

DLHS-2

PUNJAB

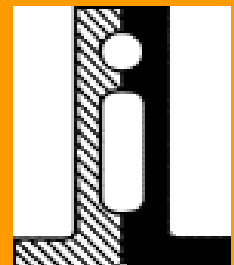
# Reproductive and Child Health District Level Household Survey 2002-04



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



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



**Indian Institute of Health  
Management Research  
Jaipur-302 011**

# Reproductive and Child Health

## District Level Household Survey (DLHS-2)

# Punjab

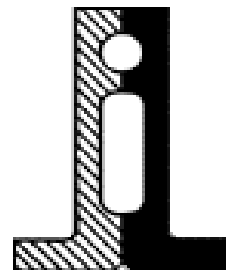
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## **PREFACE AND ACKNOWLEDGEMENT**

Government of India had launched the Reproductive and Child Health (RCH) programme 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 As a first step, family planning target has been withdrawn and an effort is being made to provide a package of reproductive services at different levels of health care centres.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 Punjab and covered all the districts. The findings of selected indicators of reproductive and child health services from the state of Punjab are presented in the report.

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

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

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We would like to thank our staff members who were associated with this study, especially Dr. Dharendra Kumar, Associate Professor and Project Coordinator, Mr.J.P.Singh Sr. Research Officer, Mr. Laxman Sharma, Mr. J.B. Singh, Research Officers and Mr. James.E.J.and Ms Ubida Sulthana, Trainee Research Officers. We appreciate the hard work of Mr. N.K. Jacob for typing the report. We thank the administrative staff of IIHMR for the effective logistic arrangements to conduct the fieldwork in time. We also express our appreciation for the efforts made by the house-listing teams, interviewers, supervisors and editors in the data collection. Mr. Atal Khandelwal and Mr. Rakesh Mathur from computer cell deserve a special mention for their support in the data processing.

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

**S.D. Gupta, M.D, Ph.D.**

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## KEY INDICATORS

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

<b>Sample size</b>			
Households surveyed.....	17891	Adequate Iron folic acid tablets/syrup <sup>3</sup> .....	20.3
Currently married women age 15-44.....	15,696	Full antenatal check-up <sup>4</sup> .....	16.7
Husband's of eligible women.....	9,246	<b>Delivery characteristics</b>	
<b>Characteristics of households</b>		Delivery at home.....	51.1
Percent rural.....	67.3	Delivery at government health institutions.....	9.5
Percent Hindu.....	36.8	Delivery at private health institutions.....	39.4
Percent Sikh.....	60.1	Delivery attendant by skilled persons <sup>5</sup> .....	64.3
Percent other religion (christian).....	1.8	<b>Child health</b>	
Percent scheduled caste.....	34.1	Percent of children whose mother squeezed out milk	
Percent scheduled tribe.....	1.3	from her breast <sup>6</sup> .....	79.5
Percent with electricity.....	96.2	Percent of children <sup>7</sup> with diarrhoea <sup>8</sup> who received ORS..	26.2
Percent with flush toilet.....	35.1	Percentage of women whose child <sup>7</sup> with pneumonia <sup>8</sup>	
Percent with no toilet facility.....	39.7	sought treatment.....	87.4
Percent living in <i>Kachcha</i> houses.....	8.0	<b>Percent of children who received vaccinations<sup>9</sup></b>	
Percent living in <i>Pucca</i> houses.....	41.8	BCG.....	88.6
Percent with low standard of living.....	11.8	DPT (3 injections).....	82.1
Percent with high standard of living.....	46.9	Polio (3 drops).....	82.1
Percent with iodized salt (15+ppm).....	64.8	Measles.....	76.8
<b>Characteristics of currently married women age 15-44 years</b>		All vaccinations <sup>10</sup> .....	72.9
Percent below age 30.....	43.1	No vaccination at all.....	9.4
Percent with age at first cohabitation below age 18.....	22.7	<b>Percentage of women who had</b>	
Percent illiterate.....	36.1	Pregnancy complication <sup>2</sup> .....	25.5
Percent having 10 or more years of schooling.....	32.0	Delivery complication <sup>2</sup> .....	20.4
Percent with illiterate husband.....	23.9	Post delivery complication <sup>2</sup> .....	18.7
Percent with husband 10+ years of schooling.....	43.4	Symptoms of RTI/STI.....	21.3
<b>Marriage</b>		Problems of vaginal discharge.....	11.0
Mean age at marriage for boys.....	23.8	Menstruation related problem.....	12.3
Mean age marriage for girls.....	20.9	<b>Awareness of RTI/STI and HIV/AIDS</b>	
Percent of boys married below age 21.....	19.1	Percent of women who have heard of RTI/STI.....	71.7
Percent of girls married below age 18.....	10.2	Percent of women who have heard of HIV/AIDS.....	64.8
<b>Fertility</b>		<b>Utilization of government health services</b>	
Mean children ever born women age 40-44 years.....	3.44	Antenatal care.....	45.8
Percent of births of order 3 and above <sup>1</sup> .....	32.4	Treatment for pregnancy complication.....	27.2
<b>Current use of family planning method</b>		Treatment for post-delivery complication.....	15.5
Any method.....	68.2	Treatment for vaginal discharge.....	45.1
Any modern method.....	57.2	Treatment for children with diarrhoea.....	8.5
Pill.....	4.4	Treatment for children with pneumonia.....	11.4
IUD.....	5.5	<b>Quality of family planning services</b>	
Condom.....	15.8	Percent non-users ever advised to adopt the family	
Female sterilization.....	30.5	planning method.....	8.0
Male sterilization.....	0.8	Percent users told about side effects of any method.....	37.0
Any traditional method.....	11.1	Percent users who received follow-up services any	
Rhythm/safe period.....	5.0	modern method.....	26.4
Withdrawal.....	5.8	<b>Characteristics of husband of eligible women</b>	
<b>Unmet need for family planning</b>		Percent of husband knowing NSV.....	46.9
Percent with unmet need for spacing.....	2.7	Percent of men who have heard of RTI/STI.....	51.4
Percent with unmet need for limiting.....	7.6	Percent of men who have heard of HIV/AIDS.....	89.2
Percent with total unmet need.....	10.4	Percentage who had any symptoms of RTI/STI.....	4.1
<b>Maternal care<sup>2</sup></b>		Sought treatment for RTI/STI.....	62.6
Percent of women received antenatal check-ups... ..	89.5		
Antenatal check-up at home.....	1.7		
Antenatal check-up in first trimester.....	48.6		
Three or more visit for ANC.....	64.3		
Two or more tetanus toxoid injections.....	84.4		

<sup>1</sup> For births in past three years, <sup>2</sup> For live/still births during three years preceding the survey, <sup>3</sup> 100 or more IFA tablets/Syrup, <sup>4</sup> A minimum of three visits for ANC, at least one TT injections and 100 or more IFA tablets/syrup, <sup>5</sup> Either institutional delivery or home delivery assisted by Doctor/ANM/nurse, <sup>6</sup> Children age below 3 years, <sup>7</sup> Last but one living children below age 3 years, <sup>8</sup> Last two weeks preceding the survey, <sup>9</sup> Last but one living children (age 12-23 months) born during three years preceding the survey. <sup>10</sup> 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 Punjab, Indian Institute of Health management Research, Jaipur, was entrusted the work of carrying out of the survey. The survey for Phase-1 of the DLHS covering 9 districts of the state was conducted during April 2002 to July 2002. The survey for Phase-2 covering the remaining districts of the state was carried out during Feb 2004 to June 2004. The focus of the survey was on: i) Coverage on antenatal care (ANC) and immunization services, ii) Extent of safe deliveries, iii) Contraceptive prevalence rate and unmet need for family planning, iv) Awareness about RTI/STI and HIV/AIDS and v) Utilization of government health services and users' satisfaction. The salient findings of the survey are presented here.

For both the phases together, the data was collected from 17,891 households in Punjab. From these households, 15,696 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 9,246 husbands of eligible women were interviewed.

Of the total households interviewed in Punjab, nearly 33 percent were from urban areas. There were 60 percent Sikh households, 37 percent Hindu and three percent came under other category in the sample. Thirty five percent of the households belonged to either scheduled castes or scheduled tribes. Only 8 percent of the households lived in *Kachcha*, about 50 percent are in *Semi-pacca* and 42 percent are in *pucca* houses. About half of the households belonged to high economic status (47 percent in high SLI)

About 71 percent of population aged seven and above are literate. Percent literate among females is 65 where as it is 76 percent for male. Proportion of non-literate is much higher among the older cohort compared to the younger ones. Thirty six percent of eligible women in the state are non-literate and 32 percent have completed 10 or more years of schooling. In Punjab 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 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 less for husbands below 30 years.

The reporting of the marriages during three years prior to survey gives the mean age at marriage among the boys and girls in the state as 24 and 21 years respectively. Nineteen percent of boys and 10 percent of girls in the state got married before attaining the minimum legal age at marriage of 21 and 18 years respectively. In all the districts, except Hoshiarpur, Nawanshahr and Rupnagar more than 10 percent of boys got married below the legal minimum age at marriage. Except in Firozpur, in all the districts less than one-fifth of the girls got married below the legal minimum age at marriage.

About two-third of the households (65 percent) use cooking salt that is iodized at the recommended level of 15 parts per million or higher level of iodine content whereas 17 percent of households used salts that are not iodized at all. Lowest proportion of households (5 percent)

in Jalandhar is using non-iodized salt; whereas in Amritsar the highest proportion of households (29 percent) used non-iodized salt. More than three-fourth of the households in Jalandhar, Kapurthala and Nawanshahr and more than half of the household in every districts of Punjab consume adequately iodized salt.

On an average, women on the verge of completion of reproductive period have given birth to 3.4 children. The completed fertility in the states varies from the lowest of 3 children ever born per women in a Nawanshahr to the highest of 3.9 children in Amritsar.

The share of births of order 3 and above in the total births that occurred three years prior to survey is 32 percent. In most of the district, proportion of higher order births is quite high, ranging from the lowest of around 23 percent in Rupnagar, to the highest of about 38 percent in Amritsar.

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 90 percent of the women received at least one ante-natal care during pregnancy. About two percent of the women during their pregnancy were visited by health worker at their residence for providing ANC. Thirty eight percent of the women visited private health facilities and 46 percent received ANC from government health facilities. The percent of women who got some kind of ANC during pregnancy range between 63 percent in Ferozpur to 99 percent in Hoshiarpur. In 12 districts out of 17, 90 percent or more women got some antenatal care.

Though 90 percent of the women in Punjab received ANC, only 74, 69 68 and 66 percent women had check-up or test of abdomen, blood, blood pressure and urine respectively. Twenty percent women received adequate Iron and Folic Acid (IFA) tablets and 87 percent got at least one TT injection. A full package of ANC including minimum three ANC visits, at least one TT injection and 100 or more IFA tablets/Syrup was received by 17 percent of women.

Minimum three ANC and timing of first check up are crucial for maternal and childcare. In Punjab nearly 49 percent of women got ANC in the first trimester and about 64 percent had minimum three antenatal check-ups. An extent of ANC in first trimester varies from minimum of 40 percent in Ferozpur, Sangrur and Mansa to the maximum of 64 percent in Jalandhar. In Ferozpur, only 42 percent of women had minimum three ANC whereas in Jalandhar more than 83 percent women had got minimum three ANC.

Nearly 49 percent of the total deliveries in Punjab were conducted in the health institutions; 8 percentages point up from RCH Round I. The majority of the institutional deliveries were conducted in private institutions (39 percent of total deliveries) as against in government institution 10 percent of total deliveries. Thirty 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, 64 percent of the deliveries, slightly up from RCH Round I (55 percent), in the state were assisted by skilled personnel. The extent of institutional deliveries varies from the highest of 62 percent in Fatehgarh Sahib and Jalandhar to the lowest of 33 percent in Hoshiarpur. 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 Punjab, 26, 20 and 19 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 55 percent of the women sought treatment for the pregnancy and 73 percent for the post-delivery complications. The pregnancy complication varies from the lowest of 17 percent in Sangrur to the highest of 33 percent in Patiala.

In most of the districts and the state as a whole, the practice of breast-feeding is almost universal. However, the practice of initiation of breastfeeding within two hours of birth of the child is not common. In Punjab, only 12 percent women started breastfeeding the child within two hours of birth and nearly 69 percent started after one day of birth. There is great deal of variation in the pattern of breastfeeding across the districts. In Muktsar and Jalandhar district only 4 percent of the women breastfed the child within two hours of birth. In Rupnagar district, the percentage is highest (24 percent).

In Punjab 89, 82, 82 and 77 percent of the children received the BCG vaccine, three doses of DPT, Polio and measles vaccine respectively. There is 12 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 73 percent of the children, whereas 9 percent of the children did not receive a single vaccination under routine programme. About 54 percent of the children received supplementation of at least one dose of vitamin A and only 5 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 Muktsar (46 percent) and highest in Rupnagar (92 percent). In 8 districts more than 75 percent of the children received complete immunization.

In Punjab, 64 percent of the women were aware of diarrhoea management and 25 percent were aware of Oral Rehydration Salt (ORS). During the two-week period prior to survey, children of 16 percent of the women suffered from diarrhoea. And 26 percent women treated diarrhoea among children by giving ORS. In comparison to awareness about diarrhoea management, the awareness about danger signs of pneumonia is quite low. Only 40 percent of the women reported awareness about danger signs of pneumonia. 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 87 percent sought treatment.

The knowledge of family planning methods is universal in all districts of Punjab, all the 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 (95 percent). The knowledge of any modern methods is also universal in the state, though the knowledge of all modern methods is only 57 percent. The proportion knowing all modern methods (males and females' sterilization, IUD, oral pills and condom) varies from about 9 percent in Ferozpur to 91 percent in Fatehgarh Sahib.

In DLHS, knowledge about No-scalpel vasectomy has been asked to husbands of eligible women. About half (47 percent) of the husbands were aware of no-scalpel vasectomy in the state. The proportion of husbands knowing No-scalpel vasectomy varies from about 36 percent in Firozpur to 66 percent in Rupnagar.

The contraceptive prevalence rate (any methods) in the state is 68 percent, 3 percentage point up from RCH Round I, comprising of prevalence of about 57 percent of modern methods and 11 percent of traditional methods. Thirty one percent of the couples adopted sterilization. The percent user of the two male methods sterilization and condom is only 17 percent. There has been positive association between contraceptive use, economic development and availability of health facility. The highest contraceptive prevalence is in Fatehgarh Sahib (75 percent) followed by Patiala (74 percent) and lowest is in Hoshiarpur (65 percent).

In Punjab, a total of 10 percent of women are found to have unmet need for family planning, with 8 percent for limiting and 3 percent for spacing. The total unmet need varies from 7 percent in Mansa and Fatehgarh Sahib to 17 percent in Nawanshahr.

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. Most of the women (89 percent) who were visited by ANM felt that ANM had given them sufficient time to discuss health-related matters.

In all the districts, less than 5 percent of the women reported the visit of ANM/LHV to their residence. In the 10 districts only 1-2 percent of the women reported visits of ANM/LHV and in the remaining 3-5 percent of the women reported visit of ANM/LHV.

It has been observed that in three months period prior to survey, 28 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 35 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 17 percent in Jalandhar to 49 percent in Rupnagar. A large percentage of women visited to private health facilities (72 percent), ranges from 50 percent in Rupnagar to 83 percent in Jalandhar.

In Punjab 72 and 65 percent of women are aware of RTI/STI and HIV/AIDS respectively. The corresponding level of awareness among husbands of eligible women is 51 and 89 percent. The percent of women who are aware of RTI/STI and HIV/AIDS is lowest in Firozpur (21 and 39 percent respectively) to highest in Fatehgarh Sahib (96 and 80 percent). Similarly awareness level of husbands of eligible women of RTI/STI and HIV/AIDS are lowest in Firozpur (22 and 71 percent respectively) to highest in Rupnagar (81 and 97 percent respectively). Out of 17, in 8 districts the awareness of HIV/AIDS is below state figure for women and their husband.

About 21 percent of women and 4 percent of husbands of eligible women in the state reported having at least one symptoms of RTI/STI. In all the districts the reported prevalence of RTI/STI among husbands was low. The prevalence of RTI/STI is lowest in Firozpur and Sangrur (14 percent each) for women and in Rupnagar (2 percent) for husbands to highest in Patiala (32 percent) for women and in Gurdaspur and Sangrur (7 percent each)) for husbands. About 11 percent of women reported vaginal discharge with low in Moga (7 percent) to highest in Rupnagar (15 Percent). Forty five percent of women sought treatment for vaginal discharge problem and 63 percent of husbands sought treatment with at least one symptoms of RTI/STI. It may be noted that in Moga, Muktsar and Rupnagar 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 than that based on service statistics. It is also of interest to assess people's perceptions on quality of services. Therefore, it was decided to undertake District Level Household Survey (DLHS) under the RCH programme in the country.

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

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

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

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

For the purpose of conducting DLHS-RCH, all the states and the union territories were grouped into 16 regions. A total of twelve research organizations including Population Research Centres (PRCs) were involved in conducting the survey in 16 regions with IIPS as the nodal agency.

## **1.2 Survey Design**

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

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

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

## **1.3 House Listing and Sample Selection**

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

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

Small villages with less than 50 households were linked with a nearest village. After combining it with the nearest village, the same sampling procedure was adopted as mentioned above.

For the urban PSUs, the selected UFS blocks needed no segmentation as they were of almost equal size and contained less than 300 households.

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

#### 1.4 Questionnaire

DLHS-RCH collected information on a various indicators pertaining to RCH that would assist policymakers and programme managers to formulate and implement the goals set for RCH programmes. The International Institute for Population Sciences (IIPS), Mumbai, the Nodal Agency for DLHS–RCH project has made necessary modifications in the two Questionnaires: 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 was 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, 8 districts were covered from April 2002 to July 2002 and remaining 9 districts were covered during Phase II from February 2004 to June 2004.

During Round II, a total of 17891 households were covered. From these surveyed households, 15,696 currently married women (aged 15-44 years) and 9,246 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  $i^{\text{th}}$  PSU of the district. These probabilities are defined as

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

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

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  $i^{\text{th}}$  PSU and  $H = \sum H_i$ , total number of household in a district.

$$f_2^i = \text{Probability of selecting segment (s) from segmented PSU}$$

(in case the  $i^{\text{th}}$  selected PSU is segmented)

$$= \frac{\text{(Number of segments selected after segmentation of PSU)}}{\text{(number of segment created a PSU)}}$$

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



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

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

Where  $HR_i$  is the household response rate of the  $i^{\text{th}}$  sampled PSU and  $HL_i$  is the number of households listed in  $i^{\text{th}}$  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;

$$f^i = (f_1^i * f_2^i * f_3^i)$$

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

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

Where  $n_i$  is the number of households interviewed in the  $i^{\text{th}}$  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  $i^{\text{th}}$  psu in  $d^{\text{th}}$  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;

$$n_i^s = n_i^d * \frac{\left( \frac{n_i^d}{n_s} \right)}{\left( \frac{N_i^d}{N_{sc}} \right)}, \quad \text{where } n_i^d \text{ household sample in } i^{\text{th}} \text{ district, } n_s \text{ is the total sample in the}$$

state,  $N_i^d$  is the census population in the  $i^{\text{th}}$  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 17,891 households are interviewed, about two-thirds were rural. The overall household response rate – the number of households interviewed per 100 occupied households – was 99 percent. The household response rate was more than 97 percent in every district.

<b>Table 1.1 NUMBER OF HOUSEHOLDS INTERVIEWED</b>						
Month and year of fieldwork and number of households interviewed by district, Punjab, 2002-04						
State/District	Month and year of field work		Number of households interviewed			Response rate
	From	To	Total	Rural	Urban	
<b>State</b>	-	-	17,891	12,047	5,844	98.9
<b>State-phase I</b>	04/2002	07/2002	-	-	-	-
<b>State-phase II</b>	02/2004	06/2004	-	-	-	-
Amritsar	06/2002	07/2002	1,046	643	403	97.2
Firozpur	05/2002	05/2002	1,053	734	319	99.1
Gurdaspur	04/2002	04/2002	1,011	797	214	99.2
Hoshiarpur	06/2002	06/2002	1,066	746	320	99.7
Kapurthala	04/2002	05/2002	1,019	757	262	98.9
Ludhiana	05/2002	06/2002	1,065	485	580	98.5
Rupnagar	06/2002	06/2002	1,035	718	317	98.8
Sangrur	05/2002	05/2002	1,065	749	316	98.2
Bathinda	04/2004	05/2004	1,069	693	376	99.5
Faridkot	03/2004	04/2004	1,037	739	298	99.0
Fatehgarh Sahib	06/2004	06/2004	1,086	770	316	99.7
Jalandhar	06/2004	06/2004	1,042	547	495	99.4
Mansa	05/2004	06/2004	1,081	760	321	99.2
Moga	03/2004	04/2004	1,053	730	323	98.4
Muktsar	04/2004	05/2004	1,065	749	316	99.8
Nawanshahr	02/2004	03/2004	1,024	728	296	97.8
Patiala	05/2004	06/2004	1,074	702	372	99.0

Note: Table based on unweighted cases.

In the interviewed households, interviews were completed with 15,696 currently married women who are the usual member of the household or stayed night before the household interview and 9,246 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 91 and 58 percent respectively. The variation in the women's response rate by district was highest in Mansa (95 percent) and lowest in Firozpur (85 percent), similarly husband's response rate was found to be highest in Fatehgarh Sahib (71 percent) and lowest in Firozpur (47 percent).

<b>Table 1.2 NUMBER OF WOMEN AND HUSBANDS INTERVIEWED</b>								
Number of women and husbands interviewed by district, Punjab, 2002-04								
State/District	Number of women interviewed			Response rate	Number of husbands interviewed			Response rate
	Total	Rural	Urban		Total	Rural	Urban	
State	15,696	10,820	4,876	90.5	9,246	6,273	2,973	57.6
Amritsar	815	509	306	89.3	462	295	167	54.0
Ferozpur	806	580	226	84.8	442	322	120	47.4
Gurdaspur	893	728	165	86.5	567	462	105	58.7
Hoshiarpur	876	625	251	90.9	448	293	155	51.7
Kapurthala	851	633	218	89.6	429	312	117	50.4
Ludhiana	934	415	519	90.5	506	239	267	50.4
Rupnagar	901	650	251	88.0	473	327	146	52.8
Sangrur	1,048	780	268	92.3	582	410	172	53.9
Bathinda	954	632	322	91.3	592	367	225	59.4
Faridkot	901	652	249	92.0	546	380	166	59.7
Fatehgarh Sahib	1,059	774	285	90.0	760	545	215	71.0
Jalandhar	864	459	405	91.8	488	247	241	61.1
Mansa	1,080	767	313	95.2	637	452	185	59.7
Moga	853	599	254	89.1	537	378	159	60.1
Muktsar	1,010	699	311	94.3	616	422	194	60.8
Nawanshahr	854	633	221	90.0	506	372	134	60.8
Patiala	997	685	312	92.2	655	450	205	64.5

Note: \* Based on unweighted cases.

## 1.9 Basic Demographic Profile of the State

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

According to 2001 census, the total population of the state was 24 million. Punjab constitutes 2.37 percent of India's population. The sex ratio of Punjab population (876) is substantially lower than India's sex ratio of 933. The levels of literacy among males and females above age 7 in the state are 75 and 63 respectively. While the literacy rate of the male is almost similar the national average, the same among the females is much higher than the national average (54 percent). As per the 2001 census the level of urbanization in the state is 34 percent, which is higher than the level of urbanization in India. Twenty nine percent of the state population belongs to scheduled caste, which is again much higher than that of the national average. It is also to be noted that there is no scheduled tribe population in Punjab.

Punjab is bounded on the west by Pakistan, Jammu and Kashmir and Himachal Pradesh on the north, Haryana and Rajasthan on the south and again Himachal Pradesh and Haryana on the east. Punjab has an area of 50362 square km. The state is somewhat truncated size in terms of area. This is the land where the Vedas were written and this is the land of "Sapta Sindhavah", the seven mighty rivers. Sikhs and Sikhism are integral and vital part of Punjab.

There is major variation in population of different districts in the state. The population varies from 538 thousand in Fatehgarh Sahib to 3096 thousand in Amritsar. Only in one district in the state sex ratio exceeds the national level average. With the exception of Hoshiarpur (935),

and Nawanshahr (914) in all other states the sex ratio is less than 900 females per 1000 males. With the exception of Ludhiana (56 percent) the urban population is less than 50 percent in all the districts. Hoshiarpur, Moga and Nawanshahr are almost rural districts with less than 20 percent of urban population. In Punjab there is no scheduled tribe population.

The sex ratio of the total population in the state has declined since 1991 Census from 882 to 876 per 1000 males in 2001. Hoshiarpur has recorded the highest sex ratio (935) and surprisingly Ludhiana has the lowest (824) within the state.

The literacy rate in the state has improved from 57.7 percent in 1991 to 69.7 percent in 2001 and it is higher even the national average of 64.8 percent. Among the districts, Hoshiarpur has the highest literacy rate of 81 percent. Mansa has the lowest literacy rate of 52.4 percent. The male literacy for the state is 75.2 percent and the female literacy rate is 63.4 percent. Both the rates have increased from 1991 census to 2001 census. In districts like Hoshiarpur, Rupnagar, Nawanshahr, Jalandhar, Gurdaspur, Ludhiana, Fatehgarh Sahib, Kapurthala and Patiala, the literacy levels among the males are higher than the national level. Higher percent of literacy level among the females is found in those districts where the male literacy rates are also higher.

<b>Table 1.3 BASIC DEMOGRAPHIC INDICATOR</b>							
Basic demographic indicator of India, state and districts, Census 2001 Punjab							
India/state/district	Population (in thousand)	Percentage urban	Percentage decadal growth rate <sup>1</sup>	Sex ratio <sup>2</sup>	Percentage literate 7+		
					Male	Female	Persons
<b>India</b>	10,28,737	28.0	21.5	933	75.3	53.7	64.8
<b>State</b>	24,358	33.9	20.1	876	75.2	63.4	69.7
Amritsar	3,096	39.5	22.7	876	73.5	61.3	67.3
Ferozpur	1,746	25.8	20.4	885	69.5	51.7	60.7
Gurdaspur	2,104	25.4	19.3	890	80.4	67.2	73.8
Hoshiarpur	1,481	19.7	13.8	935	86.9	75.3	81.0
Kapurthala	755	32.7	16.3	888	78.6	68.3	73.9
Ludhiana	3,033	55.8	24.8	824	80.1	71.9	76.5
Rupnagar	1,116	32.5	23.4	871	84.4	71.4	78.1
Sangrur	2,000	29.2	18.6	871	65.9	53.4	60.0
Bathinda	1,183	29.7	19.9	870	68.3	53.7	61.2
Faridkot	551	35.1	21.4	883	68.9	55.0	62.0
Fatehgarh Sahib	538	28.1	18.6	854	78.8	68.3	73.6
Jalandhar	1,963	47.5	18.4	887	82.3	73.1	78.0
Mansa	689	20.7	19.8	880	59.1	45.2	52.4
Moga	895	20.0	13.9	887	68.4	58.5	63.5
Muktsar	777	25.5	18.7	891	65.9	50.3	58.2
Nawanshahr	587	13.8	10.4	914	83.6	69.5	76.4
Patiala	1,845	34.9	20.3	868	76.1	62.9	69.8

Source: Primary Census Abstract, Series 20, Census of India, 2001. <sup>1</sup> 1991-2001, <sup>2</sup> Females per 1,000 males.

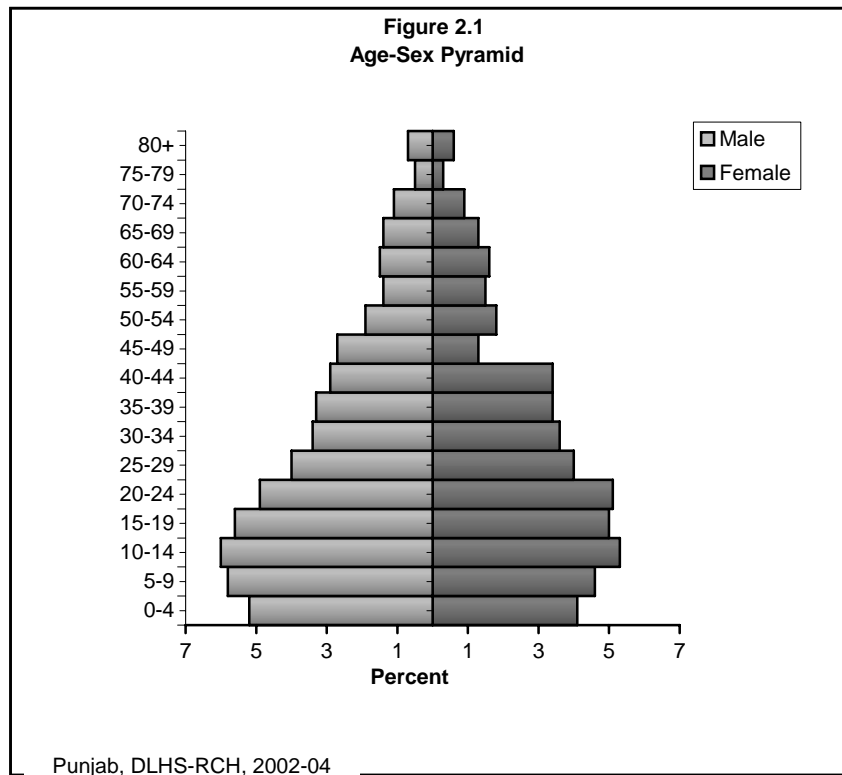
## CHAPTER II

### BACKGROUND CHARACTERISTICS OF HOUSEHOLD

This chapter provides a socio-economic and demographic profile of households interviewed in the District Level Household Survey-Reproductive and Child Health. Facilities and services such as Health, Education and Communication available in the representative sampled village are also presented here. The *de facto* 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 96040 persons of whom 69 percent lived in the rural areas of Punjab. The state of Punjab depicts a young and growing population with 31 percent below the age of 15 years (Figure 2.1). There are more children below 15 years recorded in rural areas (32 percent) compared to those in urban areas (29 percent).



The overall sex ratio of 109 males per 100 females is recorded for the *de facto* population. The sex ratio is more skewed, 110 in favour of males in rural areas compared to 108 in urban areas.

<b>Table 2.1 HOUSEHOLD POPULATION BY AGE AND SEX</b>									
Percent distribution of the household population by age and by residence and sex, Punjab, 2002-04									
Age	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
< 1	1.9	2.0	1.7	2.0	2.2	1.8	1.7	1.6	1.7
1-4	7.5	8.0	6.9	7.7	8.2	7.0	7.0	7.4	6.6
5-9	10.4	11.1	9.6	10.7	11.3	10.0	9.7	10.6	8.8
10-14	11.3	11.5	11.1	11.6	11.7	11.4	10.8	11.0	10.6
15-19	10.6	10.7	10.5	10.6	10.8	10.4	10.7	10.6	10.7
20-24	9.9	9.3	10.6	10.0	9.3	10.8	9.8	9.3	10.2
25-29	8.0	7.6	8.4	7.8	7.4	8.2	8.5	8.0	9.0
30-34	7.0	6.5	7.5	6.9	6.4	7.4	7.1	6.6	7.7
35-39	6.7	6.4	7.0	6.5	6.2	6.8	7.1	6.8	7.5
40-44	6.4	5.6	7.2	6.1	5.3	6.8	7.1	6.2	7.9
45-49	4.0	5.2	2.6	3.8	4.9	2.5	4.4	5.8	2.9
50-54	3.7	3.6	3.8	3.5	3.4	3.7	4.0	4.1	3.9
55-59	2.9	2.7	3.0	2.8	2.7	3.0	3.0	2.8	3.1
60-64	3.1	2.8	3.4	3.1	2.9	3.4	3.0	2.6	3.4
65-69	2.7	2.7	2.7	2.7	2.6	2.8	2.7	2.8	2.5
70-74	2.0	2.1	1.9	2.1	2.3	1.8	1.8	1.7	1.9
75-79	0.8	0.9	0.7	0.8	0.9	0.7	0.8	0.9	0.6
80+	1.2	1.3	1.2	1.3	1.4	1.3	1.0	1.0	0.9
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of persons	96,040	50,129	45,911	65,991	34,504	31,487	30,049	15,625	14,424
Sex ratio <sup>1</sup>	109	NA	NA	110	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  
<sup>1</sup> Male per 100 females

## 2.2 Household Characteristics

The percent distribution of 17,891 households surveyed in the state of Punjab 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 90 percent of household heads are male invariant of place of resident while only 8 percent are female-headed households. Nearly 68 percent of household heads are in the 30-59 years age group. The median age of household heads is 46 years for the state as a whole. About 9 percent of household heads are younger than 30 years and 24 percent are at least 60 years old. Majority of the household heads are Sikh (60 percent), 37 percent are Hindus and 3 percent belongs to other religions. Hindus constitute a higher proportion of population in urban areas (60 percent) than in rural areas (26 percent). A total of 70 percent of rural households are Sikh compared to 39 percent of the urban households.

<b>Table 2.2 HOUSEHOLD CHARACTERISTICS</b>			
Percent distribution of the household head by selected characteristics of the household head and household size, according to residence, Punjab, 2002-04			
Characteristic	Total	Residence	
		Rural	Urban
<b>Sex of the household head</b>			
Male	92.3	92.7	91.4
Female	7.7	7.3	8.6
<b>Age of the household head</b>			
< 30	8.5	9.0	7.7
30-44	37.0	37.0	37.0
45-59	30.6	29.6	32.7
60+	23.8	24.4	22.6
Median age of the household head	46.1	46.1	46.3
<b>Religion of the household head</b>			
Hindu	36.8	25.7	59.7
Muslim	1.1	1.3	0.5
Christian	1.8	2.3	0.6
Sikh	60.1	70.4	38.8
Buddhist	0.1	0.1	0.1
Jain	0.1	0.1	0.2
No Religion	0.0	0.0	0.0
Other	0.1	0.0	0.1
<b>Caste/tribe of the household head</b>			
Scheduled caste	34.1	38.6	25.0
Scheduled tribe	1.3	1.4	1.1
Other backward class	18.9	19.1	18.5
Other #	45.3	40.5	55.4
Don't know	0.3	0.4	0.1
<b>Number of usual members</b>			
1	1.9	1.7	2.3
2	5.3	5.5	5.1
3	9.4	9.3	9.5
4	19.6	17.9	23.1
5	23.1	22.4	24.7
6	17.2	17.7	16.2
7	10.0	10.7	8.4
8	5.3	5.8	4.4
9+	8.1	9.0	6.3
Mean household size	5.2	5.3	5.0
Total percent	100.0	100.0	100.0
Number of households	17,891	12,047	5,844
Note: Table is based on the <i>de jure</i> population			
# Higher caste (Not belonging to a scheduled caste, a scheduled tribe and an other backward class)			

Thirty-four percent of the households in Punjab belongs to schedule caste, 19 percent to other backward classes, one percent to schedule tribe; while the remaining 45 percent of the households are headed by other castes not under schedule caste, schedule tribe and other backward classes. About two-fifths of the household head belong to schedule caste or tribe in rural areas and it is only 26 percent in urban areas. The overall state average household size is 5.2 persons. The rural-urban differential in average household size is 5.3 in rural areas and 5.0 in urban areas.

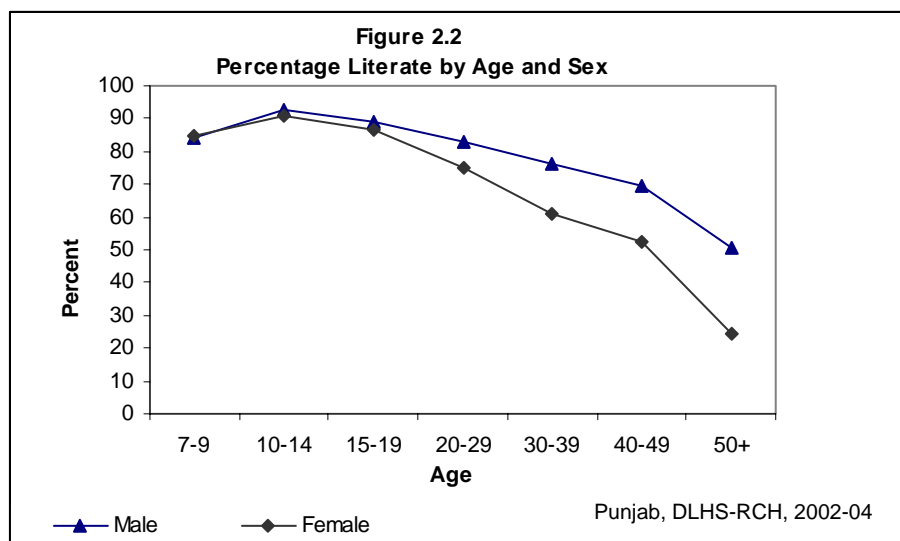
## 2.3 Educational Level

The educational background of Punjab 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.

<b>Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION</b>									
Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age, residence and sex, Punjab, 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			
<b>Total</b>									
<b>Male</b>									
7-9	15.8	0.7	82.4	0.9	0.0	0.0	0.1	100.0	3,354
10-14	7.2	0.0	48.4	39.7	4.4	0.0	0.3	100.0	5,776
15-19	11.1	0.0	9.9	26.1	32.7	20.2	0.0	100.0	5,378
20-29	17.0	0.0	9.4	16.6	26.4	30.6	0.0	100.0	8,493
30-39	24.0	0.0	12.2	17.5	28.1	18.1	0.0	100.0	6,439
40-49	30.4	0.0	12.3	15.5	24.6	17.2	0.0	100.0	5,413
50+	49.5	0.1	12.1	10.7	17.0	10.6	0.0	100.0	8,061
Total	23.7	0.1	21.7	18.6	20.4	15.5	0.0	100.0	42,913
<b>Female</b>									
7-9	15.0	0.5	84.0	0.3	0.0	0.0	0.2	100.0	2,653
10-14	8.6	0.0	44.4	40.4	6.4	0.0	0.3	100.0	5,105
15-19	14.0	0.0	11.0	19.4	30.4	25.2	0.0	100.0	4,828
20-29	25.2	0.0	11.2	14.5	21.8	27.3	0.0	100.0	8,738
30-39	38.3	0.0	16.9	14.5	17.4	12.9	0.0	100.0	6,673
40-49	47.3	0.0	17.8	9.2	14.2	11.5	0.0	100.0	4,513
50+	75.5	0.1	11.7	4.3	4.5	3.9	0.0	100.0	7,650
Total	35.3	0.1	22.0	14.9	14.5	13.1	0.0	100.0	40,160
<b>Total</b>									
7-9	5.5	0.6	83.1	0.6	0.0	0.0	0.2	100.0	6,007
10-14	7.9	0.0	46.5	40.0	5.3	0.0	0.3	100.0	10,881
15-19	12.5	0.0	10.4	22.9	31.6	22.5	0.0	100.0	10,206
20-29	21.2	0.0	10.3	15.5	24.1	28.9	0.0	100.0	17,231
30-39	31.3	0.0	14.6	16.0	22.6	15.4	0.0	100.0	13,112
40-49	38.1	0.0	14.8	12.7	19.9	14.6	0.0	100.0	9,925
50+	62.2	0.1	11.9	7.6	10.9	7.3	0.0	100.0	15,710
Total	29.3	0.1	21.8	16.8	17.6	14.3	0.0	100.0	83,073
Note: Table is based on <i>de facto</i> population.									Contd...

Table 2.3 indicates that, 29 percent of the population aged seven and above are non-literate. The proportion of non-literates is 35 percent for females compared to 24 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).





**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, Punjab, 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			
<b>RURAL</b>									
Male									
7-9	16.2	1.0	81.7	0.9	0.0	0.0	0.2	100.0	2,391
10-14	8.3	0.0	51.5	36.6	3.5	0.0	0.2	100.0	4,052
15-19	12.1	0.0	11.2	28.7	32.5	15.5	0.0	100.0	3,716
20-29	20.0	0.0	10.2	18.8	27.6	23.3	0.0	100.0	5,788
30-39	29.2	0.0	13.4	18.6	28.2	10.6	0.0	100.0	4,345
40-49	38.2	0.0	14.1	16.6	22.7	8.4	0.0	100.0	3,527
50+	59.9	0.1	12.3	10.0	13.2	4.6	0.0	100.0	5,577
Total	28.2	0.1	23.2	19.1	19.4	10.0	0.0	100.0	29,398
Female									
7-9	16.4	0.5	82.5	0.3	0.0	0.0	0.2	100.0	1,879
10-14	10.1	0.0	46.3	38.5	4.9	0.0	0.2	100.0	3,583
15-19	16.5	0.0	12.6	22.1	30.7	18.2	0.0	100.0	3,284
20-29	30.2	0.0	12.8	16.7	22.1	18.1	0.0	100.0	5,961
30-39	45.7	0.0	19.9	15.0	14.9	4.5	0.0	100.0	4,480
40-49	59.1	0.0	20.7	8.6	9.0	2.6	0.0	100.0	2,954
50+	85.8	0.1	9.7	2.3	1.4	0.8	0.0	100.0	5,283
Total	41.3	0.1	23.3	15.2	12.8	7.3	0.0	100.0	27,424
Total									
7-9	16.3	0.8	82.1	0.7	0.0	0.0	0.2	100.0	4,270
10-14	9.1	0.0	49.0	37.5	4.2	0.0	0.2	100.0	7,635
15-19	14.1	0.0	11.8	25.6	31.6	16.8	0.0	100.0	7,000
20-29	25.2	0.0	11.5	17.8	24.8	20.7	0.0	100.0	11,750
30-39	37.6	0.0	16.7	16.8	21.4	7.5	0.0	100.0	8,826
40-49	47.7	0.0	17.1	13.0	16.5	5.7	0.0	100.0	6,481
50+	72.5	0.1	11.0	6.2	7.4	2.7	0.0	100.0	10,860
Total	34.5	0.1	23.2	17.2	16.2	8.7	0.0	100.0	56,822

Contd...

Around 83 percent of males in this age group had 1-5 years of schooling. Eighty four percent of females have had education for 1-5 years. Lesser proportion of females are found in higher education of 9-10 years (15 percent) and 11 or more years (13 percent) compared to the males having corresponding figures of 20 percent and 16 percent respectively. Less than one percent of the total population, males and females are found to be literate without any formal schooling.

<b>Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION</b>									
Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age , residence and sex, Punjab, 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			
<b>URBAN</b>									
Male									
7-9	14.8	0.1	84.1	0.9	0.0	0.0	0.1	100.0	963
10-14	4.6	0.0	41.2	47.1	6.5	0.0	0.5	100.0	1,724
15-19	9.0	0.0	7.0	20.3	33.1	30.6	0.0	100.0	1,662
20-29	10.6	0.0	7.6	11.7	23.8	46.3	0.0	100.0	2,704
30-39	13.3	0.0	9.8	15.4	27.9	33.6	0.0	100.0	2,094
40-49	15.8	0.0	8.8	13.5	28.1	33.7	0.0	100.0	1,885
50+	26.1	0.1	11.8	12.3	25.6	24.1	0.0	100.0	2,483
Total	13.9	0.0	18.5	17.5	22.6	27.4	0.1	100.0	13,515
Female									
7-9	11.6	0.4	87.6	0.2	0.0	0.0	0.2	100.0	774
10-14	5.2	0.0	39.9	44.6	9.8	0.0	0.5	100.0	1,522
15-19	8.7	0.0	7.8	13.6	29.9	40.0	0.0	100.0	1,544
20-29	14.5	0.0	7.7	9.8	21.0	47.0	0.0	100.0	2,777
30-39	23.4	0.0	10.8	13.4	22.4	30.1	0.0	100.0	2,193
40-49	24.9	0.0	12.4	10.4	24.1	28.2	0.0	100.0	1,559
50+	52.5	0.0	16.2	8.8	11.5	10.9	0.0	100.0	2,366
Total	22.4	0.0	19.1	14.3	18.3	25.8	0.1	100.0	12,736
Total									
7-9	13.4	0.2	85.6	0.6	0.0	0.0	0.1	100.0	1,737
10-14	4.9	0.0	40.6	45.9	8.0	0.0	0.5	100.0	3,246
15-19	8.8	0.0	7.4	17.1	31.6	35.1	0.0	100.0	3,206
20-29	12.5	0.0	7.6	10.8	22.4	46.7	0.0	100.0	5,481
30-39	18.4	0.0	10.3	14.4	25.1	31.8	0.0	100.0	4,286
40-49	19.9	0.0	10.4	12.1	26.3	31.2	0.0	100.0	3,445
50+	39.0	0.0	13.9	10.6	18.7	17.7	0.0	100.0	4,850
Total	18.0	0.0	18.8	15.9	20.5	26.6	0.1	100.0	26,251

An examination of the educational attainment by place of residence revealed that the urban-rural differential was quite pronounced. In urban areas, only 18 percent of the total population is non-literate in comparison to 35 percent of the rural population. The numbers of non-literate females live in rural areas of Punjab accruing a share as high as 41 percent, while non-literate rural males is 28 percent. Prevalence of illiterate is much less in urban areas with figures of 22 percent and 14 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 (23 percent) and those who had 11 or more years of schooling was just 9 percent, whereas in urban areas a significant proportion of people (27 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. Ninety five percent of female in the age group 30-44 years, followed by 81 percent in the age group 25-29 years and 89 percent in the age group 45-59 years are currently married. The proportion of never married for both males and female is 36 percent in the state, and it is higher for males (41 percent) than for females (31 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 45-49 years. The proportions of divorced, separated or widowed are negligible and limited to the older ages. Forty five percent of women aged 60 years or above are widowed /divorced /separated. Among the *de facto* population aged 10 years and above, 55 percent of males and 60 percent of females are currently married.

<b>Table 2.4 MARITAL STATUS OF THE HOUSEHOLD POPULATION</b>						
Percent distribution of the household population aged 10 years and above by marital status, according to age and sex , Punjab, 2002-04						
Age	Marital status				Total Percent	Number of persons
	Never married	Currently married	Married, <i>gaunna</i> not performed	Widowed/ Divorced/ Separated		
Male						
10-14	99.7	0.2	0.0	0.0	100.0	5,776
15-19	97.6	2.0	0.2	0.1	100.0	5,378
20-24	73.2	25.9	0.4	0.5	100.0	4,678
25-29	28.2	70.8	0.1	1.0	100.0	3,815
30-44	4.1	94.2	0.0	1.7	100.0	9,253
45-59	2.2	93.3	0.0	4.5	100.0	5,764
60+	2.9	77.2	0.0	19.9	100.0	4,895
Total	40.8	55.4	0.1	3.7	100.0	39,559
Female						
10-14	99.9	0.1	0.0	0.0	100.0	5,105
15-19	88.9	10.9	0.2	0.0	100.0	4,828
20-24	37.2	62.0	0.1	0.8	100.0	4,871
25-29	7.3	91.0	0.1	1.5	100.0	3,867
30-44	0.7	94.7	0.0	4.5	100.0	9,975
45-59	0.4	83.3	0.0	16.3	100.0	4,347
60+	0.6	54.3	0.1	45.0	100.0	4,513
Total	30.9	60.2	0.1	8.8	100.0	37,507
Total						
10-14	99.8	0.1	0.0	0.0	100.0	10,881
15-19	93.5	6.2	0.2	0.1	100.0	10,206
20-24	54.8	44.3	0.2	0.6	100.0	9,550
25-29	17.7	81.0	0.1	1.2	100.0	7,682
30-44	2.3	94.5	0.0	3.2	100.0	19,228
45-59	1.4	89.0	0.0	9.6	100.0	10,111
60+	1.8	66.2	0.1	32.0	100.0	9,408
Total	36.0	57.7	0.1	6.2	100.0	77,066
Note: Table is based on <i>de facto</i> 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.

<b>Table 2.5 MARRIAGE</b>				
Mean age at marriage and percentage of marriages below legal at marriage by sex and by district, Punjab, 2002-04				
Place of residence/ District	Mean age at marriage		Percentage of marriage below legal age at marriage	
	Boy	Girl	Boy (<21)	Girl (<18)
<b>State – Total</b>	23.8	20.9	19.1	10.2
<b>State – Rural</b>	23.4	20.6	22.0	11.5
<b>State – Urban</b>	24.7	21.6	12.4	7.1
Amritsar	24.0	20.5	18.5	13.4
Bathinda	23.2	20.4	19.4	12.3
Faridkot	23.6	20.5	21.7	16.2
Fatehgarh Sahib	23.3	20.9	17.3	4.6
Firozpur	22.9	19.8	27.8	21.7
Gurdaspur	24.4	21.1	10.5	8.7
Hoshiarpur	25.7	21.6	6.6	1.6
Jalandhar	25.7	22.0	10.8	5.3
Kapurthala	24.9	21.2	9.8	5.1
Ludhiana	23.5	21.4	21.8	8.8
Mansa	22.7	20.0	23.4	18.4
Moga	23.2	21.3	27.8	7.5
Muktsar	22.7	20.0	27.9	17.8
Nawanshahr	25.9	22.6	6.2	0.8
Patiala	23.3	20.3	23.7	12.2
Rupnagar	25.0	21.3	8.4	2.2
Sangrur	22.2	20.6	27.9	9.6

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

Mean age at marriage for boys and girls in urban areas of Punjab are 24 years and 21 years respectively. The corresponding figures in rural areas are 23 years and 21 years. On the whole, as far as Punjab is concerned, both boys and girls seem to oblige the legal age marriage, the average age at marriage being 24 years for boys and 21 years for girls. However, one-fifth of the boys and nearly one in ten girls got married below the corresponding specified legal age marriage. The proportion is much higher in the rural areas compared to the urban areas of the state.

When it comes to district level variation in mean age at marriage, it is highest in Nawanshahr 26 years for boys and 23 years for girls. The lowest mean age at marriage for boys is 22 years recorded for the district of Sangrur and for the girls; the lowest is 20 years in Firozpur.

It is also found that, the percentage of girls who were married below the legal age at marriage was the highest in Ferozpur (22 percent) and the lowest in Hoshiarpur (2 percent). In 7 out of 17 districts more than 10 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 Sangrur, Moga, Muktsar and Ferozpur districts (28 percent) and lowest in Nawanshahr (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.

<b>Table 2.6 MORBIDITY RATES</b>			
Prevalence of blindness, tuberculosis, and malaria, according to place of residence, Punjab, 2002-04			
Morbidity	Total	Residence	
		Rural	Urban
Prevalence rate of blindness			
Male			
Partial	1,519	1,502	1,556
Complete	202	223	155
Night blindness	98	88	118
Female			
Partial	2,106	2,147	2,016
Complete	301	330	236
Night blindness	89	81	106
Persons			
Partial	1,797	1,807	1,776
Complete	249	274	193
Night blindness	94	85	112
Prevalence rate of tuberculosis			
Male	202	236	126
Female	119	139	75
Person	162	190	101
Prevalence rate of malaria <sup>1</sup>			
Male	190	201	167
Female	314	329	283
Person	249	262	222
Note: All the rates refer to <i>de jure</i> population.			
Prevalence rate per 100, 000 population			
Reference period: - January 1 <sup>st</sup> , 1999 to survey date for phase-1, and January 1 <sup>st</sup> , 2001 to survey date for phase-2. <sup>1</sup> Last two weeks prior to the survey			

### Partial, Complete and Night Blindness

The overall prevalence of partial blindness is 1,797 per 100,000 population in the state and is lower in urban areas (1,776 per 100,000) than in rural areas (1,807 per 100,000). It is more among females. The prevalence of complete blindness is 249 per 100,000 population with a rural-urban differential of 274 against 193 per 100,000. Sex differential is also significant in complete blindness. The prevalence of night blindness due to vitamin A deficiency is 94 per 100,000 population and is higher in urban areas (112) than in rural areas (85).

## Tuberculosis

The prevalence of tuberculosis is 162 per 100,000 population, with rural areas having a higher prevalence of 190 compared to 101 per 100,000 in urban areas. The prevalence of TB is higher among males (202 per 100,000) than among females (119 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 Punjab, 249 persons per 100,000 populations were reported to have suffered from malaria. Rural residents are more likely to suffer from malaria (262 per 100,000) than urban residents (222 per 100,000). The reported prevalence of malaria is higher for females than for males.

### 2.7 Morbidity Rates by District

Table 2.7 shows the prevalence of blindness, tuberculosis and malaria in the districts of Punjab. The prevalence of partial blindness varies considerably among the districts the lowest being 216 per 100,000 in Jalandhar and the highest, 3,900 per 100,000 in Gurdaspur.

<b>Table 2.7 MORBIDITY RATES BY DISTRICT</b>				
Prevalence of blindness, tuberculosis, and malaria, by district, Punjab, 2002-04				
District	Prevalence <sup>1</sup> of morbidity			
	Partial blindness	Complete blindness	Tuberculosis	Malaria <sup>2</sup>
Amritsar	892	53	144	140
Bathinda	1,127	85	207	88
Faridkot	1,349	584	228	258
Fatehgarh Sahib	1,714	80	114	129
Firozpur	2,356	749	280	202
Gurdaspur	3,900	338	290	807
Hoshiarpur	1,967	357	37	123
Jalandhar	216	126	84	140
Kapurthala	2,657	139	77	378
Ludhiana	3,039	357	69	244
Mansa	459	88	145	260
Moga	1,117	249	264	396
Muktsar	296	155	192	383
Nawanshahr	2,069	442	261	218
Patiala	2,037	90	153	133
Rupnagar	946	470	85	59
Sangrur	1,470	17	225	170
Punjab	1,797	249	162	249

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

The districts with a prevalence rate below 1,000 per 100,000 are Amritsar, Jalandhar, Mansa, Muktsar and Rupnagar. The prevalence rate of complete blindness ranges from 17 per 100,000 in Sangrur to 749 per 100,000 in Firozpur. Inter-district variations are substantial for tuberculosis and malaria.

The prevalence rate of tuberculosis is the highest in Gurdaspur district (290 per 100,000 population) and it is lowest in Hoshiarpur (37 per 100,000). In the case of malaria, the prevalence rate is highest in Gurdaspur (807 per 100,000) and lowest in Rupnagar (59 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. Ninety six percent of the households in Punjab have electricity connection and it is more in urban areas (99 percent) than in rural areas (95 percent).

As regards household source of drinking water one-third (36 percent) of the households get drinking water through taps, while 63 percent drink water from hand pumps/ bore-wells and one percent drink water from wells. About 71 percent of households in urban areas get piped water for drinking, whereas in rural areas only 19 percent of the households have such provision.

When it comes to sanitation facility, only 35 percent of the households have flush toilets, while 24 percent have pit based toilets or latrines, one percent depend on shared toilets and nearly 40 percent of the households have no toilet facility at all. There is a large rural-urban difference; 54 percent of rural households have no toilet facility, compared to just 11 percent of urban households.

DLHS-RCH has also collected data on type of fuel used in the households for cooking. Forty percent of the households used liquid petroleum gas or electricity for cooking in Punjab. About 43 percent of households rely on firewood, 2 percent on kerosene and 15 percent of households use other types of fuel for cooking. The use of liquid petroleum gas/electricity for cooking is reported more in urban areas (77 percent) and firewood or other sources for cooking are reported more in rural areas.

There is considerable variation in the quality of housing. On the basis of building material, type of floor, walls and roof, households are categorised into *kachcha*, *semi-pucca* and *pucca*. Half of the households are living in *semi-pucca* houses, 42 percent in *pucca* houses and 8 percent in *kachcha* houses. Seventy percent of urban households live in *pucca* houses compared to 28 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 almost all the households in the state own electric fan (96 percent), bicycles (78 percent), television (77 percent), radio/transistor (29 percent) and telephone (32 percent).

<b>Table 2.8 HOUSING CHARACTERISTICS</b>			
Percent distribution of the household by housing characteristics and percentage of households owing selected durable goods, according to residence, Punjab , 2002-04			
Housing characteristic	Total	Residence	
		Rural	Urban
<b>Electricity</b>			
Yes	96.2	95.0	98.9
No	3.8	5.0	1.1
<b>Source of drinking water</b>			
Tap inside	21.1	7.8	48.4
Tap shared public	14.5	10.9	22.1
Hand pump/ bore well	62.8	79.2	29.1
Well covered	0.4	0.6	0.1
Well uncovered	0.4	0.6	0.0
River	0.1	0.2	0.0
Pond	0.0	0.0	0.0
Spring	0.0	0.0	0.0
Other	0.5	0.7	0.3
<b>Sanitation facility</b>			
Own flush toilet	35.1	16.1	74.4
Own pit toilet / latrine	23.7	29.2	12.3
Shared toilet of any type	0.8	0.7	1.2
Public / community toilet	0.6	0.3	1.3
No toilet facility	39.7	53.7	10.8
<b>Main type of fuel used for cooking</b>			
Liquid petroleum gas/ electricity	39.7	21.7	77.0
Kerosene	2.4	1.2	5.0
Wood	42.9	56.3	15.3
Other	15.0	20.9	2.8
<b>Type of house</b>			
<i>Kachcha</i>	8.0	10.1	3.7
<i>Semi - pucca</i>	50.2	61.8	26.2
<i>Pucca</i>	41.8	28.1	70.1
<b>Household assets</b>			
Fan	96.0	94.7	98.6
Radio/transistor	29.0	27.3	32.4
Sewing machine	64.2	59.9	73.1
Television	77.0	71.3	88.8
Telephone	32.3	25.3	46.8
Bicycle	77.6	79.2	74.4
Motor cycle/ scooter	36.1	30.3	47.8
Car / Jeep	7.0	4.6	11.7
Tractor	9.1	12.7	1.6
<b>Standard of living index</b>			
Low	11.8	16.1	2.7
Medium	41.4	50.4	22.8
High	46.9	33.5	74.5
Number of households	17,891	12,047	5,844

Other durable goods found in the surveyed households are sewing machine (64 percent), motorcycle or scooter (36 percent). Car/jeep and tractor each are owned by 7 percent and 9 percent of households in Punjab respectively. Ownership of most of the consumer durable items is more among the urban households than among the rural households. However, a higher proportion of households in rural areas than in urban areas own a tractor.



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 half of the households (47 percent) come under the high standard of living category, 41 percent of households to medium standard of living and 12 percent of the households to low standard of living.

The proportion of sample households with high standard of living is higher in urban areas than in rural areas, and the proportion of households with a low and medium standard of living is much higher in rural households (67 percent) than in urban households (26 percent) in the state of Punjab.

## **2.9 Housing Characteristics by District**

The 17 districts in Punjab 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 lowest in the district Mansa (93 percent) and the household with electricity is highest in Fatehgarh Sahib (99 percent). Ninety nine percent of households used piped water or water from a hand pump for drinking in most districts except for Hoshiarur (98 percent), Faridkot and Ferozpur (97 percent) and Rupnagar (94 percent).

Largely the districts in Punjab have inadequate toilet facility in 7 of the 17 districts less than 60 percent of the households have toilet facilities and it is the least in Gurdaspur district (31 percent).

In Jalandhar district the percentage of households using liquid petroleum gas/electricity for cooking is 63 percent and in the rest of the districts, it is relatively low ranging between 29 to 53 percent. The percentage of households living in *pucca* houses is quite low in all the districts

of Punjab. In 11 of the 17 districts, less than half of the households live in *pucca* houses. In Rupnagar 61 percent of the households live in *pucca* houses.

<b>Table 2.9 HOUSING CHARACTERISTICS BY DISTRICT</b>					
Selected housing characteristics by district, Punjab, 2002-04					
Districts	Percentage of households:				
	With electricity	With drinking water <sup>1</sup>	With toilet facility	Using Liquid petroleum gas/ electricity	Living in <i>pucca</i> house
Amritsar	94.1	99.5	50.8	39.3	38.8
Bathinda	95.2	98.8	84.8	41.1	50.0
Faridkot	93.8	97.4	65.1	36.3	30.7
Fatehgarh Sahib	99.4	100.0	69.8	40.8	54.5
Firozpur	95.5	96.8	52.5	28.6	29.7
Gurdaspur	93.7	98.5	31.3	31.9	39.6
Hoshiarpur	97.2	98.3	41.5	37.1	41.8
Jalandhar	97.0	100.0	71.5	62.9	51.4
Kapurthala	98.5	99.2	55.5	43.7	46.6
Ludhiana	98.8	99.5	80.8	52.6	50.6
Mansa	93.0	99.9	60.5	29.9	34.3
Moga	95.3	98.5	80.9	39.6	34.2
Muktsar	94.8	99.9	72.4	30.7	32.9
Nawanshahr	98.5	99.1	62.4	45.6	59.2
Patiala	98.4	99.9	59.6	40.9	39.2
Rupnagar	97.2	93.7	55.0	51.3	60.6
Sangrur	97.1	99.7	65.1	33.9	37.8
Punjab	96.2	98.8	60.3	39.7	41.8

Note :- That is piped or from a hand pump/bore well, well covered.

## 2.10 Iodization of Salt

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

In the 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 65 percent of households used salt that contained a minimum recommended 15 ppm or higher level of iodine content whereas 17 percent of households used salt that is not iodized at all and another 17 percent used salt, which was inadequately iodized.

In rural areas, 21 percent of households against 8 percent in urban areas used non-iodized salts. Percentage of households using inadequately iodized salt in rural areas is almost 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 79 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 72 percent, followed by 61 percent in other backward class households and among scheduled caste and scheduled tribe it is about 58 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, Punjab, 2002-04

Background characteristic	Not iodised	7ppm	15+ppm	Other <sup>1</sup>	Total percent	Number of households
<b>Place of Residence</b>						
Rural	21.1	20.2	57.2	1.5	100.0	12,047
Urban	7.8	10.9	80.3	1.0	100.0	5,844
<b>Education of the household heads</b>						
Non-literate	24.0	21.5	52.6	1.8	100.0	6,960
0-9@ years	15.4	17.4	65.9	1.3	100.0	5,431
10 and above	8.8	11.4	79.0	0.8	100.0	5,497
<b>Religion of household head</b>						
Hindu	12.4	15.1	71.0	1.6	100.0	6,579
Muslim	27.3	19.7	51.1	1.8	100.0	190
Christian	28.3	22.3	46.2	3.2	100.0	317
Sikh	18.9	18.2	61.7	1.1	100.0	10,751
Other	7.9	15.4	75.1	1.5	100.0	54
<b>Caste/tribe of the household head#</b>						
Scheduled caste	21.0	19.6	57.7	1.7	100.0	6,108
Scheduled tribe	16.4	23.5	58.5	1.7	100.0	235
Other backward class	18.9	18.6	60.9	1.6	100.0	3,378
Other	12.7	14.5	71.9	0.9	100.0	8,113
<b>Standard of living index</b>						
Low	34.3	24.1	38.8	2.9	100.0	2,105
Medium	21.1	20.9	56.5	1.5	100.0	7,398
High	8.5	12.1	78.6	0.8	100.0	8,387
Total	16.7	17.2	64.8	1.3	100.0	17,891

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. <sup>1</sup> Includes salt not at home, salt not tested, refused and missing cases.

Differential in the consumption of properly iodized salt is more pronounced when analysed by religion of the household head and standard of living index. Percentage of households using adequately iodized salt is only 46 percent among Christian households, whereas the corresponding figures for Hindu and Sikh households are 71 percent and 62 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 34 percent of households with low standard of living used non-iodized salt, only 9 percent households with a high standard of living fall in this category. The number of households with a high standard of living using adequately iodized salt is twice of those with a low standard of living.

## 2.11 Iodization of Salt by District

Table 2.11 shows district level variation in the percent distribution of households by level of iodization of salt used in the households. Jalandhar has the lowest proportion of households (5 percent) using non-iodized salt, whereas Amritsar has the highest proportion of households (29 percent) using non-iodized salt. Percentage of households using inadequately iodized salt is the highest (26 percent) in Firozpur and the lowest in Jalandhar (7 percent). Around 65 percent of the households in the state used adequately iodized salt, the highest being in the district of Jalandhar (88 percent). About half of the households in Amritsar and Firozpur (51 percent) were using adequately iodized salt (see Map-2).

<b>Table 2.11 IODOIZATION OF SALT BY DISTRICT</b>				
Percent distribution of household heads by degree of idoization of salt by district, Punjab, 2002-04				
District	Not idoized	7ppm	15+ppm	Other <sup>1</sup>
Amritsar	29.1	18.7	51.3	0.9
Bathinda	14.5	15.3	69.2	1.0
Faridkot	20.4	12.9	65.7	1.0
Fatehgarh Sahib	16.1	12.7	70.6	0.7
Firozpur	21.7	26.8	50.6	0.9
Gurdaspur	16.2	20.5	61.2	2.1
Hoshiarpur	11.2	18.5	68.2	2.1
Jalandhar	4.7	7.0	87.8	0.4
Kapurthala	8.9	10.0	80.7	0.4
Ludhiana	12.1	17.6	69.3	1.0
Mansa	27.3	17.5	54.4	0.8
Moga	11.0	16.8	71.1	1.1
Muktsar	21.4	22.8	54.6	1.2
Nawanshahr	7.9	11.4	78.1	2.7
Patiala	16.1	19.0	64.2	0.7
Rupnagar	13.5	11.8	70.7	3.9
Sangrur	19.0	15.3	63.4	2.4
Punjab	16.7	17.2	64.8	1.3

Note: Ppm: Parts per million. <sup>1</sup> 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. Most of the rural residents (99 percent) (the *de jure* rural population) in the state live in villages that have a primary school, 68 percent live in villages with middle school and 46 percent of the rural population live in villages with secondary schools and *Gurujee* scheme. Higher secondary schools are available for 28 percent of the rural population. Two percent of the rural population live in villages, which have *Madarasa*. Only 4 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, 29 percent of the villages have middle school, 45 percent have secondary school, 44 percent have higher secondary school and 8 percent have a '*Madarasa*' within this distance. For 54 percent of the villages, the college is more than 10 kilometres away and *madarasa* are available at this distance for 3 percent of the villages.

<b>Table 2.12 DISTANCE FROM THE NEAREST EDUCATION FACILITY</b>						
Percent distribution of rural household population by distance from the nearest education facility, Punjab, 2002-04						
Education facility	Within village	Distance from the village:			Don't know/missing	Total percent
		< 5 km	5-9 km	10+ km		
Primary School	98.5	0.8	0.4	0.1	0.2	100.0
Middle School	68.0	28.5	1.9	0.6	0.9	100.0
Secondary School	43.9	44.8	9.6	1.7	0.0	100.0
Higher Secondary School	28.3	44.1	19.5	7.1	1.0	100.0
College	4.2	12.5	28.2	54.2	0.8	100.0
<i>Gurujee</i> Scheme	2.1	8.3	1.6	3.6	84.5	100.0
<b><i>Madarsa</i></b>	1.9	8.3	1.2	2.8	85.8	100.0

Note: Table based on rural *de jure* population

<b>Table 2.13 DISTANCE FROM THE NEAREST HEALTH FACILITY</b>						
Percent distribution of rural household population, rural currently married women age 15-44 years and rural men by distance from the nearest health facility, Punjab, 2002-04.						
Health facility	Within village	Distance from the village:			Don't know/missing	Total percent
		< 5 km	5-9 km	10+ km		
Rural household population						
Sub-centre	32.0	41.5	16.9	7.8	1.8	100.0
Primary health centre	12.4	28.3	28.2	27.2	3.9	100.0
Either sub-centre or PHC	34.9	41.7	16.0	6.6	0.8	100.0
Community health centre/ Referral hospital	8.4	23.7	29.2	33.4	5.3	100.0
Government dispensary	34.9	34.5	17.5	11.5	1.5	100.0
Government hospital	5.7	22.0	24.4	47.2	0.8	100.0
Private clinic	39.7	20.9	19.8	18.8	0.8	100.0
Private hospital	3.8	22.8	29.9	40.8	2.7	100.0
ISM health facility	5.0	21.2	21.9	38.6	13.3	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 32 percent of the rural population live in villages with Sub-centres. Only 12 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 35 percent. The proportion of rural population with other health facilities are 8 percent for CHCs/RHs, 35 percent for Government dispensary, 6 percent for Government hospitals, 40 percent for private clinics, 4 percent for private hospitals and 5 percent for Indian System of Medicine.

<b>Table 2.14 AVAILABILITY OF SERVICES</b>	
Percentage of rural residents living in villages that have selected services, Punjab, 2002-04	
Services	Percentage of rural residents
<b>Anganwadi centre</b>	92.2
Anganwadi worker	87.0
Private doctor	51.0
Visiting doctor	12.9
Homeopathic doctor	10.1
Village health guide	9.0
Trained birth attendant	46.7
Traditional healer	32.5
Dai	63.1

Note: Table based on rural *de jure* population

The proportion of rural population located within a distance of 5 kilometres from health facilities are 42 percent for sub-centres, 28 percent for primary health centres, 24 percent for CHCs/RHs. 35 percent for a Government dispensary, 22 percent for Government hospitals, 21 percent for private clinic, 23 percent for private hospitals and 21 percent for ISM health facilities. Distance of particular health facilities is beyond 10 kilometres from surveyed villages in the case of Government hospitals (47 percent) and private hospitals, (41 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* centre (a nursery school for children age 3-6 years) and at the same time 87 percent of rural households live in villages with *anganwadi* workers (*Anganwadi* workers provide integrated child development services) are available.

About half of the rural residents live in villages that have a private doctor, 13 percent live in villages with a visiting doctor, 10 percent with a homoeopathy doctor, 9 percent with a village health guide, 47 percent with a trained birth attendant and 33 percent with a traditional healer. Little less than two-thirds of the rural residents live in villages that have a *Dai* (*Dai* provides the services for the delivery).

### **2.13 Availability of Education Facility and Health Services by District**

Table 2.15 shows the availability of education and health facilities for the rural population within the surveyed villages by district in Punjab. All the rural population of Punjab have access to primary or middle schools except the districts of Gurdaspur, Hoshiarpur, Muktsar, Nawnsahr, Rupnagar and Sangrur. In the state of Punjab, 99 percent of the rural population live in villages having primary schools. Thirty two percent of the rural population in the state have sub-centres within the village, with the highest coverage of 68 percent in Bathinda and the lowest of 6 percent of the population in Hoshiarpur. Highest availability of PHCs within the village is found in Jalandhar and Mansa (24 percent) each; while in Rupnagar and Hoshiarpur only 4 percent villages have PHCs.

**Table 2.15 AVAILABILITY OF FACILITY AND SERVICES BY DISTRICT**

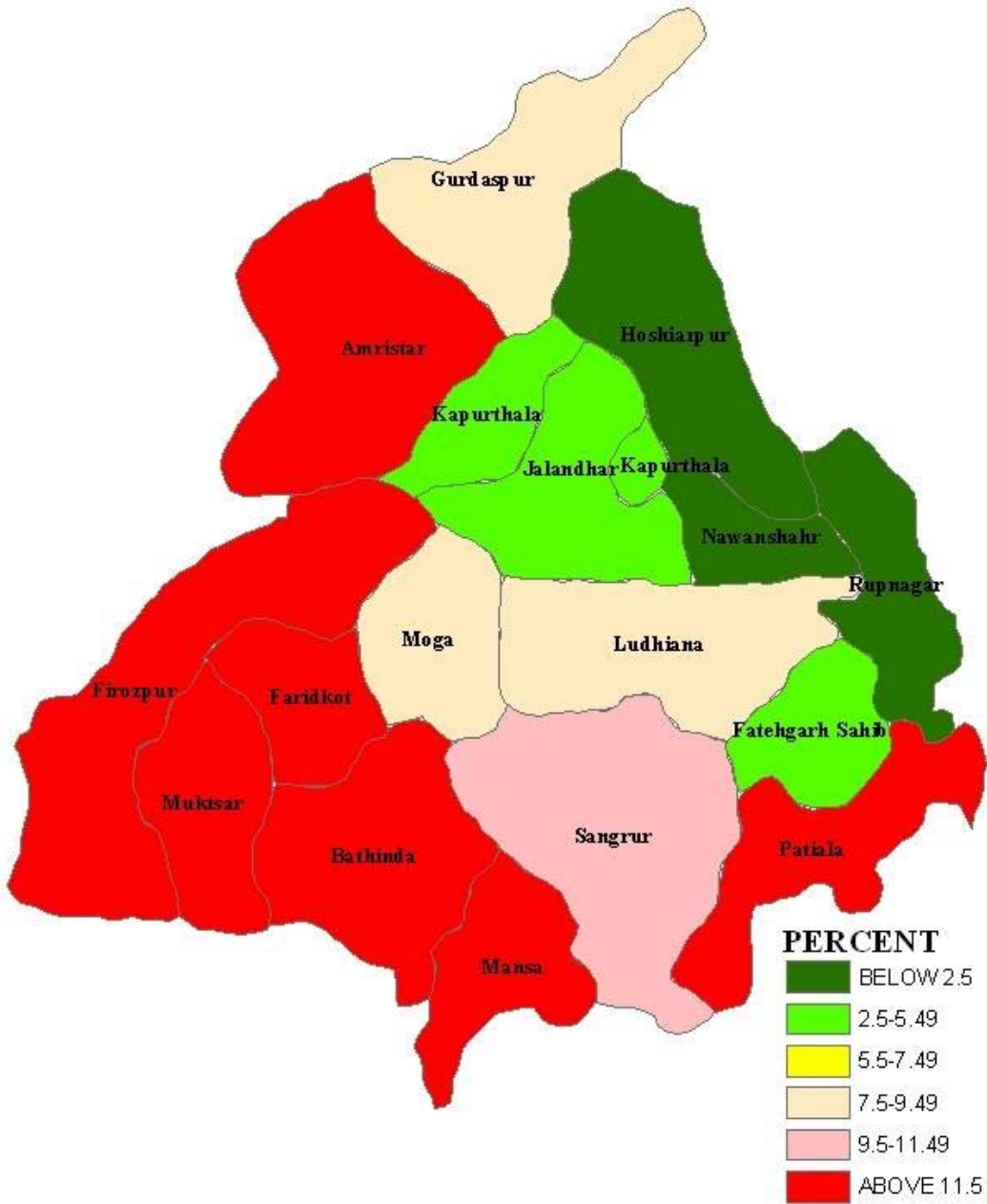
Selected facility and services of rural household population within village by district, Punjab, 2002-04

Districts	Percentage of rural household population with						
	Primary or middle school	Sub-centre	PHCs	Any government health facility <sup>1</sup>	Doctor <sup>2</sup>	TBA <sup>3</sup>	Angan-wadi worker
Amritsar	100.0	21.4	11.9	53.7	72.8	50.4	90.8
Bathinda	100.0	68.4	14.9	79.8	19.0	35.7	100.0
Faridkot	100.0	60.2	22.7	71.2	24.1	53.6	94.3
Fatehgarh Sahib	100.0	47.7	23.0	55.3	28.9	40.7	93.3
Firozpur	100.0	36.9	11.5	55.9	74.9	45.1	68.6
Gurdaspur	97.9	29.1	14.2	45.5	72.9	46.0	74.5
Hoshiarpur	96.7	6.3	4.1	16.2	66.6	40.0	85.4
Jalandhar	100.0	28.5	24.0	64.6	24.6	61.8	83.3
Kapurthala	100.0	31.3	8.3	57.4	69.4	43.3	77.5
Ludhiana	100.0	9.4	6.0	48.6	80.8	38.9	93.7
Mansa	100.0	47.6	23.9	68.7	38.4	44.2	89.5
Moga	100.0	40.6	18.1	69.3	48.4	70.5	92.1
Muktsar	96.9	41.2	17.7	61.3	15.0	36.8	93.5
Nawanshahr	94.2	32.8	23.5	54.1	31.5	40.7	86.3
Patiala	100.0	38.8	6.1	50.4	37.0	57.0	91.1
Rupnagar	89.4	12.9	3.6	40.2	66.0	47.5	96.7
Sangrur	96.7	38.8	7.0	66.0	66.5	37.1	82.7
Punjab	98.5	32.0	12.4	54.9	56.1	46.7	87.0

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

Around 81 percent of the rural population are visited either by private or by visiting doctors in the surveyed villages of Ludhiana district, whereas only 15 percent households can be classified in this category in Muktsar district. Highest numbers of rural population (71 percent) are attended by trained birth assistants in Moga, while only 36 percent of rural population, availed themselves of such a provision in Bathinda. A visit by *anganwadi* workers to rural households is highest (100 percent) in Bathinda and the lowest in Gurdaspur (75 percent).

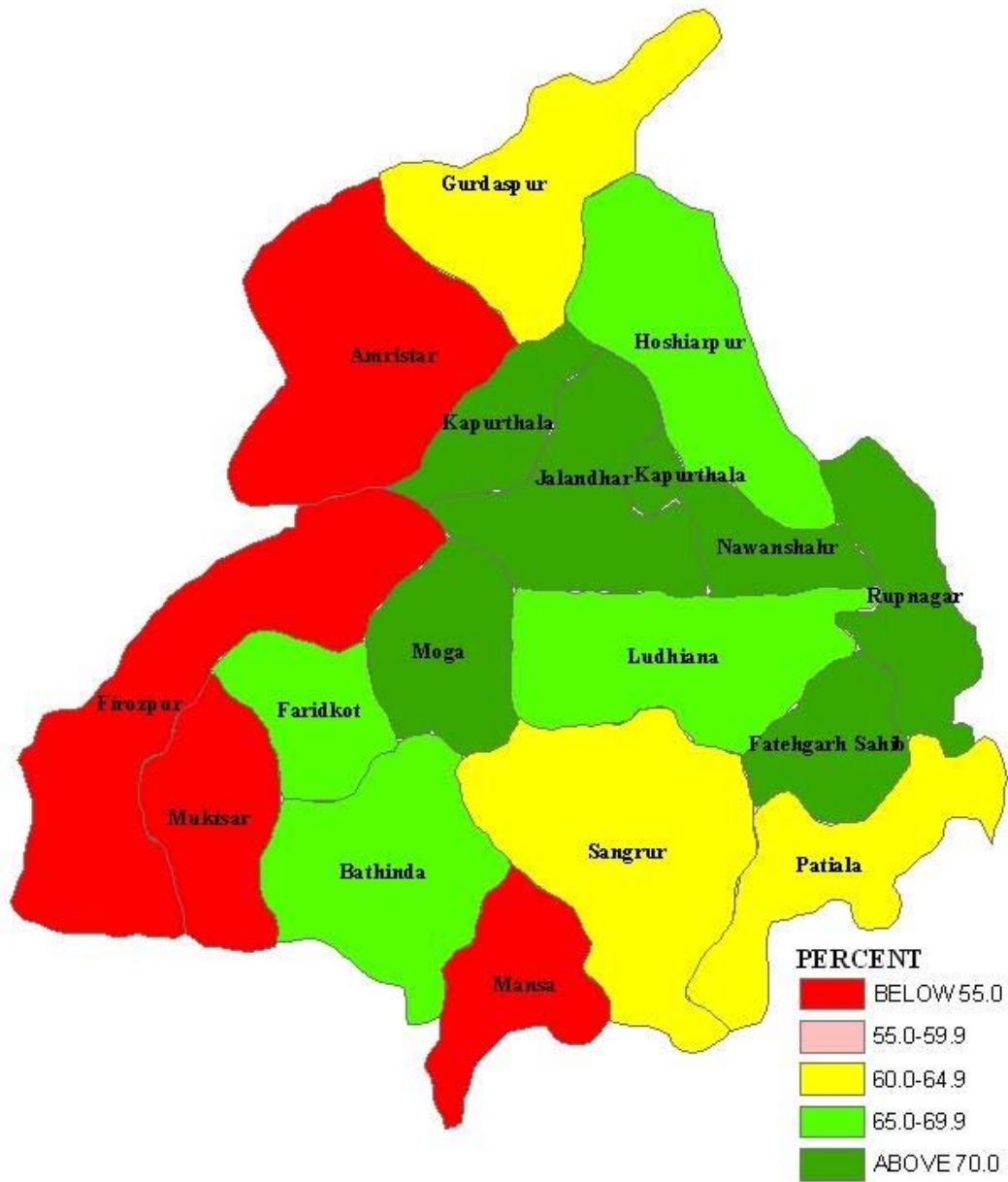
**MAP-1**  
**Percent Girl Marrying Below Legal Age at Marriage**





## MAP-2

Percentage of Households Using Salt that Contains 15 ppm 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 15,696 eligible women represents the state of Punjab in DLHS-RCH and nearly one-third of these women are drawn from rural areas. About 60 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 low with as many as 19 percent of the women having cohabited before 18 years of age, while it is 25 percent in urban areas. Looking at the distribution of marital duration it is noted that about 38 percent of the women across the state are married for more than 15 years.

Among the sample 15,696 representative women in Punjab, Sikh and Hindus constitute 61 percent and 36 percent respectively. More, Sikh women are found in urban areas (71 percent) than in rural areas (38 percent). The presence of women belonging to other religious groups is insignificant in proportional and absolute terms. Thirty three percent of the women belong to scheduled castes, 1 percent to scheduled tribes and 19 percent to other backward classes. Majority of the sample women (46 percent) belong to a general caste other than scheduled caste/tribe and other backward class. In urban areas, there are more women belonging to scheduled caste and scheduled tribe than in rural areas, while more women from other castes are found in rural areas. There is a clear rural-urban differential in the educational attainment of

women. For the state of Punjab, 36 percent of women are non-literate and women of this category constitute 43 percent in urban areas while it is just 21 percent in rural areas.

<b>Table 3.1 BACKGROUND CHARACTERISTICS OF ELIGIBLE WOMEN</b>			
Percent distribution of currently married women aged 15-44 by selected background characteristics, according to residence, Punjab, 2002-04			
Background characteristic	Total	Residence	
		Rural	Urban
<b>Age group</b>			
15-19	3.4	2.3	4.0
20-24	18.0	14.9	19.4
25-29	21.7	22.6	21.2
30-34	20.4	20.2	20.5
35-39	18.2	19.3	17.7
40-44	18.3	20.7	17.2
<b>Age at consummation of marriage</b>			
Below 18 years	22.7	18.5	24.6
18 years & above	77.3	81.5	75.4
<b>Marital duration</b>			
0-4	21.4	19.9	22.1
5-9	20.5	20.7	20.4
10-14	20.5	20.4	20.5
15+	37.6	39.0	37.0
<b>Religion</b>			
Hindu	36.3	60.9	25.3
Muslim	1.0	0.4	1.3
Christian	1.9	0.7	2.4
Sikh	60.5	37.5	70.8
Buddhist	0.1	0.1	0.1
Jain	0.1	0.3	0.0
Other	0.0	0.1	0.0
<b>Caste/tribe</b>			
Scheduled caste	33.0	25.0	36.5
Scheduled tribe	1.3	1.0	1.4
Other backward class	19.2	19.2	19.2
Other #	46.2	54.7	42.4
Don't know	0.3	0.1	0.4
<b>Education (Years of schooling)</b>			
Non-literate	36.1	21.4	42.7
0-9@ years	31.9	25.5	34.7
10 years & above	32.0	53.0	22.6
Missing	0.0	0.1	0.0
<b>Husband's education (Years of schooling)</b>			
Non-literate	23.9	13.4	28.7
0-9@ years	32.5	27.5	34.8
10 years & above	43.4	59.0	36.4
Don't know	0.1	0.0	0.1
Missing	0.1	0.1	0.0
<b>Standard of living index</b>			
Low	9.1	2.1	12.3
Medium	40.4	21.3	48.9
High	50.5	76.6	38.8
Number of women	15,696	4,877	10,819

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

About 32 percent of women across the state have completed 0-9 years of schooling. Only a handful, 23 percent of urban women have completed 10 or more years of schooling compared to 53 percent for rural women. Men are more literate than their spouses. In Punjab, 24 percent of the husbands of eligible women are non-literate and the corresponding figures are 13 percent in rural areas and 29 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. Nine percent of women in the state live in low standard of living households and this is 2 percent in rural areas and 12 percent in urban areas. Majority of women across the state live in households categorised as high standard of living. In rural areas, 77 percent of women belong to high standard of living households and the corresponding figure is just 39 percent in urban 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, 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 and not many had 11 or more years of schooling. For the women in the age group 15-19 years, 18 percent each of them had 1-5 years and 6-8 years of schooling, while only 4 percent had 11 or more years of schooling. Among the senior women in the age group 40-44 years, distribution by year of schooling varies with 20 percent, 10 percent, 15 percent and 12 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 Punjab. About 43 percent of rural eligible women are non-literate and 18 percent, 15 percent, 17 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 21 percent non-literate and 11 percent, 13 percent, 24 percent and 31 percent respectively. More Christian women (67 percent) are non-literate compared to Muslim women (60 percent), Hindu women (30 percent) and women belonging to other religious communities (24 percent). The proportion of Hindu women with 1-5 years of schooling is 13 percent and the same is 22 percent for Muslim women, 17 percent for Christian women, 16 percent for Christian and 4 percent for women from other religions. Among the literate Muslim women hardly 4 percent of them have 11 or more years of schooling, while 22 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 (57 percent), scheduled tribe (46 percent), other backward class (38 percent) and other caste or tribe (20 percent). The husband's education is an important characteristic, which has strong association with the education of eligible women. As many as 79 percent of women whose husbands are non-literate are also non-literate, while only 4 percent of women whose husbands have 11 or more years of schooling are

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

<b>Table 3.2 LEVEL OF EDUCATION OF ELIGIBLE WOMEN</b>									
Percent distribution of currently married women aged 15-44 by years of schooling, according to selected background characteristics, Punjab, 2002-04									
Background characteristic	Non-literate	Literate but no schooling	Years of schooling				Missing	Total percent	Number of women
			1-5 years	6-8 years	9-10 years	11 or more years			
<b>Age group</b>									
15-19	43.8	0.0	18.3	18.2	15.4	4.4	0.0	100.0	541
20-24	30.9	0.0	13.9	16.8	22.0	16.3	0.1	100.0	2,829
25-29	30.9	0.0	12.5	14.7	21.4	20.4	0.0	100.0	3,399
30-34	36.6	0.1	15.7	15.6	18.0	14.0	0.1	100.0	3,207
35-39	38.3	0.0	18.2	13.7	17.9	12.0	0.0	100.0	2,851
40-44	43.0	0.1	19.5	10.0	15.4	11.9	0.1	100.0	2,870
<b>Place of residence</b>									
Rural	42.7	0.0	18.1	15.2	16.8	7.2	0.0	100.0	10,819
Urban	21.4	0.1	11.0	12.5	23.5	31.4	0.1	100.0	4,877
<b>Religion</b>									
Hindu	29.5	0.1	12.9	14.2	21.0	22.4	0.0	100.0	5,701
Muslim	59.8	0.0	22.2	6.7	7.0	4.3	0.0	100.0	163
Christian	67.3	0.0	15.6	5.5	5.9	5.2	0.5	100.0	292
Sikh	38.6	0.0	17.7	14.8	18.3	10.5	0.1	100.0	9,495
Other	(23.9)	(0.0)	(4.3)	(8.7)	(6.5)	(56.5)	(0.0)	(100.0)	45
<b>Caste/tribe #</b>									
Scheduled caste	57.0	0.1	15.9	11.2	11.4	4.4	0.1	100.0	5,172
Scheduled tribe	46.0	0.0	8.9	19.9	15.9	8.6	0.7	100.0	201
Other backward class	38.4	0.0	17.3	16.4	18.2	9.5	0.1	100.0	3,016
Other	19.9	0.0	15.5	15.6	24.6	24.4	0.0	100.0	7,257
<b>Husband's education</b>									
Non-literate	79.4	0.1	12.0	5.8	2.4	0.3	0.1	100.0	3,754
1-5 years	48.7	0.0	28.4	13.7	7.9	1.3	0.0	100.0	1,893
6-8 years	33.3	0.0	22.0	24.8	16.0	3.8	0.1	100.0	2,646
9-10 years	16.8	0.0	17.4	19.1	34.2	12.6	0.0	100.0	4,365
11 or more years	4.4	0.1	5.4	9.3	26.8	54.0	0.1	100.0	3,004
Total	36.1	0.0	15.9	14.3	18.9	14.7	0.0	100.0	15,696
Note: # Total number may not add upto N due to don't know and missing cases. Table includes 10 cases of literature but no schooling and 24 missing / do not know cases on husband's education were not shown separately. ( ) Based on less than 50 unweighted cases.									

### 3.3 Background Characteristics of Husbands of Eligible Women

In DLHS-RCH husbands of eligible women were also interviewed. 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 Punjab, husbands are mostly in the age group 25-34 years. Fewer husbands are below 25 years. In Punjab, 60 percent of the husbands are Sikh, 37 percent of the husbands are Hindus and presence of other religious groups is insignificant. Thirty two percent of husbands in the state belong to the scheduled caste and it is little more in rural areas (35 percent) than in urban areas (26 percent). Nearly 47 percent of the husbands belong to castes other than scheduled caste, scheduled tribe and other backward

classes. In urban areas husbands from other castes constitute 54 percent, while it is 44 percent rural areas. As regards educational characteristics of the husbands of surveyed eligible women, more than 35 percent of them have completed 0-9 years of schooling and the proportion of non-literate husband ranges from 14 percent in urban areas to 30 percent in rural areas, while the overall state figure is 25 percent.

<b>Table 3.3 BACKGROUND CHARACTERISTICS OF MEN</b>			
Percent distribution of husbands of eligible women by selected background characteristics, according to residence, Punjab, 2002-04			
Background characteristic	Total	Residence	
		Rural	Urban
<b>Age group</b>			
< 25	8.0	9.1	5.8
25-34	36.4	36.4	36.2
35-44	35.4	35.2	35.7
45 +	20.2	19.3	22.2
<b>Religion</b>			
Hindu	36.5	25.2	60.3
Muslim	1.1	1.3	0.5
Christian	1.8	2.4	0.7
Sikh	60.3	70.9	37.8
Buddhist	0.2	0.2	0.2
Jain	0.1	0.0	0.4
Other	0.0	0.0	0.0
<b>Caste/tribe</b>			
Scheduled caste	32.1	35.0	26.0
Scheduled tribe	1.4	1.5	1.1
Other backward class	18.8	19.1	18.4
Other #	47.3	43.9	54.4
Don't know	0.4	0.5	0.1
<b>Education (Years of schooling)</b>			
Non-literate			
0-9@ years	24.5	29.5	13.9
10 years & above	34.5	37.3	28.7
Missing	41.0	33.2	57.4
	0.0	0.0	0.1
<b>Standard of living index</b>			
Low	8.2	11.4	1.4
Medium	40.3	49.0	21.9
High	51.5	39.6	76.7
<b>Number of living children</b>			
0	10.2	10.3	10.0
1	15.2	14.9	15.8
2	30.7	29.0	34.1
3	25.2	25.4	25.0
4+	18.7	20.4	15.2
<b>Number of Men</b>	<b>9,246</b>	<b>6,273</b>	<b>2,973</b>
Note: # Higher caste (Not belonging to a scheduled caste, scheduled tribe and an other backward class). @ Literate persons with no year of schooling are included.			

The proportion of husbands living in households classified as low, medium and high standard of living index are 8 percent, 40 percent and 52 percent respectively. In rural areas, 11 percent of the husbands live in low standard of living households compared to 1 percent in urban areas. This is complementary in the case of husbands living in high standard of living households, 77 percent in urban and 40 percent in rural. In terms of household standard of living composition, those living in medium standard of living dominate in rural (49 percent) and in urban Punjab most husbands (77 percent) live in high standard of living households. Around 31 percent of husbands across the state reported to have two living children. More husbands in urban areas (16 percent) reported to have one living child, while more husbands in rural areas (20 percent) have four or more living children. About 46 percent of the husbands of rural eligible women have more than three living children and it is 40 percent for husbands of urban eligible women.

### **3.4 Educational Level of Husbands of Eligible Women**

Educational levels in categories of years of schooling classified by age, place of residence, religion and caste/tribe of husbands of eligible women are shown in Table 3.4. The distribution of non-literate husbands across age is more or less uniform, though it is marginally less for husbands in the age groups 25-34 years (20 percent) compared to 23 percent for below 25 years and 27 percent for husbands in the age groups 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, 35 percent of those below 25 years and 30 percent of those above 45 years of age. As expected few of the younger husbands (17 percent) below 25 years have 11 or more years of schooling compared to 18 percent of those above 45 years. As in the case of eligible women, 55 percent of Christian husbands are non-literate while the corresponding non-literate husbands of Hindu, Muslim and Sikh are 19 percent, 42 percent and 27 percent respectively. The proportions of husbands of Hindu, Muslim and Sikh who have 11 or more years of schooling constitute 24 percent, 10 percent and 17 percent respectively. Most of the literate Muslim husbands (18 percent) have completed 1-5 years of schooling and the corresponding numbers are 11 percent, 13 percent and 15 percent respectively for Hindu, Sikh and Christian husbands. Educational attainment of husbands of eligible women varies according to the caste/tribe they belong. There are more non-literate husbands belonging to scheduled caste (39 percent) followed by scheduled tribes husbands (33 percent). Among the scheduled caste and scheduled tribe husbands, 29 percent and 34 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, 27 percent of them are non-literate and 36 percent of them have 9 or more years of schooling.

<b>Table 3.4 LEVEL OF EDUCATION OF MEN</b>									
Percent distribution of husbands of eligible women by years of schooling, according to selected background characteristics, Punjab, 2002-04									
Background characteristic	Non-literate	Literate but no schooling	Years of schooling				Missing	Total percent	Number of men
			1-5 years	6-8 years	9-10 years	11 or more years			
<b>Age group</b>									
< 25	23.2	0.0	12.9	22.2	24.7	17.0	0.0	100.0	741
25-34	20.2	0.0	11.8	16.2	28.9	22.8	0.1	100.0	3,362
35-44	27.1	0.1	13.3	17.8	25.4	16.3	0.0	100.0	3,271
45 +	28.2	0.0	13.2	16.7	23.9	18.0	0.0	100.0	1,872
<b>Place of residence</b>									
Rural	29.5	0.0	14.4	18.1	25.9	12.0	0.0	100.0	6,273
Urban	13.9	0.1	9.2	15.6	27.3	34.0	0.1	100.0	2,973
<b>Religion</b>									
Hindu	18.7	0.0	11.3	17.7	28.3	24.1	0.0	100.0	3,373
Muslim	42.0	0.0	17.9	20.0	9.8	10.3	0.0	100.0	97
Christian	54.6	0.0	15.4	12.8	9.9	7.2	0.0	100.0	169
Sikh	26.8	0.1	13.4	17.2	26.0	16.5	0.1	100.0	5,572
Other	(15.6)	(0.0)	(0.0)	(6.3)	(28.1)	(50.0)	(0.0)	(100.0)	34
<b>Caste/tribe #</b>									
Scheduled caste	39.3	0.0	15.3	16.2	20.3	8.9	0.1	100.0	2,968
Scheduled tribe	32.8	0.0	10.7	23.0	24.4	9.1	0.0	100.0	129
Other backward class	26.5	0.0	15.2	22.1	22.7	13.4	0.0	100.0	1,743
Other	13.4	0.1	10.0	16.2	31.9	28.5	0.0	100.0	4,369
<b>Total</b>	<b>24.5</b>	<b>0.0</b>	<b>12.7</b>	<b>17.3</b>	<b>26.3</b>	<b>19.1</b>	<b>0.0</b>	<b>100.0</b>	<b>9,246</b>

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

### 3.5 Children Ever Born and Surviving

In DLHS-RCH, currently married women in the age group of 15-44 years were asked about the children ever born alive and the number of children surviving. Table 3.5 shows mean children ever born and mean surviving children by selected background characteristics and sex of children. A look at the mean children ever born by age of the women reveals that older women 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 3.4 for the state of Punjab and it comprises an average of 1.9 male children and 1.6 female children. Out of the 3.4 mean children ever born to women in the 40-44 year age group an average of 3.1 children survived. By sex of children, out of 1.9 mean numbers of males, 1.7 survived on the average and the corresponding mean number of females surviving was 1.4 out of 1.6.

Women with longer marital duration have higher mean children ever born. On the average, women who are married for 15 or more years have 3.5 children ever born and on the average 3.2 of them are surviving. There is a clear rural-urban divide in terms of mean children ever born with 2.6 children in rural areas and 2.4 children in urban areas. The mean children ever born to women who are Hindu, Muslim, Christian, Sikh and other religions are 2.5, 2.7, 3.1, 2.5



and 2.2 respectively. The corresponding mean surviving children are 2.3, 2.5, 2.8, 2.3 and 2.2 respectively for these religious groups. The average children ever born also vary by caste/tribe of the eligible women. For women belonging to scheduled caste, the mean children ever born are 2.9, for the scheduled tribe are 2.5, other backward classes are 2.6 and other castes are 2.2. For all religious groups, the mean number of surviving children is slightly more than 2 shared almost by one surviving male and one surviving female children on the average.

<b>Table 3.5 CHILDREN EVER BORN AND SURVIVING</b>							
Mean children ever born (CEB) and children surviving (CS) by selected background characteristics of currently married women aged 15-44 years, Punjab, 2002-04							
Background characteristic	Mean children ever born			Mean children surviving			Number of women
	Total	Male	Female	Total	Male	Female	
<b>Age group (years)</b>							
15-19	0.5	0.3	0.2	0.4	0.2	0.2	541
20-24	1.3	0.7	0.6	1.2	0.7	0.6	2,829
25-29	2.2	1.2	1.0	2.1	1.1	0.9	3,399
30-34	2.9	1.6	1.3	2.7	1.5	1.2	3,207
35-39	3.2	1.7	1.5	2.0	1.6	1.4	2,851
40-44	3.4	1.9	1.6	3.1	1.7	1.4	2,870
<b>Marital duration</b>							
0-4	0.9	0.5	0.4	0.8	0.4	0.4	3,360
5-9	2.3	1.3	1.0	2.1	1.2	0.9	3,219
10-14	2.9	1.6	1.3	2.7	1.5	1.2	3,219
15+	3.5	1.9	1.6	3.2	1.7	1.4	5,898
<b>Residence</b>							
Rural	2.6	1.4	1.2	2.4	1.3	1.1	10,819
Urban	2.4	1.3	1.1	2.3	1.2	1.0	4,877
<b>Religion</b>							
Hindu	2.5	1.3	1.2	2.3	1.3	1.1	5,701
Muslim	2.7	1.5	1.2	2.5	1.4	1.1	163
Christian	3.1	1.6	1.4	2.8	1.4	1.3	292
Sikh	2.5	1.4	1.1	2.3	1.3	1.0	9,495
Other	(2.2)	(1.1)	(1.1)	(2.2)	(1.1)	(1.1)	45
<b>Caste/tribe #</b>							
Scheduled caste	2.9	1.6	1.4	2.6	1.4	1.2	5,172
Scheduled tribe	2.5	1.4	1.1	2.4	1.3	1.1	201
Other backward class	2.6	1.4	1.2	2.4	1.3	1.1	3,016
Other	2.2	1.2	1.0	2.1	1.2	0.9	7,257
<b>Education</b>							
Non-literate	3.2	1.7	1.5	2.9	1.6	1.3	5,659
0-9@ years	2.5	1.4	1.1	2.3	1.3	1.1	5,004
10 years & above	1.8	1.0	0.8	1.7	1.0	0.8	5,026
<b>Standard of living index</b>							
Low	3.2	1.7	1.5	2.9	1.5	1.4	1,434
Medium	2.8	1.5	1.3	2.6	1.4	1.2	6,334
High	2.2	1.2	1.0	2.1	1.1	0.9	7,928
All women	2.5	1.2	1.1	2.3	1.3	1.1	15,695
Note: # Total number may not add upto N due to don't know and missing cases. Table includes 7 women with missing information on education. @ Literate women with no year of schooling are included. ( ) Based on less than 50 unweighted cases.							

The mean children ever born is higher for non-literate women (3.2) than women who have completed 0-9 years of schooling (2.5) and 10 or more years of schooling (1.8). The mean number of surviving children for women corresponding to these educational levels is 2.9, 2.3 and 1.7 respectively. Further the mean children ever born for women classified into low, medium and high standard of living by SLI are 3.2, 2.8 and 2.2 respectively. For the state of Punjab, 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 district in Punjab 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 3.4 children in their reproductive life of which 3.1 children are surviving on the average. Completed fertility in Punjab varies from the low of 3.0 mean children ever born for Nawanshahr to the highest of 3.9 children in Amritsar district. Mean children ever born in all the districts of Punjab are 3 or more than 3 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. Amritsar and Mansa (3.5) 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 Punjab.

<b>Table 3.6 COMPLETED FERTILITY BY DISTRICT</b>						
Mean children ever born (CEB) and children surviving (CS) to currently married women aged 40-44 by district, Punjab, 2002-04						
District	Mean children ever born			Mean children surviving		
	Total	Male	Female	Total	Male	Female
Amritsar	3.9	2.2	1.6	3.5	2.0	1.4
Bathinda	3.4	1.8	1.6	3.1	1.7	1.4
Faridkot	3.3	1.8	1.5	3.1	1.7	1.3
Fatehgarh Sahib	3.3	1.7	1.5	3.0	1.5	1.4
Firozpur	3.5	2.0	1.5	3.2	1.8	1.4
Gurdaspur	3.3	1.8	1.5	3.1	1.7	1.4
Hoshiarpur	3.4	1.8	1.6	3.2	1.6	1.5
Jalandhar	3.4	1.7	1.7	3.1	1.5	1.6
Kapurthala	3.2	1.7	1.4	2.9	1.6	1.2
Ludhiana	3.1	1.6	1.5	2.9	1.5	1.4
Mansa	3.8	2.0	1.8	3.5	1.8	1.6
Moga	3.1	1.6	1.4	2.8	1.4	1.3
Muktsar	3.3	1.8	1.4	2.9	1.6	1.2
Nawanshahr	3.0	1.7	1.3	2.7	1.6	1.1
Patiala	3.6	1.8	1.7	3.1	1.6	1.5
Rupnagar	3.2	1.8	1.4	3.0	1.6	1.3
Sangrur	3.4	1.9	1.4	3.0	1.8	1.2
Punjab	3.4	1.8	1.5	3.1	1.7	1.4

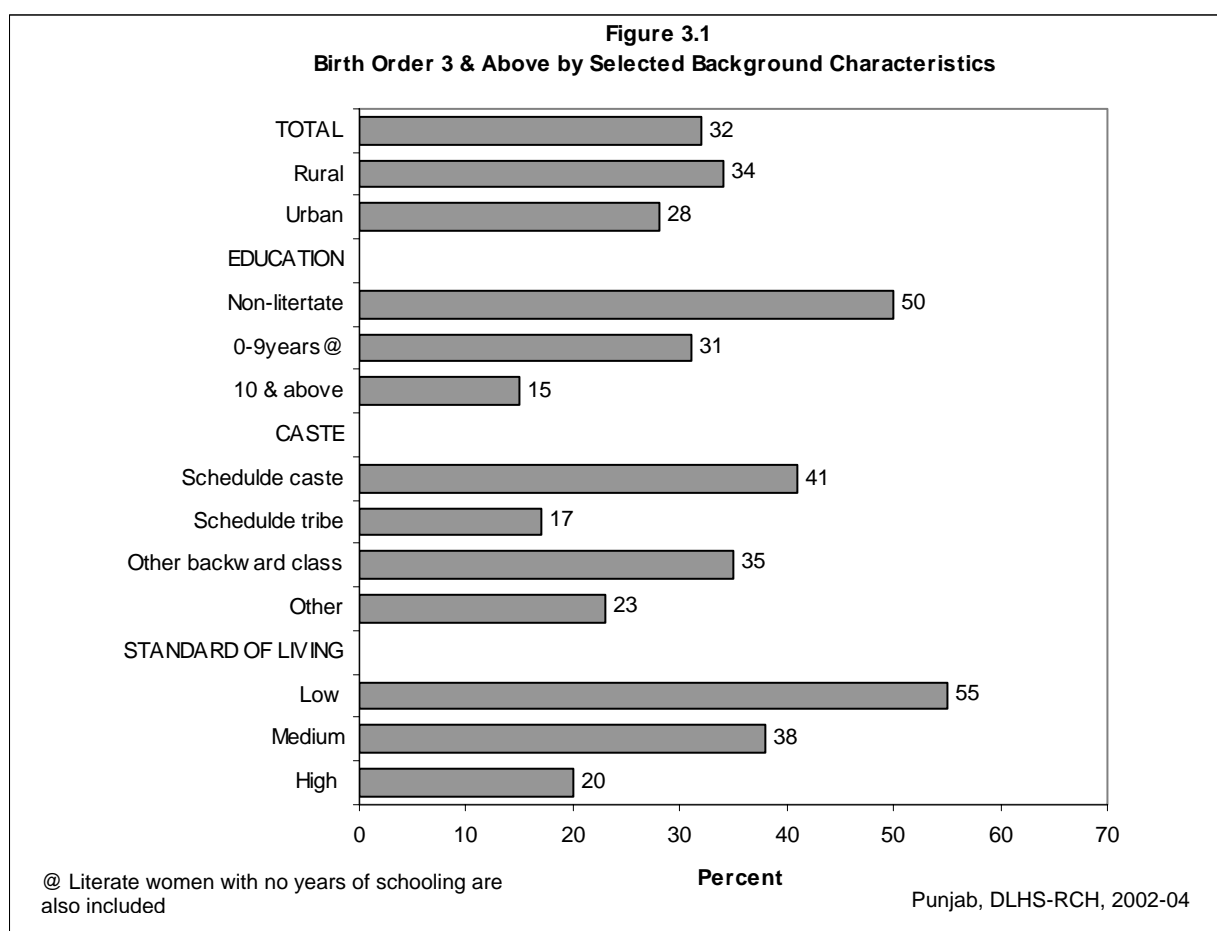
### 3.7 Birth Order

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

<b>Table 3.7 BIRTH ORDER</b>						
Percent distribution of births during three years preceding the survey by birth order by selected background characteristics, Punjab, 2002-04						
Background characteristic	Birth order				Total percent	Number of births
	1	2	3	4+		
<b>Age of women</b>						
15-19	78.2	17.6	3.8	0.4	100.0	227
20-24	51.9	33.1	11.6	3.5	100.0	2,288
25-29	22.6	37.1	23.8	16.5	100.0	1,922
30-34	8.7	24.6	26.5	40.2	100.0	619
35-39	7.2	17.0	18.3	57.5	100.0	172
40-44	(4.8)	(14.3)	(21.4)	(59.5)	(100.0)	49
<b>Place of residence</b>						
Rural	34.2	31.7	18.1	16.0	100.0	3,761
Urban	38.2	33.5	17.1	11.2	100.0	1,517
<b>Education (Years of schooling)</b>						
Non-literate	23.1	26.8	24.1	26.0	100.0	1,900
0-9@ years	36.1	33.2	17.2	13.5	100.0	1,638
10 years & above	48.1	37.2	11.5	3.2	100.0	1,739
<b>Religion</b>						
Hindu	37.5	31.3	17.3	14.0	100.0	1,960
Muslim	30.0	36.4	18.1	15.5	100.0	70
Christian	31.2	18.7	25.5	24.7	100.0	144
Sikh	34.4	33.3	17.7	14.6	100.0	3,095
<b>Caste/tribe #</b>						
Scheduled caste	30.2	29.0	20.9	19.9	100.0	2,106
Scheduled tribe	47.7	35.1	8.0	9.2	100.0	59
Other backward class	35.0	30.6	17.2	17.3	100.0	1,089
Other	40.7	36.3	15.2	7.8	100.0	1,998
<b>Standard of living index</b>						
Low	19.4	25.4	24.0	31.2	100.0	734
Medium	33.4	29.1	19.8	17.7	100.0	2,312
High	42.6	37.7	13.7	6.0	100.0	2,231
Total	35.4	32.2	17.8	14.6	100.0	5,278
Note: Total includes 2 births with missing information on mother's education and 9 births in other religion are not shown separately. # Total number of births may not add upto N due to don't know and missing cases. ( ) Based on less than 50 unweighed cases.						

For the state of Punjab, 35 percent of the births born in the three years period preceding the survey were of first order, 32 percent of second order and the remaining 32 percent were of order 3 and higher order births. By current age of eligible women, more than 50 percent of births to women in the age group 35-39 years and 40-44 years are 4 and higher order births. For women of 15-19 years, 78 percent births are of first order and 18 percent births are of second order. In the case of eligible women in urban areas 28 percent of the births are of 3 and higher whereas this order births constitute 34 percent for rural women indicating that higher order births are

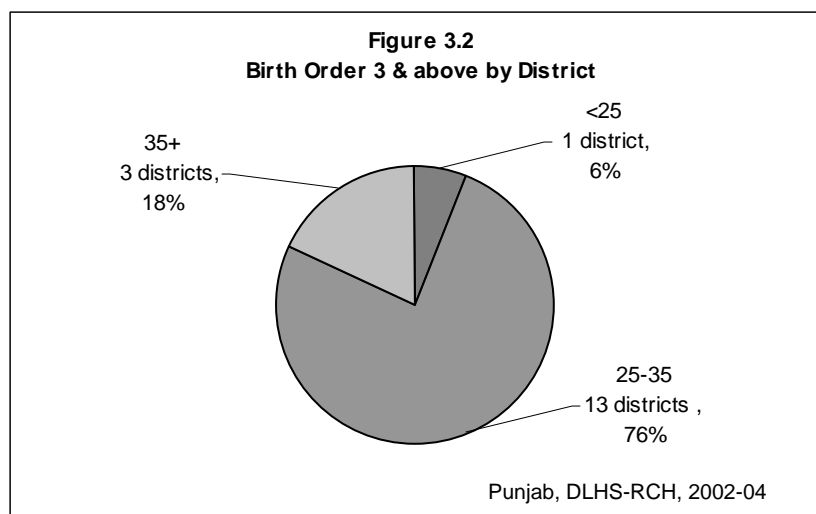
more concentrated in rural areas. Of the total births born to non-literate women, 40 percent are 3 and higher order births, followed by 31 percent for women with 0-9 years of schooling and 15 percent for women who had 10 or more years of schooling. In short, births born to non-literate women are of higher order whereas much lower order births occurred to women who completed 10 or more years of schooling. Looking at the religion differential in birth order distribution, it is observed that 34 percent of births born to Muslim women are 3 and higher order births. For Hindu, Sikh and Christian women, the 3 and higher order births constitute 31 percent, 32 percent and 50 percent respectively. The occurrence of births of order 3 and above is more among scheduled caste (41 percent) than among scheduled tribe (17 percent), other backward classes (35 percent) and other castes (23 percent) women. Incidence of births of order 3 and above for women classified by household standard of living index are 20 percent for high, 38 percent for medium and 55 percent for low living standard households women.



### 3.8 Birth Order by District

Table 3.8 and Figure 3.2 shows the births order distribution by districts in Punjab. The proportion of births of order 3 and above ranges from the lowest of 23 percent in Rupnagar to the highest of 38 percent in Amritsar. The districts, which have lower proportion of births (less than 30 percent) of order 3 and above, are Bathinda (30 percent), Faridkot (29 percent), Fatehgarh

Sahib (29 percent), Jalandhar (28 percent) Nawanshahr (25 percent) and Rupnagar (23 percent). The remaining districts fall between 31 percent to 38 percent.



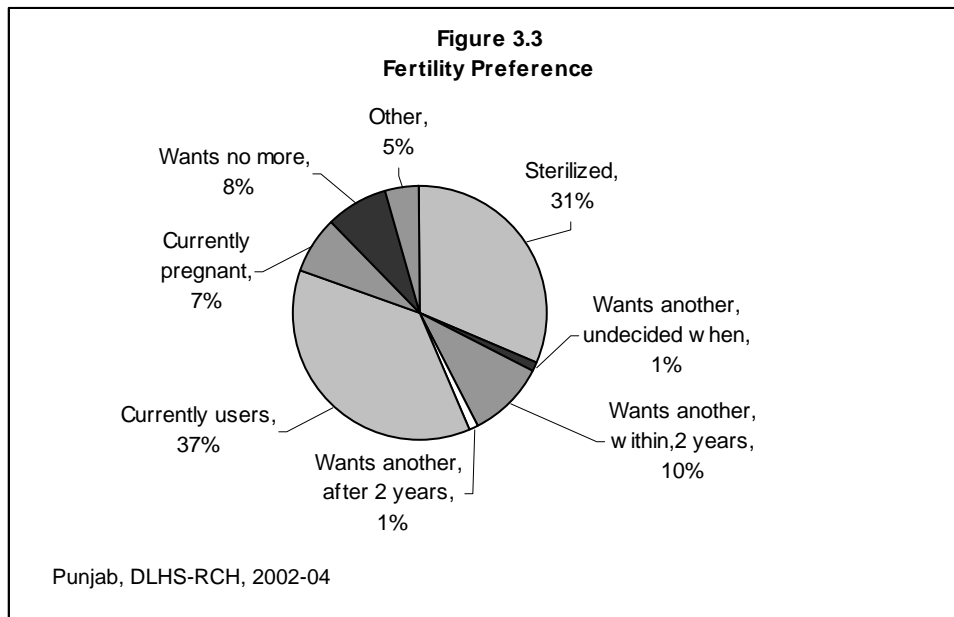
**Table 3. 8 BIRTH ORDER BY DISTRICT**

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

District	Birth order			
	1	2	3	4+
Amritsar	32.7	29.5	17.6	20.1
Bathinda	38.2	31.9	15.9	14.0
Faridkot	36.3	34.6	16.8	12.2
Fatehgarh Sahib	34.7	36.1	15.7	13.5
Firozpur	33.0	30.3	17.6	19.1
Gurdaspur	33.9	31.2	18.5	16.3
Hoshiarpur	36.0	28.3	19.3	16.5
Jalandhar	36.2	35.3	17.8	10.6
Kapurthala	37.6	29.2	18.2	15.0
Ludhiana	35.1	33.7	19.2	12.0
Mansa	37.8	30.7	15.0	16.5
Moga	35.4	33.7	16.0	14.9
Muktsar	36.5	29.6	21.3	12.6
Nawanshahr	39.9	35.5	15.6	8.9
Patiala	36.8	31.9	17.0	14.4
Rupnagar	38.5	38.6	14.5	8.4
Sangrur	36.1	33.1	19.4	11.4
Punjab	35.4	32.2	17.8	14.6

### 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 1,484 women with no living child, 35 percent are currently pregnant and 4 percent are using spacing methods, while 54 percent want to have children within two years, 2 percent want to have children after two years, 2 percent are undecided about the timing of birth and below 1 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 47 percent of the women having one living child are using spacing methods, 19 percent of them want additional children within two years, 3 percent after two years, 5 percent are undecided about the timing of the next child, 5 percent of them want no more additional children and 2 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 Punjab, out of the 15,696 surveyed representative women, 10 percent desired to have additional children within two years, 1 percent after two years, 8 percent want no more children, 8 percent are currently pregnant and 68 percent are using either terminal or temporary contraceptive methods. A total of 2,022 women want additional children irrespective of the number of living children. Out of 871 women who have no living children and desire for additional children, 19 percent want a boy as the first child, one percent desired for girl, for 57 percent, the sex of the child is immaterial and 22 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.



<b>Table 3.9 FERTILITY PREFERENCE</b>						
Percent distribution of currently married women by desire for children, according to number of living children, Punjab, 2002-04						
Desire for children	Number of living children					Total
	0	1	2	3	4+	
<b>Desire for additional child</b>						
Wants another soon <sup>1</sup>	53.6	19.1	4.3	2.1	1.7	10.0
Wants another later <sup>2</sup>	2.2	2.8	0.4	0.2	0.3	0.9
Want another, undecided when	1.9	4.5	0.9	0.6	0.1	1.3
Undecided	0.4	1.9	0.6	0.2	0.2	0.6
Up to God	0.5	0.1	0.2	0.1	0.1	0.2
Want no more	0.7	4.7	10.1	8.6	8.4	7.7
Sterilized	0.0	1.8	21.9	45.9	58.5	31.3
Currently users <sup>3</sup>	4.0	47.3	53.9	35.1	25.1	36.9
Currently pregnant	34.5	15.7	3.6	2.2	1.6	7.5
Declared infecund	1.9	2.1	3.8	5.0	3.8	3.7
Missing	0.2	0.0	0.2	0.1	0.1	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,484	2,274	4,477	3,764	3,697	15,696
<b>Preferred sex of additional children</b>						
Boy	18.7	47.6	61.1	79.3	79.3	40.5
Girl	1.3	6.5	6.5	1.1	0.0	3.6
Doesn't matter	57.3	28.3	19.0	13.0	9.9	37.7
Upto God	22.1	17.1	13.3	5.3	10.8	17.7
Missing	0.6	0.5	0.2	1.3	0.0	0.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	871	644	293	123	91	2,022
Note: <sup>1</sup> Wants next births within 2 years. <sup>2</sup> Wants to delay next birth for 2 or more years. <sup>3</sup> Other than sterilization.						

### 3.10 Pregnancy Outcomes

Table 3.10 shows distribution of pregnancy outcomes including live birth, stillbirth, induced abortion and spontaneous abortion by districts in Punjab. For the state as a whole, 87 percent of pregnancy ends in live births, 5 percent in induced abortions, 6 percent in spontaneous abortion and 2 percent in stillbirth. More pregnancies in rural areas end in live births (88 percent) than in urban areas (86 percent), while the incidence of induced abortion is more in urban areas (7 percent) than in rural areas (4 percent). The proportion of pregnancies ending in live births ranges from 84 percent in Faridkot and Patiala to 90 percent in Firozpur. The incidence of stillbirth is highest in Rupanagar, Bathinda, Moga and Firozpur (3 percent) followed by Faridkot, Gurdaspur, Hoshiarpur, Muktsar, Nawanshahr and Sangrur (2 percent). Induced abortion is higher in the districts of Patiala (9 percent), Jalandhar and Kapurthala (7 percent). Spontaneous abortion is in 4 percent in Firozpur and Kapurthala and , about 9 percent and highest in Bathinda and Faridkot.

**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, Punjab, 2002-04

Districts	Live birth	Stillbirth	Induced abortion	Spontaneous abortion	Missing	Total percent
<b>State-Rural</b>	87.9	2.1	4.0	6.0	0.0	100.0
<b>State-Urban</b>	85.5	0.7	7.2	6.5	0.1	100.0
<b>State-Total</b>	87.1	1.7	5.0	6.1	0.0	100.0
Amritsar	86.0	1.3	5.8	6.9	0.0	100.0
Bathinda	84.6	2.7	3.7	8.9	0.0	100.0
Faridkot	83.7	1.7	5.9	8.8	0.0	100.0
Fatehgarh Sahib	87.4	1.2	6.1	5.4	0.0	100.0
Firozpur	90.0	2.5	3.3	4.1	0.0	100.0
Gurdaspur	89.2	1.7	2.9	6.2	0.0	100.0
Hoshiarpur	87.3	2.1	2.8	7.8	0.0	100.0
Jalandhar	86.3	0.6	7.3	5.8	0.0	100.0
Kapurthala	88.2	1.2	7.1	3.6	0.0	100.0
Ludhiana	87.8	0.7	5.9	5.2	0.4	100.0
Mansa	87.2	1.1	4.7	7.0	0.0	100.0
Moga	87.8	2.7	4.3	5.1	0.0	100.0
Muktsar	85.1	1.7	5.6	7.6	0.0	100.0
Nawanshahr	85.4	1.6	4.9	8.1	0.0	100.0
Patiala	84.2	0.9	8.5	6.3	0.0	100.0
Rupnagar	85.8	2.9	4.2	7.1	0.0	100.0
Sangrur	88.8	2.3	3.7	5.1	0.0	100.0



## CHAPTER IV

### MATERNAL HEALTH CARE

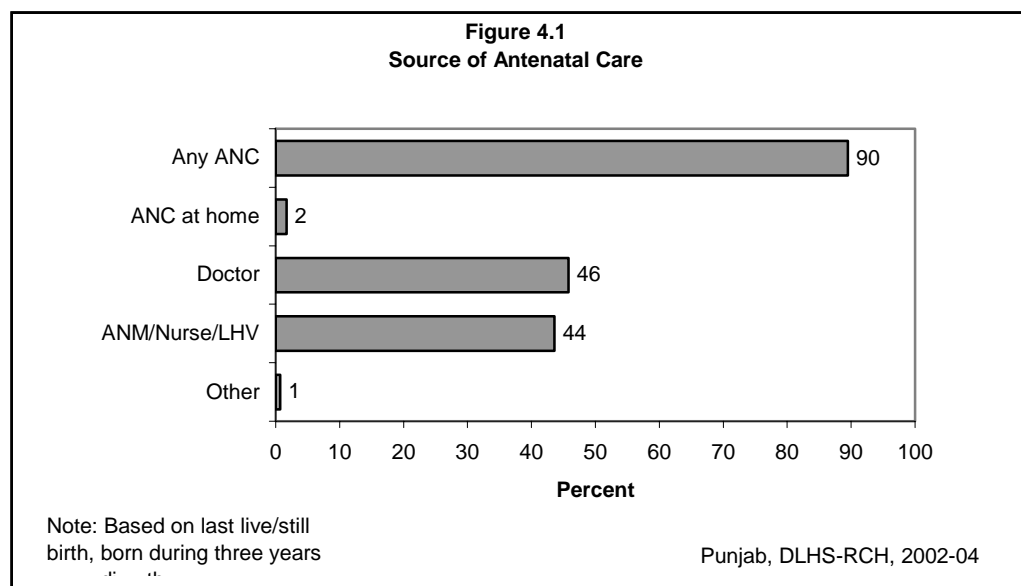
Provisions of maternal health care services to ensure safe motherhood is one of the major components of the Reproductive and Child Health (RCH) programme. The RCH programme services for antenatal care, includes at least three antenatal care visits, iron prophylaxis for pregnant and lactating women, at 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. Forty six percent of women received antenatal check-ups from doctors and 44 percent from ANM/Nurse/LHV. Only 2 percent women received antenatal check-ups at the doorstep from the ANMs or health worker.



Antenatal check-ups are more common among younger women age below 35 years than among older women, and it is more common among those women who had given their first birth. The percentage of women who received antenatal check-up was higher in urban areas (94 percent) than in rural areas (87 percent) and the percentage of women who received antenatal check-ups from doctors is also higher in urban areas (58 percent) than in rural areas (41 percent), and on the other hand an 46 percent of rural women received antenatal check-ups from auxiliary nurse midwife, nurse or LHVs, the same for women in urban areas is 39 percent. Seventy eight percent of non-literate women received antenatal check-ups; nearly all women (99 percent) who had completed high school received antenatal check-ups for their last pregnancy that terminated into births (either live or still birth) during the three years preceding the survey.

<b>Table 4.1 ANTENATAL CHECK-UP</b>							
Percentage of women* who received any antenatal check-up (ANC) during pregnancy by source of antenatal provider, according to selected background characteristics, Punjab, 2002-04							
Background characteristic	Any <sup>1</sup> antenatal check-up	Antenatal check-up only at home by ANM	Health personnel providing ANC <sup>2</sup>				Number of women
			Doctor	ANM /Nurse/ LHV	Other health professional	Other <sup>3</sup>	
<b>Age group</b>							
Less than 20 years	88.4	1.8	40.6	47.4	0.5	0.7	194
20-34 years	90.0	1.6	46.2	43.9	0.2	0.7	4,264
35 years & above	79.6	3.7	42.5	35.5	0.0	0.8	217
<b>Children ever born</b>							
1	95.6	0.9	52.5	44.2	0.4	0.5	1,465
2	91.5	1.5	48.9	43.1	0.1	0.7	1,511
3	85.7	2.1	41.5	43.8	0.0	0.3	888
4+	78.4	3.4	32.8	43.2	0.0	1.5	787
<b>Residence</b>							
Rural	87.4	2.2	40.6	45.7	0.1	0.7	3,280
Urban	94.2	0.6	57.8	38.8	0.2	0.9	1,394
<b>Education</b>							
Non-literate	77.7	2.9	30.5	44.1	0.0	1.2	1,653
0-9 @ years	92.5	1.7	46.1	46.1	0.2	0.5	1,405
10 years & above	98.9	0.6	61.1	40.9	0.3	0.5	1,615
<b>Religion</b>							
Hindu	89.7	1.5	50.6	40.2	0.2	1.1	1,761
Muslim	77.0	0.0	43.8	34.8	0.0	0.0	62
Christian	85.5	9.4	27.1	49.1	0.0	1.2	125
Sikh	89.7	1.6	43.5	45.8	0.2	0.5	2,716
<b>Caste/tribe#</b>							
Scheduled caste	84.7	1.9	37.5	45.6	0.1	1.1	1,792
Scheduled tribe	98.5	8.0	31.7	56.3	1.2	1.4	54
Other backward class	87.1	1.8	45.0	42.4	0.1	0.4	944
Other	95.1	1.2	54.6	42.0	0.3	0.5	1,867
<b>Standard of living index</b>							
Low	72.6	3.8	27.6	40.4	0.0	1.8	635
Medium	86.9	1.9	37.4	48.6	0.3	0.6	1,956
High	97.0	1.0	59.2	39.9	0.1	0.5	2,084
<b>Availability of health facility<sup>4</sup> in the village</b>							
No	88.0	2.5	39.6	47.7	0.1	0.7	1,431
Yes	87.0	2.0	41.4	44.1	0.2	0.6	1,849
Total	89.5	1.7	45.8	43.6	0.2	0.7	4,674
Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001.							
Note: Total includes 23 women with zero parity and 2 with missing information on education and 11 women with other religion who were not shown separately.							
<sup>1</sup> Antenatal check-ups either at home or outside from home at health facility.							
<sup>2</sup> Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses							
<sup>3</sup> Other also includes trained and untrained <i>dai</i> .							
# 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. <sup>4</sup> Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.							

The proportion of women who received antenatal check-ups from a doctor, increased steadily with the level of education and the standard of living index. Thirty one percent non-literate women as compared to 61 percent having education of more than 10 years received ANC from doctors. Similarly, 28 percent women belonging to households with a low standard of living against 59 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 (51percent) was higher than that of Muslim women (44 percent) and Christian women (27 percent). Fifty five percent of women from the 'other castes' category received antenatal check-ups from doctors, while it was 38 percent for scheduled caste women and 32 percent for scheduled tribe women, and for women from other backward classes, it was 45 percent. Women from scheduled tribes were more likely to receive antenatal check-ups from auxiliary nurse midwives, or LHVs (56 percent), while it was 46 percent among scheduled castes, 42 percent among other backward class women and 42 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, Punjab, 2002-04

Background characteristic	Antenatal check-up only at home	Place of antenatal check-ups <sup>1</sup>							Number of women
		Government <sup>2</sup> health facility	Private <sup>3</sup> health facility	PHC	SC	ISM <sup>4</sup> facility		Other	
						Govt.	Private		
<b>Age group</b>									
Less than 20 years	1.8	50.6	36.2	7.1	9.1	0.0	1.4	0.7	194
20-34 years	1.6	46.1	38.7	4.2	5.5	0.2	3.8	1.9	4,264
35 years & above	3.7	36.3	35.3	1.2	6.1	0.6	3.5	1.4	217
<b>Children ever born</b>									
1	0.9	43.5	48.5	4.2	4.3	0.4	3.4	1.1	1,465
2	1.5	44.8	41.0	4.3	5.5	0.3	4.0	1.6	1,511
3	2.1	52.1	29.0	4.3	7.9	0.0	3.3	1.3	888
4+	3.4	44.8	25.9	3.9	6.7	0.2	4.3	4.4	787
<b>Residence</b>									
Rural	2.2	49.8	32.0	5.1	7.4	0.2	3.2	2.2	3,280
Urban	0.6	36.5	53.5	2.2	2.0	0.3	4.8	1.0	1,394
<b>Education</b>									
Non-literate	2.9	49.4	22.2	6.3	10.9	0.3	2.5	2.8	1,653
0-9 @ years	1.7	50.6	37.3	4.3	5.1	0.1	3.5	1.4	1,405
10 years & above	0.6	38.1	56.0	2.5	2.0	0.3	4.8	1.3	1,615
<b>Religion</b>									
Hindu	1.5	43.2	41.9	2.8	4.1	0.1	3.3	2.6	1,761
Muslim	0.0	58.6	18.4	10.9	0.0	0.0	0.0	0.0	62
Christian	9.4	40.9	33.5	2.7	7.2	1.0	1.0	1.6	125
Sikh	1.6	47.5	36.8	5.1	6.7	0.3	4.2	1.4	2,716
<b>Caste/tribe#</b>									
Scheduled caste	1.9	52.4	26.6	4.2	7.0	0.2	2.7	2.8	1,792
Scheduled tribe	8.0	53.7	33.8	1.2	11.3	0.0	3.8	0.0	54
Other backward class	1.8	45.4	38.8	6.0	6.3	0.0	3.4	0.8	944
Other	1.2	39.6	49.9	3.5	4.1	0.3	4.7	1.5	1,867
<b>Standard of living index</b>									
Low	3.8	45.4	20.0	4.1	9.6	0.7	1.3	4.7	635
Medium	1.9	54.7	28.1	6.0	8.0	0.1	2.5	1.4	1,956
High	1.0	37.6	53.7	2.8	2.8	0.3	5.2	1.5	2,084
<b>Availability of health facility<sup>5</sup> in the village</b>									
No	2.5	48.0	33.3	5.7	4.1	0.3	3.2	3.4	1,431
Yes	2.0	51.2	31.0	4.7	9.9	0.2	3.2	1.2	1,849
Total	1.7	45.8	38.4	4.2	5.6	0.2	3.7	1.8	4,674

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

Total includes 23 women with zero parity and 2 women with missing information on education who were not shown separately. 11 women in other religion were not included. # 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.

<sup>1</sup> Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses. <sup>2</sup> 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. <sup>3</sup> Includes Private hospital/clinic or non-governmental hospital/ trust hospital or clinic. <sup>4</sup> Indian system of medicine. <sup>5</sup> Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

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 46 percent of women received antenatal check-ups at Government health facility, including 4 percent through primary health centre and 6 percent through sub-centre. Thirty eight percent received antenatal check-ups at a private health facility. Other than this, less than one 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 (51 percent) than older women 46 percent for age 20-34 and 36 percent for age 35 and above. Fifty percent women from rural areas availed government health facilities for antenatal check-ups that were higher than women in urban areas (37 percent) and a high proportion of women (54 percent) from urban areas availed private health facilities for antenatal check-ups than women from rural areas (32 percent). It may be mentioned that less than one-tenth of the women from rural areas (7.4 percent) and younger women aged below 20 years (9 percent) received antenatal check-ups at sub-centre. This indicates that the services are not 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 literate (0-9 years), Muslim, scheduled tribe, living in households with a medium standard of living and women from those villages where health facilities are available.

### **4.3 Antenatal Check-Ups by District**

Table 4.3 indicates the antenatal coverage in Punjab that ranges from the highest of 99 percent in Hoshiarpur to the lowest of 63 percent in Firozpur. In majority of the districts, except Firozpur, Gurdaspur, Moga and Sangrur, 90 or more than 90 percent of women got some kind of antenatal check-ups for their last births during the three years preceding the survey. Antenatal check-up received from doctor is very low in Sangrur (26 percent), Firozpur (28 percent) and it is highest in Jalandhar (84 percent) followed by Fatehgarh Sahib (83 percent). In 6 out of 17 districts half or more than half of the 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 Rupnagar (76 percent) to the lowest of 24 percent in Firozpur and only in three districts Jalandhar, Moga and Muktsar more than half of the women visited private health facility. In Punjab, 9 percent pregnant women in Firozpur district availed the Indian system of medicine (either government or private) for an antenatal

check-up. In 4 out of 17 districts, more than 5 percent of women availed such services through the Indian system of medicine.

**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, Punjab, 2002-04

District	Any <sup>1</sup> antenatal check-up	Antenatal check-up only at home by ANM	Health personnel providing ANC		Place of antenatal check-ups		
			Doctor	ANM/ Nurse	Government <sup>2</sup> health facility	Private <sup>3</sup> health facility	ISM <sup>4</sup> facility
Amritsar	92.5	0.6	35.9	62.7	48.4	43.2	1.3
Bathinda	93.1	0.0	58.8	33.9	52.7	37.4	2.0
Faridkot	89.1	0.0	55.4	33.7	51.1	31.5	1.2
Fatehgarh Sahib	98.0	0.0	83.3	13.9	50.9	46.8	1.1
Firozpur	63.3	3.8	28.3	29.9	23.7	26.0	8.9
Gurdaspur	78.1	7.9	33.3	37.4	37.7	27.4	6.4
Hoshiarpur	99.1	0.0	41.2	58.3	53.5	39.3	2.4
Jalandhar	97.0	0.0	84.1	12.4	32.2	63.9	1.3
Kapurthala	96.7	6.5	41.1	50.0	47.4	32.9	7.8
Ludhiana	95.9	1.0	36.2	59.3	41.5	44.6	7.9
Mansa	90.3	0.3	70.4	19.2	44.9	43.0	1.0
Moga	84.3	0.8	63.4	18.5	30.6	50.9	0.8
Muktsar	92.1	1.1	65.2	25.8	37.6	51.6	0.4
Nawanshahr	96.4	0.9	56.8	39.1	50.3	40.7	2.2
Patiala	95.3	0.4	69.6	24.8	54.8	39.5	0.8
Rupnagar	97.9	0.3	38.4	71.6	76.0	26.9	1.1
Sangrur	87.2	2.0	26.2	62.2	56.1	27.9	3.1
Punjab	89.5	1.7	45.8	43.6	45.8	38.4	3.5

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

#### 4.4 Components of Antenatal Check-ups

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

Seventy four percent of women had an abdominal examination as the part of the antenatal check-ups, 68 percent had their blood pressure checked and 49 were weighted. Other common components of antenatal check-ups were blood test (69 percent), urine test (66 percent), the measurement of height (12 percent), internal examination (26 percent) and breast examination (12 percent). About 26 percent of women had a sonogram or ultrasound, 5 percent had an X-ray and only 2 percent of women reported that they had amniocentesis test. All of these measurements or procedures 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 4.4. Advice on diet was given to 77 percent of urban women as compared to 67 percent of rural women and 70 percent in general. Twenty four percent of the women received advice on danger signs of pregnancy. Women were less likely to receive advice on delivery care (16 percent), on breastfeeding (19 percent) and on newborn care (12 percent). Advice on family planning was given to 5 percent of rural women and 6 percent of urban women.

<b>Table 4.4 COMPONENTS OF ANTENATAL CHECK-UPS</b>			
Percentage of women* who received an antenatal check-up by specific components of antenatal check-up, according to residence, Punjab, 2002-04			
Components of antenatal check-ups	Total	Rural	Urban
<b>Antenatal measurements/tests</b>			
Weight measured	49.4	45.2	58.5
Height measured	12.0	10.3	15.7
Blood pressure checked	68.0	63.1	78.7
Blood tested	68.8	64.1	79.1
Urine tested	65.7	60.7	76.5
Abdomen examined	74.4	70.9	82.0
Internal examined	26.3	23.3	32.9
Breast examined	12.3	11.6	14.0
X-ray	5.4	4.7	6.7
Sonography /ultrasound	26.1	22.1	34.8
Amniocentesis	2.1	1.6	3.1
<b>Antenatal advice</b>			
Diet	69.8	66.6	77.0
Danger signs of pregnancy	24.2	21.3	30.4
Delivery care	16.3	14.1	20.9
Breast feeding	19.4	18.2	22.0
New born care	12.4	10.2	17.2
Family planning	5.1	4.9	5.7
Number of women who received any antenatal check-up	4,182	2,868	1,314
Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001			

#### 4.5 Antenatal Care Services

In India, the Reproductive and Child Health Programme includes 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 4.5. In Punjab, 64 percent of the women received at least three antenatal check-ups and 46 percent had four or more check-ups. At least three antenatal check-ups were received by 75 percent of women in urban areas compared with 60 percent of women in rural areas. Number of visits for antenatal care varies by education, children ever born, religion, caste and standard of living index. Forty three percent of non-literate, 66 percent literate women (educated below high school) and 84 percent of women who had 10 or more years of schooling visited for minimum three antenatal care. Parity of women is negatively associated with antenatal check-ups. About three-fourths of women with parity one received three antenatal check-ups compared to less than half of the women with parity 4 and above.



**Table 4.5 ANTENATAL CARE**

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

Antenatal care indicators	Total	Residence		Education			Children ever born			
		Rural	Urban	Non-literate	0-9@ years	10 years & above	1	2	3	4+
<b>Number of ANC visits</b>										
No visit	10.4	12.4	5.7	22.0	7.5	1.1	4.3	8.3	14.1	21.5
1	4.4	4.3	4.6	6.2	4.4	2.5	4.2	3.9	4.6	4.9
2	20.8	23.2	14.9	27.8	21.8	12.6	16.4	19.2	24.9	27.4
3	18.8	19.7	16.6	21.7	21.5	13.4	16.9	18.7	20.4	20.7
4+	45.5	40.2	58.1	21.9	44.8	70.4	58.1	49.7	35.7	25.4
Missing	0.1	0.2	0.1	0.3	0.1	0.0	0.0	0.2	0.2	0.1
<b>Stage of pregnancy at the time of the first antenatal check-up</b>										
No antenatal check-up	10.4	12.4	5.7	22.0	7.5	1.1	4.3	8.3	14.1	21.5
First trimester	48.6	43.8	60.1	33.2	45.9	66.8	57.1	53.9	37.9	34.9
Second trimester	37.0	39.7	30.5	39.8	42.2	29.6	34.7	34.6	43.2	38.8
Third trimester	3.8	3.9	3.7	4.7	4.4	2.5	3.8	3.0	4.6	4.7
Missing	0.1	0.2	0.1	0.3	0.1	0.0	0.0	0.2	0.2	0.1
<b>Women who received TT</b>										
No TT	12.4	14.0	8.7	25.5	8.1	2.7	5.9	10.3	13.6	27.2
1	2.8	3.3	1.8	3.6	3.4	1.6	2.4	2.8	3.1	3.4
2+	84.4	82.5	88.8	70.8	87.8	95.2	91.3	86.9	82.1	69.3
Do not remember/missing	0.4	0.2	0.7	0.0	0.6	0.5	0.4	0.0	1.2	0.1
<b>Women who received IFA tablets/syrup</b>										
No IFA/syrup	33.8	34.0	33.1	45.4	31.7	23.6	26.6	31.9	34.8	49.0
Received but not consumed	1.9	1.9	1.9	2.0	2.5	1.3	2.1	1.1	2.0	3.1
Consumed one IFA per day	42.2	42.3	42.2	35.2	43.8	48.1	46.1	43.8	43.4	31.0
Received 100+ IFA tablets/syrup	20.3	18.6	24.2	12.8	18.7	29.2	26.1	21.1	18.2	10.7
Percentage of women who received full <sup>1</sup> antenatal check-ups	16.7	14.7	21.5	9.0	14.6	26.5	22.4	18.4	14.2	6.3
Number of women	4,674	3,280	1,394	1,635	1,402	1,615	1,465	1,511	888	787

Note: Total includes 23 women with zero parity and 2 women with missing information on education and 11 women with other religion who were not shown separately.

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

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

Contd...

**Table 4.5 ANTENATAL CARE** (contd...)

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

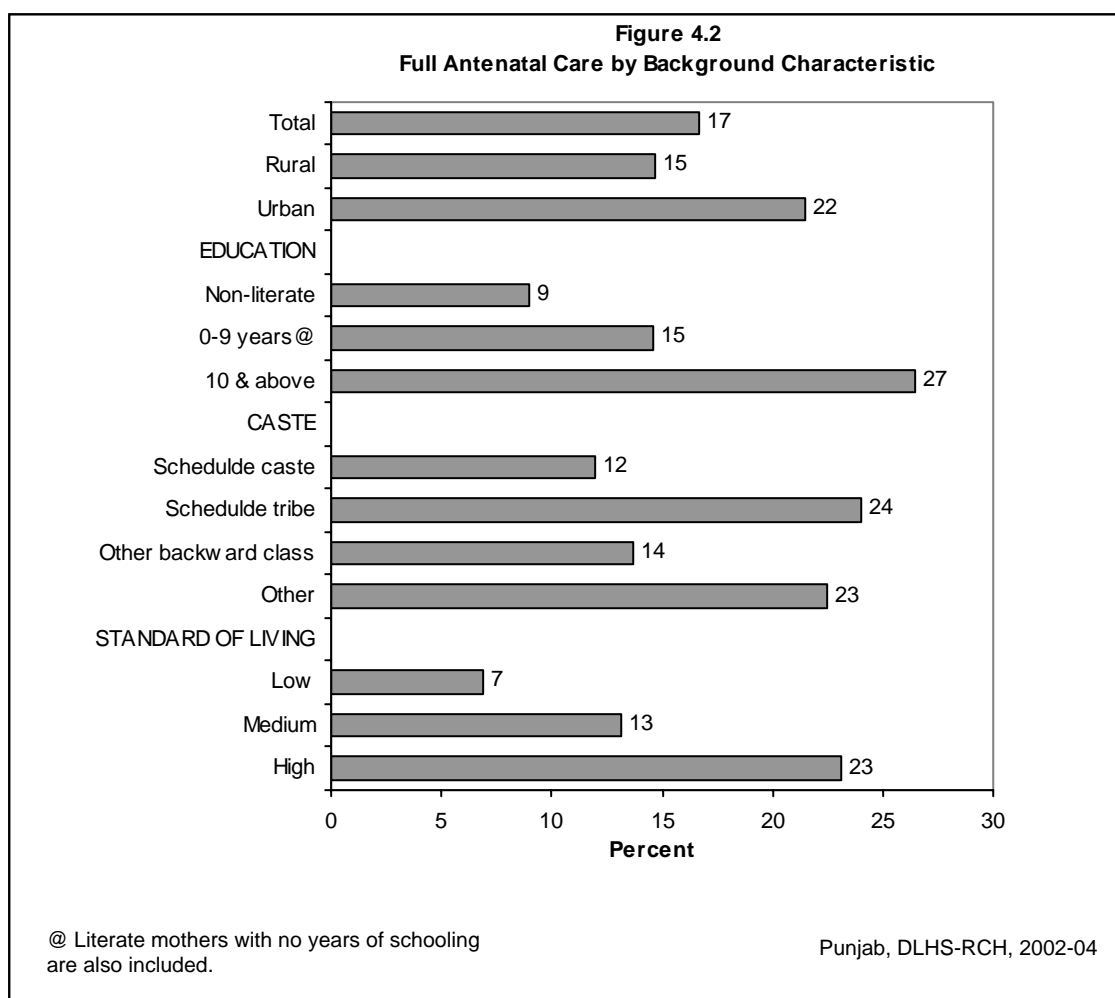
Antenatal care indicators	Religion				Caste#				Standard of living index			Availability of health facility <sup>2</sup> in the village	
	Hindu	Muslim	Christian	Sikh	Scheduled caste	Scheduled tribe	Other backward class	Other	Low	Medium	High	No	Yes
<b>Number of ANC visits</b>													
No visit	10.1	23.0	14.5	10.2	15.2	1.5	12.6	4.8	26.8	12.9	3.0	12.0	12.7
1	4.3	4.7	13.3	4.1	5.0	12.8	3.6	4.0	4.5	5.8	3.0	4.8	3.9
2	18.9	12.6	29.8	21.6	25.8	25.4	21.1	15.6	29.7	25.5	13.6	25.2	21.7
3	18.5	28.0	14.1	19.0	21.0	35.8	21.3	14.9	20.2	21.4	15.9	18.5	20.6
4+	48.0	31.8	28.4	45.0	33.0	24.4	41.1	60.6	18.2	34.2	64.5	39.4	40.8
Missing	0.2	0.0	0.0	0.1	0.1	0.0	0.4	0.0	0.6	0.2	0.0	0.1	0.2
<b>Stage of pregnancy at the time of the first antenatal check-up</b>													
No antenatal check-up	10.1	23.0	14.5	10.2	15.2	1.5	12.6	4.8	26.8	12.9	3.0	12.0	12.7
First trimester	49.8	32.7	38.2	48.8	40.7	39.7	44.5	58.7	30.4	39.6	62.7	43.7	43.8
Second trimester	36.0	39.6	44.2	37.1	39.3	52.6	38.8	33.4	37.9	42.1	31.9	40.5	39.1
Third trimester	4.0	4.7	3.1	3.8	4.6	6.3	3.8	3.0	4.3	5.2	2.4	3.8	4.0
Missing	0.2	0.0	0.0	0.1	0.1	0.0	0.4	0.0	0.6	0.2	0.0	0.1	0.2
<b>Women who received TT</b>													
No TT	11.3	28.3	21.7	12.4	18.0	11.0	13.8	6.4	28.6	15.7	4.4	14.2	13.8
1	2.8	2.7	2.2	2.9	3.9	0.0	2.6	2.0	4.3	3.7	1.6	2.6	3.8
2+	85.7	69.0	76.1	84.2	77.8	88.1	83.6	91.0	67.0	80.5	93.3	82.6	82.4
Do not remember/missing	0.2	0.0	0.0	0.5	0.3	0.9	0.0	0.7	0.1	0.1	0.7	0.6	0.0
<b>Women who received IFA tablets/syrup</b>													
No IFA/syrup	31.7	33.7	53.6	34.3	35.0	24.2	38.6	30.3	50.9	35.2	27.2	34.2	33.9
Received but not consumed	2.1	0.6	2.5	1.8	2.4	1.7	2.0	1.4	1.6	2.7	1.3	2.1	1.7
Consumed one IFA per day	43.6	47.6	32.5	41.6	41.4	48.8	39.5	44.2	30.9	41.6	46.3	42.5	42.1
Received 100+IFA tablets/syrup	22.8	19.0	12.5	19.0	16.4	23.6	17.1	25.6	11.5	16.8	26.2	17.8	19.2
Percentage of women who received full <sup>1</sup> antenatal check-ups	19.4	19.0	10.2	15.2	12.3	23.6	13.7	22.5	6.9	13.1	23.1	13.6	15.6
Number of women	1,761	62	125	2,716	1,792	54	944	1,867	635	1,956	2,084	1,431	1,849

Hindu women (67 percent) were more likely to have at least three visits for antenatal check-ups than Muslim women (60 percent) and women from 'other' religions (54 percent). Coverage is substantially lower for women from scheduled-tribes (60 percent) than to women of other than scheduled tribe (54-76 percent). Having three or more antenatal visits also increased with the standard of living-38 percent for women with a low standard of living, 56 percent for women with a medium standard of living and 80 percent for women with a high standard of living. Availability of health facility in the village makes little difference to the minimum three visits for antenatal check-ups.

Data on timing of first antenatal check-ups shows that about half (49 per cent) of the women received their first antenatal check-up in the first trimester of pregnancy, and another 37 percent received their first check-up in the second trimester, and 4 percent of women received their first check-up in the third trimester. A relatively higher proportion of women in the urban areas (60 percent) as compared to those in rural areas (44 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 three percent of non-literate women had undergone their first antenatal check-up in the first trimester, and 67 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 (57 percent) with parity-1 were visited in first trimester and slightly more than one-third (35 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 more than one-third (40 percent) of scheduled tribe women were visited in first trimester for first antenatal check-ups compared with 41 percent to scheduled caste women, 44 percent of other backward class of women and 59 percent women from 'other' caste category. Thirty percent women with low standard of living, 40 percent with medium standard of living, and 63 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 4.5 shows that women in Punjab received IFA supplements for more than two-thirds (66 percent) of the last birth during three years preceding the survey. The coverage of IFA tablets is higher in urban areas (67 percent) than in rural areas (66 percent). IFA coverage is much below for non-literate women, women with medium standard of living, scheduled caste-tribe women, and women of higher parity. IFA coverage is also lower among Christian women (46 percent) than Hindu (68 percent) and Muslim (66 percent) women. Again, during pregnancy in the last three years preceding the survey, only 20 percent of women received 100 or more IFA, 19 percent in rural areas and 24 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 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 4.5 shows that 84 percent of the women received two or more tetanus toxoid injections. Coverage of two or more TT injection is slightly higher in urban areas (89 percent) than that in rural areas (83 percent). The coverage of two or more tetanus toxoid injection for Hindu women (86 percent) is more than that for Muslim women (69 percent) and Sikh women (84 percent). Coverage of two or more tetanus toxoid injection is 88 percent for schedule tribe, 78 percent for schedule caste, 84 percent for other backward classes and 91 percent for 'other' caste category women. Non-literate women received at least one tetanus toxoid injection for 71 percent of their last birth, whereas literate women with 9 years of schooling received at least one tetanus toxoid injection for 88 percent, and women who had completed 10 years or more of schooling received at least one tetanus toxoid injection for 95 percent of their last birth. Ninety three percent of women with a high standard of living received at least one tetanus toxoid injection, and 67-81 percent women with low or medium standard of living received at least one tetanus toxoid injection for their last live/still birth. The coverage varies inversely by parity. At least one tetanus toxoid injection was received by 91 percent women of Parity-1 compared with 69 percent of Parity 4 and above.



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 17 percent of women in Punjab received full antenatal care. Coverage of full antenatal care is low for non-literate women, women with higher parity, Christian women, women from scheduled caste, 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 (15 percent) than in urban areas (22 percent).

#### 4.6 Antenatal Care Indicator by District

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

<b>Table 4.6 ANTENATAL CARE INDICATORS BY DISTRICT</b>					
Percentage of women* who received different type of antenatal care by district, Punjab, 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 <sup>1</sup>	Percentage that received full <sup>2</sup> antenatal check-ups
Amritsar	54.7	62.5	88.5	10.6	7.9
Bathinda	45.5	59.6	89.0	23.7	19.7
Faridkot	46.7	67.6	86.6	19.1	15.7
Fatehgarh Sahib	60.2	81.6	97.5	23.9	22.1
Firozpur	40.4	41.8	67.0	7.6	5.0
Gurdaspur	40.6	50.8	79.6	22.6	18.0
Hoshiarpur	53.4	70.7	95.1	16.1	14.1
Jalandhar	63.8	83.4	95.9	29.9	29.2
Kapurthala	51.5	68.4	94.1	26.0	21.4
Ludhiana	55.9	73.3	88.4	23.1	19.0
Mansa	40.4	58.7	84.9	17.5	15.6
Moga	55.1	67.0	83.5	28.8	24.6
Muktsar	43.6	65.5	84.9	12.0	10.7
Nawanshahr	53.0	74.1	95.5	29.8	26.0
Patiala	48.5	69.7	93.5	24.7	21.8
Rupnagar	43.2	76.4	97.1	27.0	21.3
Sangrur	40.1	59.5	84.8	23.0	16.8
Punjab	48.6	64.5	87.2	20.3	16.7

Note: \* Women who had their last live/still birth since 1-1-1999/1-1-200

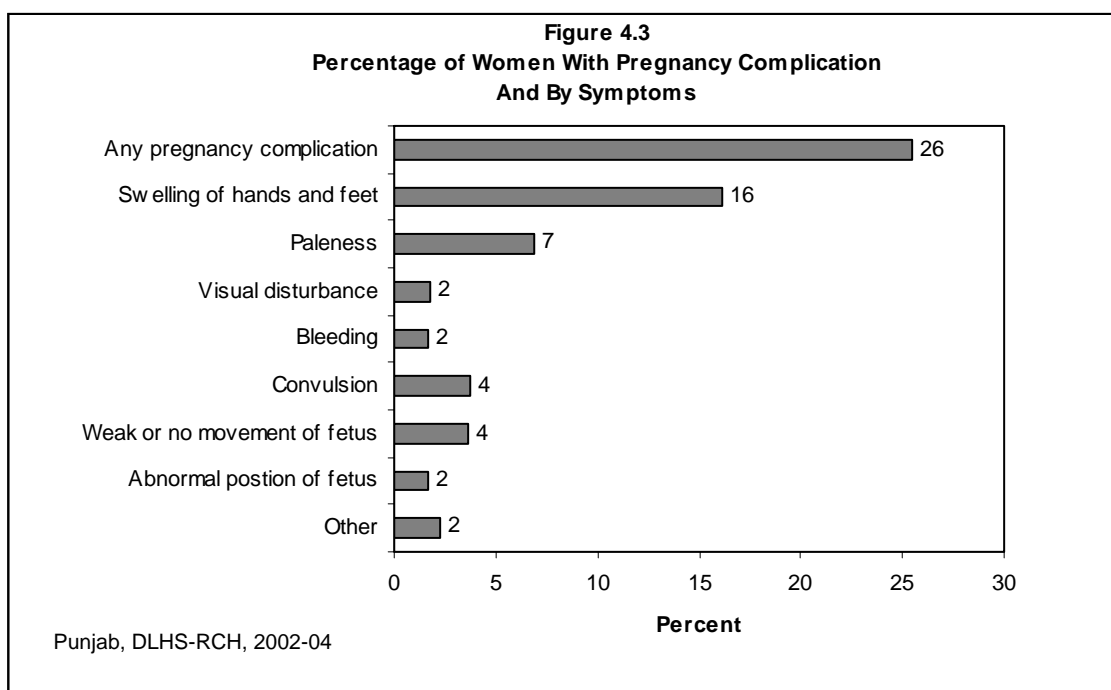
<sup>1</sup> 100 or more iron folic acid tablets including syrup

<sup>2</sup> 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 8 out of 17 districts more than half 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 42 percent in Firozpur to 83 percent in Jalandhar. In Firozpur district the coverage of at least three visits of ANC was only 42 percent (see Map-3). There has been good coverage of tetanus toxoid injection in the all districts, ranging from 67 to 98 percent, but on the other hand, performance regarding receipt of 100 or more IFA is poor. In all the districts, the value ranges from 8 to 30 percent, and it is lowest in Firozpur. The percentage of women who received full antenatal care ranges from 5 percent in Firozpur to 29 percent in Jalandhar. In 7 of districts coverage rate of full antenatal care is below than that of the state average (17 percent).

#### 4.7 Pregnancy Complications and Treatment

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



**Table 4.7 PREGNANCY COMPLICATIONS**

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

Background characteristic	Percentage of women with any pregnancy complication	Type of pregnancy complication;								Number of women
		Swelling of hands and feet	Paleness	Visual disturbances	Bleeding	Convulsion	Weak or no movement of foetus	Abnormal position of foetus	Other	
<b>Age group (years)</b>										
15-19	21.4	12.2	8.7	2.8	1.1	5.9	4.9	3.4	2.1	194
20-24	24.6	14.7	7.3	2.1	1.2	4.1	3.7	1.4	2.4	1,843
25-29	26.8	17.5	7.2	1.6	2.0	3.6	3.2	2.1	2.3	1,755
30-34	24.6	17.6	4.4	1.5	2.9	2.6	2.4	1.0	2.6	665
35-39	25.6	15.1	8.3	1.4	0.7	3.2	6.4	0.8	0.6	169
40-44	40.4	15.2	8.6	0.0	0.0	3.4	14.6	2.3	3.7	48
<b>Children ever born</b>										
1	28.2	18.9	6.8	1.3	1.5	3.4	3.5	2.8	2.9	1,465
2	24.0	14.9	7.1	1.8	1.7	3.7	3.4	1.2	1.7	1,511
3	24.0	12.8	6.0	2.1	1.6	4.7	3.2	1.5	3.2	888
4+	24.8	16.5	7.9	2.3	2.0	3.4	4.5	0.9	1.5	787
<b>Residence</b>										
Rural	22.5	13.4	6.1	1.6	1.5	3.5	3.4	1.7	2.4	3,280
Urban	32.6	22.4	8.9	2.2	2.2	4.3	4.0	1.7	2.3	1,394
<b>Standard of living index</b>										
Low	20.0	11.6	5.2	2.6	1.2	3.1	4.3	0.9	1.7	635
Medium	24.0	14.3	7.6	2.5	1.5	3.9	3.2	1.7	2.2	1,956
High	28.6	19.1	6.9	0.9	2.0	3.8	3.7	1.9	2.7	2,084
<b>Received any ANC</b>										
Yes	26.6	16.6	7.1	1.8	1.9	4.1	3.8	1.8	2.5	4,182
No	16.4	11.5	5.6	1.5	0.3	0.8	1.3	0.5	0.9	486
Total	25.5	16.1	6.9	1.8	1.7	3.7	3.6	1.7	2.3	4,674

Note: Total include 23 women with zero parity, 7 with missing information on received any ANC who were not shown separately

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

About 26 percent of the women experienced at least one pregnancy related problem. The proportion was higher among urban women (33 percent) than among rural women (23 percent). Women aged 30 years and above, and women with higher parity face at least one pregnancy related problem more than younger women and women with low parity do. This proportion is relatively high among women who had received some kind of antenatal care during the pregnancy. Twenty seven percent of women who had an antenatal check-up reported that they had experienced at least one problem during their pregnancy while 16 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' (16 percent), 'paleness' (7 percent) and 'visual disturbance' (2 percent). Only 4 percent reported 'convulsions', and 'weak or no movement of foetus. Other problems related to pregnancy were reported by 2 percent of women. Swelling of hands and feet is more common among middle aged women, women with parity-1 and parity-4 and above, and women with high standard of living. The percentage of women who were more anaemic belonging to the age group 15-19 years, and 40-44 years, women from urban areas, women with a medium standard of living and women who received any kind of antenatal care during the pregnancy. Anaemia, visual disturbance, and convulsion increased steadily with increase of parity, whereas women with parity-1 reported abnormal position of foetus more. The younger women (15-19 years of age) were more likely to report abnormal position of foetus as pregnancy complication.

Women who reported at least one pregnancy related complication were asked whether they had consulted someone or had sought treatment for their problem and also the source of treatment. Table 4.8 shows the percentage of women who had pregnancy complications who obtained advice or had sought treatment by source of treatment according to residence and availability of health facility in the village. Fifty five percent of women reported that they had obtained advice or consulted someone for their problem. The proportion was higher among urban women (57 percent) than among rural women (54 percent) and 54 percent of women sought treatment from those villages where health facility was available as compared to 55 percent of women with non-availability of health facility within the village.

Among women who sought treatment for pregnancy complications, 27 percent visited a government health facility including a primary health centre (2 percent) and sub-centre (2 percent). About two- third of them visited a private health facility and 6 percent had gone to a facility with the Indian system of medicine while another 3 percent obtained advice from another health facility. The proportion of women who visited a private health facility is higher in urban areas (67 percent) than in rural areas (63 percent). Among women who sought treatment, 73 percent went to a doctor and 25 percent to an auxiliary nurse midwife or nurse or LHV and another 2 percent to someone else. Seventy six percent of these women in urban areas and 71 percent in rural areas were examined by a doctor; whereas ANM/Nurse/LHV examined 26 percent women in rural areas and 23 percent in urban areas.



<b>TABLE 4.8 TREATMENT FOR PREGNANCY COMPLICATIONS</b>					
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, Punjab, 2002-04					
Treatment and source	Total	Residence		Availability of health facility <sup>5</sup> in the village	
		Rural	Urban	No	Yes
Percentage of women sought treatment who had any pregnancy complication	55.3	54.4	56.9	55.3	53.7
Number of women	1,191	737	454	309	428
Percentage sought treatment at health facility					
Government health facility <sup>1</sup>	27.2	28.8	24.8	26.3	30.6
Primary health centre	1.8	2.3	1.0	3.6	1.4
Sub centre	2.1	2.6	1.3	0.6	4.0
Private health facility <sup>2</sup>	64.5	62.8	67.1	63.3	62.4
ISM <sup>3</sup> facility	5.6	5.2	6.3	6.5	4.3
Other	3.1	3.4	2.7	4.3	2.7
Percent distribution of women who obtained treatment from					
Doctor	72.7	70.8	75.7	68.0	72.9
ANM/nurse/midwife/LHV	24.9	26.2	22.9	29.3	24.0
Other <sup>4</sup>	1.9	2.3	1.4	2.2	2.4
Missing	0.4	0.6	0.0	0.5	0.7
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	659	401	258	171	230
Note: <sup>1</sup> 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 <sup>2</sup> Include private hospital/clinic and non-governmental organization/ trust hospital <sup>3</sup> Either government or private Indian system of medicine <sup>4</sup> Other include Dai trained or untrained, other health professional and ISM practitioner <sup>5</sup> Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village					

## 4.8 Delivery Care

### 4.8.1 Place of Delivery

One of the important thrusts of the Reproductive and Child Health Programme is to encourage deliveries under proper hygienic conditions under the supervision of trained health professionals. The provision of delivery services in the government health institutions is one of the components of the RCH programme. For each live/still birth during three years preceding the survey, DLHS-RCH asked the women where (place) their children were born, who assisted during the deliveries in case of home deliveries, characteristics of delivery and any problems that occurred during the delivery. Table 4.9 and Figure 4.4 present the place of delivery.

About 10 percent of the birth took place in government health institutions, 39 percent in private health institutions and more than half of the births (51 percent) took place at home. About two-third of the deliveries in urban areas and 43 percent of the deliveries in rural areas took place in health institutions. Deliveries in health facilities in Punjab was 49 percent.

<b>Table 4.9 PLACE OF DELIVERY</b>							
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, Punjab, 2002-04							
Background characteristics	Health institutions		Home	Other	Missing	Total percent	Number of women
	Public	Private					
<b>Age group (in years)</b>							
Below 20	7.6	31.0	61.3	0.1	0.0	100.0	194
20-34	9.7	40.1	50.2	0.0	0.0	100.0	4,264
35 and above	7.0	33.6	59.4	0.0	0.0	100.0	217
<b>Children ever born</b>							
1	12.7	52.8	34.4	0.1	0.0	100.0	1,465
2	9.9	41.3	48.7	0.0	0.0	100.0	1,511
3	7.6	28.9	63.4	0.1	0.0	100.0	888
4+	4.8	22.5	72.7	0.0	0.0	100.0	787
<b>Residence</b>							
Rural	8.5	34.5	57.0	0.0	0.0	100.0	3,280
Urban	11.8	51.0	37.2	0.0	0.0	100.0	1,394
<b>Education</b>							
Non-literate	5.9	21.4	72.7	0.0	0.0	100.0	1,653
0-9@ years	8.8	36.6	54.5	0.0	0.0	100.0	1,405
10 years & above	13.8	60.4	25.8	0.0	0.0	100.0	1,615
<b>Religion</b>							
Hindu	10.1	37.0	52.8	0.0	0.0	100.0	1,761
Muslim	14.6	28.4	57.1	0.0	0.0	100.0	62
Christian	5.1	28.9	66.0	0.0	0.0	100.0	125
Sikh	9.2	41.6	49.2	0.1	0.0	100.0	2,716
<b>Caste#</b>							
Scheduled caste	7.9	24.4	67.6	0.1	0.0	100.0	1,792
Scheduled tribe	3.6	26.1	70.3	0.0	0.0	100.0	54
Other backward class	8.5	37.9	53.6	0.0	0.0	100.0	944
Other	11.7	54.8	33.5	0.0	0.0	100.0	1,867
<b>Standard of living index</b>							
Low	3.9	19.1	76.9	0.1	0.0	100.0	635
Medium	8.4	26.8	64.8	0.0	0.0	100.0	1,956
High	12.3	57.4	30.3	0.0	0.0	100.0	2,084
<b>Number of antenatal check-ups</b>							
No check-up	2.9	12.6	84.2	0.2	0.1	100.0	486
1	6.1	28.8	65.1	0.0	0.0	100.0	205
2	7.7	27.9	64.4	0.0	0.0	100.0	970
3	9.2	32.5	58.2	0.1	0.0	100.0	878
4+	12.2	54.7	33.1	0.0	0.0	100.0	2,128
<b>Delivery characteristics</b>							
Normal	7.0	31.7	61.2	0.0	0.0	100.0	3,861
Caesarean	21.6	77.1	1.2	0.0	0.0	100.0	475
Assisted	20.7	73.9	5.3	0.0	0.0	100.0	338
<b>Availability of health facility<sup>1</sup> in the village</b>							
No	7.8	34.0	58.1	0.1	0.0	100.0	1,431
Yes	9.0	34.8	56.1	0.0	0.0	100.0	1,849
Total	9.5	39.4	51.1	0.0	0.0	100.0	4,674

Note: Total includes 23 women with zero parity, 2 with missing information on education, 7 on number of ANC visits and 11 women with other religion 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.

<sup>1</sup>Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village

The proportion of births occurring in health institutions is higher for young women under 35 years (38-50 percent) than for women aged 35 years and above (41 percent). Institutional deliveries, particularly in private health facilities, increase sharply with education and the standard of living. More than one-fourth (27 percent) of the births to non-literate women and 74 percent births to literate women who had completed at least 10 or more years of schooling took place at health institutions. Women with a high standard of living were more likely to give birth in health institutions than women with a low standard of living (Figure 4.4). The proportion of institutional deliveries decreases as parity increases from parity one (65 percent) to parity four and above (27 percent). Institutional delivery is much lower for Christian women (34 percent) than for Sikh (51 percent) and Hindu women (47 percent). Only 30 percent births of women from scheduled-tribes are institutional deliveries as compared to 32 percent of births to women from scheduled-castes, 46 percent to other backward classes and 67 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 (67 percent) than among who had fewer antenatal check-ups (35-42 percent). Institutional deliveries are least prevalent among births to women who did not receive any antenatal check-ups (16 percent). As expected, almost all the births occurred through caesarean section (99 percent) and 95 percent of assisted deliveries took place at health institutions. At the same time, 1 percent of caesarean deliveries and 5 percent of assisted deliveries took place at home. Forty four percent of births took place at health institutions in the village with availability of health facility compared to 42 percent of births from villages without any health facility.

#### **4.8.2 Assistance During Home Delivery**

Table 4.10 shows distribution of assistance during home delivery by selected background characteristics. Generally, assistance during delivery can be provided by medical staff (doctors, ANM/nurse/LHV, TBA, un-trained *dai*), and relatives/friends. If more than one type of attendant assisted during the delivery, then only the most qualified person is considered. In the last three years only two percent of deliveries were attended by doctors, 28 percent by ANM or nurse or LHV, 40 percent by trained birth attendants, 29 percent by untrained dais and one percent were attended by relatives and friends (Figure 4.4). Overall, health professionals attended 30 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 27-28 percent of births attended by health professional for women age below 20 and 20-34 years and only 29 percent of births for women age 35 and above were attended by health professionals. In rural areas, 28 percent of births were attended by health professionals as compared to 39 percent of that in urban areas. The percentages 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 two times higher than those of non-literate women. Slightly more than one-fourth (28 percent) of home deliveries to women with a medium standard of living and 20 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 Sikh women (31 percent) than among Christian women (18 percent). Only 27 percent of births to women from scheduled castes, 31 percent to scheduled tribes, 28

**Table 4.10 ASSISTANCE DURING HOME DELIVERY AND SAFE DELIVERY**

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

Background characteristics	Attendant assisting during home delivery <sup>1</sup>						Number of women	Percentage of safe delivery <sup>2</sup>
	Doctor	ANM/ Nurse/LHV	TBA	Untrained <i>dai</i>	Relative/ friends	None		
<b>Age group (in years)</b>								
Below 20	1.7	26.9	39.1	30.8	0.7	0.8	119	56.1
20-34	2.2	27.9	40.2	28.6	1.0	0.0	2,139	64.9
35 and above	2.8	26.6	44.2	24.1	2.3	0.0	129	58.0
<b>Children ever born</b>								
1	1.8	37.2	35.8	24.7	0.5	0.0	504	78.9
2	1.5	27.5	42.2	27.3	1.4	0.1	737	65.4
3	3.2	23.5	41.9	30.5	0.9	0.0	563	53.5
4+	2.7	23.9	40.6	31.4	1.4	0.0	572	46.6
<b>Residence</b>								
Rural	2.5	25.2	39.6	31.7	1.0	0.0	1,868	58.8
Urban	1.5	37.1	43.1	16.9	1.3	0.0	519	77.2
<b>Education</b>								
Non-literate	2.3	20.9	37.6	37.9	1.3	0.1	1,202	44.1
0-9@ years	2.7	31.8	43.8	20.5	1.1	0.0	766	64.3
10 years & above	1.3	40.0	42.2	16.0	0.5	0.0	417	84.8
<b>Religion</b>								
Hindu	1.8	27.5	42.4	26.6	1.7	0.0	931	62.6
Muslim	0.0	22.6	40.6	35.7	1.1	0.0	35	55.8
Christian	4.7	13.7	65.3	16.3	0.0	0.0	83	46.2
Sikh	2.5	28.9	37.5	30.4	0.7	0.1	1,335	66.2
<b>Caste#</b>								
Scheduled caste	1.8	25.3	41.5	30.7	0.7	0.1	1,211	50.6
Scheduled tribe	2.1	28.7	49.4	19.8	0.0	0.0	38	51.4
Other backward class	2.3	25.7	40.6	30.7	0.8	0.0	506	61.4
Other	3.2	34.8	37.1	22.9	2.1	0.0	625	79.2
<b>Standard of living index</b>								
Low	3.8	16.4	38.3	40.2	1.3	0.0	488	38.5
Medium	2.1	26.5	41.1	29.6	0.7	0.0	1,267	53.7
High	1.3	39.3	40.5	17.0	1.7	0.1	632	82.0
<b>Number of antenatal check-ups</b>								
No check-up	1.8	16.5	40.1	37.8	3.8	0.0	409	31.0
1	5.6	24.1	47.3	22.5	0.4	0.0	134	54.2
2	2.6	26.0	37.6	33.4	0.3	0.1	625	54.0
3	3.0	27.1	42.0	27.5	0.5	0.0	511	59.2
4+	1.1	37.2	40.4	20.6	0.8	0.0	705	79.5
<b>Delivery characteristics</b>								
Normal	2.2	27.3	40.7	28.7	1.1	0.0	2,363	56.8
Caesarean	0.0	94.0	6.0	0.0	0.0	0.0	6	99.9
Assisted	12.0	77.4	3.3	7.3	0.0	0.0	18	99.4
<b>Availability of health facility<sup>3</sup> in the village</b>								
No	2.6	24.4	40.3	31.6	1.2	0.0	831	57.5
Yes	2.4	25.9	39.0	31.7	0.9	0.1	1,037	59.8
<b>Total</b>	2.2	27.8	40.4	28.5	1.1	0.0	2,387	64.3

Note: Total includes 11 women with zero parity, 2 with missing information on education, 3 on number of ANC visits characteristics who were not shown separately. Total includes 4 other religion women who were not shown separately.

( ) Based on less than 50 unweighted cases.

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

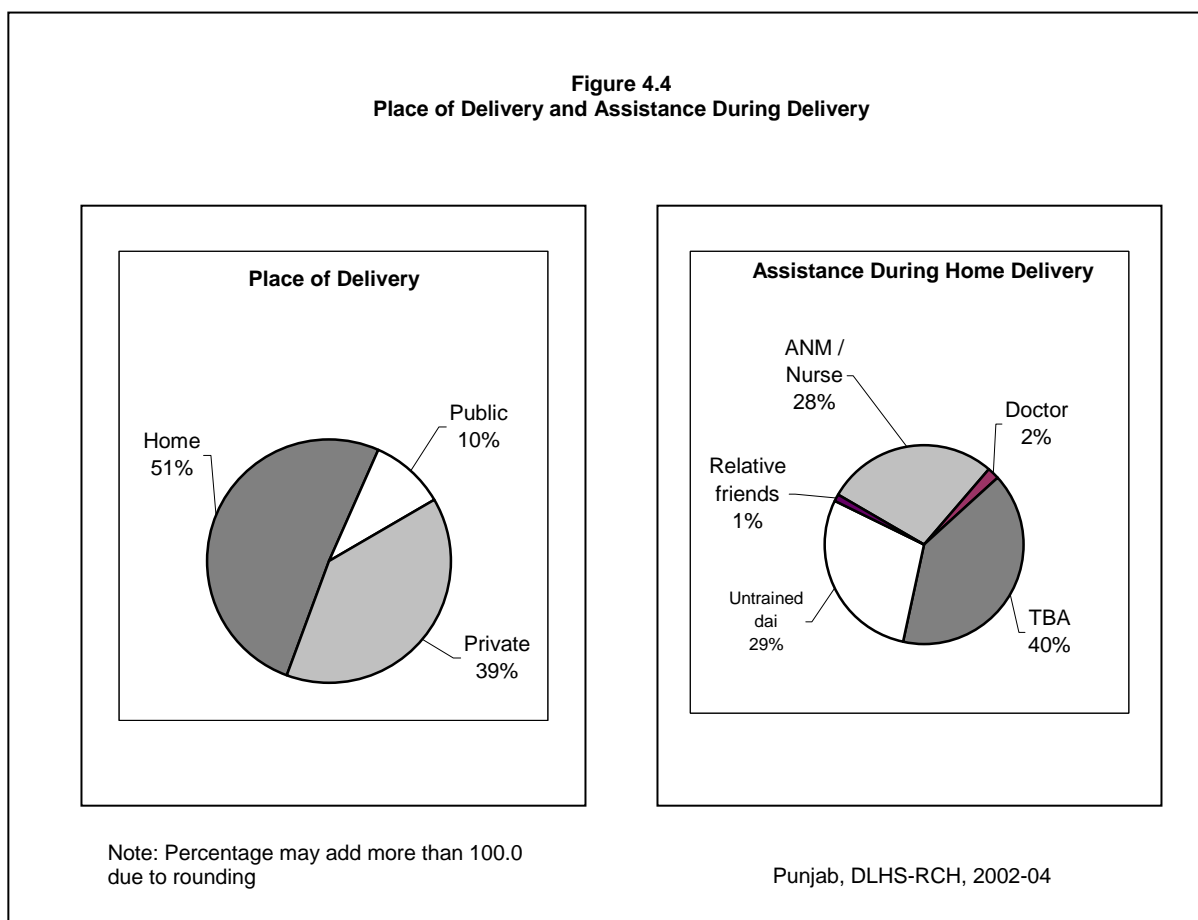
# Total figure may not add to N due to do not know and missing cases

<sup>1</sup> If the respondent mentioned more than one attendant, only the most qualified attendant is shown

<sup>2</sup> Either institutional delivery or home delivery assisted by doctor/ANM/Nurse/LHV

<sup>3</sup> Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village

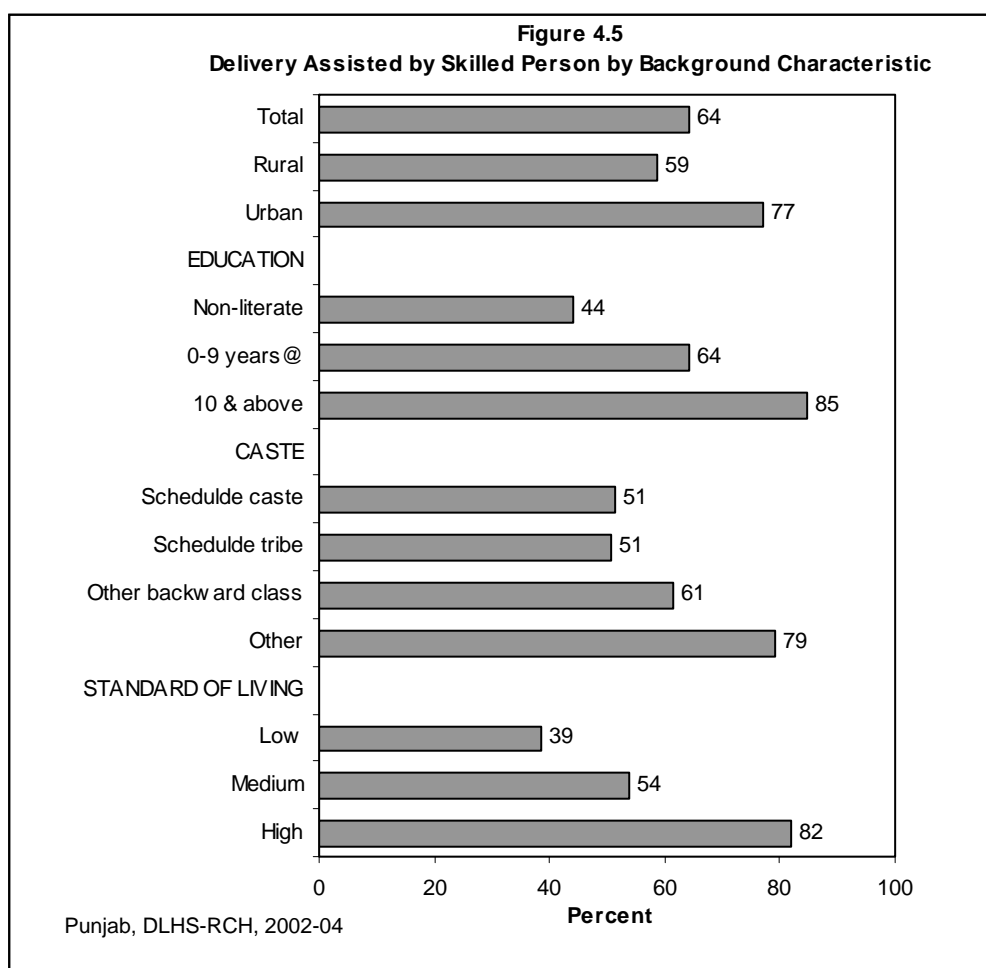
percent to other backward classes and 38 percent to women belonging to ‘other castes’ category were attended by health professionals. 18 percent of home deliveries to women who did not have any antenatal check-ups were attended by health professionals compared to 38 percent of home deliveries to women who had four or more antenatal check-ups. About 30 percent of home deliveries that were normal were attended by health professionals, which differ substantially to births by either caesarean section or assisted (89-94 percent), but the result should be interpreted with caution due to the small number of cases. More than one-fourth home deliveries were attended by health professionals in villages with non-availability of a health facility as well in villages with availability of a health facility.



### 4.8.3 Delivery Assisted by Skilled Persons

The extent of safe deliveries varied substantially by background characteristics of women (Table 4.10 and Figure 4.5). About two-thirds of the births (64 percent) were safe in Punjab. In urban areas more than three-fourths (77 percent) of the deliveries were safe as against more than half (59 percent) in rural areas. About 56-65 percent of the deliveries were safe for younger women aged below 35 than to elderly women (58 percent). The proportion of safe deliveries was much lower among Christian women (46 percent) than among Sikh women (66

percent and women from other religions (46-63 percent). Only 51 percent of births to women from scheduled-castes and scheduled-tribe were safe deliveries, compared to 61 percent to women from other backward classes and 79 percent of births to women from 'other castes' category. Proportion of safe deliveries decreases as parity rises from 1 (79 percent) to 4 and above (47 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 (80 percent). The proportion of safe deliveries increased sizeably with women's education and standard of living. Only forty four percent of non-literate women had safe deliveries whereas its prevalence is 64 percent among women who had completed at least high school. Women with a high standard of living had 82 percent safe deliveries compared to 54 percent of women with a medium standard of living and 39 percent with a low standard of living. As compared to women who had caesarean and assisted deliveries (100-99 percent) only 57 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 where health facilities are not available.



## 4.9 Reasons for Not Going to Health Institutions for Delivery

Table 4.11 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. About three-fifth of the women (59 percent) stated that it was not necessary to deliver in health institutions. It is surprising to see that a higher proportion of urban women (61 percent) than rural women (58 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 57 percent of women from villages where a health facility is not available. Only 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 costs too much' (6 percent), 'no transportation' or 'health facility is too far' (1 percent), 'no time to go' (3 percent), 'family did not allow' (1 percent) and 'better care at home' (26 percent). One percent reported lack of knowledge regarding the delivery facilities. A few of the women (1 percent) did not opt for institutional delivery due to poor quality of services. The corresponding figures were same in rural and urban areas. It is also needed to mention here that one percent of women from villages with a health facility reported lack of knowledge as a reason for not having delivery at home.

<b>Table 4.11 REASONS FOR NOT GOING TO HEALTH INSTITUTIONS FOR DELIVERY</b>					
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, Punjab, 2002-04					
Reason	Total	Residence		Availability of health facility <sup>1</sup> in the village	
		Rural	Urban	No	Yes
Not Necessary	58.9	58.4	60.8	57.2	59.4
Not customary	1.8	1.8	1.7	1.1	2.4
Cost too much	5.9	5.7	6.6	5.8	5.6
Health facility too far/ No transport	1.4	1.4	1.4	1.6	1.2
Poor quality service	0.7	0.7	0.5	1.3	0.3
No time to go	2.5	2.4	3.1	2.4	2.4
Family did not allow	0.9	1.0	0.6	1.0	1.1
Better care at home	26.4	27.4	22.8	28.2	26.8
Lack of knowledge	1.1	0.8	2.1	0.9	0.8
Other	0.3	0.2	0.5	0.2	0.2
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	2,387	1,868	519	831	1,037

Note: <sup>1</sup> Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

#### 4.10 Delivery Characteristics by District

Table 4.12 shows the delivery characteristics by district; institutional delivery (delivery in government or private health institutions), home delivery and attendant assistance during home delivery for last live/still births to women during the three years preceding the survey. The proportion of institutional delivery is lowest in Firozpur (39 percent) and followed by Amritsar (43 percent) and it is highest in Fatehgarh Sahib (62 percent).

<b>Table 4.12 DELIVERY CHARACTERISTICS BY DISTRICT</b>				
Place of delivery, assistance during home deliveries, and percentage of safe deliveries by district, Punjab, 2002-04				
Districts	Percentage of women who had institutional delivery	Percentage of women who had delivery at home	Home delivery assisted by skilled <sup>1</sup> persons	Percentage of safe <sup>2</sup> delivery
Amritsar	43.3	56.7	34.0	62.6
Bathinda	49.0	51.0	32.6	65.6
Faridkot	52.0	48.0	22.0	62.6
Fatehgarh Sahib	62.4	37.6	21.8	70.6
Firozpur	38.7	61.3	24.8	53.9
Gurdaspur	40.0	60.0	22.5	53.5
Hoshiarpur	33.2	66.8	43.0	61.9
Jalandhar	61.9	38.1	37.4	76.2
Kapurthala	48.0	52.0	33.3	65.3
Ludhiana	59.1	40.9	39.3	75.2
Mansa	46.3	53.2	20.9	57.5
Moga	60.4	38.9	32.2	72.9
Muktsar	45.1	54.9	32.9	63.2
Nawanshahr	47.8	51.9	41.4	69.3
Patiala	57.8	42.2	8.5	61.4
Rupnagar	56.2	43.8	31.3	69.9
Sangrur	50.7	49.3	29.5	65.2
Punjab	48.9	51.1	30.1	64.3

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

Compared to delivery in a government health facility, deliveries in a private health facility are more common in Punjab. A little less than 50 percent of births are institutional delivery in the state, but in 9 of 17 districts, more than half of the births took place at home and Hoshiarpur, Firozpur and Gurdaspur had more than 60 percent of home deliveries. The extent of safe deliveries also varies by district, in 8 of 17 districts, the proportion of safe deliveries are below state average, it ranges from 54 percent in Firozpur and Gurdaspur to 76 percent in Jalandhar. The proportion of safe deliveries is less than 60 percent in three districts i.e. Firozpur, Gurdaspur and Mansa (see Map-4).

#### 4.11 Complications During Delivery

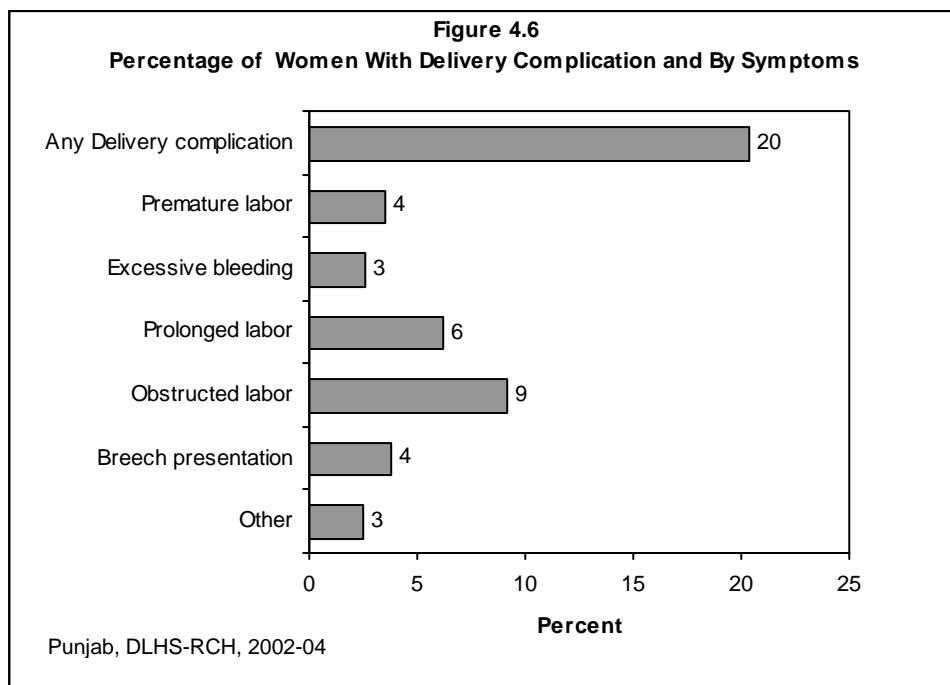
Complications during delivery include ‘premature labour’, ‘obstructed labour’, ‘prolonged labour (more than 12 hours)’, ‘breech presentations’, ‘excessive bleeding during delivery’ and ‘other problems’ at the time of delivery reported by women during the three years preceding the survey. About one-fifths of the women experienced at least one problem during delivery (Table 4.13 and Figure 4.6). The proportion of delivery complications is higher among urban women (23 percent) than rural among women (20 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. Twelve 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 15-27 percent of women who had received some kind of antenatal check-up. Among women who had assisted or caesarean delivery, 63-86 percent reported experiencing such problems, and only 9 percent women with normal deliveries cited complications during delivery. A higher proportion of women who delivered in health institutions (34-37 percent) faced at least one delivery complication compared to those who delivered at home (7 percent).

<b>Table 4.13 DELIVERY COMPLICATIONS</b>								
Percentage of women who had given last live/still births during three years preceding the survey by delivery complication, according to selected background characteristics, Punjab, 2002-04								
Background characteristics	Any delivery complication	Type of delivery complication;						Number of women
		Pre-mature labour	Excessive bleeding	Prolonged labour	Obstructed labour	Breech presentation	Other	
<b>Age group (in years)</b>								
Below 20	23.6	3.0	4.8	7.0	10.5	2.1	2.1	194
20-34	20.5	3.5	2.6	6.4	9.4	3.9	2.5	4,264
35 and above	16.1	4.9	1.7	1.5	4.1	4.0	3.6	217
<b>Children ever born</b>								
1	29.2	3.1	2.6	10.9	15.1	5.7	3.7	1,465
2	20.0	3.7	2.8	4.8	9.0	4.0	2.7	1,511
3	14.7	4.0	2.1	4.5	5.1	2.4	1.3	888
4+	10.2	2.6	2.8	2.2	3.2	1.6	1.2	787
<b>Residence</b>								
Rural	19.5	3.7	2.8	5.6	8.2	3.5	2.2	3,280
Urban	22.5	3.1	2.1	7.6	11.6	4.4	3.2	1,394
<b>Number of antenatal check-ups</b>								
No check-up	11.7	5.2	1.9	3.8	1.6	1.7	0.5	486
1	14.7	5.3	4.8	3.2	5.4	2.1	2.3	205
2	14.6	3.3	1.9	5.2	6.5	1.6	0.4	970
3	16.2	2.1	2.0	4.5	8.3	3.1	1.9	878
4+	27.2	3.6	3.1	8.2	12.9	5.7	4.1	2,128
<b>Delivery characteristics</b>								
Normal	8.6	3.3	1.6	2.5	1.6	1.0	0.5	3,861
Caesarean	86.1	5.2	8.7	32.1	51.4	24.3	12.7	475
Assisted	62.9	3.5	6.1	12.2	36.3	6.8	10.6	338
<b>Place of delivery</b>								
Government sector	37.2	4.6	3.3	10.4	20.7	9.0	4.1	444
Private sector	33.9	4.2	3.6	10.7	17.0	6.4	4.8	1,842
Home	6.9	2.7	1.8	2.0	1.0	0.9	0.5	2,387
Total	20.4	3.5	2.6	6.2	9.2	3.8	2.5	4,674
Note: Table include 23 women with zero parity, 7 with missing information on number of ANC visits and 2 on place of delivery other who were not shown separately.								

The major problems reported were ‘obstructed labour’ (9 percent), ‘prolonged labour’ (6 percent), ‘premature labour’ (4 percent) and ‘excessive bleeding (3 percent). Only 4 percent reported ‘breech presentation’, and 3 percent reported ‘other’ problems related to delivery. Premature labour, prolonged labour, obstructed labour and breech presentation are more common among younger women, and women with low parity. Urban women were more likely to report delivery complications such as premature labour prolonged labour obstructed labour and breech presentations; whereas premature labour and excessive bleeding are more prevalent among rural women. 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 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, excessive bleeding, prolonged labour, breech presentation and obstructed labour compared with place of delivery other than medical institutions.



#### 4.12 Post Delivery Complications and Treatment

Table 4.14 and Figure 4.7 present information about women who faced complications after delivery according to some selected background characteristics. The incidence of post delivery complications judged by any of the following during the first six-weeks of delivery- ‘high fever’, ‘lower abdominal pain’, ‘foul smelling vaginal discharge’, ‘excessive bleeding’, ‘convulsion’, ‘severe headache’, and ‘other’ problems. Nineteen 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 rural areas (20 percent) than in urban areas (16 percent). Older women aged 35 years and above and women with higher parity 4 and over are more prone to report at least one post delivery related problem.

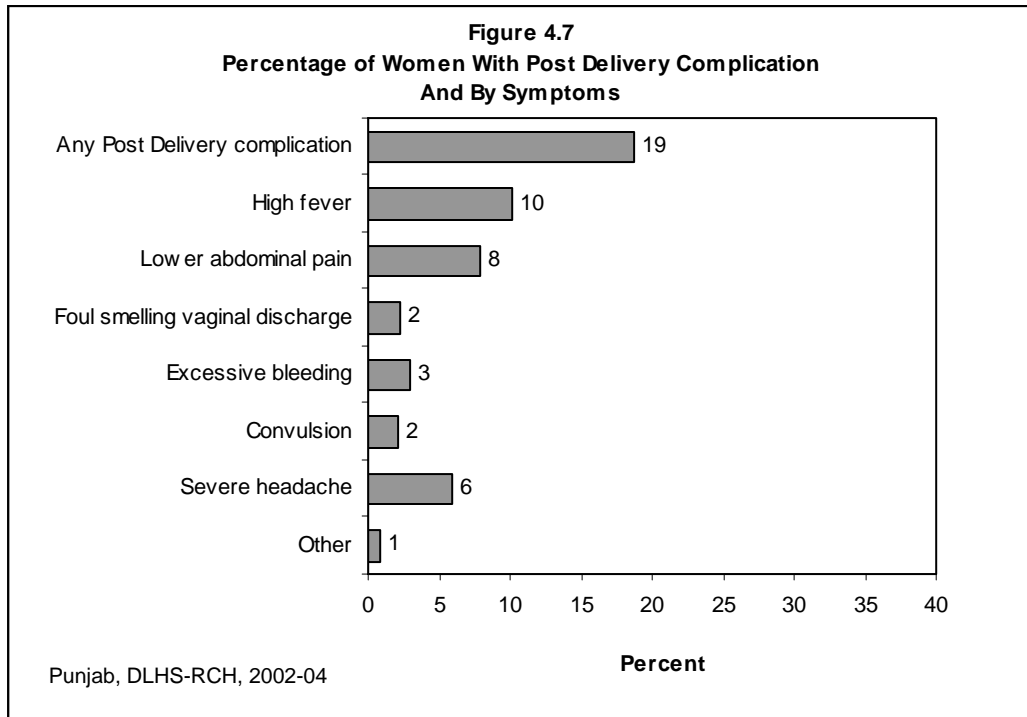
**Table 4.14 POST DELIVERY COMPLICATIONS**

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

Background characteristics	Any post delivery complication	Type of post delivery complication;							Number of women
		High fever	Lower abdominal pain	Foul smelling vaginal discharge	Excessive bleeding	Convulsion	Severe headache	Other	
<b>Age</b>									
Below 20	20.0	12.4	11.5	1.9	4.2	4.3	5.7	1.4	194
20-34	18.7	10.1	7.8	2.3	2.9	2.0	5.9	0.7	4,264
35 and above	17.0	9.4	6.1	1.7	2.7	1.5	6.2	0.9	217
<b>Children ever born</b>									
1									
2	18.9	10.3	6.4	2.4	3.1	2.3	5.6	0.8	1,465
3	18.4	9.5	8.7	2.6	2.7	1.7	5.7	0.8	1,511
4+	19.1	10.1	8.5	1.4	3.2	2.0	6.1	0.5	888
	18.2	11.1	8.6	2.0	2.6	2.6	6.9	0.9	787
<b>Residence</b>									
Rural									
Urban	19.8	11.0	8.1	2.4	3.1	2.1	6.2	0.8	3,280
	16.1	8.0	7.6	1.9	2.5	2.1	5.3	0.6	1,394
<b>Delivery characteristics</b>									
Normal	17.7	9.9	7.6	2.0	2.5	1.6	5.8	0.7	3,861
Caesarean	23.6	11.3	8.1	2.7	4.9	4.3	6.6	1.6	475
Assisted	23.3	11.0	11.0	4.8	4.6	4.4	7.2	0.2	338
<b>Place of delivery</b>									
Government sector	16.4	5.7	8.9	4.8	2.6	3.5	5.2	0.8	444
Private sector	17.9	8.9	6.9	2.3	3.2	2.1	5.7	0.9	1,842
Home	19.7	11.9	8.6	1.8	2.8	1.8	6.3	0.6	2,387
<b>Assistance during home delivery</b>									
Doctor	28.0	13.8	9.3	3.8	10.0	0.0	16.1	0.0	54
ANM/Nurse/LHV	17.3	10.5	7.0	1.5	3.1	1.1	5.7	1.0	664
TBA	21.1	13.8	9.7	2.2	2.6	2.9	6.2	0.5	963
Untrained <i>dai</i>	19.4	10.4	8.3	1.1	2.2	1.2	6.0	0.5	679
Relative/friends	24.9	17.1	12.1	7.8	3.4	3.4	13.7	0.0	26
None	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Total	18.7	10.1	7.9	2.2	2.9	2.1	5.9	0.8	4,674

Note: Table include 23 women with zero parity and 2 women place of delivery who were not shown separately.

Women reported high fever (10 percent), lower abdominal pain (8 percent), severe headache (6 percent), excessive vaginal bleeding (3 percent), foul smelling vaginal discharge and convulsion (2 percent each). Less than one percent of women reported other problems. Rural-urban differences in some of the symptoms of postpartum complication are large. All the postpartum complications, except severe headache, are more prevalent among women below 35 years than among older women aged 35 years and above. 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 were more likely to have high fever, lower abdominal pain and other postpartum problems during the first six weeks of delivery.



Women who reported at least one complication during the postpartum period were asked, whether they had consulted or sought treatment for their problems and also the source of treatment. Table 4.15 shows the percentage of women who had post delivery complications and who sought treatment by source of treatment according to residence and availability of health facility in the village. About three-fourth of the women (73 percent) reported that they had obtained advice or had consulted someone for their problems. The proportion was equal among rural and urban women and 72 percent of women sought treatment from those villages where health facility was available as compared to 76 percent of women who did not have a health facility within the village.

<b>Table 4.15 TREATMENT FOR POST DELIVERY COMPLICATIONS</b>					
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, Punjab, 2002-04					
Treatment and source	Total	Residence		Availability of health facility <sup>5</sup> in the village	
		Rural	Urban	No	Yes
Percentage of women sought treatment who had any post delivery complication	73.1	73.4	72.4	75.7	71.6
Number of women	874	649	225	284	365
Percentage sought treatment at health facility					
Government health facility <sup>1</sup>	15.5	15.5	15.4	15.5	15.5
Primary health centre	0.9	0.7	1.6	0.5	0.8
Sub centre	0.5	0.6	0.3	0.3	0.9
Private health facility <sup>2</sup>	76.2	76.4	75.5	76.7	76.1
ISM <sup>3</sup> facility	4.6	3.9	6.6	3.1	4.6
Other	4.7	5.1	3.5	5.1	5.2
Percent distribution of women who obtained treatment from					
Doctor	78.7	76.7	84.6	79.0	74.7
ANM/nurse/midwife/LHV	12.7	14.5	7.2	12.3	16.3
Other health professionals <sup>4</sup>	3.5	3.8	2.4	2.4	5.0
Other	0.5	0.6	0.4	0.5	0.6
Missing	4.7	4.4	5.4	5.7	3.4
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	639	476	163	215	261
Note: <sup>1</sup> 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 <sup>2</sup> Include private hospital/clinic and non-governmental organization/ trust hospital <sup>3</sup> Either government or private Indian system of medicine <sup>4</sup> Other health professionals include Dai (trained or untrained), relative/friends and ISM practitioner <sup>5</sup> Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village					

Among women who sought treatment for complications in the postpartum period, only 16 percent visited a government health facility including primary health centre and sub-centre (1 percent each). More than three-fourth of the women (76 percent) visited a private health facility and only 5 percent went to a facility with the Indian system of medicine (either government or private) and other health facilities. The proportion of women who visited a government health facility is equal in rural and urban areas. Among women who sought treatment, 79 percent preferred to go to a doctor and 13 percent visited an auxiliary nurse midwife or nurse or LHV, 4 percent went to other health professionals and only one percent went to some one else. Seventy-seven percent of these women in rural areas and 85 percent in urban areas went to a doctor, whereas a visit to an ANM/nurse/LHV was 15 percent in rural areas and 7 percent in urban areas. There are also differences by availability of health facilities and non-availability of health facilities in the village. Seventy-five percent of women who belonged to villages with availability of health facilities were seen by doctors compared to 79 percent of women belonging to villages with non-availability of health facilities.

### 4.13 Obstetric Morbidity by District

The extent of health problems/ complications women suffer during pregnancy, delivery and post delivery period indicates the state of obstetric morbidity. Table 4.16 presents the incidence of pregnancy, delivery and post-delivery complications and treatment seeking behaviour in case of pregnancy and post delivery complications by district. As mentioned earlier, in the state, 26 percent, 20 percent and 19 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 55 percent of the women sought treatment for pregnancy complications and 73 percent for post delivery complications. In every district, a minimum of one-sixth of the women experienced at least one of the symptoms of pregnancy complications.

<b>Table 4.16 PREGNANCY, DELIVERY AND POST DELIVERY COMPLICATIONS</b>					
Extent of pregnancy, delivery and post delivery complications and treatment seeking behaviour by districts, Punjab, 2002-04					
District	Percentage of women <sup>1</sup>				
	Who had complication during pregnancy	Sought treatment for pregnancy complication <sup>2</sup>	Who had delivery complication	Who had post delivery complication	Sought treatment for post delivery complication <sup>3</sup>
Amritsar	26.9	48.9	20.9	15.9	73.3
Bathinda	30.2	71.6	22.1	19.3	87.0
Faridkot	24.1	57.1	20.5	15.2	70.3
Fatehgarh Sahib	30.4	67.1	25.1	18.1	90.2
Firozpur	18.4	51.7	12.2	16.8	53.4
Gurdaspur	28.8	42.1	26.8	30.4	52.4
Hoshiarpur	24.2	63.1	15.7	18.4	89.6
Jalandhar	27.7	67.2	31.1	19.0	84.1
Kapurthala	27.4	53.6	27.0	21.7	63.3
Ludhiana	26.9	54.7	18.1	13.8	74.5
Mansa	24.2	43.7	16.3	24.6	77.0
Moga	23.9	66.5	19.6	19.9	84.7
Muktsar	20.4	52.7	15.7	21.0	89.5
Nawanshahr	29.4	57.2	25.2	21.9	76.3
Patiala	33.3	58.9	21.3	24.4	77.1
Rupnagar	27.5	59.8	17.4	15.3	75.7
Sangrur	16.6	49.1	17.0	10.3	80.2
Punjab	25.5	55.3	20.4	18.7	73.1

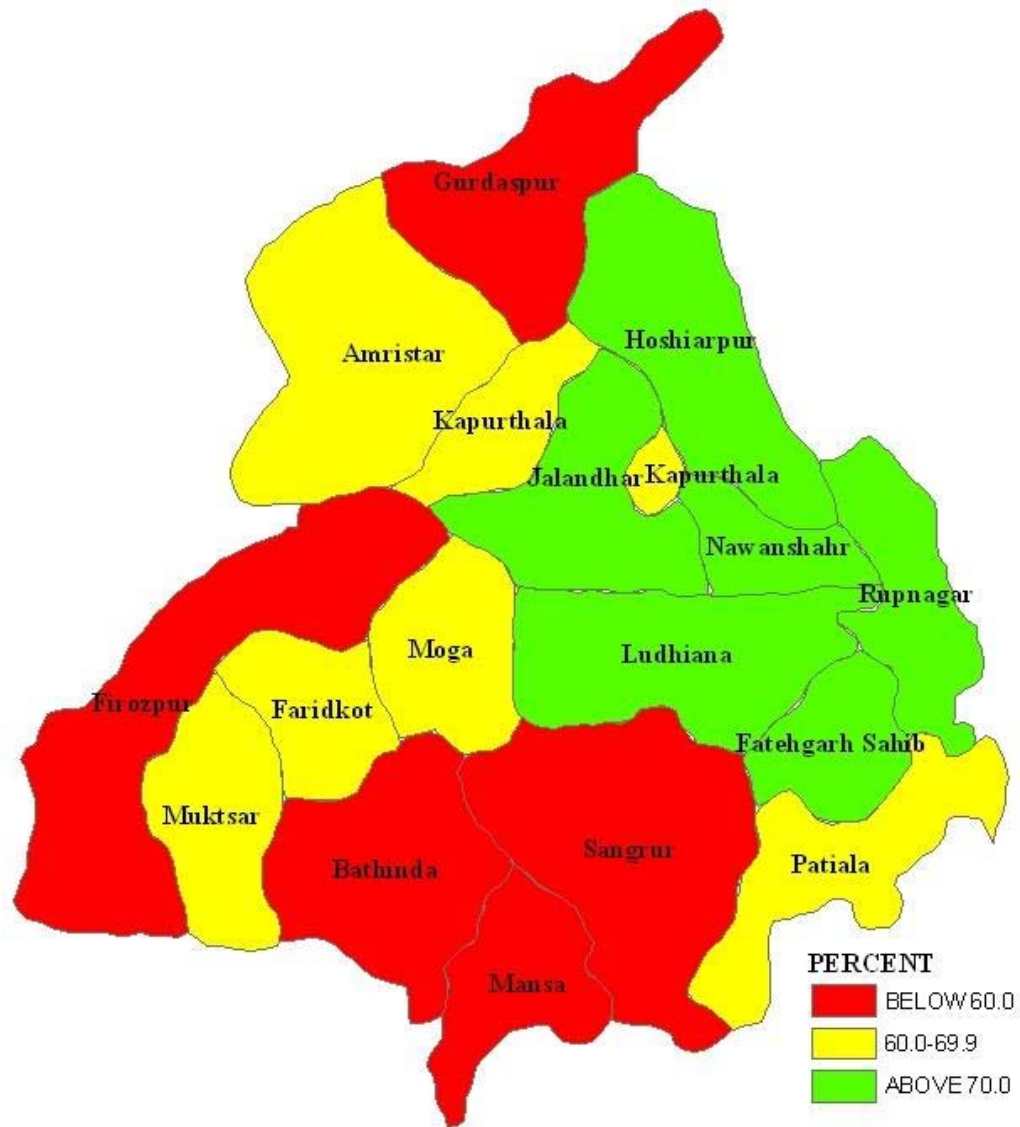
Note: <sup>1</sup> Women who had last live/still birth during three years preceding the survey. <sup>2</sup> Women who reported at least one Complication of pregnancy. <sup>3</sup> Women who reported at least one post delivery complication.

In a few districts like, Patiala (33 percent), Bathinda and Fatehgarh Sahib (30 percent each), the incidence of pregnancy complications is higher than other districts. The incidence of pregnancy complication is higher than that of delivery and post delivery complications. The percentage of women who experienced at least one type of delivery complication ranges from 12 percent in Firozpur to 31 percent in Jalandhar and incidence of post delivery complication varies from 10 percent in Sangrur to 30 percent in Gurdaspur. The incidence of all three types of complications seems to be linked with each other in varying proportions.

In most of the districts of Punjab about half of the women received some kind of antenatal care. In spite of a large proportion of women having contact with a doctor or any other health workers during the antenatal period, in all districts (except Bathinda, Fatehgarh Sahib, Hoshiarpur, Jalandhar and Moga) less than 60 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 52 percent in Gurdaspur to 90 percent in Muktsar and Fatehgarh Sahib.

### MAP-3

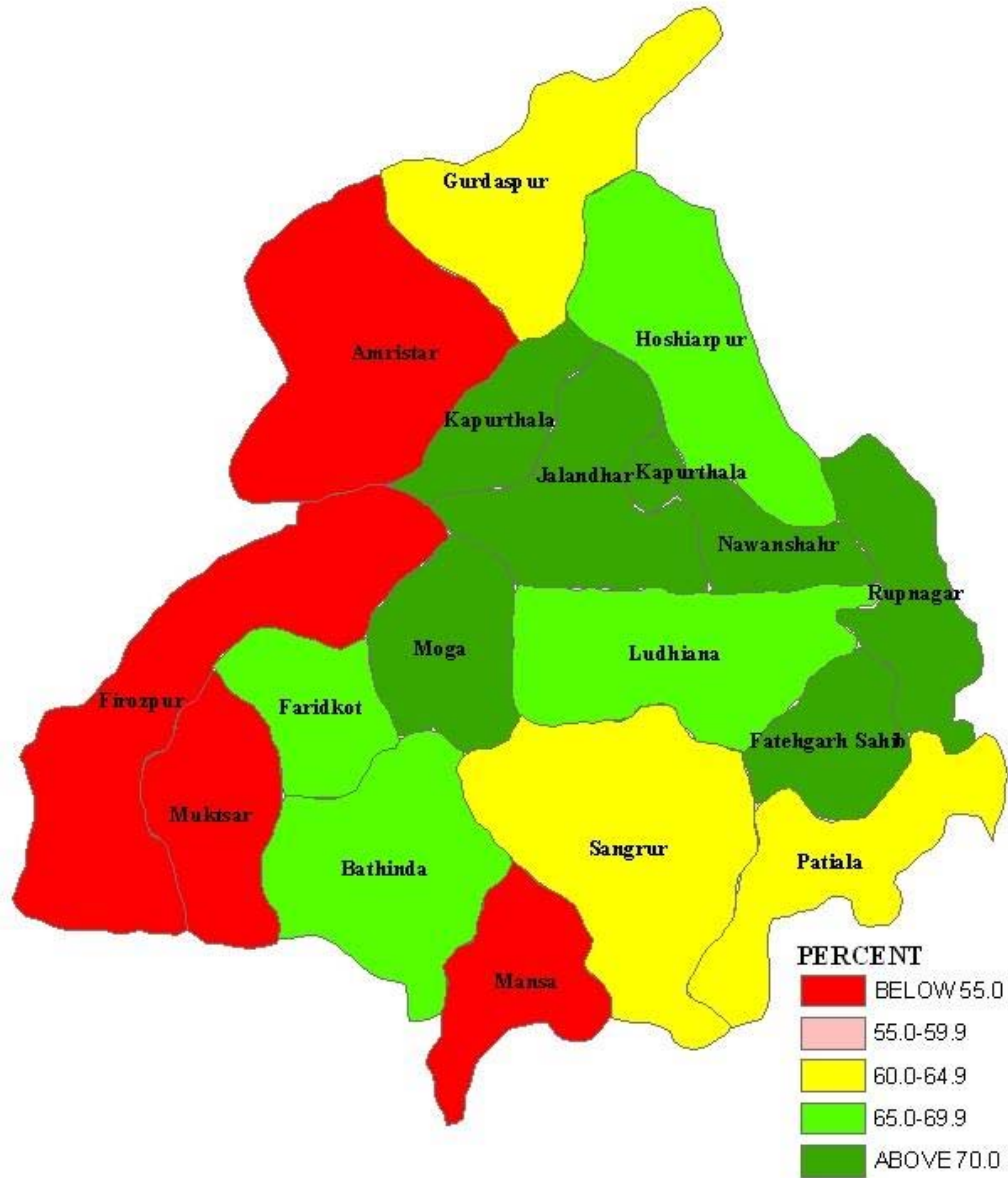
#### Percentage of Women Received Three or More Antenatal Check-Ups





### MAP-4

### Percentage of Delivery Attended by Skilled Person



## CHAPTER V

### CHILD CARE AND IMMUNIZATION

Child health services under the Reproductive and Child Health (RCH) programme include health education to mothers on breast-feeding and services for immunization, Vitamin A supplements and Iron prophylaxis, treatment of diarrhoea and Acute Respiratory Infections (ARIs). The District Level Household Survey (DLHS) covered all the currently married women whose last surviving child was born during the three years preceding the survey, and information 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.

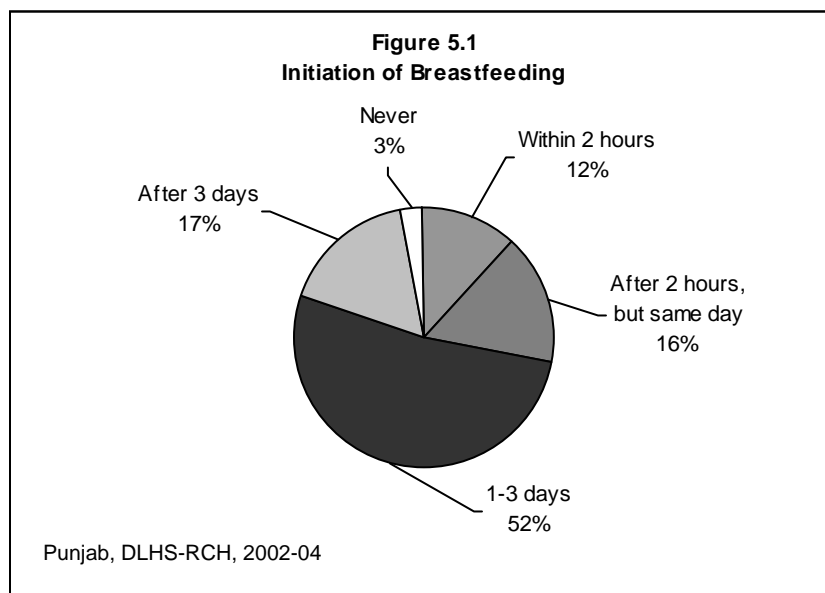
Table 5.1 shows the breastfeeding practices among children born during the three years preceding the survey in Punjab. Although, the practice of breastfeeding is common in Punjab, the initiation of breastfeeding within two hours of the birth of the child is not always followed. Twelve percent of the children were breastfed within two hours of birth and 28 percent were breastfed within one day of birth (including those who were breastfed within two hours of birth), while 69 percent of children were breastfed after one day of birth. As shown in Figure 5.1, about 16 percent of the children were breastfed within one day of birth but after two hours of birth, 52 percent were breastfed after the first day of birth but before 3 days, and 17 percent children were put to the breast after three days. Three percent of the children were never breastfed. More than three-fourth of the women (80 percent) 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 16 percent of children in any socio-economic groups shown in Table 5.1 were

breastfed within two hours of birth. Fifteen percent of children from scheduled tribe were breastfed within two hours of birth and 24 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 (63 percent), Christian children (73 percent), children from other castes (62 percent), children of educated mothers (61 percent) and children from households with a high standard of living (63 percent) were put to the breast after one day of birth.

<b>Table 5.1 INITIATION OF BREASTFEEDING</b>					
Percentage of children born during the three years preceding the survey who started breastfeeding within two hours of births, within one day of birth, and after one day of birth and percentage whose mother squeezed the first milk from her breast before breastfeeding by selected background characteristics, Punjab, 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 <sup>1</sup>	After one day of birth		
<b>Residence</b>					
Rural	12.0	26.2	71.2	79.4	3,020
Urban	12.7	33.5	63.0	79.6	1,273
<b>Mother's education</b>					
Non-literate	9.7	21.5	75.5	79.8	1,481
0-9@ years	12.7	27.3	69.7	79.6	1,311
10 and above	14.3	36.0	61.3	79.1	1,499
<b>Religion</b>					
Hindu	11.1	29.5	67.8	78.2	1,599
Muslim	15.9	25.1	66.7	65.7	58
Christian	13.8	20.9	73.2	83.2	112
Sikh	12.8	27.9	69.3	80.4	2,515
<b>Caste/tribe#</b>					
Scheduled caste	11.4	23.6	74.3	79.1	1,624
Scheduled tribe	15.3	23.8	74.7	85.9	50
Other backward class	11.2	26.1	71.8	78.4	891
Other	13.5	34.0	61.9	80.4	1,712
<b>Standard of living index</b>					
Low	7.9	17.6	79.9	78.0	558
Medium	12.0	25.9	71.8	80.5	1,824
High	13.8	33.8	62.7	79.0	1,911
Total	12.2	28.3	68.8	79.5	4,293
Note: Table based on youngest living child born during the three years preceding the survey Table includes 2 children with missing information on mother's education who were not shown separately <sup>1</sup> Includes children who started breastfeeding within two hours of births @ Literate mother with no years of schooling are included. #Total figure may not add to N due to do not know and missing cases. Total includes 8 children of other religion who are not shown separately.					

The custom of squeezing the first milk from the breast before breastfeeding is widely practised in every group, but it is slightly higher among the mothers of scheduled tribe and Christian children. Children who live in households with a low standard of living are less likely than children in other households to have mothers who squeezed the first milk from the breast before breastfeeding. There is no Rural-Urban differential of the custom of squeezing the first milk from the breast before breastfeeding. Mothers of children born in the three years preceding the survey were asked whether the child had been fed breast milk exclusively and if so, what the

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



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

Age in months	Status of exclusive breastfeeding			Number of children
	Exclusive breastfeeding	At least 4 months	At least 6 months	
<2	84.4	*	*	188
2-3	74.4	*	*	243
4-5	45.3	79.1	*	294
6-7	14.5	74.8	22.4	358
8-9	3.6	77.8	24.0	360
10-11	4.6	74.8	27.1	283
12-13	0.3	76.6	23.6	266
14-15	3.1	80.2	20.5	242
16-17	1.7	75.5	24.3	219
18-19	3.4	70.5	21.2	238
20-21	0.2	72.2	22.5	225
22-23	1.2	76.0	24.1	224
24-25	0.7	80.0	25.9	201
26-27	0.0	72.3	19.3	188
28-29	0.0	75.8	26.9	196
30-31	0.0	75.9	17.7	193
32-33	0.0	71.7	20.6	180
34-35	1.7	76.6	24.0	195
< 4 months	78.7	*	*	430
4-6 months	35.9	77.3	*	466
7-9 Months	5.6	77.0	21.5	546

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

In Punjab, only 79 percent of children under four months of age are exclusively breastfed. The percentage of infants exclusively breastfed drops steadily from 84 percent for children under 2 months of age to 45 percent for children who are 4-5 months old. About 77 percent of children in the age group 4-6 months were exclusively breastfed up to 4 months and 22 percent of children in the age group 7-9 months are exclusively breastfed upto 6 months.

### 5.1.1 Breastfeeding by District

Table 5.3 shows that in all the districts of Punjab, except Gurdaspur, Patiala and Rupnagar, not more than 15 percent of the children were put to the breast within two hours of birth. About 4 percent of the children were breastfed within two hours of birth in Jalandhar and Muktsar districts. More than 80 percent of the children were put to the breast after one day of birth in Faridkot, Moga and Nawanshahr. In 13 of the 17 districts, the mothers of more than 75 percent children squeezed the first milk before breastfeeding. There is a great deal of variation in the extent of exclusive breastfeeding for six months. It is highest in Nawanshahr (54 percent) and lowest in Fatehgarh Sahib (4 percent).

<b>Table 5.3 BREASTFEEDING BY DISTRICT</b>					
Percentage of children under age 3 who started breastfeeding within two hours of births, within one day of birth and after one day of birth, percentage whose mother squeezed the first milk from her breast before breastfeeding and percentage of children who exclusively breastfeed by District, Punjab, 2002-04					
District	Percentage started breastfeeding			Percentage whose mother squeezed first milk from breast	Exclusive breastfeeding <sup>2</sup>
	Within two hours of birth	Within one day of birth <sup>1</sup>	After one day of birth		
Amritsar	11.8	32.8	63.8	89.7	20.0
Bathinda	11.7	22.0	76.1	88.3	9.5
Faridkot	8.9	18.1	81.9	90.3	25.4
Fatehgarh Sahib	8.4	25.4	72.5	89.7	4.1
Firozpur	12.4	28.2	68.8	69.0	32.9
Gurdaspur	16.2	37.3	55.9	68.5	37.5
Hoshiarpur	8.4	28.6	69.5	71.8	26.2
Jalandhar	4.2	24.3	72.7	90.4	18.6
Kapurthala	12.3	22.3	75.7	72.2	16.6
Ludhiana	13.6	34.3	63.7	68.3	26.8
Mansa	8.5	24.5	73.9	85.8	26.1
Moga	9.0	15.7	82.0	84.9	18.7
Muktsar	3.6	15.4	79.0	78.4	17.5
Nawanshahr	7.3	15.3	81.9	76.5	54.0
Patiala	18.0	31.7	67.1	84.5	5.3
Rupnagar	23.8	36.1	60.6	81.9	18.2
Sangrur	13.6	27.2	71.5	77.7	26.3
Punjab	12.2	28.3	68.8	79.5	23.1

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

## 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 administered 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 present vaccination coverage rates for children in the age group 12-23 months. Only 73 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 higher than the percentage fully vaccinated. BCG, the first second and third doses of DPT and Polio vaccines have been given to more than three-fourths of children (Figure 5.3). Only 82 percent of the children have received three doses of DPT and 82 percent of the children received 3 drops of Polio and only 77 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 7-percentage point for DPT and 7 percentage points for polio.

There has been no improvement in full vaccination coverage in Punjab 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 Punjab, 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.

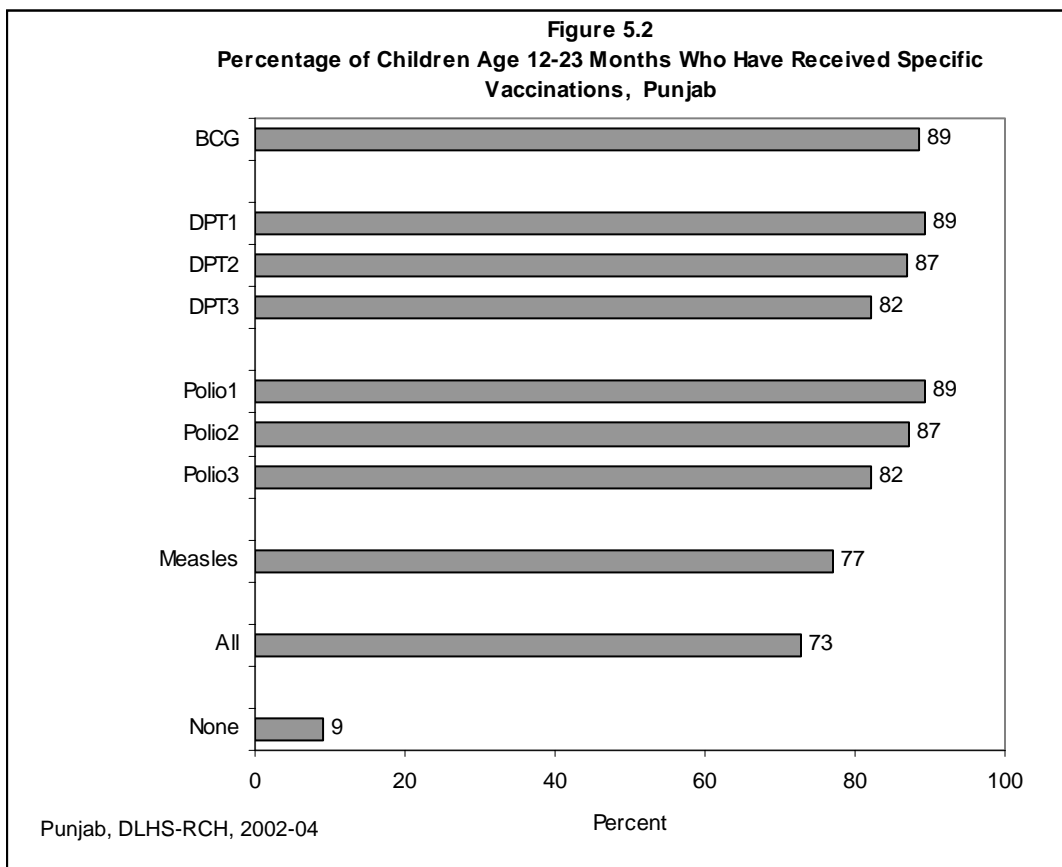
**Table 5.4 VACCINATION OF CHILDREN**

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

Background characteristic	Polio 0	BCG	DPT			Polio			Measles	Full vaccination <sup>1</sup>	No vaccination	Number of children
			1	2	3	1	2	3				
<b>Residence</b>												
Rural	44.9	87.8	88.4	86.1	80.7	88.5	86.2	80.7	75.4	71.8	10.0	1,097
Urban	65.7	90.3	90.9	89.3	85.3	90.9	89.7	85.5	80.1	75.7	8.3	465
<b>Sex of the child</b>												
Male	50.9	89.7	90.2	88.3	82.5	90.1	88.4	82.5	77.5	73.1	8.2	869
Female	51.3	87.1	87.9	85.4	81.6	88.0	85.8	81.6	75.9	72.8	11.0	694
<b>Birth order</b>												
1	62.2	94.0	94.5	92.3	86.7	94.7	92.8	86.7	82.8	77.6	4.2	547
2	53.7	91.0	92.4	91.0	87.3	92.3	91.0	87.5	81.4	79.4	6.8	498
3	38.5	84.2	84.2	82.0	77.2	84.2	82.0	77.0	72.5	67.5	13.4	286
4+	34.6	75.9	75.8	72.2	66.1	75.8	72.2	66.1	57.8	54.8	22.6	231
<b>Mother's education</b>												
Non-literate	26.7	74.7	75.9	72.4	65.2	76.1	72.5	65.2	55.5	51.9	21.5	535
0-9@ years	53.1	93.0	93.6	91.8	88.6	93.5	91.8	88.4	82.2	78.6	4.9	489
10 years and above	73.5	98.3	98.3	97.3	93.2	98.3	97.7	93.5	93.1	88.9	1.6	537
<b>Religion</b>												
Hindu	48.7	89.5	89.5	88.1	83.8	89.5	88.1	83.9	77.8	73.7	8.7	578
Muslim	(51.9)	(66.7)	(66.7)	(66.7)	(63.0)	(66.7)	(66.7)	(63.0)	(48.1)	(48.1)	(33.3)	25
Christian	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Sikh	53.3	88.9	90.2	87.7	82.2	90.2	88.0	82.1	77.1	73.5	8.9	915
<b>Caste/tribe#</b>												
Scheduled caste	32.5	80.7	81.7	79.0	73.3	81.6	79.0	73.3	65.8	63.0	16.6	594
Other backward class	54.6	89.9	90.1	87.3	82.3	90.2	87.9	82.6	77.8	74.6	8.2	326
<b>Standard of living index</b>												
Low	21.6	69.3	71.9	65.5	60.0	72.1	65.9	60.0	51.2	49.6	25.6	210
Medium	39.6	85.1	85.8	84.0	77.2	85.8	84.0	77.3	71.6	66.4	12.5	681
High	71.9	98.1	98.0	96.8	93.9	98.0	97.1	93.9	90.0	86.9	1.3	671
Total	51.1	88.6	89.2	87.0	82.1	89.2	87.2	82.1	76.8	72.9	9.4	1,563

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001. Total includes 1 case missing on mother education ,2 case of other religion and 21 cases of St were not shown seperatly. @ Literate mothers with no years of schooling are included. # Total figure may not add to N due to do not and missing cases. <sup>1</sup> 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. Seventy six percent of the children in urban areas had received all the recommended vaccinations by the time of the survey, compared with 72 percent in rural areas. Differentials in rural-urban against polio 0 may be observed from the table. Sixty six percent of the children have received polio vaccine at the time of birth in urban areas whereas 45 percent received the same in the rural areas.



Female children are 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 52 percent children of non-literate mothers are fully vaccinated compared to 79 percent of children with mothers' education below high school and 89 percent of mothers who have at least completed high school. Children from Scheduled Castes are less likely to have BCG, DPT, Polio and Measles vaccinations. The standard of living index of the household has a strong positive relationship with vaccination coverage. Eighty seven percent of children from households with a high standard of living are fully vaccinated, whereas only 50 percent of children are from households with a low standard of living.



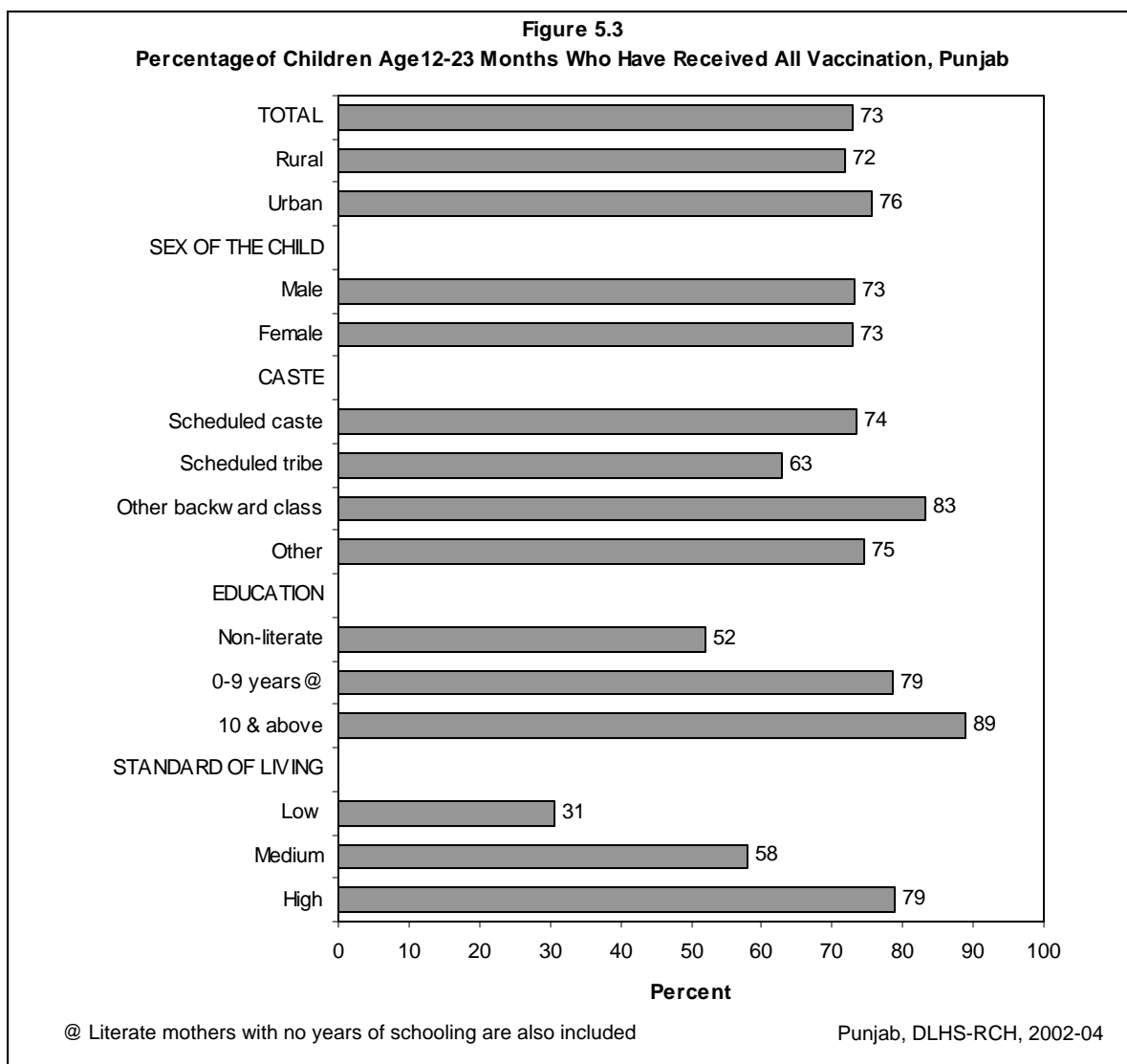


Table 5.5 shows the percentage of children in the age group 12-23 months and 24-35 months with a vaccination card, and the percentage who received various vaccinations during the first year of life by current age of children and place of residence. The interviewer was shown this vaccination card.

The proportion of children fully vaccinated by age 12 months increased slightly from 73 percent for children in the age group 12-23 months to 78 percent for children in the age group 24-35 months. A rural-urban differential for the coverage of full vaccination is also observed. Seventy two percent of children in the age group 12-23 months are fully vaccinated against 75 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). Seventy six percent of children in the age group 12-23 months have received all vaccinations in urban areas compared to 82 percent with children in the age group 24-35 months. Younger children aged 12-23 months are less likely to receive each type of vaccine except Polio 0 and BCG.

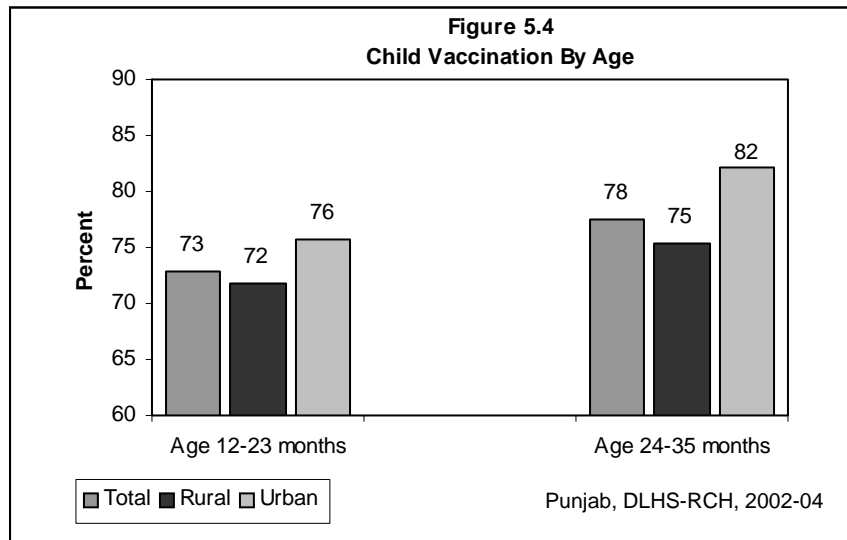
**Table 5.5 CHILDHOOD VACCINATION RECEIVED BY 12 MONTHS OF AGE**

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, Punjab, 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	37.6	28.2	37.1	27.4	38.9	30.0
Percentage vaccinated by 12 months of age						
Polio 0	51.1	48.4	44.9	43.1	65.7	60.8
BCG	88.6	87.6	87.8	86.6	90.3	89.7
<b>Polio doses</b>						
No Polio	10.5	11.2	11.0	11.3	9.1	10.9
1	2.0	2.1	2.3	2.4	1.2	1.5
2	5.1	2.8	5.5	3.3	4.2	1.7
3	82.1	83.3	80.7	82.5	85.5	85.2
Don't remember	0.3	0.6	0.5	0.5	0.0	0.7
<b>DPT injection</b>						
No DPT	10.5	11.1	11.1	11.2	9.1	10.9
1	2.1	2.2	2.4	2.5	1.6	1.3
2	4.9	2.7	5.3	3.2	4.0	1.6
3	82.1	83.4	80.7	82.5	85.3	85.5
Don't remember	0.3	0.6	0.5	0.5	0.0	0.7
Measles	76.8	81.2	75.4	79.8	80.1	84.5
Full <sup>1</sup> vaccination	72.9	77.5	71.8	75.4	75.7	82.2
No vaccination at all	9.4	10.1	10.0	10.6	8.3	9.1
Number of children	15,63	1,649	1,097	1,153	465	496

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

<sup>1</sup> BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles



### 5.3 Source of Immunization

Table 5.6 gives the percent distribution of children under three years of age who have received any vaccination by the source of last vaccine, according to place of residence and availability of health facilities in the village. The sub-centre is the primary provider of childhood vaccinations in Punjab. Most of the children (77 percent) were immunized at the government health facilities and only 15 percent at private health facilities. Further, among the children immunized, 24 percent of them had received vaccination from the sub-centre, 41 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 considerably lower in rural areas (10 percent) than in urban areas (26 percent). Even in urban areas, however, 67 percent of children received their vaccination from the government health facility. Children from those villages where health facilities are available are slightly less likely to receive vaccination from the government health facility.

<b>Table 5.6 SOURCE OF CHILDHOOD VACCINATION</b>					
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, Punjab, 2002-04					
Source of vaccination	Total	Residence		Availability of health facility <sup>1</sup> in the village	
		Rural	Urban	No	Yes
<b>Government health sector</b>					
Government/municipal hospital	40.7	36.6	50.7	44.3	30.0
Community/primary health centre	12.0	14.1	6.9	12.9	15.1
Sub-centre	23.8	29.9	9.2	24.9	34.1
RCH/MCP camp	0.0	0.0	0.0	0.0	0.0
<b>Private health sector</b>					
Private hospital	8.9	6.1	15.5	3.3	8.6
Private doctor	5.8	3.8	10.8	4.2	3.4
ISM <sup>2</sup> health facility	1.6	1.2	2.4	1.5	1.0
Other	3.9	4.9	1.6	5.7	4.3
Do not remember					
Missing	0.2	0.3	0.1	0.3	0.3
	3.0	3.0	2.9	2.8	3.2
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	4,389	3,098	1,292	1,416	1,681

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

## 5.4 Vitamin A and IFA Supplements

Vitamin A deficiency is one of the most common nutritional deficiency disorders in the world, affecting more than 250 million children worldwide (Bolem et. al., 1997). The child survival programme also includes administration of five doses of Vitamin A for prevention of night blindness and distribution of IFA for iron supplement. In Round II, mothers of children born during the three years before the survey were asked whether their children had received a dose of Vitamin A and IFA tablets/syrup. Those who said that their children had received a dose of Vitamin A and IFA tablets/syrup were further asked how many doses were given. Table 5.7 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 Punjab as a whole, 54 percent of the children received at least one dose of Vitamin A and only 5 percent received IFA tablets/syrup. This indicates that a large number of children in Punjab did not receive Vitamin A supplements and very few children received IFA tablets/syrup supplementation.

**Table 5.7 VITAMIN A AND IFA SUPPLEMENTATION FOR CHILDREN**

Percentage of children age 12-35 months who have received at least one dose of Vitamin A and iron folic acid tablets/syrup, according to selected background characteristics, Punjab, 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
<b>Age of the child</b>			
12-23 months	50.9	5.1	1,563
24-35 months	56.7	5.2	1,649
<b>Sex of the child</b>			
Male	55.8	6.1	1,814
Female	51.3	3.9	1,398
<b>Birth order</b>			
1	58.9	6.4	1,128
2	58.5	5.5	1,027
3	45.3	3.4	577
4+	42.6	3.6	480
<b>Residence</b>			
Rural	51.8	4.3	2,250
Urban	58.7	7.0	962
<b>Mother's education</b>			
Non-literate	37.0	2.4	1,151
0-9 years@	57.8	4.6	988
10 years and above	68.3	8.6	1,072
<b>Religion</b>			
Hindu	56.1	4.5	1,174
Muslim	(40.4)	(2.1)	45
Christian	48.3	2.5	91
Sikh	53.1	5.7	1,899
<b>Caste/tribe #</b>			
Scheduled caste	46.6	3.2	1,258
Scheduled tribe	(51.4)	(0.0)	37
Other backward class	53.4	4.9	658
Other	61.4	7.4	1,243
<b>Standard of living index</b>			
Low	34.5	1.3	445
Medium	48.3	4.7	1,389
High	65.7	6.8	1,378
<b>Availability of health facility in the village<sup>1</sup></b>			
Yes	51.3	5.3	1,221
No	52.3	3.2	1,029
Total	53.9	5.2	3,212

Note: Table includes last and last but one living children born in the three years preceding the survey.

Total include includes 6 women with missing information on education who are 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. <sup>1</sup> Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village.

Children in the age group 24-35 months are more likely to receive at least one dose of Vitamin A and IFA tablets/syrup each than children in the age group 12-23 months. Female children are less likely to receive Vitamin A and IFA tablets/syrup than male children. Children living in urban areas, children whose mother completed high school and above and children living in households with a high standard of living children living are more likely to receive a dose of Vitamin A and IFA tablets/syrup. Children of birth order 4 or above are much less likely than children of birth order 1, 2 or 3 to receive any dose of vitamin A and IFA tablets/syrup.

<b>Table 5.8 CHILDHOOD VACCINATION BY DSITRICT</b>								
Percentage of children age 12-23 months with a vaccination card that shown to the interviewer and percentage who received specific vaccinations by district, Punjab, 2002-04								
District	Percentage vaccinated							Percentage showing vaccination card
	Polio 0	BCG	DPT3	Polio3	Measles	Full <sup>1</sup>	None	
Amritsar	41.8	89.0	82.8	83.6	75.4	73.0	11.0	16.8
Bathinda	48.4	89.3	79.4	79.4	67.4	67.4	9.1	67.3
Faridkot	47.4	80.9	70.1	71.1	60.2	55.5	11.6	46.4
Fatehgarh Sahib	64.0	95.8	91.9	92.4	89.2	87.5	2.3	51.6
Firozpur	48.0	75.3	68.6	68.6	57.6	50.2	17.7	29.6
Gurdaspur	58.0	90.7	81.4	81.4	81.7	74.4	7.1	37.0
Hoshiarpur	32.0	97.7	91.5	91.5	93.1	85.7	1.3	36.2
Jalandhar	53.0	93.6	90.5	90.5	77.5	77.5	6.4	66.1
Kapurthala	45.4	93.4	88.4	88.4	84.2	81.6	6.6	36.0
Ludhiana	60.6	93.6	86.2	86.2	89.4	85.1	6.4	36.1
Mansa	43.3	76.9	67.8	66.9	57.5	54.1	17.1	43.4
Moga	60.8	76.7	72.4	73.9	66.7	57.2	18.6	39.2
Muktsar	42.0	71.1	59.8	59.8	50.5	45.7	23.6	40.2
Nawanshahr	48.6	98.9	95.9	95.9	89.5	87.6	0.0	58.1
Patiala	66.8	94.8	88.4	87.7	81.8	79.1	5.2	40.9
Rupnagar	55.6	98.8	96.6	95.4	94.2	91.6	0.0	32.1
Sangrur	54.0	84.6	79.8	79.8	75.3	73.5	13.5	26.7
Punjab	49.7	88.0	82.8	82.7	79.1	75.3	9.8	37.6

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

## 5.5 Immunization Coverage by District

The coverage of vaccination rates for all vaccines for children in the age group 12-23 months in each district is presented in Table 5.8. There are inter-district differentials in the coverage for different vaccinations, and for children receiving all vaccinations and those that did not receive any vaccination at all. The percentage of children who are fully vaccinated ranges from 46 percent in Muktsar to 92 percent in Rupnagar. In 9 of the 17 districts the coverage of full immunization is below the state average of 75 percent. Twenty four percent of children in Muktsar district were not vaccinated at all and in another six districts, the percentage of children not vaccinated is higher than the state average. In nearly all the districts, fewer children have received the Polio 0 than any of the other vaccinations. The coverage of polio drops at the time of birth varies from the lowest in Hoshiarpur (32 percent) to the highest in Patiala (67 percent).

## **5.6 Child Morbidity and Treatment**

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

### **5.6.1 Awareness of Diarrhoea**

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

In Punjab, 64 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 58 percent in Round I, and 25 percent were aware of ORS, which was 17 percent in Round I. Twenty three percent of the women were aware of salt and sugar solution. Some of the women also reported that they would continue normal food (7 percent), continue breastfeeding (3 percent) and give plenty of fluids (8 percent) and about 35 percent of women did not know what to give a child who had diarrhoea. As expected, knowledge of ORS is higher among urban women (40 percent) than rural women (18 percent) and among high school and above educated women (50 percent) as compared to non-literate women (7 percent). Women belonging to Schedule Tribes (12 percent) are less likely to know about ORS than women belonging to other caste groups (35 percent). Forty one percent of women with children having a high standard of living know about ORS and it declines to 14 percent for women with a medium standard of living and 6 percent with a low standard of living. Knowledge of ORS is more among middle age groups and among older women than among younger women.

<b>Table 5.9 AWARENESS OF DIARRHOEA</b>								
Percentage of women who are aware of diarrhoea management, type of practice followed if child gets diarrhoea, and percentage of women whose child suffered <sup>1</sup> from diarrhoea by selected background characteristics, Punjab, 2002-04								
Background characteristic	Knowledge of diarrhoea management	Type of practices to be followed do if child gets diarrhoea*					Do not know	Number of women
		Give ORS	Salt and sugar solution	Continue normal food	Continue breast-feeding	Give plenty of fluids		
<b>Age</b>								
15-24	60.2	20.3	16.8	5.0	3.4	6.4	38.8	2,053
25-34	67.0	29.0	27.0	7.9	2.7	8.4	31.8	2,447
35-44	60.7	24.6	26.1	8.7	3.7	11.0	39.3	208
<b>Residence</b>								
Rural	59.9	18.4	17.3	5.6	2.9	6.0	38.4	3,288
Urban	72.7	40.2	34.5	9.2	3.4	11.4	27.6	1,420
<b>Mother's education</b>								
Non-literate	49.2	6.9	9.0	4.6	2.3	3.9	48.7	1,639
0-9@ years	59.8	17.1	17.8	6.0	2.5	5.9	39.2	1,432
10 and above	81.8	50.0	40.0	9.3	4.2	13.0	17.9	1,635
<b>Religion</b>								
Hindu	67.6	32.6	26.2	7.0	3.4	8.9	31.8	1,776
Muslim	58.6	8.8	12.9	4.6	0.0	3.8	42.6	63
Christian	53.4	20.0	24.5	6.3	6.1	5.3	45.6	122
Sikh	61.8	20.6	20.1	6.5	2.7	7.0	36.7	2,737
<b>Caste/tribe#</b>								
Scheduled caste	59.7	16.0	15.6	6.1	2.6	4.4	39.0	1,768
Scheduled tribe	56.8	11.9	11.2	1.0	1.1	6.0	33.9	58
Other backward class	62.7	23.0	23.2	6.5	2.6	8.4	35.2	973
Other	68.5	35.0	28.7	7.5	3.7	10.3	31.4	1,891
<b>Standard of living index</b>								
Low	45.8	6.3	9.7	4.4	1.8	3.2	50.0	608
Medium	56.0	13.7	14.7	5.0	2.4	5.0	43.2	1,974
High	76.1	40.8	33.3	8.8	3.9	11.4	23.4	2,126
<b>Availability of health facility<sup>2</sup> in the village</b>								
Yes	60.6	18.4	16.9	5.1	2.0	5.9	38.8	1,825
No	58.9	18.5	17.7	6.1	3.9	6.1	37.8	1,463
Total	63.8	25.0	22.5	6.7	3.0	7.6	35.1	4,708

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. <sup>1</sup> 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. <sup>2</sup> Includes sub-centre, primary health center, Community health centre or referral hospital, government hospital, and government dispensary within the village. Total includes 2 women missing information on education and 11 woman on other religion which are not shown separately.

## 5.6.2 Treatment of Diarrhoea

During the two weeks before the survey, 16 percent of the women reported that their children suffered from diarrhoea (Table 5.10). Women, whose children had diarrhoea, were further asked about treatment with ORS, any other medical treatment and source of treatment. About 26 percent of the women mentioned that they gave ORS therapy, and 84 percent of the women said that their child had been treated at health facility. Use of ORS for the treatment of childhood diarrhoea in Punjab is relatively high among urban women than among rural women.



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

<b>Table 5.10 TREATMENT OF DIARRHOEA</b>					
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, Punjab, 2002-04					
Sought treatment/ source of treatment	Total	Residence		Availability of health facility <sup>2</sup> in the village	
		Rural	Urban	Yes	No
Percentage of women whose child suffered <sup>1</sup> from diarrhoea	15.9	15.9	16.0	17.0	14.5
Number of women	4708	3288	1420	1825	1463
Percentage of women whose child suffered <sup>1</sup> from diarrhoea treated with ORS	26.2	21.8	36.2	19.4	25.4
Percentage of women whose child suffered <sup>1</sup> from diarrhoea sought treatment	83.5	84.2	81.9	83.8	84.9
Number of women	750	523	227	311	212
<b>Source of treatment</b>					
<b>Government health facility</b>					
Hospital/dispensary	6.2	6.8	4.9	5.4	8.8
CHC/ Rural hospital	0.8	0.8	0.7	0.4	1.3
Primary health centre	0.5	0.6	0.0	0.4	1.0
Sub centre	1.0	1.4	0.0	2.1	0.3
<b>Private health facility</b>					
Private hospital clinic	80.6	80.1	81.7	80.8	79.1
ISM <sup>3</sup> facility	6.8	7.2	5.8	5.6	9.5
Home remedy	2.6	2.1	4.0	1.4	3.0
Other	5.9	6.0	5.8	7.4	3.8
Percent distribution of women who seek treatment by					
Doctor	89.1	86.3	95.7	83.7	90.1
ANM/Nurse/LHV	5.6	7.0	2.3	7.7	5.9
Relative/friends	0.7	1.0	0.0	1.1	0.7
<i>Dai (trained or untrained)</i>	3.7	4.8	0.3	0.0	0.0
Chemist/medical shop	0.1	0.3	1.0	6.2	2.7
ISM Practitioner	0.5	0.7	0.1	0.8	0.5
Missing	0.4	0.3	0.5	0.5	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	627	441	186	261	180
Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II.					
<sup>1</sup> Last two weeks prior to survey. <sup>2</sup> Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. <sup>3</sup> Either government or private health facility of Indian System of Medicine					

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 81 percent of women visited private hospitals/clinics and 7 percent of women treated their children through the Indian System of Medicine.

### **5.6.3 Awareness of Pneumonia**

Another major killer disease among infants and children is Acute Respiratory Infections (ARI) including pneumonia. Early diagnosis and treatment with antibiotics can prevent a large proportion of ARI/pneumonia deaths. An attempt was made to understand the awareness level of pneumonia, and the proportion of children who had suffered from pneumonia during the last two weeks before the survey and their health seeking behaviour. This is presented in Table 5.11. It was found that a low proportion (40 percent) of women with births three years preceding the survey in Punjab were aware of danger signs of pneumonia. The figure was slightly down from 49 percent in Round I. A relatively high proportion of women in urban areas (46 percent) were aware of the danger signs of pneumonia as compared to women from rural areas (37 percent). Knowledge of danger signs of pneumonia is higher among older women (47 percent), Hindu women (41 percent), other castes category (45 percent), highly educated women (51 percent), women living in high standard of living household (47 percent) and women living in those villages without health facilities (38 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' (81 percent), 'chest in drawing' (60 percent), 'pain in chest and productive cough' (32 percent), 'wheezing / whistling' (26 percent), 'rapid breathing' (20 percent), 'conditions get worse than before' (14 percent), 'not able to drink or take a feed' (11 percent) and 'excessive drowsy and difficulty in keeping awake' (10 percent).

### **5.6.4 Treatment of Pneumonia**

About 6 percent of women reported that their children had suffered from pneumonia during two weeks before the survey; the corresponding figures were 6 percent in rural and urban areas (Table 5.12).

Table 5.12 also shows that the percentage of women whose children suffered from ARI symptoms in the last two weeks before the survey who sought advice/treatment and taken to a health facility or provider. Eighty seven percent of women received some advice or treatment whose children were ill with ARI. This percentage is relatively low in village with health facilities (88 percent) than village without health facility (90 percent).

Among them who got advice for children ill with ARI, 73 percent of women visited private hospital/clinic and only 8 percent went to government hospital/dispensary, whereas 7 percent of them obtained treatment through Indian System of Medicine.

<b>Table 5.11 AWARENESS OF PNEUMONIA</b>												
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, Punjab, 2002-04												
Background characteristic	Percentage of women aware of danger signs of pneumonia	Number of women	Danger signs								Number of women	
			Difficulty in breathing	Chest in-drawing	Not able to drink or take a feeding	Excessive drowsy and difficulty in keeping awake	Pain in chest and productive cough	Conditions get worse than before	Wheezing / whistling	Rapid breathing		
<b>Age</b>												
15- 24	33.4	2,053	83.7	55.8	9.5	7.6	29.5	13.0	27.0	18.1	686	
25-34	44.9	2,447	79.6	62.2	10.8	11.4	32.6	14.8	26.8	21.2	1,098	
35-44	47.3	208	80.9	60.5	13.8	12.1	33.2	19.6	15.8	15.9	98	
<b>Residence</b>												
Rural	37.4	3,288	79.4	58.6	9.3	9.8	31.0	14.3	26.4	18.7	1,231	
Urban	45.9	1,420	84.5	62.1	12.8	10.6	32.4	14.5	26.1	21.9	652	
<b>Mother's education</b>												
Non-literate	31.2	1,639	78.1	53.9	9.2	8.3	29.2	12.1	26.1	19.6	512	
0-9@ years	38.2	1,432	84.2	59.7	10.7	10.4	29.4	12.7	24.1	20.3	546	
10 and above	50.5	1,635	81.0	63.6	11.1	10.9	34.3	16.8	27.8	19.6	825	
<b>Religion</b>												
Hindu	41.0	1,776	81.5	60.4	11.7	10.1	29.2	15.5	25.3	20.6	727	
Muslim	40.7	63	(80.0)	(64.0)	(4.0)	(12.0)	(24.0)	(8.0)	(12.0)	(20.0)	25	
Christian	38.8	122	(77.4)	(64.5)	(3.2)	(12.9)	(19.4)	(6.5)	(12.9)	(25.8)	48	
Sikh	39.4	2,737	80.9	58.8	10.1	10.1	33.3	14.1	28.0	18.9	1,077	
<b>Caste/tribe#</b>												
Scheduled caste	33.8	1,768	81.4	54.4	8.8	8.4	30.0	12.0	24.8	16.9	598	
Scheduled tribe	35.7	58	*	*	*	*	*	*	*	*	21	
Other backward class	41.8	973	80.0	62.0	10.7	7.8	30.3	13.5	23.5	22.3	407	
Other	45.2	1,891	81.9	62.7	11.7	12.2	33.5	16.5	29.0	21.0	854	
<b>Standard of living index</b>												
Low	29.3	608	72.4	59.6	12.8	8.0	22.4	16.9	18.1	27.0	178	
Medium	35.9	1,974	80.9	54.0	8.5	9.0	30.8	12.4	28.2	17.5	708	
High	46.9	2,126	83.0	64.0	11.5	11.2	33.6	15.3	26.3	20.1	996	
<b>Availability of health facility<sup>2</sup> in the village</b>												
Yes	37.0	1,825	80.3	54.9	9.9	8.9	32.7	15.5	28.1	18.5	675	
No	38.0	1,463	78.4	63.1	8.5	10.8	28.9	12.8	24.2	18.9	556	
<b>Total</b>	<b>40.0</b>	<b>4,708</b>	<b>81.2</b>	<b>59.8</b>	<b>10.5</b>	<b>10.0</b>	<b>31.5</b>	<b>14.4</b>	<b>26.3</b>	<b>19.8</b>	<b>1,883</b>	

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. <sup>1</sup> 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.  
<sup>2</sup> Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village.  
 Total includes 2 women missing information on education who are not shown separately.  
 Total includes 11 women with other religion who are not shown separately. \* Percentage not shown separately, based on few cases.  
 () Based on less than 50 unweighted cases

**Table 5.12 TREATMENT OF PNEUMONIA**

Percentage of women who sought treatment whose child suffered<sup>1</sup> from cough and cold and source of treatment, according to place of residence and availability of health facility in the village, Punjab, 2002-04

Sought treatment/ source of treatment	Total	Residence		Availability of health facility <sup>2</sup> in the village	
		Rural	Urban	Yes	No
Percentage of women whose child suffered from cough, cold and difficulty in breathing	5.8	5.7	6.1	5.7	5.6
Number of women	4,708	3,288	1,420	1,825	1,463
Percentage of women sought treatment whose child suffered from cough and cold	87.4	88.7	84.7	88.1	89.6
Number of women	274	187	87	105	82
<b>Source of treatment</b>					
<b>Government health facility</b>					
Hospital/dispensary	8.3	8.9	6.7	6.5	12.0
CHC/ Rural hospital	0.5	0.7	0.0	0.0	1.5
Primary health centre	1.8	2.6	0.0	4.1	0.8
Sub centre	0.8	1.2	0.0	2.1	0.0
<b>Private health facility</b>					
Private hospital clinic	72.7	68.8	81.3	66.7	71.4
ISM <sup>3</sup> facility	7.0	6.5	8.1	9.0	3.5
Home remedy	1.8	1.8	1.9	2.6	0.7
Other	9.1	10.8	5.3	10.1	11.7
Percent distribution of women who seek treatment by					
Doctor	90.7	89.4	93.7	84.5	95.6
ANM/Nurse/LHV	3.7	4.5	1.9	7.4	0.8
Relative/friends	0.5	0.0	1.5	0.0	0.0
Chemist/medical shop	4.4	6.1	0.8	8.1	3.7
ISM practitioner	0.7	0.0	2.1	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	240	166	74	92	74
Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II.					
<sup>1</sup> Last two weeks prior to survey. <sup>2</sup> Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village.					
<sup>3</sup> Either government or private health facility of Indian System of Medicine					

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

Table 5.13 presents the knowledge of diarrhoea management, knowledge of ORS and incidence of diarrhoea by district. Although knowledge of diarrhoea management is high in most of the districts but knowledge about ORS is low. Knowledge of ORS is also not common and it is lowest in Firozpur (13 percent). Women in Mansa, Muktsar, and Sangrur also have relatively low level of knowledge of ORS. The incidence of diarrhoea is 16 percent in the state as a whole and it varies from 7 percent in Nawanshahr to 30 percent in Patiala. Table 5.13 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 Nawanshahr (24 percent) and highest in Rupnagar (68 percent). Incidence of ARI symptoms is comparatively low in nearly all the districts in Punjab. It is highest in Nawanshahr (20 percent) and lowest in Sangrur (1 percent).

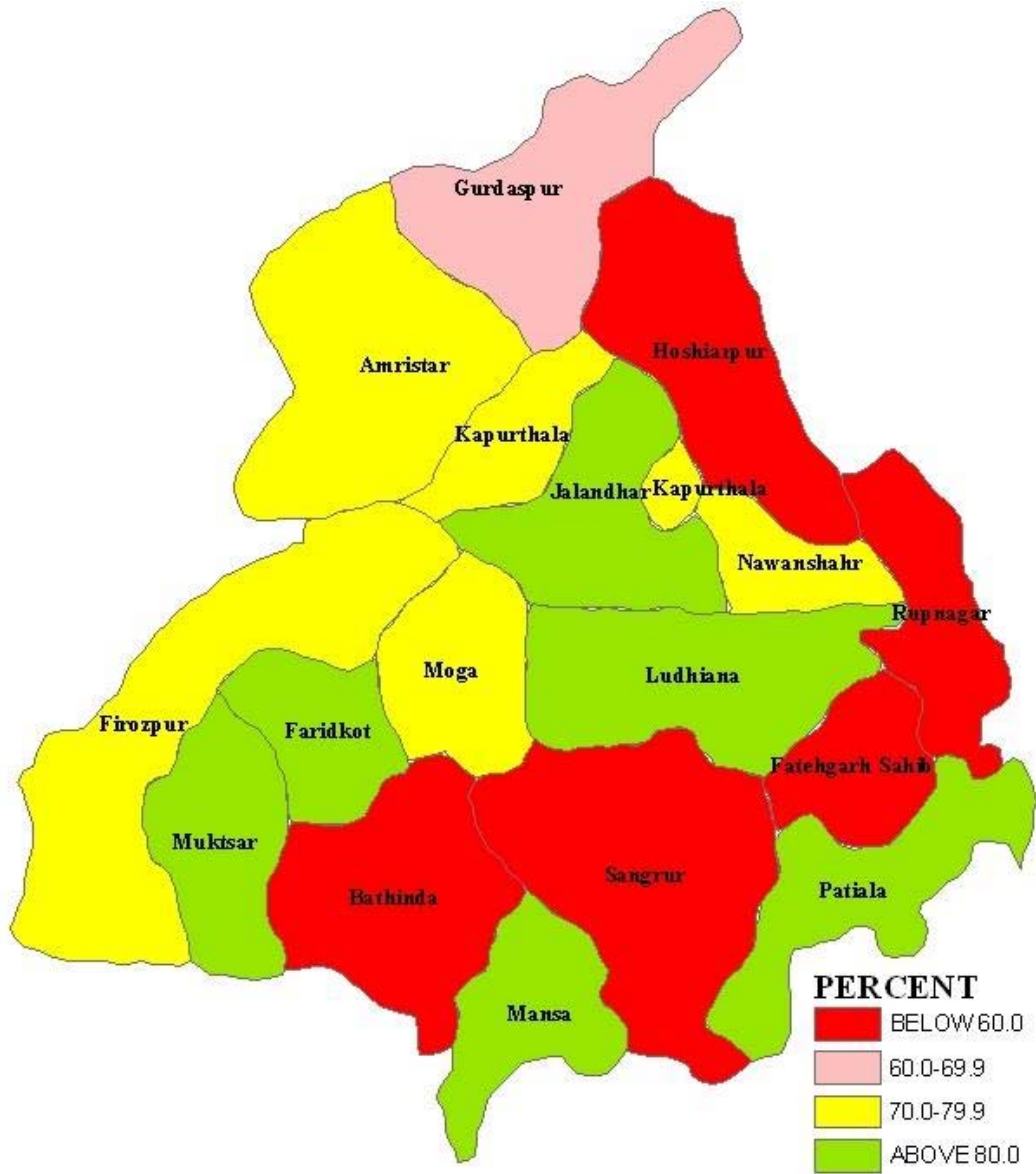
<b>Table 5.13 KNOWLEDGE OF DIARRHOEA MANAGEMENT AND PNEUMONIA BY DISTRICT</b>					
Percentage of women by awareness of diarrhoea management, ORS, danger signs of pneumonia and whose child had suffered from diarrhoea and pneumonia during last two weeks prior to survey by district, Punjab, 2002-04					
District	Percentage of women aware of		Percentage of women whose child suffered <sup>1</sup> from diarrhoea	Percentage of women aware of danger signs of pneumonia	Percentage of women whose child suffered <sup>1</sup> from pneumonia
	Diarrhoea Management	ORS			
Amritsar	62.5	26.0	14.0	44.7	1.9
Bathinda	70.0	20.7	17.1	39.2	6.2
Faridkot	80.0	20.4	16.8	36.7	9.3
Fatehgarh Sahib	68.6	43.8	17.4	40.1	2.0
Firozpur	33.8	13.1	16.5	29.6	8.7
Gurdaspur	53.4	24.8	17.1	37.0	14.1
Hoshiarpur	63.1	30.3	16.9	43.1	1.9
Jalandhar	91.2	29.0	13.9	28.9	5.7
Kapurthala	57.8	29.8	16.0	35.4	3.9
Ludhiana	55.0	29.9	15.5	43.9	4.7
Mansa	74.3	14.0	21.4	27.3	6.0
Moga	79.3	20.1	11.7	33.6	8.3
Muktsar	76.8	13.5	20.3	40.3	6.6
Nawanshahr	76.8	36.6	6.7	23.8	19.7
Patiala	61.2	33.4	30.1	36.7	7.7
Rupnagar	86.7	42.7	11.0	67.9	1.7
Sangrur	60.6	14.0	9.4	48.9	1.3
Punjab	63.8	25.0	15.9	40.0	5.8

Note: Table based on women with last and last but one living children born since 01.01.1999 /01.01.2001. <sup>1</sup> 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 Vaccination



## 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 Punjab. 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 95 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, 55 percent of women from rural areas are aware about all modern methods compared to 62 percent of their urban counterparts.

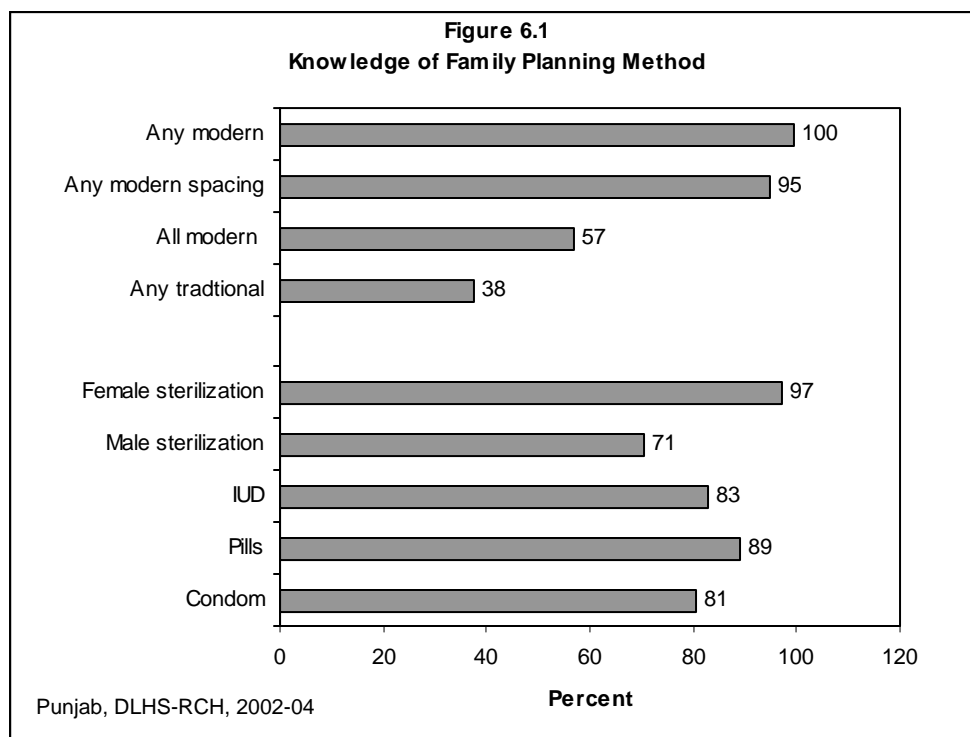
<b>Table 6.1 KNOWLEDGE OF CONTRACEPTIVE METHODS</b>					
Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and selected background characteristics, Punjab, 2002-04					
Contraceptive methods	Total	Residence		Availability of health facility in the village <sup>3</sup>	
		Rural	Urban	No	Yes
Any method	99.6	99.5	99.8	99.3	99.6
Any modern method	99.5	99.4	99.8	99.3	99.5
Any modern spacing method <sup>1</sup>	94.7	93.6	97.1	93.0	94.0
All modern methods <sup>2</sup>	56.9	54.5	62.1	53.5	55.3
Female sterilization	97.3	97.4	97.1	97.3	97.5
Tubectomy	60.8	60.0	62.6	56.8	62.6
Laparoscopy	42.0	40.5	45.4	41.0	40.1
Male sterilization	70.6	69.6	72.6	68.8	70.4
Vasectomy	38.9	36.7	43.8	33.2	39.5
No-scalpel vasectomy	26.2	23.6	32.1	22.0	24.9
IUD/Loop	82.7	80.7	87.3	79.4	81.7
Pills	89.2	87.4	93.4	86.9	87.7
Daily	64.6	61.9	70.5	61.1	62.5
Weekly	28.3	23.3	39.5	24.7	22.0
Condom/Nirodh	80.6	78.3	85.6	77.2	79.2
Sponge (today)	5.8	4.2	9.5	4.7	3.8
Injectables	10.2	9.9	10.8	9.4	10.3
Norplant	0.8	0.8	0.9	0.7	0.9
Contraceptive herbs	2.7	2.7	2.9	2.3	3.0
Any traditional method	37.5	35.3	42.5	33.9	36.4
Any other Indian system of medicinal contraceptives	2.1	2.2	1.8	1.9	2.6
<b>Number of women</b>	15,696	10,819	4,877	4,894	5,926

Note: <sup>1</sup> Include IUD, pills and condom. <sup>2</sup> Include Female sterilization, Male sterilization, IUD, pills and condom  
<sup>3</sup> 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 Punjab followed by Pills. Overall, 97 percent of currently married women are aware of female sterilization and 71 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 (73 percent) know about male sterilization as compared to 70 percent of rural women. There are differentials in spacing methods such as IUD/Loop, Pill and condom users with respect to the background characteristics. The best-known spacing methods are Pills (89 percent) and condoms (81 percent) respectively. Only 83 percent of women know about the IUD/Loop. There is a large differential in knowledge of spacing methods by residence, only 78 percent of the rural women know condom compared to 86 percent of urban women. The modern spacing methods, Pill and IUD are known by 87 and 81 percent of rural women respectively while the corresponding figures in urban areas are 93 and 87 percent respectively of eligible women respondents. The knowledge of these spacing methods remains low as compared to knowledge of sterilization.

In Punjab, only 38 percent of the women are aware of a traditional method and about 2 percent are also aware of other contraceptives of the Indian System of Medicine. It is also observed that women from villages with a health facility are slightly more aware about modern spacing methods.





**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, Punjab, 2002-04

Districts	Any method	Any modern <sup>1</sup> method	Any modern spacing <sup>2</sup> method	All modern <sup>3</sup> methods	Male sterilization	Female sterilization	IUD	Pill	Condom/Nirodh	Any traditional method
Amritsar	100.0	100.0	95.9	69.9	86.9	99.3	87.0	92.6	82.9	34.0
Bathinda	99.9	99.9	97.8	69.5	83.9	99.7	93.5	93.7	85.0	58.0
Faridkot	100.0	100.0	98.4	68.5	78.9	99.3	93.7	92.5	90.0	39.3
Fatehgarh Sahib	100.0	99.9	99.7	91.4	94.8	99.9	98.1	98.9	97.5	76.3
Firozpur	99.4	99.4	79.1	8.8	18.5	96.9	48.6	65.6	54.3	5.7
Gurdaspur	95.8	95.3	84.2	21.4	40.1	83.6	53.4	72.6	62.9	16.6
Hoshiarpur	100.0	100.0	98.6	55.4	75.8	98.5	86.3	93.0	82.3	35.3
Jalandhar	100.0	100.0	99.8	90.1	95.3	100.0	96.9	99.2	96.8	67.8
Kapurthala	99.8	99.7	93.7	45.2	65.3	97.3	74.9	88.9	76.3	22.3
Ludhiana	100.0	99.9	95.1	26.8	37.4	95.2	76.9	86.4	73.8	19.1
Mansa	100.0	100.0	99.1	76.3	87.5	99.9	94.4	96.6	90.8	58.4
Moga	100.0	100.0	99.3	70.0	82.1	99.8	94.9	95.2	87.4	42.5
Muktsar	100.0	100.0	99.1	82.1	89.5	100.0	96.0	96.5	93.1	55.2
Nawanshahr	99.9	99.8	98.4	69.5	81.7	98.0	87.0	96.8	92.7	45.2
Patiala	100.0	100.0	99.8	86.5	91.5	100.0	96.0	97.9	97.6	70.6
Rupnagar	100.0	100.0	97.6	69.5	88.6	98.8	95.7	96.3	79.9	41.1
Sangrur	100.0	100.0	92.7	54.8	79.2	98.4	83.4	87.3	73.6	25.5
Punjab	99.6	99.5	94.7	56.9	70.6	97.3	82.7	89.2	80.6	37.5

Note: <sup>1</sup> Includes female sterilization, male sterilization, IUD, pills and condom

<sup>2</sup> Includes IUD pills and condom

<sup>3</sup> Includes female sterilization & male sterilization & IUD & pills and condom

### 6.1.1 Knowledge of Family Planning Methods by District

Table 6.2 shows the knowledge of contraceptive methods by districts in Punjab. In all districts more than 95 percent of women know about any modern methods of contraception. A large differential is noticed in the knowledge of all modern methods by districts. The awareness ranges from 9 percent women in Firozpur to 91 percent in Fatehgarh Sahib district. There is not much variation in the knowledge of female sterilization, which is the lowest in Gurdaspur (84 percent) and the highest in Jalandhar, Muktsar and Patiala districts (100 percent). Knowledge about IUD/Loop and condom are 49 and 54 percent respectively in Firozpur districts, whereas the same is around 98 percent for each method in Fatehgarh Sahib district. As for any traditional method, awareness is 76 percent in Fatehgarh Sahib and the least in Firozpur (6 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 Punjab is shown in Table 6.3. About half of the husbands (47 percent) know about the no-scalpel vasectomy. In rural areas, 43 percent of husbands know about NSV compared to 55 percent in urban areas. For women residing in villages with a health facility, 42 percent of their husbands are aware of No-scalpel vasectomy and it is nearly the same, that is, 44 percent for those living in villages without health facilities. Among the husbands who know about NSV, 84 percent reported that NSV is simpler than a conventional family planning method, 68 percent feel that reported as NSV does not lead to any complication and 52 percent reported that NSV does not affect a man's sexual performance. Only 50 percent of the husbands in villages with a health facility reported that, NSV does not affect sexual performance compared to 53 percent of husbands in villages without a health facility.

**Table 6.3 KNOWLEDGE OF NO-SCALPEL VASECTOMY (NSV)**

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

Knowledge of NSV	Total	Residence		Availability of health facility in the village <sup>1</sup>	
		Rural	Urban	No	Yes
Percentage of husband who had knowledge about NSV	46.9	42.9	55.3	44.0	42.1
Number of husbands	9,246	6,273	2,973	2,822	3,451
Who know that NSV is simpler than conventional vasectomy	83.6	85.0	81.3	84.7	85.3
Who feel that NSV does not lead to any complication	67.7	68.9	65.7	70.0	67.9
Who feel that NSV does not affect man's sexual performance	52.0	51.0	53.8	52.7	49.5
Number of husbands	4,339	2,694	1,645	1,242	1,452

Note:<sup>1</sup> 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 District

No-scalpel vasectomy awareness by districts in Punjab is provided in Table 6.4. The districts in which at least half of the husbands know about NSV are Fatehgarh Sahib (54 percent), Hoshiarpur (58 percent), Jalandhar (65 percent), Nawanshahr (56 percent) and Rupnagar (66 percent). Only 36 percent of the husbands in Ferozpur district know about the no-scalpel vasectomy. That NSV does not lead to any complications was reported by 78 percent of the husbands in Moga and Muktsar districts, followed by 77 percent in Patiala and only 48 percent in Jalandhar. The husbands who reported that the NSV does not affect a man's sexual performance were highest 73 percent in Fatehgarh Sahib and Patiala districts and the lowest in Gurdaspur (29 percent).

<b>Table 6.4 NO-SCALPEL VASECTOMY BY DISTRICT</b>				
Percentage of husband of eligible women by knowledge of NSV by district, Punjab, 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
Amritsar	48.2	80.4	66.4	49.6
Bathinda	39.6	90.4	68.0	68.9
Faridkot	45.2	87.5	58.4	49.0
Fatehgarh Sahib	54.2	90.9	76.2	72.9
Ferozpur	35.6	83.9	72.9	57.7
Gurdaspur	43.7	78.5	72.2	28.8
Hoshiarpur	57.8	78.2	65.3	52.1
Jalandhar	64.6	88.8	48.3	35.1
Kapurthala	47.2	84.1	68.6	56.5
Ludhiana	47.6	76.8	71.4	56.3
Mansa	36.7	83.9	56.4	41.9
Moga	43.3	94.5	77.7	65.3
Muktsar	46.0	88.1	77.5	55.7
Nawanshahr	56.4	89.2	59.6	49.4
Patiala	40.8	91.0	76.6	73.1
Rupnagar	66.3	83.5	73.9	60.5
Sangrur	38.8	80.0	65.5	46.8
Punjab	46.9	83.6	67.7	52.0

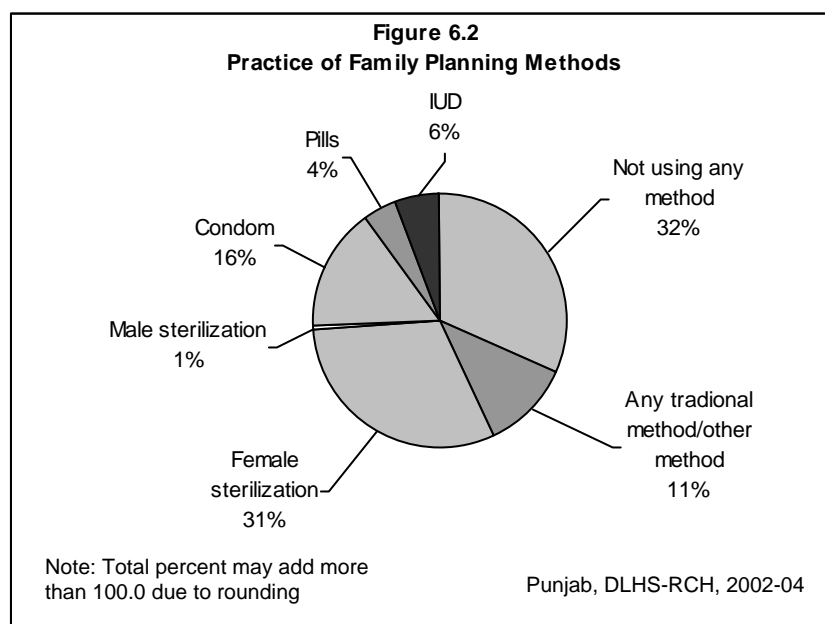
## 6.2 Current use of Family Planning Methods

Table 6.5 and Figure 6.2 provide the information on current use of family planning methods for currently married women in Punjab. At the time of DLHS-RCH, 68 percent of currently married women were using some method of contraception, 3 percentage points up from Round I. Current contraceptive use is slightly higher in urban areas (72 percent) than in rural areas (66 percent). Use of modern method is reported by 57 percent of the women, the breakdown of which is 31 percent for permanent methods and 26 percent for spacing methods. Among the users of sterilization methods most prefer female sterilization, which invalidates the use of male sterilization (less than one percent).

The use of traditional methods is reported by 11 percent of the women of whom 6 percent are using withdrawal and 5 percent follow the rhythm or periodic abstinence practice. The rural-urban differential is visible in the case of traditional methods, where 14 percent of the urban women are using this means of contraception compared to 10 percent of the rural women.

<b>Table 6.5 CONTRACEPTIVE PREVALENCE RATE</b>													
Percentage of currently married women age 15-44 years currently using any contraceptive method by selected background characteristics, Punjab, 2002-04													
Method	Any method	Any modern <sup>1</sup> method	Any modern spacing method <sup>2</sup>	Any sterilization	Male sterilization	Female sterilization	IUD/ Loop	Pill	Condom/ Nirodh	Any traditional method <sup>3</sup>	Rhythm/ periodic abstinence	Withdrawal	Number of women
<b>Residence</b>													
Rural	66.4	56.4	21.5	34.9	0.7	34.2	5.4	4.2	11.9	9.9	4.9	4.8	10,819
Urban	72.4	58.8	35.4	23.2	0.9	22.3	5.9	4.9	24.6	13.6	5.4	8.0	4,877
<b>Education</b>													
Non-literate	70.1	61.2	12.9	48.2	1.0	47.1	2.7	2.8	7.5	8.9	4.8	3.8	5,659
0-9@ years	68.6	57.2	26.0	31.1	0.8	30.3	6.4	5.0	14.6	11.4	5.0	6.2	5,004
10 years & above	65.7	52.6	40.1	12.5	0.5	12.0	7.8	5.7	26.5	13.1	5.3	7.7	5,026
<b>Religion</b>													
Hindu	69.1	56.8	28.4	28.3	0.7	27.6	4.4	4.5	19.5	12.3	5.0	7.1	5,701
Muslim	68.9	55.8	30.4	25.4	0.8	24.6	6.4	3.9	20.2	13.1	4.1	9.0	163
Christian	63.4	55.1	15.6	39.4	2.0	37.5	3.5	1.4	10.8	8.3	4.8	3.6	292
Sikh	67.8	57.5	24.5	32.9	0.8	32.1	6.2	4.5	13.8	10.3	5.1	5.0	9,495
Other	77.3	60.8	20.9	39.9	3.7	36.1	9.0	1.7	10.2	16.5	3.1	13.4	45
<b>Caste/tribe#</b>													
Scheduled caste	66.4	56.9	16.5	40.3	0.8	39.4	1.9	3.3	11.3	9.5	5.2	4.1	5,172
Scheduled tribe	61.3	50.5	20.6	29.9	0.0	29.9	1.2	4.5	14.8	10.7	3.4	7.0	201
Other backward class	65.2	55.0	23.0	32.0	0.9	31.1	4.2	4.0	14.8	10.1	4.0	5.9	3,016
Other	71.0	58.4	33.7	24.7	0.7	24.0	8.8	5.4	19.5	12.6	5.4	7.0	7,257
<b>Standard of living index</b>													
Low	59.5	51.6	10.5	41.0	0.4	40.6	2.0	1.8	6.7	7.9	4.7	2.9	1,434
Medium	67.2	57.2	17.5	39.6	0.8	38.8	3.2	4.0	10.3	10.0	4.9	4.7	6,334
High	70.6	58.1	35.2	22.9	0.8	22.1	8.0	5.2	21.9	12.5	5.2	7.2	7,928
<b>Availability of health facility in the village<sup>4</sup></b>													
No	66.0	55.8	21.4	34.4	0.7	33.7	5.2	4.6	11.6	10.2	4.6	5.2	4,894
Yes	66.6	57.0	21.5	35.3	0.7	34.6	5.5	3.9	12.1	9.7	5.1	4.5	5,926
<b>Total</b>	<b>68.2</b>	<b>57.2</b>	<b>25.8</b>	<b>31.3</b>	<b>0.8</b>	<b>30.5</b>	<b>5.5</b>	<b>4.4</b>	<b>15.8</b>	<b>11.1</b>	<b>5.0</b>	<b>5.8</b>	<b>15,696</b>

Note:<sup>1</sup> Include Female sterilization, Male sterilization, IUD, Pills and Condom. <sup>2</sup> Include IUD, Pills and Condom. <sup>3</sup> 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. <sup>4</sup> Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.



Current use of contraception is high among women of other castes (71 percent) than among Scheduled tribe women (61 percent). It is surprising that current use of contraception is high among non-literate women (70 percent) than the women who have less than 10 years of schooling (69 percent) and the women who have 10 or more years of schooling (66 percent). Similarly, current contraceptive use varies positively with respect to the standard of living of the women, increasing the prevalence rate from 60 percent to 71 percent for women from the lowest to the highest standard of living households. The availability of the health facility in the village is an important factor in motivating eligible women to use contraceptives. Sixty seven 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 (66 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 District

Table 6.6 presents a picture of current contraceptive use in the districts of Punjab. The contraceptive use is a couple concepts as family planning methods can be used either by women or by their husbands. In all the districts, the current use of contraception exceeds 65 percent of eligible women except Nawanshahr (see Map-6). The state figure of current spacing methods use is 26 percent and it ranges from 23 percent in Ferozpur and Muktsar districts to 29 percent in Fatehgarh Sahib, Jalandhar, Rupnagar and Ludhiana. 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 RATES BY DISTRICT**

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

Districts	Any method	Any modern <sup>1</sup> method	Any modern spacing <sup>2</sup> method	Male sterilization	Female sterilization	IUD	Pill	Condom / Nirodh	Any traditional <sup>3</sup> method
Amritsar	69.6	58.2	24.4	1.3	32.6	4.4	4.4	15.7	11.3
Bathinda	70.2	62.4	23.8	0.5	37.9	6.7	1.9	15.2	7.8
Faridkot	67.2	58.4	28.0	0.1	30.2	9.4	4.3	14.2	8.8
Fatehgarh Sahib	75.2	63.2	28.7	0.8	33.7	7.4	4.1	17.2	12.1
Firozpur	66.2	59.1	23.3	0.8	34.8	4.9	5.5	13.0	7.1
Gurdaspur	66.7	58.0	26.6	0.5	30.8	2.5	4.5	19.5	8.7
Hoshiarpur	64.7	49.8	25.0	0.9	23.9	4.1	6.4	14.5	14.9
Jalandhar	67.1	52.7	29.3	0.8	22.6	3.3	4.3	21.7	14.5
Kapurthala	65.6	55.5	27.7	0.6	27.2	4.7	5.2	17.8	10.1
Ludhiana	70.6	56.4	29.4	0.9	25.8	6.7	5.4	17.3	14.2
Mansa	69.5	60.2	23.9	0.3	36.0	6.7	3.3	13.9	9.3
Moga	65.8	54.8	27.2	0.4	27.1	8.0	3.6	15.6	11.0
Muksar	68.3	56.1	23.1	0.6	32.3	6.5	3.2	13.4	12.2
Nawanshahr	62.3	50.9	27.6	0.7	22.3	3.1	4.2	20.3	11.4
Patiala	74.1	63.4	24.8	0.6	37.9	5.6	3.9	15.3	10.7
Rupnagar	67.3	57.0	28.6	1.6	26.6	7.1	4.7	16.8	10.3
Sangrur	66.5	55.4	24.1	0.7	30.6	7.7	3.9	12.4	11.2
Punjab	68.2	57.2	25.8	0.8	30.5	5.5	4.4	15.8	11.1

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

The pattern of use of contraceptive methods in Punjab is different from the general existing pattern in India. The contraceptive prevalence rate for traditional methods is 11 percent in the state. The use of oral Pills is 2 percent in the district of Bathinda and 6 percent in Firozpur and Hoshiaur .The districts in which the use of condom is more than 20 percent are in Nawanshahr and Jalandhar.

### 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 14 percent and this attains a peak of 82 percent in the age groups 30-34 and 35-39 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 14 percent for the women aged 40 – 44 and 13 percent in 35-39 years and 11 percent for the women aged 30-34 years and it is least (5 percent) for the women in younger age groups 15-19 years. The use of modern methods ranges from 9 percent for women in the age group 15-19 years to 71 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, Punjab, 2002-04

Demographic Characteristic	Percentage of women/husbands using				Percentage of women/husbands by contraceptive status		Number of women
	Any modern method <sup>1</sup>	Any traditional method <sup>2</sup>	Any method	Not using any method	Ever used	Never used	
<b>Age-group</b>							
15-19	8.9	5.2	14.0	86.0	19.3	80.7	541
20-24	32.2	9.5	41.7	58.3	52.4	47.6	2,829
25-29	57.6	9.2	66.8	33.2	76.4	23.6	3,399
30-34	70.5	11.1	81.6	18.4	87.7	12.2	3,207
35-39	69.2	12.9	82.2	17.8	87.8	12.2	2,851
40-44	63.4	14.1	77.5	22.5	85.4	14.6	2,870
<b>Surviving children</b>							
0	2.8	1.3	4.1	95.9	8.6	91.4	1,561
1	36.5	12.8	49.3	50.7	63.6	36.4	2,489
2	62.8	14.1	76.9	23.1	85.6	14.4	4,915
3 or more	73.3	10.5	83.7	16.3	89.6	10.4	6,732
<b>Surviving sons</b>							
0	18.2	6.9	25.1	74.9	36.1	63.9	3,327
1	57.8	14.8	72.6	27.4	82.2	17.8	6,270
2 or more	77.8	9.4	87.2	12.8	91.8	8.2	6,099
<b>Surviving daughters</b>							
0	44.3	8.6	53.0	47.0	59.9	40.1	5,239
1	62.8	12.4	75.2	24.8	83.9	16.1	6,147
2 or more	64.7	12.1	76.8	23.2	84.9	15.1	4,310
<b>All women</b>	57.2	11.1	68.2	31.8	76.2	23.8	15,696

Note: <sup>1</sup> Include Female sterilization, Male sterilization, IUD, Pills and Condom.

<sup>2</sup> 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 Punjab. The use of any method of contraception is 87 percent for the women who have two or more sons and is marginally higher than the women who have two or more daughters (77 percent). The same trend can be observed in the case of use of any modern method which is 78 percent for the women who have two or more surviving sons and it is higher than the women who have two or more daughters (65 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 Punjab 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 29 percent and it gradually picks up with the age of husband, to a peak of 84 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 the age group, 45 years and above the use of traditional methods is 14 percent and it is least 5 percent among the husbands in the younger age group of below 25 years. The use of modern methods ranges from 24 percent for husbands below 25 years of age to 72 percent for the husbands in the age group 35-44 years.

<b>Table 6.8 USE OF CONTRACEPTION BY MEN</b>					
Percentage of husband of currently married women by current use and ever use of contraception by selected demographic variables, Punjab, 2002-04.					
Demographic Characteristics	Percentage of husbands/women using				Number of men
	Any modern method <sup>1</sup>	Any traditional method <sup>2</sup>	Any method	Not using any method	
<b>Age-group</b>					
<25	23.5	5.0	28.5	71.5	741
25-34	56.5	9.4	66.0	34.0	3,362
35-44	72.2	11.6	83.8	16.2	3,271
45+	67.7	14.1	81.8	18.1	1,872
<b>Surviving children</b>					
0	5.3	1.2	6.5	93.5	943
1	42.5	11.6	54.1	45.9	1,404
2	69.2	13.6	82.8	17.2	2,834
3 or more	76.1	10.8	87.0	13.0	4,065
<b>Surviving sons</b>					
0	21.9	5.8	27.8	72.2	1,899
1	63.6	15.1	78.8	21.2	3,700
2 or more	80.4	9.0	89.4	10.5	3,647
<b>Surviving daughters</b>					
0	47.3	8.1	55.4	44.6	3,049
1	68.4	11.8	80.2	19.8	3,630
2 or more	69.2	12.7	82.0	18.0	2,566
<b>All men</b>	61.7	10.8	72.5	27.5	9,246

Note: <sup>1</sup> Include Female sterilization, Male sterilization, IUD, Pills and Condom.  
<sup>2</sup> 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 Punjab. Among all the husbands interviewed, 56 percent reported about female methods. Reporting of female methods is higher in rural areas (63 percent) than in urban areas (44 percent). The reasons cited for not preferring the male methods are fear of weakness (45 percent), greater popularity of female methods (40 percent), fear of method failure (3 percent), fear of operation (3 percent) and lack of sexual pleasure (1 percent). Less than one 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 and popularity of female methods. The expression for fear of weakness is higher in rural areas (49 percent) than in urban areas (35 percent). Popularity of female methods as a reason for not using male methods of contraception is more in urban areas (47 percent) than in rural areas (38 percent).



<b>Table 6.9 REASONS FOR NOT USING MALE METHODS</b>			
Percentage of husbands with their choice of family planning methods and reasons for not accepting male methods according to residence, Punjab, 2002-04			
Female method users and reason for not accepting male methods	Total	Residence	
		Rural	Urban
Percentage of husband who have reported female methods	56.4	62.6	44.0
Number of men	6,704	4,487	2,217
Reasons for not accepting male methods*			
Fear of impotency	0.7	0.7	0.6
Lack of sexual pleasure	0.9	1.0	0.9
Fear of method failure	2.7	2.5	3.1
Fear of operation	2.9	2.9	2.8
Fear of weakness	45.0	48.5	34.8
Female methods are more popular	40.0	37.7	46.9
Other	13.4	12.8	15.1
Number of men	3,783	2,808	975
Note: * Percentages may add to more than 100.0 because multiple responses could be recorded.			

#### 6.4 Source of Contraceptive Methods

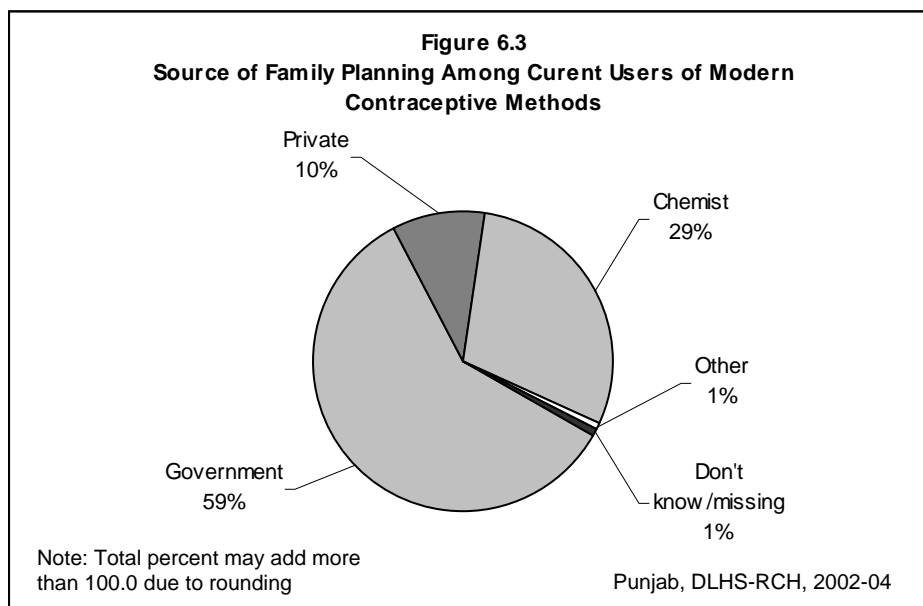
To assess the various sources of contraceptive methods, DLHS-RCH collected information on source of obtaining methods. Table 6.10 and Figure 6.3 show the percent distribution of current users of modern contraceptives by source of contraceptives. Family planning methods and services in Punjab are provided 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 (10 percent), family planning camps or RCH camp (4 percent) and private hospital (5 percent). For male sterilization as well the aforesaid are the main sources. Among the IUD users, 38 percent reported the source as private hospital, 33 percent reported the source as government/municipal hospital and 6 percent from the community health centres. It is found that the chemist is the main source for Pills (74 percent) and condom (85 percent).

**Table 6.10 SOURCE OF MODERN CONTRACEPTIVE METHODS**

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

Source	Contraceptive method					All modern methods <sup>1</sup>
	Female sterilization	Male sterilization	IUD/ Loop	Pills	Condom / Nirodh	
<b>Government medical centre</b>	93.8	91.4	43.6	16.8	8.1	59.2
Government/Municipal hospital	80.0	77.8	32.6	6.0	4.5	48.7
CHC/PHC	9.6	11.1	5.9	2.3	0.8	6.3
Sub-centre	0.3	0.7	3.0	6.8	2.3	1.6
Government doctor	0.0	0.1	0.2	0.4	0.2	0.1
Government nurse/ ANM	0.0	0.0	1.7	0.9	0.3	0.3
Family planning/RCH camp	3.8	1.6	0.2	0.1	0.0	2.1
Out reach/MCP clinic in village	0.0	0.0	0.0	0.2	0.0	0.0
Mobile clinic	0.2	0.0	0.0	0.2	0.1	0.1
<b>Private medical centre</b>	5.3	1.9	55.4	7.5	3.9	9.9
Private hospital	4.9	1.9	38.3	3.9	0.6	6.8
Private doctor	0.4	0.0	6.4	2.7	3.2	1.9
Private nurse	0.1	0.0	10.8	0.8	0.2	1.2
Chemist	NA	NA	NA	74.2	84.5	29.2
Other	0.5	5.4	0.9	0.8	0.8	0.7
Do not know	0.1	1.2	0.0	0.6	2.5	0.8
Missing	0.2	0.0	0.0	0.1	0.1	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	4,788	123	867	695	2,487	8,959

Note:<sup>1</sup> Includes female sterilization, male sterilization, IUD, Pills or condom. CHC: Community health centre, PHC: Primary health centre. NA: Not applicable.



## 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 9 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 (27 percent), white discharge (14 percent), dizziness (9 percent), body ache or backache (47 percent), cramps (7 percent), irregular periods and excessive bleeding (18 percent each). With regard to the modern spacing methods, 7 percent of women had problems in using Pills and IUD respectively. The most common problems of Pill users were dizziness (42 percent), weakness or inability to work (19 percent), white discharge (11 percent), nausea or vomiting (1 percent), body ache or backache (13 percent) and irregular periods (25 percent).

<b>Table 6.11 HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION</b>			
Percentage of women informed about side effects, had side effects with the method by use of method, Punjab, 2002-04			
Health problems/side effect	Type of method		
	Female sterilizations	IUD/loop	Pill
Women who were informed about all the available methods	31.9	0.0	0.0
Women who were informed about the side effects before adoption of the method	48.1	42.7	31.0
Women who had side effect/health problem due to use of contraceptive method	8.9	7.4	7.3
Number of current users	4,788	867	695
<b>Type of health problems/side effects<sup>1</sup></b>			
Weakness/inability to work	26.6	29.8	18.9
Body ache/ backache	47.2	37.1	12.8
Cramps	6.5	15.6	7.7
Weight gain	13.5	6.2	10.5
Dizziness	9.4	8.5	41.9
Nausea/vomiting	1.5	0.5	0.8
Breast tenderness	4.3	13.4	0.8
Irregular periods	17.6	37.8	25.0
Excessive bleeding	17.6	29.3	7.9
Spotting	0.4	10.0	0.0
White discharge	13.8	10.3	11.1
<b>Number of users with side effects</b>	<b>426</b>	<b>65</b>	<b>51</b>
Note: <sup>1</sup> Percentages may add to more than 100.0 because multiple problems could be recorded.			
* 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 68 percent of the sterilized women sought treatment and 33 percent in the case of Pills. Regarding the satisfaction about the method, 97 percent of the sterilized women reported satisfaction with sterilization. In the case of spacing methods, 96 percent of women using Pills and 97 percent of women using IUD were satisfied with the respective methods.

Those women who had sought treatment for contraceptive use related problems, majority of them have taken treatment from private hospitals/clinics. For female sterilization related health problems, 40 percent had taken treatment from government hospitals/dispensaries, 26 percent from private hospitals/clinics, 7 percent from Indian System of Medicine health facilities and 4 percent got treatment from health visitors. Private hospital/clinic is the source of treatment for 44 percent of women who had health problem in using IUD.

<b>Table 6.12 SOUGHT TREATMENT FOR HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION</b>			
Percentage of women sought treatment who had side effects, follow-up and satisfaction with the method by use of method, Punjab, 2002-04			
Health problems/side effect	Type of method		
	Female sterilizations	IUD/loop	Pill
Women who had follow up visit by health worker after adoption of method	45.5	6.4	5.9
Women who are satisfied with method of current use	96.8	97.0	96.1
Number of current users	4,788	867	695
Women who sought treatment for the health problem	68.1	57.2	33.4
Number of women with side effects	426	65	51
<b>Source of treatments</b>			
<b>Government health facility</b>			
Government hospital/dispensary	39.7	20.5	*
CHC/Rural hospital	1.0	5.1	*
PHC	1.7	5.1	*
Sub-centre	2.7	2.6	*
Out reach/MCP clinic in village	0.8	2.6	*
<b>Private health facility</b>			
NGO/trust hospital clinic	0.2	0.0	*
Private hospital/clinic	25.8	43.6	*
ISM health facility <sup>1</sup>	7.4	5.1	*
Chemist/Medical shop	21.1	7.7	*
Home remedy	2.6	7.7	*
Other	3.8	0.0	*
Number of women with side effects	290	37	17
Note: <sup>1</sup> Either government or Private. *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 only 8 percent of the women were advised by ANM/health worker to adopt any family planning method in Punjab. Among rural women, 8 percent were advised by ANM/health worker to adopt any method and it is higher than the urban women (7 percent) who were advised so.

<b>Table 6.13. ADVICE ON CONTRACEPTIVE USE</b>					
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, Punjab, 2002-04					
Advise/future intension to use	Total	Residence		Availability of health facility in the village <sup>1</sup>	
		Rural	Urban	No	Yes
Percentage of current non-users advised by ANM/health worker to use of contraceptive method	8.0	8.2	7.2	8.4	8.1
Number of non-users	4,409	3,247	1,162	1,473	1,774
Percent distribution of women who were advised by method					
Female sterilization	37.9	42.4	23.7	44.0	41.1
Male sterilization	2.6	3.1	1.0	0.5	5.4
IUD/loop	20.6	18.3	27.8	16.5	19.8
Pill	16.2	16.6	15.1	21.2	12.6
Condom/Nirodh	19.5	17.3	26.8	14.3	19.9
Rhythmic /periodic abstinence	0.8	0.2	2.6	0.0	0.4
Withdrawal	0.5	0.4	0.6	0.0	0.8
Other	0.8	1.1	0.0	2.3	0.0
Missing	1.0	0.5	2.4	1.2	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of non-users	352	268	84	124	143

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

The recommended contraceptive methods by ANM/health worker are dominated by female sterilization (38 percent) and IUD/loop (21 percent). Only 16 percent were advised either to adopt Pill and (20 percent) Condom/Nirodh as spacing methods. Male sterilization has been advised to 3 percent. This pattern of advice also emerges irrespective of residence and availability of health facility in the village.

### 6.7.1 Future Intention to Use Contraception

Among the non-users, 25 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 rural areas (26 percent) than in urban areas (23 percent).

Among the women who intended to use permanent methods of contraception, 62 percent preferred female sterilization whereas less than one percent of the women preferred male sterilization. In case of temporary methods, the preferred methods by women are oral Pills (11 percent) and condoms (12 percent), IUD (10 percent), rhythm/periodic abstinence, withdrawal and other methods (1 percent each).

More than one-third (38 percent) of the husbands intended to use contraception in the future, among them 39 percent belong to rural areas and 34 from urban areas. Method wise choice in intention to use contraception is dominated female sterilization being reported by 56 percent, followed by condom (27 percent) and IUD/copper-T/loop (5 percent).

<b>Table 6.14 FUTURE INTENTION TO USE</b>						
Percentage of current non-users* who were intended to use contraception in future by preferred method according to place of residence, Punjab, 2002-04						
Future intention to use/method	Women			Husband		
	Total	Rural	Urban	Total	Rural	Urban
<b>Percentage of respondents who intend to use contraceptive in future</b>	25.2	26.0	23.0	37.6	39.0	34.4
<b>Number of non-users</b>	4,409	3,247	1,162	2,427	1,701	726
Percent distribution of non-user who were preferred to use family methods by preferred method						
Female sterilization	61.7	64.3	53.5	56.3	58.5	50.5
Male sterilization	0.9	0.9	0.9	3.7	4.3	2.0
IUD/copper-T/loop	10.1	10.1	10.2	4.8	4.9	4.6
Oral pills	10.7	11.0	9.7	3.2	3.3	3.0
Condom/Nirodh	12.3	9.3	21.8	27.1	25.6	31.0
Rhythm/periodic abstinence	0.6	0.5	0.9	1.6	1.9	0.8
Withdrawal	1.1	0.9	1.6	0.6	0.7	0.3
Other	1.5	1.6	1.4	1.8	0.8	4.4
Missing	1.0	1.3	0.1	1.0	0.0	3.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of non-users	1,104	839	266	907	659	248

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 Punjab. Among the current non-users, around 14 percent of the women intended to use contraception within the next twelve months. Only 5 percent of women wanted to use within one to two years whereas 6 percent reported their intention to use contraceptives after two years. About 51 percent are not sure of their intention to use, whereas 24 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 66 percent of the women who have no living children reported that they are yet to decide about the use of contraceptives.

<b>Table 6.15 FUTURE USE OF CONTRACEPTION BY NUMBER OF LIVING CHILDREN</b>						
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, Punjab, 2002-04						
Intention to use in the future	Number of living children					Total
	0	1	2	3	4+	
<b>Total</b>						
Intends to use in next 12 months	2.9	12.1	21.4	23.0	34.2	13.8
One to two years	2.8	6.4	6.9	6.2	4.3	5.1
More than two years	6.1	8.5	4.3	7.0	2.1	6.2
Does not intend to use	22.1	19.5	25.8	28.2	31.7	23.6
Not yet decided	66.1	53.4	41.5	35.4	27.7	51.2
Missing	0.0	0.1	0.1	0.3	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,465	1,203	926	501	314	4,409
<b>Rural</b>						
Intends to use in next 12 months	2.8	12.2	21.3	23.1	32.9	14.0
One to two years	2.3	6.9	6.8	5.8	5.2	5.1
More than two years	6.9	8.9	4.9	8.1	2.5	6.8
Does not intend to use	21.4	17.1	22.1	25.4	31.9	21.7
Not yet decided	66.6	54.9	44.8	37.6	27.5	52.3
Missing	0.0	0.1	0.1	0.0	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,049	871	681	400	247	3,247
<b>Urban</b>						
Intends to use in next 12 months	3.2	12.0	21.4	22.3	39.0	13.3
One to two years	3.9	5.2	7.3	7.7	1.2	5.2
More than two years	3.9	7.4	2.7	2.5	0.6	4.3
Does not intend to use	24.0	25.9	36.0	39.1	30.9	28.8
Not yet decided	64.9	49.5	32.5	26.8	28.3	48.2
Missing	0.1	0.0	0.1	1.4	0.0	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
<b>Number of women</b>	416	332	246	101	68	1,162

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 (5 percent), weakness/inability to work and excessive bleeding (4 percent each), irregular periods (2 percent), method was inconvenient (2 percent) and other reasons (28 percent). For urban women 5 percent have reported method failure/become pregnant due to discontinuation. In urban areas, 23 percent of women reported as other reason for discontinuing the use and where as the same is 30 percent among rural women.

<b>Table 6.16 REASONS FOR DISCONTINUATION OF CONTRACEPTION</b>			
Percent distribution of women who were past users (current non-users) by reason for discontinuation of the contraceptive method according to place of residence, Punjab, 2002-04			
Reasons	Total	Place of residence	
		Rural	Urban
<b>Reason for discontinuation</b>			
Wanted child	47.6	44.7	54.9
Method failed/became pregnant	5.4	5.7	4.6
Supply not available	0.2	0.3	0.1
Difficult to get method	0.7	0.6	0.7
Weakness/inability to work	3.8	3.6	4.3
Body ache/ Backache	2.3	2.3	2.2
Cramps	0.6	0.6	0.9
Weight gain	0.6	0.4	1.0
Dizziness	1.4	1.9	0.3
Nausea/vomiting	0.5	0.7	0.2
Breast tenderness	0.3	0.5	0.0
Irregular periods	1.8	2.3	0.8
Excessive bleeding	3.9	4.0	3.7
Spotting	0.1	0.1	0.0
White discharge	0.6	0.5	0.8
Lack of pleasure	0.1	0.1	0.0
Method was inconvenient	1.7	1.8	1.6
Other	27.6	29.5	22.8
Missing	0.8	0.7	1.1
Total percent	100.0	100.0	100.0
Number of past users	1,243	880	362

### 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; health does not permit (14 percent), difficult to become pregnant (6 percent), opposed to family planning (3 percent), lack of knowledge about family planning methods and against the religion (2 percent each) and afraid of sterilization (1 percent). About 58 percent of the women reported other reasons for not using contraception. As far as rural-urban differentials are concerned, a little variation is observed in the reasons for not using any contraceptive.



**Table 6.17 REASON FOR NOT USING CONTRACEPTIVE METHOD**

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

Reason	Women			Husband*		
	Total	Rural	Urban	Total	Rural	Urban
Lack of Knowledge about FP method	2.2	2.5	1.3	1.8	2.1	1.1
Against the Religion	1.9	0.8	4.9	1.0	1.0	1.1
Opposed to family planning	3.2	3.5	2.3	2.6	2.8	2.1
Not like existing method	1.0	0.8	1.3	2.0	2.3	1.4
Afraid of sterilization	1.4	1.5	1.2	0.4	0.6	0.0
Can not work after sterilization	0.9	1.0	0.5	1.0	1.4	0.0
Worry about side effects	4.6	4.8	4.1	1.3	1.7	0.3
Costs too much	0.5	0.5	0.5	0.6	0.8	0.1
Health does not permit	14.0	13.4	15.7	44.9	41.5	52.9
Hard/inconvenient to get method	0.3	0.2	0.7	1.1	1.3	0.7
Inconvenient to use method	1.6	1.9	0.9	1.7	1.2	2.8
Difficult to become pregnant	6.1	6.0	6.5	4.3	3.7	5.8
Wife is pregnant <sup>1</sup>	-	-	-	2.3	3.0	0.7
Other	58.3	58.8	57.1	33.3	34.7	30.0
Missing	4.1	4.4	3.1	1.6	2.0	0.8
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,712	1,271	441	761	538	223

Note: <sup>1</sup> 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 Punjab 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 (14 percent) for both spacing and limiting. Among the older women of age 25-29 years, 12 percent have unmet need, and mostly for limiting. Among the women age 30 years and above, unmet need is mostly for limiting. The rural women have high unmet need (11 percent) than the urban women (9 percent). The unmet need for family planning is somehow equal among the non-literate women, women with 0-9 years of schooling (10 percent each) and 10 or more years of schooling (11 percent) women. Muslim women have lesser unmet need for family planning (7 percent) compared to the

Christian women (14 percent) or Sikh women (11 percent). Unmet need for family planning is higher (12 percent) for Scheduled tribe followed by Scheduled caste (11 percent), other backward class and other caste (10 percent each) 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, Punjab, 2002-04

Background Characteristic	Unmet need for FP			Number of women
	Spacing <sup>1</sup>	Limiting <sup>2</sup>	Total	
<b>Age</b>				
15-19	6.1	1.8	7.9	541
20-24	7.9	6.5	14.4	2,829
25-29	3.3	8.8	12.1	3,399
30-34	1.2	7.8	9.0	3,207
35-39	0.7	8.2	8.8	2,851
40-44	0.2	7.6	7.9	2,870
<b>Residence</b>				
Rural	3.1	8.1	11.2	10,819
Urban	2.0	6.6	8.6	4,877
<b>Education</b>				
Illiterate	2.2	7.7	10.0	5,659
0-9 @ years	2.5	7.6	10.1	5,004
10 years and above	3.6	7.5	11.1	5,026
<b>Religion</b>				
Hindu	2.7	7.3	10.0	5,701
Muslim	3.1	3.4	6.5	163
Christian	3.4	10.3	13.7	292
Sikh	2.8	7.9	10.6	9,495
Others	2.8	1.0	3.8	45
<b>Caste/tribe#</b>				
Scheduled caste	3.1	7.6	10.8	5,172
Scheduled tribe	2.4	9.1	11.5	201
Other backward class	2.6	7.6	10.2	3,016
Others	2.5	7.6	10.1	7,257
<b>Number of living children</b>				
0	2.5	0.7	3.2	1,561
1	9.7	5.1	14.9	2,489
2	1.9	10.2	12.1	4,915
3	1.1	8.3	9.4	3,902
4+	0.4	8.3	8.8	2,830
<b>Standard of living Index</b>				
Low	3.8	9.0	12.8	1,434
Medium	2.7	7.9	10.6	6,334
High	2.6	7.2	9.8	7,928
All women	2.7	7.6	10.4	15,696

Note: <sup>1</sup> 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.

<sup>2</sup> Unmet need for limiting includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method.

Total unmet need refers to unmet for limiting and spacing.

@ Literate women with no years of schooling are also included. # The total figure may not add to N due to do not know and missing cases.

Women with low standard of living have high (13 percent) unmet need than those of medium (11 percent) and high standard of living (10 percent). Unmet need is much higher for the women with one living child (15 percent) than women with no children (3 percent), two children (12 percent), three children (9 percent) and four or more (9 percent). Among the women with no children or one child the unmet need is mainly for spacing, whereas for women with two children or more unmet need is exclusively for limiting.

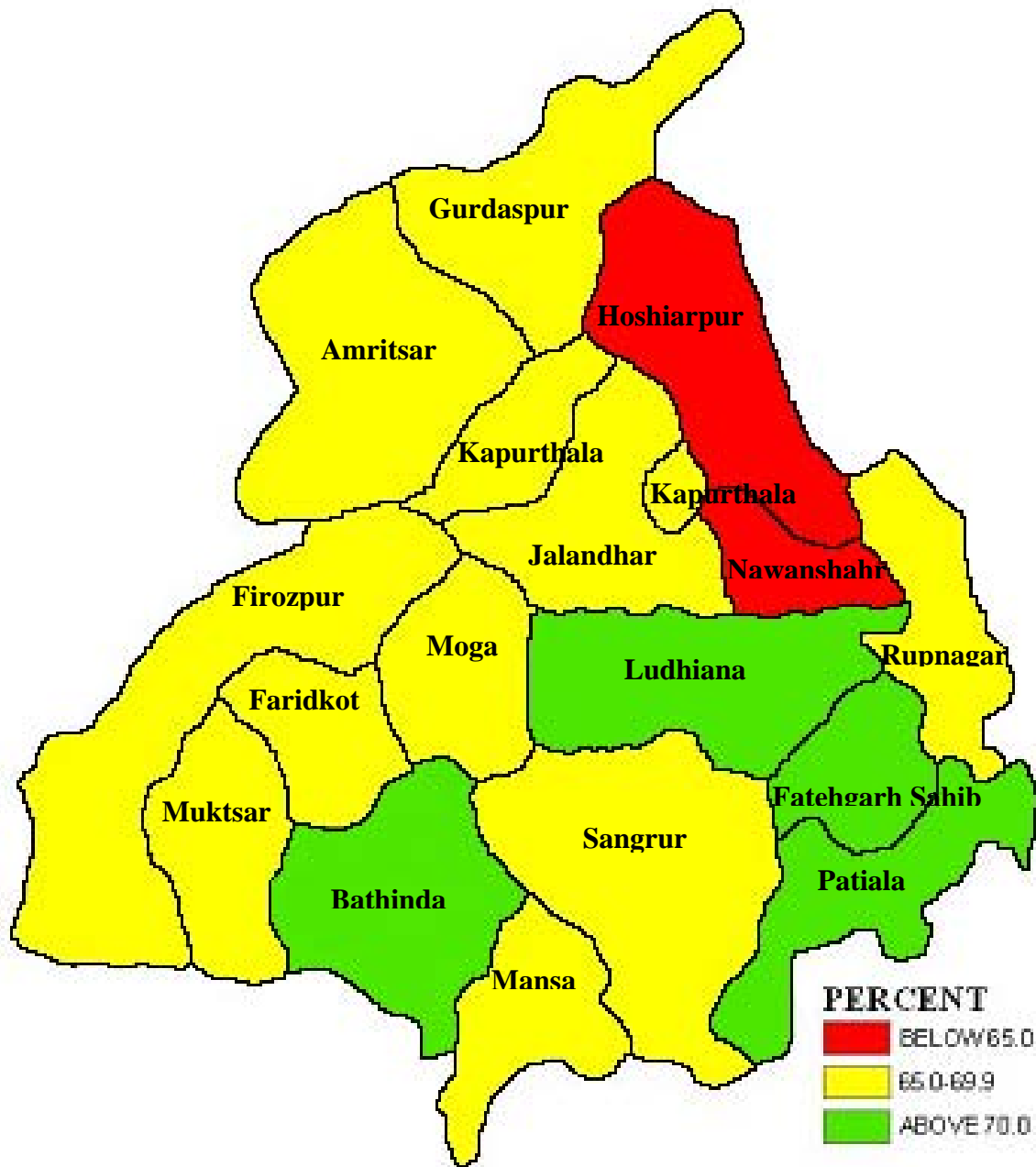
### 6.9.1 Unmet Need for Family Planning Services by District

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 10 percent and it ranges from 7 percent in Fatehgarh Sahib and Mansa districts to 17 percent in Nawanshahr. In 9, out of 17 districts unmet need for family planning is more than state average. Unmet need for limiting was found lowest in Bathinda and Mansa (5 percent each) and highest in Gurdaspur, Hoshiarpur and Nawanshahr (11 percent each). Similarly, unmet need for spacing was lowest to one percent in Ludhiana and Rupnagar to 6 percent in Nawanshahr. It may also observe that in all the districts of Punjab unmet need for limiting was more than spacing.

<b>Table 6.19 UNMET NEED BY DISTRICT</b>			
Percentage of currently married women with unmet need by district, Punjab, 2002-04			
Districts	Unmet need for		
	Spacing	Limiting	Total
Amritsar	2.3	6.1	8.4
Bathinda	2.7	5.3	8.0
Faridkot	3.4	8.2	11.5
Fatehgarh Sahib	1.6	5.6	7.3
Firozpur	1.7	7.1	8.8
Gurdaspur	3.4	10.7	14.1
Hoshiarpur	2.6	11.7	14.3
Jalandhar	4.9	7.9	12.8
Kapurthala	4.4	9.9	14.3
Ludhiana	1.3	6.6	7.9
Mansa	2.4	4.7	7.1
Moga	4.3	8.3	12.6
Muktsar	1.9	5.9	7.8
Nawanshahr	5.9	11.3	17.2
Patiala	2.4	5.7	8.1
Rupnagar	1.4	9.4	10.8
Sangrur	3.2	7.5	10.7
Punjab	2.7	7.6	10.4

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 Punjab reported that the health worker visited them at their residence at least once in last three months preceding the survey. Younger women seemed more likely to report a home visit than older women. Three percent of women in the age group 15-24 years reported at least one home visit compared to only 2 percent of women in the age group 35 years and older. The percentage of women in Punjab receiving home visits is higher in rural areas (3 percent) than in urban areas (2 percent). More Muslim (4 percent) and Sikh women (3 percent) reported home visits than Hindu (2 percent) and Christian (1 percent) women. There was not much variation by caste/tribe.

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, 70 percent received services from ANM/LHV, 21 percent from the doctor and 16 percent from male health worker. There were less rural-urban differentials by visit of households by health worker except visits by male health worker. Eighty nine percent of women who received services at home were satisfied with the time spent with them and 91 percent of women were satisfied with the services or advice given to them.

**Table 7.1 HOME VISIT BY HEALTH WORKER**

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

Background characteristic	Percentage with home visit	Number of women	Home visit by <sup>1</sup>			Percentage of women satisfied with		Number of women
			Doctor	ANM / LHV	Male health worker	Amount of time	Services/advices	
<b>Age</b>								
15-24	3.3	3,370	22.4	72.1	8.7	89.7	91.6	110
25-34	2.4	6,606	13.9	76.1	16.0	87.4	91.0	160
35-44	2.1	5,721	28.9	60.9	21.7	91.0	91.7	122
<b>Residence</b>								
Rural	2.9	10,819	19.7	70.9	17.5	89.1	91.7	319
Urban	1.5	4,877	26.4	67.1	7.7	89.1	89.8	72
<b>Education</b>								
Non-literate	2.3	5,659	20.6	66.8	16.8	88.0	92.5	130
0-9@ years	2.9	5,004	26.3	66.6	13.4	91.3	92.7	143
10 and above	2.4	5,026	14.9	78.5	17.4	87.9	88.4	119
<b>Religion</b>								
Hindu	1.7	5,701	26.4	66.0	8.4	89.8	89.0	97
Muslim	4.1	163	*	*	*	*	*	7
Christian	1.0	292	*	*	*	*	*	3
Sikh	3.0	9,495	19.9	71.7	17.7	88.7	91.8	284
Other	(2.2)	45	*	*	*	*	*	1
<b>Caste/tribe#</b>								
Scheduled caste	2.7	5,172	22.4	69.1	10.1	94.0	95.2	139
Scheduled tribe	1.5	201	*	*	*	*	*	3
Other backward class	2.2	3,016	23.7	60.6	16.0	82.6	83.7	67
Other	2.5	7,257	18.9	74.4	20.5	88.3	92.5	180
<b>Standard of living index</b>								
Low	2.0	1,434	19.0	68.4	12.6	97.9	97.3	29
Medium	2.6	6,334	23.0	67.2	11.5	90.5	91.1	167
High	2.5	7,928	19.6	73.2	19.9	86.6	90.7	195
<b>Availability of health facility<sup>2</sup> in the village</b>								
No	2.9	5,926	17.6	72.8	23.4	91.9	94.1	170
Yes	3.0	4,894	21.6	69.3	12.4	86.0	89.1	149
<b>Total</b>	<b>2.5</b>	<b>15,695</b>	<b>21.0</b>	<b>70.2</b>	<b>15.7</b>	<b>89.1</b>	<b>91.4</b>	<b>391</b>

Note: Total includes 7 woman with missing information on education were not shown separately. <sup>1</sup> Percentage add to more than 100.0 due to multiple responses. @ Literate mother with no years of schooling are included. # Total number may not add to N due to do not know and missing cases.

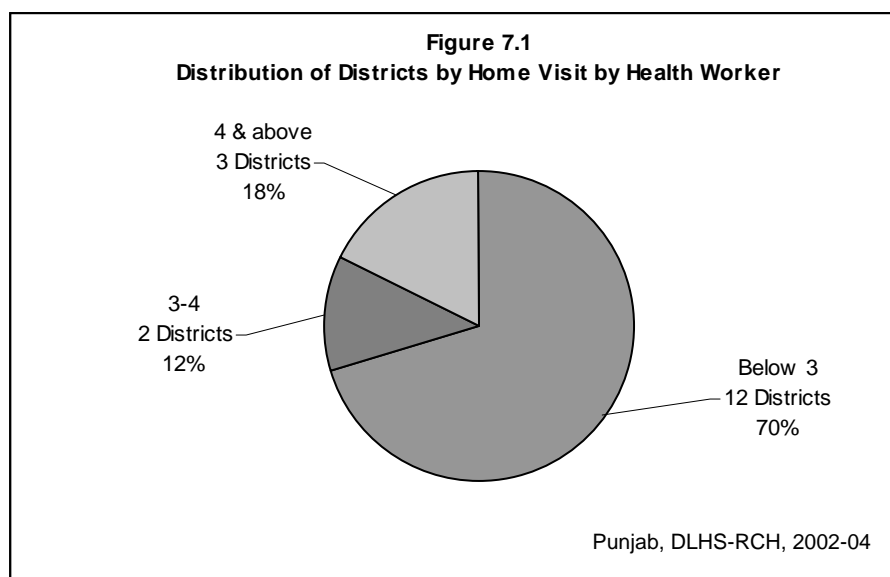
<sup>2</sup> Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village. \* Percentages not shown based on few cases.

The proportion of women who were satisfied with the amount of time spent and advices provided by health workers varied across various background characteristics. As compared to older women younger women were less likely to report about satisfaction with amount of time spent by the health workers during home visits. Ninety percent of women in the age group, 15-24 years reported satisfaction with the time spent by health workers as compared to Ninety one percent of women aged 35 years and older. Urban and rural women (89 percent) were equally satisfied with the time spent by health workers during home visits. Women residing in the village with availability of health facility are slightly less satisfied with the time spent than women from those villages where health facilities are not available.

## 7.2 Home Visit by Health Workers by District

In half of the districts in Punjab, health workers visited 2 or less than 2 percent of the women at home (Table 7.2 and Figure 7.1). In districts like Faridkot, Muktsar and Rupnagar about five percent of the women were visited by health workers. Among women who were visited by health worker at home, about 34 percent of them approached by ANM/LHV in Muktsar and all the women (100 percent) in Sangrur. Approached by male worker at home is lowest in Muktsar (nil), followed by Nawanshahr (3 percent)) districts and highest in Bathinda (56 percent) district, and the percentage of women visited by doctor at home was below the state average of 21 percent in 9 of the 17 districts.

In the districts of Bathinda, Fatehgarh Sahib, Firozpur, Jalandhar, Mansa and Muktsar all the women said that the worker had spent enough time with them. On the other hand, more than two-third of the women in all the districts and all the women in Fatehgarh Sahib, Firozpur, Jalandhar and Nawanshahr reported satisfaction with services/advices given by health workers.



<b>Table 7.2 HOME VISIT BY HEALTH WORKER BY DISTRICT</b>						
Percentage of women who had home visit by a doctor, ANM/LHV, or male health worker in the 3 months preceding the survey, among women who had home visit, satisfied with time spent by health workers and with services provided by district, Punjab, 2002-04						
District	Percentage with home visit	Home visit by <sup>1</sup>			Percentage of women satisfied with	
		Doctor	ANM / LHV	Male health worker	Time spent	Service
Amritsar	2.1	19.5	79.9	4.4	84.9	88.7
Bathinda	1.9	5.3	38.8	55.8	100.0	94.7
Faridkot	4.9	22.8	56.5	20.7	97.1	97.1
Fatehgarh Sahib	1.8	16.0	43.5	40.5	100.0	100.0
Firozpur	0.8	0.0	90.6	9.4	100.0	100.0
Gurdaspur	1.6	33.8	62.7	3.5	85.0	85.0
Hoshiarpur	2.3	22.2	77.8	4.6	85.7	81.8
Jalandhar	2.3	47.7	48.6	3.7	100.0	100.0
Kapurthala	1.9	4.8	76.6	18.6	86.4	87.4
Ludhiana	2.8	9.5	90.5	13.4	69.9	77.8
Mansa	2.1	46.1	53.9	0.0	100.0	91.6
Moga	3.3	23.1	68.6	8.3	96.6	96.6
Muktsar	4.6	65.6	34.4	0.0	100.0	97.9
Nawanshahr	3.2	11.7	85.6	3.4	92.4	100.0
Patiala	2.3	26.8	45.6	27.7	96.0	96.0
Rupnagar	4.6	6.0	82.4	17.3	92.7	93.7
Sangrur	2.8	0.0	100.0	41.0	79.9	91.8
Punjab	2.5	21.0	70.2	15.7	89.1	91.4

Note:<sup>1</sup> Percentage add to more than 100.0 due to multiple responses  
( ) Based on less number of cases.

### 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 161 pregnant woman or women with children born during the reference period and other women includes 165 current users and 65 current non-users, who were visited by health workers at home.

The major focus of discussion during home visits was family planning (30 percent) and treatment of health problems (23 percent). In addition, discussions were also made on diseases prevention (19 percent), immunization (16 percent), antenatal care, delivery care and postpartum care (6 percent each), child care (8 percent), sanitation/cleanliness (9 percent) and nutrition (7 percent). Discussions about family planning were mentioned more often by current users of contraception and by pregnant women or women with child born after reference period than current non- users. 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 and other health related matters during home visit by health workers past three months preceding the survey.

<b>Table 7.3 MATTER DISCUSSED DURING CONTACT WITH A HEALTH WORKER</b>				
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 <sup>1</sup> who discussed specific topics with the health worker, Punjab, 2002-04				
Topic discussed	Pregnant women or women with children after reference period <sup>2</sup>	Other women		Total
		Current contraceptive users	Current nonusers	
<b>During home visit</b>				
Family planning	31.7	33.7	15.8	29.9
Breastfeeding	5.5	0.7	0.8	2.7
Supplementary feeding	1.9	0.0	0.0	0.8
Immunization	24.7	11.3	5.2	15.8
Nutrition	8.8	5.1	6.7	6.9
Diseases Prevention	6.9	24.2	37.4	19.3
Treatment of health Problem	9.9	32.6	33.7	23.4
Ante natal care	12.7	1.2	1.8	6.0
Delivery care	11.6	2.6	0.0	5.9
Postpartum care	11.9	0.9	4.4	6.0
Child care	11.7	3.1	10.5	7.9
Sanitation/cleanliness	7.3	11.6	4.8	8.7
Oral Rehydration	0.1	1.1	0.0	0.5
Other	14.0	11.1	26.7	14.9
Number of women	161	165	65	391
<b>During visit to health facility</b>				
Family planning	12.4	10.4	8.6	11.4
Breastfeeding	1.0	0.5	1.4	0.9
Supplementary feeding	1.2	0.0	0.0	0.7
Immunization	40.0	0.3	0.3	23.0
Nutrition	3.4	5.9	8.3	4.7
Diseases prevention	7.3	30.6	29.9	17.3
Treatment of health problem	18.0	63.5	57.8	36.9
Antenatal care	21.5	0.8	2.1	12.8
Delivery care	4.3	0.0	0.0	2.5
Postpartum care	2.1	1.0	0.0	1.5
Childcare	5.4	5.6	0.0	4.9
Sanitation / cleanliness	0.9	0.4	1.2	0.8
Oral rehydration	0.1	0.0	0.0	0.1
Other	1.2	2.3	9.7	2.5
Number of women	789	440	154	1382
Note: Percentage add to more than 100.0 due to multiple responses.				
<sup>1</sup> Women who visited private health facility are not included.				
<sup>2</sup> Reference period for phase I, January 1 <sup>st</sup> 1999 and for phase II, January 1 <sup>st</sup> .2001				

The topics discussed most often during visits to health facility by women were treatment of health problems (37 percent), immunization (23 percent), diseases prevention (17 percent), antenatal care (13 percent) and family planning (11 percent). A few pregnant women or women with children born after reference period also discussed about delivery care, postpartum care, breastfeeding, nutrition and oral re-hydration 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 28 percent of women needed to visit health facility but did not visit in comparison with 31 percent of women who needed to visit health facility and visited in past three months of the survey. The proportion of such women was higher in urban areas (32 percent) than in rural areas (30 percent). Among them who visited any health facility, half of the women reported that they had visited a private hospital, (45 percent in rural areas and 60 percent in urban areas).

<b>Table 7.4 VISIT TO HEALTH FACILITY</b>					
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, Punjab, 2002-04					
Health facility	Total	Residence		Availability of health facility <sup>1</sup> in the village	
		Rural	Urban	No	Yes
Percentage of women who needed to visit health facility and not visited	27.9	27.1	29.7	26.9	27.3
Percentage of women who needed to visit health facility and visited	31.0	30.4	32.3	29.5	31.1
Number of women	15,696	10,819	4,877	5,926	4,894
<b>Government health facility</b>					
Hospital / CHC / FRU /RH	17.4	16.8	18.5	18.9	15.2
Dispensary	4.5	5.8	1.9	3.9	7.3
Primary health center	2.4	3.0	1.2	3.6	2.5
Sub-center	3.1	4.1	1.0	3.9	4.2
<b>Private health facility</b>					
Hospital	49.9	45.1	59.7	44.9	45.3
Dispensary	18.2	20.3	14.0	19.3	21.0
ISM <sup>2</sup> hospital/dispensary	3.7	3.9	3.1	3.9	3.9
Other	0.8	0.9	0.7	1.5	0.5
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	4,858	3,285	1,574	1,443	1,841
Note: CHC: Community Health Center, FRU: First Referral Unit, RH: Referral Hospital					
<sup>1</sup> Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village					
<sup>2</sup> Either government or private health facility of Indian System of Medicine					

Only twenty eight percent of the women visited a government health facility, of which 17 percent visited government health facility such as, hospital/CHC/FRU/RH, 5 percent visited government dispensary, 3 percent visited sub-centres and only two percent visited to primary health centre. Only four percent of the women reported that they visited Indian system of medicine hospital/ dispensary either government or private. There are not many 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 District

Table 7.5 presents the percentage of currently married women who needed to visit health facility and visited the health facility by districts. Fifty six percent of currently married women in Sangrur and 54 percent in Rupnagar, needed to visit a health facility, but they did not visit. Out of 17, in 5 districts i.e. Fatehgarh Sahib, Jalandhar, Mansa, Muktsar and Patiala, more than half of the women visited health facility for their health problems. In Firozpur only 10 percent of women visited health facility when needed. Among them who visited health facility, less than a quarter women visited government health facility in 5 districts and in all districts more than half of the women visited private health facility in past three months of the survey.

<b>Table 7.5 VISIT TO HEALTH FACILITY BY DISTRICT</b>				
Percentage of women who needed to visit health facility, but not visited and percentage of women who visited health facility by type of health facility by district, Punjab, 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
Amritsar	30.8	25.8	36.3	63.7
Bathinda	18.5	44.7	23.3	75.6
Faridkot	28.1	39.0	32.7	67.3
Fatehgarh Sahib	21.7	58.7	25.1	74.8
Firozpur	30.6	10.3	43.8	53.8
Gurdaspur	27.7	16.0	26.5	69.4
Hoshiarpur	12.6	21.0	30.7	67.2
Jalandhar	16.1	56.8	17.4	82.6
Kapurthala	27.9	16.1	36.3	61.8
Ludhiana	28.6	19.4	27.9	68.4
Mansa	18.1	50.5	25.3	74.7
Moga	15.7	43.9	22.7	76.4
Muktsar	22.3	50.0	18.4	80.6
Nawanshahr	21.0	28.0	22.7	77.3
Patiala	19.0	61.4	26.2	73.7
Rupnagar	53.7	25.7	48.7	50.0
Sangrur	55.8	14.0	40.6	59.4
Punjab	27.9	31.0	27.6	71.5

## 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 personnel manner of doctor (8 percent), nurse (5 percent), and other staff including paramedical staff (4 percent) was excellent.

<b>Table 7.6 QUALITY OF GOVERNMENT HEALTH FACILITY</b>			
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 preceding the survey, Punjab, 2002-04			
Quality indicator	Poor	Good	Excellent
The convenience of the health facility location	3.2	91.8	5.0
Length <sup>1</sup> of time spend towards waiting	6.1	87.2	6.8
Personal manner <sup>2</sup> of the physician <sup>5</sup>	4.0	88.4	7.6
The technical skills and quality <sup>3</sup> of the physician <sup>5</sup>	4.2	89.4	6.4
Personal manner <sup>2</sup> of nurse	2.9	92.2	4.9
The technical skills and quality <sup>3</sup> of nurse	2.8	92.3	4.8
Personal manner of other staff <sup>5</sup>	3.4	87.2	3.9
The technical skills and quality of other <sup>4</sup> staff	4.6	90.9	4.5
The explanation of what was done to her	2.7	92.8	4.5
Medical, surgical and diagnostic equipment	3.9	87.7	4.2
General comfort	3.0	92.7	4.3

Note: <sup>1</sup> Poor indicate long waiting time, good indicate average waiting time, and excellent indicate short waiting time.  
<sup>2</sup> Courtesy, respect, sensitivity, friendliness  
<sup>3</sup> Thoroughness, carefulness, competence  
<sup>4</sup> Including paramedical staff  
<sup>5</sup> 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 one percent of the currently married women reported poor quality of service as one of the reasons for not visiting the government health centre for their health problems, as expected this reason is more reported by urban women (23 percent) than rural women (19 percent) and women from those village where health facilities are not available (20 percent). About 18 percent reported that they did not feel necessity to visit the government health centre due to inconvenient location of the centre (18 percent in rural and urban areas). Other reasons for not visiting government health centres were: time is not suited (17 percent), heavy rush (10 percent), doctor/ health workers do not examine properly (8 percent), medicine rarely/not given or of bad quality (13 percent), non-availability or rare availability of doctors/ health workers (3 percent).

<b>Table 7.7 REASON FOR NOT PREFERRING GOVERNMENT HEALTH FACILITY</b>					
Percent distribution of women visited private health facility by reason for not visiting government health facility and according to residence and availability of health facilities in the village, Punjab, 2002-04					
Reason	Total	Residence		Availability of health facility <sup>1</sup> in the village	
		Rural	Urban	No	Yes
Not conveniently located	18.0	18.0	17.9	14.7	22.5
Time is not suited	17.4	16.2	19.7	15.8	16.7
Poor quality of services	20.6	19.3	22.8	19.8	18.7
Heavy rush	9.9	8.1	13.4	6.6	10.0
Non/rare-availability of doctors/health workers	3.0	3.0	3.0	3.2	2.8
Doctors/health workers do not examine properly	7.7	7.9	7.3	8.7	6.9
Medicine not/rarely given or of bad quality	13.2	15.4	9.0	16.5	13.9
Doctors/paramedical staff does not behave properly	1.0	1.4	0.3	1.8	0.8
Services are charged	1.0	1.0	1.0	1.0	1.0
Referred by government doctor	0.4	0.3	0.6	0.2	0.5
Other	7.8	9.3	5.0	11.7	6.2
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	3,474	2,268	1,206	981	1,287

Note: <sup>1</sup> Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village

## 7.8 Family Planning Information and Advice Received

Women who are currently not using any contraceptive method were asked whether they were ever advised by ANM or family planning health worker to adopt family planning method and method advised during any of the contact. Eight 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 female sterilization (38 percent) IUD (21 percent) and 20 percent of women received advices to adopt condom as a contraceptive method. 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 3 percent of pill users reported that they had a problem in getting these methods. A little higher proportion of rural women than urban women had problems in getting a supply of these methods.

<b>Table 7.8 ADVISE TO ADOPT FAMILY PLANNING METHOD</b>			
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, Punjab, 2002-04			
Method	Total	Rural	Urban
Percentage of non-users who were advised to adopt family planning method	8.0	8.3	7.2
Number of women	4401	3241	1160
<b>Method</b>			
Female sterilization	37.9	42.4	23.7
Male sterilization	2.6	3.1	1.0
IUD	20.6	18.3	27.8
Pills	16.2	16.6	15.1
Condom	19.5	17.3	26.8
Rhythm /periodic abstinence	0.8	0.2	2.6
Withdrawal	0.5	0.4	0.6
Other	0.8	1.1	0.0
Missing	1.0	0.5	2.4
Total percent	100.0	100.0	100.0
Number of women	352	268	84
Note: Total includes 5 case missing on advise to adopt family planning method.			

<b>Table 7.9 AVAILABILITY OF REGULAR SUPPLY OF CONDOMS/PILLS</b>		
Percentage of current condom or pill users who ever had a problem getting a supply of condoms / pills by residence, Punjab, 2002-04		
Method/residence	Percentage who had a problem getting supply	Number of users
<b>Condom</b>		
Rural	3.7	456
Urban	2.6	239
Total	3.3	695
<b>Pills</b>		
Rural	3.3	1285
Urban	2.0	1202
Total	2.6	2487

## 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 32 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 32 percent of sterilized women received such information by a ANM or health worker in the government health facilities compared to around 30 percent of women who were sterilized in private health facilities and 36 percent of women received this information in the family planning or RCH camp or out reach/ MCH clinic in village at the time of accepting the sterilization.

<b>Table 7.10 INFORMATION OF OTHER MODERN METHOD BEFORE STERILIZATION</b>				
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, Punjab, 2002-04				
Source of sterilization	Total	Rural	Urban	Number of users
Government health facility	31.8	30.9	35.0	1,404
Family planning or RCH camp/ village session	35.6	34.5	42.7	65
Private health facility	30.4	31.5	28.8	78
Total	31.8	31.0	34.4	1,562
Note: Total includes 1, 10 and 3, women who said that they sterilized at mobile clinic, other and who do not know including missing information of place/source of sterilization, are not shown separately.				

<b>Table 7.11 INFORMATION ON SIDE EFFECT AND FOLLOW-UP FOR CURRENT METHOD</b>			
Percentage of current users of modern contraceptive methods who were told about side effects or other problems of current method by a health worker or ANM/Nurse at the time of accepting the method and percentage who received follow-up services after accepting the method by current method and residence, Punjab, 2002-04			
Information/follow-up	Total	Rural	Urban
<b>Told about side effects</b>			
Sterilization	47.9	48.5	46.0
Other modern method	23.7	25.2	21.7
Any modern method	37.0	39.6	31.4
<b>Received follow-up</b>			
Sterilization	45.0	48.0	34.9
Other modern method	3.9	4.4	3.3
Any modern method	26.4	31.4	15.8

Another important facet of informed contraceptive choice is being fully informed about any side effects and any other problems associated with the method. In Punjab, only 37 percent of users of any modern method were informed about possible side effects or health problems associated with their current method. Forty nine percent of acceptors of sterilization in rural area and 46 percent in urban area reported that they were informed about side effects. Among users of modern method other than sterilization, 25 percent of rural users and 22 percent of urban users were informed about side effects. It is clear from the result that ANM or health workers in Punjab are not providing sufficient information to couples who need to make an informed choice about contraceptive methods. The situation with respect to follow-up services is also not encouraging. Follow-up services among sterilization users are slightly higher than user of modern methods. About forty eight percent of sterilization users in rural area and about 35 percent in urban area reported that they received follow-up services by ANM or health worker. Only 4 percent of the users of other modern method received follow-up services. In all, only 31 percent of the users of any modern method in rural area and only 16 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.

<b>Table 7.12 QUALITY OF CARE INDICATORS FOR CONTRACEPTIVE USERS BY DISTRICT</b>						
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, Punjab, 2002-04						
District	Percentage informed about other methods before getting sterilization <sup>1</sup>	Percentage told about side effects or other problems with method <sup>2</sup>		Percentage who received follow-up <sup>2</sup>		Percentage non-user told ever had advised to adopt contraceptive method
		Sterilization	Other modern method	Sterilization	Other modern method	
Amritsar	27.1	40.1	17.8	41.3	3.7	4.1
Bathinda	32.6	39.8	30.4	55.1	5.0	13.2
Faridkot	35.7	55.3	39.7	60.3	6.1	15.5
Fatehgarh Sahib	35.1	76.1	21.2	55.0	4.8	14.5
Firozpur	32.5	24.5	15.6	26.0	4.0	3.4
Gurdaspur	30.8	24.6	16.2	38.3	3.2	6.4
Hoshiarpur	35.3	45.3	17.4	48.4	3.2	9.5
Jalandhar	27.6	87.7	37.0	44.0	2.4	8.4
Kapurthala	40.5	37.1	19.1	43.9	6.6	6.2
Ludhiana	34.8	42.7	15.1	43.9	3.1	6.5
Mansa	23.5	83.6	35.7	66.6	1.5	8.1
Moga	29.7	43.4	29.1	44.9	4.2	11.8
Muktsar	21.7	75.8	50.9	49.1	3.6	8.7
Nawanshahr	37.8	45.2	26.0	50.4	4.7	11.2
Patiala	36.5	76.6	33.0	51.5	3.0	12.7
Rupnagar	40.5	37.5	20.8	39.1	6.7	12.2
Sangrur	30.8	33.2	22.0	41.8	5.6	4.7
Punjab	31.8	47.9	23.7	45.0	3.9	8.0

Note: <sup>1</sup> At the time of accepting the current method.  
<sup>2</sup> By a health worker or ANM/Nurse after accepting the current method. ( ) Based on less number of cases.

The percentage of sterilization-users who were told about alternate method is lowest in Muktsar (22 percent) and it is highest in Kapurthala and Rupnagar (41 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 25 percent in Firozpur and Gurdaspur to a high of 88 percent in Jalandhar. For other modern contraceptive methods, about 51 percent in Muktsar and a minimum of 15 percent users in Ludhiana districts 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 Punjab. 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 Firozpur to a high of 16 percent in Faridkot.



Overall, the quality of care for family planning and health services is far from satisfactory in many of the district of Punjab; 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.

<b>Table 7.13 ADVISED TO HAVE DELIVERY AT HEALTH FACILITY AND FOLLOW-UP SERVICES FOR POSTPARTUM CEHECK-UP</b>			
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, Punjab, 2002-04			
Advise/follow-up service	Total	Rural	Urban
Percentage of women who were advised to have delivery at health facility	37.6	34.9	44.0
Percentage of women who were visited within 2 weeks of delivery	12.2	12.5	11.4
Percentage of women who were visited at least once within 6 weeks of delivery	12.3	12.7	11.2
Number of women	4,674	3,280	1,394
Note: * Women who had live birth/still birth after 1.1.1999/2001			

More than one-third (38 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 (44 percent) were more likely than rural areas (35 percent) to get advised to deliver their child at health facility.

In district wise variation, the percentage varies from as low as 19 percent in Firozpur to as high as 56 percent in Rupnagar (Table 7.14). In 11 of the 17 districts, less than two-fifth women were advised for deliver their child in health facility.

<b>Table 7.14 QUALITY OF CARE INDICATORS FOR MATERNAL CARE</b>			
Among currently married women* who are given live/still birth three years preceding the survey, quality of care indicators related to delivery care by district, Punjab, 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
Amritsar	44.5	12.4	12.4
Bathinda	29.2	14.8	14.8
Faridkot	38.1	22.0	22.0
Fatehgarh Sahib	42.4	6.4	6.7
Firozpur	19.1	6.5	6.1
Gurdaspur	28.7	8.9	9.3
Hoshiarpur	36.8	15.1	14.6
Jalandhar	51.8	13.9	14.5
Kapurthala	37.5	12.0	12.0
Ludhiana	36.4	13.1	13.0
Mansa	37.8	10.8	11.1
Moga	32.7	14.0	14.8
Muktsar	39.8	19.9	19.9
Nawanshahr	32.1	22.2	22.2
Patiala	43.3	4.2	4.2
Rupnagar	56.0	14.7	14.7
Sangrur	37.7	13.6	13.6
Punjab	37.6	12.2	12.3

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

Twelve percent of the women reported that they were visited by an ANM within two weeks of delivery; such visit was only 11 percent in urban areas and 13 percent in rural areas. Only 13 percent of the women in rural area and 11 percent in urban areas received at least one follow-up service within six weeks of delivery. Not more than one quarter women were received postpartum check-up within 2 weeks of delivery in any district of Punjab and the proportion of women who had at least one postpartum check-up within six weeks of delivery varied from a low of 4 percent in Patiala to high of 22 percent in Faridkot and Nawanshahr (Table 7.14).

## CHAPTER VIII

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

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

#### 8.1 Awareness of RTI/STI

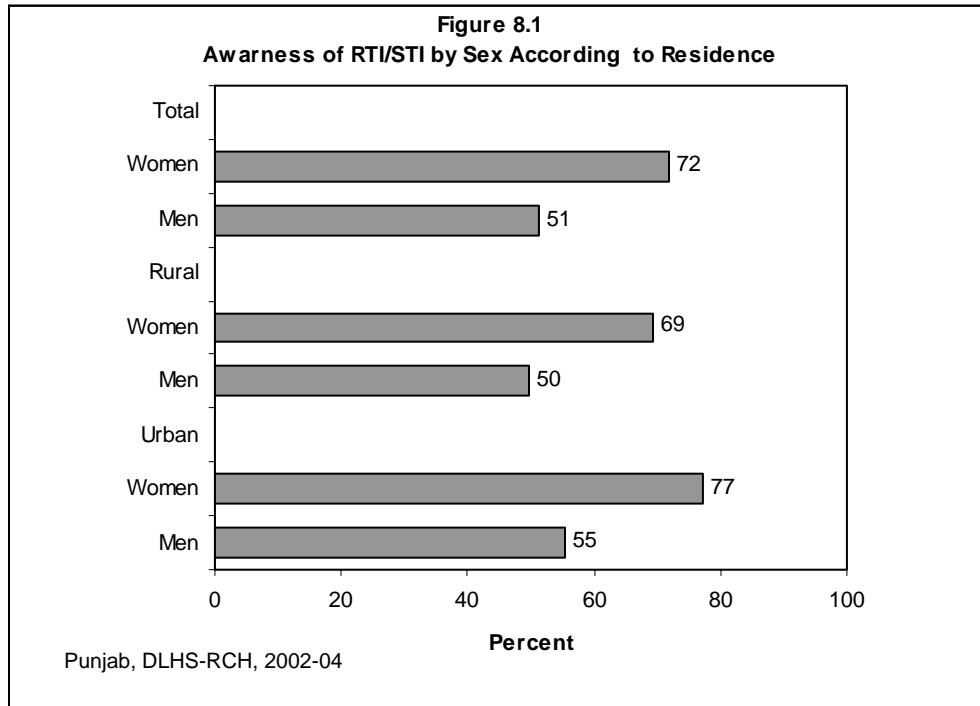
An attempt was made to assess whether couples were aware of RTI/STI. Currently married women and their husbands were asked about their awareness of RTI/STI, and if they were aware, they were further questioned about the source of information and mode of transmission of the disease.

Table 8.1 shows the percentage of women aware of RTI/STI by background characteristics. Seventy two percent of the women in Punjab were aware of RTI/STI. The proportion of women who were aware of RTI/STI is much higher in urban areas (77 percent) than in rural areas (69 percent) Figure 8.1. Awareness of RTI/STI is much lower among younger women, non-literate women, women from Christian religions, scheduled tribe women and women from households with a low standard of living. Awareness of RTI/STI increases from 63 percent among non-literate women to 81 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 55 percent among women with a low standard of living to 78 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. Most of the women (85 percent) reported that they received information of RTI/STI from friends or relatives. Other sources of information of RTI/STI as reported by women were television (13 percent), newspaper or books or magazines (11 percent), slogans or posters or pamphlets or wall hoardings (2 percent) and radio (1 percent). Only 5 percent of women received this information from doctors and 2 percent from health workers and about 15 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 Punjab, the percentage of women who heard of RTI/STI is higher than that of men (Figure 8.1). Half 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 scheduled tribes are less likely to report awareness of RTI/STI. The level of awareness of RTI/STI increases with an increase in education level and standard of living. Thirty six percent of non-literate men were aware of RTI/STI as compared to 64 percent of men who had completed 10 or more years of schooling. Forty two percent of men from households with a low standard of living were aware of RTI/STI as compared to 58 percent of men with a high standard of living.



Relatives or friends are the most prominent source of RTI/STI for men in Punjab. Sixty-eight 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 (29 percent) followed by newspaper or books or magazines (24 percent), slogans or posters or pamphlets or wall hoardings (9 percent) and radio (3 percent). Fifteen percent of the men received this information from a doctor, 9 percent from community meetings, 3 percent from health workers and 1 percent mentioned that they had received information about RTI/STI from school-teachers. About 8 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-caste, 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 Hindu 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 14 percent of non-literate men had heard of RTI/STI from television, which increased to 37 percent for men who have completed 10 or more years of schooling.

**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, Punjab, 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		
<b>Age group (years)</b>														
15-19	59.2	541	0.0	8.1	3.9	1.4	3.4	0.8	2.0	6.1	86.0	14.0	358	
20-24	67.0	2,829	1.1	12.9	10.5	1.9	4.5	2.8	1.7	11.2	83.7	13.8	1,979	
25-29	71.8	3,399	0.8	14.8	12.9	2.7	5.2	2.6	2.6	12.7	85.4	15.5	2,536	
30-34	72.4	3,207	1.5	13.1	11.9	2.2	4.4	2.4	3.7	12.4	85.7	16.8	2,403	
35-39	74.7	2,851	1.0	13.2	11.3	2.2	4.8	2.3	3.4	13.2	85.6	14.7	2,134	
40-44	74.8	2,870	1.8	12.8	10.5	1.7	4.5	2.1	2.1	13.6	86.2	13.9	2,220	
<b>Residence</b>														
Rural	69.2	10,819	1.0	10.4	8.0	1.4	3.9	2.3	2.8	12.6	87.0	14.4	7,791	
Urban	77.2	4,877	1.5	19.1	17.8	3.6	6.3	2.7	2.5	12.1	82.1	16.1	3,839	
<b>Education</b>														
Non-literate	63.0	5,659	0.6	4.9	2.8	0.2	2.2	1.8	2.4	9.2	89.9	14.4	3,698	
0-9@ years	72.3	5,004	1.0	10.5	6.8	0.9	3.9	2.2	2.3	12.7	87.4	16.8	3,759	
10 and above	80.9	5,026	1.9	23.2	22.7	4.9	7.6	3.1	3.4	15.1	79.6	13.8	4,168	
<b>Religion</b>														
Hindu	70.9	5,701	1.7	18.0	15.1	2.9	5.4	2.6	2.8	14.5	81.6	15.4	4,077	
Muslim	78.3	163	0.0	2.3	2.3	0.8	3.1	1.5	2.3	13.0	93.1	17.6	131	
Christian	54.5	292	0.9	20.8	19.8	1.9	3.8	2.8	3.8	18.9	80.2	17.9	106	
Sikh	72.5	9,495	0.9	10.7	9.0	1.7	4.3	2.3	2.6	11.2	87.4	14.7	7,280	
Other	(78.3)	45	(2.8)	(13.9)	(30.6)	(2.8)	(5.6)	(5.6)	(5.6)	(11.1)	(83.3)	(11.1)	36	
<b>Caste/tribe<sup>#</sup></b>														
Scheduled caste	68.8	5,172	1.1	9.1	6.1	1.3	3.2	2.3	2.0	10.9	87.5	14.4	3,706	
Scheduled tribe	51.9	201	2.8	19.4	19.4	0.0	4.6	2.8	4.6	39.8	79.6	25.9	108	
Other backward class	71.1	3,016	0.9	11.8	9.7	2.0	4.8	2.0	2.4	13.0	87.2	15.7	2,121	
Other	74.7	7,257	1.3	16.4	14.9	2.8	5.6	2.6	3.2	12.7	83.5	14.9	5,675	
<b>Standard of living index</b>														
Low														
Medium	55.0	1,434	0.7	3.3	2.6	0.5	1.8	2.2	1.7	6.9	90.1	15.7	815	
High	67.6	6,334	0.8	8.4	5.7	0.8	3.2	2.0	2.3	12.5	87.6	15.9	4,275	
	78.0	7,928	1.5	17.6	16.0	3.2	6.0	2.7	3.1	13.1	83.3	14.3	6,540	
<b>Total</b>	<b>71.7</b>	<b>15,696</b>	<b>1.2</b>	<b>13.3</b>	<b>11.2</b>	<b>2.1</b>	<b>4.7</b>	<b>2.4</b>	<b>2.7</b>	<b>12.5</b>	<b>85.4</b>	<b>15.0</b>	<b>11,630</b>	

Note: Total includes 5 cases missing information on education are not shown separately.

<sup>#</sup> Total figure may not add to N due to do not know and missing cases.

@ Literate women with no year of schooling are also included.

**Table 8.2 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, Punjab, 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	Television	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others	
<b>Age group (years)</b>													
< 25	49.5	741	2.6	22.1	19.8	5.4	11.2	1.6	1.7	6.8	76.3	6.4	367
25-34	52.2	3,362	2.3	29.8	22.5	8.4	15.6	2.7	2.2	8.7	67.5	7.3	1,754
35-44	50.6	3,271	3.1	28.7	25.0	8.7	15.5	2.7	1.0	9.1	68.5	7.1	1,656
45+	52.3	1,872	3.0	30.2	28.3	9.4	15.5	2.8	0.7	8.4	63.2	9.2	978
<b>Residence</b>													
Rural	49.6	6,273	3.2	26.3	18.8	6.8	14.8	2.3	1.0	9.7	71.0	7.4	3,111
Urban	55.3	2,973	1.9	34.0	34.7	11.7	16.1	3.2	2.2	6.6	61.3	7.9	1,644
<b>Education</b>													
Non-literate	36.2	2,266	2.0	14.2	1.1	1.1	9.4	1.8	0.5	11.3	79.0	11.3	819
0-9@ years	47.6	3,189	1.9	24.8	13.3	6.6	12.7	2.0	0.5	8.1	70.6	8.4	1,519
10 and above	63.7	3,788	3.5	36.5	39.1	12.2	18.8	3.3	2.3	8.1	61.9	5.8	2,414
<b>Religion</b>													
Hindu	50.7	3,373	2.8	32.5	29.5	9.2	13.4	2.9	2.0	8.6	65.1	7.4	1,709
Muslim	60.7	97	0.0	12.9	1.7	0.6	11.0	5.0	0.0	7.8	89.5	4.8	59
Christian	50.6	169	2.0	22.8	6.2	1.3	8.3	0.0	1.3	11.0	74.4	19.6	85
Sikh	51.9	5,572	2.8	27.3	22.2	8.5	16.6	2.5	1.1	8.6	68.6	7.4	2,891
Other	(29.4)	34	*	*	*	*	*	*	*	*	*	*	10
<b>Caste/tribe<sup>#</sup></b>													
Scheduled caste	51.3	2,968	2.8	21.6	16.1	5.7	14.7	2.1	1.3	8.0	71.5	9.1	1,524
Scheduled tribe	41.1	129	2.1	28.6	13.7	16.4	24.7	3.5	0.0	7.1	68.6	14.2	53
Other backward class	48.8	1,743	1.9	26.8	17.4	5.9	15.5	3.1	1.2	7.5	68.4	8.7	850
Other	52.9	4,369	2.9	34.4	32.3	11.2	15.2	2.8	1.6	9.3	64.9	6.0	2,313
<b>Standard of living index</b>													
Low	42.1	758	1.5	11.2	6.6	3.6	10.0	3.4	0.0	12.7	76.7	9.6	319
Medium	45.6	3,723	2.1	23.1	12.4	5.6	13.5	2.4	1.1	9.4	72.6	9.8	1,696
High	57.5	4,764	3.3	34.6	33.8	10.9	16.9	2.7	1.7	7.7	63.5	5.9	2,739
Total	51.4	9,246	2.7	28.9	24.3	8.5	15.2	2.6	1.4	8.6	67.6	7.6	4,755

Note: Table includes 3 cases with missing information on education are not shown separately. <sup>#</sup>Total figure may not add to N due to do not know and missing cases. @ Literate men with no year of schooling are also included. ( ) Based on less than 50 cases. \* Percentage not shown based on few cases.

### 8.1.1 Knowledge of Mode of Transmission of RTI/STI

Women who were aware of RTI/STI were asked about the mode of transmission. This is presented in Table 8.3. Among women who reported knowledge of RTI/STI, 52 percent of them did not know anything further about the mode of transmission of this disease. This proportion is higher among rural women, young women, non-literate women, and women from Christian and Sikh religions, women from scheduled-tribes and women coming from households with low standard of living. Fifty six percent of rural women do not know about the mode of transmission of RTI/STI compared to 46 percent of urban women. Lack of personnel hygiene and heterosexual intercourse were mentioned by 19 percent and 12 percent of women respectively as mode of transmission of RTI/STI. Only 2 percent of women reported homosexual intercourse and 24 percent reported other modes of transmission of RTI/STI.

<b>Table 8.3 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG WOMEN</b>						
Percentage of currently married women age 15-44 who have heard of RTI/STI, knowledge of mode of transmission by selected background characteristics, Punjab, 2002-04						
Background characteristic	Percentage by knowledge of mode of transmission				Do not know	Number of women who have heard of RTI/STI
	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other		
<b>Age</b>						
15-19	0.5	8.8	12.7	20.7	62.2	358
20-24	1.4	13.5	17.7	21.3	55.6	1,979
25-29	1.9	13.1	19.9	21.9	53.3	2,536
30-34	1.1	11.0	19.1	26.4	51.1	2,403
35-39	1.8	12.2	19.4	24.8	50.9	2,134
40-44	1.7	12.1	18.7	27.3	49.9	2,220
<b>Residence</b>						
Rural	1.5	11.0	14.7	24.4	55.8	7,791
Urban	1.6	14.7	27.2	24.0	45.7	3,839
<b>Education</b>						
Non-literate	1.1	8.0	11.4	24.6	59.2	3,698
0-9@ years	1.1	10.4	15.0	24.6	55.7	3,759
10 years and above	2.4	17.6	28.8	23.6	43.5	4,168
<b>Religion</b>						
Hindu	1.8	13.8	21.0	24.7	49.4	4,077
Muslim	0.4	6.2	13.3	33.8	53.7	131
Christian	0.0	21.2	22.7	14.4	53.9	106
Sikh	1.5	11.2	17.6	24.0	54.1	7,280
Other	(2.8)	(19.4)	(30.6)	(27.8)	(38.9)	36
<b>Caste/tribe<sup>#</sup></b>						
Scheduled caste	1.1	9.6	12.5	24.5	58.5	3,706
Scheduled tribe	1.6	8.9	16.4	14.6	61.9	108
Other backward class	1.3	11.0	16.9	23.0	55.7	2,121
Other	1.9	14.5	23.7	24.9	47.0	5,675
<b>Standard of living index</b>						
Low	1.0	7.3	12.4	22.0	62.2	815
Medium	1.3	10.1	13.1	23.2	57.7	4,275
High	1.8	14.4	23.6	25.2	47.5	6,540
<b>Total</b>	1.5	12.2	18.8	24.3	52.4	11,630

Note: Total includes 6 cases missing information on education are not shown separately.  
<sup>#</sup> Total figure may not add to N due to do not know and missing cases.  
<sup>@</sup> Literate women with no year of schooling are also included.

Table 8.4 presents the knowledge of mode of transmission of RTI/STI among men. Among men who had heard of RTI/STI, 13 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 non-literate men, Christian men, men from scheduled tribes and men from households with a low standard of living. Among the men who knew the modes of transmission of RTI/STI, 49 percent mentioned heterosexual intercourse, 38 percent reported lack of personnel hygiene and only 3 percent mentioned homosexual intercourse and 26 percent reported other modes of transmission.

<b>Table 8.4 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG MEN</b>						
Percentage of husbands of currently married women who have heard of RTI/STI, knowledge of mode of transmission by selected background characteristics, Punjab, 2002-04						
Background characteristic	Percentage by knowledge of mode of transmission				Do not know	Number of men who have heard of RTI/STI
	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other		
<b>Age</b>						
<25	5.2	46.8	37.1	26.5	9.7	367
25-34	2.6	48.4	37.9	24.5	13.7	1,754
35-44	3.6	49.8	36.4	26.8	13.0	1,656
45+	2.8	48.1	39.6	25.8	13.2	978
<b>Residence</b>						
Rural	3.1	46.5	34.6	26.9	14.7	3,111
Urban	3.4	52.8	43.5	23.5	9.9	1,644
<b>Education</b>						
Non-literate	2.4	32.4	24.8	31.5	21.4	819
0-9@ years	3.2	45.2	31.6	25.7	15.4	1,519
10 years and above	3.5	56.5	45.8	23.7	8.7	2,414
<b>Religion</b>						
Hindu	4.6	52.0	39.8	21.9	12.7	1,709
Muslim	0.0	49.1	30.0	38.5	10.3	59
Christian	3.1	34.4	27.1	28.6	25.1	85
Sikh	2.4	47.1	36.8	27.6	12.9	2,891
<b>Caste/tribe<sup>#</sup></b>						
Scheduled caste	2.8	45.0	33.8	28.8	13.6	1,524
Scheduled tribe	0.0	41.9	29.9	20.3	28.1	53
Other backward class	2.4	45.1	35.7	27.4	14.0	850
Other	3.8	52.6	41.2	23.3	12.0	2,313
<b>Standard of living index</b>						
Low	2.7	37.5	26.6	23.6	23.5	319
Medium	3.3	42.4	29.5	28.3	16.0	1,696
High	3.2	53.9	44.0	24.3	10.0	2,739
Total	3.2	48.7	37.7	25.7	13.0	4,755

Note: Total includes 3 cases with missing information on education are not shown separately. @ 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.



## 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 more than one-fifth of currently married women (21 percent) reported at least one reproductive health problem. The problems reported by women were 'itching over vulva', 'some mass coming out of vagina' and 'low backache' (6 percent each), 'fever' (5 percent), 'pain in lower abdomen' (4 percent), and 'painful sexual intercourse' (3 percent). Very few women reported 'boils/ ulcers/ warts around vulva', 'bleeding after sexual intercourse' and 'swelling in the groin'. The prevalence of reproductive health problems is common among rural and urban women.

<b>Table 8.5 SYMPTOMS OF RTI/STI AMONG WOMEN</b>			
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, Punjab, 2002-04			
Symptoms	Total	Residence	
		Rural	Urban
Percentage of women reported any RTI/STI symptoms	21.3	21.6	20.8
<b>Symptoms</b>			
Itching over vulva	5.9	5.9	5.9
Boils/ ulcers/ warts around vulva	1.5	1.6	1.2
Pain in lower abdomen not related to menses	3.5	3.8	2.8
Low backache	5.7	6.1	4.9
Pain during sexual intercourse	3.1	3.3	2.6
Bleeding after sexual intercourse	0.4	0.3	0.4
Swelling in the groin	1.5	1.6	1.3
Frequent / painful passage of urine	3.2	3.4	2.6
Fever	4.6	4.6	4.7
Some mass coming out of vagina	6.3	6.4	6.2
Any involuntary escape of urine while coughing or sneezing	1.7	1.7	1.5
Swelling / lump in breast	0.5	0.5	0.5
Number of women	15,696	10,819	4,877

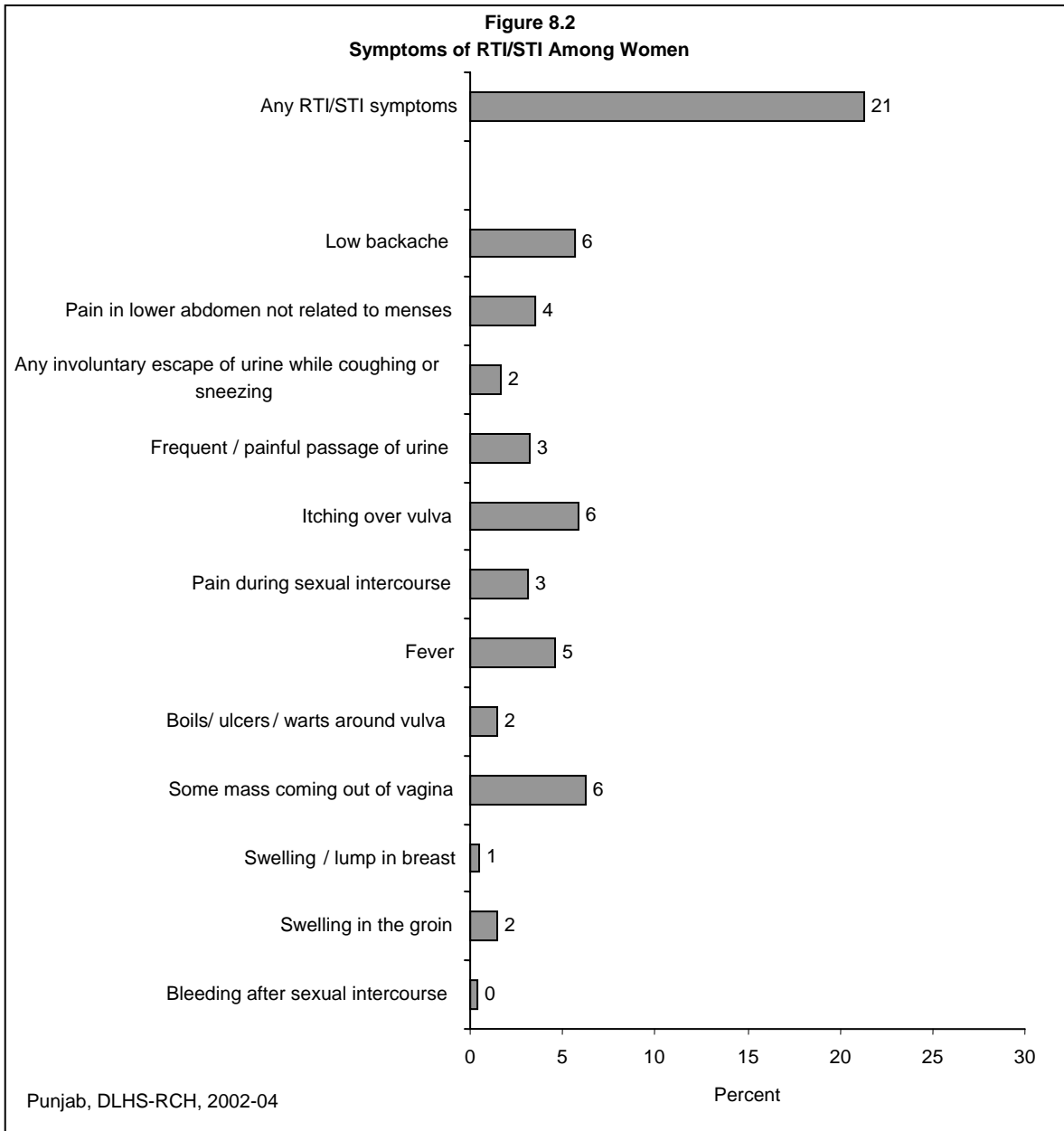
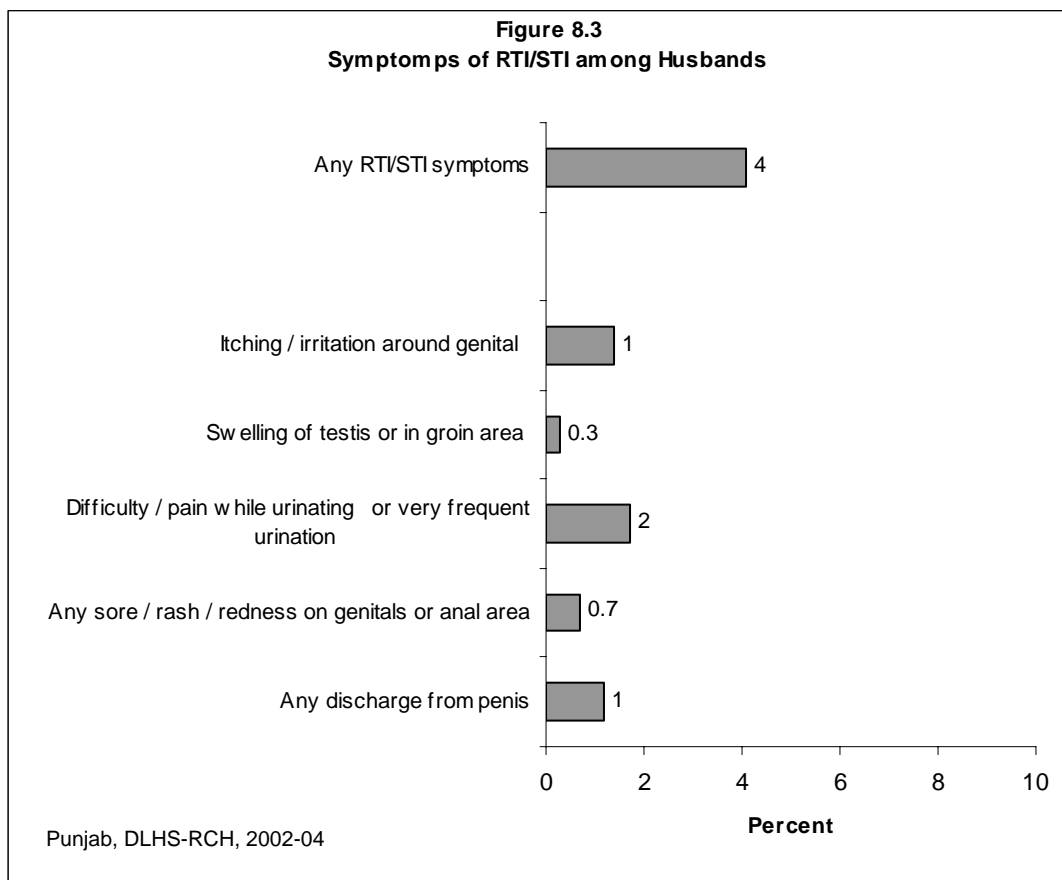


Table 8.6 and Figure 8.3 show the prevalence of reproductive health problems among husbands of currently married women. The prevalence of RTI/STI among men was judged by the reporting of symptoms. Four percent of men reported experiencing at least one symptom of reproductive health problem in the last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



Among men who reported reproductive health problems, 63 percent of them sought treatment. There is not much rural-urban differential in seeking treatment for reproductive health problems. Among them only 18 percent visited a government health facility, including a primary health centre and sub-centre (1 percent each) and 45 percent visited a private health facility. Seventeen percent of men were treated by the Indian system of medicine, 17 percent obtained treatment from a chemist or medical shop and 8 percent of the men reported that they were treated at other sources. A relatively higher proportion of men from rural areas utilised the government health facility and chemist or medical shop for treatment; utilisation of the Indian system of medicine is much higher among urban men (20 percent) than among rural men (16 percent). A large proportion of men saw a doctor (62 percent), 64 percent in urban areas and 62 percent in rural areas. Seven percent of men were seen by relative or friends and 3 percent by an ISM practitioner. Four percent of the men used home remedies and 14 percent of the men went to a chemist. Another 15 percent of the men obtained treatment from other sources.

<b>Table 8.6 SYMPTOMS OF RTI/STI AMONG MEN</b>			
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, Punjab, 2002-04			
Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of men reported any RTI/STI symptoms	4.1	4.2	3.9
<b>Symptoms</b>			
Any discharge from penis	1.2	1.1	1.4
Any sore / rash / redness on genitals or anal area	0.7	0.7	0.7
Difficulty / pain while urinating or very frequent urination	1.7	1.7	1.6
Swelling of testis or in groin area	0.3	0.3	0.5
Itching / irritation around genital	1.4	1.4	1.2
Number of men	9,246	6,273	2,973
Percentage of men sought treatment for any RTI/STI	62.6	61.7	64.8
Number of men <sup>1</sup>	379	263	116
<b>Percentage sought treatment at health facility<sup>2</sup></b>			
<b>Government health facility<sup>3</sup></b>			
Primary health centre	0.5	0.7	0.0
Sub centre	0.5	0.7	0.0
<b>Private health facility<sup>4</sup></b>			
ISM <sup>5</sup> facility	17.2	16.1	19.6
Chemist/ medical shop	17.4	18.4	15.1
Other	8.1	9.9	4.1
<b>Percentage obtained treatment from<sup>2</sup></b>			
Doctor	62.3	61.6	64.0
Male health worker	0.5	0.7	0.0
Traditional healer	0.9	0.6	1.5
Relative/friends	7.0	6.8	7.5
ISM practitioner	3.2	3.1	3.4
Home remedy	3.5	4.2	2.0
Chemist medical shop	13.9	13.3	15.0
Other	14.9	16.0	12.5
Number of men	237	162	75
Note: <sup>1</sup> Based on men with any symptoms of RTI/STI. <sup>2</sup> Percentage may add more than 100.0 due to multiple responses and based on who sought treatment. <sup>3</sup> Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre. <sup>4</sup> Includes private hospital/ clinic, non-governmental / trust hospital/clinic. <sup>5</sup> Either government or private hospital/clinic of Indian system of medicine. <sup>6</sup> Based on who sought treatment for RTI/STI.			

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 Punjab during the three months preceding the survey according to residence. Eleven percent of

the women reported problems related to vaginal discharge. The prevalence of vaginal discharge problem is equal among rural and urban women (11 percent).

<b>Table 8.7 ABNORMAL VAGINAL DISCHARGE</b>			
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, Punjab, 2002-04			
Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women reported abnormal vaginal discharge	11.0	11.1	10.9
Number of women	15,696	10,819	4,877
Percentage of women sought treatment for vaginal discharge <sup>1</sup>	45.1	44.2	47.0
Number of women	1,730	1,200	529
<b>Percentage sought treatment at health facility<sup>2</sup></b>			
Government health facility <sup>3</sup>	25.6	27.2	22.2
Primary health centre	1.6	2.4	0.0
Sub centre	1.0	1.3	0.4
Private health facility <sup>4</sup>	53.4	52.5	55.2
ISM <sup>5</sup> facility	17.6	16.4	20.1
Home remedy	4.0	4.2	3.5
Other	6.7	6.9	6.2
<b>Percent distribution of women who obtained treatment from <sup>2</sup></b>			
Doctor	65.1	65.2	64.9
ANM/nurse/midwife/LHV	21.3	20.2	23.5
Other health professionals <sup>6</sup>	5.0	4.9	5.1
Other	6.6	7.4	4.9
Total percent	100.0	100.0	100.0
Number of women	780	531	249
Note: <sup>1</sup> Based on women who reported having vaginal discharge. <sup>2</sup> Based on women who sought treatment for vaginal discharge. <sup>3</sup> Includes Government municipal hospital/ dispensary/ UHC/ UHP/ UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. <sup>4</sup> Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. <sup>5</sup> Either government or private hospital/clinic of Indian system of medicine, <sup>6</sup> Includes dai (trained or untrained), relative or friends and chemist/ medical shop. ( ) Based on less than 50 cases. Note: Total includes 281 woman missing information on home remedy and other 284 do not show separately.			

Among the women who had reported symptoms of vaginal discharge, 45 percent went for treatments, higher percentage (47 percent) from urban areas compared to their rural counterparts (44 percent). A considerable proportion (53 percent) visited private health facilities, followed by government health facility (26 percent). Only 18 percent went to ISM facility, 2 percent to Primary health centre, 1 percent to Sub Centre; while 4 percent took home remedies and 7 percent of the women visited other places for treatment. The proportion of women who visited a private health facility is higher in urban areas (55 percent) than in rural areas (53 percent), and the proportion of women who visited a facility rendering the Indian system of medicine, is also higher in urban areas (20 percent) than in rural areas (16 percent). A significantly higher proportion (65 percent) of women in the state of Punjab obtained treatment from doctors for their problems. Around 21 percent women were treated by ANM/Nurse/Midwife /LHV and 5 percent by other health professionals.

### 8.3 Menstruation Related Problems

Table 8.8 shows the percentage of women who had menstruation problems and who sought treatment during the three months preceding the survey. The Table shows that around 12 percent women in Punjab had menstruation problems and the figures are 12 percent and 13 percent in the rural and urban areas respectively.

<b>Table 8.8 MENSTRUATION RELATED PROBLEMS</b>			
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, Punjab, 2002-04			
Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women with any menstruation related problem	12.3	12.1	12.7
<b>Symptoms<sup>1</sup></b>			
No period	1.5	1.3	1.9
Painful period	29.1	31.2	24.9
Frequent or short period	40.7	39.3	43.4
Delayed period	21.7	20.9	23.2
Prolonged bleeding	8.1	9.1	6.3
Excessive bleeding	18.4	19.2	16.8
Continuous bleeding	3.2	3.3	3.0
Scanty bleeding	4.0	4.2	3.5
Inter-menstrual bleeding	1.9	1.2	3.3
Number of women	12,773	8,677	4,096
Percentage of women sought treatment who had any menstruation related problems	36.5	36.4	36.8
Number of women	1,571	1,051	519
<b>Percentage sought treatment at health facility<sup>6</sup></b>			
<b>Government health facility<sup>2</sup></b>			
Primary health centre	2.0	1.4	3.0
Sub centre	2.0	2.3	1.3
<b>Private health facility<sup>3</sup></b>			
ISM <sup>4</sup> facility	11.5	11.6	11.4
Other	4.5	5.5	2.7
<b>Percentage of women obtained treatment from<sup>6</sup></b>			
Doctor	69.2	68.1	71.3
ANM/nurse/midwife/LHV	25.3	24.4	27.1
Other health professionals <sup>5</sup>	4.1	5.0	2.4
Other	4.1	5.3	1.6
Number of women	573	382	191
Note: <sup>1</sup> Based on women who reported any menstruated related problems. <sup>2</sup> Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. <sup>3</sup> Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. <sup>4</sup> Either government or private hospital/clinic of Indian system of medicine, <sup>5</sup> Includes <i>dai</i> (trained or untrained), relative or friends and chemist/ medical shop. <sup>6</sup> Multiple responses.			

Among the women who had reported menstrual problems in Punjab, 41, 29, 22 and 18 percent reported frequent or short period, painful periods, delayed periods and excessive bleeding as symptoms respectively. The magnitude of these symptoms is more or less the same among urban as well as rural women. Frequent or short period and painful periods are the main menstrual problems prevalent in Punjab. Among the women who had menstrual problems, 37 percent sought treatment in the state and the figures for urban and rural areas are 37 percent and 36 percent respectively. The private health facility and government health facility are the main sources of treatment for menstrual problems. Around 59 percent of women sought treatment at a private facility and 29 percent sought treatment at government health facility. Twelve percent of the women were treated at ISM facility, which holds true for both urban and rural areas. Most of the women went to a doctor for treatment (69 percent). The figures for urban and rural areas are 71 and 68 percent respectively.

#### 8.4 Prevalence of RTI/STI by District

Table 8.9 presents the prevalence of RTI/STI among currently married women and their husbands by districts. The reported symptoms of RTI/STI among women are lowest in Firozpur and Sangrur (14 percent each) and highest in Patiala (32 percent). The problems related to abnormal vaginal discharge ranges from 7 percent in Moga to 15 percent in Rupnagar.

<b>Table 8.9 REPRODUCTIVE HEALTH CARE INDICATORS BY DISTRICT</b>					
Percentage of currently married women and their husbands who reported reproductive health problems and percentage who sought treatment for the problems by district, Punjab, 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
Amritsar	20.8	12.9	51.5	4.6	83.5
Bathinda	24.7	8.5	39.5	4.6	55.1
Faridkot	18.8	8.5	50.6	4.1	60.0
Fatehgarh Sahib	29.6	9.9	37.8	2.5	74.4
Firozpur	13.7	10.9	36.4	3.3	38.0
Gurdaspur	27.0	11.6	33.6	6.7	47.8
Hoshiarpur	27.6	13.7	43.3	3.0	64.8
Jalandhar	17.5	11.7	43.5	2.8	54.0
Kapurthala	20.9	13.0	41.5	5.5	71.8
Ludhiana	17.9	10.1	48.2	2.8	66.7
Mansa	21.9	10.6	50.2	3.2	58.0
Moga	20.2	7.0	47.7	3.1	25.6
Muktsar	19.7	10.7	49.6	2.9	38.4
Nawanshahr	23.7	10.3	43.2	4.2	44.8
Patiala	31.6	11.4	46.5	4.2	72.5
Rupnagar	21.5	15.2	48.9	1.5	42.8
Sangrur	14.1	8.1	51.7	7.4	77.7
Punjab	21.3	11.0	45.1	4.1	62.6

Note: ( ) Based on less number of cases

In comparison to women, fewer men from all districts of Punjab reported symptoms of RTIs/STIs. Men from Rupnagar (2 percent) reported the lowest prevalence of symptoms of RTIs/STIs and men from Gurdaspur and Sangrur (7 percent) reported the highest prevalence.

The percentage of women who have sought treatment for RTIs (abnormal vaginal discharge) ranges from 34 percent in Gurdaspur to 52 percent in Amritsar and Sangrur; for men who have sought treatment; it ranges from 26 percent in Moga to 84 percent in Amritsar.

## **8.5 HIV/AIDS**

Acquired Immune Deficiency Syndrome (AIDS) is an illness caused by the Human Immunodeficiency 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**

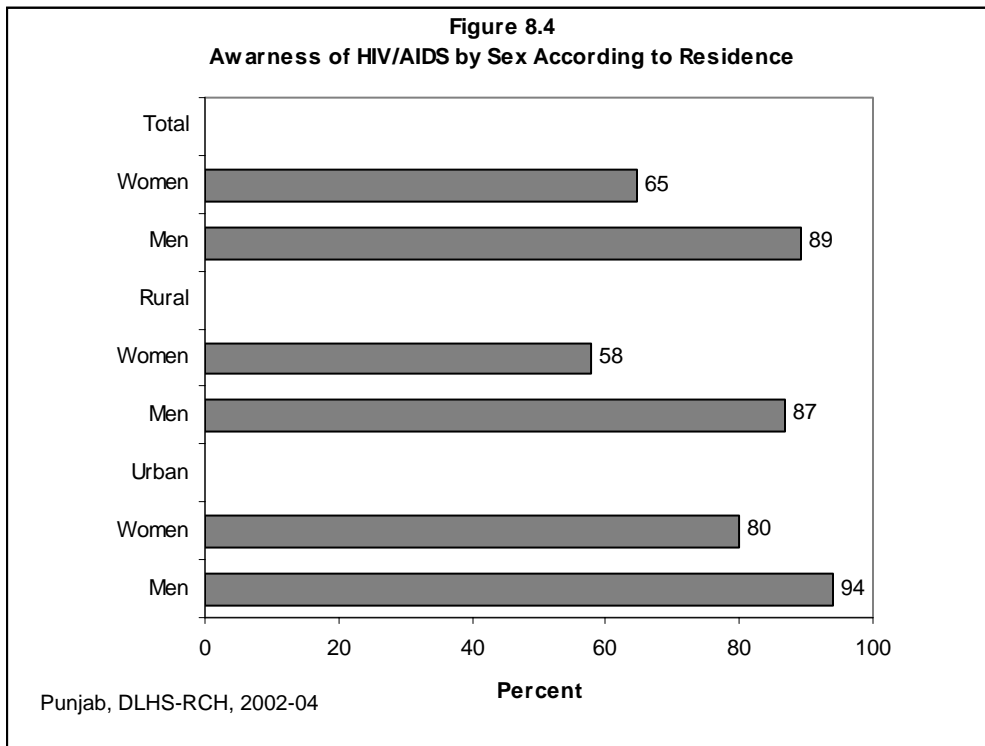
Table 8.10 shows the percentage of women who had heard about HIV/AIDS by some selected background characteristics. Sixty five percent of currently married women in Punjab have heard of HIV/AIDS, which is higher than RCH Round – I. In Round-I only 54 percent of currently married women were aware of HIV/AIDS.

Knowledge of HIV/AIDS is lower among rural women, non-literate women, Muslim and Christian women, women from scheduled castes, women from households with a low standard of living and younger women. Eighty percent of urban women had heard about HIV/AIDS compared to only 58 percent of rural women. Knowledge of HIV/AIDS steadily increased with increase in educational level and household standard of living. About one-third of non-literate women (33 percent) had heard of HIV/AIDS against 95 percent of women who had completed 10 or more years of schooling. Similarly a little less than one-quarter of the women (23 percent) with a low standard of living had heard of HIV/AIDS against 82 percent of women with a high standard of living. More than 50 percent of the women from different age groups have knowledge of HIV/AIDS. Christian women (45 percent) were less aware of HIV/AIDS compared to women from Hindu (70 percent), Muslim (49 percent), Sikh (62 percent) and 'other' religions (72 percent). Women from 'other caste' category were more knowledgeable about of HIV/AIDS (77 percent) than women belonging to other backward classes (61 percent), scheduled-caste (50 percent) and scheduled tribe women (56 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 87 percent of women reported that television was their source of information about HIV/AIDS, followed by relatives or friends (45 percent), newspapers, books or magazines (28 percent), slogans or pamphlets, posters or wall hoardings (22 percent), radio (4 percent), Six percent of the women reported that a doctor had informed them about HIV/AIDS and 3 percent of the women received information of HIV/AIDS from a health worker.

Table 8.11 shows the percentage of husbands of currently married women who had heard about HIV/AIDS. In Punjab, the proportion of men who had heard about HIV/AIDS is much higher than that of women. Eighty nine percent of men had heard of HIV/AIDS as compared to 65 percent of women (Figure 8.4).



About 94 percent of urban men had heard about HIV/AIDS as compared to 87 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. About three-fourth of non-literate men had heard of HIV/AIDS and it increased up to 91 percent for literate men and up to 99 percent of men who had completed 10 or more years of schooling and 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 Punjab, the most prominent source of information of HIV/AIDS was television (74 percent), followed by relatives or friends (56 percent). Other important sources of HIV/AIDS are the radio (7 percent), newspapers, books or magazines (38 percent) and slogans or pamphlets, posters or wall hoardings (31 percent). Twelve percent of men reported that a doctor had informed them about HIV/AIDS and 3 percent men had received information of HIV/AIDS from a health worker.

**Table 8.10 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG WOMEN**

Percentage of currently married women 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, Punjab, 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	Television	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others	
<b>Age group (years)</b>													
15-19	50.2	541	0.0	84.9	18.0	14.2	2.4	2.0	1.5	2.7	44.3	0.4	272
20-24	66.1	2,829	3.8	89.4	25.8	20.4	6.8	2.6	1.7	4.7	41.3	0.9	1,870
25-29	68.2	3,399	4.4	89.5	29.3	23.9	7.1	3.3	1.8	5.1	44.2	1.3	2,319
30-34	65.1	3,207	4.1	87.0	27.7	21.4	5.9	3.4	1.2	5.2	45.0	1.2	2,089
35-39	65.7	2,851	3.4	83.8	27.6	20.3	5.1	2.7	1.4	7.2	49.4	1.4	1,871
40-44	60.8	2,870	4.7	84.0	28.9	22.3	6.4	3.7	1.3	7.4	47.3	1.0	1,744
<b>Residence</b>													
Rural	57.9	10,819	4.0	82.2	19.2	16.5	5.8	3.0	1.1	6.0	48.4	1.2	6,268
Urban	80.0	4,877	4.0	94.2	41.2	29.7	6.8	3.2	2.1	5.4	40.3	1.0	3,898
<b>Education</b>													
Non-literate	32.7	5,659	2.1	70.4	2.1	1.5	1.9	1.2	0.6	5.9	53.2	2.0	1,851
0-9@ years	70.7	5,004	3.4	83.9	13.7	14.0	4.6	2.6	0.5	4.8	46.3	1.0	3,535
10 and above	95.0	5,026	5.2	95.4	47.9	34.9	9.0	4.2	2.5	6.4	41.5	0.9	4,776
<b>Religion</b>													
Hindu	70.1	5,701	4.3	92.0	32.5	24.9	6.5	3.1	1.6	4.6	40.2	1.0	3,997
Muslim	49.0	163	0.4	76.8	11.6	6.7	1.8	5.1	1.2	6.5	54.9	0.4	80
Christian	45.3	292	4.1	79.5	13.9	6.2	6.4	7.8	0.0	8.0	46.6	0.0	132
Sikh	62.4	9,495	3.8	83.6	24.9	19.9	6.0	3.0	1.4	6.5	48.7	1.3	5,926
Other	(71.7)	45	(12.1)	(93.9)	(57.6)	(33.3)	(6.1)	(6.1)	(9.1)	(6.1)	(30.3)	(6.1)	30
<b>Caste/tribe #</b>													
Scheduled caste	50.0	5,172	2.9	83.0	15.2	13.2	5.1	2.4	0.9	4.3	46.5	1.1	2,586
Scheduled tribe	55.5	201	3.2	91.6	21.2	17.5	4.6	5.5	0.0	7.6	50.6	0.0	112
Other backward class	61.1	3,016	3.3	87.0	22.9	19.7	5.2	2.3	1.4	5.6	46.0	1.0	1,842
Other	77.1	7,257	4.6	88.4	35.1	26.1	7.0	3.6	1.7	6.4	44.5	1.2	5,597
<b>Standard of living index</b>													
Low	23.2	1,434	2.8	56.2	6.8	7.7	2.3	1.3	0.8	6.7	65.9	1.8	332
Medium	52.1	6,334	3.5	79.4	11.3	10.7	4.8	2.6	0.8	5.5	48.5	1.3	3,299
High	82.4	7,928	4.3	92.1	37.0	27.8	7.1	3.4	1.8	5.8	42.7	1.0	6,533
Total	64.8	15,696	4.0	86.8	27.7	21.6	6.2	3.1	1.5	5.8	45.3	1.1	10,166

Note: Total includes 7 cases missing information on education are not shown separately.

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

**Table 8.11 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG MEN**

Percentage of husband of currently married women who have heard about RTI/STI and among men who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Punjab, 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	Television	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others		
<b>Age group (years)</b>														
< 25	90.5	741	4.6	73.9	31.5	25.1	12.8	1.9	3.1	11.9	62.0	1.3	671	
25-34	92.3	3362	7.6	76.4	38.1	32.1	12.0	3.1	1.5	11.1	56.7	2.9	3,103	
35-44	88.1	3271	6.7	70.4	36.6	32.2	11.7	2.7	1.3	11.0	54.3	4.1	2,883	
45+	85.0	1872	7.5	73.2	41.3	28.4	12.4	2.2	0.9	9.5	53.7	3.5	1,592	
<b>Residence</b>														
Rural	86.9	6273	7.5	67.5	29.8	26.1	11.8	2.3	1.2	11.0	60.1	3.3	5,453	
Urban	94.0	2973	6.2	85.0	53.1	40.2	12.5	3.3	1.8	10.4	47.2	3.2	2,795	
<b>Education</b>														
Non-literate	71.9	2266	3.9	44.5	3.2	4.8	5.5	0.9	0.4	11.6	72.3	3.5	1,629	
0-9@ years	90.5	3189	6.2	70.2	24.7	26.5	10.2	1.7	0.8	10.3	56.9	2.6	2,885	
10 and above	98.5	3788	9.1	88.6	62.7	45.6	16.3	4.2	2.4	10.9	47.5	3.7	3,731	
<b>Religion</b>														
Hindu	89.7	3373	8.0	79.8	42.6	33.2	11.3	3.1	1.6	10.5	49.7	2.6	3,025	
Muslim	91.9	97	2.9	51.6	21.1	33.6	13.2	4.0	1.1	6.5	65.3	3.8	89	
Christian	80.3	169	7.2	60.7	14.2	13.2	4.9	0.0	0.0	20.5	51.7	6.7	136	
Sikh	89.2	5572	6.5	70.3	35.6	29.9	12.7	2.4	1.4	10.8	59.3	3.6	4,972	
Other	(79.4)	34	(7.1)	(92.9)	(53.6)	(46.4)	(17.9)	(0.0)	(7.1)	(7.1)	(42.9)	(3.6)	27	
<b>Caste/tribe<sup>#</sup></b>														
Scheduled caste	86.4	2968	5.7	63.7	24.0	23.3	10.8	2.3	1.5	11.6	63.2	3.8	2,564	
Scheduled tribe	80.5	129	6.8	71.3	37.5	21.6	12.1	3.5	1.4	13.4	46.9	1.5	104	
Other backward class	86.2	1743	6.7	71.2	32.5	29.8	10.8	1.5	1.5	8.4	57.0	3.0	1,502	
Other	92.7	4369	7.9	80.5	48.2	36.4	13.2	3.3	1.4	11.1	50.8	3.1	4,051	
<b>Standard of living index</b>														
Low	68.9	758	3.6	32.6	10.6	14.5	6.7	1.0	0.8	11.6	72.2	5.3	523	
Medium	85.2	3723	5.8	64.0	21.9	20.8	9.9	2.6	0.8	11.5	61.8	2.8	3,172	
High	95.6	4764	8.3	84.7	51.8	39.7	14.1	2.9	1.9	10.3	49.6	3.4	4,554	
Total	89.2	9246	7.0	73.5	37.7	30.9	12.0	2.7	1.4	10.8	55.7	3.3	8,248	

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

About 11 percent reported that they were informed through community meetings and one percent received such information from a school teacher. The information on awareness of HIV/AIDS through mass media, such as television and newspapers, and books or magazines, was received more by older men (aged 45 and above), urban men, and men from other religions and 'other castes' category, with at least 10 years of schooling, and men from households with a high standard of living.

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

<b>Table 8.12 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF HIV/AIDS AMONG WOMEN</b>								
Percentage currently married women age 15-44 who have heard of HIV/AIDS, knowledge of mode of transmission by selected background characteristics, Punjab, 2002-04								
Background characteristic	Percentage by knowledge of mode of transmission						Do not know	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		
<b>Age</b>								
15-19	0.7	87.2	32.4	7.7	24.8	1.3	15.6	272
20-24	5.2	84.6	42.4	11.5	34.2	1.3	17.9	1,870
25-29	5.3	87.8	46.2	12.5	38.2	1.9	17.4	2,319
30-34	5.5	83.9	42.8	8.5	34.2	1.3	21.7	2,089
35-39	5.4	82.3	39.2	8.1	31.2	1.5	20.9	1,871
40-44	6.1	82.5	39.0	8.9	28.4	1.9	20.5	1,744
<b>Residence</b>								
Rural	5.2	82.3	36.8	8.3	28.3	1.6	20.5	6,268
Urban	5.6	88.0	50.1	12.5	41.5	1.4	17.9	3,898
<b>Education</b>								
Non-literate	3.1	77.3	17.8	2.2	12.5	1.3	24.0	1,851
0-9@ years	4.3	81.7	30.9	5.1	21.6	1.4	21.8	3,535
10 years and above	7.0	89.4	59.4	16.5	50.1	1.8	16.1	4,776
<b>Religion</b>								
Hindu	5.6	86.1	45.0	11.2	36.7	1.7	20.8	3,997
Muslim	9.1	82.1	29.1	8.0	19.5	2.6	19.1	80
Christian	5.4	74.2	23.7	7.9	25.1	1.2	21.4	132
Sikh	5.1	83.7	40.4	9.1	31.4	1.5	18.7	5,926
Other	(6.1)	(97.0)	(54.5)	(21.2)	(45.5)	(0.0)	(6.1)	30
<b>Caste/tribe<sup>#</sup></b>								
Scheduled caste	4.3	83.7	31.8	7.0	24.3	1.4	22.4	2,586
Scheduled tribe	8.8	68.1	33.7	7.5	22.4	0.5	35.7	112
Other backward class	4.7	83.8	40.6	9.0	31.0	1.4	18.7	1,842
Other	5.9	85.5	47.2	11.6	38.4	1.7	18.2	5,597
<b>Standard of living index</b>								
Low	3.6	75.6	13.8	3.8	12.6	0.8	21.4	332
Medium	4.4	79.6	29.8	5.8	21.6	1.6	24.4	3,299
High	5.9	87.4	49.5	12.3	40.3	1.6	17.0	6,533
Total	5.3	84.5	41.9	9.9	33.3	1.6	19.5	10,166

Note: Total includes 7 cases missing information on education are not shown separately. @ Literate women with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases.

This proportion is relatively high among rural women, non-literate women, Hindu and Christian women, women from scheduled tribes and women with a medium standard of living. Twenty one percent of the rural women do not know about the mode of transmission of HIV/AIDS compared to 18 percent of urban women.

Among women who reported different ways of transmission of HIV/AIDS, a large proportion (85 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 (42 percent), transfusion of infected blood (33 percent), mother to child, if pregnancy occurs during a stage of HIV (10 percent); only 5 percent of the women mentioned that homosexual intercourse could also be a mode of transmission. Only two percent stated that there were other ways of transmission of HIV/AIDS.

<b>Table 8.13 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF HIV/AIDS AMONG MEN</b>								
Percentage of husbands of currently married women who have heard of HIV/AIDS, knowledge of mode of transmission by selected background characteristics, Punjab, 2002-04								
Background characteristic	Percentage by knowledge of mode of transmission						Do not know	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		
<b>Age</b>								
<25	5.0	93.0	38.6	8.4	24.5	1.4	4.5	671
25-34	4.1	93.1	43.5	7.7	29.6	2.4	5.2	3,103
35-44	5.8	93.5	38.7	7.4	28.7	2.9	4.5	2,883
45+	5.7	93.2	38.6	8.0	26.4	2.3	5.3	1,592
<b>Residence</b>								
Rural	4.7	92.5	36.2	6.0	24.1	2.6	5.2	5,453
Urban	5.8	94.7	48.8	11.1	36.2	2.1	4.4	2,795
<b>Education</b>								
Non-literate	2.5	89.1	10.7	1.1	6.0	2.9	9.3	1,629
0-9@ years	4.8	92.3	28.9	3.6	17.4	2.4	5.7	2,885
10 years and above	6.5	95.8	62.5	13.8	46.3	2.3	2.4	3,731
<b>Religion</b>								
Hindu	5.7	93.2	43.0	8.7	30.4	2.3	5.4	3,025
Muslim	9.2	94.5	25.6	11.2	18.2	2.6	5.5	89
Christian	3.9	83.2	25.2	5.0	12.8	3.0	14.0	136
Sikh	4.7	93.5	39.6	7.1	27.4	2.5	4.4	4,972
Other	(3.6)	(96.4)	(57.1)	(14.3)	(46.4)	(0.0)	(3.6)	27
<b>Caste/tribe#</b>								
Scheduled caste	3.6	93.2	28.3	4.2	18.4	2.7	5.5	2,564
Scheduled tribe	12.6	91.0	27.7	10.8	23.9	3.0	9.4	104
Other backward class	4.5	92.5	35.8	6.2	24.2	2.2	5.7	1,502
Other	5.9	93.8	50.2	10.4	36.2	2.4	4.0	4,051
<b>Standard of living index</b>								
Low	1.6	91.2	13.7	1.4	6.8	3.0	7.6	523
Medium	4.5	91.2	26.0	3.9	16.5	2.4	6.6	3,172
High	5.9	94.9	53.6	11.1	38.8	2.4	3.4	4,554
Total	5.1	93.3	40.5	7.7	28.2	2.5	4.9	8,248

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

Table 8.13 presents the knowledge about mode of transmission of HIV/AIDS among men. Five 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 rural men, non-literate men, Christian men, scheduled tribe, and men from households with a low standard of living. Among who reported ways of transmission of HIV/AIDS, 93 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 (41 percent), transfusion of infected blood (28 percent), mother to child, if pregnancy occurs during a stage of HIV (8 percent) and only 5 percent of men mentioned that homosexual intercourse could also be a mode of transmission of HIV/AIDS. Only three 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, about 12 percent of them did not know how to avoid becoming infected by HIV/AIDS. This percentage is higher among rural women than among urban women. The percentage of women who did not know of any way to avoid infection decreases with increasing levels of education and household standard of living. Twenty percent of non-literate women reported that they did not know of any way to avoid infection as compared to 7 percent of women who had completed ten or more years of schooling. Similarly, 21 percent of women with low a standard of living stated that they did not know of any way to avoid infection as compared to 10 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 Christian women and scheduled tribe women.

Among women who mentioned ways to avoid HIV/AIDS, most of the women (83 percent) said, “sex with only one partner is the way to avoid it”. Other ways to prevent HIV/AIDS mentioned by women were sterilizing needles and syringe before injecting’ (40 percent), ‘checking blood prior to transfusion’ (35 percent), ‘using a condom correctly during each sexual intercourse’ (27 percent) and 9 percent of the women reported that the pregnancy should be avoided if couples were infected by HIV/AIDS. All the specific ways to avoid becoming infected by HIV/AIDS reported by women are proportionally higher in urban areas, among Hindu 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, 5 percent of them did not know of any method to avoid infection, compared to 12 percent women in the state.

In Punjab a higher proportion of men reported that ‘sex with only one partner’ is the way to avoid HIV/AIDS, most of the men (90 percent) also reported the same, and this was the most commonly reported way to avoid HIV/AIDS in all the groups.

<b>Table 8.14 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG WOMEN</b>								
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, Punjab, 2002-04								
Background characteristic	Percentage reported HIV/AIDS can be avoided by:						Do not know to avoid HIV/AIDS	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		
<b>Age</b>								
15-19	80.9	18.9	25.9	30.1	5.2	1.9	15.1	272
20-24	82.8	28.5	36.2	41.2	9.4	1.1	11.7	1,870
25-29	86.1	31.5	40.3	44.2	10.5	1.6	9.4	2,319
30-34	82.8	26.3	35.3	41.1	7.6	2.2	12.9	2,089
35-39	80.4	24.2	33.7	37.2	6.6	1.7	14.9	1,871
40-44	81.7	25.4	31.1	38.3	8.4	3.0	12.6	1,744
<b>Residence</b>								
Rural	80.9	23.6	30.0	35.4	6.8	1.9	14.2	6,268
Urban	86.1	32.8	43.9	48.3	11.2	1.9	9.2	3,898
<b>Education</b>								
Non-literate	77.2	10.3	13.3	17.2	1.8	2.4	19.5	1,851
0-9@ years	79.4	20.1	23.4	29.2	4.6	1.4	15.6	3,535
10 years and above	87.6	38.9	52.7	57.5	13.9	2.1	7.0	4,776
<b>Religion</b>								
Hindu	83.8	30.5	38.6	43.8	9.6	1.9	11.4	3,997
Muslim	81.6	18.1	21.1	29.8	6.4	2.2	16.3	80
Christian	73.1	18.2	27.3	27.4	5.0	2.1	21.9	132
Sikh	82.5	25.2	33.4	38.4	7.8	1.9	12.7	5,926
Other	(97.0)	(39.4)	(51.5)	(57.6)	(18.2)	(0.0)	(0.0)	30
<b>Caste/tribe<sup>#</sup></b>								
Scheduled caste	82.4	21.8	25.8	30.4	5.6	1.6	13.6	2,586
Scheduled tribe	69.7	13.9	24.9	29.2	7.2	3.5	17.7	112
Other backward class	81.9	26.0	33.7	38.3	7.3	1.7	13.9	1,842
Other	83.7	30.3	40.4	45.8	10.2	2.1	11.0	5,597
<b>Standard of living index</b>								
Low	75.1	12.7	13.1	14.0	2.6	3.6	21.2	332
Medium	78.1	18.5	22.9	28.0	4.9	1.7	16.8	3,299
High	85.7	32.2	42.8	47.9	10.6	1.9	9.5	6,533
<b>Total</b>	<b>82.9</b>	<b>27.1</b>	<b>35.4</b>	<b>40.3</b>	<b>8.5</b>	<b>1.9</b>	<b>12.3</b>	<b>10,166</b>

Note: Total includes 7 cases missing information on education are not shown separately.@ Literate women with no year of schooling are also included.

Other ways to prevent by HIV/AIDS mentioned by men are ‘sterilizing needles and syringe before injecting’ (37 percent), ‘using a condom correctly during each sexual intercourse’ (36 percent) and ‘checking blood prior to transfusion’ (30 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. Hindu men were more likely to report using a condom correctly during each sexual intercourse.



**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, Punjab, 2002-04

Background characteristic	Percentage reported HIV/AIDS can be avoided by:						Do not know to avoid HIV/AIDS	Number of men
	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		
<b>Age</b>								
<25	90.8	40.9	29.0	35.4	4.9	1.9	4.6	671
25-34	88.8	38.8	31.4	40.2	4.8	5.2	5.8	3,103
35-44	91.6	35.1	30.4	35.8	4.8	4.8	4.8	2,883
45+	89.9	27.9	28.4	34.0	4.9	6.5	5.9	1,592
<b>Residence</b>								
Rural	89.7	32.5	25.9	33.6	3.8	5.1	5.9	5,453
Urban	91.1	41.5	38.8	43.9	6.8	4.9	4.2	2,795
<b>Education</b>								
Non-literate	86.4	14.6	5.6	9.5	0.6	5.2	10.0	1,629
0-9@ years	89.6	27.1	18.9	26.3	2.2	5.5	6.9	2,885
10 years and above	92.2	51.2	49.8	57.6	8.7	4.6	2.2	3,731
<b>Religion</b>								
Hindu	89.6	38.3	32.3	38.4	5.7	4.7	5.9	3,025
Muslim	84.5	32.0	17.6	23.4	6.1	3.6	2.2	89
Christian	78.3	26.5	16.2	27.9	3.8	0.9	17.2	136
Sikh	90.9	34.2	29.6	36.8	4.3	5.4	4.8	4,972
Other	(92.9)	(50.3)	(42.9)	(50.0)	(14.3)	(0.0)	(3.6)	27
<b>Caste/tribe#</b>								
Scheduled caste	90.6	28.6	19.7	26.2	2.7	4.5	6.3	2,564
Scheduled tribe	81.7	34.3	28.8	27.7	4.4	8.6	12.0	104
Other backward class	89.3	31.5	25.7	32.5	4.3	4.7	5.6	1,502
Other	90.5	41.5	38.7	46.0	6.4	5.5	4.4	4,051
<b>Standard of living index</b>								
Low	87.4	13.4	7.7	12.6	0.9	3.1	9.3	523
Medium	88.1	26.7	17.6	24.2	2.8	5.7	7.5	3,172
High	91.9	44.3	41.7	48.9	6.7	4.8	3.4	4,554
Total	90.2	35.6	30.3	37.1	4.8	5.0	5.4	8,248

Note: Total includes 4 case missing information on education are not shown separately. @ Literate men with no year of schooling are also included. ( ) Based on less than 50 cases. # Total figure may not add to N due to do not know and missing cases.

### 8.5.4 Misconception about HIV/AIDS

People generally have misconceptions about the 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 by

women in all the groups and this percentage is higher among rural areas (30 percent) than in urban areas (23 percent). Non-literate women, women from households with a low standard of living, Christian women and women from scheduled caste mentioned this method of transmission more often. Other misconceptions about the spreading of HIV/AIDS were 'stepping on urine/stool' (21 percent), 'sharing eating utensils' (25 percent), 'kissing' (25 percent), 'sharing clothes' (23 percent), 'hugging' and 'shaking hands' (20 percent each). The percentage of all these misconceptions is also higher among women who belong to scheduled tribes, scheduled castes, among Muslim women, non-literate women and women with a low standard of living.

<b>Table 8.16 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG WOMEN</b>								
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, Punjab, 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	
<b>Residence</b>								
Rural	21.5	21.8	26.6	25.5	28.2	23.2	30.1	6,268
Urban	17.1	16.8	22.1	20.0	21.0	16.9	22.7	3,898
<b>Education</b>								
Non-literate	27.1	27.7	33.4	33.5	35.8	29.4	34.3	1,851
0-9@ years	22.1	23.0	27.3	26.9	29.1	23.9	30.1	3,535
10 years and above	15.3	14.7	19.7	16.9	18.6	15.1	22.5	4,776
<b>Religion</b>								
Hindu	17.1	16.9	22.1	19.7	21.5	17.2	23.7	3,997
Muslim	23.4	24.6	32.5	29.2	36.5	30.0	34.5	80
Christian	24.5	22.8	27.3	26.2	29.4	31.0	35.7	132
Sikh	21.5	21.9	26.6	25.8	27.8	22.9	29.4	5,926
Other	(15.2)	(9.1)	(18.2)	(9.1)	(12.1)	(9.1)	(21.2)	30
<b>Caste/tribe<sup>#</sup></b>								
Scheduled caste	19.8	20.7	25.4	24.9	27.3	22.3	28.7	2,586
Scheduled tribe	18.2	21.9	24.8	26.1	28.4	25.6	24.7	112
Other backward class	18.0	18.0	23.1	20.3	22.6	18.6	25.3	1,842
Other	20.4	20.1	25.1	23.6	25.4	20.7	27.3	5,597
<b>Standard of living index</b>								
Low	27.0	28.3	37.7	37.9	38.5	34.8	38.4	332
Medium	22.5	23.4	28.1	27.0	29.4	24.6	30.4	3,299
High	18.1	17.8	22.6	20.9	22.7	18.2	25.1	6,533
Total	19.8	19.9	24.8	23.4	25.4	20.8	27.3	10,166
Note: Total includes 3 cases missing information on education are not shown separately								
@ Literate women with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases.								

Table 8.17 presents the percentage of men with misconceptions about the spreading of HIV/AIDS through specific ways by selected background characteristics. Again, just like the women, men in all the groups reported that HIV/AIDS is transmitted through insect bites, mosquitoes, through flea or bedbugs. Forty three percent of the men in Punjab felt so. The percentage who reported that HIV/AIDS could be transmitted through the biting by mosquitoes or flees or bedbugs was higher among rural men (45 percent) than among urban men (38 percent). Non-literate men, men from households with a low standard of living, Muslim men, and scheduled caste 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’ (35 percent), ‘kissing’ (34 percent each), ‘stepping on urine/stool’ (25 percent) ‘sharing clothes’ (31 percent), ‘hugging’ (24 percent), and ‘shaking hands’ (21 percent). All the misconceptions reported by men are relatively higher than those reported by women.

<b>Table 8.17 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG MEN</b>								
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, Punjab, 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	
<b>Residence</b>								
Rural	23.1	26.6	37.4	33.9	37.7	28.5	45.2	5,453
Urban	17.7	19.5	28.3	25.3	28.7	19.2	37.6	2,795
<b>Education</b>								
Non-literate	32.9	39.9	50.4	49.1	53.1	39.9	50.2	1,629
0-9@ years	25.9	28.5	40.6	37.8	42.4	29.9	47.8	2,885
10 years and above	12.7	13.9	22.4	17.8	20.7	15.5	35.4	3,731
<b>Religion</b>								
Hindu	19.3	21.1	30.7	27.3	30.5	20.8	37.2	3,025
Muslim	41.0	47.4	49.4	49.3	50.5	45.2	53.3	89
Christian	29.7	33.4	53.2	53.8	47.2	38.3	51.8	136
Sikh	22.0	25.5	35.8	32.4	36.7	27.5	45.7	4,972
Other	(7.1)	(7.1)	(7.1)	(7.1)	(7.1)	(7.1)	(14.3)	27
<b>Caste/tribe<sup>#</sup></b>								
Scheduled caste	24.7	29.6	40.7	37.5	41.6	30.0	47.8	2,564
Scheduled tribe	22.2	28.1	40.0	41.6	49.9	34.7	43.8	104
Other backward class	23.7	26.3	35.8	34.2	37.4	27.5	45.0	1,502
Other	18.2	19.9	29.5	25.3	28.8	21.4	38.7	4,051
<b>Standard of living index</b>								
Low	34.0	39.7	53.4	50.5	54.4	39.9	53.2	523
Medium	26.7	31.1	42.2	39.7	44.2	31.7	47.2	3,172
High	16.0	17.6	26.6	22.7	25.7	19.2	38.3	4,554
Total	21.3	24.2	34.3	31.0	34.7	25.3	42.7	8,248

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

### 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 40 percent women and 43 percent men have the notion that HIV/AIDS is curable, whereas 38 percent women and 41 percent men replied that the disease is not curable. Twenty two percent women and 16 percent men do not have any idea regarding the curability of the disease. It can be safely asserted from the figures that women of urban area having high level of education, belonging to Christian religion and Other castes 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, Punjab, 2002-04

Background characteristic	Percent distribution of women			Number of women	Percent distribution of men			Number of men
	Yes	No	Do not know		Yes	No	Do not know	
<b>Residence</b>								
Rural	43.5	31.2	25.3	3,795	49.1	35.0	15.9	4,521
Urban	36.5	43.8	19.7	4,045	34.5	49.7	15.9	3,085
<b>Education</b>								
Non-literate	37.7	28.3	34.0	1,415	48.3	30.7	20.9	1,225
0-9@ years	43.8	32.5	23.7	4,168	47.0	35.6	17.4	3,948
10 years and above	34.1	53.1	12.8	2,252	34.4	54.8	10.8	2,429
<b>Religion</b>								
Hindu	40.6	38.0	21.4	6,453	43.1	41.6	15.4	6,097
Muslim	37.1	34.8	28.1	1,237	44.2	37.5	18.4	1,393
Christian	24.1	47.9	28.1	53	(38.3)	(44.7)	(17.0)	42
Other	36.2	47.2	16.5	98	34.8	58.4	6.8	73
<b>Caste/tribe#</b>								
Scheduled caste	41.5	32.7	25.9	1,733	46.6	35.0	18.3	1,908
Scheduled tribe	46.7	36.4	16.9	252	57.2	31.4	11.4	300
Other backward class	40.8	40.4	18.8	434	40.6	44.2	15.2	488
Other	39.1	39.0	21.9	5,235	41.4	43.5	15.0	4,680
<b>Standard of living index</b>								
Low	43.6	27.2	29.2	2,123	49.4	32.6	18.0	2,987
Medium	41.2	35.7	23.1	3,259	43.7	41.2	15.1	2,918
High	35.0	49.3	15.6	2,457	31.5	55.1	13.5	1,701
<b>Total</b>	<b>39.9</b>	<b>37.7</b>	<b>22.4</b>	<b>7,840</b>	<b>43.2</b>	<b>40.9</b>	<b>15.9</b>	<b>7,606</b>

Note: Total includes 7 cases of missing information on education of women and 4 men and 186 and 230 Cases about do not know in caste category are not shown separately of women and men respectively. #Total figure may not add to N due to do not know and missing cases @ Literate persons with no year of schooling are also included. ( ) Based on less than 50 unweighted cases.

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

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

According to DLHS, 72 percent and 65 percent of women were aware of RTI/STI and HIV/AIDS respectively and the corresponding figures for husbands of eligible women are 51 and 89 percent respectively. The awareness of HIV/AIDS among men is higher than that among women by 25 percentage points and the awareness of RTI/STI among women is higher than that among men by 20 percentage points.

In all of the districts women are more aware of RTI/STI than men except the districts of Firozpur, Gurdaspur and Nawanshahr. The highest level of awareness about RTI/STI among women was reported in Fatehgarh Sahib (96 percent), followed by Jalandhar (95 percent) to the lowest in Firozpur (21 percent). Among men the highest level of awareness of RTI/STI was reported in Rupnagar (81 percent) and to the lowest in Firozpur (22 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 Punjab is also presented Table 8.19. Among women the awareness about HIV/AIDS ranges from the highest of 85 percent in Jalandhar to the lowest of 39 percent in Firozpur. With the exception of Firozpur, Mansa and Sangrur in every districts half of the women reported awareness of HIV/AIDS. A high level of awareness of HIV/AIDS among men exceeding 95 percent was reported in Fatehgarh Sahib, Jalandhar, Patiala and Rupnagar.

<b>Table 8.19 AWARENESS OF RTI/STI AND HIV/AIDS BY DISTRICT</b>				
Percentage of currently married women and their husbands aware of RTI/STI and HIV/AIDS by district, Punjab, 2002-04				
District	Percentage of women		Percentage of men	
	Aware of RTI/STI	Aware of HIV/AIDS	Aware of RTI/STI	Aware of HIV/AIDS
Amritsar	85.0	64.4	67.5	93.3
Bathinda	73.3	64.0	36.7	91.1
Faridkot	75.7	58.2	59.4	87.7
Fatehgarh Sahib	95.5	80.4	53.7	96.9
Firozpur	20.6	39.3	21.5	71.1
Gurdaspur	40.9	58.1	53.6	83.4
Hoshiarpur	82.7	80.4	49.6	93.9
Jalandhar	95.0	85.1	67.7	96.4
Kapurthala	59.8	73.5	39.5	90.1
Ludhiana	65.8	72.0	39.5	89.4
Mansa	84.9	47.3	53.1	85.4
Moga	77.8	70.2	42.3	90.4
Muktsar	87.6	61.0	51.3	87.0
Nawanshahr	52.7	76.0	53.5	85.7
Patiala	91.3	69.4	40.8	95.5
Rupnagar	85.3	77.7	81.1	96.6
Sangrur	69.7	45.6	66.8	86.4
Punjab	71.7	64.8	51.4	89.2

## 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 programme indicators is design as

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

where the cell (h, j, i) stands for i<sup>th</sup> observational unit in j<sup>th</sup> primary sampling unit (PSU) in h<sup>th</sup> stratum, basically rural-urban areas of a district are taken as strata. W<sub>hij</sub> is the sampling weight of (h, j, i)<sup>th</sup> 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

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

$$\text{var} ( y ) = \sum_h \frac{n_h}{n_h - 1} [ \sum_j \sum_i (w_{hji} y_{hji})^2 - \frac{(\sum_j \sum_i w_{hji} y_{hji})^2}{n_h} ] \dots\dots\dots(3)$$

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

and n<sub>h</sub> is the number of sampled PSUs representing rural or urban areas of state and district..

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

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

Sampling errors, Punjab, 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
<b>Contraceptive Prevalence Rate (Currently Married Women age 15-44)</b>								
Total	0.682	0.004	15,696	15,697	1.482	2.4	0.674	0.691
Rural	0.664	0.005	10,820	10,820	1.448	2.7	0.653	0.674
Urban	0.724	0.008	4,876	4,877	1.560	5.1	0.709	0.739
<b>Unmet Need (Currently Married Women age 15-44)</b>								
Total	0.104	0.003	15,696	15,697	1.398	2.8	0.098	0.109
Rural	0.112	0.004	10,820	10,820	1.387	3.2	0.105	0.119
Urban	0.086	0.005	4,876	4,877	1.426	5.6	0.077	0.096
<b>Received Any Antenatal Check up (last live/still birth of past 3 years)</b>								
Total	0.895	0.006	4,558	4,674	1.526	0.6	0.884	0.905
Rural	0.874	0.007	3,218	3,280	1.487	0.8	0.860	0.888
Urban	0.942	0.008	1,340	1,394	1.697	0.9	0.926	0.958
<b>Received 3+ Antenatal Check up (last live/still birth of past 3 years)</b>								
Total	0.645	0.009	4,558	4,675	1.480	1.3	0.628	0.661
Rural	0.601	0.010	3,218	3,280	1.426	1.7	0.581	0.621
Urban	0.748	0.015	1,340	1,395	1.663	2.0	0.718	0.777
<b>Institutional Delivery (last live/still birth of past 3 years)</b>								
Total	0.489	0.009	4,558	4,674	1.465	1.8	0.472	0.506
Rural	0.430	0.010	3,218	3,280	1.409	2.4	0.410	0.450
Urban	0.628	0.016	1,340	1,394	1.566	2.6	0.596	0.659
<b>Safe Delivery (last live/still birth of past 3 years)</b>								
Total	0.643	0.009	4,558	4,674	1.467	1.3	0.626	0.659
Rural	0.588	0.010	3,218	3,279	1.428	1.8	0.567	0.608
Urban	0.772	0.014	1,340	1,395	1.554	1.8	0.744	0.799
<b>Received BCG Vaccination (last and last but one living children, age 12-23 months)</b>								
Total	0.886	0.009	1,557	1,563	1.342	1.1	0.867	0.904
Rural	0.878	0.011	1,108	1,098	1.369	1.3	0.856	0.901
Urban	0.903	0.016	449	465	1.262	1.7	0.872	0.934
<b>Received Measles (last and last but one living children, age 12-23 months)</b>								
Total	0.768	0.012	1,557	1,563	1.357	1.6	0.743	0.792
Rural	0.754	0.015	1,108	1,098	1.350	2.0	0.724	0.783
Urban	0.801	0.022	449	465	1.365	2.8	0.758	0.844
<b>Birth order 3+ (birth in last three years)</b>								
Total	0.324	0.008	5,145	5,278	1.482	2.4	0.309	0.340
Rural	0.341	0.009	3,682	3,761	1.448	2.7	0.323	0.359
Urban	0.282	0.014	1,463	1,517	1.560	5.1	0.254	0.311



Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Birth order 3+ (birth in last three years)</b>							
Amritsar	0.377	0.028	315	304	7.4	0.322	0.433
Bathinda	0.299	0.029	263	258	9.7	0.242	0.355
Faridkot	0.291	0.027	310	310	9.3	0.238	0.343
Fatehgarh Sahib	0.292	0.030	275	286	10.3	0.234	0.350
Firozapur	0.367	0.027	326	322	7.4	0.314	0.421
Gurudashpur	0.348	0.028	333	332	8.0	0.293	0.404
Hoshiarpur	0.358	0.032	278	283	8.9	0.296	0.419
Jalandhar	0.284	0.028	275	279	9.9	0.229	0.340
Kapurthala	0.332	0.029	287	288	8.7	0.275	0.389
Ludhiana	0.312	0.030	265	266	9.6	0.254	0.370
Mansa	0.315	0.026	360	372	8.3	0.263	0.367
Moda	0.310	0.028	301	311	9.0	0.255	0.364
Muktsar	0.339	0.028	302	309	8.3	0.283	0.394
Nawansar	0.245	0.028	255	253	11.4	0.190	0.301
Patiala	0.313	0.027	309	316	8.6	0.260	0.367
Rupnagar	0.229	0.029	313	321	12.7	0.173	0.286
Sangrur	0.309	0.024	378	375	7.8	0.262	0.356

Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Unmet Need (Currently Married Women age 15-44)</b>							
Amritsar	0.084	0.010	815	815	11.9	0.065	0.104
Bathinda	0.080	0.009	954	954	11.3	0.063	0.097
Faridkot	0.115	0.011	901	901	9.6	0.094	0.137
Fatehgarh Sahib	0.073	0.008	1,059	1,059	11.0	0.056	0.089
Firozapur	0.088	0.010	806	806	11.4	0.068	0.108
Gurudashpur	0.141	0.012	893	893	8.5	0.117	0.165
Hoshiarpur	0.143	0.013	876	876	9.1	0.118	0.169
Jalandhar	0.128	0.012	864	864	9.4	0.105	0.151
Kapurthala	0.143	0.013	851	851	9.1	0.118	0.168
Ludhiana	0.079	0.009	934	934	11.4	0.061	0.097
Mansa	0.071	0.008	1,080	1,080	11.3	0.054	0.087
Moda	0.126	0.012	853	853	9.5	0.102	0.150
Muktsar	0.078	0.009	1,010	1,010	11.5	0.061	0.096
Nawansar	0.172	0.014	854	854	8.1	0.145	0.199
Patiala	0.081	0.009	997	997	11.1	0.063	0.099
Rupnagar	0.108	0.012	901	900	11.1	0.084	0.132
Sangrur	0.107	0.010	1048	1048	9.3	0.088	0.126

Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Received Any Antenatal Check up (last live/still birth of past 3 years)</b>							
Amritsar	0.925	0.017	269	264	1.8	0.893	0.958
Bathinda	0.931	0.016	249	245	1.7	0.898	0.963
Faridkot	0.891	0.019	270	269	2.1	0.853	0.929
Fatehgarh Sahib	0.980	0.012	250	257	1.2	0.956	1.003
Firozapur	0.633	0.029	285	284	4.6	0.575	0.691
Gurudashpur	0.781	0.027	284	83	3.5	0.728	0.834
Hoshiarpur	0.991	0.006	258	260	0.6	0.978	1.003
Jalandhar	0.970	0.011	240	243	1.1	0.947	0.992
Kapurthala	0.967	0.011	256	258	1.1	0.945	0.989
Ludhiana	0.959	0.013	251	251	1.4	0.933	0.984
Mansa	0.903	0.018	306	311	2.0	0.867	0.939
Moda	0.843	0.023	250	255	2.7	0.797	0.889
Muktsar	0.921	0.017	267	275	1.8	0.889	0.954
Nawansar	0.964	0.012	228	225	1.2	0.941	0.987
Patiala	0.953	0.013	267	272	1.4	0.926	0.979
Rupnagar	0.979	0.015	289	297	1.5	0.95	1.008
Sangrur	0.872	0.019	339	336	2.2	0.835	0.909

Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Received 3+ Antenatal Check up (last live/still birth of past 3 years)</b>							
Amritsar	0.625	0.031	269	264	5.0	0.565	0.684
Bathinda	0.596	0.032	249	244	5.4	0.534	0.658
Faridkot	0.676	0.029	270	269	4.3	0.619	0.733
Fatehgarh Sahib	0.816	0.027	250	256	3.3	0.764	0.868
Firozapur	0.418	0.030	285	284	7.2	0.359	0.477
Gurudashpur	0.512	0.032	284	283	6.3	0.448	0.575
Hoshiarpur	0.707	0.031	258	260	4.4	0.645	0.769
Jalandhar	0.834	0.025	240	242	3.0	0.786	0.883
Kapurthala	0.684	0.031	256	258	4.5	0.625	0.744
Ludhiana	0.733	0.029	251	250	4.0	0.677	0.789
Mansa	0.587	0.029	306	312	4.9	0.529	0.644
Moda	0.670	0.031	250	256	4.6	0.610	0.730
Muktsar	0.655	0.030	267	276	4.6	0.597	0.714
Nawansar	0.741	0.030	228	225	4.0	0.683	0.799
Patiala	0.697	0.029	267	271	4.2	0.640	0.754
Rupnagar	0.764	0.030	289	297	3.9	0.704	0.823
Sangrur	0.595	0.027	339	335	4.5	0.542	0.649

Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Institutional Delivery (last live/still birth of past 3 years)</b>							
Amritsar	0.433	0.031	269	262	7.2	0.371	0.494
Bathinda	0.490	0.032	249	245	6.5	0.427	0.554
Faridkot	0.520	0.031	270	269	6.0	0.459	0.581
Fatehgarh Sahib	0.624	0.033	250	256	5.3	0.560	0.689
Firozapur	0.387	0.030	285	284	7.8	0.329	0.446
Gurudashpur	0.400	0.032	284	283	8.0	0.337	0.463
Hoshiarpur	0.332	0.031	258	260	9.3	0.271	0.392
Jalandhar	0.619	0.032	240	242	5.2	0.556	0.682
Kapurthala	0.480	0.032	256	258	6.7	0.417	0.544
Ludhiana	0.591	0.032	251	252	5.4	0.529	0.654
Mansa	0.463	0.030	306	310	6.5	0.405	0.522
Moda	0.604	0.032	250	255	5.3	0.541	0.666
Muktsar	0.451	0.032	267	274	7.1	0.389	0.513
Nawansar	0.478	0.034	228	226	7.1	0.411	0.545
Patiala	0.578	0.031	267	271	5.4	0.517	0.640
Rupnagar	0.562	0.033	289	297	5.9	0.496	0.627
Sangrur	0.507	0.028	339	336	5.5	0.453	0.561

Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Safe Delivery (last live/still birth of past 3 years)</b>							
Amritsar	0.626	0.031	269	263	5.0	0.565	0.687
Bathinda	0.656	0.031	249	244	4.7	0.596	0.716
Faridkot	0.626	0.030	270	269	4.8	0.567	0.685
Fatehgarh Sahib	0.706	0.031	250	257	4.4	0.645	0.768
Firozapur	0.539	0.030	285	284	5.6	0.480	0.598
Gurudashpur	0.535	0.032	284	284	6.0	0.472	0.599
Hoshiarpur	0.619	0.033	258	260	5.3	0.555	0.684
Jalandhar	0.762	0.028	240	243	3.7	0.707	0.816
Kapurthala	0.653	0.031	256	257	4.7	0.593	0.713
Ludhiana	0.752	0.028	251	251	3.7	0.697	0.807
Mansa	0.575	0.030	306	310	5.2	0.517	0.633
Moda	0.729	0.029	250	255	4.0	0.672	0.785
Muktsar	0.632	0.031	267	275	4.9	0.572	0.691
Nawansar	0.693	0.031	228	225	4.5	0.632	0.754
Patiala	0.614	0.031	267	270	5.0	0.554	0.675
Rupnagar	0.699	0.030	289	297	4.3	0.641	0.757
Sangrur	0.652	0.026	339	336	4.0	0.601	0.704

Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Received BCG Vaccination (last and last but one living children, age 12-23 months)</b>							
Amritsar	0.890	0.033	76	76	3.7	0.825	0.956
Bathinda	0.893	0.036	75	75	4.0	0.822	0.964
Faridkot	0.809	0.042	91	92	5.2	0.727	0.891
Fatehgarh Sahib	0.958	0.029	77	80	3.0	0.902	1.015
Firozpur	0.753	0.048	80	80	6.4	0.659	0.847
Gurdaspur	0.907	0.030	93	90	3.3	0.848	0.966
Hoshiarpur	0.977	0.016	83	88	1.7	0.945	1.009
Jalandhar	0.936	0.030	69	70	3.2	0.876	0.995
Kapurthala	0.934	0.035	80	81	3.8	0.865	1.004
Ludhiana	0.936	0.029	71	72	3.1	0.880	0.993
Mansa	0.769	0.043	105	104	5.6	0.685	0.852
Moga	0.767	0.046	86	88	6.0	0.677	0.858
Muksar	0.711	0.043	108	110	6.1	0.626	0.796
Nawanshahr	0.989	0.011	77	76	1.1	0.966	1.011
Patiala	0.948	0.023	89	93	2.5	0.902	0.993
Rupnagar	0.988	0.012	87	81	1.2	0.965	1.011
Sangrur	0.846	0.036	101	101	4.3	0.775	0.917

Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Received Measles (last and last but one living children, age 12-23 months)</b>							
Amritsar	0.754	0.047	76	76	6.2	0.662	0.845
Bathinda	0.674	0.054	75	75	8.0	0.568	0.779
Faridkot	0.602	0.052	91	92	8.6	0.500	0.704
Fatehgarh Sahib	0.892	0.038	77	80	4.2	0.819	0.966
Firozpur	0.576	0.054	80	80	9.4	0.470	0.682
Gurdaspur	0.817	0.040	93	90	4.9	0.739	0.895
Hoshiarpur	0.931	0.028	83	88	3.0	0.876	0.986
Jalandhar	0.775	0.050	69	70	6.5	0.676	0.874
Kapurthala	0.842	0.046	80	81	5.5	0.751	0.933
Ludhiana	0.894	0.036	71	72	4.1	0.823	0.966
Mansa	0.575	0.048	105	104	8.4	0.481	0.670
Moga	0.667	0.051	86	88	7.7	0.566	0.767
Muksar	0.505	0.048	108	110	9.5	0.411	0.600
Nawanshahr	0.895	0.036	77	76	4.0	0.824	0.965
Patiala	0.818	0.040	89	93	4.9	0.739	0.896
Rupnagar	0.942	0.024	87	81	2.5	0.896	0.988
Sangrur	0.753	0.043	101	101	5.7	0.669	0.837

Sampling errors, Punjab, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Errors (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Birth order 3+ (birth in last three years)</b>							
Amritsar	0.377	0.028	315	304	7.4	0.322	0.433
Bathinda	0.299	0.029	263	258	9.7	0.242	0.355
Faridkot	0.291	0.027	310	310	9.3	0.238	0.343
Fatehgarh Sahib	0.292	0.030	275	286	10.3	0.234	0.350
Firozapur	0.367	0.027	326	322	7.4	0.314	0.421
Gurudashpur	0.348	0.028	333	332	8.0	0.293	0.404
Hoshiarpur	0.358	0.032	278	283	8.9	0.296	0.419
Jalandhar	0.284	0.028	275	279	9.9	0.229	0.340
Kapurthala	0.332	0.029	287	288	8.7	0.275	0.389
Ludhiana	0.312	0.030	265	266	9.6	0.254	0.370
Mansa	0.315	0.026	360	372	8.3	0.263	0.367
Moda	0.310	0.028	301	311	9.0	0.255	0.364
Muktsar	0.339	0.028	302	309	8.3	0.283	0.394
Nawansar	0.245	0.028	255	253	11.4	0.190	0.301
Patiala	0.313	0.027	309	316	8.6	0.260	0.367
Rupnagar	0.229	0.029	313	321	12.7	0.173	0.286
Sangrur	0.309	0.024	378	375	7.8	0.262	0.356

## **Appendix - B**

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