

DLHS -2

# Andhra Pradesh

## 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



Population Research Centre,  
Visakhapatnam – 530 003.

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## **PREFACE AND ACKNOWLEDGEMENT**

Government of India had launched the Reproductive and Child Health (RCH) program to ensure that couples have access to adequate information and services for reproductive health care. As a first step, family planning targets have been withdrawn and an effort is being made to provide a package of reproductive services at different levels of health care centres.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 services. 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 Andhra Pradesh and covered all the districts. The findings of selected indicators of reproductive and child health services from the state of Andhra Pradesh are presented in the report.

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

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

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

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## 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 Andhra Pradesh, Population Research Centre, Visakhapatnam was entrusted with the work of carrying out the survey. The survey for Phase-1 of the DLHS covering 12 districts of the state was conducted during August 2002 to January 2003. The survey for Phase-2 covering the remaining 11 districts of the state was carried out during April 2004 to September 2004. The focus of the survey was on: i) Coverage on ante-natal care (ANC) and immunization services, ii) Extent of safe deliveries, iii) Contraceptive prevalence rate and unmet need for family planning, iv) Awareness about RTI/STI and HIV/AIDS and v) Utilization of government health services and users' satisfaction. The salient findings of the survey are presented here.

For both the phases together, the data was collected from 22,999 households in Andhra Pradesh. From these households, 17,886 eligible women (usual residents or visitors who stayed in the sample households the night before the interview, currently married aged 15-44 years whose marriages were consummated) and 10,404 husbands of eligible women were interviewed.

Of the total households interviewed in Andhra Pradesh, nearly 33 percent were from urban areas. There were 86 percent Hindu households, 9 percent Muslim and 5 percent Christian households in the sample. Twenty-four percent of the households belonged to either scheduled castes or scheduled tribes. About 24 percent of the households lived in *Kachcha* houses and 37 percent are in *Semi-pacca* and 39 percent are in *pucca* houses. Nearly two-fifths of the households belonged to low economic status (39 percent in low SLI)

Fifty-nine percent of population aged seven and above are literate. Percent literate among females is 50, whereas it is 68 percent for males. Proportion of non-literate is much higher among the older cohort compared to the younger ones. Nearly 55 percent of eligible women in the state are non-literate, and 19 percent have completed 10 or more years of schooling. In Andhra Pradesh the levels 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, the same trend is seen in the case of non-literate husbands.

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 23 and 18 years respectively. Twenty-eight percent of boys and 39 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 Hyderabad, Rangareddi and Cuddapah more than one-fifth of boys got married below the legal minimum age at marriage. Except in Hyderabad, in all the districts 26 to 60 percent of the girls got married below the legal minimum age at marriage.

One-fourth of the households (25 percent) use cooking salt that is iodized at the recommended level of 15 parts per million or higher level of iodine content whereas 45 percent of households used salts that are not iodized at all. Lowest proportion of households (9 percent) in Hyderabad is using non-iodized salt whereas in Medak the highest proportion of households (67 percent) used non-iodized salt. While more than one-third of households in Hyderabad, Adilabad, Karimnagar and Visakhapatnam consume adequately iodized salt, only 10 percent of households in Mahabubnagar do so.

On an average, women on the verge of completion of reproductive period have given birth to 3.4 children. The completed fertility in different districts varies from the lowest of 3.0 children ever born per woman in Khammam, Nellore, Prakasam, Visakhapatnam and Warangal districts to the highest of 4.4 children in Kurnool district.

The share of births of order 3 and above in the total births that occurred three years prior to survey is 23 percent. In a majority of the districts, proportion of higher (3 and above) order births is high, ranging from the lowest of around 12 percent in East Godavari, to the highest of 35 percent in Kurnool district.

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 show that the ANC coverage in the state is high as around 95 percent of the women received at least one ante-natal care during pregnancy. About 4 percent of the women during their pregnancy were visited by health worker only at their residence for providing ANC. Forty-seven percent of the women visited private health facilities and 32 percent received ANC from government health facilities. The percent of women who got some kind of ANC during pregnancy range between 82 percent in Mahbubnagar to 99 percent in Cuddapah, Hyderabad, Karimnagar, Krishna, Nellore and Warangal districts. In 17 districts out of 23, 95 percent or more women got some antenatal care.

Though 95 percent of the women in Andhra Pradesh received ANC, only 89, 84 and 86 percent women had check-up of weight, blood pressure and abdomen respectively. Forty-eight percent women received Iron and Folic Acid (IFA) tablets and 88 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 only 44 percent of women.

Minimum three ANC and timing of first check-up is crucial for maternal and child care. In Andhra Pradesh nearly 67 percent of women got ANC in the first trimester and 88 percent had minimum three antenatal check-ups. The extent of ANC in first trimester varies from the minimum of 43 percent in Mahbubnagar to the maximum of 88 percent in Karimnagar district. In Mahbubnagar, Kurnool and Visakhapatnam, only around 76 percent of women had minimum three ANC, whereas in Hyderabad, Karimnagar and Medak districts 96 percent women had got minimum three ANC.

Nearly 61 percent of the total deliveries in Andhra Pradesh were conducted in the health institutions; 10 percentage points 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 institutions (22 percent of total deliveries). Twenty-one 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, 69 percent of the deliveries, slightly up from RCH Round I (60 percent), in the state were assisted by skilled personnel. The extent of institutional deliveries varies from the highest of 93 percent in Hyderabad to a low of 31 percent in Srikakulam and 32 percent in Kurnool districts. The percent of the institutional deliveries increases substantially with women's education and economic status.

In Andhra Pradesh, 21, 34 and 17 percent of the women experienced pregnancy, delivery and post-delivery complications respectively. About 73 percent of the women sought treatment for the pregnancy and 66 percent for the post-delivery complications. The women experiencing pregnancy complications varies from the lowest of 10 percent in Kurnool to the highest of 33 percent in East Godavari district. The incidence of all the three types of complications seems to be linked, in general, with each other. In the districts where the incidence of pregnancy complications is high, the incidence of delivery and post-delivery complications is also high.

In most of the districts and the state as a whole, the practice of breast-feeding is almost universal. However, the practice of initiation of breastfeeding within two hours of birth of the child is not common. In Andhra Pradesh, only 42 percent women started breastfeeding the child within two hours of birth and nearly 44 percent started after one day of birth. There is great deal of variation in the pattern of breastfeeding across the districts. In Nizamabad district only 18 percent of the women breastfed the child within two hours of birth. On the other hand, in Warangal district, the percentage is highest (62 percent).

In Andhra Pradesh 93, 79, 82 and 74 percent of the children received the BCG vaccine, three doses of DPT, three doses of Polio and measles vaccine respectively. There is 19 percentage points drop from BCG to measles. It means that large number of children that have contact with service providers are missed out of subsequent services. The complete schedule of immunization including BCG, three doses of DPT and Polio each and measles vaccines was received by 63 percent of the children, whereas 3 percent of the children did not receive a single vaccination under routine programme. About 38 percent of the children received supplementation of at least one dose of vitamin A and only 7 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 vaccines is the lowest in Mahbubnagar (22 percent) and highest in Karimnagar district (78 percent). In 7 districts (East Godavari, Hyderabad, Karimnagar, Khamman, Nalgonda, Nizamabad and Vizianagaram) more than 70 percent of the children received complete immunization.

In Andhra Pradesh, 50 percent of the women were aware of diarrhoea management and 35 percent were aware of Oral Rehydration Salt (ORS). During the two-week period prior to survey, children of 12 percent of the women suffered from diarrhoea. And 59 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 11 percent of the women reported awareness about danger signs of pneumonia. Nine percent of the women reported that their children suffered from cough, cold and difficulty in breathing in two-week period prior to survey and 81 percent sought treatment.

The knowledge of family planning methods is universal in all the districts of Andhra Pradesh, with over 99 percent women reporting knowledge of one method or the other. However, the knowledge of any spacing method is low (41 percent). The knowledge of any modern methods is also universal in all the districts, though the knowledge of all modern methods is only 18 percent. The proportion knowing all modern methods (male and female sterilization, IUD, oral pills and condom) varies from as low as 3 percent in Warangal to 29 percent in Guntur district.

In DLHS, knowledge about No-scalpel vasectomy has been asked to husbands of eligible women. About one-third of the husbands were aware of no-scalpel vasectomy in the state. The proportion of husbands knowing No-scalpel vasectomy varies from about 13 percent in Adilabad to 60 percent in Kurnool district.

The contraceptive prevalence rate (any methods) in the state is 63 percent, 4 percentage points up from RCH Round I, comprising of prevalence of about 62 percent of modern methods and 0.3 percent of traditional methods. Sixty-one percent of the couples adopted sterilization. The percent users of the two male methods - sterilization and condom is only 4 percent. There has been positive association between contraceptive use and economic development, while a negative association is observed with female education. The highest contraceptive prevalence is in Krishna (74 percent) followed by West Godavari (72 percent), Guntur (71 percent) and East Godavari (70 percent) and the lowest is in Nizamabad (51 percent).

In Andhra Pradesh, a total of 12 percent of women are found to have unmet need for family planning, with 6 percent for limiting and 6 percent for spacing. There are inter-district differences in the pattern of unmet need. The total unmet need varies from 7 percent in Khammam, Krishna and Nalgonda to 18 percent in Mahbubnagar and Rangareddi districts followed by Hyderabad (17 percent).

Only 13 percent of the women in the state reported that either ANM/LHV or health worker visited them at their residence at least once in the past three months. Nearly 88 percent of women who were visited by ANM felt that ANM had given them sufficient time to discuss health-related matters.

In 5 out of the 23 districts, less than 10 percent of the women reported the visit of ANM/LHV to their residence. In 7 districts (Adilabad, East Godavari, Guntur, Kurnool, Nalgonda, Visakhapatnam and West Godavari) 10-15 percent of the women reported visits of ANM/LHV and in the remaining 11 districts more than 15 percent of the women reported visit of ANM/LHV.

It has been observed that in three months period prior to survey, 25 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 the facility as excellent. On the other hand, nearly 54 percent of the women who did not visit the government health facility reported 'poor quality of services' and 'doctors/health workers do not examine properly' as reasons for their not visiting.

The district level variation in the utilization of the government health facilities ranges from 12 percent each in Cuddapah and Karimnagar to 35 percent in Hyderabad. A large percentage of women visited to private health facilities (74 percent), ranging from 62 percent in Ananthapur to 88 percent in Cuddapah district.

In Andhra Pradesh 25 and 76 percent of women are aware of RTI/STI and HIV/AIDS respectively. The corresponding levels of awareness among husbands of eligible women are 49 and 92 percent. The percent of women who are aware of RTI/STI and HIV/AIDS is lowest in Mahbubnagar and Warangal (12 percent each) and in Mahbubnagar (37 percent) respectively and is highest in Medak (41 percent) and in Krishna (94 percent) respectively. Similarly awareness levels of husbands of eligible women of RTI/STI and HIV/AIDS are lowest in Srikakulam (28 percent) and in Mahbubnagar (68 percent) respectively and are highest in East Godavari and Rangareddi (65 percent each) and in East Godavari, Guntur, Nellore, Prakasam and West Godavari (98 percent each) respectively. Out of 23, in 9 districts the awareness of HIV/AIDS is below state figure for women and in 8 districts for husbands of eligible women.

About 14 percent of women and 3 percent of husbands of eligible women in the state reported having at least one symptom of RTI/STI. In most of the districts the reported prevalence of RTI/STI among husbands was low. The prevalence of RTI/STI is lowest in Hyderabad (5 percent) for women and in Khammam (0.3 percent) and Medak (0.5 percent) for husbands and is highest in Medak (21 percent) for women and in Srikakulam (12 percent) for husbands. About 8 percent of women reported vaginal discharge with low in Warangal (4 percent) to highest in Medak (18 percent). Forty-six percent of women sought treatment for vaginal discharge problem and 41 percent of husbands with at least one symptom of RTI/STI sought treatment. It may be noted that in 11 out of 23 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 & immunization services
- Proportion of safe deliveries
- Contraceptive prevalence rates
- Unmet need for family planning
- Awareness about RTI/ STI and HIV/AIDS
- Utilization of government health services and users' satisfaction.

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

## **1.2 Survey Design**

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

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

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

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

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

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

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

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

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

#### **1.4 Questionnaires**

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

These modified questionnaires had been canvassed for 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 happened 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 collects 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, delivery and post-partum 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 staff and reasons for not visiting government health facilities by eligible woman.

*Section VI: Awareness about RTI/STI and HIV/AIDS:* In this section the information was collected about women's knowledge of RTI/STI, 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 on 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 was on weight of children age 0–71 months old and the blood samples to assess the haemoglobin levels of children age 0–71 months old, adolescent girls age 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 was 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, 12 districts were covered from August 2002 to January 2003 and remaining 11 districts were covered during Phase II from April 2004 to September 2004.

During Round II, a total of 22,999 households were covered. From these surveyed households, 17,886 currently married women (aged 15-44 years) and 10,404 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 weights for household, women and husband have been used and these weights 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

$$\begin{aligned} f_1^i &= \text{Probability of selection of } i^{\text{th}} \text{ PSU in a district} \\ &= \frac{(n_r * H_i)}{H} \end{aligned}$$

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.

$$\begin{aligned} f_2^i &= \text{Probability of selecting segment (s) from segmented PSU} \\ &\quad \text{(in case the } i^{\text{th}} \text{ selected PSU is segmented)} \\ &= \text{(Number of segments selected after segmentation of PSU) / (number of segment created in} \\ &\quad \text{a PSU)} \end{aligned}$$

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

$$\begin{aligned} f_3^i &= \text{probability of selecting a household from the total listed households of a PSU or in} \\ &\quad \text{segment(s) of a PSU} \\ &= \frac{28 * HR_i}{HL_i} \end{aligned}$$

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

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

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

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

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

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

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

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

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

the state,  $N_i^d$  is the census population in the  $i^{th}$  district and  $N_{sc}$  is the census population in the state.

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

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

## 1.8 Sample Implementation

Table 1.1 shows the period of fieldwork, number of households interviewed and households response rates. A total of 22,999 households are interviewed out of which, 15,393 were rural. The overall household response rate – the number of households interviewed per 100 occupied households – was 99. The household response rate was 98 percent or more in almost all the districts.

<b>Table 1.1 NUMBER OF HOUSEHOLDS INTERVIEWED</b>						
Month and year of fieldwork and number of households interviewed by district, Andhra Pradesh, 2002-04						
State/District	Month and year of field work		Number of households interviewed			Response rate
	From	To	Total	Rural	Urban	
<b>State</b>	-	-	22,999	15,393	7,606	98.6
<b>State-phase I</b>	08/2002	01/2003	-	-	-	-
<b>State-phase II</b>	04/2004	09/2004	-	-	-	-
Adilabad	10/2002	11/2002	1,024	719	305	99.7
Chittoor	10/2002	11/2002	1,005	701	304	99.3
Guntur	09/2002	10/2002	1,006	709	297	98.5
Hyderabad	11/2002	12/2002	887	0	887	93.4
Karimnagar	11/2002	12/2002	1,009	711	298	99.8
Kurnool	11/2002	12/2002	1,032	726	306	99.7
Mahbubnagar	11/2002	01/2003	953	683	270	99.2
Nellore	10/2002	10/2002	1,004	711	293	99.3
Srikakulam	10/2002	10/2002	1,015	893	122	98.9
Visakhapatnam	08/2002	09/2002	974	584	390	98.2
Warangal	10/2002	11/2002	1,044	728	316	99.4
West Godavari	09/2002	10/2002	1,009	711	298	98.5
Anantapur	06/2004	07/2004	1,039	732	307	99.2
Cuddapah	06/2004	06/2004	1,031	730	301	98.3
East Godavari	05/2004	05/2004	977	708	269	97.4
Khammam	08/2004	09/2004	1,021	730	291	99.6
Krishna	05/2004	06/2004	1,011	690	321	97.7
Medak	07/2004	08/2004	991	686	305	99.0
Nalgonda	08/2004	08/2004	1,048	733	315	99.6
Nizamabad	07/2004	08/2004	1,026	720	306	98.9
Prakasam	05/2004	06/2004	954	667	287	98.7
Rangareddi	06/2002	07/2004	959	429	530	97.9
Vizianagaram	04/2004	05/2004	980	692	288	96.9

Note: Table based on unweighted cases.

In the interviewed households, interviews were completed with 17,886 currently married women who are the usual members of the households or stayed night before the household interview and 10,404 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 82 and 50 respectively. The variation in the women's response rate by district was highest in Guntur (90 percent) and lowest in Prakasam district (71 percent). Similarly husbands' response rate was found to be highest in Nalgonda (65 percent) and lowest in Mahbubnagar district (36 percent).

**Table 1.2 NUMBER OF WOMEN AND HUSBANDS INTERVIEWED**

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

State/District	Number of women interviewed			Response rate	Number of husbands interviewed			Response rate
	Total	Rural	Urban		Total	Rural	Urban	
<b>State</b>	<b>17,886</b>	<b>11,857</b>	<b>6,029</b>	<b>81.6</b>	<b>10,404</b>	<b>7,048</b>	<b>3,356</b>	<b>50.4</b>
Adilabad	831	570	261	86.2	403	287	116	44.4
Chittoor	823	556	267	83.1	355	240	115	37.5
Guntur	858	605	253	89.6	544	360	184	60.0
Hyderabad	704	0	704	80.4	333	0	333	39.4
Karimnagar	772	521	251	86.4	376	245	131	45.3
Kurnool	859	614	245	83.2	365	261	104	37.3
Mahbubnagar	714	498	216	73.9	325	228	97	36.3
Nellore	800	575	225	84.2	365	262	103	40.4
Srikakulam	743	648	95	79.7	471	395	76	53.8
Visakhapatnam	731	416	315	81.8	459	257	202	55.8
Warangal	811	552	259	84.0	524	385	139	56.2
West Godavari	772	544	228	84.3	419	306	113	49.3
Anantapur	836	594	242	80.6	567	412	155	58.9
Cuddapah	850	587	263	81.0	522	378	144	53.6
East Godavari	728	528	200	77.5	500	363	137	58.4
Khammam	775	561	214	84.8	516	370	146	60.0
Krishna	800	556	244	82.5	537	377	160	59.9
Medak	792	552	240	78.8	491	361	130	51.2
Nalgonda	800	555	245	87.2	567	402	165	65.1
Nizamabad	853	585	268	86.2	525	367	158	55.7
Prakasam	644	462	182	71.4	415	307	108	48.5
Rangareddi	704	309	395	73.1	406	184	222	44.2
Vizianagaram	686	469	217	77.7	419	301	118	49.9

Note: Table based on unweighted cases.

## 1.9 Basic Demographic Profile of the State

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

The state of Andhra Pradesh, located in the southern part of the country with 76 million persons in 2001, is the fifth largest state in India in terms of population. The state consisted of 23 districts distributed in three regions: Coastal Andhra comprising 9 districts viz., Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Prakasam and Nellore; Telangana, comprising 10 districts namely Adilabad, Nizamabad, Karimnagar, Warangal, Khammam, Nalgonda, Hyderabad, Rangareddy, Medak and Mahbubnagar; and Rayalaseema comprising the remaining four districts namely Kurnool, Anantapur, Cuddapah and Chittoor. There are 1,125 sub-districts (Mandals) and 28,123 villages in the 23 districts of the state. The urban areas of the state comprised 247 towns/urban agglomerations in 2001. Hyderabad is the capital of the state.

According to 2001 census the population of Andhra Pradesh is 76.2 million out of which 38.5 millions are males and 37.7 millions are females. The rural and urban break-up of the population shows that 72.7 percent of the population was enumerated in rural areas and 27.3 percent in urban areas. Unlike the decline at national level, Andhra Pradesh has recorded a sharp decline in the decadal growth rate from 24.2 per cent in 1981-91 to 14.6 percent during 1991-2001. Among the districts, Rangareddi with 37.4 percent has the highest decadal growth rate, whereas Vizianagaram with 6.4 percent has the lowest decadal growth rate of total population during 1991-2001.

Percentage of Scheduled Caste population has experienced a marginal decline during 1991-2001, while the decline is significant in the case of Schedule Tribe population in the state. The proportions of schedule caste and scheduled tribe population in total population of 2001 are 16.2 percent and 6.6 percent respectively. Highest proportion of Schedule Caste population has been recorded in Nellore district (22.0 per cent) and that of Schedule Tribe in Khammam (26.5 per cent) and Hyderabad has the lowest proportion of both the categories (8.0 per cent SC and 0.9 per cent ST). With a population density of 277 persons per sq. km., Andhra Pradesh ranks 19<sup>th</sup> among the states and union territories in India and this figure is lower than the all India density of 325 persons per sq. km. Among the districts, Hyderabad has the highest density (17,649 persons/sq. km.) and Adilabad has the lowest (154 persons/sq. km).

The sex ratio of the total population in the state has slightly improved since 1991 Census from 972 to 978 females per 1000 males. Nizamabad has recorded the highest sex ratio (1017) and Hyderabad has the lowest (933) within the state.

The literacy rate in the state has improved from 44.1 percent in 1991 to 60.4 percent in 2001, however, it is lower than the national average of 64.8 percent. The literacy rate in urban areas (76.1 percent) is considerably higher in the state than that in rural areas (54.5 percent). Among the districts, Hyderabad has the highest literacy rate of 78.8 percent. Vizianagaram has the lowest literacy rate of 51.1 percent. The male literacy for the state is 70.3 percent and the female literacy rate is 50.4 percent. Both the rates have increased from 1991 census to 2001 census.

<b>Table 1.3 BASIC DEMOGRAPHIC INDICATORS</b>							
Basic demographic indicators of India, state and districts, Census 2001							
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>	1,028,737	28.0	21.5	933	75.8	53.7	64.8
<b>State</b>	76,210	27.3	14.6	978	70.3	50.4	60.5
Adilabad	2,488	26.5	19.1	989	65.0	40.3	52.7
Chittoor	3,746	21.7	14.5	982	77.6	55.8	66.8
Guntur	4,465	28.8	7.3	984	71.2	53.7	62.5
Hyderabad	3,830	100.0	17.2	933	83.7	73.5	78.8
Karimnagar	3,492	19.4	14.5	998	67.1	42.8	54.9
Kurnool	3,529	23.2	18.1	965	66.0	40.0	53.2
Mahbubnagar	3,514	10.6	14.0	972	56.6	31.9	44.4
Nellore	2,669	22.4	11.2	984	73.7	56.4	65.1
Srikakulam	2,538	11.0	8.9	1,014	67.2	43.7	55.3
Visakhapatnam	3,832	39.9	15.4	985	69.7	50.1	60.0
Warangal	3,246	19.2	14.6	973	68.9	45.1	57.1
West Godavari	3,804	19.7	7.9	991	78.1	69.0	73.5
Anantapur	3,640	25.3	14.3	958	68.4	43.3	56.1
Cuddapah	2,602	22.6	13.5	974	75.8	49.5	62.8
East Godavari	4,901	23.5	7.9	993	70.0	60.9	65.5
Khammam	2,579	19.8	15.8	975	66.1	47.4	56.7
Krishna	4,188	32.1	14.0	978	74.4	63.2	68.9
Medak	2,670	14.4	17.3	974	64.3	38.7	51.7
Nalgonda	3,248	13.3	13.5	966	69.2	44.7	57.2
Nizamabad	2,346	18.1	15.1	1,017	64.9	39.5	52.0
Prakasam	3,059	15.3	10.7	971	69.4	45.1	57.4
Rangareddi	3,575	54.2	37.4	944	75.3	56.5	66.2
Vizianagaram	2,249	18.3	6.4	1,009	62.4	39.9	51.1

Source: Primary Census Abstract, Series 29, Census of India, 2001. <sup>1</sup> 1991-2001, <sup>2</sup> Females per 1,000 males.

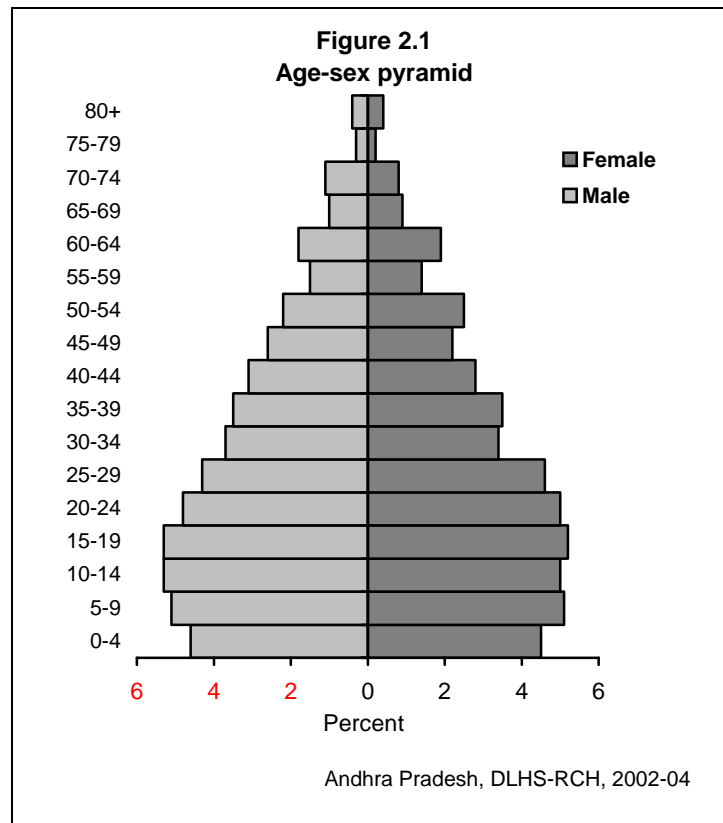
## CHAPTER II

### 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 villages are also presented here. The *de facto* procedure 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 107,175 persons of whom 66 percent lived in the rural areas of Andhra Pradesh. The state of Andhra Pradesh depicts a young and growing population with 30 percent below the age of 15 years (Figure 2.1). There are slightly more children below 15 years recorded in rural areas (31 percent) compared to those in urban areas (28 percent).



The overall sex ratio of 102 males per 100 females is recorded for the *de facto* population. The sex ratio is slightly more skewed, 103 in favour of males in urban areas compared to 101 in rural 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, Andhra Pradesh, 2002-04									
Age	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
< 1	1.7	1.6	1.8	1.8	1.7	1.8	1.6	1.4	1.8
1-4	7.5	7.6	7.4	7.7	7.7	7.6	7.2	7.3	7.0
5-9	10.2	10.1	10.3	10.5	10.4	10.6	9.6	9.4	9.8
10-14	10.3	10.5	10.2	10.5	10.6	10.4	10.0	10.3	9.8
15-19	10.4	10.5	10.4	10.1	10.2	10.0	11.1	11.0	11.2
20-24	9.9	9.6	10.2	9.3	8.9	9.8	10.9	10.9	10.9
25-29	8.9	8.5	9.3	8.6	8.2	9.0	9.4	8.9	10.0
30-34	7.0	7.3	6.8	6.7	6.9	6.6	7.6	8.0	7.2
35-39	7.0	6.9	7.1	7.0	7.0	6.9	7.1	6.8	7.5
40-44	5.8	6.1	5.6	5.6	5.9	5.3	6.2	6.3	6.0
45-49	4.8	5.2	4.4	4.7	5.1	4.4	4.9	5.4	4.5
50-54	4.7	4.3	5.1	4.9	4.2	5.6	4.2	4.3	4.2
55-59	2.9	2.9	2.9	3.0	2.9	3.0	2.8	2.8	2.8
60-64	3.7	3.6	3.8	4.1	4.1	4.1	3.0	2.7	3.3
65-69	1.9	1.9	1.8	1.9	2.0	1.9	1.7	1.8	1.7
70-74	1.9	2.1	1.7	2.1	2.4	1.8	1.5	1.5	1.5
75-79	0.6	0.7	0.5	0.6	0.7	0.4	0.6	0.6	0.5
80+	0.8	0.7	0.8	0.9	0.9	0.9	0.6	0.5	0.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of persons	107,175	54,034	53,141	70,372	35,405	34,967	36,803	18,629	18,174
Sex ratio <sup>1</sup>	102	NA	NA	101	NA	NA	103	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 residents and visitors). NA: Not applicable. <sup>1</sup> Males per 100 females.

## 2.2 Household Characteristics

The percent distribution of 22,999 households surveyed in the state of Andhra Pradesh 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. About 90 percent of household heads are male, invariant of place of residence, while only 10 percent are female-headed households. About 68 percent of household heads are in the 30-59 years age group. The median age of household heads is 45 years for the state as a whole and in rural areas, while it is 44 years in urban areas. About 11 percent of household heads are younger than 30 years and 21 percent are at least 60 years old. Majority of the household heads are Hindus (86 percent), 9 percent are Muslims, and 5 percent are Christians. Hindus constitute a higher proportion of population in rural areas (90 percent) than in urban areas (76 percent). Only 4 percent of the rural households are Muslims, while 19 percent of the urban households are Muslims.



<b>Table 2.2 HOUSEHOLD CHARACTERISTICS</b>			
Percent distribution of the households by selected characteristics of the household head and household size, according to residence, Andhra Pradesh, 2002-04			
Characteristic	Total	Residence	
		Rural	Urban
<b>Sex of the household head</b>			
Male	90.1	90.1	90.0
Female	9.9	9.9	10.0
<b>Age of the household head</b>			
< 30	11.1	11.2	10.7
30-44	38.7	37.9	40.4
45-59	29.7	28.7	31.6
60+	20.6	22.2	17.3
Median age of the household head	44.9	45.1	44.4
<b>Religion of the household head</b>			
Hindu	85.7	90.3	76.3
Muslim	9.2	4.3	19.1
Christian	4.9	5.2	4.2
Sikh	0.1	0.0	0.1
Buddhist	0.0	0.0	0.0
Jain	0.0	0.0	0.1
No Religion	0.1	0.1	0.0
Other	0.1	0.0	0.1
<b>Caste/tribe of the household head</b>			
Scheduled caste	17.8	20.9	11.6
Scheduled tribe	6.2	8.1	2.3
Other backward class	44.3	46.6	39.7
Other #	30.8	23.6	45.5
Don't know	0.9	00.9	0.9
<b>Number of usual members</b>			
1	2.9	3.4	1.9
2	9.2	9.9	7.8
3	12.8	12.9	12.6
4	24.6	23.2	27.6
5	21.3	21.7	20.7
6	13.1	13.3	12.8
7	6.8	7.0	6.3
8	3.3	3.2	3.6
9+	5.9	5.4	6.8
Mean household size	4.7	4.7	4.8
Total percent	100.0	100.0	100.0
Number of households	22,999	15,393	7,606
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).			

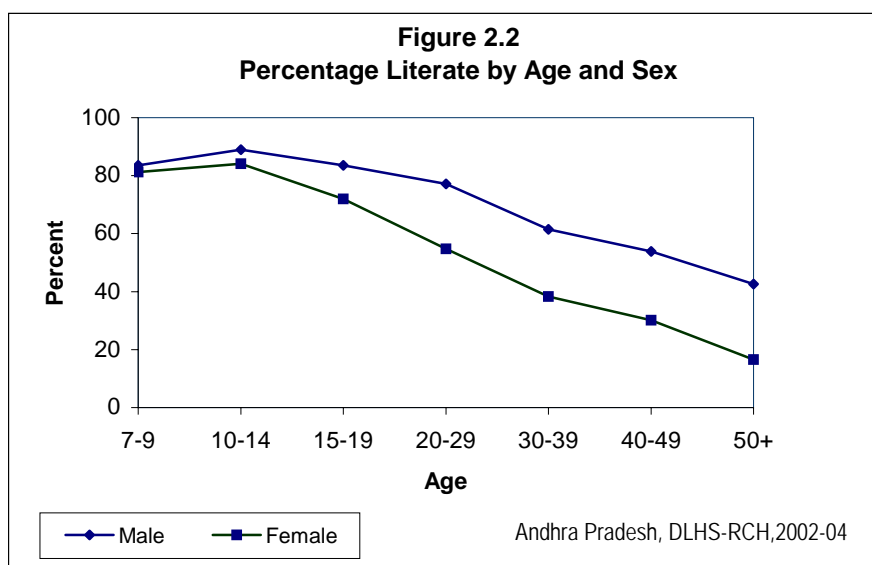
Nearly 18 percent of the households in Andhra Pradesh belong to schedule caste, 6 percent to schedule tribe and 44 percent to other backward classes, while 31 percent of the households are headed by other castes not under schedule caste, schedule tribe and other backward classes. Twenty-nine percent of the household heads belong to schedule caste or tribe in rural areas and it is only 14 percent in urban areas. The overall state average household size is 4.7 persons. The rural-urban differential in average household size is 4.7 in rural areas and 4.8 in urban areas.

## 2.3 Educational Level

The educational background of Andhra Pradesh 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, Andhra Pradesh, 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>									
Male									
7-9	16.2	0.4	81.9	1.2	0.0	0.0	0.2	100.0	3,129
10-14	10.6	0.1	33.0	45.2	10.7	0.0	0.4	100.0	5,668
15-19	16.5	0.1	9.6	16.4	31.3	26.1	0.0	100.0	5,657
20-29	22.8	0.1	10.4	13.2	24.3	29.2	0.0	100.0	9,753
30-39	38.5	0.2	11.6	9.5	17.4	22.9	0.0	100.0	7,696
40-49	46.1	0.2	14.3	9.7	14.1	15.6	0.0	100.0	6,081
50+	57.4	0.4	14.8	7.4	9.8	10.2	0.0	100.0	8,759
Total	32.2	0.2	19.3	14.5	16.7	17.0	0.1	100.0	46,742
Female									
7-9	18.7	0.2	79.5	1.5	0.0	0.0	0.2	100.0	3,221
10-14	15.5	0.0	31.3	42.1	10.7	0.0	0.4	100.0	5,412
15-19	28.0	0.0	11.1	15.6	25.0	20.2	0.0	100.0	5,531
20-29	45.2	0.1	11.0	12.0	16.0	15.7	0.0	100.0	10,355
30-39	61.7	0.1	10.4	8.9	10.2	8.7	0.0	100.0	7,372
40-49	69.9	0.2	11.0	7.4	6.8	4.6	0.0	100.0	5,294
50+	83.4	0.2	8.1	3.7	2.8	1.7	0.0	100.0	8,823
Total	50.6	0.1	17.6	12.6	10.8	8.2	0.1	100.0	46,008
Total									
7-9	17.5	0.3	80.7	1.3	0.0	0.0	0.2	100.0	6,349
10-14	13.0	0.0	32.1	43.7	10.7	0.0	0.4	100.0	11,080
15-19	22.2	0.1	10.4	16.0	28.2	23.2	0.0	100.0	11,188
20-29	34.3	0.1	10.7	12.6	20.0	22.3	0.0	100.0	20,109
30-39	49.8	0.1	11.0	9.2	13.9	15.9	0.0	100.0	15,068
40-49	57.2	0.2	12.8	8.7	10.7	10.5	0.0	100.0	11,375
50+	70.4	0.3	11.4	5.5	6.3	5.9	0.0	100.0	17,582
Total	41.3	0.2	18.5	13.6	13.8	12.6	0.1	100.0	92,750
Note: Table is based on <i>de facto</i> population.									
									Contd.

Table 2.3 indicates that about two-fifths of the population aged seven and above are non-literate. The proportion of non-literates is 51 percent for females compared to 32 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, Andhra Pradesh, 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	17.8	0.4	80.3	1.4	0.0	0.0	0.1	100.0	2,106
10-14	12.9	0.0	34.2	43.0	9.6	0.0	0.4	100.0	3,746
15-19	20.5	0.1	11.0	17.7	29.6	21.1	0.0	100.0	3,606
20-29	29.7	0.1	12.3	13.9	23.0	21.0	0.0	100.0	6,056
30-39	49.0	0.2	13.6	9.3	14.5	13.3	0.0	100.0	4,941
40-49	59.2	0.3	15.7	9.0	9.6	6.1	0.0	100.0	3,902
50+	69.2	0.3	15.4	6.3	5.6	3.2	0.0	100.0	6,108
Total	40.5	0.2	20.8	14.2	14.0	10.3	0.1	100.0	30,465
Female									
7-9	21.3	0.3	76.6	1.7	0.0	0.0	0.1	100.0	2,182
10-14	19.8	0.0	32.8	39.1	8.1	0.0	0.1	100.0	3,640
15-19	37.7	0.0	13.5	16.8	20.4	11.6	0.0	100.0	3,502
20-29	57.9	0.0	12.6	11.5	11.1	6.8	0.0	100.0	6,561
30-39	75.6	0.1	10.2	6.5	5.3	2.2	0.0	100.0	4,717
40-49	83.4	0.1	9.8	4.1	2.1	0.5	0.0	100.0	3,381
50+	90.9	0.2	6.3	1.7	0.8	0.1	0.0	100.0	6,182
Total	60.7	0.1	17.8	11.1	7.0	3.3	0.0	100.0	30,164
Total									
7-9	19.6	0.4	78.4	1.5	0.0	0.0	0.1	100.0	4,288
10-14	16.3	0.0	33.5	41.1	8.8	0.0	0.3	100.0	7,386
15-19	29.0	0.1	12.2	17.3	25.1	16.4	0.0	100.0	7,108
20-29	44.3	0.1	12.5	12.7	16.8	13.6	0.0	100.0	12,617
30-39	62.0	0.2	12.0	8.0	10.0	7.9	0.0	100.0	9,658
40-49	70.4	0.2	13.0	6.7	6.1	3.5	0.0	100.0	7,283
50+	80.1	0.3	10.8	4.0	3.2	1.6	0.0	100.0	12,290
Total	50.6	0.2	19.3	12.6	10.5	6.8	0.0	100.0	60,629

Contd.

Around four-fifths of males as well as females in the age group of 7-9 had 1-5 years of schooling. About 19 percent of males have had education for 1-5 years. Females are also not far behind compared to their male counterparts in this category with a corresponding share of 18 percent. Lesser proportion of females are found in higher education of 9-10 years (11 percent) and 11 or more years (8 percent) compared to the males having corresponding figures of 17 percent each respectively. Only 0.2 percent of the total population, 0.2 percent of males and 0.1 percent of 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, Andhra Pradesh, 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	13.0	0.5	85.3	0.8	0.0	0.0	0.4	100.0	1,023
10-14	6.1	0.1	30.6	49.7	12.9	0.0	0.6	100.0	1,922
15-19	9.5	0.1	7.2	14.1	34.3	34.9	0.0	100.0	2,050
20-29	11.6	0.2	7.1	12.1	26.4	42.6	0.0	100.0	3,698
30-39	19.6	0.1	7.8	9.8	22.7	40.0	0.0	100.0	2,755
40-49	22.6	0.1	11.6	11.1	22.0	32.6	0.0	100.0	2,179
50+	30.1	0.6	13.6	9.9	19.5	26.3	0.0	100.0	2,651
Total	16.6	0.2	16.6	15.2	21.8	29.5	0.1	100.0	16,278
Female									
7-9	13.2	0.0	85.5	1.1	0.0	0.0	0.2	100.0	1,038
10-14	6.8	0.1	28.1	48.0	16.1	0.0	0.9	100.0	1,772
15-19	11.2	0.1	7.1	13.6	32.9	35.2	0.0	100.0	2,029
20-29	23.3	0.2	8.3	12.7	24.5	31.0	0.0	100.0	3,794
30-39	36.9	0.0	10.9	13.1	18.8	20.3	0.0	100.0	2,655
40-49	46.2	0.3	13.1	13.2	15.2	12.0	0.0	100.0	1,913
50+	65.9	0.4	12.4	8.5	7.5	5.4	0.0	100.0	2,641
Total	31.4	0.2	17.1	15.4	18.1	17.7	0.1	100.0	15,844
Total									
7-9	13.1	0.2	85.4	0.9	0.0	0.0	0.3	100.0	2,061
10-14	6.5	0.1	29.4	48.9	14.4	0.0	0.7	100.0	3,694
15-19	10.3	0.1	7.1	13.9	33.6	35.0	0.0	100.0	4,079
20-29	17.5	0.2	7.7	12.4	25.5	36.7	0.0	100.0	7,492
30-39	28.1	0.1	9.3	11.4	20.8	30.3	0.0	100.0	5,410
40-49	33.6	0.2	12.3	12.1	18.8	23.0	0.0	100.0	4,092
50+	47.9	0.5	13.0	9.2	13.5	15.9	0.0	100.0	5,292
Total	23.9	0.2	16.8	15.3	20.0	23.7	0.1	100.0	32,122

An examination of the educational attainment by place of residence revealed that the urban-rural differential was quite pronounced. In urban areas, only 24 percent of the total population is non-literate in comparison to 51 percent of the rural population. The numbers of non-literate females live in rural areas of Andhra Pradesh are accruing a share as high as 61 percent, while non-literate rural males are 41 percent. Prevalence of illiterates is much less in urban areas with figures of 31 percent and 17 percent for females and males respectively. A contrasting feature of rural-urban difference in educational level is that in rural areas a significant proportion of people had 1-5 years of schooling (19 percent), and those who had 11 or more years of schooling was only 7 percent, whereas in urban areas a significant proportion of people (24 percent) had this level of education.

## 2.4 Marital Status of the Household Population

The DLHS-RCH 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. Thirty-four percent of females in the age group 15-19 years, followed by 80 percent in the age group 20-24 years, 92 percent in 25-29 years, and 89 percent in the age group 30-44 years, are currently married. The proportion of never married is 30 percent in the state, and it is higher for males (37 percent) than for females (24 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 30-44 years. The decline is much faster in the case of females. The proportions of divorced, separated or widowed are negligible and limited to the older ages. Sixty-six percent of women aged 60 years or above are widowed/divorced/separated. Among the *de facto* population aged 10 years and above, 60 percent of males and 61 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, Andhra Pradesh, 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	99.8	0.2	0.0	0.0	100.0	5,668
15-19	97.8	2.1	0.0	0.0	100.0	5,657
20-24	66.2	33.3	0.1	0.4	100.0	5,184
25-29	22.3	76.7	0.0	1.0	100.0	4,569
30-44	2.3	95.9	0.0	1.8	100.0	10,979
45-59	0.2	94.6	0.0	5.2	100.0	6,666
60+	0.1	84.0	0.0	15.8	100.0	4,891
Total	36.5	60.3	0.0	3.2	100.0	43,614
Female						
10-14	99.3	0.3	0.2	0.0	100.0	5,412
15-19	65.8	33.5	0.2	0.4	100.0	5,531
20-24	18.5	79.6	0.3	1.5	100.0	5,410
25-29	4.4	91.5	0.0	4.1	100.0	4,945
30-44	1.0	88.9	0.0	10.1	100.0	10,325
45-59	0.1	73.6	0.0	26.3	100.0	6,583
60+	0.1	34.0	0.0	65.8	100.0	4,582
Total	24.2	61.4	0.1	14.3	100.0	42,788
Total						
10-14	99.6	0.2	0.1	0.0	100.0	11,080
15-19	82.0	17.6	0.1	0.2	100.0	11,188
20-24	41.8	57.0	0.2	1.0	100.0	10,595
25-29	13.0	84.4	0.0	2.6	100.0	9,514
30-44	1.7	92.5	0.0	5.8	100.0	21,304
45-59	0.2	84.2	0.0	15.7	100.0	13,249
60+	0.1	59.8	0.0	40.0	100.0	9,472
Total	30.4	60.9	0.1	8.7	100.0	86,401

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

## 2.5 Marriage

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

<b>Table 2.5 MARRIAGE</b>				
Mean age at marriage and percentage of marriages below legal age at marriage by sex and by districts, Andhra Pradesh, 2002-04				
Place of residence/ District	Mean age at marriage		Percentage of marriages below legal age at marriage	
	Boy	Girl	Boy (<21)	Girl (<18)
<b>State – Total</b>	23.2	18.4	27.5	38.6
<b>State – Rural</b>	22.5	17.8	33.8	46.6
<b>State – Urban</b>	24.6	19.8	13.7	19.5
District				
Adilabad	22.7	18.3	26.6	45.4
Anantapur	24.0	18.5	21.5	38.8
Chittoor	23.9	18.8	24.0	30.7
Cuddapah	24.3	19.1	18.3	31.7
East Godavari	22.3	18.3	38.0	42.8
Guntur	22.3	17.9	36.5	38.6
Hyderabad	25.4	21.2	7.7	4.1
Karimnagar	22.8	18.3	22.9	33.7
Khammam	22.5	18.0	31.3	40.9
Krishna	23.6	18.6	25.7	34.7
Kurnool	22.8	17.8	30.0	49.9
Mahbubnagar	22.9	17.9	33.8	42.6
Medak	23.5	18.5	25.6	34.2
Nalgonda	22.7	17.4	32.4	52.2
Nellore	22.4	18.3	36.3	38.0
Nizamabad	23.3	18.9	20.1	27.7
Prakasam	23.2	17.8	31.9	55.2
Rangareddi	24.2	18.8	13.5	32.4
Srikakulam	22.7	17.1	31.8	59.6
Visakhapatnam	23.3	19.2	26.8	25.9
Vizianagaram	23.0	18.9	29.2	32.1
Warangal	22.7	18.3	29.4	38.3
West Godavari	22.4	17.8	35.3	54.1

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 Andhra Pradesh are 25 years and 20 years respectively. The corresponding figures in rural areas are 23 years and 18 years. On the whole, as far as Andhra Pradesh is concerned, both boys and girls seem to oblige the legal age at marriage, the average age at marriage being 23 years for boys and 18 years for girls. However, more than one-fourth (28 percent) of boys and about two-fifths of girls got married below the corresponding specified legal age at 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 Hyderabad, 25 years for boys and 21 years for girls. The lowest mean age at marriage for boys is 22 years recorded for the districts of East Godavari, Guntur, Nellore and West Godavari, and for the girls, the lowest is 17 years in Nalgonda and Srikakulam.

It is also found that, the percentage of girls who were married below the legal age at marriage was the highest in Srikakulam (60 percent) and the lowest in Hyderabad (4 percent). In 9 out of 23 districts more than 40 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 East Godavari district (38 percent) and lowest in Hyderabad (8 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, Andhra Pradesh, 2002-04.			
Morbidity	Total	Residence	
		Rural	Urban
<b>Prevalence rate of blindness</b>			
Male			
Partial	6,023	7,060	4,008
Complete	534	620	368
Night blindness	135	166	76
Female			
Partial	7,664	8,672	5,693
Complete	571	670	376
Night blindness	195	240	107
Persons			
Partial	6,833	7,857	4,838
Complete	552	645	372
Night blindness	165	202	91
<b>Prevalence rate of tuberculosis</b>			
Male	579	721	303
Female	452	530	299
Person	516	627	301
<b>Prevalence rate of malaria<sup>1</sup></b>			
Male	569	688	342
Female	590	650	474
Person	579	670	407
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 6,833 per 100,000 population in the state and is lower in urban areas (4,838) than in rural areas (7,857). It is more among females. The prevalence of complete blindness is 552 per 100,000 population with a rural-urban differential of 645 against 372 per 100,000. Sex differential in complete blindness is not significant. The

prevalence of night blindness due to vitamin A deficiency is 165 per 100,000 population, and is much higher in rural areas (202) than in urban areas (91).

## Tuberculosis

The prevalence of tuberculosis is 516 per 100,000 population, with rural areas having a much higher prevalence of 627 compared to 301 per 100,000 in urban areas. The prevalence of TB is higher among males (579 per 100,000) than among females (452 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 Andhra Pradesh, 579 persons per 100,000 population were reported to have suffered from malaria. Rural residents are more likely to suffer from malaria (670 per 100,000) than urban residents (407 per 100,000). The reported prevalence of malaria is marginally higher for females than for males.

### 2.7 Morbidity Rates by Districts

Table 2.7 shows the prevalence of blindness, tuberculosis and malaria in the districts of Andhra Pradesh.

<b>Table 2.7 MORBIDITY RATES BY DISTRICTS</b>				
Prevalence of blindness, tuberculosis, and malaria, by district, Andhra Pradesh, 2002-04				
District	Prevalence <sup>1</sup> of morbidity			
	Partial blindness	Complete blindness	Tuberculosis	Malaria <sup>2</sup>
Adilabad	6,141	896	427	1,385
Anantapur	6,252	656	674	343
Chittoor	8,333	220	231	421
Cuddapah	6,946	116	870	450
East Godavari	7,301	267	1,049	1,079
Guntur	10,623	1,593	475	286
Hyderabad	3,464	134	53	169
Karimnagar	8,919	381	340	1,106
Khammam	5,902	68	298	892
Krishna	7,214	267	125	400
Kurnool	6,826	299	378	240
Mahbubnagar	3,823	2,028	603	465
Medak	7,415	57	172	191
Nalgonda	7,382	291	1,002	451
Nellore	9,202	823	337	324
Nizamabad	6,030	346	411	355
Prakasam	8,912	403	971	104
Rangareddi	4,967	81	394	168
Srikakulam	4,609	426	474	1,350
Visakhapatnam	4,780	708	941	1,968
Vizianagaram	8,397	360	620	319
Warangal	6,712	501	367	889
West Godavari	6,250	1,631	516	300
Andhra Pradesh	6,833	552	516	579

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 prevalence of partial blindness varies considerably among the districts, the lowest being 3,464 per 100,000 in Hyderabad and the highest, 10,623 per 100,000 in Guntur.

The prevalence rate of complete blindness ranges from a low of 57 per 100,000 in Medak to a high of 2,028 per 100,000 in Mahbubnagar.

Inter-district variations are substantial for tuberculosis and malaria. The prevalence rate of tuberculosis is the highest in East Godavari (1,049 per 100,000 population) and it is lowest in Hyderabad (53 per 100,000). In the case of malaria, the prevalence rate is highest in Visakhapatnam (1,968 per 100,000) and lowest in Prakasam (104 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. Eighty-four percent of the households in Andhra Pradesh have electricity connection and it is higher in urban areas (95 percent) than in rural areas (79 percent).

As regards household source of drinking water, about 62 percent of the households get drinking water through taps, while 24 percent drink water from hand pumps/bore-wells, and 10 percent drink water from wells. About 84 percent of households in urban areas get piped water for drinking, whereas in rural areas 51 percent of the households have such provision.

When it comes to sanitation facility, only 32 percent of the households have flush toilets, while 7 percent have pit based toilets or latrines, 3 percent depend on shared toilets and nearly 58 percent of the households have no toilet facility at all. There is a large rural-urban difference; 77 percent of rural households have no toilet facility, compared to just 19 percent of urban households.

DLHS-RCH has also collected data on type of fuel used in the households for cooking. Thirty-two percent of the households used liquid petroleum gas or electricity for cooking in Andhra Pradesh. About 63 percent of households rely on fire woods, and 4 percent on kerosene. The use of liquid petroleum gas/electricity for cooking is reported more in urban areas (67 percent), and firewood for cooking is reported more in rural areas (83 percent).

There is considerable variation in the quality of housing. On the basis of building material, type of floor, walls and roof, households are categorised into *kachcha*, *semi-pucca* and *pucca*. Less than one-fourth of the households are living in *kachcha* houses, 37 percent in *semi-pucca* houses and 39 percent in *pucca* houses. Sixty-one 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 majority of the households in the state own fan (70 percent), while a significant proportion own television (48 percent) and bicycle (37 percent).

<b>Table 2.8 HOUSING CHARACTERISTICS</b>			
Percent distribution of the households by housing characteristics and percentage of households owing selected durable goods, according to residence, Andhra Pradesh, 2002-04			
Housing characteristic	Total	Residence	
		Rural	Urban
<b>Electricity</b>			
Yes	84.1	78.7	95.0
No	15.9	21.3	5.0
<b>Source of drinking water</b>			
Tap inside	23.6	13.3	44.6
Tap shared public	38.2	37.8	39.1
Hand pump/ bore well	24.0	30.3	11.3
Well covered	1.3	1.6	0.9
Well uncovered	9.1	12.5	2.2
River	0.4	0.5	0.1
Pond	0.9	1.3	0.1
Spring	1.3	2.0	0.1
Other	1.0	0.7	1.6
<b>Sanitation facility</b>			
Own flush toilet	32.3	15.9	65.7
Own pit toilet / latrine	7.2	5.2	11.3
Shared toilet of any type	1.7	1.3	2.5
Public / community toilet	0.8	0.6	1.1
No toilet facility	57.9	77.0	19.4
<b>Main type of fuel used for cooking</b>			
Liquid petroleum gas/ electricity	32.1	14.9	66.8
Kerosene	4.1	1.5	9.4
Wood	63.4	83.2	23.3
Other	0.4	0.3	0.5
<b>Type of house</b>			
Kachcha	23.7	31.1	8.9
Semi - pucca	37.1	40.5	30.3
Pucca	39.1	28.4	60.8
<b>Household assets</b>			
Fan	69.5	58.8	91.2
Radio/transistor	19.6	15.5	28.1
Sewing machine	10.5	5.9	20.0
Television	48.3	34.9	75.5
Telephone	15.0	7.4	30.5
Bicycle	36.5	33.9	41.9
Motor cycle/ scooter	13.4	6.7	27.0
Car / Jeep	1.7	0.5	4.1
Tractor	0.6	0.8	0.4
<b>Standard of living index</b>			
Low	38.5	52.4	10.5
Medium	37.8	38.3	36.8
High	23.7	9.3	52.7
Number of households	22,999	15,393	7,606

Other durable goods found in the surveyed households are radio/transistor (20 percent), telephone (15 percent), sewing machine (11 percent), and motor cycle or scooter (13 percent). Car/jeep is owned by 2 percent of households and tractor is owned by less than one percent in Andhra Pradesh. Ownership of these consumer durable items is more among the urban households than among the rural households.

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

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

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

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

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

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

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

The total of the scores may vary from the lowest of 0 to a 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, about two-fifths of the households come under the low standard of living (39 percent) and medium standard of living (38 percent) categories, while 24 percent of the households have a high standard of living.

The proportion of sample households with a high standard of living is much higher in urban areas (53 percent) than in rural areas (9 percent), while the proportion of households with a low standard of living is much higher in rural households (52 percent) than in urban households (11 percent) in the state of Andhra Pradesh.

## **2.9 Housing Characteristics by Districts**

The 23 districts in Andhra Pradesh are not uniform in terms of basic amenities and possession of consumer durables. Table 2.9 presents an inter-district comparison of housing characteristics. The percentage of households with electricity is more than 70 percent in the districts with the exception of Visakhapatnam (67 percent). The proportion of households with electricity is highest in Hyderabad (97 percent). More than four-fifths of households used piped water or water from a hand pump for drinking in a majority of the districts exception being Adilabad (75 percent), Karimnagar (76 percent), Krishna (77 percent), Prakasam (74 percent), Visakhapatnam (64 percent) and Srikakulam (62 percent).

Largely the districts in Andhra Pradesh have inadequate toilet facility, in 19 of the 23 districts less than 50 percent of the households have toilet facilities and it is the least in Srikakulam district (18 percent).

In Hyderabad district the proportion of households using liquid petroleum gas/electricity for cooking is 73 percent and in the rest of the districts, it is much lower ranging between 18 and 38 percent. The percentage of households living in *pucca* houses is low in most of the districts of Andhra Pradesh. In 16 of the 23 districts, less than 40 percent of the households live in *pucca* houses. Hyderabad is the only district where nearly three-fourths of the households (74 percent) live in *pucca* houses.

<b>Table 2.9 HOUSING CHARACTERISTICS BY DISTRICTS</b>					
Selected housing characteristics by district, Andhra Pradesh, 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
Adilabad	75.0	72.3	27.7	34.2	19.6
Anantapur	90.9	98.4	43.2	23.4	52.7
Chittoor	83.6	94.5	28.2	24.9	48.5
Cuddapah	93.0	94.5	46.6	30.2	54.6
East Godavari	85.1	82.6	46.4	30.5	34.7
Guntur	87.6	87.9	41.6	38.1	38.3
Hyderabad	97.4	99.8	95.9	73.3	74.1
Karimnagar	91.7	75.7	34.8	34.1	22.7
Khammam	78.3	96.1	48.8	27.2	31.5
Krishna	89.8	76.8	58.5	41.5	36.3
Kurnool	81.9	89.2	20.8	17.6	48.1
Mahbubnagar	71.6	98.3	23.4	21.6	30.5
Medak	86.3	93.4	54.0	28.5	26.3
Nalgonda	90.1	95.1	43.5	29.2	33.0
Nellore	78.4	90.3	27.1	23.7	38.3
Nizamabad	88.9	97.6	38.6	35.5	30.0
Prakasam	82.6	74.3	36.1	26.7	47.0
Rangareddi	90.1	93.9	57.2	39.5	37.2
Srikakulam	71.4	62.3	18.3	19.1	38.8
Visakhapatnam	66.5	64.4	41.9	37.6	44.7
Vizianagaram	76.1	81.6	30.6	23.3	33.9
Warangal	83.0	91.4	41.1	32.7	35.3
West Godavari	85.0	88.0	44.2	35.8	36.2
Andhra Pradesh	84.1	87.3	42.1	32.1	39.1

Note: <sup>1</sup> 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 iodization of salt and categorised by background characteristics. It is observed that nearly 25 percent of households used salt that contained a minimum recommended 15 ppm or higher level of iodine content, whereas 45 percent of households used salt that is not iodized at all and another 26 percent used salt, which was inadequately iodized.

In rural areas, 55 percent of households against 27 percent in urban areas used non-iodized salts. Percentage of households using inadequately iodized salt in rural areas is 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 54 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 castes is 37 percent, followed by 22 percent in other backward class households and among scheduled castes and scheduled tribes it is 15 percent each of households.

<b>Table 2.10 IODIZATION OF SALT</b>						
Percent distribution of household heads by degree of iodization of salt, according to selected background characteristics, Andhra Pradesh, 2002-04						
Background characteristic	Not iodised	7ppm	15+ppm	Other <sup>1</sup>	Total percent	Number of households
<b>Place of Residence</b>						
Rural	54.6	29.4	12.9	3.1	100.0	15,393
Urban	26.7	20.0	48.8	4.4	100.0	7,606
<b>Education of the household heads</b>						
Non-literate	56.6	28.7	11.0	3.8	100.0	11,699
0-9@ years	45.3	27.3	24.5	3.0	100.0	5,663
10 and above	22.2	20.3	53.8	3.6	100.0	5,637
<b>Religion of household head</b>						
Hindu	45.3	27.0	24.1	3.6	100.0	19,707
Muslim	37.5	25.2	34.5	2.8	100.0	2,119
Christian	61.7	16.8	18.8	2.7	100.0	1,122
Other	29.2	15.5	42.7	12.6	100.0	50
<b>Caste/tribe of the household head#</b>						
Scheduled caste	54.4	27.4	14.9	3.3	100.0	4,094
Scheduled tribe	57.1	24.1	14.5	4.2	100.0	1,423
Other backward class	47.0	27.8	21.6	3.6	100.0	10,186
Other	35.2	24.2	37.2	3.5	100.0	7,095
<b>Standard of living index</b>						
Low	60.6	29.4	6.3	3.7	100.0	8,861
Medium	48.0	28.3	20.6	3.1	100.0	8,696
High	16.3	18.0	61.7	3.9	100.0	5,442
Total	45.4	26.3	24.8	3.5	100.0	22,999
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. Proportion of households using adequately iodized salt is 35 percent among Muslim households, whereas the corresponding figures for Hindu and Christian households are 24 percent and 19 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 61 percent of households with low standard of living used non-iodized salt, only 16 percent households with a high standard of living fall in this category. The proportion of households with a high standard of living using adequately iodized salt is ten times of those with a low standard of living.

## 2.11 Iodization of Salt by Districts

Table 2.11 shows district level variation in the percent distribution of households by level of iodization of salt used in the households. Hyderabad has the lowest proportion of households (9 percent) using non-iodized salt, whereas Medak has the highest proportion of households (67 percent) using non-iodized salt. Proportion of households using inadequately iodized salt is the highest in Warangal (54 percent) and the lowest in Medak (9 percent). Around 25 percent of the households in the state used adequately iodized salt, the highest being in the district of Hyderabad (56 percent) and the lowest in Mahbubnagar (10 percent). In 14 out of the 23 districts, less than one-fourth of the households are using adequately iodized salt (see Map-2).

<b>Table 2.11 IDOIZATION OF SALT BY DISTRICTS</b>				
Percent distribution of household heads by degree of idoization of salt by district, Andhra Pradesh, 2002-04				
District	Not idoized	7ppm	15+ppm	Other <sup>1</sup>
Adilabad	32.9	23.3	43.0	0.8
Anantapur	60.8	22.1	14.3	2.9
Chittoor	39.3	37.8	21.5	1.3
Cuddapah	58.6	26.4	14.0	1.0
East Godavari	56.7	19.6	20.5	3.2
Guntur	59.1	11.1	26.6	3.3
Hyderabad	9.3	24.2	55.7	10.8
Karimnagar	26.8	35.4	36.9	0.8
Khammam	56.5	11.1	27.4	5.1
Krishna	48.1	19.4	31.0	1.5
Kurnool	36.5	48.6	13.2	1.7
Mahbubnagar	53.8	31.5	9.5	5.2
Medak	67.3	9.3	18.2	5.3
Nalgonda	53.8	20.7	24.1	1.5
Nellore	50.5	29.8	17.0	2.7
Nizamabad	53.3	22.4	21.5	2.8
Prakasam	62.3	15.1	19.2	3.4
Rangareddi	51.1	14.5	30.0	4.4
Srikakulam	28.6	50.8	17.2	3.4
Visakhapatnam	35.0	24.7	35.0	5.3
Vizianagaram	54.7	25.2	15.3	4.8
Warangal	12.9	53.7	30.4	2.9
West Godavari	35.3	36.1	24.4	4.2
Andhra Pradesh	45.4	26.3	24.8	3.5

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

Table 2.12 gives the distance of surveyed villages from an education facility. The unit of analysis is usual residents of rural population. Majority of the rural residents (90 percent) (the *de*

*jure* rural population) in the state live in villages that have a primary school, 63 percent live in villages with middle school and 40 percent of the rural population live in villages with secondary schools. Higher secondary schools are available for 11 percent of the rural population. Nine percent of the rural population live in villages, which have *Madarassas*. Only 5 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, one-fourth of the villages have secondary school, 15 percent have middle school, 14 percent have higher secondary school and 8 percent have a 'college' within this distance. For 59 percent of the villages, the college is more than 10 kilometres away, 41 percent of the villages have higher secondary school at this distance and *madarassa* are available at this distance for 32 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, Andhra Pradesh, 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	90.0	0.9	0.9	0.2	8.2	100.0
Middle School	63.3	15.4	5.3	3.1	13.1	100.0
Secondary School	39.7	25.4	14.8	9.0	11.1	100.0
Higher Secondary School	11.0	14.2	20.8	41.2	12.8	100.0
College	4.7	8.1	16.8	59.1	11.3	100.0
<i>Gurujee</i> Scheme	4.5	4.5	3.0	23.5	64.6	100.0
<i>Madarsa</i>	8.7	4.1	5.2	31.9	50.1	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 by distance from the nearest health facility, Andhra Pradesh, 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	50.9	16.3	11.4	9.5	11.8	100.0
Primary health centre	14.8	14.8	29.5	30.4	10.5	100.0
Either sub-centre or PHC	53.4	17.8	12.8	7.8	8.3	100.0
Community health centre/ Referral hospital	4.5	9.2	16.2	50.4	19.7	100.0
Government dispensary	4.7	8.3	18.0	50.0	19.0	100.0
Government hospital	6.0	7.1	19.5	52.2	15.3	100.0
Private clinic	30.8	13.2	17.3	26.3	12.3	100.0
Private hospital	9.1	10.7	20.9	41.9	17.5	100.0
ISM health facility	5.7	7.2	9.1	29.0	49.0	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 51 percent of the rural population live in villages with Sub-centres. Only 15 percent of the rural household population live in a village with a primary health centre, though the proportion of villages having facilities of either Sub-centre or primary health centre is 53 percent. The proportion of rural population with other health facilities are 5 percent for CHCs/RHs, 5 percent for Government dispensary, 6 percent for Government hospitals, 31 percent for private clinics, 9 percent for private hospitals and 6 percent for Indian System of Medicine.

<b>Table 2.14 AVAILABILITY OF SERVICES</b>	
Percentage of rural residents living in villages that have sleeted services, Andhra Pradesh, 2002-04	
Services	Percentage of rural residents
<i>Anganwadi</i> centre	88.2
<i>Anganwadi</i> worker	85.5
Private doctor	37.4
Visiting doctor	36.9
Homeopathic doctor	6.2
Village health guide	26.6
Trained birth attendant	49.4
Traditional healer	8.5
<i>Dai</i>	55.4

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

The proportion of rural population located within a distance of 5 kilometres from health facilities are 16 percent for sub-centres, 15 percent for primary health centres, 9 percent for CHCs/RHs, 8 percent for a Government dispensary, 7 percent for Government hospitals, 13 percent for private clinics, 11 percent for private hospitals and 7 percent for ISM health facilities. Distance of particular health facility is beyond 10 kilometres from surveyed villages in the case of Government hospitals (52 percent), Government dispensaries (50 percent) and for CHCs/RHs (50 percent).

Table 2.14 shows the proportion of rural residents in the state that live in the villages with various health services. Almost 88 percent of rural residents live in villages that have an *anganwadi*, a nursery school for children age 3-6 years and at the same time 86 percent of rural households live in villages with *anganwadi* workers (*Anganwadi* workers provide integrated child development services).

More than one-third each of the rural residents live in villages that have a private doctor (37 percent) and a visiting doctor (37 percent), 6 percent with a homeopathy doctor, 27 percent with a village health guide, 49 percent with a trained birth attendant and 9 percent with a traditional healer. More than half of the rural residents (55 percent) live in villages that have a *Dai* (*Dai* provides the services for the delivery).

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

Table 2.15 shows the availability of education and health facilities for the rural population within the surveyed villages by districts in Andhra Pradesh. In the districts of Anantapur, Chittoor, Cuddapah, Khammam, Krishna, Kurnool, Medak, Nalgonda, Nizamabad, Prakasam and Rangareddi, all the rural population have access to primary or middle schools. In the state of Andhra Pradesh, 92 percent of the rural population live in villages having primary schools. Around 51 percent of the rural population in the state have sub-centres within the village, with the highest coverage of 77 percent in Anantapur and the lowest of 15 percent of the population in Karimnagar.



There is one district, Karimnagar with no PHCs within the villages. Highest availability of PHCs within the village is found in Kurnool (26 percent). In Anantapur and Warangal around three-fourths of the households in the rural area have access to at least one government health facility including sub-centre, primary health centre, community health centre or referral hospital, government hospital and government dispensary within the village.

<b>Table 2.15 AVAILABILITY OF FACILITY AND SERVICES BY DISTRICTS</b>							
Selected facility and services of rural household population within village by district, Andhra Pradesh, 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>	Anganwadi worker
Adilabad	93.2	32.3	15.4	45.0	61.0	49.4	78.6
Anantapur	100.0	76.8	17.0	76.8	35.9	48.1	92.3
Chittoor	100.0	44.5	17.5	47.5	74.9	68.8	96.0
Cuddapah	100.0	59.4	12.7	62.8	40.8	72.7	100.0
East Godavari	96.3	55.3	8.6	61.8	35.1	19.0	96.3
Guntur	59.2	45.0	3.6	48.5	52.7	9.6	51.1
Karimnagar	46.0	14.6	0.0	18.1	33.9	18.0	42.4
Khammam	100.0	66.2	10.0	66.2	30.1	61.4	95.8
Krishna	100.0	68.6	23.0	72.3	52.6	57.4	97.2
Kurnool	100.0	62.5	26.2	65.9	92.7	79.3	96.7
Mahbubnagar	79.6	47.5	16.9	61.3	41.0	50.6	64.6
Medak	100.0	49.1	15.4	52.4	22.1	53.1	93.2
Nalgonda	100.0	54.7	19.6	60.6	51.6	36.4	96.6
Nellore	96.9	38.5	16.8	38.5	63.6	60.5	93.7
Nizamabad	100.0	59.5	11.2	63.3	49.5	65.0	91.8
Prakasam	100.0	59.7	24.7	67.1	46.4	55.1	100.0
Rangareddi	100.0	34.4	10.2	39.2	31.3	59.7	96.2
Srikakulam	96.6	40.8	11.4	45.7	88.4	27.6	70.4
Visakhapatnam	81.4	36.3	7.3	36.3	66.7	39.0	71.1
Vizianagaram	95.5	34.2	10.9	38.0	45.9	56.7	100.0
Warangal	88.5	71.5	22.6	74.6	69.1	55.1	81.4
West Godavari	96.9	48.7	20.4	59.7	96.4	72.4	90.4
Andhra Pradesh	91.5	50.9	14.8	55.7	53.8	49.4	85.5

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.

More than 90 percent of the rural population are visited either by private or by visiting doctors in the surveyed villages of West Godavari (96 percent) and Kurnool (93 percent) districts. Highest numbers of rural population (79 percent) are attended by trained birth attendants in Kurnool, while only 10 percent of rural population availed themselves of such a provision in Guntur. A visit by *anganwadi* workers is reported by all the rural households in Cuddapah, Prakasam and Vizianagaram, while it is the lowest in Karimnagar (42 percent).

## CHAPTER III

### CHARACTERISTICS OF WOMEN, HUSBANDS AND FERTILITY

The Reproductive and Child Health (RCH) programme is targeted towards the underprivileged sections of the population, particularly, women and children. The utilization of RCH services being 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 preferences 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, completed 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, education and other demographic characteristics are shown in Table 3.1. A sample of 17,886 eligible women represents the state of Andhra Pradesh in DLHS-RCH and nearly two-thirds of these women are drawn from rural areas. About 62 percent of the currently married women are in the age range of 20-34 years and a similar age distribution is observed both for urban and rural areas. Age at consummation of marriage, particularly in rural areas, is found to be very low with as many as 73 percent of the women having cohabited before 18 years of age, while it is 53 percent in urban areas. Looking at the distribution of marital duration, it is noted that about 41 percent of the women across the state are married for more than 15 years.

Among the sample of 17,886 representative women in Andhra Pradesh, Hindus, Muslims and Christians constitute 85 percent, 10 percent and 5 percent respectively. More Hindu women are found in rural areas (90 percent) than in urban areas (76 percent). The presence of women belonging to other religious groups is very insignificant in proportional and absolute terms. Seventeen percent of the women belong to scheduled castes, 6 percent to scheduled tribes and 45 percent to other backward classes. Thirty-one percent of the sample women belong to a general caste other than scheduled caste/tribe and other backward class. In rural areas, there are more

women belonging to scheduled caste, scheduled tribe and other backward classes than in urban areas, while more women from other castes are found in urban areas. There is a clear rural-urban differential in the educational attainment of women. For the state of Andhra Pradesh, 55 percent of women are non-literate and women of this literacy category constitute 66 percent in rural areas, while it is just 33 percent in urban 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, Andhra Pradesh, 2002-04			
Background characteristic	Total	Residence	
		Rural	Urban
<b>Age group</b>			
15-19	9.7	11.8	5.6
20-24	22.0	22.6	20.7
25-29	22.4	21.8	23.5
30-34	17.3	16.7	18.4
35-39	16.4	15.5	18.3
40-44	12.3	11.7	13.5
<b>Age at consummation of marriage</b>			
Below 18 years	66.4	73.3	52.7
18 years & above	33.6	26.7	47.3
<b>Marital duration</b>			
0-4	19.5	20.0	18.7
5-9	21.0	20.4	22.3
10-14	18.7	18.9	18.5
15+	40.7	40.7	40.6
<b>Religion</b>			
Hindu	85.3	90.1	75.9
Muslim	9.7	4.4	20.0
Christian	4.8	5.4	3.7
Sikh	0.0	0.0	0.1
Buddhist	0.0	0.0	0.0
Jain	0.0	0.0	0.1
No religion	0.1	0.0	0.1
Other	0.1	0.0	0.1
<b>Caste/tribe</b>			
Scheduled caste	17.4	20.6	11.2
Scheduled tribe	6.1	8.0	2.4
Other backward class	45.0	47.1	40.7
Other #	30.7	23.5	45.0
Don't know	0.7	0.8	0.7
<b>Education (Years of schooling)</b>			
Non-literate	54.7	65.9	32.8
0-9@ years	26.0	24.3	29.4
10 years & above	19.3	9.9	37.8
Missing	0.0	0.0	0.0
<b>Husband's education (Years of schooling)</b>			
Non-literate	40.5	50.1	21.7
0-9@ years	25.7	26.4	24.2
10 years & above	33.4	23.2	54.0
Don't know	0.3	0.3	0.1
Missing	0.2	0.2	0.2
<b>Standard of living index</b>			
Low	34.4	47.3	9.0
Medium	40.5	42.1	37.4
High	25.2	10.7	53.6
Number of women	17,886	11,857	6,029

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

Around 26 percent of women in the state have completed 0-9 years of schooling. Only 10 percent of rural women have completed 10 or more years of schooling compared to 38 percent for urban women. Men are more literate than their spouses. In Andhra Pradesh, 41 percent of the husbands of eligible women are non-literate and the corresponding figures are 50 percent in rural areas and 22 percent in urban areas. The DLHS-RCH includes data on materials used for floor, walls and roofs of the housing structure along with status of possession of a list of durables and these are utilized to construct a composite index of household standard of living. Households are further classified as those with low, medium and high standard of living. Thirty-four percent of women in the state live in low standard of living households and this is 47 percent in rural areas and 9 percent in urban areas. Majority of women across the state live in households categorised as medium standard of living. In urban areas, 54 percent of women belong to high standard of living households and the corresponding figure is just 11 percent in rural areas.

### **3.2 Educational Level of Women**

Table 3.2 provides details of educational level of eligible women in terms of classification by years of schooling, and selected background characteristics, such as, place of residence, religion, and caste and husbands' education. As regards distribution of non-literate women, it is observed that a lesser proportion of younger women below 30 years of age are non-literate compared to older women above 30 years. This age divide remains true even among literate women. A distinct pattern of educational attainment of women is that maximum of them attended schooling either for 1-5 years or 6-8 years or 9-10 years and not many had 11 or more years of schooling. For the women in the age group 15-19 years, 15 percent, 18 percent and 14 percent of them had 1-5 years, 6-8 years and 9-10 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 has decreased uniformly with 12 percent, 10 percent, 9 percent and 5 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 Andhra Pradesh. About 66 percent of rural eligible women are non-literate and 12 percent, 10 percent, 9 percent and 3 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 33 percent for non-literate and 11 percent, 15 percent, 22 percent and 19 percent respectively for literate categories. More Christian women (59 percent) and Hindu women (57 percent) are non-literate compared to Muslim women (45 percent). For literate eligible women from all religious communities, maximum of them have either 1-5 or 6-8 or 9-10 years of schooling. The proportion of Hindu women with 1-5 years of schooling is 12 percent and the same is 17 percent for Muslim women and 9 percent for Christian women. Among the literate Muslim women, 10 percent of them have 11 or more years of schooling, while 8 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 (67 percent), scheduled tribe (83 percent), other backward class (58 percent) and other caste or tribe (37 percent). The literate women belonging to scheduled castes or tribes or other backward classes are concentrated more in the range of 1-5 to 9-10 years of schooling. The husbands' education is an important

characteristic, which has strong association with the education of eligible women. As many as 86 percent of women whose husbands are non-literate are also non-literate, while only 12 percent of women whose husbands have 11 or more or years of schooling are non-literate. Thirty-eight percent of literate women educated for 11 or more years of schooling have husbands who have the same level of education.

**Table 3.2 LEVEL OF EDUCATION OF ELIGIBLE WOMEN**  
Percent distribution of currently married women aged 15-44 by years of schooling, according to selected background characteristics, Andhra Pradesh, 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	49.3	0.0	15.4	17.7	13.6	3.9	0.0	100.0	1,737
20-24	45.9	0.0	12.1	14.4	17.3	10.2	0.0	100.0	3,926
25-29	51.2	0.1	11.6	11.3	15.0	10.7	0.0	100.0	3,999
30-34	57.9	0.1	10.5	9.8	12.6	9.2	0.0	100.0	3,085
35-39	64.0	0.0	10.5	8.5	9.2	7.9	0.0	100.0	2,938
40-44	64.2	0.0	12.0	9.7	8.6	5.4	0.0	100.0	2,200
<b>Place of residence</b>									
Rural	65.9	0.0	12.4	10.0	8.5	3.2	0.0	100.0	11,857
Urban	32.8	0.0	10.6	15.1	22.4	19.0	0.0	100.0	6,029
<b>Religion</b>									
Hindu	55.6	0.0	11.8	11.3	13.0	8.3	0.0	100.0	15,256
Muslim	44.7	0.1	11.8	16.6	16.4	10.4	0.0	100.0	1,731
Christian	59.2	0.0	11.3	9.0	11.2	9.4	0.0	100.0	863
Other	(53.3)	(0.0)	(16.7)	(3.3)	(10.0)	(16.7)	(0.0)	(100.0)	36
<b>Caste/tribe #</b>									
Scheduled caste	67.1	0.0	10.2	9.1	8.4	5.1	0.0	100.0	3,116
Scheduled tribe	82.8	0.0	6.8	3.6	4.4	2.3	0.0	100.0	1,098
Other backward class	58.4	0.0	11.6	11.5	12.0	6.5	0.0	100.0	8,043
Other	36.6	0.1	13.8	15.1	19.5	14.8	0.0	100.0	5,497
<b>Husband's education</b>									
Non-literate	86.0	0.0	6.8	4.7	2.1	0.4	0.0	100.0	7,245
Literate but no schooling	(44.8)	(13.8)	(6.9)	(20.7)	(6.9)	(6.9)	(0.0)	(100.0)	27
1-5 years	58.2	0.1	24.2	10.7	5.5	1.3	0.0	100.0	2,192
6-8 years	46.6	0.0	19.2	19.9	12.2	2.1	0.0	100.0	1,916
9-10 years	29.4	0.0	14.7	21.9	27.6	6.3	0.0	100.0	3,203
11 or more years	12.0	0.0	7.3	12.9	29.9	37.9	0.0	100.0	3,229
Total	54.7	0.0	11.8	11.7	13.2	8.6	0.0	100.0	17,886

Note: # Total number may not add up to N due to don't know and missing cases. Table includes 74 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 Andhra Pradesh, husbands are mostly in the age group 25-44 years. Fewer husbands are 24 years or younger. In Andhra Pradesh, 86 percent of the husbands are Hindus, 9 percent are Muslims and 5 percent are Christians. Nineteen percent of husbands in the state belong to the scheduled caste and it is more

in rural areas (22 percent) than in urban areas (11 percent). Thirty 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 45 percent, while it is 23 percent in rural areas. As regards educational characteristics of the husbands of surveyed eligible women, one-third of them have completed 10 or more years of schooling and the proportion of non-literate husbands ranges from 19 percent in urban areas to 47 percent in rural areas, while the overall state figure is 38 percent.

<b>Table 3.3 BACKGROUND CHARACTERISTICS OF MEN</b>			
Percent distribution of husbands of eligible women by selected background characteristics, according to residence, Andhra Pradesh, 2002-04			
Background characteristic	Total	Residence	
		Rural	Urban
<b>Age group</b>			
< 25	8.4	10.0	5.2
25-34	37.0	37.5	36.1
35-44	35.5	34.5	37.8
45 +	19.0	18.1	21.0
<b>Religion</b>			
Hindu	85.9	90.1	77.1
Muslim	9.1	4.4	19.0
Christian	4.8	5.4	3.7
Sikh	0.0	0.0	0.1
Buddhist	0.0	0.0	0.0
Jain	0.0	0.0	0.1
No religion	0.0	0.1	0.0
Other	0.0	0.0	0.1
<b>Caste/tribe</b>			
Scheduled caste	18.5	21.9	11.2
Scheduled tribe	6.0	7.7	2.4
Other backward class	44.9	46.8	40.8
Other #	30.0	22.9	44.9
Don't know	0.7	0.6	0.7
<b>Education (Years of schooling)</b>			
Non-literate	38.0	46.9	19.1
0-9@ years	28.9	29.9	26.6
10 years & above	33.2	23.2	54.2
<b>Standard of living index</b>			
Low	35.0	47.6	8.5
Medium	40.2	41.4	37.6
High	24.8	11.0	53.9
<b>Number of living children</b>			
0	10.3	10.7	9.4
1	15.8	15.8	15.7
2	35.5	33.8	39.0
3	24.1	24.6	23.0
4+	14.3	15.0	12.8
Number of Men	10,404	7,049	3,355
Note: # 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 35 percent, 40 percent and 25 percent respectively. In rural areas, 48 percent of the husbands live in low standard of living households compared to 9 percent in urban areas. This is complementary in the case of husbands living in high standard of living households, 54 percent in urban and 11 percent in rural. In terms of household standard of living composition, those living in medium standard of living is more or less the same in rural (41 percent) and urban (38 percent) Andhra Pradesh. Around 36 percent of husbands across the state reported to have two living children. More husbands in urban areas (39 percent) as well as in rural areas (34 percent) have two living children. About 40 percent of the husbands of rural eligible women have more than three living children and it is 36 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 not uniform and it is more for husbands aged 35 years or older (43 percent) than those who are below 35 years (32 percent). Among the literate husbands, irrespective of their age at the time of survey most of them have 1-10 years of schooling, 57 percent of those below 25 years and 43 percent of those above 45 years of age. As expected few of the younger husbands below 25 years (10 percent) have 11 or more years of schooling and the proportion of the husbands having 11 or more years of schooling is more among those aged 25-34 years (22 percent) and 35-44 years (19 percent) compared to 14 percent of those above 45 years. As in the case of eligible women, 28 percent of Muslim husbands are non-literate while the corresponding non-literate husbands of Hindu and Christian religions are 39 percent and 43 percent respectively. The proportions of husbands of Hindu, Muslim and Christian religions who have 11 or more years of schooling constitute 18 percent, 20 percent and 16 percent respectively. Most of the literate Muslim husbands (52 percent) have completed 1-10 years of schooling and the corresponding numbers are 43 percent and 41 percent respectively for Hindu and Christian religion husbands. Educational attainment of husbands of eligible women varies according to the caste/tribe they belong. There are more non-literate husbands belonging to scheduled tribes (64 percent) followed by scheduled caste husbands (50 percent). Among the scheduled caste and scheduled tribe husbands, 26 percent and 16 percent of them have 9 or more years of schooling. The literacy level of other backward classes is low compared to that of husbands from castes other than scheduled tribe, scheduled caste and other backward classes. Among the husbands belonging to other backward classes, 39 percent of them are non-literate and 34 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, Andhra Pradesh, 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	32.0	0.3	13.4	18.6	25.3	10.4	0.0	100.0	878
25-34	32.0	0.1	12.3	11.6	22.5	21.5	0.0	100.0	3,852
35-44	42.9	0.2	14.4	9.5	14.1	18.9	0.0	100.0	3,697
45 +	43.0	0.1	17.7	10.9	13.9	14.4	0.0	100.0	1,977
<b>Place of residence</b>									
Rural	46.9	0.2	15.8	10.9	15.1	11.1	0.0	100.0	7,049
Urban	19.1	0.0	10.8	12.1	24.4	33.4	0.0	100.0	3,355
<b>Religion</b>									
Hindu	38.8	0.1	14.3	10.9	17.7	18.2	0.0	100.0	8,941
Muslim	27.7	0.3	12.6	15.2	23.9	20.3	0.0	100.0	945
Christian	43.0	0.0	14.8	12.0	14.0	16.2	0.0	100.0	502
<b>Caste/tribe #</b>									
Scheduled caste	50.3	0.3	12.9	10.1	13.5	12.9	0.0	100.0	1,920
Scheduled tribe	63.7	0.3	12.3	7.3	11.2	5.2	0.0	100.0	627
Other backward class	38.8	0.1	15.7	11.1	17.8	16.5	0.0	100.0	4,667
Other	24.0	0.1	13.0	13.1	22.7	27.1	0.0	100.0	3,120
Total	38.0	0.1	14.2	11.3	18.1	18.3	0.0	100.0	10,404

Note: # Total number may not add upto N due to don't know and missing cases. Table includes 16 cases on other category in religion were not shown separately.

### 3.5 Children Ever Born and Surviving

In DLHS-RCH, currently married women in the age group of 15-44 years were asked about the children born alive and the number of children surviving. Table 3.5 shows mean children ever born and mean surviving children by selected background characteristics and sex of children. A look at the mean children ever born by age of the women reveals that older women had experienced more average live births than younger women. On the average, women in the reproductive age group have given birth to slightly more male children than female children and a similar sex differential is also noted when it comes to mean surviving children. Completed fertility, that is, mean children ever born to women in the age group 40-44 years is 3.4 for the state of Andhra Pradesh and it comprises an average of 1.8 male children and 1.5 female children. Out of the 3.4 mean children ever born to women in the 40-44 year age group, an average of 3.0 children survived. By sex of children, out of 1.8 mean number of males, 1.6 survived on the average and the corresponding mean number of females surviving was 1.4 out of 1.5.

Women with longer marital duration have higher mean children ever born. On the average, women who are married for 15 or more years have 3.1 children ever born and 2.8 of them are surviving. There is not much rural-urban divide in terms of mean children ever born with 2.3 children in rural areas and 2.2 children in urban areas. The mean children ever born to women who are Hindu, Muslim and Christian religions are 2.2, 2.7 and 2.3 respectively. The corresponding mean surviving children are 2.0, 2.5 and 2.1 for these religious groups. The



average children ever born also does not vary much by caste/tribe of the eligible women. For women belonging to scheduled caste, the mean children ever born is 2.4, for the scheduled tribe is 2.5, other backward classes is 2.3 and other castes is 2.3. For all caste 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 LIVING</b>							
Mean children ever born (CEB) and children surviving (CS) by selected background characteristics of currently married women age 15-44 years, Andhra Pradesh, 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	0.6	0.3	0.3	0.6	0.3	0.3	1,737
20-24	1.6	0.8	0.8	1.4	0.7	0.7	3,926
25-29	2.2	1.1	1.1	2.1	1.1	1.0	3,999
30-34	2.7	1.4	1.3	2.5	1.3	1.2	3,085
35-39	3.0	1.6	1.4	2.7	1.4	1.3	2,938
40-44	3.4	1.8	1.5	3.0	1.6	1.4	2,200
<b>Marital duration</b>							
0-4	0.8	0.4	0.4	0.7	0.4	0.3	3,494
5-9	1.9	1.0	0.9	1.8	0.9	0.9	3,765
10-14	2.5	1.3	1.2	2.3	1.2	1.1	3,351
15+	3.1	1.7	1.5	2.8	1.5	1.3	7,276
<b>Residence</b>							
Rural	2.3	1.2	1.1	2.1	1.1	1.0	11,857
Urban	2.2	1.2	1.1	2.1	1.1	1.0	6,029
<b>Religion</b>							
Hindu	2.2	1.2	1.1	2.0	1.1	1.0	15,256
Muslim	2.7	1.4	1.3	2.5	1.3	1.2	1,731
Christian	2.3	1.2	1.1	2.1	1.0	1.0	863
Other	(2.4)	(1.5)	(0.9)	(2.4)	(1.4)	(0.9)	36
<b>Caste/tribe #</b>							
Scheduled caste	2.4	1.2	1.1	2.1	1.1	1.0	3,116
Scheduled tribe	2.5	1.3	1.2	2.2	1.1	1.1	1,098
Other backward class	2.3	1.2	1.1	2.1	1.1	1.0	8,043
Other	2.3	1.2	1.1	2.1	1.1	1.0	5,497
<b>Education</b>							
Non-literate	2.6	1.4	1.2	2.3	1.2	1.1	9,787
0-9@ years	2.1	1.1	1.0	1.9	1.0	0.9	4,649
10 years & above	1.7	0.9	0.8	1.7	0.9	0.8	3,449
<b>Standard of living index</b>							
Low	2.4	1.2	1.2	2.1	1.1	1.0	6,146
Medium	2.3	1.2	1.1	2.1	1.1	1.0	7,241
High	2.1	1.1	1.0	2.0	1.1	1.0	4,500
All women	2.3	1.2	1.1	2.1	1.1	1.0	17,886
Note: # Total number may not add upto N due to don't know and missing cases. Table includes 1 woman 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 (2.6) than women who have completed 0-9 years of schooling (2.1) and 10 or more years of schooling (1.7). The mean number of surviving children for women corresponding to these educational levels is 2.3, 1.9 and 1.7 respectively. Further the mean children ever born for women classified into low, medium and

high standard of living groups by SLI are 2.4, 2.3 and 2.1 respectively. For the state of Andhra Pradesh, the DLHS-RCH shows inverse association between mean children ever born and educational attainment of women and also, in lesser degree, the level of household economic comfort.

### 3.6 Completed Fertility by Districts

The levels of completed fertility, as measured by mean children ever born to women of 40-44 years, by districts in Andhra Pradesh 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 3.0 children are surviving. Completed fertility in Andhra Pradesh varies from the low of 3.0 mean children ever born for Khammam, Nellore, Prakasam, Visakhapatnam and Warangal districts to the highest of 4.4 children in Kurnool district. Completed fertility in terms of mean children ever born is high in the districts of Rangareddi (4.0), Adilabad (3.9), Karimnagar (3.8), Nizamabad (3.7), Srikakulam (3.6), Anantapur (3.6), Hyderabad (3.5), Medak (3.5) and Nalgonda (3.5). Mean children ever born in all districts of Andhra Pradesh is 3 or more children. It is also true that in most of the districts mean number of male children is more than the mean of female children born alive to women in the 40-44 year age group. Rangareddi (3.7), Kurnool (3.6) and Adilabad (3.5) recorded high 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 Andhra Pradesh.

<b>Table 3.6 COMPLETED FERTILITY BY DISTRICT</b>						
Mean children ever born (CEB) and children surviving (CS) to currently married women age 40-44 by district, Andhra Pradesh, 2002-04						
District	Mean children ever born			Mean children surviving		
	Total	Male	Female	Total	Male	Female
Adilabad	3.9	2.2	1.7	3.5	2.0	1.6
Anantapur	3.6	1.8	1.8	3.0	1.5	1.5
Chittoor	3.1	1.7	1.4	2.7	1.5	1.2
Cuddapah	3.4	1.9	1.5	2.9	1.7	1.2
East Godavari	3.3	1.8	1.5	3.1	1.7	1.4
Guntur	3.2	1.7	1.4	2.8	1.5	1.3
Hyderabad	3.5	1.8	1.7	3.4	1.7	1.7
Karimnagar	3.8	2.0	1.7	3.3	1.8	1.5
Khammam	3.0	1.7	1.3	2.8	1.5	1.2
Krishna	3.1	1.9	1.3	2.7	1.5	1.2
Kurnool	4.4	2.4	2.1	3.6	1.9	1.7
Mahabubnagar	3.4	2.0	1.3	3.3	2.0	1.3
Medak	3.5	1.9	1.6	3.2	1.8	1.4
Nalgonda	3.5	1.9	1.7	3.0	1.6	1.5
Nellore	3.0	1.7	1.4	2.7	1.5	1.2
Nizamabad	3.7	1.7	1.9	3.3	1.5	1.7
Prakasham	3.0	1.9	1.1	2.7	1.7	1.0
Rangareddi	4.0	2.1	1.9	3.7	2.0	1.7
Srikakulam	3.6	2.0	1.6	3.1	1.7	1.4
Viskhapatnam	3.0	1.7	1.2	2.5	1.5	1.0
Vizianagaram	3.3	1.9	1.4	2.8	1.6	1.2
Warangal	3.0	1.6	1.4	2.9	1.5	1.4
West Godavari	3.2	1.6	1.6	2.9	1.5	1.4
Andhra Pradesh	3.4	1.8	1.5	3.0	1.6	1.4

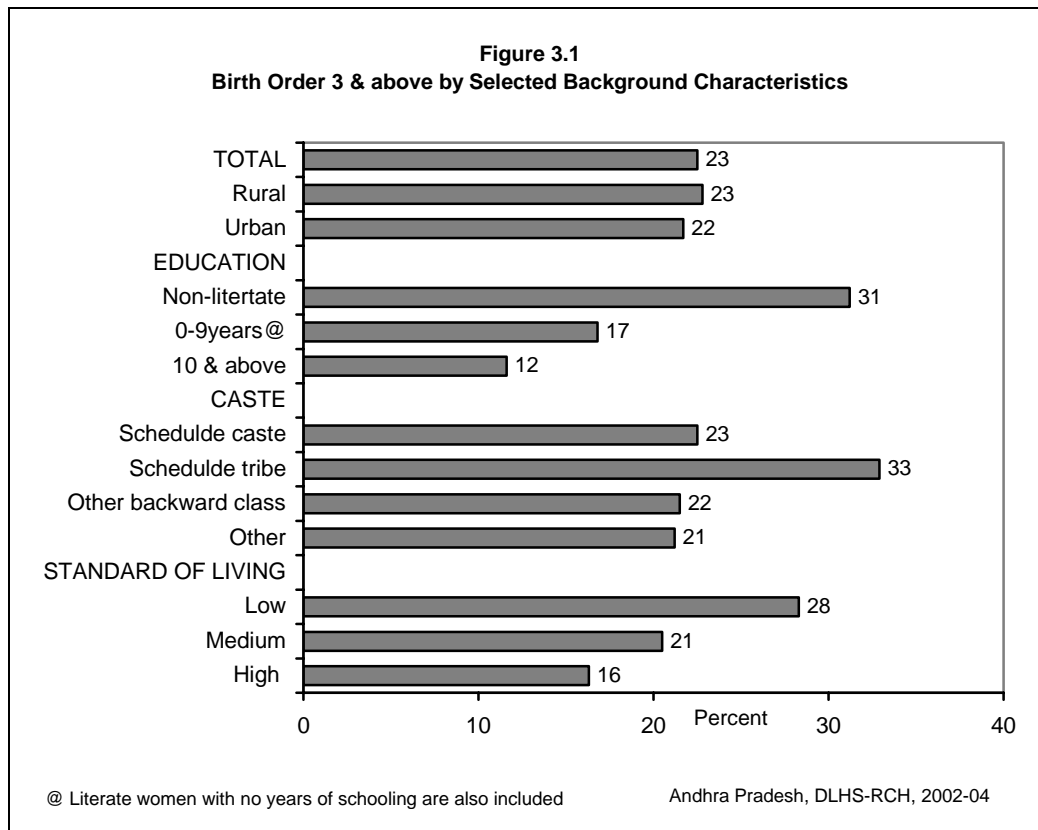
### 3.7 Birth Order

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

<b>Table 3.7 BIRTH ORDER</b>						
Percent distribution of births during three years preceding the survey by birth order by selected background characteristics, Andhra Pradesh, 2002-04						
Background characteristic	Birth order				Total percent	Number of births
	1	2	3	4+		
<b>Age of women</b>						
15-19	75.6	21.7	2.6	0.1	100.0	940
20-24	40.2	43.4	12.9	3.4	100.0	2,692
25-29	19.2	42.2	25.1	13.5	100.0	1,303
30-34	13.3	28.2	21.6	36.8	100.0	320
35-39	18.1	32.9	8.9	40.1	100.0	70
<b>Place of residence</b>						
Rural	39.7	37.4	14.7	8.1	100.0	3,607
Urban	38.6	39.7	14.1	7.6	100.0	1,734
<b>Education (Years of schooling)</b>						
Non-literate	33.3	35.5	18.5	12.7	100.0	2,549
0-9@ years	42.5	40.7	12.5	4.3	100.0	1,573
10 years & above	48.0	40.4	8.9	2.7	100.0	1,219
<b>Religion</b>						
Hindu	40.3	39.3	13.8	6.6	100.0	4,379
Muslim	32.7	30.5	19.9	16.9	100.0	686
Christian	41.0	38.1	13.6	7.2	100.0	267
<b>Caste/tribe #</b>						
Scheduled caste	40.9	36.5	14.7	7.8	100.0	909
Scheduled tribe	33.6	33.5	18.4	14.5	100.0	416
Other backward class	38.5	39.9	14.9	6.6	100.0	2,430
Other	41.3	37.5	12.8	8.4	100.0	1,546
<b>Standard of living index</b>						
Low	35.6	36.1	17.4	10.9	100.0	2,007
Medium	40.4	39.0	13.6	6.9	100.0	2,154
High	43.8	39.9	11.5	4.8	100.0	1,180
Total	39.4	38.1	14.5	8.0	100.0	5,341
Note: Total includes 16 cases in age of women and 10 women in other category in religion were not shown separately.						
# Total number of births may not add upto N due to don't know and missing cases.						

For the state of Andhra Pradesh, 39 percent of the births in the three-year period preceding the survey were of first order, 38 percent were of second order and the remaining 23 percent were of order 3<sup>rd</sup> and higher order births. By current age of eligible women, more than one-third of births to women in the age group 30-34 years and 35-39 years are 4<sup>th</sup> and higher order births. For women of 15-19 years, 76 percent births are of first order and 22 percent births are of second order. Birth order distribution is more or less similar in the case of eligible women in urban and rural areas. Of the total births of non-literate women, 31 percent are 3<sup>rd</sup> and higher order births, followed by 17 percent for women with 0-9 years of schooling and 12 percent for women who had 10 or more years of schooling. In short, births occurred to non-literate women are of higher order whereas lower order births were occurred to more women who completed 10

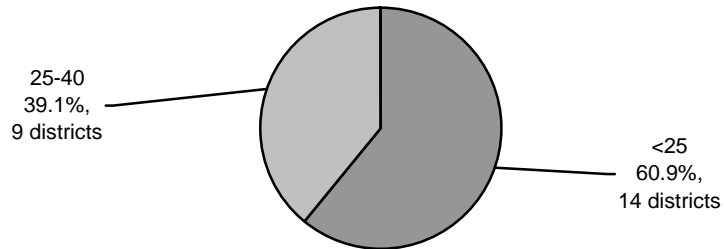
or more years of schooling. Looking at the religious differentials in birth order distribution, it is observed that 37 percent of births occurred to Muslim women are 3<sup>rd</sup> and higher order births. For Hindu and Christian women, the 3<sup>rd</sup> and higher order births constitute 20 percent and 21 percent respectively. The occurrence of births of order 3 and above is more among scheduled tribe women (33 percent) than among scheduled caste (23 percent), other backward classes (22 percent) and other castes (21 percent) women. Incidence of births of order 3 and above for women classified by household standard of living index is 16 percent for high, 21 percent for medium and 28 percent for low living standard household women.



### 3.8 Birth Order by Districts

Table 3.8 and Figure 3.2 show the birth order distribution by districts in Andhra Pradesh. The proportion of births of order 3<sup>rd</sup> and above ranges from the lowest of 12 percent in East Godavari to the highest of 35 percent in Kurnool district. The other districts, which have lower proportion of births of order 3<sup>rd</sup> and above are Vizianagaram (14 percent), Krishna (15 percent), Nellore (15 percent), West Godavari (16 percent), Guntur (16 percent), Khammam (17 percent) and Srikakulam (18 percent). The other districts which can be classified as having higher proportion of births of order 3 and above are Mahbubnagar (34 percent) and Rangareddi (33 percent). The remaining districts fall midway between these districts in terms of incidence of births of order 3<sup>rd</sup> and above.

**Figure 3.2**  
**Birth Order 3 & above by District**



Andhra Pradesh, DLHS-RCH, 2002-04

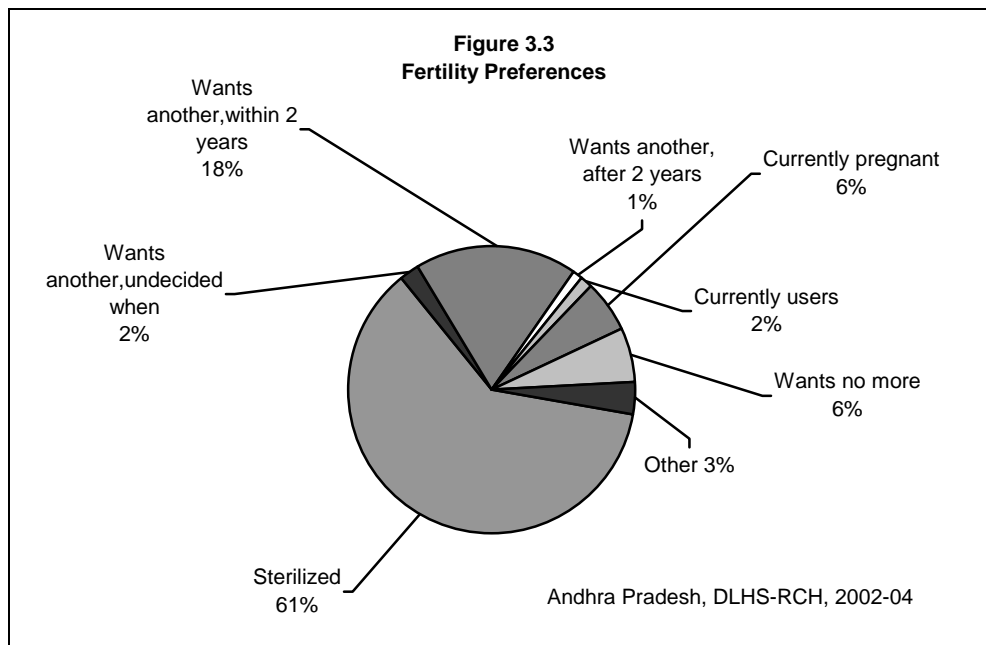
**Table 3.8 BIRTH ORDER BY DISTRICT**

Percent distribution of births during three years preceding the survey by birth order, according to districts, Andhra Pradesh, 2002-04

District	Birth order			
	1	2	3	4+
Adilabad	37.8	36.2	14.5	11.5
Anantapur	42.7	35.5	14.0	7.7
Chittoor	36.6	36.1	14.0	13.3
Cuddapah	35.8	42.0	15.3	6.8
East Godavari	47.0	40.9	9.0	3.2
Guntur	42.1	41.8	10.7	5.4
Hyderabad	37.0	37.3	15.4	10.2
Karimnagar	40.6	37.8	17.8	3.8
Khammam	46.3	37.0	11.6	5.1
Krishna	42.4	42.8	11.8	3.0
Kurnool	31.3	33.4	15.1	20.3
Mahbubnagar	33.3	32.7	20.1	13.9
Medak	39.5	34.7	15.1	10.8
Nalgonda	36.6	41.9	14.5	7.0
Nellore	46.9	38.2	10.9	4.0
Nizamabad	41.1	33.2	15.7	10.0
Prakasam	37.7	35.8	17.4	9.0
Rangareddi	33.5	33.5	20.9	12.1
Srikakulam	42.3	39.7	14.2	3.7
Visakhapatnam	36.9	40.7	17.0	5.3
Vizianagaram	43.4	42.6	10.5	3.5
Warangal	36.2	43.8	12.4	7.6
West Godavari	44.9	39.3	10.9	5.0
Andhra Pradesh	39.4	38.1	14.5	8.0

### 3.9 Fertility Preferences

The distribution of currently married women desiring additional children and preferred sex of additional children by number of living children of the women is shown vividly in Table 3.9 and Figure 3.3. Out of the 2,040 women with no living child, 21 percent are currently pregnant and one percent are using spacing methods, while 61 percent want to have children within two years, 4 percent are undecided about the timing of birth and 2 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 50 percent of the women having one living child want additional children within two years, 4 percent after two years, 8 percent are undecided about the timing of the next child, 6 percent of them want no more additional children and 9 percent are sterilized, while only 3 percent of them are using spacing methods. Use of permanent means of contraception tends to be accelerated with number of living children. In the state of Andhra Pradesh, out of the 17,886 surveyed representative women, 18 percent desired to have additional children within two years, 6 percent want no more children, 6 percent are currently pregnant and 61 percent are using terminal contraceptive methods. A total of 4,188 women want additional children irrespective of the number of living children. Out of 1,493 women who have no living children and desire for additional children, 8 percent want a boy as the first child and 2 percent desired a girl, while for 83 percent, the sex of the child is immaterial and 7 percent leave it to God. With increasing number of living children, male is the dominating preferred sex of the next child, though a significant proportion of women desiring additional children expressed that the sex of the child was immaterial.



<b>Table 3.9 FERTILITY PREFERENCES</b>						
Percent distribution of currently married women by desire for children, according to number of living children, Andhra Pradesh, 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>	61.1	49.8	8.5	3.1	1.7	18.4
Wants another later <sup>2</sup>	0.4	3.9	0.5	0.1	0.0	0.9
Want another, undecided when	4.4	8.2	1.5	0.2	0.4	2.4
Undecided	3.1	2.0	0.6	0.3	0.2	0.9
Up to God	4.1	1.4	0.3	0.2	0.1	0.8
Want no more	1.9	6.3	6.8	5.0	8.9	6.1
Sterilized	0.7	8.8	76.4	87.9	83.3	61.2
Currently users <sup>3</sup>	1.0	3.4	1.6	0.8	1.0	1.5
Currently pregnant	21.1	14.2	2.6	1.0	1.0	5.8
Declared infecund	2.2	1.9	1.3	1.4	3.4	1.9
Missing	0.0	0.1	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,040	2,730	6,040	4,054	3,023	17,886
<b>Preferred sex of additional children</b>						
Boy	8.3	28.4	38.8	46.3	53.3	24.1
Girl	1.9	22.1	16.5	17.2	8.9	13.6
Doesn't matter	82.5	45.8	39.9	24.7	23.6	56.8
Upto God	7.3	3.6	4.8	11.8	14.1	5.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,493	1,782	684	156	74	4,188
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 Andhra Pradesh. For the state as a whole, 96 percent of pregnancies ended in live births, 1 percent in stillbirths, 0.5 percent in induced abortions and 3 percent in spontaneous abortions. No rural-urban divide in the outcomes of pregnancies is found in the state. In Andhra Pradesh, the proportion of pregnancies ending in live births ranges from 90 percent in Cuddapah to 99 percent in Medak. The incidence of stillbirths is less than 1.0 percent in 10 out of the 23 districts. Induced abortions are higher in Anantapur district (2 percent) and nil in 9 districts. Spontaneous abortions are least (0.6 percent) in Medak district and highest (7 percent) in Cuddapah, Vizianagaram and Krishna districts.

**Table 3.10 OUTCOMES OF PREGNANCY**

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

Districts	Live birth	Stillbirth	Induced abortion	Spontaneous abortion	Missing	Total percent
<b>State-Rural</b>	95.7	1.0	0.5	2.8	0.0	100.0
<b>State-Urban</b>	95.5	0.8	0.6	3.1	0.0	100.0
<b>State-Total</b>	95.6	1.0	0.5	2.9	0.0	100.0
Adilabad	96.9	0.9	0.3	1.9	0.0	100.0
Anantpur	91.0	1.4	2.0	5.6	0.0	100.0
Chittoor	92.0	1.9	1.5	4.6	0.0	100.0
Cuddapah	89.9	1.5	1.2	7.4	0.0	100.0
East Godavari	96.6	0.5	0.4	2.5	0.0	100.0
Guntur	94.9	0.8	1.5	2.8	0.0	100.0
Hyderabad	97.9	1.1	0.0	1.1	0.0	100.0
Karimnagar	97.4	0.0	0.4	2.2	0.0	100.0
Khammam	96.3	1.0	0.0	2.6	0.0	100.0
Krishna	92.5	0.4	0.4	6.7	0.0	100.0
Kurnool	96.3	0.4	0.3	3.0	0.0	100.0
Mahabubnagar	98.2	0.3	0.3	1.1	0.0	100.0
Medak	98.6	0.7	0.0	0.6	0.0	100.0
Nalgonda	95.9	1.7	0.0	2.4	0.0	100.0
Nellore	96.3	1.1	0.1	2.5	0.0	100.0
Nizamabad	95.8	1.2	0.3	2.8	0.0	100.0
Prakasham	95.9	1.8	0.0	2.2	0.0	100.0
Rangareddi	95.4	0.5	1.2	2.9	0.0	100.0
Srikakulam	97.1	1.6	0.0	1.3	0.0	100.0
Viskhapatnam	96.3	1.1	0.8	1.8	0.0	100.0
Vizianagaram	91.6	1.3	0.0	7.0	0.0	100.0
Warangal	97.6	1.2	0.0	1.2	0.0	100.0
West Godavari	96.5	0.9	0.0	2.6	0.0	100.0



## CHAPTER IV

### MATERNAL HEALTH CARE

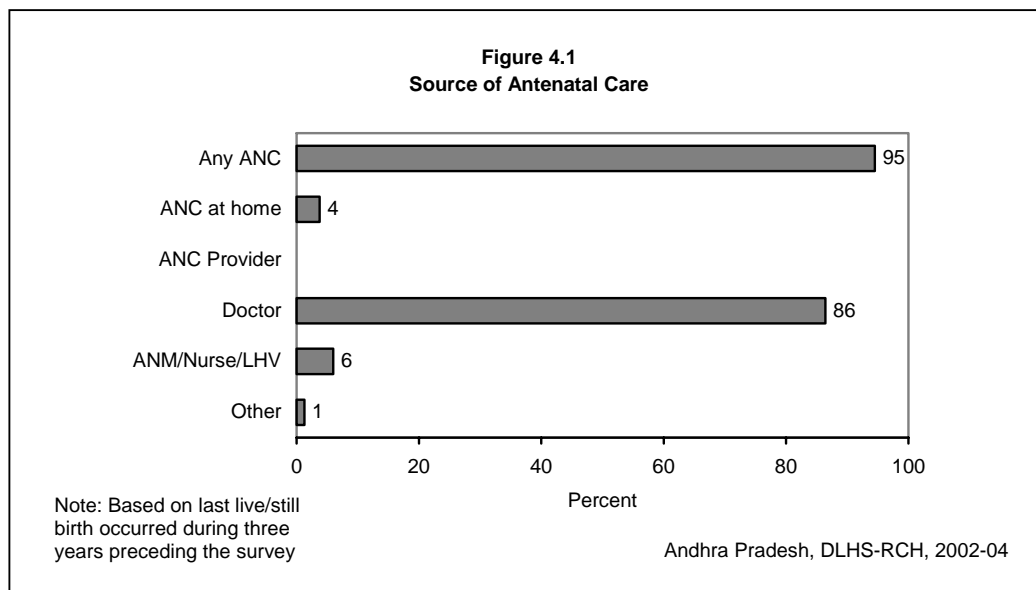
Provisions of maternal health care services to ensure safe motherhood is one of the major components of the Reproductive and Child Health (RCH) programme. The RCH programme services for antenatal care, includes at least three antenatal care visits, iron prophylaxis for pregnant and lactating women, at 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 cases non-governmental organisations (NGOs) and trust hospitals. In urban areas, reproductive health services are available mainly through government or municipal hospitals, Urban Health Posts (UHPs), Urban Family Welfare Centres (UFWCs), hospitals and nursing homes operated by NGOs, and private nursing and maternity homes.

The National Population Policy (NPP), 2000 adopted by the Government of India (Ministry of Health and Family Welfare, 2000) reiterates the Government's commitment 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 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 received antenatal check-ups by source of antenatal check-ups according to some selected background characteristics. Results show that 95 percent of the women received antenatal check-ups during the three years preceding the survey, almost same as that of RCH Round I (94 percent). Eighty-six percent of women received antenatal check-ups from doctors, and 6 percent from ANM/Nurse/LHV. Four percent women received antenatal check-ups only at the doorsteps 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 or second births. The percentage of women who received antenatal check-ups was slightly higher in urban areas (97 percent) than in rural areas (93 percent), and the percentage of women who received antenatal check-ups from doctors is higher in urban areas (93 percent) than in rural areas (83 percent) and 7 percent of rural women received antenatal check-ups from auxiliary nurse midwife, nurse or LHVs, the same for women in urban areas is 4 percent. Ninety-one percent of non-literate women received antenatal check-ups and nearly all women (99 percent) who had completed high school received antenatal check-ups for their last pregnancy that terminated into birth (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, Andhra Pradesh, 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	96.5	3.7	88.6	7.1	0.8	0.6	851
20-34 years	94.2	3.7	86.1	5.9	0.4	0.8	4,528
35 years & above	90.1	9.3	80.8	0.0	0.0	0.0	121
<b>Children ever born</b>							
1	97.3	2.5	90.7	5.7	0.7	0.6	1,826
2	95.8	2.9	89.2	5.6	0.3	0.8	2,219
3	91.4	5.2	81.1	6.8	0.4	1.0	897
4+	84.6	10.0	69.2	7.0	0.6	0.9	542
<b>Residence</b>							
Rural	93.4	5.4	83.1	6.8	0.5	1.1	3,725
Urban	96.8	0.5	93.4	4.2	0.4	0.2	1,776
<b>Education</b>							
Non-literate	90.5	6.9	78.0	7.2	0.5	1.1	2,698
0-9 @ years	97.9	1.5	92.7	6.3	0.7	0.7	1,552
10 years & above	98.8	0.2	96.8	3.0	0.3	0.3	1,250
<b>Religion</b>							
Hindu	94.3	4.0	86.1	5.7	0.4	0.8	4,562
Muslim	95.4	1.6	88.5	6.7	0.8	1.0	667
Christian	96.4	5.7	86.0	9.3	0.7	0.5	262
<b>Caste/tribe#</b>							
Scheduled caste	95.9	3.6	87.7	7.2	0.6	0.9	943
Scheduled tribe	77.5	14.6	59.3	5.3	0.2	0.4	436
Other backward class	95.3	3.4	87.6	6.0	0.5	0.9	2,506
Other	97.1	1.7	91.3	5.5	0.5	0.8	1,570
<b>Standard of living index</b>							
Low	90.2	7.9	77.4	6.8	0.6	1.0	2,090
Medium	96.7	2.0	89.7	7.1	0.4	1.0	2,198
High	97.9	0.1	96.0	2.6	0.4	0.1	1,212
<b>Availability of health facility<sup>4</sup> in the village</b>							
No	92.6	6.5	81.6	6.6	0.4	0.8	1,713
Yes	94.1	4.4	84.3	7.0	0.6	1.2	2,011
<b>Total</b>	<b>94.5</b>	<b>3.8</b>	<b>86.4</b>	<b>6.0</b>	<b>0.5</b>	<b>0.8</b>	<b>5,500</b>

Note: \* Women who had their last live/still birth since 1-1-1999/1-1-2001. Note: Total includes 18 women with zero parity and 10 women in other religion who were not shown separately. <sup>1</sup> Antenatal check-ups either at home or outside 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 *daī*. # 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. Seventy-eight percent non-literate women as compared to 97 percent having education of more than 10 years received ANC from doctors. Similarly, 77 percent women belonging to households with a low standard of living against 96 percent of that from a high standard of living fall in this category. The proportion of Hindu and Christian women who received antenatal check-ups from doctors (86 percent) was slightly lower than that of Muslim women (89 percent). Fifty-nine percent of scheduled tribe women received antenatal check-ups from doctors, while it was 91 percent for women from the 'other castes' category and 88 percent for scheduled caste women and women from other backward classes. Women from scheduled tribes were more likely to receive antenatal check-ups

only at home from auxiliary nurse midwives. Fifteen percent of scheduled tribe women received antenatal check-ups only at home from ANMs, while it was 4 percent among scheduled castes, 3 percent among other backward class women, and 2 percent among 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 the women had received antenatal check-ups, and if they had, from where they had availed such services.

<b>Table 4.2 PLACE OF ANTENATAL CHECK-UP</b>									
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, Andhra Pradesh, 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	ISM <sup>4</sup> facility					
				PHC	SC	Govt.	Private	Other	
<b>Age group</b>									
Less than 20 years	3.7	34.3	49.0	9.1	1.2	0.9	11.8	3.2	851
20-34 years	3.7	31.9	46.7	6.0	0.9	0.6	13.5	2.8	4,528
35 years & above	9.3	37.7	36.8	6.9	0.0	0.0	6.8	2.8	121
<b>Children ever born</b>									
1	2.5	28.5	53.3	6.0	1.0	0.8	14.3	3.1	1,826
2	2.9	33.7	48.7	6.3	0.8	0.4	12.1	3.0	2,219
3	5.2	36.2	38.6	7.4	1.0	0.6	13.0	2.7	897
4+	10.0	33.4	31.1	8.1	1.2	0.9	12.1	2.2	542
<b>Residence</b>									
Rural	5.4	32.2	44.7	8.2	1.4	0.6	12.9	3.1	3,725
Urban	0.5	32.8	51.2	3.3	0.0	0.6	13.3	2.6	1,776
<b>Education</b>									
Non-literate	6.9	37.1	36.0	9.0	1.4	0.7	12.5	3.1	2,698
0-9 @ years	1.5	33.2	52.4	6.0	0.7	0.6	12.7	3.2	1,552
10 years & above	0.2	21.2	63.4	2.6	0.3	0.4	14.5	2.2	1,250
<b>Religion</b>									
Hindu	4.0	31.6	47.2	6.7	1.0	0.7	13.1	2.9	4,562
Muslim	1.6	35.7	44.3	4.7	0.3	0.2	15.9	1.7	667
Christian	5.7	37.8	46.8	8.9	1.0	0.5	5.1	5.5	262
<b>Caste/tribe#</b>									
Scheduled caste	3.6	42.6	41.4	8.7	1.3	0.3	9.2	3.3	943
Scheduled tribe	14.6	32.5	22.6	10.8	2.4	1.7	15.1	2.5	436
Other backward class	3.4	31.4	48.5	6.7	0.7	0.6	13.7	2.6	2,506
Other	1.7	28.1	53.8	4.4	0.8	0.6	13.9	3.3	1,570
<b>Standard of living index</b>									
Low	7.9	38.3	36.7	10.2	1.2	0.6	9.1	3.3	2,090
Medium	2.0	33.8	46.7	6.0	0.9	0.9	15.4	3.0	2,198
High	0.1	19.6	64.4	2.1	0.5	0.2	14.7	2.2	1,212
<b>Availability of health facility<sup>5</sup> in the village</b>									
No	6.5	30.5	46.4	7.2	1.2	0.5	10.5	4.2	1,713
Yes	4.4	33.6	43.3	9.0	1.5	0.7	14.9	2.2	2,011
<b>Total</b>	<b>3.8</b>	<b>32.4</b>	<b>46.8</b>	<b>6.5</b>	<b>0.9</b>	<b>0.6</b>	<b>13.1</b>	<b>2.9</b>	<b>5,500</b>

Note: \* Women who had their last live/still birth since 1-1-1999/1-1-2001. Note: Total includes 18 women with zero parity and 10 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> 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 32 percent of women received antenatal check-ups at Government health facility, including 7 percent through primary health centre and one percent through sub-centre, and 47 percent 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 13 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.

A slightly higher proportion of older women (38 percent) received antenatal-check-ups at government health facilities than younger women (34 percent for age below 20 and 32 percent for age 20-34). Around one-third of women from rural as well as urban areas availed government health facilities for antenatal check-ups, however, a comparatively higher proportion of women from urban areas (51 percent) availed private health facilities for antenatal check-ups than women from rural areas (45 percent). A comparatively high proportion of women who received antenatal check-ups at Government health facilities are women who are non-literate, scheduled tribe and living in households with a low standard of living.

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

Table 4.3 indicates the antenatal coverage in Andhra Pradesh that ranges from the lowest of 82 percent in Mahbubnagar to the highest of 99 percent in Karimnagar, Cuddapah and Warangal districts. In all districts, except Kurnool, Mahbubnagar and Visakhapatnam 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-ups received from doctor was low in Kurnool (70 percent), Mahbubnagar (72 percent) and Visakhapatnam (74 percent) districts and in all the remaining districts more than 80 percent of the women received antenatal check-ups from doctor and it is highest in Hyderabad (97 percent) followed by Krishna and Warangal (96 percent). In 3 out of 23 districts, Prakasam (15 percent), Rangareddi (15 percent), and Medak (10 percent) 10 percent or more of women received antenatal check-ups by ANM/Nurse/LHV.

The extent of utilisation of government health facilities for antenatal check-ups was lower than that of private health facilities. The range of antenatal check-ups coverage through government facilities was highest in Chihittoor (55 percent) to the lowest of 8 percent in Karimnagar, and in 13 out of the 23 districts, more than half of the women visited private health facility. In Andhra Pradesh, more than half of pregnant women in Nalgonda (64 percent), Cuddapah (55 percent) and Nizamabad (53 percent) districts availed the Indian system of Medicine (either government or private) for an antenatal check-ups. In another 3 districts, more than 30 percent of women availed such services through the Indian system of Medicine.

<b>Table 4.3 ANTENATAL CHECK-UPS BY DISTRICT</b>							
Percentage of women* who received any antenatal care (ANC), by source and place of antenatal check-ups by district, Andhra Pradesh, 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
Adilabad	91.4	6.0	81.9	3.8	21.7	55.8	0.5
Anantapur	96.7	5.2	83.1	7.8	42.2	19.7	31.6
Chittoor	97.8	5.0	89.7	5.3	55.4	37.7	0.6
Cuddapah	98.9	2.4	86.3	6.8	11.4	33.4	54.6
East Godavari	95.1	2.3	89.7	7.2	30.8	62.4	4.7
Guntur	95.3	5.8	86.2	3.9	20.2	52.9	0.9
Hyderabad	98.6	0.0	97.0	1.5	41.1	58.8	0.0
Karimnagar	99.2	1.2	93.7	4.4	7.5	81.6	2.2
Khammam	96.9	1.4	94.5	8.6	31.3	67.8	1.4
Krishna	98.5	1.6	96.4	0.5	23.9	71.5	2.8
Kurnool	89.3	15.2	70.1	5.3	33.5	41.6	0.0
Mahbubnagar	81.7	2.3	72.1	7.3	40.2	34.1	1.6
Medak	97.2	0.6	94.0	10.0	35.1	64.5	1.6
Nalgonda	93.9	3.0	84.3	6.9	24.4	7.8	63.9
Nellore	98.8	3.6	93.3	2.9	27.4	68.7	0.0
Nizamabad	95.9	3.4	86.3	7.7	29.1	16.8	53.1
Prakasam	97.0	3.7	85.9	15.0	33.2	18.4	47.2
Rangareddi	91.0	1.7	81.6	14.5	46.9	17.4	31.0
Srikakulam	95.7	9.7	82.2	4.1	34.7	50.7	0.9
Visakhapatnam	83.5	6.4	73.8	4.2	38.1	40.7	0.6
Vizianagaram	97.1	5.3	88.1	4.3	36.1	50.6	7.5
Warangal	98.5	0.4	96.4	1.0	36.7	62.7	0.3
West Godavari	96.8	3.2	89.5	6.9	26.6	63.3	0.3
Andhra Pradesh	94.5	3.8	86.4	6.0	32.4	46.8	13.7

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 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.

Eighty-nine percent of women were weighted, 84 percent had their blood pressure checked, and 86 percent had an abdominal examination as part of the antenatal check-ups. Other common components of antenatal check-ups were blood test (87 percent), urine test (84 percent), the measurement of height (67 percent), internal examination (71 percent), and breast examination (40 percent). About 24 percent of women had a sonogram or ultrasound, 10 percent had an X-ray and 7 percent of women reported that they had amniocentesis test. All of these measurements or producers were performed more often during antenatal check-ups in urban areas than in rural areas.

<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, Andhra Pradesh, 2002-04			
Components of antenatal check-ups	Total	Rural	Urban
<b>Antenatal measurements/tests</b>			
Weight measured	88.6	85.9	94.2
Height measured	67.2	63.3	75.0
Blood pressure checked	83.8	80.4	90.6
Blood tested	86.6	83.0	94.0
Urine tested	83.6	79.3	92.2
Abdomen examined	85.6	82.3	92.5
Internal examined	70.8	66.1	80.2
Breast examined	39.5	36.2	46.2
X-ray	9.5	7.9	12.6
Sonography /ultrasound	23.6	19.1	32.7
Amniocentesis	7.0	5.5	9.9
<b>Antenatal advice</b>			
Diet	86.9	86.3	88.2
Danger signs of pregnancy	54.6	52.1	59.5
Delivery care	60.1	57.0	66.2
Breast feeding	42.8	40.6	47.3
New born care	41.7	39.7	45.7
Family planning	39.7	39.4	40.2
Number of women who received any antenatal check-up	5,198	3,478	1,720
Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001.			

The types of advices received by women who had antenatal check-ups for last live/still births during three years preceding the survey are also presented in Table 4.4. Advice on diet was given to 88 percent of urban women, 86 percent of rural women and 87 percent in general. Fifty-five percent of the women received advice on danger signs of pregnancy, while 60 percent received advice on delivery care. Women were less likely to receive advice on family planning (40 percent), on breastfeeding (43 percent), and on newborn care (42 percent).

#### 4.5 Antenatal Care Services

In India, the Reproductive and Child Health Programme includes all pregnant women, whom 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, receipt of tetanus toxoid injection and supplementation of iron folic acid tablets. The results are presented in Table 4.5. In Andhra Pradesh, 88 percent of the women received at least three antenatal check-ups and 80 percent had four or more check-ups. At least three antenatal check-ups were received by 92 percent of women in urban areas compared with 86 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. Eighty-one percent of non-literate, 93 percent of literate women (educated below high school) and 95 percent of women who had 10 or more years of schooling visited for a minimum of three antenatal care services. Parity of women is negatively associated with antenatal check-ups. About 91 percent of women with parity one received three antenatal check-ups compared to 75 percent 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, Andhra Pradesh, 2002-04

Antenatal care indicators	Residence			Education			Children ever born			
	Total	Rural	Urban	Non-literate	0-9@ years	10 years & above	1	2	3	4+
<b>Number of ANC visits</b>										
No visit	5.3	6.5	2.9	9.3	1.8	1.0	2.6	4.0	8.2	15.1
1	2.2	2.4	1.6	3.1	1.2	1.3	2.0	1.5	3.0	3.7
2	4.5	4.8	3.7	6.1	3.3	2.4	3.9	4.5	4.8	5.7
3	7.8	8.8	5.7	11.2	6.1	2.7	7.2	6.2	10.9	11.8
4+	80.0	77.3	85.8	70.1	87.3	92.3	84.2	83.5	72.6	63.5
Missing	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.1	0.4	0.3
Stage of pregnancy at the time of the first antenatal check-up										
No antenatal check-up	5.3	6.5	2.9	9.3	1.8	1.0	2.6	4.0	8.2	15.1
First trimester	66.5	62.1	75.6	54.7	71.2	86.1	73.3	68.5	57.8	49.6
Second trimester	25.5	28.4	19.4	32.2	25.3	11.4	21.8	24.9	31.2	31.2
Third trimester	2.5	2.8	1.8	3.6	1.4	1.4	2.2	2.5	2.4	3.9
Missing	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.1	0.4	0.3
<b>Women who received TT</b>										
No TT	10.5	12.2	7.0	15.3	6.5	5.1	7.2	8.7	13.8	24.0
1	3.4	3.6	2.9	4.3	2.8	2.1	3.1	3.6	3.6	3.3
2+	84.5	82.7	88.3	79.0	88.9	91.0	88.2	86.0	81.2	71.3
Do not remember/missing	1.6	1.5	1.8	1.4	1.8	1.8	1.6	1.7	1.4	1.4
<b>Women who received IFA tablets/syrup</b>										
No IFA/syrup	13.3	14.4	11.2	18.0	9.8	7.6	11.1	11.4	16.3	24.4
Received but not consumed	4.2	4.8	3.0	5.3	3.5	2.8	4.1	4.3	3.8	5.1
Consumed one IFA per day	61.1	61.3	60.7	58.4	62.1	65.9	61.2	63.7	58.6	53.9
Received 100+ IFA tablets/syrup	48.3	44.7	55.7	41.9	49.9	59.9	52.4	48.6	45.1	37.7
Percentage of women who received full <sup>1</sup> antenatal check-ups										
	43.9	40.2	51.7	37.3	45.7	56.0	47.8	44.8	39.7	33.8
Number of women	5,500	3,725	1,776	2,698	1,552	1,250	1,826	2,219	897	542

Note: Total includes 18 women with zero parity 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.

Continued.....



<b>Table 4.5 ANTENATAL CARE (contd)</b>												
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, Andhra Pradesh, 2002-04												
Antenatal care indicators	Religion			Caste#				Standard of living index			Availability of health facility <sup>2</sup> in the village	
	Hindu	Muslim	Christian	Scheduled caste	Scheduled tribe	Other backward class	Other	Low	Medium	High	No	Yes
<b>Number of ANC visits</b>												
No visit	5.6	4.2	3.2	3.9	22.2	4.4	2.8	9.7	3.0	1.9	7.3	5.8
1	2.0	2.9	3.6	1.4	5.5	1.8	2.2	3.3	1.8	0.9	2.2	2.6
2	4.6	3.5	5.1	6.1	8.1	4.2	3.0	6.1	4.2	2.3	5.1	4.6
3	7.6	7.0	13.0	10.5	10.1	8.0	5.4	11.5	7.2	2.6	8.7	9.0
4+	80.1	82.0	74.8	77.8	53.9	81.3	86.5	69.4	83.5	92.1	76.6	77.8
Missing	0.2	0.4	0.4	0.2	0.2	0.3	0.1	0.0	0.4	0.2	0.2	0.1
<b>Stage of pregnancy at the time of the first antenatal check-up</b>												
No antenatal check-up	5.6	4.2	3.2	3.9	22.2	4.4	2.8	9.7	3.0	1.9	7.3	5.8
First trimester	65.9	72.0	63.1	64.2	45.6	65.3	75.8	54.3	68.5	83.8	62.4	61.9
Second trimester	25.9	21.9	28.4	28.5	26.7	27.7	19.8	31.8	26.4	13.2	27.2	29.5
Third trimester	2.5	1.5	4.8	3.2	5.3	2.3	1.5	4.2	1.8	0.9	2.9	2.7
Missing	0.2	0.4	0.4	0.2	0.2	0.3	0.1	0.0	0.4	0.2	0.2	0.1
<b>Women who received TT</b>												
No TT	10.8	9.8	7.9	10.3	28.7	9.3	7.5	16.2	7.9	5.4	13.0	11.5
1	3.4	2.9	3.7	3.8	6.0	2.9	3.1	4.3	3.2	2.1	4.0	3.3
2+	84.3	84.9	87.6	84.9	62.2	86.2	87.9	77.8	87.6	90.6	81.2	83.9
Do not remember/missing	1.5	2.4	0.7	1.0	3.1	1.6	1.5	1.7	1.3	1.8	1.8	1.2
<b>Women who received IFA tablets/syrup</b>												
No IFA/syrup	13.2	14.8	11.8	12.4	28.6	12.1	11.5	18.3	11.0	9.1	15.6	13.3
Received but not consumed	4.1	3.8	8.4	6.2	3.9	3.8	3.7	5.2	4.1	2.9	4.4	5.2
Consumed one IFA per day	61.7	58.6	57.6	65.0	51.1	61.1	62.4	59.6	62.1	62.0	61.7	60.9
Received 100+ IFA tablets/syrup	48.5	50.9	37.8	41.9	36.0	49.3	53.8	39.9	50.0	59.5	40.6	48.2
Percentage of women who received full <sup>1</sup> antenatal check-ups	44.0	47.1	35.2	38.3	30.6	44.7	49.8	35.1	46.0	55.5	35.6	44.1
Number of women	4,562	667	262	943	436	2,506	1570	2,090	2,198	1,212	1,713	2,011

Note: Total includes 10 women with other religions who were not shown separately. # Total figure may not add to N due to don't know and missing cases. <sup>1</sup> At least three visits for antenatal check-ups, at least one TT injection received and was given adequate amount of IFA tablets/syrup. <sup>2</sup> Includes sub-center, primary health center, community health center or referral hospital, government hospital, and government dispensary within the village.

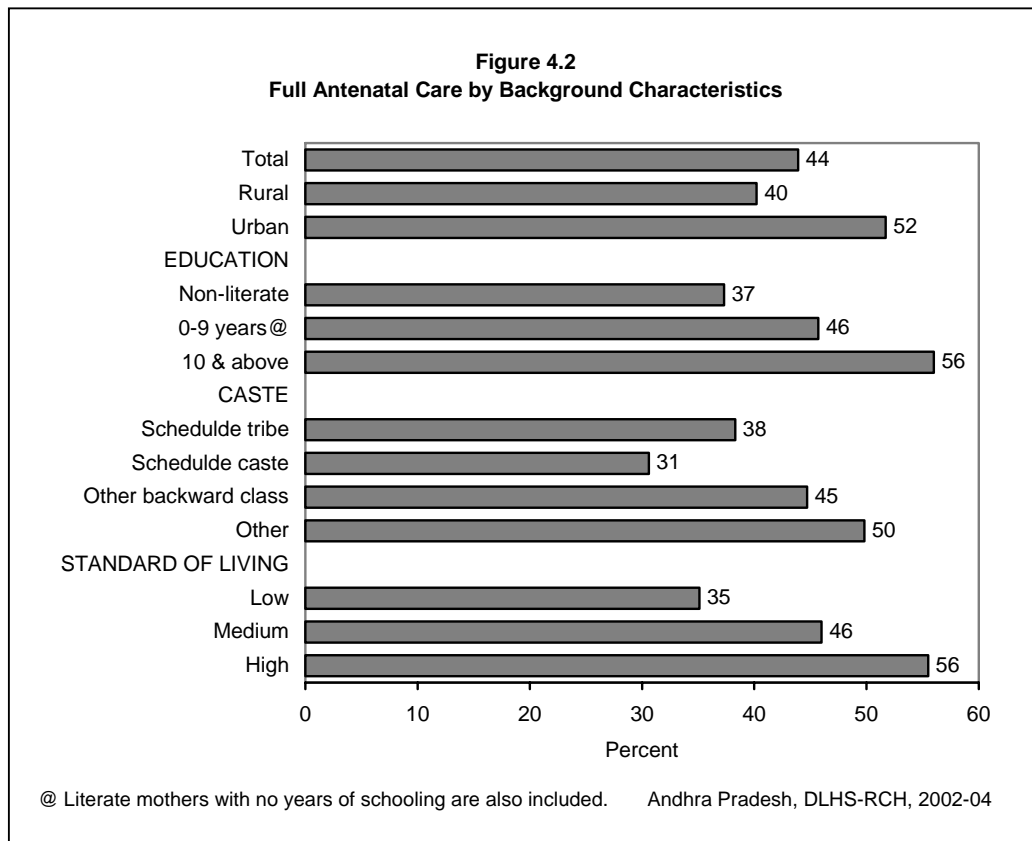
The proportion of women who received at least three antenatal check-ups is similar among Muslim (89 percent), Hindu (88 percent) and Christian (88 percent) religions. Coverage is substantially lower for women from scheduled-tribes (64 percent) than to women of castes other than scheduled tribe (88-92 percent). Having three or more antenatal visits also increased with the standard of living-81 percent for women with a low standard of living, 91 percent for women with a medium standard of living and 95 percent for women with a high standard of living. Availability of health facility in the village did not make any difference to the minimum three visits for antenatal check-ups.

Data on timing of first antenatal check-ups shows that about two-thirds of the women received their first antenatal check-up in the first trimester of pregnancy, and another one-fourth received their first check-up in the second trimester, and 3 percent of women received their first check-up in the third trimester. A relatively higher proportion of women in the urban areas (76 percent) as compared to those in rural areas (62 percent) had a check-up in the first trimester of pregnancy. The first antenatal check-up in the first trimester has sharply increased with education. Fifty-five percent of non-literate women had undergone their first antenatal check-up in the first trimester, and 86 percent of women who had completed at least 10 years of schooling received their first antenatal check-up in the first trimester. About 73 percent of the women with parity-1 had visited in first trimester, while only half of the women with parity - 4 and above (50 percent) had undergone antenatal check-ups in first trimester. Muslim women were more likely to go for first antenatal check-ups in first trimester of their pregnancy as compared to Hindu and Christian women, and less than half of scheduled tribe women (46 percent) had visited in first trimester for first antenatal check-ups compared with 64 percent of scheduled caste women, 65 percent of other backward classes women and 76 percent of women from 'other castes' category. Fifty-four percent of women with low standard of living, 69 percent with medium standard of living, and 84 percent of women with high standard of living had undergone their first antenatal check-ups 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 in the survey. Table 4.5 shows that women in Andhra Pradesh received IFA supplements for 87 percent of the last births during three years preceding the survey. The coverage of IFA tablets is slightly higher in urban areas (89 percent) than in rural areas (86 percent). IFA coverage is relatively less for non-literate women, women with low standard of living, scheduled tribe women, and women of higher parity. Again, during pregnancy in the last three years preceding the survey, only 48 percent of women received 100 or more IFA, 45 percent in rural areas and 56 percent in urban areas. Intake of 100 or more IFA is positively associated with education and standard of living index, and also, with the availability of health facility in the village and negatively associated, in general, with parity. Lesser women from Christian religion and scheduled tribes received 100 or more IFA than their counterparts.

For the last live birth or still birth during the three years preceding the survey, women were asked whether they were given tetanus toxoid injection to prevent them and their babies from getting tetanus. Table 4.5 shows that eighty-five percent of the women received two or more tetanus toxoid injections. Coverage of two or more TT injections is slightly higher in urban areas (88 percent) than that in rural areas (83 percent). The coverage of at least one tetanus toxoid injection for Christian women (91 percent) is more than that

for Muslim and Hindu women (88 percent). Coverage of at least one tetanus toxoid injection is almost similar for schedule castes (89 percent), for other backward classes (89 percent) and for 'other castes' category (91 percent) women, while it is much lower for scheduled tribe women (68 percent). Non-literate women received at least one tetanus toxoid injection for 83 percent of their last births, whereas literate women with 0-9 years of schooling or women who had completed 10 years or more of schooling received at least one tetanus toxoid injection for 92-93 percent of their last births. Eighty-two percent of women with low standard of living received at least one tetanus toxoid injection, whereas 91-93 percent women with medium or high standard of living received at least one tetanus toxoid injection for their last live/still birth. The coverage, in general, varies inversely by parity. At least one tetanus toxoid injection was received by 91 percent women of Parity-1 compared with 75 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. Forty-four percent of women in Andhra Pradesh 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/tribe, women with a low standard of living, and women from those villages where health facilities are not available. Full antenatal coverage was also lower in rural areas (40 percent) than in urban areas (52 percent).

#### 4.6 Antenatal Care Indicators by Districts

Table 4.6 shows the percentage of women who had given live/still birth during the three years preceding the survey and 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 districts.

<b>Table 4.6 ANTENATAL CARE INDICATORS BY DISTRICT</b>					
Percentage of women* who received different type of antenatal care by districts, Andhra Pradesh, 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
Adilabad	65.3	83.2	83.8	44.5	39.8
Anantapur	54.6	87.3	94.8	50.3	47.2
Chittoor	62.7	88.9	94.2	37.1	33.8
Cuddapah	68.7	91.5	96.6	47.7	45.3
East Godavari	68.0	91.6	84.6	66.3	55.0
Guntur	73.6	91.4	91.2	31.2	29.8
Hyderabad	84.4	96.0	89.7	61.9	60.6
Karimnagar	88.1	95.7	91.8	49.4	46.7
Khammam	75.1	85.1	89.8	73.0	63.5
Krishna	74.1	94.7	95.8	58.5	57.1
Kurnool	47.8	75.5	84.6	17.0	15.2
Mahbubnagar	42.9	76.7	50.3	20.4	14.9
Medak	70.6	96.3	84.7	74.0	65.1
Nalgonda	63.7	81.7	87.0	43.5	40.3
Nellore	70.4	94.5	95.0	33.2	31.9
Nizamabad	70.1	87.5	93.8	53.6	50.8
Prakasam	67.2	81.5	92.5	58.5	49.5
Rangareddi	58.4	87.5	86.3	61.5	53.6
Srikakulam	63.3	90.8	92.8	62.9	57.9
Visakhapatnam	56.3	76.4	77.7	32.6	28.2
Vizianagaram	60.9	88.2	95.0	47.2	43.0
Warangal	82.8	95.2	95.4	52.5	51.7
West Godavari	69.3	92.2	92.2	45.9	42.5
Andhra Pradesh	66.5	87.8	87.9	48.3	43.9

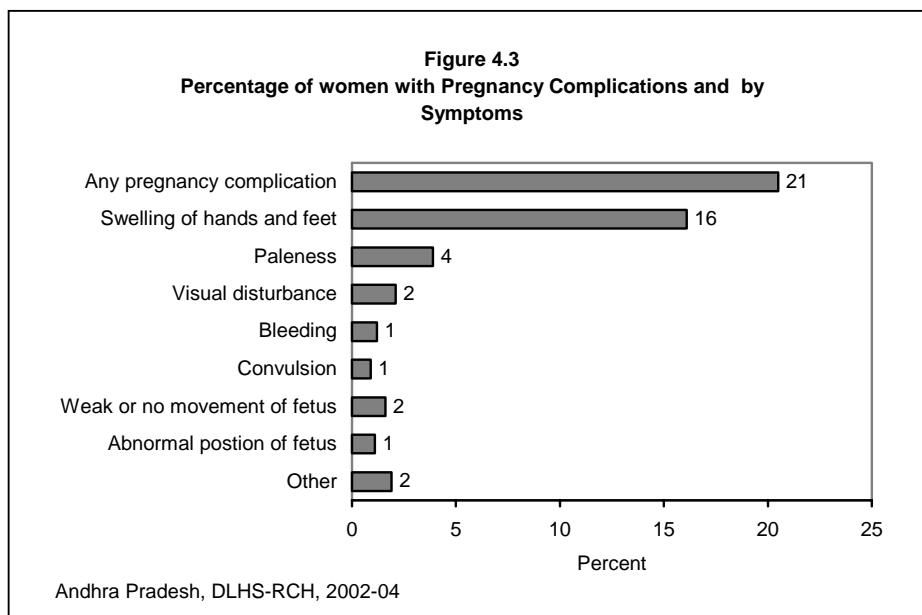
Note: \* Women who had their last live/still birth since 1-1-1999/1-1-2001. <sup>1</sup> 100 or more iron folic acid tablets including syrup. <sup>2</sup> At least three visits for antenatal check-ups, at least one TT injection received and adequate amount of IFA.

The utilisation of antenatal care services differs from district to district. In 3 out of the 23 districts, Hyderabad, Karimnagar and Warangal, more than four-fifths of the women received their first antenatal check-up in the first trimester of pregnancy. The percentage of women who received at least three visits for antenatal check-ups ranges from 76 percent in Kurnool and Visakhapatnam to 96 percent in Hyderabad, Karimnagar and Medak districts.

In three districts namely Kurnool, Mahbubnagar and Visakhapatnam, the coverage of at least three visits of ANC were less than 80 percent (see Map-3). There has been good coverage of tetanus toxoid injections in all but two districts – Mahbubnagar (50 percent) and Visakhapatnam (78 percent), ranging from 84 to 97 percent. But on the other hand, performance regarding receipt of 100 or more IFA tablets/syrup is poor or moderate. In 13 out of the 23 districts, the value ranges from 17 to 50 percent, and it is lowest in Kurnool. The percentage of women who received full antenatal care ranges from 15 percent in Kurnool and Mahbubnagar to 65 percent in Medak. In 10 of the 23 districts, Adilabad, Chittoor, Guntur, Kurnool, Mahbubnagar, Nalgonda, Nellore, Visakhapatnam, Vizianagaram and West Godavari coverage rate of full antenatal care is below than that of the state average.

#### 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 their last live or still births during the three years preceding the survey were asked if at any time during the pregnancy, they had experienced any of the pregnancy-related problems such as swelling of hands and feet, paleness, visual disturbance, vaginal bleeding, convulsions, weak or no movement of foetus and abnormal position of foetus. 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, Andhra Pradesh, 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	21.7	17.1	4.2	3.3	0.8	0.6	1.2	1.3	1.8	851
20-24	21.3	16.2	4.1	2.2	1.3	1.1	2.0	1.3	2.1	2,610
25-29	19.5	16.2	3.5	1.6	1.3	0.8	1.5	1.0	1.6	1,527
30-34	19.0	14.5	3.7	1.9	2.1	1.5	1.1	0.7	1.9	391
35-39	11.6	10.9	1.5	0.5	0.5	0.5	0.6	0.0	0.9	102
<b>Children ever born</b>										
1	24.8	20.2	4.2	2.2	1.3	0.8	1.8	1.5	1.8	1,826
2	19.2	14.1	3.4	2.2	1.3	1.0	1.7	0.9	2.3	2,219
3	16.9	13.7	4.4	2.0	1.1	1.0	1.3	1.1	1.7	897
4+	16.0	13.2	3.6	2.1	0.9	0.9	1.4	0.8	0.8	542
<b>Residence</b>										
Rural	20.7	16.2	4.4	2.7	1.2	1.1	1.7	1.2	2.0	3,725
Urban	20.2	16.0	2.8	0.9	1.3	0.6	1.6	0.9	1.7	1,776
<b>Standard of living index</b>										
Low	19.9	16.4	4.7	2.7	1.2	1.0	1.8	1.0	1.9	2,090
Medium	19.7	14.6	3.5	2.3	1.2	1.2	1.3	0.9	2.0	2,198
High	23.1	18.6	3.1	0.9	1.5	0.3	1.9	1.8	1.7	1,212
<b>Received any ANC</b>										
Yes	21.0	16.5	3.9	2.2	1.3	0.9	1.7	1.1	1.9	5,198
No	11.9	9.9	3.5	1.6	0.9	0.8	1.0	0.7	1.1	292
Total	20.5	16.1	3.9	2.1	1.2	0.9	1.6	1.1	1.9	5,500

Note: Total includes 19 cases of 40-44 age group, 18 women with zero parity on CEB and 11 cases with missing information on received any ANC who were not shown separately.

About 21 percent of the women experienced at least one pregnancy related problem. The proportion was similar among rural (21 percent) and urban (20 percent) women. Women aged 35 years and above, and women with higher parity face at least one pregnancy related problem less 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-one percent of women who had an antenatal check-up reported that they had experienced at least one problem during their pregnancy, while 12 percent of women who 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) and 'paleness' (4 percent). Two percent each reported visual disturbance and weak or no movement of foetus, while 'vaginal bleeding', 'convulsions', and 'abnormal position of foetus' were reported by one percent each of the women. Other problems related to pregnancy were reported by 2 percent of women. Swelling of hands and feet is relatively more among women with parity-1 and among those who received any kind of antenatal care during pregnancy. There were not much differences in the proportion of women reporting other pregnancy related complications.

Women who reported at least one pregnancy related complication were asked whether they had consulted someone or had sought treatment for their problem and also, the source of treatment. Table 4.8 shows the percentage of women who had pregnancy complications and who obtained advice or had sought treatment by source of treatment according to residence and availability of health facility in the village. Seventy-three percent of women reported that they had obtained advice or consulted someone for their problem. The proportion was higher among urban women (81 percent) than among rural women (69 percent), and 72 percent of women sought treatment were from those villages where health facility was available as compared to 66 percent of women with non-availability of health facility within the village.

Among women who sought treatment for pregnancy complications, 25 percent visited a government health facility including a primary health centre (4 percent) and sub-centre (1 percent). About 71 percent of them visited a private health facility, and 3 percent had gone to a facility with the Indian system of medicine, while another 4 percent obtained advice from other health facility. The proportion of women who visited a private health facility is slightly higher in urban areas (73 percent) than in rural areas (70 percent). Among women who sought treatment, 97 percent went to a doctor and 2 percent to an auxiliary nurse midwife or nurse or LHV. Ninety-nine percent of these women in urban areas and 95 percent in rural areas were examined by a doctor, whereas ANM/Nurse/LHV examined 3 percent women in rural areas and one percent in urban areas.

<b>Table 4.8 TREATMENT FOR PREGNANCY COMPLICATIONS</b>					
Percentage of women* who had any pregnancy complication and sought treatment and source of treatment according to residence and availability of health facility in the village, Andhra Pradesh, 2002-04					
Treatment and source	Total	Residence		Availability of health facility <sup>5</sup> in the village	
		Rural	Urban	No	Yes
Percentage of women who had any pregnancy complication and sought treatment	72.8	68.9	81.1	65.8	71.6
Number of women	1,128	769	358	359	411
Percentage sought treatment at health facility					
Government health facility <sup>1</sup>	25.1	24.9	25.4	25.3	24.6
Primary health centre	3.6	4.0	3.0	4.8	3.3
Sub centre	1.3	2.0	0.0	2.9	1.4
Private health facility <sup>2</sup>	71.3	70.4	72.8	68.1	72.3
ISM <sup>3</sup> facility	2.6	2.7	2.5	2.8	2.5
Other	4.1	4.2	3.9	5.1	3.4
Percent distribution of women who obtained treatment from					
Doctor	96.5	95.3	98.5	92.8	97.3
ANM/nurse/midwife/LHV	2.4	3.2	1.1	4.4	2.3
Other <sup>4</sup>	0.6	0.8	0.4	1.8	0.0
Missing	0.4	0.7	0.6	1.0	0.4
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	826	530	290	236	294
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 deliveries and any problems that occurred during the delivery. Table 4.9 and Figure 4.4 present the place of delivery. A little more than one-fifth of the births (22 percent) took place in government health institutions, about two-fifths (39 percent) in private health institutions and another two-fifths of births (39 percent) took place at home. About four-fifths of the deliveries in urban areas and half of the deliveries in rural areas took place in health institutions. Deliveries in health facilities in Andhra Pradesh rose from 51 percent in Round-I to 61 percent in Round-II.



<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, Andhra Pradesh, 2002-04							
Background characteristics	Health institutions				Missing	Total percent	Number of women
	Public	Private	Home	Other			
<b>Age group (in years)</b>							
Below 20	23.8	34.5	40.7	0.8	0.1	100.0	851
20-34	21.7	39.8	38.0	0.3	0.2	100.0	4,528
35 and above	22.1	31.5	46.4	0.0	0.0	100.0	121
<b>Children ever born</b>							
1	24.0	47.8	27.5	0.6	0.2	100.0	1,826
2	22.5	39.3	37.9	0.2	0.1	100.0	2,219
3	20.4	30.2	49.1	0.2	0.1	100.0	897
4+	16.2	21.0	62.5	0.0	0.3	100.0	542
<b>Residence</b>							
Rural	19.3	32.3	48.0	0.3	0.1	100.0	3,725
Urban	27.9	52.5	19.0	0.4	0.2	100.0	1,776
<b>Education</b>							
Non-literate	19.8	22.7	57.1	0.2	0.1	100.0	2,698
0-9@ years	28.8	42.4	28.2	0.4	0.3	100.0	1,552
10 years & above	18.6	69.2	11.6	0.5	0.1	100.0	1,250
<b>Religion</b>							
Hindu	20.8	38.2	40.5	0.3	0.1	100.0	4,562
Muslim	30.3	44.0	24.7	0.6	0.4	100.0	667
Christian	22.5	37.3	40.2	0.0	0.0	100.0	262
<b>Caste#</b>							
Scheduled caste	25.2	29.3	45.2	0.3	0.0	100.0	943
Scheduled tribe	13.1	15.5	71.2	0.0	0.2	100.0	436
Other backward class	22.1	37.1	40.1	0.4	0.2	100.0	2,506
Other	22.6	53.5	23.4	0.4	0.1	100.0	1,570
<b>Standard of living index</b>							
Low	20.8	20.5	58.4	0.3	0.0	100.0	2,090
Medium	25.0	39.1	35.2	0.4	0.3	100.0	2,198
High	18.9	69.9	10.6	0.3	0.2	100.0	1,212
<b>Number of antenatal check-ups</b>							
No check-up	10.5	10.7	78.6	0.0	0.1	100.0	292
1	10.8	22.6	66.1	0.5	0.0	100.0	119
2	19.4	24.2	56.5	0.0	0.0	100.0	246
3	21.0	19.1	59.3	0.6	0.0	100.0	431
4+	23.4	44.0	32.2	0.3	0.0	100.0	4,402
<b>Delivery characteristics</b>							
Normal	22.0	29.8	47.8	0.4	0.0	100.0	4,399
Caesarean	21.1	77.8	0.9	0.2	0.0	100.0	941
Assisted	30.6	61.0	8.4	0.0	0.0	100.0	151
<b>Availability of health facility<sup>1</sup> in the village</b>							
No	19.5	30.7	49.4	0.3	0.2	100.0	1,713
Yes	19.1	33.8	46.7	0.3	0.1	100.0	2,011
<b>Total</b>	<b>22.1</b>	<b>38.8</b>	<b>38.6</b>	<b>0.3</b>	<b>0.2</b>	<b>100.0</b>	<b>5,500</b>

Note: Total includes 18 women with zero parity, 10 women with other religion, 11 cases with missing information on number of antenatal check-ups, 9 missing cases on delivery characteristics who were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included. <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 slightly higher for young women under 35 years (58-62 percent) than for women aged 35 years and above (54 percent). Institutional deliveries, particularly in private health facilities, increase sharply with education and the standard of living. About 43 percent of the births to non-literate women and 88 percent births to literate women who had completed 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 (89 percent) than women with a low standard of living (41 percent). The proportion of institutional deliveries decreases as parity increases from parity one (72 percent) to parity four and above (37 percent). Institutional deliveries are comparatively higher for Muslim women (74 percent) than for Hindus (59 percent) and Christian women (59 percent). Only 29 percent births of women from scheduled-tribes are institutional deliveries as compared to 55 percent of births to women from scheduled-castes, 59 percent to other backward classes women and 76 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 (33-44 percent). Institutional deliveries are least prevalent among births to women who did not receive any antenatal check-ups (21 percent). As expected, a large proportion of births occurred through caesarean section (99 percent) and assisted deliveries (92 percent) took place at health institutions. At the same time, among the deliveries that took place at home, one percent were through caesarean section and 8 percent were assisted deliveries. Availability of health facility in the villages did not make much difference in the proportion of deliveries that took place at health institutions.

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

Table 4.10 shows distribution of women by 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 9 percent of home deliveries were attended by doctors, 12 percent by ANM or nurse or LHV, 23 percent by trained birth attendants, 33 percent by untrained *dais* and 23 percent were attended by relatives and friends and 2 percent of home deliveries were not attended by anyone (Figure 4.4). Overall, health professionals attended 21 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 groups. About 20-22 percent of births for the women of the three age groups: below 20, 20-34 and 35 year and above were attended by health professionals. In rural areas, 19 percent of births were attended by health professionals as compared to 30 percent of that in urban areas. The percentage of births attended by health professionals has decreased with increasing parity of women.

Births to literate women which were attended by health professionals are more than two times than those of non-literate women. About two-fifths of home deliveries (39 percent) to women with a high standard of living, as compared to 18 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 Christian women (29 percent) than among Muslim women (19 percent) or Hindu women (21 percent). Only 11 percent of births to women from scheduled tribes were attended by health professionals, while it is 23 percent among scheduled castes, 23 percent among other backward classes and 24 percent among women belonging to 'other castes' category. Eleven percent of home deliveries to women who did not have any antenatal check-ups were attended by health

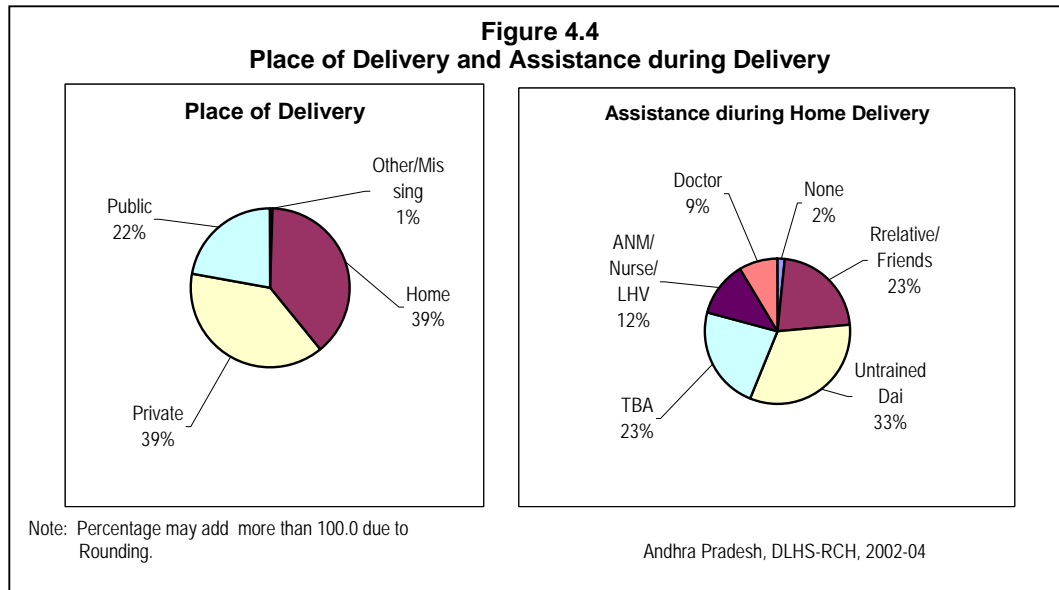
**Table 4.10 ASSISTANCE DURING HOME DELIVERY AND SAFE DELIVERY**

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, Andhra Pradesh, 2002-04

Background characteristics	Attendant assisting during home delivery <sup>1</sup>						Number of women	Percentage of safe <sup>2</sup> delivery
	Doctor	ANM/ Nurse/ LHV	TBA	Un- trained <i>dai</i>	Relative / friends	None		
<b>Age group (in years)</b>								
Below 20	10.0	12.2	24.4	32.1	20.1	1.2	347	67.4
20-34	8.3	12.5	23.2	31.2	22.8	1.9	1,720	69.5
35 and above	8.3	11.6	24.6	31.3	24.1	0.0	56	62.9
<b>Children ever born</b>								
1	12.2	13.8	22.9	29.7	19.4	2.1	501	78.9
2	7.7	13.4	22.4	31.9	23.1	1.5	840	69.8
3	8.4	11.9	24.6	31.2	22.5	1.4	440	60.6
4+	5.3	8.9	25.6	32.7	25.3	2.3	338	46.1
<b>Residence</b>								
Rural	8.9	10.4	23.4	33.0	22.5	1.7	1,786	60.9
Urban	7.0	23.4	23.3	22.4	22.0	1.8	337	86.1
<b>Education</b>								
Non-literate	7.0	8.5	23.2	33.6	25.8	1.9	1,541	51.3
0-9@ years	14.9	21.0	21.9	27.6	12.9	1.7	437	81.3
10 years & above	7.1	28.1	30.7	18.1	15.3	0.7	145	91.9
<b>Religion</b>								
Hindu	8.5	12.2	23.2	31.7	22.6	1.9	1,848	67.4
Muslim	4.7	13.8	25.9	33.0	21.4	1.3	165	78.8
Christian	15.9	13.5	25.4	24.7	19.5	0.9	105	71.6
<b>Caste#</b>								
Scheduled caste	10.4	12.4	25.1	30.2	20.0	2.1	426	64.7
Scheduled tribe	6.1	4.8	17.4	35.1	33.8	2.8	311	36.3
Other backward class	9.1	13.6	23.2	31.2	21.7	1.2	1,006	68.4
Other	7.6	16.1	27.8	29.2	17.2	2.1	367	81.7
<b>Standard of living index</b>								
Low	7.4	10.2	21.9	32.6	26.2	1.7	1,221	51.6
Medium	9.9	13.6	24.8	32.2	17.7	1.7	774	72.4
High	12.2	27.0	29.5	14.1	14.8	2.4	129	93.0
<b>Number of antenatal check-ups</b>								
No check-up	7.2	3.9	16.4	29.6	39.5	3.3	229	30.0
1	2.9	3.3	22.4	40.4	29.9	1.1	79	37.5
2	7.7	7.0	21.3	34.1	27.4	2.6	139	51.8
3	4.7	12.1	22.9	32.4	26.7	1.3	256	50.0
4+	10.0	14.8	24.9	30.7	18.0	1.6	1,418	75.4
<b>Delivery characteristics</b>								
Normal	8.3	12.2	23.6	31.7	22.5	1.7	2,103	61.7
Caesarean	*	*	*	*	*	*	8	99.6
Assisted	*	*	*	*	*	*	13	97.0
<b>Availability of health facility<sup>3</sup> in the village</b>								
No	8.0	8.1	23.3	36.0	23.1	1.5	846	58.1
Yes	9.8	12.4	23.6	30.3	22.0	1.9	940	63.3
<b>Total</b>	<b>8.9</b>	<b>12.4</b>	<b>23.4</b>	<b>33.0</b>	<b>22.5</b>	<b>1.7</b>	<b>1,786</b>	<b>69.0</b>

Note: Total includes 4 women with zero parity and 3 women with missing information on number of ANC visits, and 6 women with other religion were not shown separately. @ Literate women with no years of schooling are also included. # Total figure may not add to N due to do not know and missing cases. <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. \* Percentage not shown: Based on very few cases.

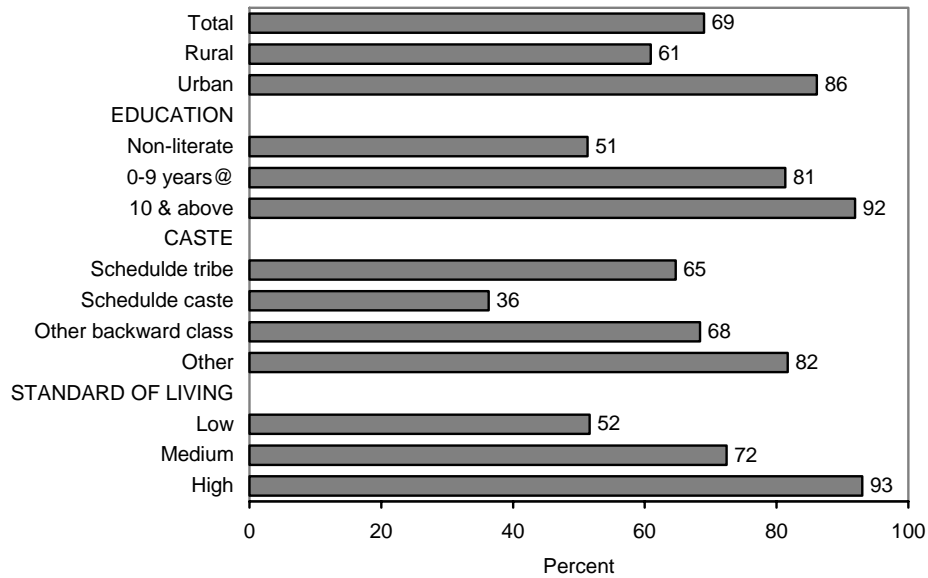
professionals compared to 25 percent of home deliveries to women who had four or more antenatal check-ups. About 21 percent of home deliveries that were normal were attended by health professionals. Twenty-two percent home deliveries were attended by health professionals in villages with availability of a health facility against 16 percent in villages with non-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). Sixty-nine percent of the births were considered to be safe in Andhra Pradesh. In urban areas, 86 percent of the deliveries were safe as against 61 percent in rural areas. About 67-70 percent of the deliveries were safe for younger women aged below 35 as compared to 23 percent for elderly women. The proportion of safe deliveries was comparatively higher among Muslim women (79 percent) than among Hindu women (67 percent) and Christian women (72 percent). Only 36 percent of births to women from scheduled-tribes were considered to be safe deliveries, compared to 65 percent to women from scheduled-castes, 68 percent to women from other backward classes, and 82 percent of births to women from 'other castes' category. Proportion of safe deliveries decreases from 79 percent to 46 percent as parity rises from 1 to 4 and above. Safe deliveries were least prevalent among women who did not receive any antenatal check-ups (30 percent), and it is most prevalent among women who had 4 or more antenatal check-ups (75 percent). The proportion of safe deliveries increased considerably with women's education and standard of living. Only 51 percent of non-literate women had safe deliveries whereas its prevalence is 92 percent among women who had completed at least high school. Women with a high standard of living had 93 percent safe deliveries compared to 72 percent of women with a medium standard of living and 52 percent with a low standard of living. Only 62 percent of women with normal deliveries had safe deliveries. The proportion of safe deliveries was slightly higher in villages with a health facility (63 percent) than to women from those villages where health facilities are not available (58 percent).

**Figure 4.5**  
**Delivery Assisted by Skilled Persons by Background Characteristics**



Andhra Pradesh, DLHS-RCH, 2002-04

@ Literate Women with no years of Schooling are also included.

#### 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 by reasons. The main reason for not going to health institutions has been presented according to residence and availability of health facility in the village. Less than one-third of the women (30 percent) stated that it was not necessary to deliver in health institutions. A slightly higher proportion of rural women (31 percent) than urban women (28 percent) felt this way. About 22 percent of the women felt that they get better care at home and 21 percent reported that they had no time to go to the health institutions. Other factors contributing for not going to health institutions for delivery were, 'no transportation or health facility is too far' (9 percent), 'it costs too much' (7 percent), 'not customary' (3 percent) and 'lack of knowledge' (2 percent).

<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, Andhra Pradesh, 2002-04					
Reason	Total	Residence		Availability of health facility <sup>1</sup> in the village	
		Rural	Urban	No	Yes
Not Necessary	30.3	30.8	27.6	31.0	30.7
Not customary	3.0	2.8	3.7	3.1	2.6
Cost too much	7.2	7.3	6.6	9.4	5.5
Health facility too far/ No transport	9.0	9.6	5.8	10.7	8.6
Poor quality service	1.0	0.9	1.7	0.3	1.5
No time to go	20.7	20.6	21.3	19.2	22.0
Family did not allow	1.0	0.9	1.1	1.1	0.8
Better care at home	21.5	20.9	24.6	18.7	23.0
Lack of knowledge	2.0	2.0	1.8	2.7	1.4
Other	4.2	3.9	6.0	3.8	4.0
Total percent	100.0	100.0	100.0	100.0	100.0
<b>Number of women</b>	2,124	1,786	337	846	940

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 Districts

Table 4.12 shows the delivery characteristics by district; institutional delivery (delivery in government or private health institutions), home delivery and skilled persons' assistance during home delivery and safe deliveries for last live/still births to women during the three years preceding the survey. The proportion of institutional deliveries is lowest in Srikakulam (31 percent) followed by Kurnool (32 percent) and it is highest in Hyderabad (93 percent).

Compared to deliveries in a government health facility, deliveries in a private health facility are more common in all the districts of Andhra Pradesh. About three-fifths of births (61 percent) are institutional deliveries in the state, but in 5 of 23 districts, more than half of the births took place at home and Kurnool and Srikakulam districts had around 68 percent of home deliveries. Except Krishna, East Godavari and West Godavari districts, less than one third of home deliveries were attended by a health professional. The extent of safe deliveries also varies by district, it ranges from 38 percent in Kurnool to 93 percent in Hyderabad and in 9 of 23 districts, the proportion of safe deliveries are below state average. The proportion of safe deliveries is less than 40 percent in only one district i.e. Kurnool (see Map-4).

<b>Table 4.12 DELIVERY CHARACTERISTICS BY DISTRICT</b>				
Place of delivery, assistance during home deliveries, and percentage of safe deliveries by district, Andhra Pradesh, 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
Adilabad	52.8	47.2	21.7	63.0
Anantapur	50.4	48.7	15.5	58.0
Chittoor	57.7	41.7	12.8	63.1
Cuddapah	64.5	35.3	13.6	69.3
East Godavari	78.9	20.7	40.7	87.4
Guntur	64.3	35.7	28.3	74.4
Hyderabad	92.7	7.3	(7.7)	93.3
Karimnagar	72.2	26.4	24.1	78.6
Khammam	61.7	38.3	24.6	71.1
Krishna	68.4	31.1	44.2	82.1
Kurnool	32.2	67.5	8.0	37.6
Mahbubnagar	48.2	51.5	18.7	57.9
Medak	67.8	31.0	17.3	73.1
Nalgonda	63.6	35.7	17.9	70.0
Nellore	73.7	25.3	14.9	77.5
Nizamabad	60.8	37.4	22.8	69.4
Prakasam	53.2	46.8	19.0	62.1
Rangareddi	64.1	34.4	14.1	68.9
Srikakulam	31.3	68.7	31.2	52.7
Visakhapatnam	50.0	50.0	17.9	58.9
Vizianagaram	42.1	57.6	23.9	55.9
Warangal	73.9	25.7	11.2	76.7
West Godavari	60.8	39.2	40.5	76.7
Andhra Pradesh	60.9	38.6	21.0	69.0

Note: <sup>1</sup>Table includes last live/still birth since 1-1-1999/1-1-2001. <sup>2</sup> Includes Doctor/ANM/Nurse. <sup>3</sup> Either institutional delivery or home delivery assisted by skilled person. ( ) Based on less number of cases.

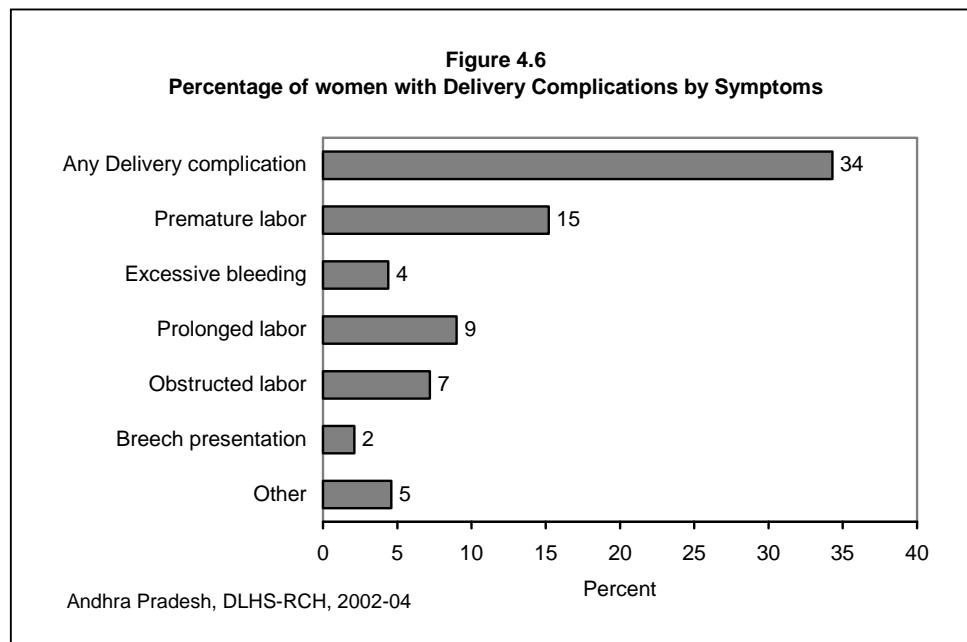
#### 4.11 Complications During Delivery

Complications during delivery include ‘premature labour’, ‘obstructed labour’, ‘prolonged labour (more than 12 hours)’, ‘breech presentation’, ‘excessive bleeding during delivery’ and ‘other problems’ at the time of delivery reported by women during the three years preceding the survey. Slightly more than one-third 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 (38 percent) than among rural women (33 percent). Younger women below the age of 34 years, reported slightly more of at least one delivery related problem than older women aged 35 years and above. The percentage reporting at least one delivery related problem was more among women with low parity 1-2 than among women with higher parity. This proportion is relatively high among women who had received some kind of antenatal care during their pregnancy. Twenty percent of women who had not received any antenatal check-ups reported that they experienced at least one problem during their pregnancy as compared to 25-36 percent of women who had received some kind of antenatal check-ups. Among women who had assisted or caesarean deliveries, 62-76 percent reported experiencing such problems, and 24 percent women with normal deliveries also cited complications during delivery. A much higher proportion of women who delivered in health institutions (40-47 percent) faced at least one delivery complication compared to those who delivered at home (19 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, Andhra Pradesh, 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	34.9	15.9	3.3	10.4	7.6	1.7	5.3	851
20-34	34.2	15.1	4.6	8.8	7.1	2.2	4.5	4,528
35 and above	31.3	16.0	5.6	8.8	6.5	1.2	4.5	121
<b>Children ever born</b>								
1	40.2	15.0	5.3	12.4	10.8	3.0	5.7	1,826
2	34.7	15.8	4.3	8.7	6.4	1.8	4.8	2,219
3	26.7	14.1	3.3	5.9	4.1	1.8	3.6	897
4+	23.6	14.9	3.5	3.7	3.0	1.1	1.7	542
<b>Residence</b>								
Rural	32.6	14.9	4.5	8.8	6.4	1.9	4.2	3,725
Urban	37.7	15.9	4.2	9.5	8.9	2.7	5.4	1,776
<b>Number of antenatal check-ups</b>								
No check-up	19.8	15.4	3.8	5.8	2.0	1.4	1.1	292
1	25.4	11.8	1.7	7.2	5.4	3.0	1.7	119
2	33.5	17.0	4.2	8.6	5.6	1.5	3.5	246
3	30.3	13.7	3.9	9.6	4.6	1.3	4.2	431
4+	36.0	15.4	4.6	9.3	8.0	2.3	5.0	4,402
<b>Delivery characteristics</b>								
Normal	24.4	15.5	4.1	6.8	1.3	0.8	1.2	4,399
Caesarean	76.3	13.1	5.2	18.6	33.4	7.7	19.4	941
Assisted	62.2	21.0	7.6	13.8	17.6	6.5	11.4	151
<b>Place of delivery</b>								
Government sector	39.7	18.7	5.1	12.4	7.3	2.0	4.8	1,213
Private sector	46.7	16.6	4.8	12.1	13.7	3.6	8.2	2,136
Home	18.7	11.9	3.5	4.1	0.6	0.7	0.9	2,124
Total	34.3	15.2	4.4	9.0	7.2	2.1	4.6	5,500
Note: Total includes 18 women with zero parity, 11 cases with missing information on number of antenatal check-ups, 9 missing cases on delivery characteristics and 18 cases on other category in place of delivery who were not shown separately.								

The major problems reported were 'premature labour' (15 percent), 'prolonged labour' (9 percent), 'obstructed labour' (7 percent), 'excessive bleeding' (4 percent) and 'breech presentation' (2 percent) and 5 percent reported 'other' problems related to delivery. The age and rural-urban differences in the proportions of women reporting premature labour, prolonged labour, obstructed labour and breech presentation are marginal. Premature labour, and excessive bleeding were more among women whose last delivery was assisted with instruments, and prolonged labour, obstructed labour, breech presentation and other problems were more likely among those who had a caesarean section or assisted deliveries during the three years preceding the survey. Women whose recent delivery was performed in medical institutions were more likely to report premature labour, prolonged labour, breech presentation, obstructed labour and other problems compared with those reporting home deliveries.





#### 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', 'convulsions', 'severe headache', and 'other problems'. Seventeen percent of women reported that they faced any of these problems during the first six weeks after their delivery. The proportion of women who cited at least one post-delivery complication is slightly higher in rural areas (18 percent) than in urban areas (15 percent). Younger women aged below 35 years and women who had their deliveries with caesarean section are more prone to report at least one post-delivery related problem.

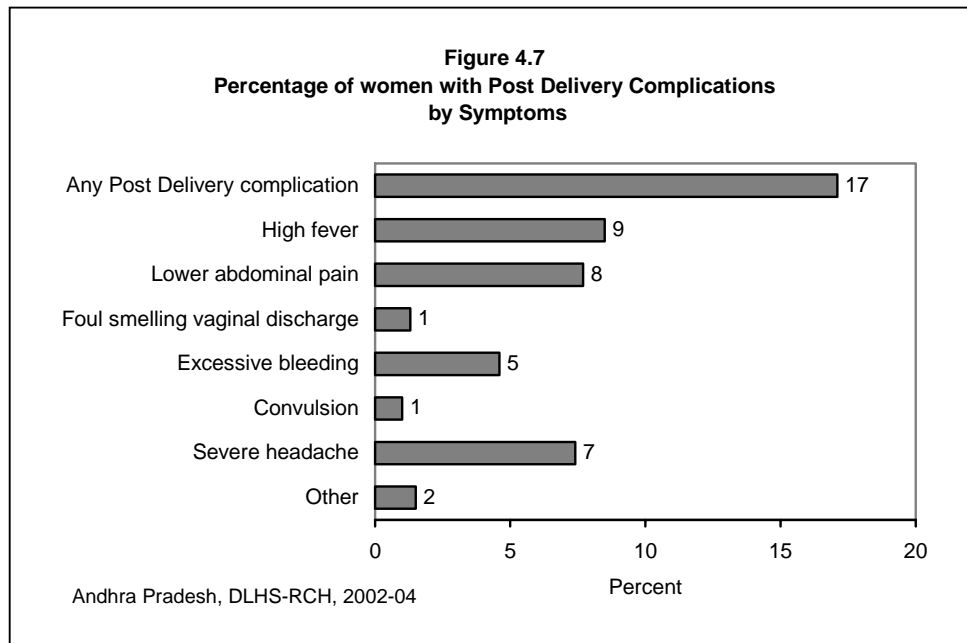
Women reported high fever (9 percent), lower abdominal pain (8 percent), severe headache (7 percent), excessive vaginal bleeding (5 percent), foul smelling vaginal discharge (1 percent) and convulsions (1 percent). Two percent of women reported other problems. Rural-urban differences in all symptoms of postpartum complications are not large. All the postpartum complications, except foul smelling vaginal discharge and convulsions, are more prevalent among younger women aged below 35 years. There are marginal differences in the likelihood of having different symptoms in the postpartum period by place of delivery, assistance during delivery and type of delivery.

**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 complications, according to selected background characteristics, Andhra Pradesh, 2002-04

Background characteristics	Type of post delivery complication;								Number of women
	Any post delivery complication	High fever	Lower abdominal pain	Foul smelling vaginal discharge	Excessive bleeding	Convulsions	Severe headache	Other	
<b>Age</b>									
Below 20	18.3	9.4	8.0	1.4	4.1	1.2	7.3	2.4	851
20-34	17.1	8.6	7.8	1.2	4.7	1.0	7.5	1.3	4,528
35 and above	7.7	2.2	1.8	1.2	1.5	0.5	2.9	1.3	121
<b>Children ever born</b>									
1	17.0	9.0	6.3	1.1	4.2	1.0	6.8	1.9	1,826
2	17.8	8.7	8.7	1.5	5.2	1.0	8.5	1.4	2,219
3	15.1	7.0	7.1	1.3	4.6	1.0	5.6	0.9	897
4+	17.2	8.7	9.2	0.7	3.0	1.3	7.4	1.1	542
<b>Residence</b>									
Rural	18.0	9.3	8.2	1.5	4.8	1.2	7.8	1.6	3,725
Urban	15.3	6.9	6.6	0.7	4.1	0.6	6.4	1.2	1,776
<b>Delivery characteristics</b>									
Normal	16.3	7.8	7.6	1.2	4.5	1.0	6.6	1.6	4,399
Caesarean	20.8	12.2	8.1	1.5	4.5	1.3	10.5	1.0	941
Assisted	18.3	7.2	8.9	2.9	5.8	0.0	10.1	1.5	151
<b>Place of delivery</b>									
Government sector	17.8	8.9	8.0	1.4	4.7	0.6	7.2	1.6	1,213
Private sector	16.0	8.0	6.4	0.8	4.2	0.9	7.8	1.0	2,136
Home	17.9	8.9	8.9	1.7	4.8	1.4	7.0	1.8	2,124
<b>Assistance during home delivery</b>									
Doctor	18.7	7.9	11.0	2.0	5.5	1.5	8.8	4.0	183
ANM/Nurse/LHV	16.7	8.5	8.2	0.5	3.8	0.8	5.4	2.5	264
TBA	20.4	10.0	10.5	0.4	5.7	1.2	6.4	0.9	497
Untrained dai	15.9	7.4	7.2	1.7	4.6	1.1	6.9	1.1	666
Relative/friends	17.9	10.4	9.2	3.3	4.1	2.4	8.3	2.5	476
None	(19.4)	(8.3)	(5.6)	(5.6)	(5.6)	(0.0)	(0.0)	(0.0)	37
<b>Total</b>	<b>17.1</b>	<b>8.5</b>	<b>7.7</b>	<b>1.3</b>	<b>4.6</b>	<b>1.0</b>	<b>7.4</b>	<b>1.5</b>	<b>5,500</b>

Note: Total includes 18 women with zero parity, 9 cases with missing information on delivery characteristics, 18 other cases on place of delivery and 9 missing cases on place of delivery who were not shown separately. ( ) Based on less than 50 unweighted cases.



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. Sixty-six percent of women reported that they had obtained advice or had consulted someone for their problems. The proportion was slightly higher among urban women (69 percent) than among rural women (65 percent), and 67 percent of women sought treatment from those villages where health facility was available as compared to 63 percent of women who did not have a health facility within the village.

Among women who sought treatment for complications in the postpartum period, only 28 percent visited a government health facility including primary health centre (5 percent) and sub-centre (1 percent). About 61 percent of women visited a private health facility, and 4 percent went to a facility with the Indian system of medicine (either government or private) and another 8 percent obtained advice from other health facilities. The proportion of women who visited a private health facility is relatively higher in urban areas (66 percent) than in rural areas (59 percent). On the other hand, the proportion of women seeking treatment from a government health facility is slightly more among women who belonged to villages with availability of health facility within the village. Among women who sought treatment, 86 percent preferred to go to a doctor and 8 percent visited an auxiliary nurse midwife or nurse or LHV, 2 percent went to other health professionals, and 3 percent went to some one else. Ninety-five percent of these women in urban areas, and 83 percent in rural areas went to a doctor, whereas a visit to an ANM/nurse/LHV was 10 percent in rural areas and 5 percent in urban areas. Availability of health facilities in the villages did not make any difference with regard to those who were seen by doctor. However, the proportion of women seen by ANM/Nurse/LHV is slightly more in villages having health facility (11 percent) than those from villages with no health facility (8 percent).

<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, Andhra Pradesh, 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	66.2	64.9	69.2	62.5	67.2
Number of women	940	669	271	321	348
Percentage sought treatment at health facility					
Government health facility <sup>1</sup>	28.1	28.1	28.3	26.0	29.8
Primary health centre	4.9	5.6	3.2	4.2	6.8
Sub centre	1.3	1.9	0.0	0.5	3.2
Private health facility <sup>2</sup>	61.2	59.0	66.1	59.6	58.6
ISM <sup>3</sup> facility	4.0	4.3	3.1	6.5	2.4
Other	8.0	9.4	4.7	8.7	10.1
Percent distribution of women who obtained treatment from					
Doctor	86.4	82.7	95.2	82.6	82.7
ANM/nurse/midwife/LHV	8.4	9.9	4.8	8.4	11.3
Other health professionals <sup>4</sup>	1.8	2.5	0.0	2.8	2.3
Other	3.4	4.9	0.0	6.2	3.7
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	622	434	188	201	234
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/friend and ISM practioner. <sup>5</sup> Include sub-centre, primary health centre, community health centre or referral hospital, government hospital and government dispensary within the village.					

#### 4.13 Obstetric Morbidity by Districts

The extent of health problems/ complications women suffer during pregnancy, delivery and post-delivery periods 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, 21 percent, 34 percent and 17 percent of the women experienced pregnancy, delivery and post-delivery complications respectively. About 73 percent of the women sought treatment for pregnancy complications and 66 percent for post-delivery complications. In every district, a minimum of one-tenth 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, Andhra Pradesh, 2002-04					
District	Percentage of women <sup>1</sup>				
	Who had complication during pregnancy	Sought <sup>2</sup> treatment for pregnancy complication	Who had delivery complication	Who had post delivery complication	Sought <sup>3</sup> treatment for post delivery complication
Adilabad	19.3	54.2	18.4	12.7	60.7
Anantapur	16.1	77.8	26.6	20.3	63.7
Chittoor	11.6	86.8	20.0	11.6	65.7
Cuddapah	22.6	82.3	35.0	23.2	68.7
East Godavari	33.1	86.3	56.3	16.8	64.1
Guntur	18.9	69.8	26.4	14.9	66.8
Hyderabad	10.6	68.1	36.8	10.0	(34.8)
Karimnagar	25.9	76.4	29.8	14.1	71.8
Khammam	19.6	79.2	48.0	15.5	91.2
Krishna	16.8	79.4	35.4	9.1	(69.4)
Kurnool	10.2	56.4	12.6	12.1	61.8
Mahbubnagar	24.3	49.4	34.6	21.8	51.6
Medak	23.2	84.3	50.9	17.9	89.6
Nalgonda	21.2	77.5	37.6	14.2	80.8
Nellore	19.2	82.1	24.7	12.7	79.4
Nizamabad	19.6	74.7	30.6	13.6	65.3
Prakasam	21.9	85.2	35.0	13.3	(77.9)
Rangareddi	19.9	60.5	42.4	17.9	76.4
Srikakulam	20.3	59.4	30.1	23.0	71.2
Visakhapatnam	32.6	74.9	35.2	32.4	60.5
Vizianagaram	19.2	87.4	34.4	22.8	61.7
Warangal	22.4	61.6	46.2	20.6	56.2
West Godavari	19.4	67.9	34.4	18.6	59.3
Andhra Pradesh	20.5	72.8	34.3	17.1	66.2

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. ( ) Based on less number of cases.

The incidence of pregnancy complications is comparatively higher in two districts, East Godavari and Visakhapatnam (each 33 percent) than other districts. In general, the incidence of delivery complications is higher than that of pregnancy and post-delivery complications. The percentage of women who experienced at least one type of delivery complication ranges from 13 percent in Kurnool to 56 percent in East Godavari, and incidence of post-delivery complications varies from 9 percent in Krishna to 32 percent in Visakhapatnam. The incidence of all the three types of complications seems to be linked with each other in varying proportions.

In most of the districts of Andhra Pradesh more than nine-tenths of the women received some kind of antenatal care. Thus, a large proportion of women in these districts were having contact with a doctor or any other health workers during the antenatal period, and in only 4 districts (viz. Adilabad, Kurnool, Mahbubnagar and Srikakulam) less than 60 percent of the women sought treatment for pregnancy complications. Similarly, among women who experienced at least one symptom of postpartum complications, the proportion seeking treatment also varies across the districts, ranging from 35 percent in Hyderabad to 91 percent in Khammam.

## 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 three years preceding the survey and information was obtained 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 were 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 influence 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 colostrum, should be given to the baby because it provides protection against certain infections. Afterwards, it has to be supplemented with other semi-solid and solid foods at proper time intervals.

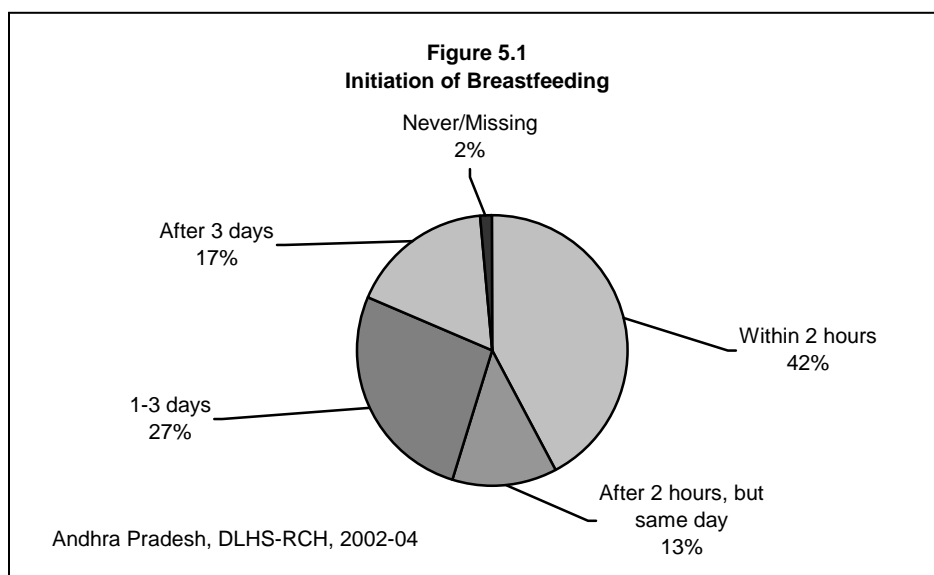
Table 5.1 and Figure 5.1 show the breastfeeding practices among children born during three years preceding the survey in Andhra Pradesh. Although, the practice of breastfeeding is common in Andhra Pradesh, the initiation of breastfeeding within two hours of the birth of the child is not always followed. Forty-two percent of the children were breastfed within two hours of birth, and 55 percent were breastfed within one day of birth (including those who were breastfed within two hours of birth), while 44 percent of children were breastfed after one day of birth. As shown in Figure 5.1, about 13 percent of the children were breastfed within one day of birth, but after two hours of birth; 27 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. Two percent of the children were never breastfed. More than two-fifths of the women who gave birth to children during three years preceding the survey (44 percent) squeezed the first milk from the breast before they began breastfeeding. Not more than 51 percent of children in any socio-economic groups shown in Table 5.1 were breastfed within two hours of birth. Among the Christians, 51

percent of children were breastfed within two hours of birth and 62 percent were breastfed within one day of birth. Forty-eight percent of children from scheduled tribes were breastfed within two hours of birth, and 59 percent were breastfed within one day of birth. Women who have had high school education and above are more likely to start breastfeeding their children early. There are marginal differences in the proportion of children who were put to the breast after one day of birth by background characteristics of their mothers.

<b>Table 5.1 INITIATION OF BREASTFEEDING</b>					
Percentage of children under age 3 years whose mothers started breastfeeding within two hours of birth, within one day of birth, and after one day of birth and percentage whose mothers squeezed the first milk from her breast before breastfeeding by selected background characteristics, Andhra Pradesh, 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	41.3	54.0	44.7	46.4	3,087
Urban	43.2	56.0	42.1	38.7	1,482
<b>Mother's education</b>					
Non-literate	41.8	53.3	45.3	50.4	2,167
0-9@ years	39.6	54.4	43.8	43.4	1,339
10 and above	45.2	57.6	41.0	31.3	1,062
<b>Religion</b>					
Hindu	41.8	54.6	44.1	44.3	3,759
Muslim	39.2	51.6	45.7	43.7	569
Christian	50.8	61.6	35.7	36.9	232
<b>Caste/tribe#</b>					
Scheduled caste	43.6	58.4	39.7	44.5	785
Scheduled tribe	48.3	59.3	38.8	48.4	342
Other backward class	42.1	53.8	45.0	46.4	2,071
Other	39.1	52.7	45.7	38.7	1,335
<b>Standard of living index</b>					
Low	43.2	54.9	44.2	51.0	1,711
Medium	40.3	54.1	44.5	42.9	1,835
High	42.7	55.3	42.0	33.7	1,022
<b>Total</b>	<b>41.9</b>	<b>54.7</b>	<b>43.8</b>	<b>43.9</b>	<b>4,568</b>
Note: Table based on youngest living child born during the three years preceding the survey. <sup>1</sup> Includes children who were breastfed 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 comparatively less among the mothers of children who live in urban areas, mothers of 'other castes' category children, mothers of Christian religion children, mothers who had 10 or more years of schooling and mothers of children who live in households with a high standard of living.

Mothers of children born in three years preceding the survey were asked whether the children 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 months, Andhra Pradesh, 2002-04

Age in months	Status of exclusive breastfeeding			Number of children
	Exclusive breastfeeding	At least 4 months	At least 6 months	
<2	87.4	*	*	225
2-3	84.0	*	*	261
4-5	54.5	86.8	*	337
6-7	41.8	86.4	54.0	281
8-9	20.0	87.3	49.0	302
10-11	9.5	84.5	40.4	284
12-13	4.7	82.9	40.3	324
14-15	3.6	82.1	37.6	345
16-17	4.2	81.6	37.8	270
18-19	2.3	87.2	44.2	261
20-21	4.5	81.8	39.1	222
22-23	1.0	83.7	39.2	161
24-25	2.4	84.3	41.5	307
26-27	1.9	79.7	38.9	241
28-29	3.0	82.9	41.1	212
30-31	1.7	82.1	40.2	182
32-33	2.0	76.8	43.3	167
34-35	1.0	77.0	38.3	185
< 4 months	85.6	*	*	486
4-6 months	51.5	86.7	*	486
7-9 Months	25.6	86.9	50.4	434

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



In Andhra Pradesh, nearly 86 percent of children under four months of age are exclusively breastfed. The percentage of infants exclusively breastfed drops steadily from 87 percent for children under 2 months of age to 20 percent for children who are 8-9 months old. About 87 percent of children in the age group 4-6 months were exclusively breastfed up to 4 months and half of children in the age group 7-9 months were exclusively breastfed upto 6 months.

### 5.1.1 Breastfeeding by Districts

Table 5.3 shows that in Andhra Pradesh, only in 8 out of the 23 districts, more than 50 percent of the children were put to the breast within two hours of birth. Less than 25 percent of the children were breastfed within two hours of birth in Kurnool district. More than two-fifth of the children were put to the breast after one day of birth in Anantaapur, Cuddapah, Guntur, Krishna, Kurnool, Mahbubnagar, Medak, Nalgonda, Nellore, Nizamabad, Prakasam, Vizianagaram and West Godavari districts. In 6 of the 23 districts, more than 50 percent of the mothers of children squeezed the first milk before breastfeeding.

<b>Table 5.3 BREASTFEEDING BY DISTRICT</b>						
Percentage of children under age 3 years whose mothers started breastfeeding within two hours of birth, within one day of birth and after one day of birth, percentage whose mother squeezed the first milk from her breast before breastfeeding and percentage of children who exclusively breastfed by district, Andhra Pradesh, 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			
Adilabad	54.7	62.2	35.3	40.3	25.8	
Anantapur	25.7	45.7	51.6	51.7	33.1	
Chittoor	47.2	67.2	32.8	60.6	30.0	
Cuddapah	28.8	38.9	60.5	39.8	24.9	
East Godavari	53.6	59.2	38.0	39.5	56.7	
Guntur	39.2	57.2	41.6	43.7	22.0	
Hyderabad	56.7	67.6	30.8	19.8	39.4	
Karimnagar	55.3	61.7	38.3	48.5	26.6	
Khammam	54.7	67.0	33.0	38.4	64.6	
Krishna	32.6	52.7	46.3	34.3	37.9	
Kurnool	23.6	45.8	53.4	63.8	34.7	
Mahbubnagar	31.5	45.0	51.3	40.0	51.7	
Medak	39.1	48.0	50.6	44.0	51.3	
Nalgonda	24.3	35.6	62.7	46.9	36.8	
Nellore	35.7	49.8	46.5	53.6	30.8	
Nizamabad	18.3	31.0	68.3	57.6	40.5	
Prakasam	46.4	55.1	43.1	34.3	55.7	
Rangareddi	52.1	60.5	38.9	37.4	64.0	
Srikakulam	51.7	57.2	39.6	45.5	41.0	
Visakhapatnam	49.5	60.2	38.2	47.6	36.8	
Vizianagaram	37.0	51.7	46.3	47.2	49.3	
Warangal	62.3	71.5	28.1	25.0	54.8	
West Godavari	33.8	54.9	43.5	51.5	46.6	
Andhra Pradesh	42.9	55.7	42.5	44.0	41.9	

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

There is a great deal of variation in the extent of exclusive breastfeeding for six months. It is highest in Khammam (65 percent) and lowest in Guntur (22 percent).

## **5.2 Immunization of Children**

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

The Universal Immunization Programme (UIP) was introduced in 1985-86 with the objective of covering at least 85 percent of all infants against the six vaccine preventable diseases by 1990. This scheme has been introduced in every district of the country. The standard immunization schedule developed for the child immunization programme specifies the age at which each vaccine should be 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 at birth, tuberculosis (BCG), diphtheria, whooping cough (pertusis) and tetanus (DPT), polio and measles, and in 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 vaccinations 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 and Figures 5.2 and 5.3 present vaccination coverage rates for children in the age group 12-23 months. Only 63 percent of the children are fully vaccinated, and around 3 percent have not received any routine vaccination. Coverage of each vaccination is much higher than the percentage fully vaccinated. BCG, the first, second and third doses of DPT and Polio vaccines have each been given to more than three-fourths of children, while 74 percent of the children have been vaccinated against measles (Figure 5.2). However, not all children who begin the DPT and polio vaccination series, go on to complete them. The difference between the percentage of children receiving the first and third doses is 13-percentage points for DPT and 10-percentage points for polio vaccination.

There has been a drop of 12-percentage points in full vaccination coverage in Andhra Pradesh since the time of Round I in 1998-99. These data indicate that despite the steps that have been taken to improve the immunization coverage for children in Andhra Pradesh, coverage levels are low and a large proportion of children who received some early vaccinations dropped out of the programme before receiving all of the recommended vaccinations.

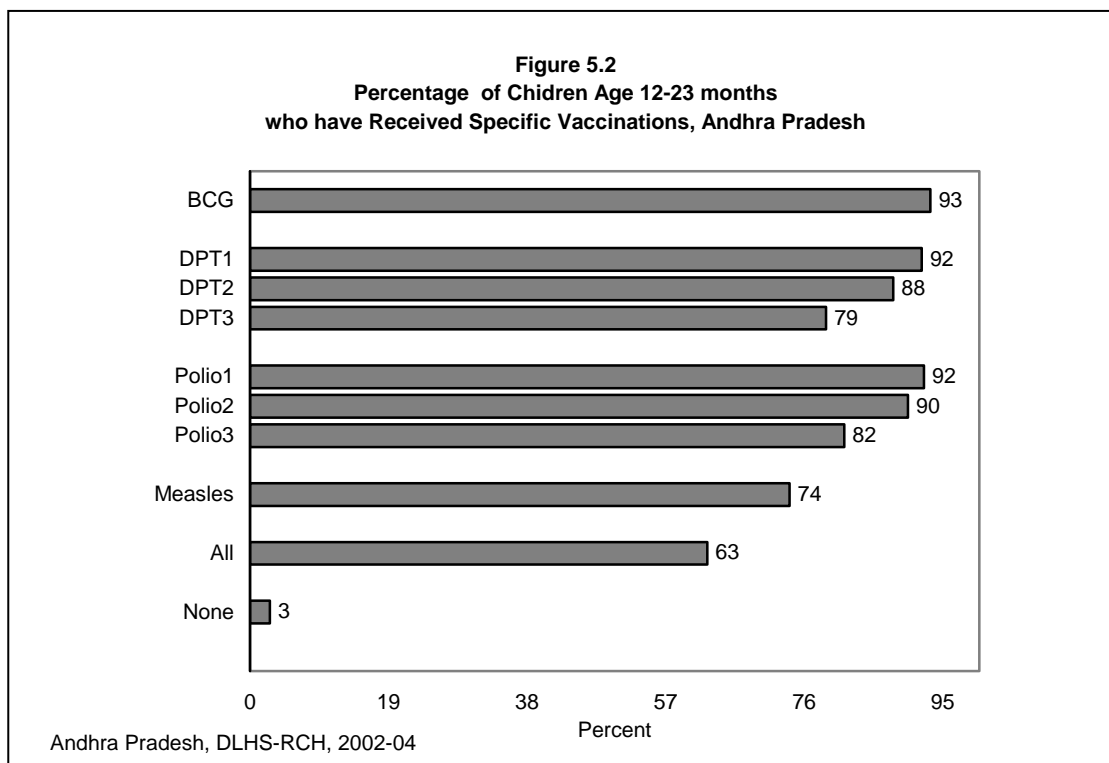
**Table 5.4 VACCINATION OF CHILDREN**

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

Background characteristic	Polio 0	BCG	DPT			Polio			Measles	Full <sup>1</sup> vaccination	No vaccination	Number of children
			1	2	3	1	2	3				
<b>Residence</b>	64.3	92.0	91.3	86.7	76.9	91.4	89.0	79.9	71.8	59.9	3.0	1,092
Rural	87.3	95.7	93.4	91.0	83.0	94.2	92.4	84.4	78.1	67.8	2.1	583
Urban												
<b>Sex of the child</b>	74.6	94.3	93.2	88.7	80.6	92.6	90.3	81.3	75.7	65.0	2.3	846
Male	70.0	92.2	90.9	87.8	77.4	92.2	90.1	81.7	72.3	60.3	3.0	829
Female												
<b>Birth order</b>	76.7	94.0	93.2	89.1	79.7	92.4	90.6	81.9	76.7	64.3	1.8	668
1	73.7	94.4	92.8	89.3	79.2	93.8	92.1	81.9	75.0	63.0	2.0	667
2	68.5	92.5	92.2	89.6	81.3	91.4	89.6	84.5	74.0	65.7	5.4	218
3	47.6	84.0	81.5	75.4	69.9	86.5	79.3	71.3	53.8	46.4	6.6	121
4+												
<b>Mother's education</b>	58.1	89.1	88.4	83.3	73.8	89.4	86.5	77.3	66.9	55.1	5.3	765
Non-literate	79.1	96.0	94.0	91.4	82.6	93.3	91.1	83.2	77.4	67.3	0.6	517
0-9@ years	91.1	97.8	96.6	93.7	84.4	97.0	96.3	87.4	83.3	71.3	0.4	393
10 years and above												
<b>Religion</b>	71.3	93.1	92.0	88.1	78.7	92.6	90.5	81.3	74.1	62.7	2.7	1,359
Hindu	79.3	93.0	91.1	87.7	80.5	92.3	88.9	82.7	72.5	63.1	2.8	217
Muslim	71.9	96.7	95.9	91.3	80.6	90.1	88.8	81.1	76.5	62.1	2.0	96
Christian												
<b>Caste/tribe#</b>	70.0	95.1	94.5	90.3	79.3	94.3	91.3	81.9	74.8	62.2	1.7	315
Scheduled caste	48.7	73.8	73.3	64.0	51.9	72.9	69.3	54.6	46.6	37.3	13.4	122
Scheduled tribe	70.3	93.6	92.0	87.9	80.3	92.8	91.0	82.7	75.1	63.8	2.3	741
Other backward class	83.0	96.4	95.2	93.2	83.6	95.4	93.5	85.9	78.7	67.4	1.2	483
Other												
<b>Standard of living index</b>	57.8	88.7	88.1	82.8	71.3	88.4	85.4	73.9	64.7	51.9	5.4	596
Low	73.8	94.5	92.9	88.9	80.5	93.2	90.9	83.2	76.1	64.1	1.8	690
Medium	91.9	98.1	96.6	95.2	88.3	97.1	96.4	89.9	84.5	76.7	0.0	390
High												
Total	72.3	93.3	92.1	88.2	79.0	92.4	90.2	81.5	74.0	62.7	2.7	1,675

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001. Total includes 3 children with other religion were not shown separately. @ Literate mothers with no years of schooling are included. # Total figure may not add to N due to do not and missing cases. <sup>1</sup> BCG, three doses of DPT, and Polio (excluding Polio 0) and measles vaccines.

The data indicates that the coverage of each type of vaccine is less in rural areas than in urban areas. About 60 percent of the children in rural areas had received all the recommended vaccinations by the time of the survey, compared with 68 percent in urban areas. Differentials in rural-urban against polio 0 may be observed from the table. Sixty-four percent of the children have received polio vaccine at the time of birth in rural areas, whereas 87 percent received the same in the urban areas.



Female children (60 percent) are less likely than male children (65 percent) to be fully vaccinated. A large majority of third or less 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 55 percent children of non-literate mothers are fully vaccinated compared to 67 percent of children with mothers' education below high school and 71 percent of mothers who have at least completed high school. Children from Scheduled tribes (37 percent) are less likely to be fully vaccinated as compared to those of Scheduled castes (62 percent), other backward classes (64 percent) and 'other castes' category (67 percent). The standard of living index of the households has a strong positive relationship with vaccination coverage. Seventy-seven percent of children from households with a high standard of living are fully vaccinated, whereas only 52 percent of children are fully vaccinated from households with a low standard of living.

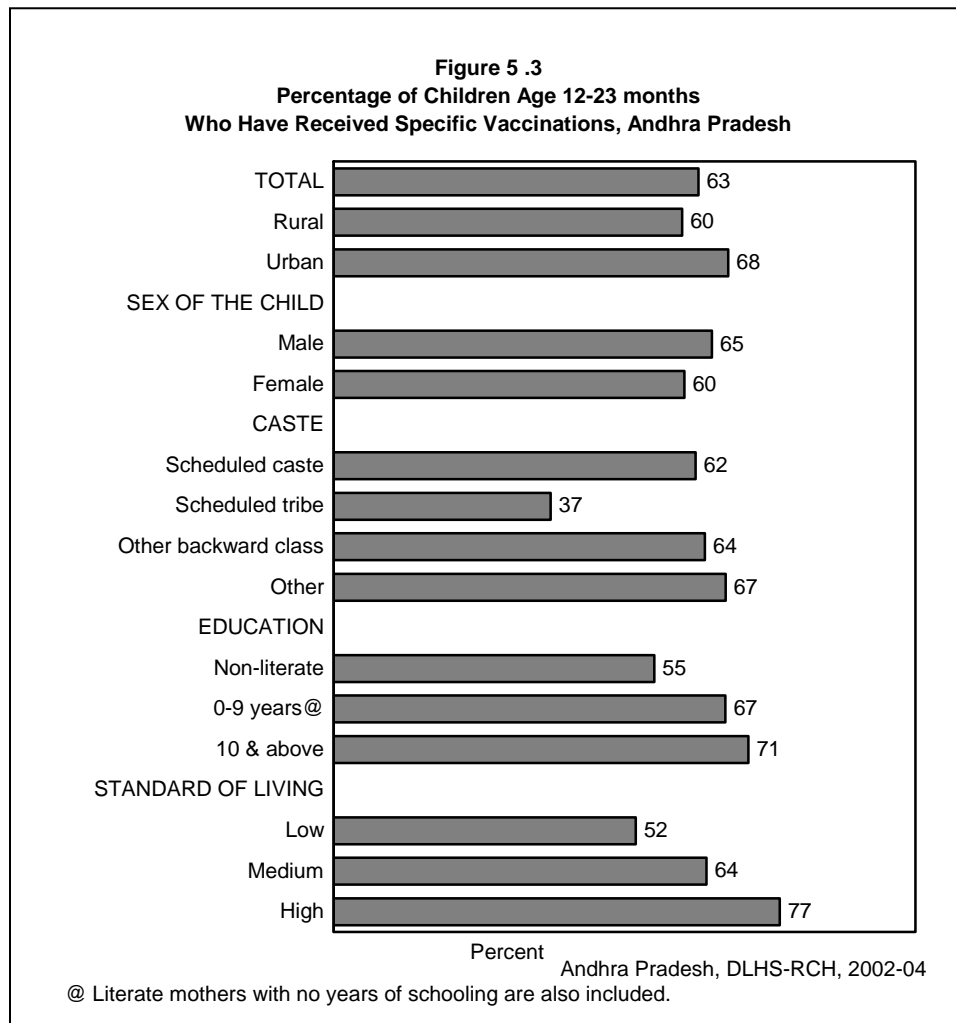


Table 5.5 shows the percentage of children in the age group 12-23 months and 24-35 months for whom a vaccination card was shown to interviewers, and the percentage who received various vaccinations during the first year of life by place of residence. The interviewer was shown the vaccination card for a relatively higher proportion of children in the age group 12-23 months (38 percent) than for children in the age group 24-35 months (31 percent).

The proportion of children fully vaccinated by age 12 months was the same (63 percent) for children in the age groups of 12-23 months and 24-35 months. A rural-urban differential for the coverage of full vaccination is observed for children in the age group 12-23, while it is absent for children in the age group 24-35 months. Sixty percent of children in the age group 12-23 months are fully vaccinated against 63 percent of children in the age group 24-35 months in rural areas, while the reverse is true in urban areas (Figure 5.4). About 68 percent of children in the age group 12-23 months have received all vaccinations compared to 64 percent of children in the age group 24-35 months in urban areas.

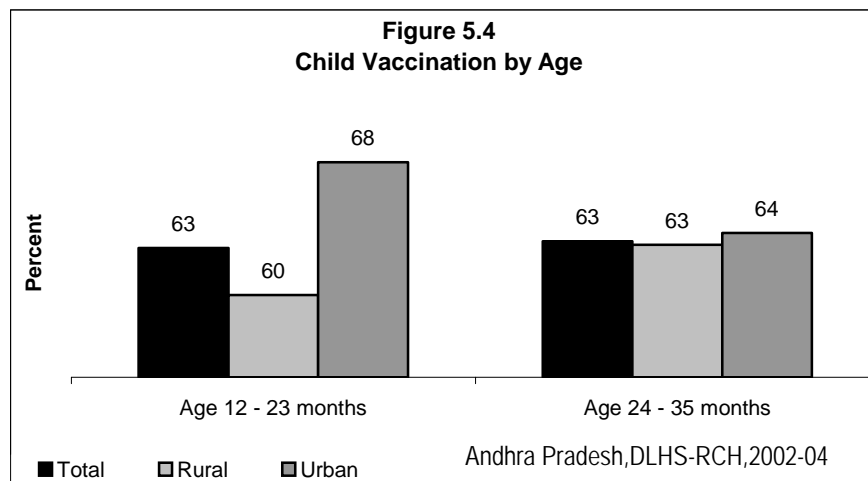
**Table 5.5 CHILDHOOD VACCINATION RECEIVED BY 12 MONTHS OF AGE**

Percentage of children age 12-23 months and 24-35 months for whom a vaccination card was shown to the interviewer and percentage who received specific vaccinations by 12 months of age according to residence, Andhra Pradesh, 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	30.7	35.6	27.5	41.4	37.3
Percentage vaccinated by 12 months of age						
Polio 0	72.3	68.8	64.3	61.7	87.3	83.2
BCG	93.3	91.7	92.0	91.3	95.7	92.5
<b>Polio doses</b>						
No Polio	5.2	6.5	5.9	6.6	3.9	6.3
1	2.2	1.9	2.4	2.2	1.8	1.3
2	8.8	5.7	9.2	6.0	8.1	5.1
3	82.3	84.1	80.8	83.2	85.1	86.0
Don't remember/missing	1.4	1.7	1.6	1.9	1.0	1.3
<b>DPT injection</b>						
No DPT	6.6	9.0	7.2	9.4	5.7	8.1
1	3.8	3.7	4.6	3.9	2.4	3.4
2	9.2	7.3	9.8	7.1	8.0	7.8
3	79.0	78.4	76.9	77.5	83.0	80.3
Don't remember	1.3	1.5	1.5	2.1	0.9	0.4
Measles	74.0	74.7	71.8	74.7	78.1	74.8
Full <sup>1</sup> vaccination	62.7	63.1	59.9	62.9	67.8	63.6
No vaccination at all	2.7	2.9	3.0	3.0	2.1	2.7
Number of children	1,675	1,716	1,092	1,154	583	562

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

**Error!**



### 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. Majority of the children (76 percent) in Andhra Pradesh were immunized at the government health facilities and only 21 percent at private health facilities. The RCH/MCP camp and Government/Municipal hospital are the major providers of childhood vaccinations. Among the children immunized, 31 percent of them had received vaccinations from the RCH/MCP camp, 28 percent from government/municipal hospital, 10 percent from community health centre or from primary health centre and 7 percent had received vaccinations from sub-centre. The percentage of children receiving vaccination from the private sector is considerably lower in rural areas (14 percent) than in urban areas (34 percent). Even in urban areas, however, 64 percent of children received their vaccination from the government health facility. More or less similar proportion of children from those villages where health facilities are available and from those villages with no such health facilities had received vaccinations from the government health facilities.

<b>Table 5.6 SOURCE OF CHILDHOOD VACCINATION</b>					
Percent distribution of children under age, 3 years who have received any vaccination by source of last vaccination, according to place of residence and availability of health facilities in the village, Andhra Pradesh, 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	27.7	21.0	41.2	21.0	20.9
Community/primary health centre	9.9	10.7	8.3	8.7	12.4
Sub-centre	7.1	9.2	2.7	7.8	10.3
RCH/MCP camp	31.4	41.3	11.6	43.3	39.7
<b>Private health sector</b>					
Private hospital	16.0	10.5	27.0	11.9	9.3
Private doctor	4.6	3.3	7.4	2.7	3.7
ISM <sup>2</sup> health facility	0.5	0.5	0.4	0.4	0.6
Other	2.0	2.4	1.2	3.1	1.9
Do not remember	0.7	0.9	0.2	1.0	0.9
Missing	0.2	0.2	0.1	0.2	0.2
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	4,754	3,171	1,583	1,406	1,765
Note: Table includes last and last but one living children born in 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 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 Andhra Pradesh as a whole, only 38 percent of the children received at least one dose of Vitamin A, and 7 percent received IFA tablets/syrup. This indicates that a large number of children in Andhra Pradesh did not receive Vitamin A supplements and very few children received IFA tablets/syrup supplementation.

A slightly higher proportion of children in the age group 24-35 months than children in the age group 12-23 months had received at least one dose of Vitamin A and IFA tablets/syrup each. Male children are slightly more likely to receive Vitamin A and IFA tablets/syrup than female children. A slightly higher proportion of children living in rural areas received at least one dose of Vitamin A than urban areas, but the reverse is true in case of IFA tablets/syrup. Children whose mothers completed high school and above and children living in households with a medium or high standard of living are more likely to receive a dose of Vitamin A. Children of birth order 4 or above are less likely than children of birth order 1, 2 or 3 to receive any dose of vitamin A. Similarly, children from Schedule Tribes are less likely to receive at least one dose of Vitamin A than children from 'other castes' category. More or less similar pattern is observed for the receipt of IFA tablets/syrup.



<b>Table 5.7 VITAMIN A AND IFA SUPPLEMENTATION FOR CHILDREN</b>			
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, Andhra Pradesh, 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	36.2	6.3	1,675
24-35 months	39.3	8.0	1,716
<b>Sex of the child</b>			
Male	40.0	7.8	1,724
Female	35.4	6.5	1,667
<b>Birth order</b>			
1	39.2	8.5	1,370
2	38.5	6.4	1,260
3	37.4	6.4	470
4+	28.6	5.3	291
<b>Residence</b>			
Rural	38.6	6.1	2,246
Urban	36.1	9.3	1,145
<b>Mother's education</b>			
Non-literate	35.0	5.5	1,620
0-9 years@	38.7	7.1	1,003
10 years and above	52.2	10.7	768
<b>Religion</b>			
Hindu	38.7	7.1	2,767
Muslim	31.9	5.6	444
Christian	38.9	12.2	175
<b>Caste/tribe #</b>			
Scheduled caste	39.5	6.9	608
Scheduled tribe	25.1	4.2	249
Other backward class	39.7	6.9	1,517
Other	36.6	8.5	989
<b>Standard of living index</b>			
Low	32.2	6.0	1,249
Medium	40.5	6.2	1,371
High	41.9	10.7	771
<b>Availability of health facility in the village<sup>1</sup></b>			
Yes	37.7	6.2	1,253
No	39.7	6.0	993
Total	37.8	7.2	3,391

Note: Table includes last and last but one living children born in three years preceding the survey. @ Literate mothers 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. Total includes 1 child missing in birth order and 6 children in other religion were not shown separately.

## 5.5 Immunization Coverage by Districts

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.

<b>Table 5.8 CHILDHOOD VACCINATION BY DSITRICT</b>								
Percentage of children who received specific vaccinations and Vitamin A supplementation by district, Andhra Pradesh, 2002-04								
District	Percentage vaccinated <sup>1</sup>							At least one Vit.A <sup>3</sup> Dose
	Polio 0	BCG	DPT3	Polio3	Measles	Full <sup>2</sup>	None	
Adilabad	57.6	90.4	70.1	79.5	72.5	64.6	0.0	54.1
Anantapur	69.0	93.0	82.1	84.5	78.3	65.7	2.6	41.3
Chittoor	67.3	98.9	82.5	80.7	69.6	63.3	1.1	28.3
Cuddapah	79.6	83.3	81.5	81.4	68.9	57.1	6.4	27.6
East Godavari	84.2	98.8	91.5	92.7	77.0	72.3	1.2	32.4
Guntur	73.2	93.9	85.9	91.2	67.8	64.0	0.0	39.8
Hyderabad	88.3	97.3	81.1	80.3	80.6	72.0	2.7	38.7
Karimnagar	82.0	96.9	82.5	86.9	88.8	77.8	1.8	62.1
Khammam	84.5	96.8	90.0	88.9	78.5	75.7	1.8	53.3
Krishna	83.3	100.0	85.3	93.8	80.5	69.6	0.0	37.5
Kurnool	33.8	92.5	81.5	82.1	65.1	61.0	3.7	27.3
Mahbubnagar	68.5	74.3	51.5	57.6	32.8	21.7	5.3	6.3
Medak	77.9	98.0	87.9	86.2	74.9	63.9	1.2	41.3
Nalgonda	70.9	92.9	83.2	88.7	82.4	76.4	2.9	46.1
Nellore	74.8	92.3	77.3	68.4	74.7	53.6	0.0	21.9
Nizamabad	68.6	89.8	83.8	87.2	81.4	75.4	6.0	58.5
Prakasam	82.4	98.4	80.5	83.7	80.6	67.0	0.0	33.3
Rangareddi	74.9	88.2	65.1	69.6	70.5	49.8	4.3	35.0
Srikakulam	38.9	89.8	69.2	74.0	75.8	57.4	4.7	47.1
Visakhapatnam	61.7	79.8	61.2	64.3	55.3	41.1	13.8	35.5
Vizianagaram	70.9	98.8	88.4	90.8	78.0	73.9	1.2	40.7
Warangal	88.6	98.9	75.9	77.7	85.9	55.8	0.0	45.0
West Godavari	59.3	94.2	68.8	73.9	79.3	56.2	0.0	35.7
Andhra Pradesh	72.3	93.3	79.0	81.5	74.0	62.7	2.7	37.8

Note: Table includes only last and last but one living children born since 1.1.1999/1.1.2001. <sup>1</sup>Children age 12-23 months  
<sup>2</sup> BCG, three doses of DPT and Polio (excluding Polio 0) and measles vaccinations <sup>3</sup> Children age 12-35 months.

There are inter-district differentials in the coverage of children for different vaccinations, and for receiving all vaccinations and those who did not receive any vaccination at all. The percentage of children who are fully vaccinated ranges from a low of 22 percent in Mahbubnagar to a high of 78 percent in Karimnagar. In three districts, namely Mahbubnagar (22 percent), Visakhapatnam (41 percent) and Rangareddi (49.8 percent) the coverage of full immunization is below 50 percent (see Map-5) and including these three districts, the coverage rate of full immunization is below the state average of 63 percent in Cuddapah (57 percent), Kurnool (61 percent), Nellore (54 percent), Srikakulam (57 percent), Warangal (56 percent) and West Godavari (56). Fourteen percent of children in Visakhapatnam 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, less children have received the measles vaccine than any of the other vaccinations. The coverage of polio drops at the time of birth varies from the lowest in Kurnool (34 percent) to the highest in Warangal (89 percent).

District wise variations in the percentage of children who received at least one dose of Vitamin A are also shown in Table 5.8. The proportion of children in the age group 12-35 months who received at least one dose of Vitamin 'A' supplement ranges from 6 percent in Mahbubnagar to 62 percent in Karimnagar. Besides Mahbubnagar, Chittoor (28 percent), Cuddapah (28 percent), East Godavari (32 percent), Kurnool (27 percent), Nellore (22 percent), Prakasam (33 percent), Rangareddi (35 percent), Visakhapatnam (36 percent) and West Godavari (36 percent) stand out as having below the state average to receive at least one dose of Vitamin A.

## **5.6 Child Morbidity and Treatment**

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

### **5.6.1 Awareness of Diarrhoea**

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

In Andhra Pradesh, about 50 percent of the mothers with births during three years preceding the survey were aware of what to do when a child had diarrhoea, which was 15 percent points down from Round I, and 35 percent were aware of ORS, which was 13 percent points down from Round I. Thirty-two percent of the women were aware of salt and sugar solution. Some of the women also reported that they would continue normal food (8 percent), continue breastfeeding (7 percent), and give plenty of fluids (8 percent), and about 51 percent of women did not know what to give a child who had diarrhoea. As expected, knowledge of ORS is higher

among urban women (43 percent) than among rural women (31 percent), and it is much higher among high school and above educated women (59 percent) as compared to non-literate women (22 percent). Women belonging to Schedule Tribes (22 percent) are less likely to know about ORS than women belonging to other caste groups (33-41 percent). Fifty-two percent of women with children having a high standard of living know about ORS and it declines to 36 percent for women with a medium standard of living and 24 percent with a low standard of living. Knowledge of ORS is slightly more among younger women than among older women. Women from villages with availability of health facilities are slightly more aware of diarrhoea management than women from other villages.

<b>Table 5.9 AWARENESS OF DIARRHOEA</b>								
Percentage of women who are aware of diarrhoea management, type of practices followed if child gets diarrhoea, and percentage of women whose children suffered <sup>1</sup> from diarrhoea by selected background characteristics, Andhra Pradesh, 2002-04								
Background characteristic	Knowledge of diarrhoea management	Type of practices to be followed if child gets diarrhoea						Number of women
		Give ORS	Give salt and sugar solution	Continue normal food	Continue breast-feeding	Give plenty of fluids	Do not know	
<b>Age</b>								
15-24	47.9	33.7	28.9	7.3	6.4	7.0	52.4	3,368
25-34	53.2	37.5	37.8	8.1	7.5	9.9	47.1	1,859
35-44	47.3	31.7	35.0	7.0	6.1	8.1	53.4	121
<b>Residence</b>								
Rural	44.9	31.2	26.7	6.2	5.4	5.5	55.4	3,607
Urban	59.7	42.8	43.4	10.4	9.6	13.2	40.6	1,742
<b>Mother's education</b>								
Non-literate	35.8	22.2	18.1	3.4	3.1	3.2	64.5	2,602
0-9@ years	53.1	37.8	35.5	7.7	7.0	8.3	47.2	1,515
10 and above	74.9	58.6	57.7	16.3	14.2	17.9	25.3	1,231
<b>Religion</b>								
Hindu	49.3	34.9	31.9	7.3	6.4	7.5	51.0	4,429
Muslim	49.6	34.8	31.8	7.7	6.1	8.9	51.0	655
Christian	59.8	38.6	38.0	12.9	14.2	15.3	40.6	255
<b>Caste/tribe#</b>								
Scheduled caste	48.3	32.9	29.3	7.3	5.6	7.3	51.9	913
Scheduled tribe	32.8	21.6	19.4	4.3	3.0	2.8	67.5	415
Other backward class	48.2	34.1	30.5	7.7	6.9	7.6	52.2	2,430
Other	57.6	41.2	39.8	8.6	8.3	10.6	42.5	1,548
<b>Standard of living index</b>								
Low	38.2	24.2	20.2	4.3	3.3	3.1	62.0	2,022
Medium	49.2	35.5	30.8	6.3	6.4	8.1	51.0	2,138
High	70.3	52.4	54.9	15.7	13.2	16.3	30.1	1,188
<b>Availability of health facility<sup>2</sup> in the village</b>								
Yes	45.3	32.0	26.8	6.2	5.4	5.8	55.0	1,957
No	44.3	30.3	26.5	6.3	5.4	5.3	55.9	1,650
Total	49.7	35.0	32.1	7.6	6.8	8.0	50.6	5,348

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. @ Literate mothers with no years of schooling are included. # Total figure may not add to N due to do not know and missing cases. <sup>1</sup> Last two weeks prior to survey. <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 10 children in other religions were not shown separately.

## 5.6.2 Treatment of Diarrhoea

During the last two weeks before the survey, 12 percent of the women reported that their children suffered from diarrhoea (Table 5.10).

<b>Table 5.10 TREATMENT OF DIARRHOEA</b>					
Percentage of women whose children suffered from diarrhoea and who sought treatment and by source of treatment, according to place of residence and availability of health facility in the village, Andhra Pradesh, 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 children suffered <sup>1</sup> from diarrhoea	12.3	12.5	11.9	12.9	12.0
Number of women	5,348	3,607	1,742	1,957	1,650
Percentage of women whose children suffered <sup>1</sup> from diarrhoea and treated with ORS	58.6	53.0	70.8	51.2	55.2
Percentage of women whose children suffered <sup>1</sup> from diarrhoea and sought treatment at health facility	86.2	85.3	88.0	85.7	84.7
Number of women	658	450	208	253	197
<b>Source of treatment</b>					
<b>Government health facility</b>					
Hospital/dispensary	9.8	9.2	11.2	10.3	7.8
UHC/UHP/UFWC	0.6	0.6	0.6	0.0	1.4
CHC/ Rural hospital	1.2	1.1	1.4	1.0	1.1
Primary health centre	4.0	5.0	1.7	5.3	4.7
Sub centre	1.2	1.7	0.0	1.6	1.9
<b>Private health facility</b>					
Private hospital/clinic	69.3	64.8	78.8	66.7	62.3
ISM <sup>3</sup> facility	13.0	12.9	13.2	14.2	11.2
Home remedy	9.4	10.6	6.8	8.5	13.4
Other	4.3	5.9	1.1	7.5	3.8
Percent distribution of women who sought treatment from					
Doctor	91.5	89.5	95.7	90.1	88.7
ANM/Nurse/LHV	4.8	6.0	2.3	4.8	7.6
Dai (trained or untrained)	0.8	1.2	0.0	1.5	0.8
Relative/friends	0.4	0.4	0.2	0.2	0.7
Chemist/medical shop	2.2	2.4	1.8	2.9	1.8
ISM practitioner	0.3	0.4	0.0	0.4	0.4
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	567	384	183	217	167
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.					

Women, whose children had diarrhoea, were further asked about treatment with ORS, any other medical treatment and source of treatment. About 59 percent of the women mentioned that they gave ORS therapy, and 86 percent of the women said that their children had been treated at health facility. Use of ORS for the treatment of childhood diarrhoea in Andhra Pradesh is much higher among urban women than among rural women.

It is to be observed that a slightly higher proportion of women from those villages where health facilities are not available within the villages used ORS for the treatment of childhood diarrhoea.

Among those mothers whose children suffered from diarrhoea during the last two weeks before the survey and who consulted or obtained advice, about 69 percent of women visited private hospitals/clinics, 17 percent visited government health facility and 13 percent of women treated their children through the Indian System of Medicine. The proportion of those women who visited private hospitals/clinics is relatively higher in urban areas (79 percent) than in rural areas (65 percent).

### **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 levels 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 very low proportion of women (11 percent) with births during three years preceding the survey in Andhra Pradesh were aware of danger signs of pneumonia. The figure was sharply down from 26 percent in Round I. A relatively high proportion of women in urban areas (15 percent) were aware of the danger signs of pneumonia as compared to women from rural areas (9 percent). Knowledge of danger signs of pneumonia is relatively higher among older women (16 percent), Christian women (14 percent), women from 'other castes' category (16 percent), highly educated women (24 percent) and women living in high standard of living households (22 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' (91 percent) followed by 'chest in drawing' (45 percent), 'pain in chest and productive cough' (44 percent), 'wheezing/whistling' (34 percent), 'rapid breathing' (33 percent), 'not able to drink or take a feed' (31 percent), 'excessive drowsy and difficulty in keeping awake' (23 percent) and 'condition get worse than before' (8 percent).

### **5.6.4 Treatment of Pneumonia**

About 9 percent of women reported that their children had suffered from pneumonia during the last two weeks before the survey, this proportion being the same (9 percent) in rural and urban areas (Table 5.12). The incidence of pneumonia varies little with availability of health facilities in the villages.

<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, Andhra Pradesh, 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	9.7	3,368	90.2	42.8	28.4	21.0	45.0	6.2	30.2	33.2	327
25-34	12.7	1,859	92.3	47.3	32.1	24.5	43.0	10.2	35.8	30.6	235
35-44	16.0	121	*	*	*	*	*	*	*	*	19
<b>Residence</b>											
Rural	8.8	3,607	90.6	45.3	30.7	19.5	47.9	6.6	33.8	30.5	316
Urban	15.2	1,742	90.7	44.5	30.4	28.1	39.4	10.4	33.4	35.7	265
<b>Mother's education</b>											
Non-literate	5.4	2,602	86.5	37.6	25.8	14.7	47.1	2.3	34.3	26.4	141
0-9@ years	9.8	1,515	87.6	38.9	32.9	18.1	41.1	5.1	29.1	23.6	147
10 and above	23.8	1,231	94.2	51.4	31.7	30.2	44.0	12.8	35.6	40.7	293
<b>Religion</b>											
Hindu	11.0	4,429	89.6	46.8	30.8	22.5	44.8	8.4	31.7	34.3	486
Muslim	9.1	655	99.6	44.8	30.8	34.3	44.5	7.4	44.9	29.4	59
Christian	14.2	255	(90.9)	(24.2)	(30.3)	(24.2)	(36.4)	(12.1)	(42.4)	(27.3)	36
<b>Caste/tribe#</b>											
Scheduled caste	10.7	913	87.2	37.1	34.2	20.3	51.7	7.9	32.5	29.1	97
Scheduled tribe	5.5	415	*	*	*	*	*	*	*	*	23
Other backward class	9.0	2,430	93.2	47.6	31.5	19.7	41.7	7.6	31.6	34.1	218
Other	15.7	1,548	89.7	46.2	30.2	28.8	43.1	9.8	35.6	34.0	243
<b>Standard of living index</b>											
Low	6.3	2,022	86.6	40.2	31.3	15.3	52.0	3.6	35.9	31.2	127
Medium	9.0	2,138	89.8	38.8	29.5	23.2	43.0	8.2	30.6	27.5	192
High	22.1	1,188	93.2	51.7	31.0	27.5	40.9	10.7	34.8	37.7	262
<b>Availability of health facility<sup>2</sup> in the village</b>											
Yes	8.8	1,957	92.2	41.8	27.4	18.6	45.2	6.2	32.0	31.5	173
No	8.7	1,650	88.7	49.4	34.7	20.6	51.1	7.0	35.9	29.4	144
Total	10.9	5,348	90.6	44.9	30.6	23.4	44.0	8.3	33.6	32.9	581

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 10 women with other religion on aware of danger sign of pneumonia who are not shown separately.() Based on less than 50 unweighted cases. \* Percentage were not shown separately due to few cases.





Table 5.12 also shows the percent of women whose children suffered from ARI symptoms in the last two weeks before the survey and sought advice/treatment and taken their children to a health facility or provider. Eighty-one percent of women received some advice or treatment for their children who were ill with ARI. This percentage is relatively low in rural areas (79 percent) than in urban areas (84 percent) and village without health facilities (72 percent) than village with health facility (85 percent).

<b>Table 5.12 TREATMENT OF PNEUMONIA</b>					
Percentage of women whose children suffered <sup>1</sup> from cough and cold and who sought treatment and source of treatment, according to place of residence and availability of health facility in the village, Andhra Pradesh, 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	9.2	9.3	9.0	9.0	9.5
Number of women	5,348	3,607	1,742	1,957	1,650
Percentage of women whose children suffered from cough and cold and sought treatment	80.6	79.1	83.9	85.1	72.3
Number of women	490	333	156	176	157
<b>Source of treatment</b>					
<b>Government health facility</b>					
Hospital/dispensary	7.5	6.6	9.3	6.6	6.7
UHC/UHP/UFWC	0.9	0.5	1.8	0.9	0.0
CHC/ Rural hospital	0.6	0.0	1.8	0.0	0.0
Primary health centre	3.8	5.3	0.8	6.6	3.6
Sub centre	1.4	1.8	0.8	1.9	1.5
<b>Private health facility</b>					
NGO/Trust hospital/clinic	0.9	0.3	2.0	0.5	0.0
Private hospital/clinic	67.2	65.7	70.2	68.4	62.2
ISM <sup>3</sup> facility	1.5	1.1	2.4	0.4	2.0
Home remedy	15.1	15.7	14.1	14.8	16.8
Other	6.0	5.8	6.5	4.8	7.1
Percent distribution of women who seek treatment by					
Doctor	88.9	86.5	93.6	86.7	86.3
ANM/Nurse/LHV	3.3	3.7	2.4	4.7	2.5
Dai (trained)	0.6	1.0	0.0	1.7	0.0
Relatives/Friends	0.5	0.0	1.5	0.0	0.0
Chemist/medical shop	2.4	2.8	1.6	3.0	2.4
Other	4.3	6.0	0.9	3.9	8.8
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	395	264	131	150	113
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 the women who got advice for children ill with ARI, 67 percent visited private hospital/clinic, and only 14 percent went to government health facility, whereas 15 percent of them said that their children had been treated with home remedy.

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

Table 5.13 presents the knowledge of diarrhoea management, knowledge of ORS, and incidence of diarrhoea by district. Knowledge of diarrhoea management and knowledge about ORS is low in almost all districts, in Andhra Pradesh. Knowledge of ORS is lowest in Cuddapah (16 percent). Women in Nizamabad, Nalgonda, Anantapur, Mahbubnagar, Krishna, Warangal, Vizianagaram, Visakhapatnam and Kurnool also have relatively low levels of knowledge of ORS. The incidence of diarrhoea is 12 percent in the state as a whole and it varies from 4 percent in Mahbubnagar and Medak to 21 percent in Cuddapah. Table 5.13 also shows differentials in the awareness of danger signs of pneumonia and incidence of pneumonia by district. In comparison to awareness about diarrhoea management, the awareness of danger signs of pneumonia is quite low in all the districts. It is the lowest in Vizianagaram and Anantapur (5 percent) and highest in Guntur (23 percent). Incidence of ARI symptoms is highest in East Godavari (18 percent) and lowest in Hyderabad (2 percent).

**Table 5.13 KNOWLEDGE OF DIARRHOEA MANAGEMENT AND PNEUMONIA BY DISTRICT**

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

Districts	Percentage of women aware of		Percentage of women whose children suffered <sup>1</sup> from diarrhoea	Percentage of women aware of danger signs of pneumonia	Percentage of women whose children suffered <sup>1</sup> from pneumonia
	Diarrhoea Management	ORS			
Adilabad	47.8	39.1	9.2	10.1	6.0
Anantapur	34.3	23.9	18.3	5.0	5.3
Chittoor	52.5	37.8	10.0	13.9	6.3
Cuddapah	23.4	15.6	21.0	5.9	14.4
East Godavari	72.2	52.7	16.9	14.2	17.5
Guntur	58.9	35.0	18.9	23.2	10.3
Hyderabad	59.3	37.9	4.5	14.6	2.3
Karimnagar	52.8	41.9	11.5	10.0	3.2
Khammam	60.1	52.4	10.1	6.5	14.5
Krishna	41.0	26.3	14.9	7.0	13.4
Kurnool	48.6	34.0	9.5	9.9	4.4
Mahbubnagar	38.2	24.8	3.7	9.4	8.9
Medak	52.9	46.9	3.7	8.6	9.3
Nalgonda	35.5	23.5	11.5	8.2	4.4
Nellore	55.1	37.7	15.3	18.5	8.4
Nizamabad	27.6	21.8	10.1	7.4	9.8
Prakasam	48.5	37.8	12.5	15.2	11.9
Rangareddi	53.7	37.4	7.8	10.0	15.8
Srikakulam	56.4	37.0	13.1	6.7	5.7
Visakhapatnam	53.5	33.2	20.1	12.3	13.8
Vizianagaram	45.0	29.2	20.0	4.6	15.8
Warangal	43.6	26.2	7.0	12.8	8.2
West Godavari	63.3	53.8	15.9	13.3	3.6
Andhra Pradesh	49.7	35.0	12.3	10.9	9.2

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.

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.

## 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 contraceptive services to 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 was collected from current users. The current non-users were asked about the past status of contraceptive use, reasons 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 methods 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. A question on the knowledge of no-scalpel vasectomy (NSV) was also asked to the husbands of eligible women. If the respondent did not recognise the name of the family planning method, she 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.

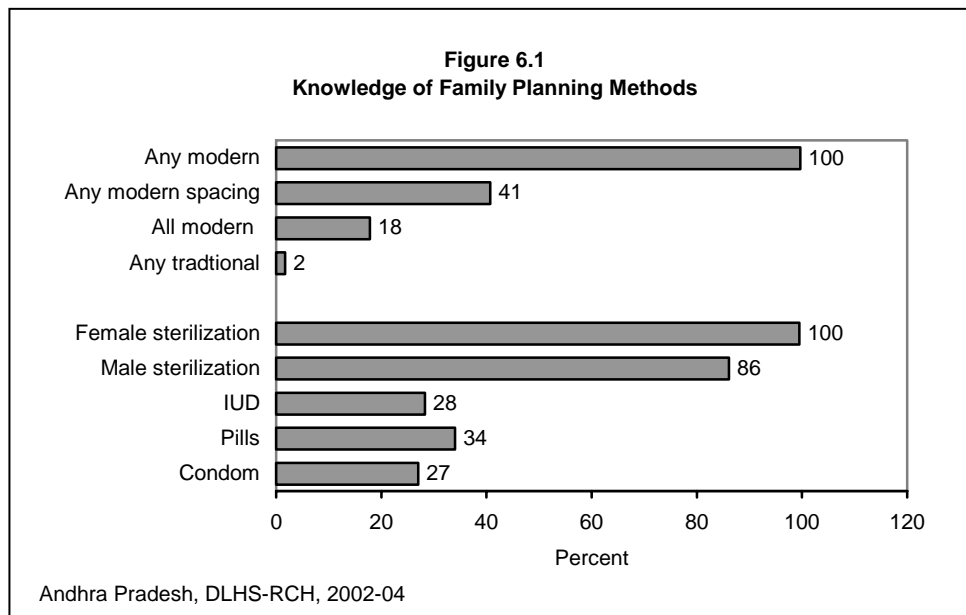
The extent of knowledge of contraceptive methods among currently married women for specific methods according to residence and availability of health facilities in the village is shown in Table 6.1 and Figure 6.1. Knowledge of any method including any modern contraceptive method is almost universal in the state of Andhra Pradesh and do not vary by residence. The knowledge of modern spacing methods among currently married women is only around 41 percent, and comparatively higher among the women with an urban residence. Only 12 percent of women from rural areas are aware about all modern methods compared to 30 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 according to place of residence and availability of health facility in the village, Andhra Pradesh, 2002-04					
Contraceptive methods	Total	Residence		Availability of health facility in the village <sup>3</sup>	
		Rural	Urban	No	Yes
Any method	99.7	99.7	99.7	99.7	99.7
Any modern method	99.7	99.7	99.6	99.7	99.7
Any modern spacing method <sup>1</sup>	40.7	32.7	56.4	30.7	34.3
All modern methods <sup>2</sup>	17.8	11.9	29.5	10.5	13.0
Female sterilization	99.5	99.6	99.5	99.6	99.6
Tubectomy	35.8	32.8	41.5	28.3	36.5
Laparoscopy	23.1	20.5	28.2	20.7	20.3
Male sterilization	86.1	84.5	89.2	84.4	84.6
Vasectomy	23.8	19.1	33.2	16.6	21.1
No-scalpel vasectomy	17.4	13.5	25.2	13.3	13.6
IUD/Loop	28.3	21.1	42.3	18.6	23.1
Pills	34.0	26.9	48.1	25.1	28.2
Daily	21.8	16.1	33.1	14.6	17.2
Weekly	15.4	10.9	24.1	9.9	11.7
Condom/Nirodh	27.0	19.5	41.8	18.7	20.1
Sponge (today)	2.6	1.6	4.5	1.6	1.7
Injectables	2.7	1.8	4.7	1.9	1.7
Norplant	0.7	0.4	1.3	0.4	0.5
Contraceptive herbs	2.2	2.0	2.6	2.1	1.9
Any traditional method	1.7	0.9	3.4	1.0	0.8
Any other Indian system of medicinal contraceptives	0.3	0.1	0.6	0.1	0.1
Number of women	17,886	11,857	6,029	5,292	6,565

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 Andhra Pradesh followed by male sterilisation. Overall, almost all the currently married women are aware of female sterilization and 86 percent knew about male sterilization. There is no rural - urban difference in knowledge of female sterilization, but it is slightly higher in urban areas in the case of male sterilization. The best-known spacing methods are Pills (34 percent), IUD/Loop (28 percent) and condoms (27 percent). There is a large differential in knowledge of spacing methods by residence. The three modern spacing methods, Pill, IUD/Loop and condom are known by 27, 21 and 20 percent of rural women respectively, while the corresponding figures in urban areas are 48, 42 and 42 percent of eligible women respondents. The knowledge of these spacing methods remains very low as compared to knowledge of sterilization.

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



### 6.1.1 Knowledge of Family Planning Methods by Districts

Table 6.2 shows the knowledge of contraceptive methods by district in Andhra Pradesh. In all the districts, more than 97 percent of women know about contraceptives including modern methods. A large differential is noticed in the knowledge of all modern methods by districts. The awareness ranges from 3 percent women in Warangal to 29 percent in Guntur district. There is not much variation in the knowledge of female sterilization, which ranges from 97 to 100 percent. Knowledge about IUD/Loop, Pill and condom is 9, 8 and 6 percent respectively in Warangal district, whereas the knowledge of IUD/Loop is around 43 percent in Khammam and that of Pill and condom is 49 and 44 percent respectively in Guntur district.

**Table 6.2 KNOWLEDGE OF CONTRACEPTIVE METHODS BY DISTRICTS**

Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and district, Andhra Pradesh, 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/ Loop	Pill	Condom /Nirodh	Any traditional method
Adilabad	99.7	99.7	38.8	19.8	91.7	99.7	28.8	29.4	32.7	0.8
Anantapur	100.0	100.0	44.8	15.7	73.5	100.0	40.5	34.5	21.5	0.9
Chittoor	100.0	100.0	43.6	24.4	90.3	100.0	35.9	37.1	29.6	3.2
Cuddapah	100.0	100.0	43.4	17.3	80.4	100.0	35.8	35.0	21.4	0.7
East Godavari	99.7	99.7	36.8	9.7	81.3	98.8	15.1	27.5	26.5	0.6
Guntur	100.0	100.0	55.8	29.0	96.4	100.0	38.0	48.5	44.3	6.8
Hyderabad	99.8	99.8	37.5	16.8	82.0	99.8	27.4	29.5	25.1	1.5
Karimnagar	99.9	99.9	47.1	23.4	97.0	99.9	32.2	40.6	37.5	0.2
Khammam	100.0	100.0	51.1	27.9	90.0	100.0	43.3	47.6	32.0	0.1
Krishna	100.0	100.0	49.0	25.1	88.6	100.0	38.8	38.1	35.0	0.2
Kurnool	99.9	99.9	38.7	19.9	85.0	99.9	32.3	34.3	23.2	2.8
Mahbubnagar	97.6	97.6	20.1	6.6	51.9	97.4	9.4	18.6	10.2	0.9
Medak	99.5	99.5	45.9	24.4	88.6	99.5	33.4	44.1	28.8	0.3
Nalgonda	100.0	100.0	41.2	17.2	89.1	100.0	31.3	35.5	21.7	1.4
Nellore	99.8	99.8	40.4	21.4	95.1	99.8	29.6	35.8	27.5	2.6
Nizamabad	100.0	100.0	34.8	10.2	80.8	100.0	23.0	29.7	15.3	1.0
Prakasam	100.0	100.0	53.9	17.6	93.2	100.0	28.6	47.6	33.6	1.1
Rangareddi	100.0	99.8	50.4	20.4	89.8	99.7	28.6	47.4	32.6	1.6
Srikakulam	98.8	98.8	30.4	11.1	80.0	98.7	19.5	20.4	24.5	0.1
Visakhapatnam	98.3	98.3	38.8	16.1	90.4	97.7	25.4	29.6	27.6	5.1
Vizianagaram	99.5	99.5	23.4	5.7	80.5	99.5	14.4	18.7	11.2	0.6
Warangal	100.0	100.0	11.2	3.1	83.9	99.1	8.5	7.5	5.9	0.7
West Godavari	99.7	99.7	47.1	21.2	95.2	99.7	29.8	37.7	36.3	1.6
Andhra Pradesh	99.7	99.7	40.7	17.8	86.1	99.5	28.3	34.0	27.0	1.7

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.

### 6.1.2 Knowledge of No-Scalpel Vasectomy (NSV)

Knowledge of no-scalpel vasectomy among the husbands of currently married women in the state of Andhra Pradesh is shown in Table 6.3. Less than one-third of the husbands (31 percent) know about the no-scalpel vasectomy. In rural areas, 28 percent of husbands know about NSV compared to 40 percent in urban areas. For women residing in villages with a health facility, 29 percent of their husbands are aware of No-scalpel vasectomy and it is 26 percent for those living in villages without health facilities. Among the husbands who know about NSV, 70 percent reported that NSV is simpler than conventional vasectomy, 45 percent feel that NSV does not lead to any complication and 35 percent reported that NSV does not affect a man's sexual performance. Only 28 percent of the husbands in villages without a health facility reported that NSV does not affect sexual performance compared to 34 percent of husbands in villages with a health facility.

<b>Table 6.3 KNOWLEDGE OF NO-SCALPEL VASECTOMY (NSV)</b>					
Husbands knowledge of NSV by residence and availability of health facility in the village, Andhra Pradesh, 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	31.4	27.5	39.6	25.8	28.9
Number of husbands	10,404	7,049	3,355	3,143	3,906
Who know that NSV is simpler than conventional vasectomy	70.1	67.7	73.7	69.3	66.6
Who feel that NSV does not lead to any complication	44.8	40.6	51.1	36.4	43.6
Who feel that NSV does not affect man's sexual performance	35.4	31.2	41.7	27.8	33.5
Number of husbands	3,269	1,940	1,329	810	1,129

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 Districts

No-scalpel vasectomy awareness by districts in Andhra Pradesh is provided in Table 6.4. The districts in which at least the state's average of 31 percent of husbands know about NSV are Kurnool (60 percent), Chittoor (55 percent), Vizianagaram (54 percent), Cuddakah (40 percent), East Godavari (40 percent), Medak (39 percent), Rangareddi (39 percent), Visakhapatnam (32 percent) and Krishna (31 percent). Only 13 percent of the husbands in Adilabad district know about the no-scalpel vasectomy. That NSV does not lead to any complications was reported by 83 percent of the husbands in Medak district, followed by 81 percent in Khammam and 73 percent in Rangareddi, and only 16 percent in Guntur. The husbands who reported that the NSV does not affect a man's sexual performance were highest in Rangareddi district (68 percent) and the lowest in Chittoor (13 percent).



<b>Table 6.4 NO-SCALPEL VASECTOMY BY DISTRICTS</b>				
Percentage of husbands of eligible women by knowledge of NSV by district, Andhra Pradesh, 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
Adilabad	12.9	68.4	53.1	53.8
Anantapur	21.1	81.4	46.4	25.9
Chittoor	54.7	59.2	23.8	12.6
Cuddapah	40.1	89.8	54.1	43.0
East Godavari	39.6	62.4	44.8	44.7
Guntur	21.8	68.9	15.6	14.5
Hyderabad	27.7	57.4	36.1	26.2
Karimnagar	29.0	60.5	36.9	43.7
Khammam	29.9	94.8	81.2	41.7
Krishna	31.3	71.9	25.3	29.5
Kurnool	60.1	61.4	34.3	20.7
Mahbubnagar	21.1	62.1	51.8	39.3
Medak	39.0	83.6	82.6	29.6
Nalgonda	23.1	80.9	43.0	36.5
Nellore	30.4	53.9	42.1	35.8
Nizamabad	23.3	89.4	45.4	32.6
Prakasam	26.5	80.4	68.9	59.8
Rangareddi	38.8	82.7	73.3	67.6
Srikakulam	21.2	78.3	66.7	25.3
Visakhapatnam	31.6	66.3	32.2	31.7
Vizianagaram	54.3	66.9	43.4	44.2
Warangal	25.6	71.7	61.2	48.0
West Godavari	24.7	76.0	44.9	43.7
Andhra Pradesh	31.4	70.1	44.8	35.4

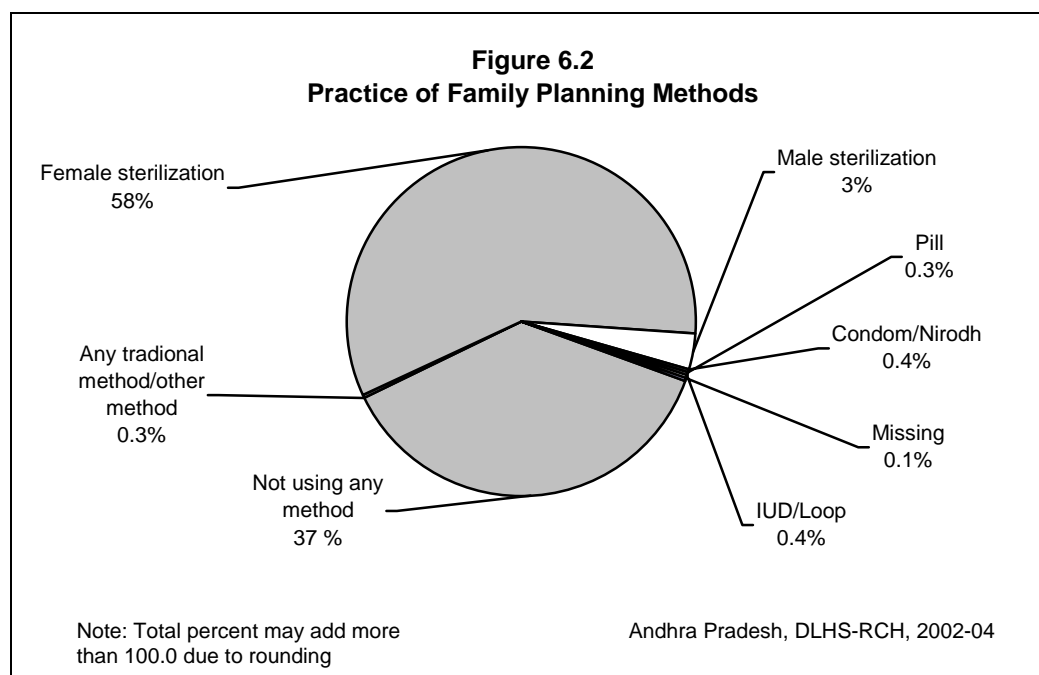
## 6.2 Current use of Family Planning Methods

Table 6.5 and Figure 6.2 provide the information on current use of family planning methods for currently married women in Andhra Pradesh. At the time of DLHS-RCH, 63 percent of currently married women were using some method of contraception, 4 percentage points up from Round I. Current contraceptive use is almost the same in urban and rural areas. Use of modern methods is reported by 62 percent of the women, the breakdown of which is 61 percent for permanent methods and one percent for spacing methods. Among the users of sterilization methods most prefer female sterilization (58 percent), which invalidates the use of male sterilization (3 percent).

<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, Andhra Pradesh, 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	62.8	62.5	0.5	62.0	3.1	58.9	0.2	0.1	0.1	0.2	0.0	0.0	11,857
Urban	62.7	62.3	2.5	59.7	3.2	56.4	0.8	0.8	1.0	0.4	0.1	0.0	6,029
<b>Education</b>													
Non-literate	65.2	64.9	0.1	64.7	3.2	61.6	0.0	0.1	0.0	0.2	0.0	0.0	9,787
0-9@ years	61.9	61.6	1.0	60.6	2.5	58.1	0.4	0.3	0.3	0.2	0.1	0.0	4,649
10 years & above	56.9	56.6	4.3	52.2	4.0	48.2	1.7	1.1	1.5	0.3	0.1	0.0	3,449
<b>Religion</b>													
Hindu	63.9	63.6	1.1	62.5	3.4	59.1	0.5	0.3	0.4	0.2	0.0	0.0	15,256
Muslim	51.9	51.4	1.9	49.4	1.6	47.7	0.4	1.2	0.4	0.4	0.2	0.0	1,731
Christian	63.5	63.5	0.2	63.3	2.3	61.1	0.0	0.2	0.0	0.0	0.0	0.0	863
Other	(63.3)	(60.0)	(0.0)	(60.0)	(3.3)	(0.0)	(60.0)	(0.0)	(0.0)	(0.0)	(3.3)	(0.0)	36
<b>Caste/tribe#</b>													
Scheduled caste	59.9	59.6	0.3	59.3	2.6	56.7	0.1	0.1	0.1	0.2	0.0	0.0	3,116
Scheduled tribe	55.3	54.7	0.3	54.5	7.9	46.5	0.2	0.1	0.0	0.5	0.0	0.0	1,098
Other backward class	63.4	63.2	0.7	62.5	3.1	59.4	0.2	0.1	0.3	0.2	0.0	0.0	8,043
Other	65.1	64.7	2.6	62.0	2.7	59.3	1.0	0.8	0.7	0.4	0.1	0.0	5,497
<b>Standard of living index</b>													
Low	59.2	59.0	0.1	58.9	2.9	56.0	0.0	0.0	0.0	0.2	0.0	0.0	6,146
Medium	63.5	63.3	0.7	62.5	2.7	59.9	0.3	0.3	0.1	0.1	0.0	0.0	7,241
High	66.4	65.8	3.3	62.4	4.4	58.0	1.1	0.8	1.3	0.5	0.2	0.0	4,500
<b>Availability of health facility in the village<sup>4</sup></b>													
No	61.9	61.7	0.3	61.3	4.0	57.3	0.1	0.1	0.0	0.2	0.0	0.0	5,292
Yes	63.4	63.2	0.6	62.6	2.4	60.2	0.3	0.2	0.1	0.2	0.1	0.0	6,565
Total	62.8	62.4	1.2	61.2	3.2	58.1	0.4	0.3	0.4	0.3	0.1	0.0	17,886

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 Rhythm/Periodic abstinence, Withdrawal and Other traditional method. <sup>4</sup> Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village. ( ) Based on less than 50 unweighted cases.

The use of traditional methods is reported by 0.3 percent of the women of which 0.1 percent are using the rhythm or periodic abstinence practice.



Current use of contraception is high among women of ‘other castes’ category (65 percent) than among backward class women (63 percent), scheduled caste women (60 percent) and women belonging to scheduled tribe (55 percent). But, the current use is high among the women who are non-literate (65 percent) than the women who have less than 10 years of schooling (62 percent) and also, than those with more than 10 years of schooling (57 percent). However, current contraceptive use varies positively with respect to the standard of living of the women, increasing the prevalence rate from 59 percent to 66 percent for women from the lowest to the highest standard of living households. The availability of the health facility in the village did not make much difference in motivating eligible women to use contraceptives. Sixty-three percent of the women living in villages with a health facility are currently under contraception and this is marginally higher than the women from villages deprived of a health facility (62 percent).

### 6.2.1 Current Use of Family Planning Methods by Districts

Table 6.6 presents a picture of current contraceptive use in the districts of Andhra Pradesh. The contraceptive use is a couple concept as family planning methods can be used either by women or by their husbands. In most of the districts, the current use of contraception exceeds 55 percent of eligible women except for the districts of Nizamabad, Mahbubnagar and Cuddapah (see Map-6). The state figure of current spacing methods use is 1.2 percent and it ranges from 0.1 percent in Adilabad district to 3.0 percent in Anantapur. The variation in contraceptive prevalence at district level is basically due to the variation in the use of permanent methods, particularly female sterilization as current use of both modern spacing methods and traditional contraceptives do not show much variation across districts.

**Table 6.6 CONTRACEPTIVE PREVALENCE RATES BY DISTRICTS**

Percentage of currently married women age 15-44 years currently using any contraceptive method by districts, Andhra Pradesh, 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
Adilabad	56.2	55.4	0.1	3.5	51.7	0.0	0.1	0.0	0.4
Anantapur	59.8	59.0	3.0	0.2	55.7	1.2	1.1	0.7	0.7
Chittoor	65.1	64.5	1.5	1.6	61.3	1.1	0.3	0.2	0.6
Cuddapah	51.6	51.5	1.6	1.3	48.0	1.1	0.4	0.1	0.1
East Godavari	70.0	69.9	1.7	1.4	66.6	0.4	0.6	0.7	0.1
Guntur	70.5	69.8	0.5	1.2	68.0	0.4	0.0	0.1	0.4
Hyderabad	56.8	56.5	2.4	0.9	53.0	1.0	0.9	0.6	0.3
Karimnagar	62.3	62.1	0.2	16.3	45.8	0.2	0.0	0.0	0.2
Khammam	67.3	67.3	0.5	1.7	65.2	0.3	0.2	0.0	0.0
Krishna	73.7	73.7	2.0	3.1	68.6	0.7	0.5	0.8	0.0
Kurnool	57.2	57.2	0.9	0.2	56.0	0.5	0.2	0.3	0.0
Mahbubnagar	53.7	53.4	0.2	0.6	52.7	0.2	0.0	0.0	0.3
Medak	57.5	57.5	0.5	0.8	56.2	0.0	0.0	0.5	0.0
Nalgonda	66.1	65.5	0.5	0.6	64.4	0.2	0.0	0.3	0.6
Nellore	57.0	56.9	0.5	1.4	55.0	0.1	0.4	0.0	0.1
Nizamabad	50.8	50.8	1.2	0.6	49.0	0.4	0.3	0.4	0.1
Prakasam	66.2	65.8	0.3	1.1	64.4	0.0	0.3	0.0	0.4
Rangareddi	55.4	54.9	1.4	1.0	52.3	0.2	0.8	0.3	0.5
Srikakulam	64.3	64.1	0.5	3.3	60.3	0.1	0.2	0.2	0.2
Visakhapatnam	65.9	65.6	1.9	11.2	52.5	0.3	0.1	1.4	0.3
Vizianagaram	66.2	66.2	0.5	3.5	62.2	0.3	0.2	0.0	0.0
Warangal	63.7	63.7	0.3	12.3	51.0	0.1	0.2	0.0	0.0
West Godavari	71.9	71.4	1.9	3.5	66.0	0.6	0.6	0.7	0.2
Andhra Pradesh	62.8	62.4	1.2	3.2	58.1	0.4	0.3	0.4	0.3

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 Rhythm/Periodic abstinence, Withdrawal and Other traditional method.

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

Table 6.7 provides information on current contraceptive use and ever use of contraception by age and number of surviving children and living sons and daughters. The current use of any method of contraception among currently married women in the 15-19 years age group is 7 percent and this attains a peak of 83 percent in the age group, 35-39 years. A similar age pattern of contraceptive use is also observed in case of modern methods.

**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, Andhra Pradesh, 2002-04

Demographic Characteristic	Percentage of women/husbands using				Percentage of women/husbands by contraceptive status		Number of women
	Any modern <sup>1</sup> method	Any traditional <sup>2</sup> method	Any method	Not using any method	Ever used	Never used	
<b>Age-group</b>							
15-19	6.9	0.2	7.1	92.9	7.8	92.2	1,737
20-24	40.3	0.3	40.7	59.3	41.7	58.3	3,926
25-29	69.0	0.3	69.3	30.7	70.7	29.3	3,999
30-34	81.3	0.1	81.5	18.5	82.3	17.7	3,085
35-39	82.6	0.2	82.9	17.1	83.6	16.4	2,938
40-44	80.4	0.5	81.1	18.9	81.7	18.3	2,200
<b>Surviving children</b>							
0	2.1	0.1	2.3	97.7	3.4	96.6	2,200
1	17.4	0.3	17.7	82.3	20.0	80.0	3,106
2	80.9	0.3	81.3	18.7	82.0	18.0	6,486
3 or more	87.5	0.2	87.9	12.1	88.3	11.7	6,094
<b>Surviving sons</b>							
0	27.8	0.2	28.1	71.9	29.6	70.4	5,352
1	69.2	0.3	69.6	30.4	70.4	29.6	7,129
2 or more	87.8	0.3	88.1	11.9	88.6	11.4	5,405
<b>Surviving daughters</b>							
0	38.9	0.3	39.2	60.8	40.3	59.7	6,267
1	72.1	0.2	72.3	27.6	73.3	26.7	6,986
2 or more	79.8	0.2	80.1	19.9	80.9	19.1	4,633
All women	62.4	0.3	62.8	37.2	63.7	36.3	17,886

Note: <sup>1</sup> Includes Female sterilization, Male sterilization, IUD, Pills and Condom. <sup>2</sup> Includes 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 two surviving children and it is much higher among women with three or more surviving children in Andhra Pradesh. The use of any method of contraception is 88 percent for the women who have two or more sons and is higher than for the women who have two or more daughters (80 percent). The same proportions can be observed in the case of use of any modern methods. It is also to be noted here that the proportions of couples using any contraceptive method and any modern method are almost the same in Andhra Pradesh.

### 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 Andhra Pradesh by age and number of surviving children, sons and daughters is 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 15 percent and it gradually picks up with the age of husband, to a peak of 83 percent for the husbands age 45 years or above. Similar age pattern of contraceptive use is also observed in the case of modern methods.

<b>Table 6.8 USE OF CONTRACEPTION BY MEN</b>					
Percentage of husbands of currently married women by current use and ever use of contraception by selected demographic variables, Andhra Pradesh, 2002-04.					
Demographic Characteristic	Percentage of husbands/women using				Number of men
	Any modern <sup>1</sup> method	Any traditional <sup>2</sup> method	Any method	Not using any method	
<b>Age-group</b>					
<25	14.8	0.0	14.8	85.2	878
25-34	54.1	0.2	54.4	45.6	3,852
35-44	81.1	0.1	81.2	18.7	3,697
45+	82.7	0.2	82.9	17.0	1,977
<b>Surviving children</b>					
0	3.0	0.4	3.4	96.6	1,073
1	17.5	0.4	18.0	82.0	1,640
2	81.3	0.0	81.4	18.6	3,694
3 or more	88.2	0.1	88.3	11.6	3,996
<b>Surviving sons</b>					
0	30.1	0.3	30.5	69.5	2,743
1	71.1	0.1	71.1	28.8	4,195
2 or more	87.8	0.1	87.9	12.1	3,466
<b>Surviving daughters</b>					
0	41.8	0.2	42.0	58.0	3,401
1	74.1	0.1	74.3	25.7	4,028
2 or more	82.2	0.2	82.3	17.6	2,975
All men	65.8	0.2	66.0	34.0	10,404

Note: <sup>1</sup> Includes Female sterilization, Male sterilization, IUD, Pills and Condom. <sup>2</sup> Includes 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 about the reasons for the same. Table 6.9 provides information about reasons for not using male contraceptive methods in Andhra Pradesh. Among all the husbands interviewed, 93 percent reported about use of female methods. Reporting use of female methods is slightly higher in rural areas (94 percent) than in urban areas (91 percent). The main reasons cited for not preferring the male methods are 'fear of weakness' (58 percent) and 'greater popularity of female methods' (43 percent). 'Fear of operation' (5 percent) and 'fear of method failure' (2 percent) were also cited as reasons for not accepting male methods by a few husbands of the currently married women. The expression for fear of weakness is much higher in rural areas (63 percent) than in urban areas (49 percent). Popularity of female methods as a reason for not using male methods of contraception is slightly more in urban areas (46 percent) than in rural areas (42 percent).

<b>Table 6.9 REASONS FOR NOT USING MALE METHODS</b>			
Percentage of husbands reporting use of female family planning methods and reasons for not accepting male methods according to residence, Andhra Pradesh, 2002-04			
Female method users and reason for not accepting male methods	Total	Residence	
		Rural	Urban
Percentage of husbands who have reported use of female methods	92.8	93.6	91.3
Number of men	6,866	4,595	2,270
Reasons for not accepting male methods*			
Fear of impotency	0.2	0.3	0.2
Lack of sexual pleasure	0.4	0.4	0.5
Fear of method failure	1.5	1.6	1.4
Fear of operation	4.7	4.7	4.7
Fear of weakness	58.0	62.6	48.6
Female methods are more popular	43.1	41.8	45.9
Other	6.4	5.8	7.7
Number of men	6,373	4,299	2,074
Note: * Percentages may add to more than 100.0 because multiple responses could be recorded.			

#### 6.4 Sources of Contraceptive Methods

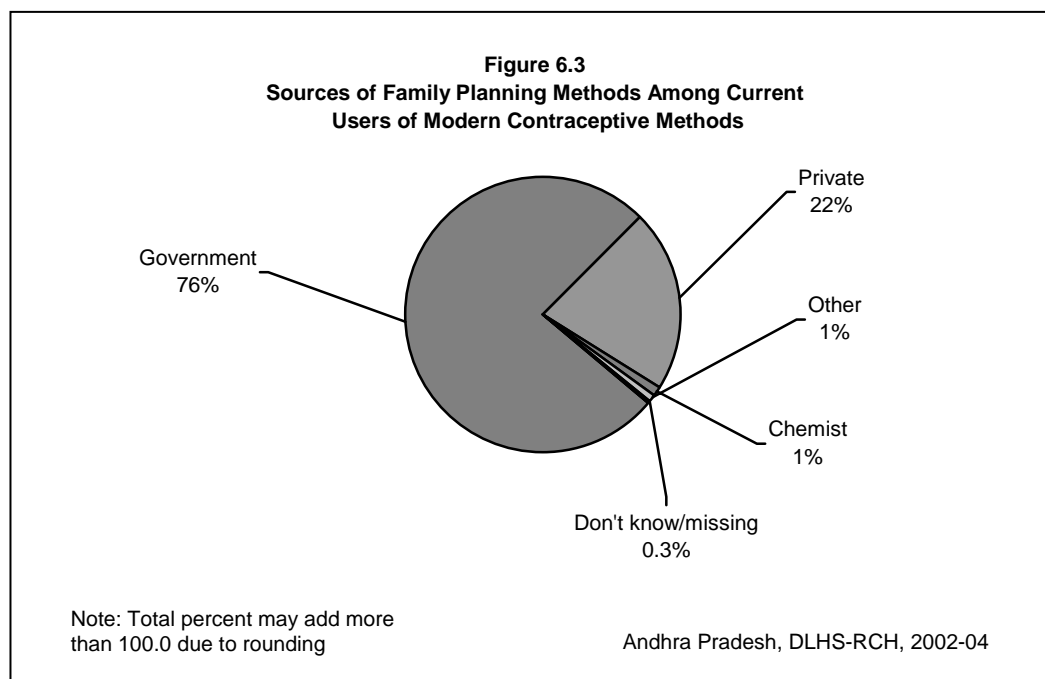
To assess the various sources of contraceptive methods, DLHS-RCH collected information on sources of obtaining methods. Table 6.10 and Figure 6.3 show the percent distribution of current users of modern contraceptives by source of contraceptives. Family planning methods and services in Andhra Pradesh 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 sources for female sterilization (58 percent) followed by private hospital (20 percent) and community health centres or primary health centres (16 percent). For male sterilization as well, the aforesaid are the main sources. But for IUD users, private hospitals are the main sources (64 percent) followed by government/municipal hospital (16 percent) and the community health centres or primary health centres (6 percent). It is found that the chemist is the main source for Pills (74 percent) as well as for condom (74 percent) users.

**Table 6.10 SOURCE OF MODERN CONTRACEPTIVE METHODS**

Percent distribution of current users of modern contraceptive methods by method and source of supply, Andhra Pradesh, 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>	77.1	84.8	26.8	9.8	6.1	76.3
Government/Municipal hospital	58.2	66.9	15.7	9.8	4.1	57.8
CHC/PHC	16.0	11.2	5.9	0.0	0.0	15.5
Sub-centre	0.2	0.3	0.9	0.0	0.0	0.2
Government doctor	0.4	0.2	2.9	0.0	0.0	0.4
Government nurse/ ANM	0.1	0.0	1.4	0.0	0.0	0.1
Family planning/RCH camp	1.3	3.0	0.0	0.0	2.0	1.3
Out reach/MCP clinic in village	0.9	2.9	0.0	0.0	0.0	1.0
Mobile clinic	0.0	0.3	0.0	0.0	0.0	0.0
<b>Private medical centre</b>	21.9	12.2	70.9	13.4	13.4	21.6
Private hospital	20.1	10.9	64.2	7.6	8.3	19.8
Private doctor	1.6	1.2	6.7	5.8	5.0	1.7
Private nurse	0.2	0.0	0.0	0.0	0.0	0.2
Chemist	NA	NA	NA	74.0	74.0	0.9
Other	0.9	1.4	2.2	0.6	4.6	0.9
Do not know	0.2	1.4	0.0	2.3	2.0	0.2
Missing	0.0	0.3	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	10,388	564	76	62	68	11,158

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. The analysis of the method specific problems reveals that 11 percent of the sterilized women have problems with the contraceptive method in use. The most common problems experienced by sterilized women are ‘body ache or backache’ (63 percent), ‘weakness or inability to work’ (50 percent), ‘white discharge’ (28 percent), ‘dizziness’ (17 percent), ‘cramps’ (17 percent), ‘excessive bleeding’ (13 percent), ‘irregular periods’ (11 percent), ‘weight gain’ (7 percent), ‘breast tenderness’ (7 percent), ‘nausea or vomiting’ (6 percent) and ‘spotting’ (5 percent). With regard to the modern spacing methods, 9 percent and 8 percent of women had problems in using IUD/loop and Pills respectively.

<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, Andhra Pradesh, 2002-04			
Health problems/side effects	Type of method		
	Female sterilization	IUD/loop	Pill
Women who were informed about all the available methods	22.1	0.0	0.0
Women who were informed about the side effects before adoption of the method	18.8	42.9	34.2
Women who had side effects/health problems due to use of contraceptive method	11.4	8.5	8.1
Number of current users	10,388	76	62
<b>Type of health problems/side effects<sup>1</sup></b>			
Weakness/inability to work	50.0	*	*
Body ache/ backache	62.7	*	*
Cramps	17.1	*	*
Weight gain	6.9	*	*
Dizziness	16.9	*	*
Nausea/vomiting	6.4	*	*
Breast tenderness	6.7	*	*
Irregular periods	10.9	*	*
Excessive bleeding	12.9	*	*
Spotting	5.0	*	*
White discharge	27.9	*	*
Other	0.0	*	*
Number of users with side effects	1,182	6	5
Note: <sup>1</sup> Percentages may add to more than 100.0 because multiple problems could be recorded. * Percentage not shown: Based on very few cases.			

## 6.6 Treatment for Health Problems with Current Use of Contraception

The study of respondents who sought treatment for contraceptive related health problems (Table 6.12) reveals that 79 percent of the sterilized women sought treatment. Regarding the satisfaction about the methods, 92 percent of the sterilized women reported satisfaction with sterilization. In the case of spacing methods, 93 percent of women using IUD/loop and 94 percent of women using Pills were satisfied with the respective methods.

Among those women who had sought treatment for female sterilization related health problems, a majority of them (52 percent) had taken treatment from private hospitals/clinics followed by 25 percent from government hospitals/dispensaries and 13 percent from Chemist/Medical shop.

<b>Table 6.12 FOLLOW-UP VISIT AND SOUGHT TREATMENT FOR HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION</b>			
Percentage of women who had follow-up visits, satisfied with current method and sought treatment for side-effects with the method by use of method, Andhra Pradesh, 2002-04.			
Health problems/side effect	Type of method		
	Female sterilization	IUD/loop	Pill
Women who had follow up visit by health workers after adoption of method	34.4	16.9	6.8
Women who are satisfied with method of current use	91.7	92.8	94.1
Number of current users	10,388	76	62
Women who sought treatment for the health problem	78.9	*	*
Number of women with side effects	1,182	6	5
<b>Sources of treatment</b>			
<b>Government health facility</b>			
Government hospital/dispensary	24.5	*	*
UHC/UHP/UFWC	0.2	*	*
CHC/Rural hospital	1.3	*	*
PHC	5.9	*	*
Sub-centre	1.1	*	*
Out reach/MCP clinic in village	0.5	*	*
<b>Private health facility</b>			
NGO/trust hospital clinic	0.1	*	*
Private hospital/clinic	52.3	*	*
ISM health facility <sup>1</sup>	1.8	*	*
Chemist/Medical shop	13.2	*	*
Home remedy	2.3	*	*
Other	1.9	*	*
Number of women with side effects	933	3	1
Note: <sup>1</sup> Either government or Private. * Percentage not shown: Based on very few cases.			

## 6.7 Advice to Non-Users to Use Contraception

Information about non-users who were advised by the ANM/health worker to adopt contraceptives according to residence and availability of health facility in the villages is 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 15 percent of the women were advised by ANM/health worker to adopt any family planning method in Andhra Pradesh. Among rural women, 17 percent were advised by ANM/health worker to adopt any method and it is relatively higher than the urban women who were advised so (11 percent).

<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, Andhra Pradesh, 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	14.7	16.5	11.3	16.7	16.4
Number of non-users	6,329	4,190	2,139	1,923	2,268
<b>Percent distribution of women who were advised by method</b>					
Female sterilization	81.1	83.4	74.4	81.9	84.8
Male sterilization	6.8	6.3	8.3	7.8	5.0
IUD/loop	5.5	3.7	10.6	3.8	3.7
Pill	5.1	5.5	3.7	5.8	5.3
Condom/Nirodh	0.8	0.5	1.7	0.7	0.3
Other	0.6	0.5	0.9	0.0	1.0
Missing	0.1	0.0	0.3	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of non-users	933	692	241	321	371
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 is dominated by female sterilization (81 percent). Only 7 percent were advised to accept male sterilization and 6 and 5 percent respectively were advised to adopt IUD/loop and Pills as spacing methods. Less than one percent were advised to use Condom/Nirodh. Similar pattern of advice also emerges irrespective of residence and availability of health facility in the village.

## 6.7.1 Future Intentions to use Contraception

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.

Future intention to use contraception by current non-users is shown in Table 6.14. Among the non-users, 37 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 more or less the same in rural (38 percent) and urban (36 percent) areas.

Among the women who intended to use contraception in the future, 92 percent preferred female sterilization, whereas only 4 percent of the women preferred male sterilization. Very few women preferred the three modern spacing methods IUD/copper-T/loop (1.0 percent), Oral Pills (0.8 percent) and Condom/Nirodh (0.4 percent), while 2 percent of the women preferred other methods.

<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, Andhra Pradesh, 2002-04						
Future intention to use/method	Women			Husband		
	Total	Rural	Urban	Total	Rural	Urban
Percentage of respondents who intend to use contraceptive in future	37.3	37.9	36.3	60.2	61.1	58.1
Number of non-users	6,329	4,190	2,139	3,447	2,381	1,066
<b>Percent distribution of non-user who were preferred to use family methods by preferred method</b>						
Female sterilization	91.9	93.6	88.4	88.5	90.9	82.8
Male sterilization	4.1	3.4	5.4	6.3	4.1	11.3
IUD/copper-T/loop	1.0	0.8	1.4	0.9	0.8	1.0
Oral pills	0.8	0.7	1.0	0.2	0.2	0.1
Condom/Nirodh	0.4	0.2	0.9	0.6	0.6	0.7
Rhythm/periodic abstinence	0.0	0.0	0.0	0.5	0.7	0.0
Withdrawal	0.1	0.0	0.2	0.0	0.0	0.0
Other	1.8	1.4	2.7	2.7	2.3	3.6
Missing	0.0	0.0	0.0	0.4	0.3	0.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of non-users	2,361	1,585	776	2,071	1,452	619
Note: * Exclude women who are in menopause or those who have undergone hysterectomy.						

Sixty percent of the husbands intended to use contraception in the future, among them 61 percent belong to rural areas and 58 percent are from urban areas. Method wise choice in intention to use contraception is again dominated by female sterilization that is being reported by 89 percent, followed by male sterilization (6 percent). IUD/copper-T/loop (0.9 percent), Condom/Nirodh (0.6 percent) and Oral Pills (0.2 percent) and rhythm/periodic abstinence (0.5 percent) were preferred by a very few men, while 3 percent of the husbands preferred other methods.

### 6.7.2 Future Intentions to use Contraception among Women by Number of Living Children

Table 6.15 provides the information on intention to use contraception in future according to number of living children and residence background in Andhra Pradesh.

<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, Andhra Pradesh, 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	1.3	10.2	23.6	20.4	10.2	10.2
One to two years	0.8	7.0	8.1	6.6	4.2	5.0
More than two years	18.5	28.8	20.0	14.7	7.3	22.1
Does not intend to use	21.0	17.3	24.8	39.7	64.5	23.1
Not yet decided	58.4	36.7	23.5	18.6	13.8	39.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,100	2,489	1,139	326	275	6,329
<b>Rural</b>						
Intends to use in next 12 months	0.9	10.0	21.2	20.5	8.9	9.2
One to two years	1.0	7.7	8.9	7.4	6.8	5.5
More than two years	19.4	29.2	21.4	17.8	7.3	23.1
Does not intend to use	19.8	16.4	25.8	37.3	65.7	22.0
Not yet decided	58.8	36.6	22.8	17.0	11.3	40.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,456	1,677	706	194	158	4,190
<b>Urban</b>						
Intends to use in next 12 months	2.2	10.5	27.5	20.2	12.0	12.1
One to two years	0.4	5.5	6.8	5.4	0.8	4.0
More than two years	16.3	28.0	17.8	10.2	7.2	20.2
Does not intend to use	23.6	19.1	23.2	43.2	62.8	25.2
Not yet decided	57.5	36.8	24.7	21.0	17.2	38.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	644	813	433	133	117	2,139

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

Among the current non-users, around one-tenth 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 22 percent reported their intention to use contraceptives for more than two years. About 40 percent are not sure of their intention to use, whereas 23 percent reported no intention to use. The intention of using contraception is high among the women who have one to three living children compared to the women who have either no or four or more living children. Around 58 percent of the women who have no living children reported that they are yet to decide about the use of contraceptives, while 65 percent of the women who have four or more living children do not intend to use contraception.

## 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 reasons for discontinuation. The survey also asked women who had never used contraceptives about the main reasons for not doing so. Table 6.16 shows the main reasons for discontinuation of contraception, while the main reasons for not using contraceptives among both the past never users and current non-users are presented in the next section.

<b>Table 6.16 REASONS FOR DISCONTINUATION OF CONTRACEPTION</b>			
Percent distribution of women who were past users (current non-users) by reasons for discontinuation of the contraceptive methods according to place of residence, Andhra Pradesh, 2002-04			
Reasons	Total	Place of residence	
		Rural	Urban
<b>Reason for discontinuation</b>			
Wanted child	50.1	53.3	48.3
Method failed/became pregnant	4.3	1.5	6.0
Supply not available	0.4	1.0	0.0
Difficult to get method	0.0	0.0	0.0
Weakness/inability to work	5.7	3.3	7.1
Body ache/ Backache	3.2	2.4	3.7
Cramps	0.0	0.0	0.0
Weight gain	0.7	1.2	0.3
Dizziness	1.0	0.0	1.6
Nausea/vomiting	1.9	1.7	2.1
Breast tenderness	0.9	2.3	0.0
Irregular periods	1.6	2.2	1.2
Excessive bleeding	2.0	0.0	3.1
Spotting	0.0	0.0	0.0
White discharge	1.5	0.0	2.4
Lack of pleasure	4.1	4.6	3.9
Method was inconvenient	2.5	1.1	3.4
Other	20.1	25.4	17.0
Total percent	100.0	100.0	100.0
Number of past users	170	63	107

Among the past users, around 50 percent of the women mentioned that they discontinued the use because they had wanted a child. ‘Weakness/inability to work’ (6 percent), ‘method failed/became pregnant’ (4 percent), ‘lack of pleasure’ (4 percent), ‘body ache/backache’ (3 percent) and ‘method was inconvenient’ (3 percent) were also reported as main reasons for discontinuation by a sizeable proportion of women, while 20 percent of the women mentioned other reasons for the same. In urban areas, a relatively higher proportion of women reported the reasons like method failed/became pregnant, weakness/inability to work and body ache/backache for discontinuing the use as compared to their counterparts in rural areas.

### 6.8.1 Reasons for Not Using Contraceptive Methods

DLHS asked women and husbands who are currently not using any contraception about the main reasons why they were not currently using a method (Table 6.17). The reported main reasons for not using contraceptives by the women are ‘opposed to family planning’ (16 percent), ‘health does not permit’ (14 percent), ‘difficult to become pregnant’ (10 percent), ‘afraid of sterilization’ (10 percent) and ‘lack of knowledge about family planning methods’ (8 percent). About 29 percent of the women reported other reasons for not using contraception. Husbands of the women also reported more or less the same 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.

<b>Table 6.17 REASONS FOR NOT USING CONTRACEPTIVE METHOD</b>						
Percentage of current non-users who were currently not using contraceptive method by reasons according to place of residence, Andhra Pradesh, 2002-04						
Reason	Women			Husband*		
	Total	Rural	Urban	Total	Rural	Urban
Lack of Knowledge about FP method	8.4	10.5	5.3	7.5	7.3	7.8
Against the Religion	3.3	1.8	5.7	3.7	1.6	7.6
Opposed to family planning	15.5	16.2	14.4	4.4	3.4	6.3
Not like existing method	1.4	0.8	2.4	1.7	2.2	0.8
Afraid of sterilization	10.0	9.1	11.4	5.6	6.9	3.2
Can not work after sterilization	2.6	3.2	1.6	2.8	3.0	2.4
Worry about side effects	2.6	1.6	4.2	2.6	3.0	1.7
Costs too much	0.5	0.5	0.4	0.5	0.6	0.3
Health does not permit	14.3	13.5	15.5	31.5	30.9	32.6
Hard/inconvenient to get method	0.2	0.4	0.0	0.4	0.4	0.5
Inconvenient to use method	0.9	0.8	1.0	1.4	1.4	1.5
Difficult to become pregnant	10.3	11.0	9.1	11.3	14.5	5.3
Wife is pregnant <sup>1</sup>	-	-	-	0.6	0.7	0.6
Other	29.4	30.0	28.6	25.1	23.1	28.7
Missing	0.5	0.6	0.4	0.8	1.0	0.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of current non-users	2,098	1,278	820	731	479	251

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. 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 Andhra Pradesh by background characteristics.

The unmet need is high for women below 20 years (21 percent), mostly for spacing rather than for limiting. Unmet need is also relatively high for women aged 20-24 years (16 percent), more for spacing than for limiting. Among the women of age 25-29 years, 9 percent have unmet need, and slightly more for limiting. Among the older women age 30 years and above, unmet need is mostly for limiting. The rural women have slightly less unmet need (11 percent) than the urban women (14 percent). The unmet need for family planning is slightly higher among the women with 10 or more years of schooling (15 percent) than among the women with 0-9 years of schooling and non-literate women (11 percent each). Hindu and Christian women have lesser unmet need for family planning (11 percent each) compared to Muslim women (17 percent). Unmet need for family planning is slightly higher for Scheduled tribe women (15 percent) followed by Scheduled caste (12 percent), 'other castes' category (12 percent) and other backward classes (11 percent) women.

Women in low and high standard of living have slightly higher unmet need (13 percent each) than the women of medium standard of living (10 percent). Unmet need is much higher for the women with one living child (25 percent) than women with either no children (10 percent) or two or more children (5-11 percent). Among the women with no children or one child the unmet need is mainly for spacing, whereas for women with two or more children, unmet need is mostly for limiting.



**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, Andhra Pradesh, 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	19.0	2.0	21.0	1,737
20-24	10.9	4.9	15.8	3,926
25-29	4.0	5.1	9.2	3,999
30-34	1.5	6.5	8.0	3,085
35-39	0.8	8.6	9.4	2,938
40-44	0.5	9.5	10.0	2,200
<b>Residence</b>				
Rural	5.6	5.1	10.7	11,857
Urban	5.5	8.1	13.6	6,029
<b>Education</b>				
Illiterate	4.4	6.4	10.8	9,787
0-9 @ years	6.8	4.5	11.3	4,649
10 years and above	7.4	7.4	14.8	3,449
<b>Religion</b>				
Hindu	5.5	5.7	11.1	15,256
Muslim	6.3	10.5	16.9	1,731
Christian	6.2	5.3	11.4	863
Others	(3.3)	(3.3)	(6.7)	36
<b>Caste/tribe#</b>				
Scheduled caste	6.1	5.4	11.5	3,116
Scheduled tribe	7.7	7.0	14.7	1,098
Other backward class	5.4	5.6	11.0	8,043
Others	5.0	7.1	12.1	5,497
<b>Number of living children</b>				
0	8.5	1.8	10.3	2,200
1	18.8	6.4	25.1	3,106
2	2.9	7.0	9.8	6,486
3	0.7	4.7	5.4	4,012
4+	0.8	10.4	11.2	2,083
<b>Standard of living Index</b>				
Low	6.1	6.3	12.5	6,146
Medium	5.1	5.3	10.4	7,241
High	5.5	7.2	12.7	4,500
All women	5.6	6.1	11.7	17,886

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. # Total figure may not add to N due to do not know and missing cases. ( ) Based on less than 50 unweighted cases.

## 6.9.1 Unmet Need for Family Planning Services by Districts

Table 6.19 provides the information about unmet need for limiting, spacing and total by district.

<b>Table 6.19 UNMET NEED BY DISTRICTS</b>			
Percentage of currently married women with unmet need by district, Andhra Pradesh, 2002-04			
Districts	Unmet need for		
	Spacing	Limiting	Total
Adilabad	5.3	8.3	13.6
Anantapur	2.4	7.4	9.8
Chittoor	3.2	7.4	10.6
Cuddapah	6.4	9.2	15.6
East Godavari	6.3	2.8	9.1
Guntur	6.5	3.3	9.8
Hyderabad	6.5	10.9	17.4
Karimnagar	5.9	5.0	10.9
Khammam	2.4	4.7	7.1
Krishna	3.5	3.7	7.3
Kurnool	5.0	6.2	11.2
Mahbubnagar	8.7	9.5	18.3
Medak	4.9	6.7	11.7
Nalgonda	2.1	5.1	7.2
Nellore	6.0	6.9	12.9
Nizamabad	2.9	5.7	8.7
Prakasam	6.1	6.1	12.2
Rangareddi	10.1	7.6	17.7
Srikakulam	5.0	4.9	9.9
Visakhapatnam	9.3	6.7	16.0
Vizianagaram	5.8	2.5	8.3
Warangal	4.7	8.6	13.2
West Godavari	5.6	3.2	8.8
Andhra Pradesh	5.6	6.1	11.7

The unmet need for family planning services for the state is 12 percent and it ranges from 7 percent in Khammam, Krishna and Nalgonda to 18 percent in Mahbubnagar and Rangareddi districts. In 9 out of 23 districts, unmet need for family planning is more than the state average. Unmet need for limiting was found to be lowest in Vizianagaram, East Godavari, West Godavari and Guntur (3 percent each), and highest in Hyderabad (11 percent). Similarly, unmet need for spacing was lowest in Nalgonda, Khammam and Anantapur (two percent each) and highest in Rangareddi (10 percent). It may also be observed that in 14 out of the 23 districts, the unmet need for limiting was more than spacing.

## 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), female health worker or male health worker play a key role in delivering the health 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 the 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 ANMs/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 Visits by Health Workers

Table 7.1 shows the percentage of currently married women visited by health workers at home during three months prior to the survey by selected background characteristics. Only 13 percent of the women in Andhra Pradesh reported that the health workers visited them at their residence at least once in last three months preceding the survey. Younger women seemed relatively more likely to report a home visit than older women. Seventeen percent of the women in the age group 15-24 years reported at least one home visit compared to only 10 percent of women in the age group 35 years and older. The percentage of women receiving home visits is relatively higher in rural areas (18 percent) than in urban areas (4 percent). Women who were non-literate and less educated (14 percent each) and women with a low (17 percent) or medium (14 percent) standard of living seemed relatively more likely to report home visits. More Hindu and Christian women (14 percent each) reported home visits than Muslim women (8 percent). Home visits of health workers are reported slightly more by women belonging to scheduled tribes (18 percent) and scheduled castes (17 percent) than backward classes (13 percent) and 'other castes' category (11 percent) women. Home visits were reported by more or less the same proportion of women residing in the villages with health facility and the villages with no health facility.

Women who reported a home visit during three months preceding the survey were asked about the health personnel who visited their households during the past three months and whether they were satisfied with the kind of services/advices received, and the time spent by these health workers. Among women who received services/advices at home, 92 percent received services/advices from ANM/LHV, 8 percent from male health worker and 3 percent

from a doctor. There were rural-urban differentials by visit to households by ANM/LHV or male health worker. Eighty-eight percent of women who received services at home were satisfied with the amount of time spent with them by health workers 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 during 3 months preceding the survey and among women who had home visits, satisfied with time spent by health workers and with services provided by selected background characteristics, Andhra Pradesh, 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	17.1	5,663	2.0	93.7	5.8	88.3	91.0	970
25-34	12.3	7,085	3.3	90.5	10.6	86.2	89.9	869
35-44	10.0	5,138	3.5	92.9	8.9	88.2	90.8	516
<b>Residence</b>								
Rural	17.8	11,857	2.6	94.2	6.8	89.3	91.4	2,107
Urban	4.1	6,029	4.5	76.8	20.1	72.7	83.3	248
<b>Education</b>								
Non-literate	14.1	9,787	3.4	92.9	7.3	88.3	91.2	1,377
0-9@ years	13.9	4,649	2.0	91.4	9.6	87.7	89.4	644
10 and above	9.7	3,449	2.0	91.6	9.7	83.8	90.0	334
<b>Religion</b>								
Hindu	13.7	15,256	2.9	92.3	8.2	87.4	90.7	2,095
Muslim	7.6	1,731	1.6	90.0	10.1	84.9	88.0	131
Christian	14.3	863	1.7	95.4	7.4	91.1	90.6	124
Other	(16.7)	36	*	*	*	*	*	6
<b>Caste/tribe#</b>								
Scheduled caste	16.6	3,116	3.3	91.5	8.5	91.1	92.7	516
Scheduled tribe	18.4	1,098	3.0	95.0	5.3	84.3	84.1	202
Other backward class	12.9	8,043	3.2	92.1	9.1	86.8	91.7	1,036
Other	10.6	5,497	1.6	92.2	7.7	86.4	88.8	582
<b>Standard of living index</b>								
Low	17.2	6,146	3.2	93.9	7.3	86.2	89.9	1,055
Medium	13.7	7,241	2.1	93.0	7.3	88.2	90.8	992
High	6.9	4,500	3.7	84.6	14.5	89.3	91.4	308
<b>Availability of health facility<sup>2</sup> in the village</b>								
No	17.4	5,292	2.2	93.9	7.7	88.4	90.7	920
Yes	18.1	6,565	2.9	94.3	6.2	89.9	91.9	1,187
Total	13.2	17,886	2.8	92.3	8.2	87.5	90.6	2,355

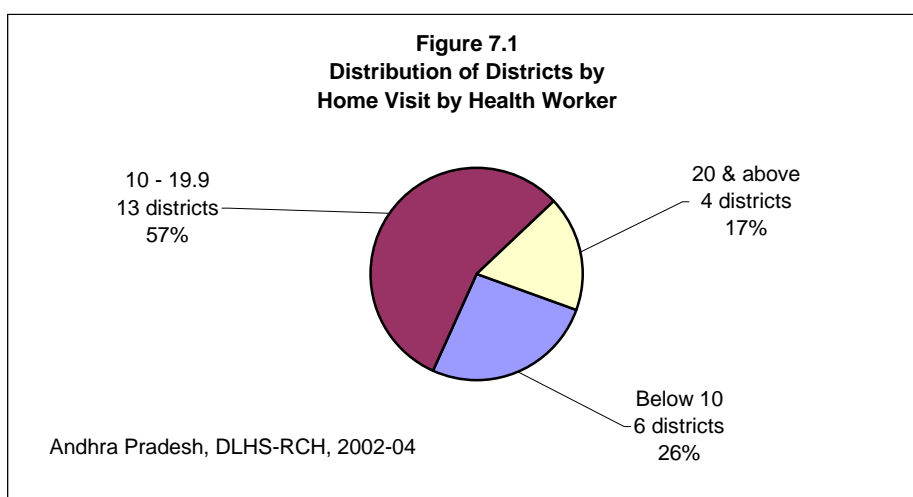
Note: Total includes 1 woman with missing information on education was not shown separately. <sup>1</sup> Percentage add to more than 100.0 due to multiple responses. @ Literate mothers with no years of schooling are included. # Total number may not add to N due to do not know and missing cases. <sup>2</sup> Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village. ( ): Based on less than 50 unweighted cases. \* Percentage not shown: Based on very few cases.

The proportion of women who were satisfied with the amount of time spent, and services/advices provided by health workers did not vary much across various background characteristics. Urban women (73 percent) were less likely than rural women (89 percent) to report that they were satisfied with the time spent by health workers during home visits, and they were also less satisfied with the services/advices received. Schedule tribe women were less likely to report that they were satisfied with amount of time spent by health workers during home visits and also, with the services/advices received.

## 7.2 Home Visits by Health Workers by Districts

In 6 out of the 23 districts in Andhra Pradesh, health workers visited less than 10 percent of the women at home (Table 7.2 and Figure 7.1). In districts like Adilabad, East Godavari, Guntur, Kurnool, Visakhapatnam and West Godavari, 10-15 percent of the women were visited by health workers. There are only four districts (Chittoor, Nellore, Nizamabad and Srikakulam) in which about one-fifth or more of the women received home visits. Among women who were visited by health worker at home, more than four-fifths of them approached by ANM/LHV in all the districts. None of the women were approached by male worker at home in Hyderabad and Rangareddi districts and the highest were approached in East Godavari district (26 percent), and except in two districts (Medak and Warangal), the proportion of women visited by doctor at home was below 10 percent in all other districts.

In all the districts, except East Godavari, three-quarters or more of the women said that the health worker had spent enough time with them. On the other hand, in a majority of the districts, 90 percent or more of the women reported satisfaction with services/advices given by health workers. The exception being Guntur (89 percent), Vizianagaram (88 percent), Khammam (84 percent), Mahbubnagar (78 percent), Medak (78 percent), Visakhapatnam (77 percent) and East Godavari (76 percent).



<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/advices provided by district, Andhra Pradesh, 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/ advice
Adilabad	11.8	0.8	94.9	4.3	87.5	91.0
Anantapur	17.4	0.7	93.5	9.5	87.8	90.4
Chittoor	20.9	0.5	97.4	3.1	96.7	95.6
Cuddapah	19.1	1.1	85.6	14.4	87.8	89.7
East Godavari	13.9	6.5	91.4	25.9	69.0	76.1
Guntur	12.5	0.0	97.0	6.3	86.6	89.2
Hyderabad	1.1	(16.8)	(83.2)	(0.0)	(100.0)	(100.0)
Karimnagar	8.4	1.3	97.2	1.5	91.2	95.7
Khammam	17.6	6.0	93.4	0.6	83.2	84.2
Krishna	16.5	1.9	83.7	15.3	85.0	96.9
Kurnool	10.6	0.0	97.8	2.2	97.6	97.6
Mahbubnagar	3.6	7.5	85.9	6.6	78.2	77.5
Medak	15.9	14.8	84.0	1.9	80.0	77.6
Nalgonda	9.9	0.0	93.9	9.4	91.8	95.9
Nellore	21.6	0.5	98.4	5.1	93.3	94.0
Nizamabad	24.3	1.0	93.7	5.8	89.5	93.0
Prakasam	17.3	2.0	98.3	0.8	86.9	91.8
Rangareddi	3.6	0.0	100.0	0.0	94.3	96.7
Srikakulam	20.7	1.2	96.0	4.1	92.5	94.8
Visakhapatnam	12.6	3.1	91.6	11.1	74.8	77.4
Vizianagaram	16.4	1.4	94.7	3.9	87.9	87.7
Warangal	4.9	14.4	82.2	21.5	100.0	100.0
West Godavari	11.2	5.6	85.4	10.1	93.2	95.6
Andhra Pradesh	13.2	2.8	92.3	8.2	87.5	90.6

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 health worker, as well as those who visited government health facility or other health facility during three months preceding the survey were asked about the different topics discussed with the health 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 with the health workers during home visits or visits to a health facility during the past three months. There are 1,189 pregnant woman or women with children born during the reference period, and other women includes 915 current users and 251 current non-users, who were visited by health workers at home.

**Table 7.3 MATTERS DISCUSSED DURING CONTACT WITH A HEALTH WORKER**

Percentage of women who were visited by health worker in three months preceding the survey and women who visited health facility, and the women<sup>1</sup> who discussed specific topics with the health worker, Andhra Pradesh, 2002-04

Topic discussed	Pregnant women or women with children during reference period <sup>2</sup>	Other women		Total
		Current contraceptive users	Current non-users	
<b>During home visit</b>				
Family planning	21.3	8.7	23.7	16.6
Breastfeeding	9.3	1.1	2.1	5.4
Supplementary feeding	10.8	4.4	3.4	7.5
Immunization	52.8	11.9	10.8	32.4
Nutrition	13.0	8.7	6.8	10.7
Diseases prevention	14.3	24.5	18.8	18.7
Treatment of health problem	24.1	53.0	53.9	38.5
Antenatal care	19.1	3.7	6.0	11.7
Delivery care	8.1	1.2	2.6	4.8
Postpartum care	11.9	1.3	3.4	6.9
Childcare	23.8	12.5	8.0	17.7
Sanitation / cleanliness	12.3	14.4	9.1	12.8
Oral rehydration	3.3	2.9	1.5	3.0
Other	2.9	17.7	16.1	10.0
Number of women	1,189	915	251	2,355
<b>During visit to health facility</b>				
Family planning	12.2	3.9	1.6	7.8
Breastfeeding	7.2	0.9	0.0	4.0
Supplementary feeding	11.0	3.2	2.2	7.0
Immunization	34.7	3.3	1.2	18.9
Nutrition	11.8	4.6	7.1	8.5
Diseases prevention	11.5	24.3	22.0	17.6
Treatment of health problem	31.0	69.0	67.7	49.8
Antenatal care	27.9	4.2	8.2	16.6
Delivery care	14.2	1.5	3.6	8.1
Postpartum care	10.5	0.7	2.8	5.9
Childcare	14.6	3.8	2.6	9.1
Sanitation / cleanliness	8.0	3.9	7.4	6.4
Oral rehydration	2.0	0.9	1.3	1.5
Other	3.1	10.5	9.9	6.7
Number of women	590	448	134	1,173
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, since January 1 <sup>st</sup> 1999 and for phase II, since January 1 <sup>st</sup> .2001to survey date.				

The major focus of discussions during home visits with pregnant women and women with children during reference period was on immunization (53 percent), treatment of health problems (24 percent) and childcare (24 percent). In addition, discussions were also made on family planning (21 percent), antenatal care (19 percent), disease prevention (14 percent), nutrition (13 percent), sanitation/cleanliness (12 percent), post-partum care (12 percent) and supplementary feeding (11 percent). Discussions about treatment of health problems were mentioned more often by current contraceptive users (53 percent) and current non-users (54 percent) than pregnant women or women with children born during reference period (24 percent). As expected, pregnant women or women with children born during reference period were much more likely than other women to report that they discussed childcare, immunization, antenatal care, delivery 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 visits by health workers during past three months preceding the survey.

The topics discussed most often during visits to health facility by women were treatment of health problems (50 percent), immunization (19 percent), disease prevention (18 percent) and antenatal care (17 percent). Only 8 percent women reported that they discussed family planning during the visit. During visit to health facility about 35 percent of the pregnant women or women with children born during reference period discussed about immunization, 31 percent discussed about treatment of a health problems and 28 percent discussed about antenatal care. A sizeable proportion of these women also discussed about child care, delivery care, family planning, disease prevention, nutrition, supplementary feeding and postpartum care during visits to health facility. A higher proportion of current users and non-users discussed about treatment of health problems, disease prevention, and other health related problems than pregnant women and women with children born during reference period during visits to health facility in three months prior to survey.

#### **7.4 Visits 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 21 percent of the women who needed to visit health facility did not visit in comparison with 25 percent of the women who needed to visit health facility and visited in past three months of the survey. The proportion of such women was slightly higher in urban areas (26 percent) than in rural areas (24 percent). Among them who visited any health facility, 73 percent of women reported that they had visited a private hospital/dispensary, 72 percent in rural areas and 76 percent in urban areas.



**Table 7.4 VISIT TO HEALTH FACILITY**

Percentage of women who needed to visit health facility and visited, and percent distribution of women who visited health facility by type of health facility and according to place of residence and availability of health facilities in the village, Andhra Pradesh, 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	20.5	21.7	18.0	21.9	21.6
Percentage of women who needed to visit health facility and visited	24.9	24.4	26.0	23.9	24.9
Number of women	17,886	11,857	6,029	5,292	6,565
<b>Government health facility</b>					
Hospital / CHC / FRU / RH	16.3	15.2	18.3	15.5	15.0
Dispensary	0.5	0.5	0.5	0.9	0.3
Primary health center	6.1	7.9	2.8	6.5	9.1
Sub-center	1.8	2.5	0.4	1.3	3.5
<b>Private health facility</b>					
Hospital	69.9	68.3	72.8	70.3	66.8
Dispensary	3.2	3.3	2.9	3.7	3.1
ISM <sup>2</sup> hospital/dispensary	0.9	0.7	1.2	0.9	0.5
Other	1.4	1.5	1.3	1.0	1.8
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	4,461	2,896	1,565	1,262	1,634

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-five percent of the women visited a government health facility, of which 16 percent visited government health facility such as, hospital/CHC/FRU/RH, 6 percent visited primary health centre, 2 percent visited sub-centres and only 0.5 percent visited government dispensary. One percent of the women reported that they visited Indian system of medicine hospital/ dispensary either government or private. There are not much differences in visits to any health facility according to availability of health facility in the village in the past three months of the survey.

## 7.5 Visits to Health Facility by Districts

Table 7.5 presents the percentage of currently married women who needed to visit health facility and visited and not visited a health facility by districts.

<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, Andhra Pradesh, 2002-04				
Districts	Percentage of women who needed to visit health facility, but not visited	Percentage of women who needed to visit health facility and visited	Percentage of women who visited	
			Government health facility	Private health facility
Adilabad	20.6	24.8	26.4	73.6
Anantapur	27.4	38.1	34.2	61.5
Chittoor	11.1	27.3	30.0	70.0
Cuddapah	21.7	35.2	11.7	87.5
East Godavari	22.5	25.5	26.3	72.5
Guntur	18.6	17.9	17.0	82.5
Hyderabad	14.1	14.0	35.1	64.9
Karimnagar	21.3	28.6	11.8	85.6
Khammam	21.5	24.2	26.8	72.8
Krishna	19.3	28.8	19.5	78.1
Kurnool	8.2	17.8	32.1	67.9
Mahbubnagar	32.9	13.0	25.5	72.9
Medak	17.4	30.6	27.0	72.6
Nalgonda	27.7	34.2	19.5	80.5
Nellore	9.9	25.5	20.0	79.4
Nizamabad	24.0	41.8	25.7	71.9
Prakasam	33.4	22.9	23.6	72.2
Rangareddi	27.3	26.7	26.0	73.5
Srikakulam	16.1	23.2	31.1	66.5
Visakhapatnam	16.6	28.9	32.2	65.4
Vizianagaram	19.0	21.9	26.7	69.8
Warangal	11.4	8.4	28.0	72.0
West Godavari	26.8	24.8	24.5	75.5
Andhra Pradesh	20.5	24.9	24.9	73.7

Thirty-three percent of currently married women in Mahbubnagar and Prakasam districts, needed to visit a health facility, but they did not visit. In 12 out of the 23 districts i.e. Anantapur, Chittoor, Cuddapah, East Godavari, Karimnagar, Krishna, Medak, Nalgonda, Nellore, Nizamabad, Rangareddi and Visakhapatnam more than one-fourth of the women visited health facility for their health problems. In Warangal only 8 percent of women visited health facility when needed. Among them who visited health facility, less than a quarter women visited government health facility in 8 districts (Cuddapah, Guntur, Karimnagar, Krishna, Nalgonda, Nellore, Prakasam and West Godavari), and in all the districts more than 60 percent of the women visited private health facility in past three months of the survey.

## 7.6 Clients' 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 prior to the date of 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 and their technical skills and quality like thoroughness, carefulness, and competence and waiting time for receiving the services) and the same are presented in Table 7.6.

<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 proceeding the survey, Andhra Pradesh, 2002-04			
Quality indicator	Poor	Good	Excellent
The convenience of the health facility location	8.4	85.8	5.7
Length <sup>1</sup> of time spend towards waiting	13.2	81.1	5.5
Personal manner <sup>2</sup> of the physician <sup>5</sup>	8.5	83.5	8.0
The technical skills and quality <sup>3</sup> of the physician <sup>5</sup>	7.9	86.0	6.0
Personal manner <sup>2</sup> of nurse	9.7	85.8	4.3
The technical skills and quality <sup>3</sup> of nurse	9.2	86.3	4.3
Personal manner of other staff <sup>5</sup>	10.4	84.9	4.7
The technical skills and quality of other <sup>4</sup> staff	10.3	85.1	4.4
The explanation of what was done to her	9.5	84.9	5.4
Medical, surgical and diagnostic equipment	9.0	85.5	5.2
General comfort	8.6	85.5	5.7

Note: <sup>1</sup> Poor indicates long waiting time, good indicates average waiting time, and excellent indicates 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 primary health center in the last visit made by women.

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 (each 10 percent) mentioned that personal manner and technical skills and quality of other staff are poor. Also, around 13 percent of the women mentioned 'long waiting time at centre' as a problem in receiving the services.

## 7.7 Reasons for not visiting Government Health Centres

Women who visited a private health centre were asked the main reason for not visiting the government health centre and the results are presented in Table 7.7. Thirty-eight percent of the currently married women reported poor quality of services at the centre as one of the reasons for not visiting the government health centre for their health problems, this reason is slightly more reported by rural women (39 percent) than urban women (37 percent), and women from those villages where health facilities are available (43 percent). About 15 percent reported that they did not feel the necessity to visit the government health centre as the doctors/health workers do not examine properly, 17 percent in rural areas and 13 percent in urban areas. Also, a sizeable proportion of the women (13 percent) reported inconvenient location of the centre as a reason for not visiting the government health centre, 13 percent in rural areas and 14 percent in urban areas. Other reasons for not visiting government health centres were: medicine rarely/not given or of bad quality (7 percent), time is not suited (5 percent), non or rare availability of doctors/ health workers (4 percent) and heavy rush (3 percent).

<b>Table 7.7 REASON FOR NOT PREFERRING GOVERNMENT HEALTH FACILITY</b>					
Percent distribution of women visited private health facility by main reason for not visiting government health facility and according to residence and availability of health facilities in the village, Andhra Pradesh, 2002-04					
Main reason	Total	Residence		Availability of health facility <sup>1</sup> in the village	
		Rural	Urban	No	Yes
Not conveniently located	13.2	12.7	14.0	13.5	12.1
Time is not suited	5.0	4.7	5.4	5.1	4.5
Poor quality of services	38.4	39.4	36.7	35.4	42.7
Heavy rush	2.9	2.6	3.4	3.1	2.2
Non/rare-availability of doctors/health workers	4.3	4.3	4.4	4.6	4.0
Doctors/health workers do not examine properly	15.4	16.9	12.6	18.3	15.8
Medicine not/rarely given or of bad quality	7.0	7.8	5.6	7.9	7.8
Doctors/paramedical staff does not behave properly	0.2	0.1	0.4	0.0	0.2
Services are charged	0.9	0.7	1.1	0.9	0.5
Referred by government doctor	0.7	0.6	0.9	0.4	0.9
Other	12.0	10.0	15.4	10.8	9.3
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	3,289	2,089	1,200	943	1,146

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 methods and about the methods advised during any of the contact. Fifteen percent of current non-users said that they had advices or discussion on methods of family planning with ANM or family planning health worker (Table 7.8). The most frequently discussed method was female sterilization (81 percent). Only 7 percent of women received advices to adopt male sterilization, 6 percent to adopt IUD and 5 percent to adopt Pills as contraceptive methods. Discussion about condom and other methods was rare. There is not much variation in the pattern of family planning method information and advice received by type of residence.

<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, Andhra Pradesh, 2002-04			
Method	Total	Rural	Urban
Percentage of non-users who were advised to adopt family planning method	14.7	16.5	11.3
Number of women	6,329	4,190	2,139
<b>Method</b>			
Female sterilization	81.1	83.4	74.4
Male sterilization	6.8	6.3	8.3
IUD	5.5	3.7	10.6
Pills	5.1	5.5	3.7
Condom	0.8	0.5	1.7
Other	0.6	0.5	0.9
Total percent	100.0	100.0	100.0
Number of women	933	692	241

## 7.9 Availability of Pills and Condoms

To explore difficulties faced in the procurement of condoms and pills, current users of these methods were asked whether they had been able to get their supplies whenever needed. The results are presented in Table 7.9. Only 7 percent of condom users and 16 percent of pills users reported that they had a problem in getting these methods. Surprisingly, more urban women reported that they had problems in getting the supplies of Pills as well as Condoms.

<b>Table 7.9 AVAILABILITY OF REGULAR SUPPLY OF CONDOMS/PILLS</b>		
Percentage of current condom or pill users who ever had a problem in getting supplies of condoms/pills by residence, Andhra Pradesh, 2002-04		
Method/residence	Percentage who had a problem in getting supplies	Number of users
<b>Condom</b>		
Rural	*	17
Urban	(9.8)	46
Total	7.1	62
<b>Pills</b>		
Rural	*	10
Urban	16.9	58
Total	16.1	68
Note: ( ) Based on less than 50 unweighted cases. * Percentage not shown: Based on very few cases.		

## 7.10 Quality of Care of Family Planning Services

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

<b>Table 7.10 INFORMATION OF OTHER MODERN METHODS 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, Andhra Pradesh, 2002-04				
Source of sterilization	Total	Rural	Urban	Number of users
Government health facility	22.0	22.6	20.6	8,221
Family planning or RCH camp/ village session	19.3	17.5	24.9	257
Private health facility	22.7	20.8	24.6	2,342
Other	12.7	16.2	4.5	97
Total	22.0	22.1	21.8	10,952
Note: Total includes 6, and 30 women who said that they sterilized at mobile clinic, and who do not know including missing information of place/source of sterilization, are not shown separately.				

Twenty-two percent of sterilized women reported that ANM or health worker informed them about alternative methods that they could use before adopting sterilization (Table 7.10). Twenty-two percent of sterilized women received such information by a ANM or health worker in the government health facilities compared to around 23 percent of women

who were sterilized in private health facilities, and 19 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. About 13 percent of such women were informed about alternative methods by others but not by a health worker working in government or private health sector.

<b>Table 7.11 INFORMATION ON SIDE EFFECTS 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, Andhra Pradesh, 2002-04			
Information/follow-up	Total	Rural	Urban
<b>Told about side effects</b>			
Sterilization	18.5	20.1	15.4
Other modern method	32.8	37.5	31.1
Any modern method	18.8	20.2	16.0
<b>Received follow-up</b>			
Sterilization	34.0	42.8	16.0
Other modern method	9.3	19.6	5.3
Any modern method	33.5	42.6	15.6

Another important facet of informed contraceptive choice is being fully informed about any side effects and any other problems associated with the method use. In Andhra Pradesh, only 19 percent of users of any modern method were informed about possible side-effects or health problems associated with their current method (Table 7.11). Twenty percent of acceptors of sterilization in rural areas and 15 percent in urban areas reported that they were informed about side-effects. Among users of modern methods other than sterilization, 38 percent of rural users and 31 percent of urban users were informed about side-effects. It is clear from the results that ANMs or health workers in Andhra Pradesh 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 higher (34 percent) than among the users of other modern methods (9 percent). About 43 percent of sterilization users in rural areas and 16 percent in urban areas reported that they received follow-up services by ANMs or health workers. Only 20 percent of the users of modern methods other than sterilization in rural areas and 5 percent in urban areas received follow-up services.

### 7.11 Quality of Care Indicators for Contraceptive Users by Districts

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 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>						
Percentage of currently married women who are current users of modern contraceptive methods by quality of care indicators related to the use of their current contraceptive method by district, Andhra Pradesh, 2002-04						
District	Percentage informed about other methods before accepting sterilization <sup>1</sup>	Percentage told about side-effects or other problems with method <sup>2</sup> use		Percentage who received follow-up <sup>2</sup>		Percentage non-users who were ever advised to adopt contraceptive methods
		Sterilization	Other modern method	Sterilization	Other modern method	
Adilabad	10.6	9.3	(0.0)	26.4	(0.0)	16.0
Anantapur	8.7	14.0	37.1	42.7	20.6	23.4
Chittoor	50.5	20.1	(27.7)	53.1	(7.1)	24.0
Cuddapah	5.2	7.4	(66.8)	39.5	(25.3)	20.8
East Godavari	41.7	37.2	(59.0)	32.7	(8.8)	13.1
Guntur	22.0	20.4	(0.0)	23.2	(0.0)	13.7
Hyderabad	17.8	8.3	(16.5)	1.3	(6.6)	6.3
Karimnagar	11.5	7.6	(0.0)	14.7	(0.0)	8.9
Khammam	15.5	32.9	(0.0)	26.1	(0.0)	11.3
Krishna	6.3	6.1	(31.0)	47.6	(6.6)	15.9
Kurnool	57.4	5.2	(58.8)	50.1	(12.7)	18.5
Mahbubnagar	19.8	11.3	(100.0)	8.8	(0.0)	6.8
Medak	23.9	30.0	(0.0)	21.7	(20.9)	10.0
Nalgonda	10.8	16.6	(38.0)	23.5	(24.6)	17.0
Nellore	38.5	20.0	(41.7)	50.1	(11.8)	21.0
Nizamabad	4.8	12.1	(12.6)	42.3	(0.0)	18.6
Prakasam	26.7	42.3	(41.7)	42.8	(58.3)	12.3
Rangareddi	17.3	40.4	(48.4)	19.5	(9.0)	8.3
Srikakulam	14.3	14.9	(27.0)	67.2	(27.0)	19.1
Visakhapatnam	24.5	24.4	(17.1)	42.3	(0.0)	15.4
Vizianagaram	9.4	7.6	(42.7)	67.0	(0.0)	16.4
Warangal	19.0	9.8	(0.0)	18.9	(0.0)	10.7
West Godavari	23.8	12.8	(28.1)	34.6	(0.0)	22.1
Andhra Pradesh	22.0	18.5	32.8	34.0	9.3	14.8

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 methods is lowest in Cuddapah and Nizamabad (5 percent each) and it is highest in Kurnool (57 percent). There are also large inter-district variations in the percentage of sterilization - users and users of other modern contraceptive methods who were told about the possible side-effects. In case of sterilization, the proportion varied from a low of 5 percent in Kurnool to a high of 42 percent in Prakasam district. Follow-up services are relatively better for acceptors of sterilization in a majority of the districts of Andhra Pradesh. Table 7.12 also shows district-wise variation in the percentage of current non-users who were ever advised to adopt contraceptive methods, which varies from a low of 6 percent in Hyderabad to a high of 24 percent in Chittoor district.



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

## 7.12 Quality of Care of Maternal Health Care

Information on few other aspects of quality of care in terms of maternal care was also collected. Women with last live/still births during three years preceding the survey were asked whether the Doctor/ANM/health worker advised them to go to health facility for delivery when they were pregnant, and received any follow-up care after delivering the baby within 2 weeks of delivery and received follow-up care at least once 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-UPS</b>			
Percentage of women* who were advised to have delivery at health facility by doctor/ health worker and percentage who received follow-up services within 2 weeks and within 6 weeks of delivery by ANM, according to residence, Andhra Pradesh, 2002-04			
Advise/follow-up service	Total	Rural	Urban
Percentage of women who were advised to have delivery at health facility	59.4	59.5	59.0
Percentage of women who were visited within 2 weeks of delivery	30.8	39.9	12.0
Percentage of women who were visited at least once within 6 weeks of delivery	33.2	42.4	13.7
Number of women	5,500	3,725	1,776
Note: * Women who had live birth/still birth after 1.1.1999/1.1.2001. Total includes 15, 10, and 13 missing cases in: advised to have delivery at health facility, visited within 2 weeks of delivery and visited at least once within 6 weeks of delivery.			

About 59 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. More or less the same proportion of the women from rural (60 percent) and urban (59 percent) areas were advised to deliver their children at health facility.

In district-wise variation, the percentage varies from as low as 34 percent in Mahbubnagar to as high as 80 percent in Nizamabad district (Table 7.14). In four out of the 23 districts, Hyderabad, Mahbubnagar, Visakhapatnam and Warangal, less than half of the women were advised to deliver their children in health facility.

<b>Table 7.14 QUALITY OF CARE INDICATORS FOR MATERNAL CARE BY DISTRICT</b>			
Percentage of currently married women* who are given live/still births during three years preceding the survey by quality of care indicators related to delivery care by district, Andhra Pradesh, 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 once within 6 weeks of delivery by ANM
Adilabad	63.5	25.3	28.0
Anantapur	65.9	28.5	35.2
Chittoor	72.5	54.5	54.9
Cuddapah	68.0	29.4	34.1
East Godavari	62.6	35.0	35.9
Guntur	68.2	35.1	37.2
Hyderabad	42.4	1.2	1.2
Karimnagar	64.2	11.8	13.7
Khammam	60.7	25.5	25.5
Krishna	74.4	44.2	47.0
Kurnool	56.6	39.0	39.7
Mahbubnagar	33.5	12.0	16.6
Medak	58.0	19.2	19.2
Nalgonda	71.1	17.5	23.8
Nellore	70.8	46.5	47.2
Nizamabad	79.6	40.6	45.5
Prakasam	63.6	43.3	48.6
Rangareddi	56.4	15.7	18.4
Srikakulam	53.6	64.5	65.9
Visakhapatnam	48.1	37.7	39.4
Vizianagaram	56.7	57.7	59.1
Warangal	42.5	15.0	16.7
West Godavari	52.3	36.1	37.4
Andhra Pradesh	59.4	30.8	33.2

Note: \* Women who had live birth/still birth after 1.1.1999/1.1.2001.

Thirty-one percent of the women reported that they were visited by an ANM within two weeks of delivery; such visit was only 12 percent in urban areas, while it is 40 percent in rural areas. About 42 percent of the women in rural areas and only 14 percent in urban areas received at least one follow-up service within six weeks of delivery (Table 7.13). In 7 out of the 23 districts, less than one-quarter of women had received postpartum check-ups within 2 weeks of delivery in Andhra Pradesh, and the proportion of women who had at least one postpartum check-up within six weeks of delivery varied from a low of 1 percent in Hyderabad to high of 66 percent in Srikakulam district (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 was also collected.

#### 8.1 Awareness of RTI/STI

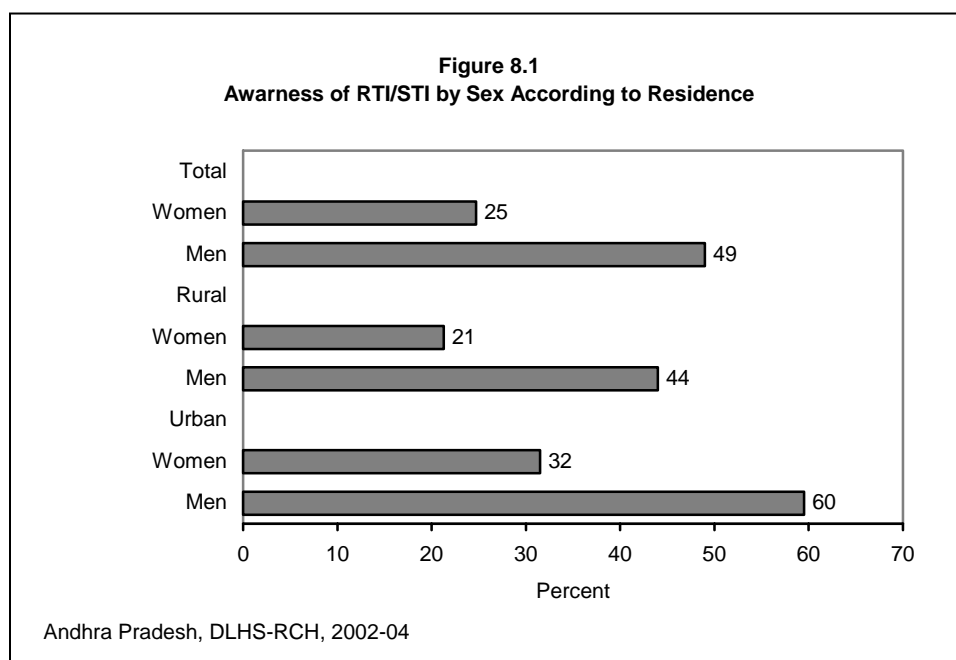
An attempt was made to assess whether couples were aware of RTI/STI. Currently married women and their husbands were asked about their awareness of RTI/STI, and if they were aware, they were further questioned about the source of information and mode of transmission of the disease.

Table 8.1 shows the percentage of women aware of RTI/STI by background characteristics. Twenty-five percent of the women in Andhra Pradesh were aware of RTI/STI. The proportion of women who were aware of RTI/STI is relatively higher in urban areas (32 percent) than in rural areas (21 percent) (Figure 8.1). Awareness of RTI/STI is much lower among younger women, non-literate women, women from Muslim religion, scheduled tribe women and women from households with a low standard of living. Awareness of RTI/STI increases from 16 percent among non-literate women to 48 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 15 percent among women with a low standard of living to 40 percent among women with a high standard of living.

Those women who had heard of RTI/STI were further asked about the source of information of RTI/STI, which is presented in Table 8.1. Almost two-thirds of the women (64 percent) reported that they received information on RTI/STI from friends or relatives. Other sources of information on RTI/STI as reported by women were television (44 percent), newspaper or books or magazines (35 percent), doctors (14 percent), radio (12 percent), health workers (11 percent), slogans or posters or pamphlets or wall hoardings (7 percent) and community meetings (6 percent). About 7 percent of the women reported that they had heard of RTI/STI from other sources.

Table 8.2 shows the percentage of husbands of currently married women who heard of RTI/STI by specific source of information according to some selected background characteristics. In Andhra Pradesh, the percentage of men who heard of RTI/STI is higher

than that of women (Figure 8.1). Forty-nine percent of the men heard of RTI/STI. Men from urban areas and younger men were relatively more aware of RTI/STI. Men who belong to Hindu religion and mainly from 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. Twenty-four percent of non-literate men were aware of RTI/STI as compared to 76 percent of men who had completed 10 or more years of schooling. Thirty-four percent of men from households with a low standard of living were aware of RTI/STI as compared to 69 percent of men with a high standard of living.



Relatives or friends are the most prominent sources of RTI/STI for men in Andhra Pradesh. Seventy-two 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 (59 percent) and newspaper or books or magazines (56 percent) followed by slogans or posters or pamphlets or wall hoardings (28 percent), and radio (22 percent). Fifteen percent each of the men received this information from a doctor or from health workers, 10 percent from community meetings and 3 percent mentioned that they had received information about RTI/STI from school-teachers. Three percent of the men reported that they heard of RTI/STI from other sources. Relatives or friends are the most important source of information on RTI/STI in all the groups. Men from rural areas, non-literate men, Hindu men, men from scheduled-castes, men with a low standard of living and younger men are relatively more prone to receive information from relatives or friends. Electronic media such as 'television' is also an important source of information on RTI/STI for men who are from urban areas and belong to 'other castes' category. The differences in the knowledge of RTI/STI from

**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, Andhra Pradesh, 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	14.1	1,737	8.5	35.0	31.1	4.0	6.6	7.4	3.2	3.3	66.3	8.8	244
20-24	22.4	3,926	12.7	44.3	35.8	7.3	11.3	11.0	3.0	5.5	64.3	6.9	880
25-29	26.9	3,999	12.0	45.3	37.0	7.3	12.8	10.4	2.4	6.5	64.1	6.0	1,078
30-34	28.9	3,085	11.3	43.4	34.6	7.3	15.3	12.6	1.9	6.3	62.4	6.8	893
35-39	26.3	2,938	11.4	44.8	35.5	7.1	16.2	10.5	2.3	4.8	64.2	7.1	771
40-44	25.3	2,200	11.6	42.3	33.4	6.0	15.8	9.2	2.0	5.3	65.5	6.5	556
<b>Residence</b>													
Rural	21.3	11,857	10.6	32.8	25.7	4.6	11.7	13.6	2.7	7.1	70.4	7.8	2,524
Urban	31.5	6,029	13.1	58.1	48.0	10.0	16.2	6.8	2.0	3.7	55.7	5.4	1,898
<b>Education</b>													
Non-literate	15.8	9,787	6.7	23.4	13.7	1.9	11.2	11.4	1.4	5.6	76.0	8.9	1,545
0-9@ years	26.1	4,649	13.3	43.3	32.7	5.3	12.0	11.3	2.3	6.3	66.7	7.1	1,215
10 and above	48.1	3,449	15.0	62.7	57.1	12.7	17.1	9.5	3.4	5.1	51.1	4.5	1,661
<b>Religion</b>													
Hindu	25.3	15,256	11.9	43.6	35.4	6.6	13.4	11.1	2.5	6.0	64.5	6.5	3,855
Muslim	19.2	1,731	10.3	48.3	36.7	8.3	14.2	7.9	1.0	2.2	65.6	4.7	332
Christian	25.8	863	9.1	37.1	28.3	9.5	16.3	8.5	2.4	4.4	56.2	14.4	223
Other	(26.7)	36	*	*	*	*	*	*	*	*	*	*	12
<b>Caste/tribe#</b>													
Scheduled caste	21.1	3,116	10.6	32.8	28.0	6.3	13.5	12.4	3.3	6.4	66.7	9.1	657
Scheduled tribe	12.4	1,098	7.1	25.6	20.4	3.8	11.6	14.4	1.3	9.2	72.2	11.4	136
Other backward class	24.2	8,043	13.4	42.9	33.9	5.7	13.8	11.0	2.4	5.8	66.4	6.6	1,949
Other	29.9	5,497	10.5	50.4	41.3	9.0	13.9	9.3	2.1	5.0	59.5	5.7	1,644
<b>Standard of living index</b>													
Low	15.0	6,146	9.2	20.2	15.9	2.2	11.5	13.9	2.7	8.0	74.0	8.8	922
Medium	23.8	7,241	10.4	37.0	26.3	4.7	11.4	11.4	2.5	6.3	69.2	8.1	1,722
High	39.5	4,500	14.2	62.3	53.9	11.5	16.8	8.2	2.1	3.8	54.1	4.3	1,778
Total	24.7	17,886	11.7	43.7	35.3	6.9	13.6	10.7	2.4	5.6	64.1	6.8	4,422

Note: Total includes 1 case with missing information on women education on aware of RTI/STI was not shown separately. #Total figure may not add to N due to do not know and missing cases. @ Literate women with no year of schooling are also included. \* Percentage not shown: Based on very few cases. ( ) Based on less than 50 unweighted cases.

**Table 8.2 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG MEN**

Percentage of husbands 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, Andhra Pradesh, 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	51.4	878	19.6	52.6	51.6	27.7	11.7	16.4	2.4	10.4	78.5	2.4	452	
25-34	53.9	3,852	22.8	61.0	60.4	29.5	14.5	15.2	2.9	11.0	71.5	3.1	2,074	
35-44	46.4	3,697	22.5	60.7	52.5	25.5	15.4	16.3	3.1	9.3	70.2	3.0	1,714	
45+	43.2	1,977	21.0	56.9	54.2	26.7	16.6	11.6	2.5	10.6	70.1	2.9	854	
<b>Residence</b>														
Rural	44.0	7,049	22.4	53.6	47.3	23.0	14.6	17.6	2.7	11.7	75.6	2.9	3,098	
Urban	59.5	3,355	21.8	68.5	69.4	34.6	15.5	11.2	3.1	8.1	65.0	3.1	1,996	
<b>Education</b>														
Non-literate	24.0	3,949	19.0	33.5	3.7	2.8	11.6	11.2	0.9	11.6	83.2	2.7	947	
0-9@ years	50.7	3,003	17.8	53.3	43.2	19.9	13.7	13.2	1.5	9.9	77.4	3.0	1,522	
10 and above	76.0	3,452	25.8	72.4	82.2	40.9	16.9	17.6	4.3	10.1	63.8	3.1	2,625	
<b>Religion</b>														
Hindu	48.5	8,941	21.6	59.2	54.9	27.4	15.2	15.4	3.0	9.9	71.6	3.1	4,334	
Muslim	52.7	945	20.2	61.9	65.0	29.0	14.1	11.3	0.6	11.2	70.8	2.7	498	
Christian	51.5	502	35.0	59.5	56.4	28.1	12.6	17.2	4.2	15.6	70.2	2.3	259	
<b>Caste/tribe#</b>														
Scheduled caste	42.5	1,920	22.6	49.5	50.4	23.6	14.0	15.7	3.1	9.9	76.6	2.2	816	
Scheduled tribe	32.9	627	20.1	40.9	36.9	17.1	16.0	18.0	3.5	14.7	72.3	4.6	206	
Other backward class	48.5	4,667	24.0	59.1	54.1	29.0	14.8	16.4	2.8	10.7	72.6	3.1	2,265	
Other	57.0	3,120	20.0	66.4	63.1	28.8	15.4	12.9	2.9	9.3	67.4	3.0	1,778	
<b>Standard of living index</b>														
Low	34.0	3,641	19.7	35.9	31.1	14.8	13.8	16.5	2.2	13.3	81.1	3.0	1,238	
Medium	49.8	4,183	20.3	59.7	53.2	26.2	13.8	14.8	2.3	10.2	73.0	2.6	2,084	
High	68.7	2,581	26.0	75.6	76.5	38.0	17.0	14.5	4.0	8.3	62.9	3.4	1,773	
<b>Total</b>	<b>49.0</b>	<b>10,404</b>	<b>22.1</b>	<b>59.4</b>	<b>55.9</b>	<b>27.6</b>	<b>14.9</b>	<b>15.1</b>	<b>2.9</b>	<b>10.3</b>	<b>71.5</b>	<b>3.0</b>	<b>5,095</b>	

Note: Total includes 16 cases of other religion on aware of RTI/STI were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate men with no year of schooling are also included.

television as a source of information by educational level and standard of living of households are quite visible. Only 34 percent of non-literate men had heard of RTI/STI from television which increased to 72 percent for men who have completed 10 or more years of schooling. Similarly, only 36 percent of men from households with low standard of living had heard about RTI/STI from television which increased to 76 percent for men from households with high standard of living.

### 8.1.1 Knowledge of Modes 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.

<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 by source of knowledge about mode of transmission by selected background characteristics, Andhra Pradesh, 2002-04						
Background characteristic	Percentage by knowledge of mode of transmission					Number of women who have heard of RTI/STI
	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other	Do not know	
<b>Age</b>						
15-19	1.2	54.9	47.9	14.8	20.4	244
20-24	2.0	57.5	54.1	16.1	15.9	880
25-29	3.1	59.5	51.3	16.1	14.8	1,078
30-34	2.4	57.3	48.3	14.9	15.6	893
35-39	3.1	57.0	49.7	17.2	15.9	771
40-44	1.8	59.0	48.8	18.7	15.6	556
<b>Residence</b>						
Rural	1.2	52.5	47.5	16.7	19.4	2,524
Urban	4.1	65.2	54.5	15.8	11.0	1,898
<b>Education</b>						
Non-literate	1.0	42.2	40.0	17.1	25.0	1,545
0-9@ years	1.4	59.7	49.9	16.3	14.4	1,215
10 years and above	4.6	71.2	60.5	15.5	8.2	1,661
<b>Religion</b>						
Hindu	2.4	57.3	50.8	16.4	15.9	3,855
Muslim	2.8	61.8	49.4	20.2	14.2	332
Christian	2.5	63.8	43.3	10.5	17.2	223
<b>Caste/tribe#</b>						
Scheduled caste	1.5	52.7	49.0	15.5	20.3	657
Scheduled tribe	2.2	39.2	46.8	14.0	25.8	136
Other backward class	2.6	55.4	50.9	15.7	16.0	1,949
Other	2.8	64.7	50.8	17.1	13.1	1,644
<b>Standard of living index</b>						
Low	0.5	46.5	45.1	16.5	23.3	922
Medium	1.5	52.8	46.1	17.8	18.0	1,722
High	4.5	68.8	57.5	14.8	9.7	1,778
Total	2.5	57.9	50.5	16.3	15.8	4,422
Note: Total includes 1 cases missing information on education and 12 women with other religion 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.						

Among women who reported knowledge of RTI/STI, 16 percent of them did not know anything further about the mode of transmission of these diseases. This proportion is relatively higher among rural women, young women, non-literate women, women from scheduled-tribes and women coming from households with low standard of living. Nineteen percent of rural women do not know about the mode of transmission of RTI/STI compared to 11 percent of urban women. Heterosexual intercourse (58 percent) and lack of personnel hygiene (51 percent) were mentioned as modes of transmission of RTI/STI by a significant proportion of the women. Only 3 percent of women reported homosexual intercourse and 16 percent reported other modes of transmission of RTI/STI.

Table 8.4 presents the knowledge of mode of transmission of RTI/STI among men. Among men who had heard of RTI/STI, 4 percent mentioned that they did not know anything about the mode of transmission of these diseases. The percentage of men who did not know about the mode of transmission is relatively higher among non-literate men, men from scheduled

<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 by source of knowledge about mode of transmission by selected background characteristics, Andhra Pradesh, 2002-04						
Background characteristic	Percentage by knowledge of mode of transmission					Number of men who have heard of RTI/STI
	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other	Do not know	
<b>Age</b>						
<25	3.6	91.6	26.7	2.0	3.5	452
25-34	3.9	91.0	32.8	1.8	3.7	2,074
35-44	4.0	90.7	31.1	1.1	3.8	1,714
45+	3.9	88.8	31.8	1.7	4.0	854
<b>Residence</b>						
Rural	3.2	90.2	28.7	1.5	4.5	3,098
Urban	5.0	91.3	35.9	1.7	2.6	1,996
<b>Education</b>						
Non-literate	2.8	85.0	16.2	0.5	8.0	947
0-9@ years	2.0	89.3	27.7	1.6	4.9	1,522
10 years and above	5.4	93.3	39.3	1.9	1.6	2,625
<b>Religion</b>						
Hindu	4.2	90.3	32.4	1.5	3.9	4,334
Muslim	2.4	90.4	26.2	1.6	4.2	498
Christian	2.4	96.3	27.6	1.7	1.0	259
<b>Caste/tribe</b>						
Scheduled caste	2.9	90.3	30.7	0.8	4.5	816
Scheduled tribe	2.9	85.1	19.4	1.4	10.7	206
Other backward class	4.6	89.5	30.8	1.8	4.0	2,265
Other	3.7	92.6	34.6	1.6	2.3	1,778
<b>Standard of living index</b>						
Low	3.0	86.8	24.5	0.9	6.6	1,238
Medium	2.6	90.8	29.8	1.6	3.9	2,084
High	6.0	93.0	38.4	1.9	1.6	1,773
Total	3.9	90.6	31.5	1.6	3.8	5,095

Note: Total includes 4 cases with other religion 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.



tribes, and men from households with a low standard of living. Among the men who new the modes of transmission of RTI/STI, 91 percent mentioned heterosexual intercourse, 32 percent reported lack of personnel hygiene, and only 4 percent mentioned homosexual intercourse, and 2 percent reported other modes of transmission.

## 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 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 were 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 respondents 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 about 14 percent of currently married women reported at least one reproductive health problem. The problems reported by women were ‘low backache’ (8 percent), ‘pain in lower abdomen’ (5 percent), ‘fever’, ‘itching over vulva’ and ‘some mass coming out of vagina’ (3 percent each), and ‘pain during intercourse’, ‘involuntary escape of urine while coughing or sneezing’ and ‘frequent/painful passage of urine’ (2 percent each). Other symptoms of reproductive health problems reported by women were ‘swelling/lump in breast’, ‘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 of RTI/STI and specific symptoms during three months prior to survey, according to residence, Andhra Pradesh, 2002-04			
Symptoms	Total	Residence	
		Rural	Urban
Percentage of women who reported any RTI/STI symptoms	13.7	13.8	13.5
<b>Symptoms</b>			
Itching over vulva	2.6	2.7	2.4
Boils/ ulcers/ warts around vulva	0.8	0.8	0.8
Pain in lower abdomen not related to menses	4.5	4.7	4.2
Low backache	8.4	8.3	8.6
Pain during sexual intercourse	1.8	1.8	1.7
Bleeding after sexual intercourse	0.3	0.3	0.3
Swelling in the groin	0.3	0.3	0.2
Frequent / painful passage of urine	1.6	1.7	1.3
Fever	2.8	2.8	2.7
Some mass coming out of vagina	2.6	2.8	2.3
Any involuntary escape of urine while coughing or sneezing	1.6	1.6	1.5
Swelling / lump in breast	1.1	1.0	1.2
Number of women	17,886	11,857	6,029
Note: Total includes 1 woman with missing information on symptoms of swelling in the groin and swelling/lump in breast.			

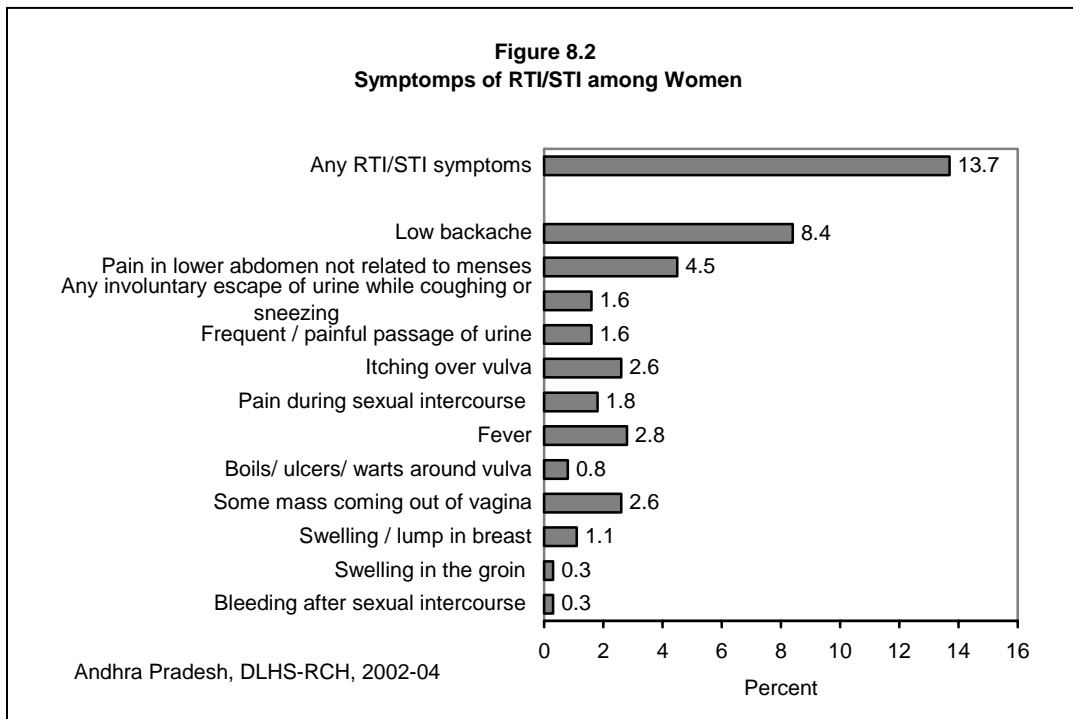
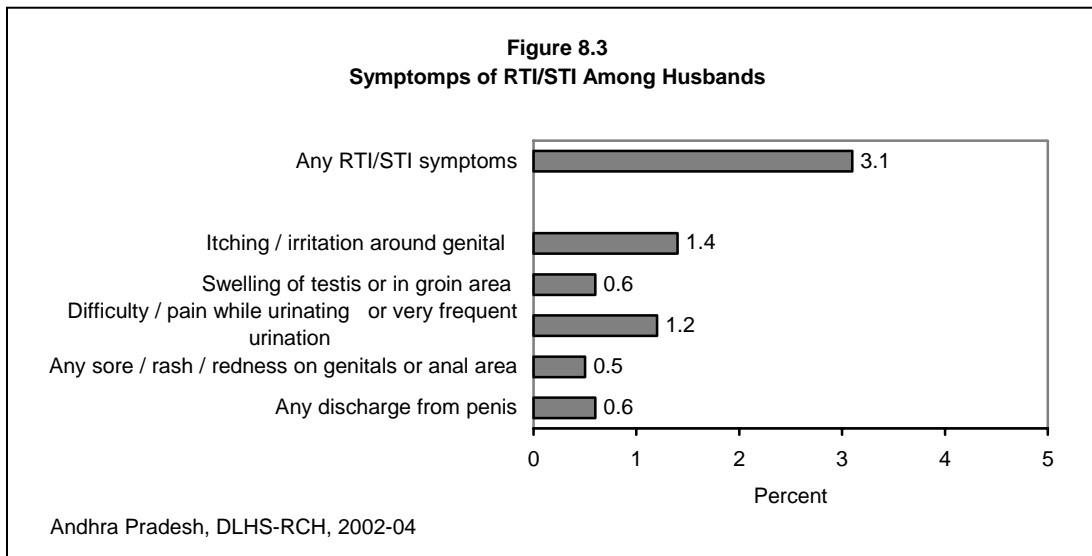


Table 8.6 and Figure 8.3 show the prevalence of reproductive health problems among husbands of currently married women. The prevalence of RTI/STI among men was judged by the reporting of symptoms. Three percent of men reported experiencing at least one symptom of reproductive health problem in the last three months preceding the survey. The prevalence of reproductive health problems is slightly more among rural men (3.4 percent) than among urban men (2.6 percent). The specific problems of reproductive health experienced by men are ‘itching/irritation around genital’ (1.4 percent), ‘difficulty/pain while urinating or very frequent urination’ (1.2 percent), ‘discharge from penis’ (0.6 percent), ‘swelling of testes or in groin area’ (0.6 percent) and ‘sore / rash / redness on genitals or anal area’ (0.5 percent).



**Table 8.6 SYMPTOMS OF RTI/STI AMONG MEN**

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

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of men reported any RTI/STI symptoms	3.1	3.4	2.6
<b>Symptoms</b>			
Any discharge from penis	0.6	0.6	0.5
Any sore / rash / redness on genitals or anal area	0.5	0.6	0.3
Difficulty / pain while urinating or very frequent urination	1.2	1.4	0.8
Swelling of testis or in groin area	0.6	0.8	0.3
Itching / irritation around genital	1.4	1.4	1.4
Number of Men	10,404	7,049	3,355
Percentage of men sought treatment for any RTI/STI <sup>1</sup>	41.1	43.6	34.0
Number of Men	327	240	87
<b>Percentage sought treatment at health facility<sup>2</sup></b>			
Government health facility <sup>3</sup>	25.4	26.2	(32.1)
Primary health centre	10.2	11.8	(10.7)
Sub-centre	2.9	2.5	(7.1)
Private health facility <sup>4</sup>	59.0	62.2	(42.9)
ISM <sup>5</sup> facility	11.8	8.3	(25.0)
Chemist/ medical shop	11.6	14.3	(3.6)
Other	5.2	3.9	(7.1)
<b>Percentage obtained treatment from<sup>2</sup></b>			
Doctor	85.7	83.4	(89.3)
Male health worker	12.4	13.8	(14.3)
Traditional healer	3.7	4.7	(0.0)
ISM practitioner	2.0	2.6	(0.0)
Home remedy	4.4	5.7	(0.0)
Chemist medical shop	11.6	13.3	(7.1)
Other	5.6	6.2	(7.1)
Number of men	134	105	29
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. <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. ( ) Based on less than 50 unweighted cases.			

Among men who reported reproductive health problems, 41 percent sought treatment. The proportion seeking treatment for reproductive health problems is relatively more among rural men (44 percent) than urban men (34 percent). Among them, only 25 percent visited a government health facility including a primary health centre (10 percent) and sub-centre (3 percent) and 59 percent visited a private health facility. A sizeable proportion of men were treated by the Indian system of medicine and obtained treatment from a chemist or medical shop (12 percent each) and 5 percent of the men reported that they were treated at other sources. A large proportion of men saw a doctor (86 percent), while 12 percent were seen by a male health worker, 4 percent by a traditional healer, and 2 percent by an ISM practitioner. Four percent of the men used home remedies and 12 percent went to a chemist. Another 6 percent of the men obtained treatment from other sources.

The DLHS-RCH also collected information from currently married women on symptoms of RTIs, that is, on abnormal vaginal discharge and 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 asymptomatic prevalence of vaginal discharge related problems among currently married women in Andhra Pradesh during three months preceding the survey according to residence. Eight percent of the women reported problems related to vaginal discharge. The prevalence of vaginal discharge problem is slightly higher among rural women (9 percent) than among urban women (7 percent).

Among the women who had reported symptoms of vaginal discharge, 46 percent went for treatment, a slightly higher percentage from urban areas (48 percent) compared to their rural counterparts (45 percent). A significantly higher proportion of women (67 percent) visited private health facilities, more or less the same proportion from rural (66 percent) and urban (67 percent) areas. Only 30 percent went to a government health facility, including 6 percent to the Primary Health Centre and less than one percent to Sub-Centre, while 3 percent took home remedies and 2 percent of the women visited other places for treatment. A much higher proportion of women (90 percent) in the state of Andhra Pradesh obtained treatment from doctors for their problems. Around 7 percent women were treated by ANM/Nurse/Midwife/LHV and one percent by other health professionals.

<b>Table 8.7 ABNORMAL VAGINAL DISCHARGE</b>			
Percentage of currently married women age 15-44 who reported any abnormal vaginal discharge during three months prior to survey and percentage who sought treatment and source of treatment according to residence, Andhra Pradesh, 2002-04			
Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women reported abnormal vaginal discharge	8.2	9.0	6.8
Number of Women	17,886	11,857	6,029
Percentage of women sought treatment for vaginal discharge <sup>1</sup>	46.1	45.3	48.2
Number of Women	1,474	1,065	410
<b>Percentage sought treatment at health facility<sup>2</sup></b>			
Government health facility <sup>3</sup>	30.2	30.2	30.2
Primary health centre	5.6	6.7	2.9
Sub centre	0.5	0.7	0.0
Private health facility <sup>4</sup>	66.6	66.3	67.3
ISM <sup>5</sup> facility	1.5	1.4	1.8
Home remedy	2.7	2.9	2.5
Other	1.8	1.8	1.9
<b>Percent distribution of women who obtained treatment from<sup>2</sup></b>			
Doctor	90.4	88.8	94.1
ANM/nurse/midwife/LHV	7.4	8.6	4.4
Other health professionals <sup>6</sup>	1.1	1.0	1.5
Other	1.1	1.6	0.0
Total percent	100.0	100.0	100.0
Number of women	680	482	198
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 <i>dai</i> (trained or untrained), relative or friends and chemist/ medical shop.			

### 8.3 Menstruation Related Problems

Table 8.8 shows the percentage of women who had menstruation problems and who sought treatment during three months preceding the survey. The Table shows that 14 percent women in Andhra Pradesh had menstruation problems, and the figures are 15 percent and 12 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, Andhra Pradesh, 2002-04			
Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women with any menstruation related problem	14.0	14.9	12.4
Number of Women	13,560	8,818	4,155
Symptoms <sup>1</sup>			
No period	2.8	2.3	3.8
Painful period	36.8	37.5	35.1
Frequent or short period	16.1	17.1	13.9
Delayed period	33.5	33.5	33.4
Prolonged bleeding	11.3	12.4	8.9
Excessive bleeding	15.8	14.9	18.0
Continuous bleeding	2.2	2.0	2.6
Scanty bleeding	20.2	19.4	22.0
Inter-menstrual bleeding	2.8	2.8	3.0
Number of Women	1,901	1,314	587
Percentage of women sought treatment who had any menstruation related problems	45.1	43.0	49.6
Percentage sought treatment at health facility <sup>6</sup>			
Government health facility <sup>2</sup>	25.3	27.9	20.3
Primary health centre	3.9	4.8	2.1
Sub centre	0.6	0.9	0.0
Private health facility <sup>3</sup>	72.7	70.5	77.1
ISM <sup>4</sup> facility	2.1	2.0	2.3
Other	1.5	1.3	1.8
Percentage of women obtained treatment from <sup>6</sup>			
Doctor			
ANM/nurse/midwife/LHV	93.3	91.7	96.2
Other health professionals <sup>5</sup>	4.0	5.3	1.5
Other	3.7	4.1	3.0
	1.5	2.0	0.6
Number of women who are currently menstruating	857	566	291
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, painful periods (37 percent) and delayed periods (34 percent) are the main menstrual problems prevalent in Andhra Pradesh. Scanty bleeding (20 percent), frequent or short periods (16 percent), excessive bleeding (16 percent) and prolonged bleeding (11 percent) are the other symptoms as reported by a sizeable proportion of women. There are minor differences in the magnitude of these symptoms among urban and rural women. Among the women who had menstrual problems, 45 percent sought treatment in the state, and the figures for urban and rural areas are 50 percent and 43 percent

respectively. The private health facility is also the main source of treatment for the menstrual problems. Around 73 percent of the women traded treatment at a private facility, a relatively higher proportion in urban areas (77 percent) than in rural areas (71 percent). Twenty-five percent of the women were sought treatment at a government health facility, which is relatively higher in rural areas (28 percent) than in urban areas (20 percent). Most of the women went to a doctor for treatment (93 percent). The figures for urban and rural areas are 96 and 92 percent respectively.

#### 8.4 Prevalence of RTIs/STIs by Districts

Table 8.9 presents the prevalence of RTIs/STIs among currently married women and their husbands by districts. The reported symptoms of RTIs/STIs among women is lowest in Hyderabad (5 percent) and highest in Medak (21 percent). The problems related to abnormal vaginal discharge among women ranges from 5 percent in Kurnool, Mahbubnagar and Prakasam to 18 percent in Medak.

<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, Andhra Pradesh, 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	
Adilabad	13.9	12.0	28.5	3.9	(33.4)	
Anantapur	15.7	10.2	37.0	1.2	(39.9)	
Chittoor	10.3	8.5	53.7	1.2	(33.5)	
Cuddapah	9.4	5.9	56.6	1.7	(81.0)	
East Godavari	20.2	10.7	61.2	6.2	38.4	
Guntur	10.4	7.4	38.7	3.2	(62.3)	
Hyderabad	4.5	5.9	38.4	5.0	(22.4)	
Karimnagar	16.8	11.1	44.4	1.2	(0.0)	
Khammam	19.2	9.4	34.0	0.3	(37.8)	
Krishna	12.1	6.5	48.2	3.4	(71.3)	
Kurnool	8.9	5.3	40.1	1.1	(21.1)	
Mahbubnagar	16.0	5.1	38.1	2.0	(29.8)	
Medak	21.1	17.5	52.2	0.5	(100.0)	
Nalgonda	11.6	6.9	34.9	1.4	(87.1)	
Nellore	9.3	6.1	44.5	3.8	(51.1)	
Nizamabad	11.0	11.1	59.3	3.0	(57.8)	
Prakasam	14.1	5.3	42.4	1.2	(79.8)	
Rangareddi	19.8	10.2	59.0	2.4	(63.8)	
Srikakulam	11.9	6.0	53.4	12.0	25.3	
Visakhapatnam	19.3	7.1	38.7	4.0	(27.3)	
Vizianagaram	14.5	9.1	51.9	2.1	(30.6)	
Warangal	10.4	4.4	33.3	3.1	(11.2)	
West Godavari	13.0	9.1	46.8	6.6	48.8	
Andhra Pradesh	13.7	8.2	46.1	3.1	41.1	

Note: ( ) Based on less number of cases.

In comparison to women, fewer men from all districts of Andhra Pradesh reported symptoms of RTIs/STIs. Men from Khammam, Medak, Kurnool, Anantapur, Chittoor, Karimnagar, Prakasam, Nalgonda and Cuddapah reported the lowest prevalence of symptoms of RTIs/STIs (0.3 – 1.7 percent) and men from Srikakulam reported the highest prevalence (12 percent). Except Srikakulam, data does not show association between the prevalence of RTIs/STIs among women and men in any other district.

The percentage of women who have sought treatment for RTIs (abnormal vaginal discharge) ranges from 29 percent in Adilabad to 61 percent in East Godavari, and for men who have sought treatment; the figures are not encouraging.

## **8.5 HIV/AIDS**

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

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

### **8.5.1 Knowledge of HIV/AIDS**

Table 8.10 shows the percentage of women who had heard about HIV/AIDS by some selected background characteristics. Seventy-six percent of currently married women in Andhra Pradesh have heard of HIV/AIDS, which is higher than RCH Round – I. In Round-I, only 56 percent of currently married women were aware of HIV/AIDS.

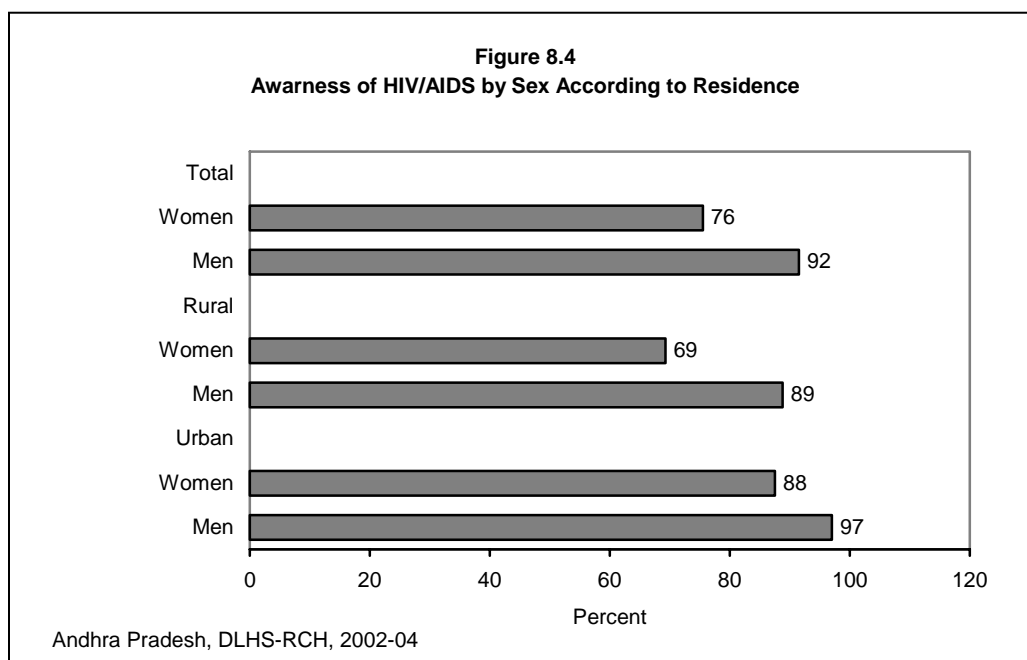
Knowledge of HIV/AIDS is relatively much lower among rural women, non-literate women, women from scheduled tribes and women from households with a low standard of living. Eighty-eight percent of urban women had heard about HIV/AIDS compared to 69 percent of rural women. Knowledge of HIV/AIDS steadily increased with increase in educational level and household standard of living. Sixty-two percent of non-literate women had heard of HIV/AIDS against 97 percent of women who had completed 10 or more years of schooling. Similarly, a little less than three-fifths of the women with a low standard of living (58 percent) had heard of HIV/AIDS against 93 percent of women with a high standard of living. Hindu women were slightly less aware of HIV/AIDS (75 percent) compared to women from Muslim



(78 percent) and Christian (83 percent) religions. Women from ‘other castes’ category were more knowledgeable about HIV/AIDS (84 percent) than women belonging to other backward classes (74 percent), scheduled-castes (72 percent) and scheduled tribes (49 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 also 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 75 percent of women reported that television was their source of information about HIV/AIDS, followed by relatives or friends (65 percent), newspapers or books or magazines (22 percent), radio (21 percent) and slogans or pamphlets or posters or wall hoardings (11 percent). Only 10 percent of the women reported that a health worker had informed them about HIV/AIDS and 8 percent of the women received information on HIV/AIDS from a doctor.

Table 8.11 shows the percentage of husbands of currently married women who had heard about HIV/AIDS. In Andhra Pradesh, the proportion of men who had heard about HIV/AIDS is much higher than that of women. Ninety-two percent of men had heard of HIV/AIDS as compared to 76 percent of women (Figure 8.4).



Ninety-seven percent of urban men had heard about HIV/AIDS as compared to 89 percent of rural men. Knowledge of HIV/AIDS is lower in older men. Awareness of HIV/AIDS is lower among non-literate men, men from scheduled tribes, and men who belong to households with a low standard of living. A similar trend is observed in the case of women. Eighty-two percent of non-literate men had heard of HIV/AIDS, and it increased up to 99 percent of men who had completed 10 or more years of schooling. It is also positively related to standard of living.

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

Percentage of currently married women age 15 - 44 who have heard about HIV/AIDS and among women who have heard about HIV/AIDS, percentage who received information from specific sources by selected background characteristics, Andhra Pradesh, 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	71.7	1,737	18.1	67.7	15.1	7.9	5.4	10.2	4.6	7.7	67.2	5.9	1,245
20-24	77.3	3,926	21.8	74.0	22.7	11.2	8.7	11.8	3.8	7.8	66.7	4.2	3,036
25-29	77.8	3,999	22.7	76.3	25.4	12.4	9.1	10.9	3.0	8.0	63.1	5.7	3,111
30-34	76.0	3,085	19.1	75.0	22.1	11.5	8.2	9.4	2.7	8.3	64.3	6.0	2,343
35-39	73.9	2,938	19.7	76.3	20.8	10.0	8.5	9.6	2.6	7.9	64.4	4.6	2,171
40-44	72.4	2,200	18.5	73.8	18.7	10.5	7.5	9.8	2.5	7.9	64.8	4.2	1,593
<b>Residence</b>													
Rural	69.3	11,857	20.1	64.1	13.1	7.2	6.2	13.0	3.5	10.1	69.5	6.1	8,221
Urban	87.5	6,029	21.0	90.6	35.2	16.8	11.4	6.5	2.6	4.5	57.6	3.5	5,278
<b>Education</b>													
Non-literate	62.2	9,787	16.7	59.6	2.8	3.1	4.7	10.4	1.7	8.2	70.0	6.0	6,092
0-9@ years	87.6	4,649	21.2	80.8	19.2	10.4	6.9	10.0	2.8	7.4	64.4	4.6	4,072
10 and above	96.7	3,449	26.5	93.9	59.3	26.0	16.4	11.0	6.3	8.0	56.1	4.0	3,335
<b>Religion</b>													
Hindu	74.7	15,256	20.8	74.1	21.7	11.0	8.0	10.9	3.3	8.5	65.1	5.0	11,401
Muslim	78.2	1,731	18.2	81.8	23.6	11.4	10.7	6.4	1.4	3.9	64.0	4.7	1,354
Christian	83.0	863	19.7	66.6	18.5	9.7	6.9	11.0	3.3	5.8	62.7	6.5	717
Other	(76.7)	36	(13.0)	(78.3)	(30.4)	(17.4)	(13.0)	(8.7)	(8.7)	(8.7)	(69.6)	(4.3)	28
<b>Caste/tribe#</b>													
Scheduled caste	72.0	3,116	18.2	62.9	13.9	8.3	6.7	12.5	3.8	7.7	68.8	6.7	2,244
Scheduled tribe	49.4	1,098	22.6	54.5	13.7	6.6	5.8	15.9	3.8	13.2	67.1	4.9	542
Other backward class	74.4	8,043	21.2	73.8	18.7	9.6	7.8	10.2	3.0	8.4	66.5	5.0	5,985
Other	84.2	5,497	20.4	83.4	30.4	14.6	9.9	9.1	3.0	6.7	60.5	4.4	4,630
<b>Standard of living index</b>													
Low	58.1	6,146	19.2	45.2	6.0	4.6	5.9	14.6	2.7	11.2	73.7	6.1	3,573
Medium	79.5	7,241	18.8	77.3	13.7	8.0	6.1	9.9	2.9	7.6	65.7	5.7	5,759
High	92.6	4,500	23.9	95.7	46.3	20.6	13.2	7.7	3.9	5.6	56.2	3.3	4,168
Total	75.5	17,886	20.5	74.5	21.7	11.0	8.2	10.4	3.2	7.9	64.9	5.1	13,500

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

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

Percentage of husbands of currently married women who have heard about RTI/STI and among men who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, State Name, 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	95.0	878	27.4	72.3	49.7	30.7	12.2	15.6	2.4	13.4	83.5	4.0	834	
25-34	93.9	3,852	27.0	75.2	54.1	35.8	13.4	18.0	3.2	13.6	79.3	4.0	3,618	
35-44	90.5	3,697	26.0	72.2	44.6	29.3	11.6	16.9	3.0	11.3	77.6	4.9	3,344	
45+	87.1	1,977	25.4	69.6	46.0	28.7	12.3	15.2	2.0	9.7	77.6	4.1	1,722	
<b>Residence</b>														
Rural	88.8	7,049	27.2	65.9	38.6	26.2	11.9	20.2	2.9	13.8	82.6	4.3	6,263	
Urban	97.0	3,355	24.9	86.2	68.7	42.5	13.6	10.6	2.7	8.8	71.3	4.4	3,256	
<b>Education</b>														
Non-literate	82.1	3,949	22.5	51.8	3.7	7.3	6.9	16.6	1.8	11.5	85.3	4.6	3,242	
0-9@ years	95.4	3,003	25.9	74.1	49.4	29.6	12.6	16.8	1.8	11.2	81.6	4.0	2,866	
10 and above	98.8	3,452	30.6	91.8	91.6	56.8	17.7	17.2	4.6	13.4	70.2	4.3	3,410	
<b>Religion</b>														
Hindu	90.9	8,941	26.9	72.4	48.1	31.3	12.8	17.4	2.9	11.9	79.1	4.1	8,125	
Muslim	95.8	945	19.4	82.9	59.5	37.5	10.9	11.8	1.4	10.6	75.5	5.0	905	
Christian	94.0	502	31.4	62.1	43.1	28.7	9.0	16.8	3.8	17.6	79.7	6.5	472	
<b>Caste/tribe#</b>														
Scheduled caste	90.8	1,920	25.8	60.2	37.6	25.9	9.7	18.3	3.3	12.4	81.5	5.1	1,743	
Scheduled tribe	73.7	627	24.6	55.8	30.7	17.2	11.4	14.4	2.3	10.6	80.1	5.0	462	
Other backward class	91.3	4,667	29.3	72.9	47.6	31.7	13.0	18.9	2.9	13.2	80.0	3.8	4,261	
Other	95.8	3,120	23.2	82.9	60.4	37.5	13.5	13.7	2.6	10.3	75.0	4.6	2,988	
<b>Standard of living index</b>														
Low	82.8	3,641	25.7	49.2	24.2	17.9	9.7	18.6	2.5	14.0	86.6	4.5	3,014	
Medium	94.8	4,183	25.0	77.3	47.0	29.8	12.2	17.4	2.3	11.2	79.3	4.3	3,966	
High	98.4	2,581	29.3	94.0	81.2	51.2	16.1	14.0	4.0	11.2	68.6	4.2	2,538	
<b>Total</b>	<b>91.5</b>	<b>10,404</b>	<b>26.4</b>	<b>72.9</b>	<b>48.9</b>	<b>31.8</b>	<b>12.5</b>	<b>16.9</b>	<b>2.8</b>	<b>12.1</b>	<b>78.8</b>	<b>4.3</b>	<b>9,518</b>	

Note: Total includes 16 cases of other religions on aware of HIV/AIDS were not shown separately. #: Total figure may not add to N due to do not know cases. @ Literate men with no year of schooling are also included.

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 Andhra Pradesh, the most prominent source of information of HIV/AIDS was relatives or friends (79 percent) followed by television (73 percent). Other important sources of knowledge of HIV/AIDS are the newspapers or books or magazines (49 percent), slogans or pamphlets or posters or wall hoardings (32 percent) and radio (26 percent). Only 13 percent of men reported that a doctor had informed them about HIV/AIDS and 17 percent men had received information on HIV/AIDS from a health worker.

About 12 percent reported that they were informed through community meetings and 3 percent received such information from a school teacher. Comparatively, a higher proportion of rural men received information about HIV/AIDS from health worker, community meeting and relatives or friends than urban men. The information on awareness of HIV/AIDS through mass media, such as television and newspapers or books or magazines, was received more by urban men, men from Muslim religion and 'other castes' category, men with at least 10 years of schooling, and men from households with a high standard of living. On the other hand, relatives or friends were the main source of information for rural men, non-literate and less educated men and men from households with a low or medium standard of living.

### **8.5.2 Knowledge of Modes of Transmission about HIV/AIDS**

Women who were aware of HIV/AIDS were asked about the modes of transmission and the details are presented in Table 8.12. Among women who reported awareness of HIV/AIDS, 7 percent did not know about the mode of transmission. Eight percent of the rural women do not know about the mode of transmission of HIV/AIDS compared to 6 percent of urban women. This proportion is relatively higher among non-literate women (11 percent) and women from households with a low standard of living (10 percent).

Among women who reported different ways of transmission of HIV/AIDS, a large proportion (88 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 (61 percent), transfusion of infected blood (45 percent) and mother to child, if pregnancy occurs during a stage of HIV (25 percent), while only 3 percent of the women mentioned that homosexual intercourse could also be a mode of transmission. Two percent stated that there were other ways of transmission of HIV/AIDS.

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

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

Background characteristic	Percentage by source of knowledge about 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	2.2	86.7	57.6	20.7	39.6	2.7	8.3	1,245
20-24	2.8	88.4	61.7	26.4	47.1	2.2	6.9	3,036
25-29	3.0	89.3	65.3	27.5	49.1	2.2	5.9	3,111
30-34	3.1	87.2	62.5	27.1	44.9	2.6	7.5	2,343
35-39	4.0	87.4	58.5	22.5	44.1	2.2	7.6	2,171
40-44	2.7	86.3	57.2	20.7	40.4	2.4	8.6	1,593
<b>Residence</b>								
Rural	2.3	87.1	57.1	19.9	39.0	2.1	7.8	8,221
Urban	4.1	89.0	67.7	32.8	54.9	2.8	6.3	5,278
<b>Education</b>								
Non-literate	2.0	83.6	48.1	12.2	28.3	1.6	10.6	6,092
0-9@ years	2.3	88.6	63.7	25.1	47.3	2.7	6.4	4,072
10 years and above	5.6	94.6	82.2	48.1	73.6	3.3	2.0	3,335
<b>Religion</b>								
Hindu	3.0	87.8	60.7	24.6	45.1	2.4	7.2	11,401
Muslim	3.1	88.9	64.9	28.0	47.9	1.5	6.8	1,354
Christian	3.4	85.9	62.6	24.4	41.9	2.7	8.5	717
Other	(0.0)	(95.7)	(60.9)	(30.4)	(43.5)	(0.0)	(4.3)	28
<b>Caste/tribe#</b>								
Scheduled caste	2.2	87.4	56.5	19.5	37.7	2.2	7.9	2,244
Scheduled tribe	2.0	84.7	52.3	13.7	32.4	2.0	9.2	542
Other backward class	2.8	87.6	59.4	23.7	43.6	2.3	7.5	5,985
Other	3.8	88.7	66.7	30.5	52.3	2.5	6.2	4,630
<b>Standard of living index</b>								
Low	1.9	83.4	50.3	15.2	29.6	1.9	10.1	3,573
Medium	2.4	87.6	58.7	19.3	41.1	2.2	7.7	5,759
High	4.8	92.0	74.1	41.1	64.3	2.9	4.2	4,168
<b>Total</b>	<b>3.0</b>	<b>87.8</b>	<b>61.2</b>	<b>24.9</b>	<b>45.2</b>	<b>2.3</b>	<b>7.2</b>	<b>13,500</b>

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

Table 8.13 presents the knowledge about mode of transmission of HIV/AIDS among men. Four 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 slightly higher among older men, rural men, non-literate men, men from scheduled-castes and tribes, and men from households with a low standard of living. Among men 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 (66 percent), transfusion of infected blood (47 percent) and mother to child, if pregnancy occurs during a stage of HIV (14 percent), while only 3 percent of men mentioned that homosexual intercourse could also be a mode of transmission of HIV/AIDS. 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 by source of knowledge about mode of transmission by selected background characteristics, Andhra Pradesh, 2002-04								
Background characteristic	Percentage by source of knowledge about 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	3.1	94.8	67.5	12.5	44.6	1.4	3.5	834
25-34	3.3	93.5	69.9	16.9	50.9	1.3	3.3	3,618
35-44	2.7	92.9	64.2	13.6	44.4	1.7	3.8	3,344
45+	2.6	90.5	59.5	11.5	43.6	1.4	6.0	1,722
<b>Residence</b>								
Rural	2.5	91.6	61.2	12.6	41.7	1.5	5.0	6,263
Urban	3.7	95.2	74.5	17.8	56.5	1.4	2.0	3,256
<b>Education</b>								
Non-literate	1.3	88.5	42.9	6.4	21.6	1.0	7.7	3,242
0-9@ years	1.8	93.6	68.1	11.3	43.9	1.2	3.4	2,866
10 years and above	5.6	96.3	85.6	24.5	73.1	2.2	0.8	3,410
<b>Religion</b>								
Hindu	2.9	92.6	65.0	14.5	46.8	1.4	4.0	8,125
Muslim	2.7	94.6	72.4	12.9	49.3	1.6	3.0	905
Christian	3.8	94.0	67.2	14.8	41.0	3.2	5.0	472
<b>Caste/tribe#</b>								
Scheduled caste	2.2	91.8	59.9	13.4	38.7	1.6	5.3	1,743
Scheduled tribe	1.3	93.7	51.1	7.9	29.7	2.0	4.8	462
Other backward class	3.2	91.6	64.9	14.1	47.5	1.2	4.2	4,261
Other	3.4	95.0	72.7	16.4	53.0	1.7	2.8	2,988
<b>Standard of living index</b>								
Low	1.7	89.2	51.2	10.0	31.9	1.4	6.8	3,014
Medium	2.8	93.5	66.3	12.9	44.7	1.2	3.6	3,966
High	4.6	96.2	82.3	21.7	67.7	2.0	1.2	2,538
Total	3.0	92.8	65.8	14.4	46.8	1.5	4.0	9,518

Note: Total includes 16 cases of other religions on source of knowledge were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate men with no year of schooling are also included.

### 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, 9 percent did not know how to avoid becoming infected by HIV/AIDS. This percentage is slightly higher among rural women than among urban women. The percentage of women who did not know of any ways to avoid infection decreases with increasing levels of education and household standard of living. Thirteen percent of non-literate women reported that they did not know of any ways to avoid infection as compared to 3 percent of women who had completed 10 or more years of schooling. Similarly, 13 percent of women with low a standard of living stated that they did not know of any ways to avoid infection as compared to 5 percent of women with a high standard of



living. The percentage of women who did not know the ways to avoid infection is also slightly higher among Christian women, scheduled-tribe women and younger and older women.

**Table 8.14 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG WOMEN**  
Percentage of currently married women age 15-44 who have heard about HIV/AIDS and who reported that HIV/AIDS can be avoided in specific ways by selected background characteristics, Andhra Pradesh, 2002-04

Background characteristic	Percentage who reported that HIV/AIDS can be avoided by:							Number of women
	Sex With Only one partner	Using condoms correctly during each sexual intercourse	Checking blood prior to transfusion	Sterilizing needles and syringes for injection	Avoiding pregnancy when having HIV/AIDS	Other	Do not know to avoid HIV/AIDS	
<b>Age</b>								
15-19	84.1	13.6	38.5	54.2	14.8	3.1	11.1	1,245
20-24	87.0	22.0	45.8	58.6	18.2	2.6	8.9	3,036
25-29	88.2	24.7	48.6	62.0	20.2	2.8	7.5	3,111
30-34	85.2	23.0	44.5	59.6	19.2	3.4	9.7	2,343
35-39	86.0	19.6	44.1	55.1	16.7	3.0	10.1	2,171
40-44	84.9	17.6	41.3	54.6	14.0	3.7	10.8	1,593
<b>Residence</b>								
Rural	85.2	14.7	38.0	53.9	13.0	3.0	10.0	8,221
Urban	87.9	31.1	55.3	64.6	25.3	3.0	8.3	5,278
<b>Education</b>								
Non-literate	82.5	7.0	27.7	45.1	6.7	2.3	13.3	6,092
0-9@ years	86.6	19.8	46.2	60.2	16.5	2.7	8.7	4,072
10 years and above	92.7	48.4	74.2	79.3	39.6	4.7	2.9	3,335
<b>Religion</b>								
Hindu	86.1	20.5	44.8	58.0	17.6	3.2	9.3	11,401
Muslim	89.0	26.4	47.7	60.2	20.5	2.3	8.1	1,354
Christian	84.1	19.4	38.1	55.7	13.9	2.5	12.3	717
Other	(91.3)	(47.8)	(39.1)	(60.9)	(30.4)	(0.0)	(4.3)	28
<b>Caste/tribe#</b>								
Scheduled caste	85.6	15.3	36.3	51.9	13.1	2.8	10.7	2,244
Scheduled tribe	82.7	11.0	31.2	47.5	9.3	2.7	12.4	542
Other backward class	85.8	19.0	43.3	57.0	17.0	3.1	9.7	5,985
Other	87.7	27.7	52.2	63.7	22.0	3.0	7.9	4,630
<b>Standard of living index</b>								
Low	82.3	8.3	28.3	46.9	8.4	2.6	12.9	3,573
Medium	85.5	15.8	40.4	55.5	12.3	2.6	9.9	5,759
High	90.8	39.3	64.9	71.3	33.4	3.9	5.4	4,168
Total	86.3	21.1	44.7	58.1	17.8	3.0	9.3	13,500

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

Among women who mentioned ways to avoid HIV/AIDS, a higher proportion of women (86 percent) said that “sex with only one partner” is a way to avoid it. Other ways to prevent HIV/AIDS mentioned by women were ‘sterilizing needles and syringes before injecting’ (58 percent), ‘checking blood prior to transfusion’ (45 percent) and ‘using a condom correctly during each sexual intercourse’ (21 percent), while 18 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 Muslim women, women who belong to ‘other castes’ category, women with a high level of education and those from the households 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 did not know of any method to avoid infection, compared to 9 percent women in the state.

<b>Table 8.15 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG MEN</b>								
Percentage of husbands of currently married women who have heard about HIV/AIDS and who reported that HIV/AIDS can be avoided in specific ways by selected background characteristics, Andhra Pradesh, 2002-04								
Background characteristic	Percentage who reported that 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	91.1	50.1	41.3	64.4	4.9	1.4	4.5	834
25-34	91.9	54.4	49.4	66.8	8.8	1.0	4.2	3,618
35-44	91.1	49.2	42.8	61.2	6.7	1.4	4.7	3,344
45+	89.1	44.1	42.4	55.9	6.5	1.5	7.7	1,722
<b>Residence</b>								
Rural	90.0	44.7	39.6	58.3	6.2	1.1	6.2	6,263
Urban	93.0	61.2	55.8	71.2	9.5	1.7	2.6	3,256
<b>Education</b>								
Non-literate	87.3	29.5	19.5	39.1	1.5	1.1	9.7	3,242
0-9@ years	91.1	50.0	41.2	64.1	5.5	0.8	4.4	2,866
10 years and above	94.5	70.5	72.8	83.9	14.3	1.8	1.1	3,410
<b>Religion</b>								
Hindu	90.7	49.0	45.1	61.9	7.3	1.2	5.1	8,125
Muslim	94.5	56.2	49.7	69.1	7.1	1.0	3.7	905
Christian	90.2	62.7	35.6	63.7	8.5	2.7	5.1	472
<b>Caste/tribe#</b>								
Scheduled caste	89.9	49.6	35.0	56.8	6.3	1.0	6.6	1,743
Scheduled tribe	93.0	40.0	28.3	50.6	3.6	2.7	6.2	462
Other backward class	90.0	47.3	45.9	61.0	7.4	1.2	5.2	4,261
Other	92.7	56.8	52.6	70.4	8.5	1.3	3.7	2,988
<b>Standard of living index</b>								
Low	88.3	37.3	28.5	47.2	3.9	1.1	8.7	3,014
Medium	91.1	48.4	43.5	63.0	6.6	1.1	4.5	3,966
High	94.2	68.9	67.2	80.6	12.5	1.8	1.4	2,538
Total	91.0	50.4	45.1	62.7	7.3	1.3	5.0	9,518

Note: Total includes 16 men with other category in religion are not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate men with no year of schooling are also included.

In Andhra Pradesh, a majority of the women (86 percent) reported that 'sex with only one partner' is a way to avoid HIV/AIDS, a still higher proportion of men (91 percent) also reported the same, and this was the most commonly reported way to avoid HIV/AIDS in all the socio-economic groups. Other ways to prevent HIV/AIDS mentioned by men are 'sterilizing needles and syringes before injecting' (63 percent), 'using a condom correctly during each sexual intercourse' (50 percent) and 'checking blood prior to transfusion' (45 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 castes' category, among men with a high level of education and among those from the households with a high standard of living. Christian men were more likely to report that HIV/AIDS can be avoided by using a condom correctly during each sexual intercourse.

#### 8.5.4 Misconceptions 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 or kissing them, sharing their clothes or sharing eating utensils, stepping on their 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.

Background characteristic	Percentage having misconceptions about the transmission of HIV/AIDS by							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	17.6	21.0	22.1	21.8	23.4	23.3	32.1	8,221
Urban	9.3	11.6	13.4	12.5	13.2	13.7	24.0	5,278
<b>Education</b>								
Non-literate	19.6	23.1	24.4	24.0	25.9	25.2	32.3	6,092
0-9@ years	12.9	16.1	17.4	16.9	17.5	18.8	30.2	4,072
10 years and above	6.6	8.2	10.0	9.1	9.9	10.0	21.2	3,335
<b>Religion</b>								
Hindu	14.9	18.0	19.4	18.7	20.1	20.1	29.4	11,401
Muslim	10.4	12.3	13.4	13.5	14.1	15.3	25.5	1,354
Christian	12.3	15.7	17.2	18.0	18.0	18.7	27.8	717
Other	(21.7)	(30.4)	(26.1)	(30.4)	(30.4)	(30.4)	(34.8)	28
<b>Caste/tribe#</b>								
Scheduled caste	16.9	20.2	21.9	21.3	22.3	22.0	30.6	2,244
Scheduled tribe	18.2	20.7	21.2	21.0	22.1	22.2	32.8	542
Other backward class	15.2	18.3	19.4	19.2	21.0	20.5	28.4	5,985
Other	11.3	14.0	15.7	14.7	15.4	16.6	28.1	4,630
<b>Standard of living index</b>								
Low	18.5	22.0	23.1	23.1	24.7	24.6	31.1	3,573
Medium	16.2	19.5	20.9	20.4	22.0	21.5	31.1	5,759
High	8.2	10.2	11.9	10.9	11.3	12.4	24.0	4,168
Total	14.3	17.3	18.7	18.2	19.4	19.5	28.9	13,500

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

Being bitten by mosquitoes, fleas or bedbugs is commonly reported as a way of getting HIV/AIDS infection by women in all the groups, and this percentage is higher among rural areas (32 percent) than in urban areas (24 percent). Literate women who have completed 10 or more years of schooling and women from households with a high standard of living, mentioned this method of transmission less often. Other misconceptions about the spreading of HIV/AIDS were ‘stepping on urine/stool’ (20 percent), ‘sharing eating utensils’ (19 percent), ‘kissing’ (19 percent), ‘sharing clothes’ (18 percent), ‘hugging’ (17 percent), and ‘shaking hands’ (14 percent). The percentages of all these misconceptions are also lower among urban women, among women who belong to ‘other castes’ category, among Muslim women, among literate women who have completed 10 or more years of schooling and among those from the households with a high standard of living.

Table 8.17 presents the percentage of men with misconceptions about the spreading of HIV/AIDS through specific ways by selected background characteristics.

Background characteristic	Percentage having misconceptions about the transmission of HIV/AIDS by							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	8.3	12.3	19.8	16.6	21.0	19.4	35.7	6,263
Urban	4.5	6.1	14.2	9.8	13.2	12.9	25.7	3,256
<b>Education</b>								
Non-literate	11.9	16.8	28.3	22.7	28.7	24.6	37.9	3,242
0-9@ years	7.2	10.8	18.9	15.8	19.9	19.2	37.7	2,866
10 years and above	2.1	3.3	7.0	4.9	7.1	8.4	22.3	3,410
<b>Religion</b>								
Hindu	6.9	10.2	17.6	14.4	18.7	17.5	32.9	8,125
Muslim	7.3	9.2	16.3	11.0	15.6	15.0	25.2	905
Christian	7.8	11.9	24.5	17.8	16.1	16.1	34.5	472
<b>Caste/tribe#</b>								
Scheduled caste	7.9	12.7	21.5	16.7	20.4	17.6	33.2	1,743
Scheduled tribe	15.6	21.2	33.8	26.2	29.5	26.6	39.4	462
Other backward class	7.5	10.5	17.9	14.8	19.8	18.6	34.2	4,261
Other	4.3	6.4	13.3	10.3	13.3	13.4	27.8	2,988
<b>Standard of living index</b>								
Low	10.3	15.4	24.8	20.6	26.0	23.4	39.1	3,014
Medium	7.2	10.3	17.7	14.6	18.7	17.6	33.1	3,966
High	2.7	3.7	9.9	6.2	8.5	9.0	22.7	2,538
Total	7.0	10.2	17.9	14.3	18.3	17.2	32.2	9,518

Note: Total includes 16 men with other category in religion are not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate men with no year of schooling are also included.

Again, just like the women, men in all the socio-economic groups reported that HIV/AIDS is transmitted through insect bites, i.e. through mosquitoes, fleas or bedbugs bites. Thirty-two percent of the men in Andhra Pradesh felt so. The percentage who reported that HIV/AIDS could be transmitted through the biting by mosquitoes or fleas or bedbugs was

relatively higher among rural men (36 percent) than among urban men (26 percent). A relatively lower proportion of literate men who have completed 10 or more years of schooling, men from households with a high standard of living, Muslim men, and men belonging to 'other castes' category are of the impression that HIV/AIDS will not spread when one is bitten by mosquitoes, fleas or bedbugs. Other misconceptions about the spread of HIV/AIDS are 'sharing eating utensils' and 'kissing' (18 percent each), 'stepping on urine/stool' (17 percent), 'sharing clothes' (14 percent), 'hugging' (10 percent), and 'shaking hands' (7 percent). All these misconceptions reported by men are relatively lower than those reported by women. The percentages of all these misconceptions are also lower among urban men, men who belong to 'other castes' category, among Muslim men, among literate men who have completed 10 or more years of schooling and among those from the households with a high standard of living.

### 8.5.5 Knowledge of Curability of HIV/AIDS

Table 8.18 shows the percentage distribution of currently married women and their husbands who have heard about HIV/AIDS by knowledge of curability of the same, according to some selected background characteristics.

<b>Table 8.18 KNOWLEDGE OF CURABILITY ABOUT HIV/AIDS</b>								
Percent distribution of currently married women and their husbands who have heard about HIV/AIDS by knowledge of curability about HIV/AIDS, according to some selected background characteristics, Andhra Pradesh, 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	7.1	73.5	19.4	8,221	6.1	84.3	9.6	6,263
Urban	8.1	79.7	12.3	5,278	5.9	87.7	6.5	3,256
<b>Education</b>								
Non-literate	6.6	69.6	23.8	6,092	6.2	78.9	14.8	3,242
0-9@ years	8.8	75.8	15.3	4,072	6.7	84.8	8.5	2,866
10 years and above	7.5	87.7	4.8	3,335	5.4	92.1	2.5	3,410
<b>Religion</b>								
Hindu	7.5	75.9	16.6	11,401	5.9	85.5	8.6	8,125
Muslim	7.5	77.2	15.2	1,354	6.3	85.7	8.0	905
Christian	7.5	74.7	17.8	717	7.4	84.9	7.7	472
Other	(0.0)	(70.5)	(29.5)	28	*	*	*	16
<b>Caste/tribe#</b>								
Scheduled caste	6.9	71.4	21.7	2,244	6.4	82.9	10.7	1,743
Scheduled tribe	7.3	72.1	20.6	542	6.6	81.7	11.7	462
Other backward class	7.6	75.4	17.0	5,985	5.9	86.4	7.7	4,261
Other	7.6	79.3	13.1	4,630	6.0	86.0	8.0	2,988
<b>Standard of living index</b>								
Low	6.7	69.1	24.2	3,573	6.3	80.7	12.9	3,014
Medium	7.7	74.4	17.8	5,759	5.7	86.3	8.0	3,966
High	7.8	83.9	8.3	4,168	6.2	89.7	4.1	2,538
Total	7.5	75.9	16.6	13,500	6.1	85.4	8.5	9,518
Note: # Total figure may not add to N due to do not know and missing cases. @ Literate persons with no years of schooling are also included. ( ) Based on less than 50 unweighted cases. * Percentage not shown: Based on very few cases.								

Around 8 percent women and 6 percent men have the notion that HIV/AIDS is curable, whereas 76 percent women and 85 percent men replied that the disease is not curable. Seventeen percent women and 9 percent men do not have any idea regarding the curability of the disease. It can be noted from the figures that both men and women of urban area, having high level of education and from households of high standard of living are having better knowledge as far as curability of HIV/AIDS is concerned.

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

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

<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, Andhra Pradesh, 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
Adilabad	16.7	63.7	35.0	80.4
Anantapur	23.8	76.0	35.3	93.2
Chittoor	30.2	69.4	62.1	95.4
Cuddapah	19.2	83.3	51.6	97.1
East Godavari	19.4	88.5	65.0	98.0
Guntur	34.5	86.8	47.7	97.5
Hyderabad	18.4	79.1	35.9	97.0
Karimnagar	25.4	81.6	57.7	92.8
Khammam	38.5	83.5	41.4	91.6
Krishna	24.8	93.7	57.0	94.2
Kurnool	27.7	62.0	60.3	94.7
Mahbubnagar	12.2	37.3	40.7	68.4
Medak	41.0	76.1	46.7	92.5
Nalgonda	26.5	78.3	40.5	92.4
Nellore	29.2	84.3	42.1	98.2
Nizamabad	27.2	74.2	33.7	89.1
Prakasam	30.1	87.7	59.5	98.3
Rangareddi	27.1	75.5	65.2	91.2
Srikakulam	19.0	68.8	27.8	84.1
Visakhapatnam	26.7	63.4	54.2	82.5
Vizianagaram	17.5	64.6	54.8	86.3
Warangal	12.3	61.2	32.1	81.8
West Godavari	23.6	86.4	56.7	97.8
Andhra Pradesh	24.7	75.5	49.0	91.5

According to DLHS-RCH, 25 percent and 76 percent respectively of women were aware of RTI/STI and HIV/AIDS and the corresponding figures for husbands of eligible women are 49 and 92 percent. The awareness of RTI/STI and HIV/AIDS among men is higher than that among women by 24 and 16 percentage points respectively.

In general, in all of the districts of Andhra Pradesh state men are more aware of RTI/STI and HIV/AIDS than women. The highest level of awareness about RTI/STI among women was reported in Medak (41 percent) and the lowest in Mahbubnagar and Warangal (12 percent each). Among men the highest level of awareness of RTI/STI was reported in East Godavari and Rangareddi (65 percent each), followed by Chittoor (62 percent) and Kurnool (60 percent) and the lowest in Srikakulam (28 percent).

The proportions of currently married women aged 15-44 and their husbands who are aware of HIV/AIDS in the districts of the state of Andhra Pradesh are also presented in Table 8.19. Among women, the awareness about HIV/AIDS ranges from the highest of 94 percent in Krishna to the lowest of 37 percent in Mahbubnagar. With the exception of Mahbubnagar, Adilabad, Kurnool, Visakhapatnam, Vizianagaram and Warangal, in every district a minimum of three-fifths of the women reported awareness of HIV/AIDS. A high level of awareness of HIV/AIDS among men exceeding 80 percent was reported in all the districts, except Mahbubnagar.

Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Contraceptive Prevalence Rate (Currently Married Women age 15-44)</b>							
Adilabad	0.562	0.018	831	831	3.2	0.527	0.596
Anantapur	0.598	0.018	836	836	3.0	0.563	0.632
Chittoor	0.651	0.017	823	823	2.6	0.617	0.685
Cuddapah	0.516	0.018	850	850	3.5	0.481	0.552
East Godavari	0.700	0.017	728	728	2.4	0.667	0.734
Guntur	0.705	0.016	858	858	2.3	0.674	0.737
Hyderabad	0.568	0.020	704	704	3.5	0.529	0.607
Karimnagar	0.623	0.018	772	772	2.9	0.588	0.658
Khammam	0.673	0.017	775	775	2.5	0.639	0.707
Krishna	0.737	0.016	800	800	2.2	0.705	0.768
Kurnool	0.572	0.018	859	859	3.1	0.537	0.606
Mahabubnagar	0.537	0.020	714	714	3.7	0.498	0.576
Medak	0.575	0.018	792	792	3.1	0.539	0.611
Nalgonda	0.661	0.017	800	800	2.6	0.627	0.695
Nellore	0.570	0.018	800	800	3.2	0.534	0.606
Nizamabad	0.508	0.018	853	853	3.5	0.474	0.543
Prakasam	0.662	0.019	644	644	2.9	0.625	0.699
Rangareddi	0.554	0.019	704	704	3.4	0.516	0.592
Srikakulam	0.643	0.018	743	743	2.8	0.607	0.679
Visakhapatnam	0.659	0.019	731	731	2.9	0.622	0.696
Vizianagaram	0.662	0.019	686	686	2.9	0.626	0.699
Warangal	0.637	0.018	811	811	2.8	0.602	0.671
West Godavari	0.719	0.017	772	772	2.4	0.686	0.752

Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Unmet Need (Currently Married Women age 15-44)</b>							
Adilabad	0.136	0.012	831	831	8.8	0.112	0.160
Anantapur	0.098	0.011	836	836	11.2	0.077	0.120
Chittoor	0.106	0.011	823	823	10.4	0.084	0.128
Cuddapah	0.156	0.013	850	850	8.3	0.131	0.181
East Godavari	0.091	0.011	728	728	12.1	0.070	0.112
Guntur	0.098	0.011	858	858	11.2	0.077	0.118
Hyderabad	0.174	0.015	704	704	8.6	0.144	0.204
Karimnagar	0.109	0.011	772	772	10.1	0.086	0.131
Khammam	0.071	0.010	775	775	14.1	0.052	0.091
Krishna	0.073	0.010	800	800	13.7	0.054	0.092
Kurnool	0.112	0.011	859	859	9.8	0.091	0.134
Mahabubnagar	0.183	0.015	714	714	8.2	0.153	0.212
Medak	0.117	0.012	792	792	10.3	0.094	0.139
Nalgonda	0.072	0.010	800	800	13.9	0.053	0.092
Nellore	0.129	0.012	800	800	9.3	0.105	0.153
Nizamabad	0.087	0.010	853	853	11.5	0.068	0.106
Prakasam	0.122	0.013	644	644	10.7	0.096	0.148
Rangareddi	0.177	0.015	704	704	8.5	0.148	0.206
Srikakulam	0.099	0.011	743	743	11.1	0.076	0.121
Visakhapatnam	0.160	0.015	731	731	9.4	0.131	0.188
Vizianagaram	0.083	0.011	686	686	13.3	0.062	0.105
Warangal	0.132	0.013	811	811	9.8	0.107	0.158
West Godavari	0.088	0.011	772	772	12.5	0.067	0.109

Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Received Any Antenatal Check-up (last live/still births of past 3 years)</b>							
Adilabad	0.914	0.016	269	271	1.8	0.882	0.947
Anantapur	0.967	0.013	229	236	1.3	0.942	0.992
Chittoor	0.978	0.010	229	231	1.0	0.959	0.997
Cuddapah	0.989	0.007	257	258	0.7	0.976	1.000
East Godavari	0.951	0.015	227	228	1.6	0.923	0.980
Guntur	0.953	0.013	221	221	1.4	0.927	0.980
Hyderabad	0.986	0.008	240	239	0.8	0.971	1.000
Karimnagar	0.992	0.006	227	232	0.6	0.980	1.000
Khammam	0.969	0.013	196	192	1.3	0.944	0.994
Krishna	0.985	0.009	195	195	0.9	0.968	1.000
Kurnool	0.893	0.018	309	311	2.0	0.858	0.928
Mahabubnagar	0.817	0.027	247	249	3.3	0.765	0.870
Medak	0.972	0.011	255	259	1.1	0.950	0.993
Nalgonda	0.939	0.017	238	243	1.8	0.906	0.972
Nellore	0.988	0.006	237	236	0.6	0.977	1.000
Nizamabad	0.959	0.012	311	316	1.3	0.935	0.982
Prakasam	0.970	0.013	170	166	1.3	0.944	0.996
Rangareddi	0.910	0.018	257	253	2.0	0.875	0.945
Srikakulam	0.957	0.013	262	267	1.4	0.931	0.982
Visakhapatnam	0.835	0.030	249	258	3.6	0.777	0.893
Vizianagaram	0.971	0.012	195	200	1.2	0.948	0.994
Warangal	0.985	0.009	262	259	0.9	0.968	1.000
West Godavari	0.968	0.012	204	207	1.2	0.944	0.992

Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Received 3+ Antenatal Check-ups (last live/still births of past 3 years)</b>							
Adilabad	0.832	0.023	269	271	2.8	0.787	0.876
Anantapur	0.873	0.023	229	236	2.6	0.829	0.918
Chittoor	0.889	0.021	229	230	2.4	0.848	0.931
Cuddapah	0.915	0.018	257	258	2.0	0.880	0.951
East Godavari	0.916	0.019	227	228	2.1	0.879	0.952
Guntur	0.914	0.019	221	220	2.1	0.877	0.952
Hyderabad	0.960	0.014	240	240	1.5	0.932	0.987
Karimnagar	0.957	0.014	227	232	1.5	0.931	0.984
Khammam	0.851	0.026	196	191	3.1	0.800	0.901
Krishna	0.947	0.016	195	195	1.7	0.916	0.978
Kurnool	0.755	0.025	309	312	3.3	0.706	0.804
Mahabubnagar	0.767	0.029	247	248	3.8	0.710	0.823
Medak	0.963	0.012	255	260	1.2	0.940	0.986
Nalgonda	0.817	0.027	238	243	3.3	0.764	0.869
Nellore	0.945	0.014	237	236	1.5	0.917	0.973
Nizamabad	0.875	0.019	311	315	2.2	0.837	0.912
Prakasam	0.815	0.031	170	166	3.8	0.755	0.875
Rangareddi	0.875	0.021	257	254	2.4	0.834	0.915
Srikakulam	0.908	0.018	262	267	2.0	0.872	0.944
Visakhapatnam	0.764	0.032	249	257	4.2	0.702	0.826
Vizianagaram	0.882	0.023	195	200	2.6	0.837	0.928
Warangal	0.952	0.014	262	259	1.5	0.924	0.979
West Godavari	0.922	0.019	204	207	2.1	0.886	0.959



Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Institutional Delivery (last live/still births of past 3 years)</b>							
Adilabad	0.528	0.031	269	270	5.9	0.467	0.588
Anantapur	0.504	0.034	229	236	6.7	0.437	0.572
Chittoor	0.577	0.034	229	230	5.9	0.511	0.643
Cuddapah	0.645	0.032	257	259	5.0	0.582	0.708
East Godavari	0.789	0.027	227	229	3.4	0.736	0.843
Guntur	0.643	0.033	221	221	5.1	0.579	0.708
Hyderabad	0.927	0.018	240	239	1.9	0.891	0.963
Karimnagar	0.722	0.030	227	232	4.2	0.664	0.781
Khammam	0.617	0.035	196	191	5.7	0.548	0.687
Krishna	0.684	0.035	195	194	5.1	0.616	0.752
Kurnool	0.322	0.027	309	312	8.4	0.268	0.375
Mahabubnagar	0.482	0.034	247	247	7.1	0.417	0.548
Medak	0.678	0.030	255	260	4.4	0.619	0.737
Nalgonda	0.636	0.032	238	243	5.0	0.572	0.699
Nellore	0.737	0.029	237	236	3.9	0.680	0.794
Nizamabad	0.608	0.028	311	316	4.6	0.553	0.664
Prakasam	0.532	0.039	170	165	7.3	0.455	0.609
Rangareddi	0.641	0.031	257	253	4.8	0.580	0.701
Srikakulam	0.313	0.029	262	265	9.3	0.255	0.370
Visakhapatnam	0.500	0.034	249	258	6.8	0.433	0.566
Vizianagaram	0.421	0.036	195	200	8.6	0.349	0.492
Warangal	0.739	0.029	262	258	3.9	0.682	0.795
West Godavari	0.608	0.036	204	206	5.9	0.536	0.679

Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Safe Delivery (last live/still births of past 3 years)</b>							
Adilabad	0.630	0.030	269	271	4.8	0.572	0.689
Anantapur	0.580	0.034	229	235	5.9	0.513	0.647
Chittoor	0.631	0.033	229	231	5.2	0.566	0.695
Cuddapah	0.693	0.031	257	258	4.5	0.632	0.754
East Godavari	0.874	0.022	227	229	2.5	0.831	0.916
Guntur	0.744	0.030	221	221	4.0	0.686	0.802
Hyderabad	0.933	0.018	240	239	1.9	0.898	0.967
Karimnagar	0.786	0.027	227	231	3.4	0.733	0.839
Khammam	0.711	0.033	196	191	4.6	0.647	0.775
Krishna	0.821	0.028	195	195	3.4	0.766	0.877
Kurnool	0.376	0.029	309	312	7.7	0.319	0.432
Mahabubnagar	0.579	0.033	247	249	5.7	0.514	0.644
Medak	0.731	0.029	255	259	4.0	0.675	0.788
Nalgonda	0.700	0.031	238	242	4.4	0.639	0.761
Nellore	0.775	0.027	237	236	3.5	0.721	0.829
Nizamabad	0.694	0.027	311	316	3.9	0.641	0.747
Prakasam	0.621	0.038	170	166	6.1	0.546	0.695
Rangareddi	0.689	0.030	257	252	4.4	0.632	0.747
Srikakulam	0.527	0.032	262	267	6.1	0.464	0.590
Visakhapatnam	0.589	0.034	249	258	5.8	0.523	0.656
Vizianagaram	0.559	0.037	195	201	6.6	0.487	0.630
Warangal	0.767	0.028	262	259	3.7	0.713	0.821
West Godavari	0.767	0.032	204	207	4.2	0.704	0.829

Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Received BCG Vaccination (last and last but one living children, age 12-23 months)</b>							
Adilabad	0.904	0.038	63	64	4.2	0.829	0.978
Anantapur	0.930	0.031	67	66	3.3	0.869	0.990
Chittoor	0.989	0.011	76	78	1.1	0.969	1.010
Cuddapah	0.833	0.045	79	83	5.5	0.744	0.922
East Godavari	0.988	0.012	74	72	1.2	0.965	1.011
Guntur	0.939	0.026	71	73	2.8	0.888	0.991
Hyderabad	0.973	0.019	79	79	1.9	0.936	1.010
Karimnagar	0.969	0.022	56	57	2.3	0.926	1.012
Khammam	0.968	0.023	62	63	2.3	0.923	1.012
Krishna	1.000	0.000	64	64	0.0	1.000	1.000
Kurnool	0.925	0.030	80	78	3.2	0.866	0.984
Mahbubnagar	0.743	0.065	55	59	8.8	0.615	0.871
Medak	0.980	0.014	76	75	1.4	0.953	1.008
Nalgonda	0.929	0.031	69	72	3.3	0.868	0.990
Nellore	0.923	0.033	63	62	3.6	0.858	0.989
Nizamabad	0.898	0.031	104	106	3.5	0.837	0.959
Prakasam	0.984	0.016	57	56	1.6	0.953	1.015
Rangareddi	0.882	0.040	66	66	4.6	0.803	0.961
Srikakulam	0.898	0.042	69	70	4.7	0.815	0.981
Visakhapatnam	0.798	0.064	57	61	8.0	0.672	0.923
Vizianagaram	0.988	0.012	52	55	1.2	0.964	1.012
Warangal	0.989	0.011	80	81	1.2	0.966	1.011
West Godavari	0.942	0.033	51	53	3.5	0.878	1.007

Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Received Measles Vaccination (last and last but one living children, age 12-23 months)</b>							
Adilabad	0.725	0.056	63	64	7.7	0.616	0.835
Anantapur	0.783	0.049	67	66	6.2	0.687	0.879
Chittoor	0.696	0.053	76	78	7.6	0.593	0.799
Cuddapah	0.689	0.054	79	83	7.8	0.583	0.795
East Godavari	0.770	0.049	74	72	6.4	0.674	0.867
Guntur	0.678	0.054	71	73	8.0	0.572	0.785
Hyderabad	0.806	0.046	79	79	5.7	0.715	0.896
Karimnagar	0.888	0.040	56	57	4.6	0.809	0.967
Khammam	0.785	0.054	62	63	6.9	0.679	0.892
Krishna	0.805	0.049	64	64	6.1	0.708	0.901
Kurnool	0.651	0.054	80	78	8.2	0.545	0.756
Mahbubnagar	0.328	0.065	55	59	19.8	0.200	0.456
Medak	0.749	0.051	76	75	6.8	0.650	0.848
Nalgonda	0.824	0.047	69	72	5.7	0.732	0.916
Nellore	0.747	0.055	63	62	7.3	0.640	0.854
Nizamabad	0.814	0.039	104	106	4.8	0.737	0.891
Prakasam	0.806	0.050	57	56	6.2	0.707	0.904
Rangareddi	0.705	0.058	66	66	8.2	0.591	0.819
Srikakulam	0.758	0.054	69	70	7.1	0.652	0.864
Visakhapatnam	0.553	0.069	57	61	12.4	0.418	0.688
Vizianagaram	0.780	0.058	52	55	7.4	0.667	0.893
Warangal	0.859	0.039	80	81	4.5	0.782	0.935
West Godavari	0.793	0.058	51	53	7.3	0.680	0.906

Sampling errors, Andhra Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
<b>Birth order 3+ (births in last three years)</b>							
Adilabad	0.261	0.028	252	255	10.7	0.206	0.316
Anantapur	0.217	0.028	234	238	12.9	0.163	0.272
Chittoor	0.274	0.032	215	220	11.7	0.211	0.336
Cuddapah	0.222	0.027	260	260	12.2	0.168	0.275
East Godavari	0.121	0.021	234	234	17.4	0.080	0.163
Guntur	0.161	0.026	214	214	16.1	0.111	0.212
Hyderabad	0.256	0.030	233	234	11.7	0.197	0.316
Karimnagar	0.216	0.029	202	205	13.4	0.159	0.273
Khammam	0.167	0.028	183	181	16.8	0.113	0.221
Krishna	0.148	0.025	211	208	16.9	0.099	0.197
Kurnool	0.353	0.029	279	280	8.2	0.296	0.411
Mahabubnagar	0.340	0.032	242	244	9.4	0.277	0.403
Medak	0.259	0.029	244	245	11.2	0.202	0.316
Nalgonda	0.215	0.027	243	246	12.6	0.162	0.267
Nellore	0.149	0.024	221	217	16.1	0.101	0.197
Nizamabad	0.257	0.026	309	315	10.1	0.207	0.307
Prakasam	0.265	0.034	169	165	12.8	0.197	0.332
Rangareddi	0.330	0.030	267	260	9.1	0.272	0.388
Srikakulam	0.179	0.026	245	249	14.5	0.128	0.230
Visakhapatnam	0.224	0.030	236	244	13.4	0.165	0.283
Vizianagaram	0.140	0.025	202	209	17.9	0.091	0.188
Warangal	0.200	0.030	224	221	15.0	0.142	0.258
West Godavari	0.158	0.028	194	196	17.7	0.103	0.214

Sampling errors, Andhra Pradesh, 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	0.628	0.004	17,886	17,886	1.172	0.6	0.620	0.635
Rural	0.628	0.005	11,857	11,857	1.098	0.7	0.618	0.637
Urban	0.627	0.007	6,029	6,029	1.316	1.1	0.613	0.641
<b>Unmet Need (Currently Married Women age 15-44)</b>								
Total	0.117	0.003	17,886	17,886	1.202	2.3	0.112	0.122
Rural	0.107	0.003	11,857	11,857	1.119	2.8	0.101	0.113
Urban	0.136	0.005	6,029	6,029	1.334	3.7	0.126	0.146
<b>Received Any Antenatal Check-up (last live/still births of past 3 years)</b>								
Total	0.945	0.004	5,486	5,501	1.341	0.4	0.938	0.952
Rural	0.934	0.005	3,715	3,725	1.344	0.5	0.925	0.943
Urban	0.968	0.005	1,771	1,776	1.295	0.5	0.959	0.978
<b>Received 3+ Antenatal Check-ups (last live/still births of past 3 years)</b>								
Total	0.881	0.005	5,486	5,501	1.205	0.5	0.871	0.890
Rural	0.863	0.006	3,715	3,725	1.185	0.7	0.850	0.875
Urban	0.919	0.007	1,771	1,776	1.246	0.8	0.904	0.933
<b>Institutional Delivery (last live/still births of past 3 years)</b>								
Total	0.609	0.007	5,486	5,500	1.161	1.2	0.595	0.623
Rural	0.516	0.009	3,715	3,725	1.103	1.7	0.499	0.533
Urban	0.803	0.011	1,771	1,775	1.324	1.3	0.782	0.824
<b>Safe Delivery (last live/still births of past 3 years)</b>								
Total	0.690	0.007	5,486	5,501	1.144	1.0	0.677	0.703
Rural	0.609	0.008	3,715	3,725	1.100	1.4	0.592	0.625
Urban	0.861	0.009	1771	1776	1.262	1.1	0.843	0.879
<b>Received BCG Vaccination (last and last but one living children, age 12-23 months)</b>								
Total	0.933	0.007	1,664	1,676	1.306	0.8	0.919	0.946
Rural	0.920	0.010	1,086	1,093	1.348	1.0	0.901	0.939
Urban	0.957	0.009	578	583	1.134	0.9	0.939	0.975
<b>Received Measles Vaccination (last and last but one living children, age 12-23 months)</b>								
Total	0.740	0.012	1,664	1,676	1.205	1.6	0.717	0.763
Rural	0.718	0.015	1,086	1,093	1.159	2.0	0.689	0.747
Urban	0.781	0.020	578	583	1.292	2.5	0.743	0.819
<b>Birth order 3+ (births in last three years)</b>								
Total	0.225	0.006	5,313	5,341	1.175	2.8	0.213	0.237
Rural	0.229	0.007	3,586	3,607	1.118	3.2	0.214	0.243
Urban	0.217	0.011	1,727	1,734	1.300	5.2	0.195	0.239

## APPENDIX A

### Sampling Errors Estimation

The accuracy of programme indicators such as contraceptive prevalence rate, unmet need, 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 is also affected to a great extent by non-sampling errors arising from lack of proper operationalisation and non-response cases, and are inherent in large scale surveys. The estimation procedure of District Level Reproductive & Child Health survey takes into consideration design appropriateness and non-response rates. DLHS-RCH estimator of a programme indicator is derived 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 ratio.

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

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

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

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

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

**List of Selected Programme Variables for Sampling Errors, DLHS-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 of the past three years
ANC3+	Proportion	Last live/still births of the past three years
Institutional Delivery	Proportion	Last live/still births of the past three years
Safe Delivery	Proportion	Last live/still births of the past three years
BCG	Proportion	Children age 12-23 months
Measles	Proportion	Children age 12-23 months
BO3+	Proportion	Currently married women age 15-44 years with births in last three years

## APPENDIX B

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## **APPENDIX C**

### **Questionnaires**

**Household Questionnaire  
Woman's Questionnaire  
Husband's Questionnaire  
Village Questionnaire**

## NOTES