FACT SHEET, ANDHRA PRADESH	Quality of Family Planning Services <sup>7</sup>
· · · · · · · · · · · · · · · · · · ·	Percent told about side effects of method
NATIONAL FAMILY HEALTH SURVEY, 1998-99	Percent who received follow-up services79.9
Sample Size	Childhood Mortality
Households	Infant mortality rate <sup>8</sup> 65.8
Ever-married women age 15-494032	Under-five mortality rate <sup>8</sup>
Characteristics of Households	Safe Motherhood and Women's Reproductive Health
Percent with electricity74.4	Percent of births <sup>9</sup> within 24 months of previous birth27.3
Percent with 15 minutes of safe water supply 1	
Percent with flush toilet	Percent of births <sup>4</sup> whose mothers received:
Percent with no toilet facility	Antenatal check-up from a health professional92.7
Percent using govt. health facilities for sickness14.8	Antenatal check-up in first trimester
Percent using govt: health facilities for siekhess	Two or more tetanus toxoid injections
refeelt using fourzed sait (at least 13 ppin)27.4	Iron and folic acid tablets or syrup
Characteristics of Women <sup>2</sup>	
Percent urban24.9	Percent of births <sup>4</sup> whose mothers were assisted at
Percent illiterate63.8	delivery by a:
Percent completed high school and above10.8	Doctor50.5
Percent Hindu87.3	Nurse/midwife
Percent Muslim6.7	Traditional birth attendant
Percent Christian	
Percent regularly exposed to mass media	Percent <sup>6</sup> reporting at least one reproductive
Percent working in the past 12 months	health problem
Status of Women <sup>2</sup>	Awareness of AIDS
	Percent of women who have heard of AIDS55.3
Percent involved in decisions about own health	Percent of women who have heard of AIDS
Percent with control over some money57.7	
	Child Health
Marriage	Percent of children age 0-3 months exclusively
Percent never married among women age 15-1955.1	breastfed74.6
Median age at marriage among women age 20-4915.4	Median duration of breastfeeding (months)24.8
Fertility and Fertility Preferences	Percent of children <sup>10</sup> who received vaccinations:
Total fertility rate (for the past 3 years)2.25	BCG90.2
Mean number of children ever born to women 40-49 <sup>3</sup> 4.03	DPT (3 doses)79.5
Median age at first birth among women age 20-4918.3	Polio (3 doses)81.6
Percent of births <sup>4</sup> of order 3 and above31.5	Measles
Mean ideal number of children <sup>5</sup> 2.4	All vaccinations
Percent of women with 2 living children wanting	
another child	Percent of children <sup>11</sup> with diarrhoea in the past
unouter cities	2 weeks who received oral rehydration salts (ORS)40.0
<b>Current Contraceptive Use</b> <sup>6</sup>	•
Any method59.6	Percent of children with acute respiratory infection in
,	the past 2 weeks taken to a health facility or provider 69.4
Any modern method58.9	
Pill	Nutrition
IUD0.6	Percent of women with anaemia <sup>12</sup>
Condom0.7	Percent of women with moderate/severe anaemia <sup>12</sup> 17.3
Female sterilization	Percent of children age 6-35 months with anaemia <sup>12</sup> 72.3
Male sterilization	Percent of children age 6-35 months with moderate/
Any traditional method	severe anaemia <sup>12</sup>
Any traditional method	
Rhythm/safe period	(stunted) <sup>13</sup>
Withdrawal0.1	Percent of children acutely undernourished (wasted) <sup>13</sup> 9.1 Percent of children underweight <sup>13</sup> 37.7
Other traditional or modern method0.2	
Unmet Need for Family Planning <sup>6</sup>	For current users of modern methods
Percent with unmet need for family planning7.7	<sup>8</sup> For the 5 years preceding the survey (1994-98)
Percent with unmet need for spacing	<sup>9</sup> For births in the past 5 years (excluding first births)
1 ercent with thiniet need for spacing	<sup>10</sup> Children age 12-23 months
<u> </u>	<sup>11</sup> Children under 3 years old
<sup>1</sup> Water from pipes, handpump, or covered well	<sup>12</sup> Anaemia–haemoglobin level < 11.0 grams/decilitre (g/dl)
<sup>2</sup> Ever-married women age 15-49	
Ever-married women age 15-49 <sup>3</sup> Ever-married women	for children and pregnant women and < 12.0 g/dl for
	nonpregnant women. Moderate/severe anaemia
<sup>4</sup> For births in the past 3 years	-haemoglobin level < 10.0 g/dl.
<sup>5</sup> Excluding women giving non-numeric responses	Stunding assessed by neight-for-age, wasting assessed by
<sup>6</sup> Among currently married women age 15-49	weight-for-height, underweight assessed by weight-for-age

**Quality of Family Planning Services**<sup>7</sup>

#### **SUMMARY OF FINDINGS**

The second National Family Health Survey (NFHS-2), conducted in 1998–99, provides information on fertility, family planning, and important aspects of health, nutrition, and healthcare. The International Institute for Population Sciences (IIPS) coordinated the survey, which collected information from a nationally representative sample of approximately 95,000 ever-married women, age 15–49, from 26 states of India. These states comprise more than 99 percent of India's population.

IIPS also coordinated the first National Family Health Survey (NFHS-1) in 1992–93. Most of the types of information collected in NFHS-2 were also collected in the earlier survey, making it possible to identify trends over the intervening period of six and one-half years. In addition, the NFHS-2 questionnaire covered a number of new or expanded topics with important policy implications, such as reproductive health, women's autonomy, domestic violence, women's nutrition, and salt iodization.

In Andhra Pradesh, NFHS-2 field staff collected information from 3,872 households between 26 November 1998 and 4 March 1999 and interviewed 4,032 eligible women in these households. In addition to information on these women and their households, the survey collected information on 1,129 of their children born since January 1995. One health investigator on each survey team measured the height and weight of women and young children and took blood samples to assess the prevalence of anaemia.

### **Background Characteristics of the Survey Population**

Three-quarters (76 percent) of the population of Andhra Pradesh live in rural areas. The age distribution is typical of populations that have recently experienced a fertility decline, with relatively low proportions in the younger and older age groups. Thirty-three percent of the population is below age 15, and 5 percent is age 65 and above. The sex ratio is 995 females for every 1,000 males in rural areas but only 954 females for every 1,000 males in urban areas, suggesting that more men than women have migrated to urban areas.

The survey provides a variety of demographic and socioeconomic background information. Two-thirds (67 percent) of males and nearly half (46 percent) of females age six and above are literate, an increase of 7–8 percentage points from literacy rates at the time of NFHS-1. Seventy-six percent of children age 6–14 are attending school, an increase from 63 percent in NFHS-1. The proportions enrolled are rising rapidly at all levels of schooling, particularly for girls, but girls still lag behind boys in school attendance. Moreover, the disparity in school attendance by sex grows with increasing age of children. At age 15–17, 48 percent of boys attend school, compared with 30 percent of girls.

Questions about housing conditions and the standard of living of household members indicate some improvements since the time of NFHS-1. Seventy-four percent of households in Andhra Pradesh have electricity, and 52 percent have piped drinking water, compared with 62 percent and 36 percent, respectively, in NFHS-1. Seventy-three percent of households do not have any toilet facility, however.

In the state as a whole, 88 percent of household heads are Hindu, 6 percent are Muslim, and 6 percent are Christian. Muslims are concentrated in urban areas, where they comprise 15 percent of household heads. Twenty percent of household heads belong to scheduled castes, 5 percent belong to scheduled tribes, and 44 percent belong to other backward classes (OBCs). Less than one-third of household heads do not belong to any of these groups.

Women in Andhra Pradesh tend to marry at an early age. Forty-five percent of women age 15–19 are already married. In rural areas, more than half (53 percent) of women age 15–19 are married. Older women are more likely than younger women to have married at an early age: 61 percent of women who are now age 45–49 married before they were 15, compared with 18 percent of women age 15–19. Although this indicates that the proportion of women who marry young is declining rapidly, the majority of women in Andhra Pradesh still marry before reaching the legal minimum age of 18 years. On average, women are six years younger than the men they marry.

As part of an increasing emphasis on gender issues in NFHS-2, the survey asked women about their participation in household decision-making. In Andhra Pradesh, 93 percent of women are involved in decision-making on at least one of four selected topics. A much lower proportion (56 percent), however, are involved in decision-making about their own healthcare. Fifty-nine percent of women do work other than housework, and more than three-fourths of these women work for cash. Only 32 percent of women who earn cash can decide independently how to spend the money that they earn.

# **Fertility and Family Planning**

Fertility continues to decline in Andhra Pradesh. At current fertility levels, women will have an average of 2.3 children each throughout their childbearing years, one of the lowest levels in India. The total fertility rate is down from 2.6 children per woman at the time of NFHS-1 and is now approaching the replacement level of just over two children per woman.

Efforts to encourage the trend toward lower fertility might usefully focus on groups within the population that have higher fertility than average. In Andhra Pradesh, poor women and women from scheduled tribes and scheduled castes have somewhat higher fertility than other women, but the differences are not large. A more striking feature is the high level of childbearing among young women. The median age at first childbirth is 19 years, and women age 15–19 account for 29 percent of total fertility. Studies in India and elsewhere have shown that health and mortality risks increase when women give birth at such young ages—both for the women themselves and for their children. Family planning programmes focusing on women in this age group could make a significant impact on maternal and child health as well as reducing overall fertility in the state.

The appropriate design of family planning programmes depends, to a large extent, on women's fertility preferences. Women may have large families because they want many children, or they may prefer small families but, for a variety of reasons, may have more children than they actually want. For 7 percent of births over the three years preceding NFHS-2, mothers report that they did not want the pregnancy at all, and for another 13 percent of these births, mothers say that they would have preferred to delay the pregnancy. When asked about their preferred family size, nearly one-half (44 percent) of women who already have three children

and nearly one-fourth (22 percent) of women with four or more children respond that they consider the two-child family ideal. This gap between women's actual fertility experience and what they want or would consider ideal suggests a need for expanded or improved family welfare services to help women achieve their fertility goals.

If women in Andhra Pradesh are not using family planning, it is not due to lack of knowledge. Knowledge of contraception is nearly universal: 99 percent of currently married women know at least one modern family planning method. Women are most familiar with female sterilization (99 percent), followed by male sterilization (91 percent), the pill (60 percent), the IUD (51 percent), and the condom (48 percent). Knowledge of modern spacing methods has increased by 6–7 percentage points since the time of NFHS-1, although use rates for these methods remain extremely low.

Sixty percent of married women are currently using some method of contraception, an increase from 47 percent at the time of NFHS-1. Contraceptive prevalence is slightly higher in urban areas (63 percent) than in rural areas (58 percent). Female sterilization is by far the most popular method: 53 percent of currently married women are sterilized, a substantial increase from 38 percent at the time of NFHS-1. By contrast, only 4 percent of women report that their husbands are sterilized, a decrease from 7 percent in NFHS-1. Overall, sterilization accounts for 96 percent of total contraceptive use. Use rates for the pill, IUD, and condom remain very low, each at less than 1 percent.

Contraceptive prevalence does not vary widely among socioeconomic groups, although Muslim women and women belonging to scheduled tribes are somewhat less likely than other women to use contraception. Muslim women, more-educated women, and women from better-off households are all more likely than other women to use the three modern spacing methods, but the use of these methods does not exceed 10 percent in any group.

Given the near-exclusive emphasis on sterilization, women tend to adopt family planning only after they have achieved their desired family size. As a result, contraceptive use can be expected to rise steadily with age and with number of living children. In Andhra Pradesh, contraceptive use does indeed go up with age, peaking at 82 percent for women age 35–39. Use also goes up with the number of children, peaking at 86 percent for women with three living children. Son preference (which is evident in all population groups but is lower than in many other states) appears to have some effect on contraceptive use. Women who have one or more sons are generally more likely to use contraception than are women who have the same number of children but have only daughters. Yet son preference is not a major obstacle to contraceptive acceptance: More than half of women with two or more daughters but no sons have been sterilized.

Five percent of currently married women are not using contraception but say that they want to wait at least two years before having another child. Another 3 percent are not using contraception although they do not want any more children. These women are described as having an 'unmet need' for family planning. The unmet need is highest for young women, who are particularly interested in spacing their births.

For many years, the Government of India has been using electronic and other mass media to promote family planning. Exposure to mass media is quite high in Andhra Pradesh, where 100 percent of rural residents live in villages that are electrified and 88 percent live in villages that

have a cable connection. Among the different types of media, television has the broadest reach across all categories of women, including those who are poor and illiterate. Overall, 58 percent of currently married women watch television at least once a week. Nevertheless, 24 percent of women are not regularly exposed to television, radio, or other types of media. Seventy-six percent of women saw or heard a family planning message in the media in the few months before the survey. Exposure to family planning messages is relatively low among disadvantaged socioeconomic groups, yet messages reached more than 60 percent of illiterate women, women from households with a low standard of living, and women belonging to scheduled castes or scheduled tribes.

More than three-fourths (79 percent) of women who use modern contraception obtained their method from a government hospital or other source in the public sector. Only 19 percent obtained their method from the private medical sector. The private sector plays a larger role in urban areas (supplying 30 percent of women who use modern methods) than in rural areas (supplying only 15 percent).

An important indication of the quality of family planning services is the information that women receive when they obtain contraception and the extent to which they receive follow-up services after accepting contraception. In Andhra Pradesh, only 7 percent of women who use a modern method were told about any other method by the person who motivated them to use contraception. Only 13 percent were told by any health or family planning worker about possible side effects of the method they adopted. Eighty percent of contraceptive users, however, have had at least one follow-up visit.

From the information provided in NFHS-2, a picture emerges of women marrying early, having their first child soon after marriage, having a second and possibly a third child in close succession, and then being sterilized—all before they reach their mid-20s. The median age for female sterilization has been declining steadily in recent years and is now 23.6 years. Very few women use modern spacing methods that could help them delay their first births and increase intervals between pregnancies.

# **Infant and Child Mortality**

NFHS-2 provides estimates of infant and child mortality and factors associated with the survival of young children. During the five years preceding the survey, the annual infant-mortality rate (deaths of children up to age one year) was 66 per 1,000 live births, a slight decrease from 70 per 1,000 in NFHS-1. The annual child-mortality rate (deaths of children age 1–5 years), at 21 per 1,000 children reaching age one, remained virtually unchanged from the level recorded during NFHS-1. Expressed differently, 1 in 15 children born in Andhra Pradesh during the five years preceding NFHS-2 died in the first year of life, and 1 in 12 died before reaching age five. Child-survival programmes might usefully focus on specific groups of children with particularly high infant and child mortality rates, such as children who live in rural areas, children whose mothers are illiterate, children belonging to scheduled castes or scheduled tribes, and children from poor households.

Along with these socioeconomic groups, efforts to promote child survival need to concentrate on very young mothers and mothers whose children are closely spaced. Infant mortality is 40 percent higher among children born to mothers under age 20 than among children

whose mothers are age 20–29 (84 deaths, compared with 60, per 1,000 live births). Infant mortality is more than three times as high among children born less than 24 months after a previous birth as among children born after a gap of 48 months or more (106 deaths, compared with 33, per 1,000 live births). Clearly, efforts to expand the use of temporary contraceptive methods for delaying and spacing births would help reduce infant mortality as well as fertility.

#### **Health and Health Care**

Promotion of maternal and child health has been one of the most important components of the Family Welfare Programme of the Government of India. One goal is for each pregnant woman to receive at least three antenatal check-ups plus two tetanus toxoid injections and a full course of iron and folic acid supplementation. In Andhra Pradesh, mothers of 93 percent of the children born in the three years preceding NFHS-2 received at least one antenatal check-up, and mothers of 80 percent of these children received at least three antenatal check-ups. For 82 percent of these children, mothers received the recommended number of tetanus toxoid vaccinations, and for 81 percent of children, mothers received iron and folic acid supplementation. Coverage by all three interventions is somewhat lower for women in disadvantaged socioeconomic groups than for other women. Coverage is also low for women who already have four or more children.

The Family Welfare Programme encourages women to deliver in a medical facility or, if at home, with assistance from a trained health professional and to receive at least three check-ups after delivery. During the three years preceding NFHS-2, only half of births in Andhra Pradesh were delivered in a medical facility. Among births delivered at home, 29 percent were assisted by a health professional and 52 percent by a traditional birth attendant. Less than half (45 percent) of births outside a medical facility were followed by a postpartum check-up within two months of delivery. Overall, these results show that health services in Andhra Pradesh are reaching many more women during pregnancy than during delivery or after childbirth. They also point to the important role of traditional birth attendants for the substantial proportion of births that occur at home.

The World Health Organization (WHO) recommends that breastfeeding should begin immediately after childbirth and that infants should be exclusively breastfed for about the first six months of life. Although breastfeeding is nearly universal in Andhra Pradesh, very few children begin breastfeeding immediately after birth—only 10 percent in the first hour and 37 percent in the first day. Three-quarters of children under four months of age are exclusively breastfed. The median length of breastfeeding is 25 months, or slightly over two years, and the median length of exclusive breastfeeding is 4.6 months. By age seven months, adequate and appropriate supplementary food should be added to an infant's diet to provide sufficient nutrients for optimal growth. However, less than three-quarters (73 percent) of children age 7–9 months receive the recommended combination of breast milk and supplements.

NFHS-2 uses three internationally recognized standards to assess children's nutritional status—weight-for-age, height-for-age, and weight-for-height. Children who are more than two standard deviations below the median of an international reference population are considered underweight (measured in terms of weight-for-age), stunted (height-for-age), or wasted (weight-for-height). Stunting is a sign of chronic, long-term undernutrition, wasting is a sign of acute, short-term undernutrition, and underweight is a composite measure that takes into account both chronic and acute undernutrition.

Based on international standards, one-third (38 percent) of children under age three years are underweight, a similar proportion (39 percent) are stunted, and 9 percent are wasted. Child nutritional status has improved in Andhra Pradesh since the time of NFHS-1, when nearly one-half (49 percent) of young children were underweight, but it is still a serious problem. Undernutrition is much higher in rural areas than in urban areas and is particularly high among children from disadvantaged socioeconomic groups. The prevalence of undernutrition is about the same for girls as for boys. Nearly three-quarters (72 percent) of children age 6–35 months are anaemic, including a large majority of children in every subgroup of the population.

Child immunization is an important component of child-survival programmes in India, with efforts focusing on six serious but preventable diseases—tuberculosis, diphtheria, pertussis, tetanus, polio, and measles. The objective of the Universal Immunization Programme (UIP), launched in 1985–86, was to extend immunization coverage against these diseases to at least 85 percent of infants by 1990. In Andhra Pradesh, 59 percent of children age 12–23 months are fully vaccinated, another 37 percent have received some but not all of the recommended vaccinations, and 5 percent have not been vaccinated at all.

Immunization coverage, although far from complete, has improved substantially since NFHS-1, when only 45 percent of children were fully vaccinated and 18 percent had not been vaccinated at all. In fact, child immunization coverage in Andhra Pradesh is higher than would appear from information on full coverage alone. Ninety percent of children age 12–23 months have been vaccinated against tuberculosis, 80 percent have received three doses of DPT vaccine, and 82 percent have received three doses of polio vaccine. Full immunization coverage is not as high as it might be primarily because only 65 percent of children have been vaccinated against measles. Dropout rates for the series of DPT and polio vaccinations are also a problem. Ninety percent of children received the first DPT vaccination, but 80 percent received all three doses; 94 percent received the first polio vaccination, but 82 percent received all three doses.

NFHS-2 collected information on the prevalence and treatment of three health problems that cause considerable mortality in young children—fever, acute respiratory infection (ARI), and diarrhoea. In Andhra Pradesh, 29 percent of children under age three were ill with fever during the two weeks preceding the survey, 19 percent were ill with ARI, and 15 percent had diarrhoea. About two-thirds of the children who became ill with ARI or diarrhoea were taken to a health facility or health provider. Fifty-five percent of children with diarrhoea received some form of oral rehydration therapy (ORT), an increase from 34 percent at the time of NFHS-1, suggesting that there has been substantial improvement in the management of childhood diarrhoea.

The survey collected information on the prevalence of tuberculosis, asthma, malaria, and jaundice among all household members. Disease prevalence based on reports from household heads must be interpreted with caution, however. The survey found that less than 1 percent of the population suffers from tuberculosis, 4 percent suffers from asthma, 5 percent suffered from malaria during the three months preceding the survey, and 2 percent suffered from jaundice during the preceding 12 months. Prevalence of all four conditions is higher in rural areas than in urban areas. Men are more likely than women to suffer from tuberculosis, asthma, and jaundice, but women are slightly more likely to suffer from malaria. Only just over one-quarter of households (27 percent) use cooking salt that is iodized at the recommended level, suggesting that iodine deficiency disorders are likely to be a serious problem.

NFHS-2 also collected basic information on selected lifestyle indicators for household members. According to household respondents, 36 percent of adult men and 20 percent of adult women smoke, 26 percent of men and 17 percent of women drink alcohol, and 11 percent of men and women chew *paan masala* or tobacco.

Almost half (49 percent) of currently married women in Andhra Pradesh report some type of reproductive-health problem, including abnormal vaginal discharge, symptoms of urinary tract infections, and pain or bleeding associated with intercourse. Among these women, 63 percent have not sought any advice or treatment. These results suggest a need to expand reproductive-health services and information programmes that encourage women to discuss their problems with a healthcare provider.

Nearly one-fourth (23 percent) of all women in Andhra Pradesh have experienced domestic violence. Most of these women have been beaten or physically mistreated by their husbands. Domestic violence against women is especially prevalent in disadvantaged socioeconomic groups, particularly scheduled tribes (43 percent) and scheduled castes (31 percent). Four out of five women accept at least one reason as a justification for a husband beating his wife.

Based on a weight-for-height index, more than one-third (37 percent) of women in Andhra Pradesh are undernourished. Nutritional deficits are particularly serious for women in rural areas and women in disadvantaged socioeconomic groups. Women who are undernourished themselves are also much more likely than other women to have children who are undernourished. Anaemia is a serious problem among women in every population group, with prevalence rates ranging from 39 to 64 percent. Overall, 50 percent of women in Andhra Pradesh have some degree of anaemia.

Most people in Andhra Pradesh (55 percent) go to private hospitals or clinics for treatment when a family member is ill. Only 15 percent normally use any type of government health facility. Even in poor households, only 19 percent of household members normally use public-sector services when they are ill. Most respondents are generally satisfied with the healthcare they receive. Ratings are lowest for public-sector facilities in urban areas, where slightly more than half of respondents are critical of staff attitudes and cleanliness of the facilities.

Overall, only 17 percent of women received a home visit from a health or family planning worker during the 12 months preceding the survey. Women who received visits were visited rather regularly—four times, on average, in the year preceding the survey. Virtually all of these women express general satisfaction with the services they received at home from health or family planning workers.

Although the spread of HIV/AIDS is a major concern in India, nearly half of women in Andhra Pradesh (45 percent) have never even heard of AIDS. Awareness of AIDS is particularly low among women in rural areas, poor women, and women who are illiterate. Among women who have heard of AIDS, 74 percent learned about the disease from television and 34 percent from radio, suggesting that the government's efforts to promote AIDS awareness through the electronic mass media have achieved some success. Among women who have heard of AIDS, however, more than one-third (37 percent) do not know of any way to avoid infection. Survey

results suggest that health personnel could play a much larger role in promoting AIDS awareness. In Andhra Pradesh, only 3 percent of women who know about AIDS learned about the disease from a health worker.