| FACT SHEET - INDIA | Quality of Family Planning Services ⁶ |
|---|---|
| | Percent told about side effects of method |
| NATIONAL FAMILY HEALTH SURVEY, 1998–99 | Percent who received follow-up services |
| Sample Size | Childhood Mortality |
| Households 91,196 | Infant mortality rate ⁷ |
| Ever-married women age 15–49 | Under-five mortality rate 7 |
| Characteristics of Households | |
| Characteristics of Households Persont with electricity 60.1 | Safe Motherhood and Women's Reproductive Health |
| Percent with electricity 60.1 | Maternal mortality ratio |
| Percent within 15 minutes of safe water supply 62.3 | Percent of births ⁸ within 24 months of previous birth 28.3 |
| Percent with flush toilet | 2 |
| Percent with no toilet facility | Percent of births ³ whose mothers received: |
| Percent using govt. health facilities for sickness | Antenatal check-up from a health professional 65.1 |
| Percent using iodized salt (at least 15 ppm) | Antenatal check-up in first trimester |
| 2 | Two or more tetanus toxoid injections |
| Characteristics of Women ² | Iron and folic acid tablets or syrup 57.6 |
| Percent urban 26.2 | |
| Percent illiterate | Percent of births ³ whose mothers were assisted at delivery by a |
| Percent completed high school and above | Doctor 30.3 |
| Percent Hindu 81.7 | Nurse/midwife 11.4 |
| Percent Muslim 12.5 | Traditional birth attendant 35.0 |
| Percent Christian | Traditional offul attendant |
| Percent regularly exposed to mass media | D 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Percent working in the past 12 months | Percent ⁵ reporting at least one reproductive |
| refeelit working in the past 12 months | health problem |
| Status of Women ² | A |
| Percent involved in decisions about own health | Awareness of AIDS |
| Percent with control over some money | Percent of women who have heard of AIDS 40.3 |
| 1 creent with control over some money | GLULTZ AL |
| Manuiaga | Child Health |
| Marriage | Percent of children age 0–3 months exclusively |
| Percent never married among women age 15–19 | breastfed |
| Median age at marriage among women age 20–49 16.7 | Median duration of breastfeeding (months) |
| Fertility and Fertility Preferences | Percent of children ⁹ who received vaccinations: |
| Total fertility rate (for the past 3 years) | BCG |
| Mean number of children ever born to women 40–49 4.45 | DPT (3 doses) |
| Median age at first birth among women age 20–49 19.6 | Polio (3 doses) |
| Percent of births ³ of order 3 and above | Measles 50.7 |
| Mean ideal number of children ⁴ | All vaccinations 42.0 |
| Percent of women with 2 living children wanting | All vaccinations |
| another child | D (C1:11 10 :4 1: 1 : 4 |
| another child | Percent of children ¹⁰ with diarrhoea in the past |
| Current Contragontive Use ⁵ | 2 weeks who received oral rehydration salts (ORS) 26.8 |
| Current Contraceptive Use ⁵ | 10 |
| Any method | Percent of children ¹⁰ with acute respiratory infection in |
| | the past 2 weeks taken to a health facility or provider 64.0 |
| Any modern method | |
| Pill | Nutrition |
| IUD | Percent of women with anaemia ¹¹ 51.8 |
| Condom | Percent of women with anaemia ¹¹ |
| Female sterilization | Percent of children age 6–35 months with anaemia ¹¹ 74.3 |
| Male sterilization | Percent of children age 6–35 months with moderate/ |
| | severe anaemia ¹¹ |
| Any traditional method | Percent of children chronically undernourished |
| Rhythm/safe period | (at at 1) ¹² |
| Withdrawal 2.0 | (stunted) ¹² |
| 77 Iuidiuwai | Percent of children acutely undernourished (wasted) ¹² 15.5 |
| Other traditional or modern method | Percent of children underweight ¹² |
| | |
| Unmet Need for Family Planning ⁵ | ⁶ For current users of modern methods |
| Percent with unmet need for family planning | ⁷ For the 5 years preceding the survey (1994–98) |
| Percent with unmet need for spacing | ⁸ For births in the past 5 years (excluding first births) |
| | ⁹ Children age 12–23 months |
| | ¹⁰ Children under 3 years |
| | ¹¹ Anaemia–haemoglobin level < 11.0 grams/decilitre (g/dl) |
| ¹ Water from pipes, handpump, covered well or tanker truck | for children and pregnant women and < 12.0 g/dl for |
| ² Ever-married women age 15–49 | nonpregnant women Moderate/severe anaemia |

²Ever-married women age 15–49 ³For births in the past 3 years ⁴Excluding women giving non-numeric responses ⁵Among currently married women age 15–49

 $[\]label{eq:continuous} \begin{array}{l} \text{nonpregnant women.} \quad \text{Moderate/severe anaemia} \\ -\text{haemoglobin level} < 10.0 \text{ g/dl.} \\ \text{12Stunting assessed by height-for-age, wasting assessed by weight-for-age} \end{array}$

SUMMARY OF FINDINGS

The second National Family Health Survey (NFHS-2), conducted in 1998–99, provides information on fertility, mortality, family planning, and important aspects of nutrition, health, and health care. The International Institute for Population Sciences (IIPS) coordinated the survey, which collected information from a nationally representative sample of more than 90,000 ever-married women age 15–49. The NFHS-2 sample covers 99 percent of India's population living in all 26 states. This report is based on the survey data for 25 of the 26 states, however, since data collection in Tripura was delayed due to local problems in the state.

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, anaemia, and salt iodization.

The NFHS-2 survey was carried out in two phases. Ten states were surveyed in the first phase which began in November 1998 and the remaining states (except Tripura) were surveyed in the second phase which began in March 1999. The field staff collected information from 91,196 households in these 25 states and interviewed 89,199 eligible women in these households. In addition, the survey collected information on 32,393 children born in the three years preceding the survey. One health investigator on each survey team measured the height and weight of eligible women and children and took blood samples to assess the prevalence of anaemia.

Background Characteristics of the Survey Population

Three-quarters (73 percent) of the population lives 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-six percent of the population is below age 15, and 5 percent is age 65 and above. The sex ratio is 957 females for every 1,000 males in rural areas but only 928 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. In the country as a whole, 82 percent of household heads are Hindu, 12 percent are Muslim, 3 percent are Christian, and 2 percent are Sikh. Muslims live disproportionately in urban areas, where they comprise 15 percent of household heads. Nineteen percent of household heads belong to scheduled castes, 9 percent belong to scheduled tribes, and 32 percent belong to other backward classes (OBCs). Two-fifths of household heads do not belong to any of these groups.

Questions about housing conditions and the standard of living of households indicate some improvements since the time of NFHS-1. Sixty percent of households in India now have electricity and 39 percent have piped drinking water compared with 51 percent and 33 percent, respectively, at the time of NFHS-1. Sixty-four percent of households have no toilet facility compared with 70 percent at the time of NFHS-1.

About three-fourths (75 percent) of males and half (51 percent) of females age six and above are literate, an increase of 6–8 percentage points from literacy rates at the time of NFHS-1. The percentage of illiterate males varies from 6–7 percent in Mizoram and Kerala to 37 percent in Bihar and the percentage of illiterate females varies from 11 percent in Mizoram and 15 percent in Kerala to 65 percent in Bihar. Seventy-nine percent of children age 6–14 are attending school, up from 68 percent in NFHS-1. The proportion of children attending school has increased for all ages, particularly for girls, but girls continue to lag behind boys in school attendance. Moreover, the disparity in school attendance by sex grows with increasing age of children. At age 6–10, 85 percent of boys attend school compared with 78 percent of girls. By age 15–17, 58 percent of boys attend school compared with 40 percent of girls. The percentage of girls 6–17 attending school varies from 51 percent in Bihar and 56 percent in Rajasthan to over 90 percent in Himachal Pradesh and Kerala.

Women in India tend to marry at an early age. Thirty-four percent of women age 15–19 are already married including 4 percent who are married but *gauna* has yet to be performed. These proportions are even higher in the rural areas. Older women are more likely than younger women to have married at an early age: 39 percent of women currently age 45–49 married before age 15 compared with 14 percent of women currently age 15–19. Although this indicates that the proportion of women who marry young is declining rapidly, half the women even in the age group 20–24 have married before reaching the legal minimum age of 18 years. On average, women are five years younger than the men they marry. The median age at marriage varies from about 15 years in Madhya Pradesh, Bihar, Uttar Pradesh, Rajasthan, and Andhra Pradesh to 23 years in Goa.

As part of an increasing emphasis on gender issues, NFHS-2 asked women about their participation in household decisionmaking. In India, 91 percent of women are involved in decision-making on at least one of four selected topics. A much lower proportion (52 percent), however, are involved in making decisions about their own health care. There are large variations among states in India with regard to women's involvement in household decisionmaking. More than three out of four women are involved in decisions about their own health care in Himachal Pradesh, Meghalaya, and Punjab compared with about two out of five or less in Madhya Pradesh, Orissa, and Rajasthan. Thirty-nine percent of women do work other than housework, and more than two-thirds of these women work for cash. Only 41 percent of women who earn cash can decide independently how to spend the money that they earn. Forty-three percent of working women report that their earnings constitute at least half of total family earnings, including 18 percent who report that the family is entirely dependent on their earnings. Women's work-participation rates vary from 9 percent in Punjab and 13 percent in Haryana to 60–70 percent in Manipur, Nagaland, and Arunachal Pradesh.

Fertility and Family Planning

Fertility continues to decline in India. At current fertility levels, women will have an average of 2.9 children each throughout their childbearing years. The total fertility rate (TFR) is down from 3.4 children per woman at the time of NFHS-1, but is still well above the replacement level of just over two children per woman. There are large variations in fertility among the states in India. Goa and Kerala have attained below replacement level fertility and Karnataka, Himachal Pradesh, Tamil Nadu, and Punjab are at or close to replacement level fertility. By contrast, fertility is 3.3 or more children per woman in Meghalaya, Uttar Pradesh, Rajasthan, Nagaland,

Bihar, and Madhya Pradesh. More than one-third to less than half of all births in these latter states are fourth or higher-order births compared with 7–9 percent of births in Kerala, Goa, and Tamil Nadu

Efforts to encourage the trend towards lower fertility might usefully focus on groups within the population that have higher fertility than average. In India, rural women and women from scheduled tribes and scheduled castes have somewhat higher fertility than other women, but fertility is particularly high for illiterate women, poor women, and Muslim women. Another striking feature is the high level of childbearing among young women. More than half of women age 20–49 had their first birth before reaching age 20, and women age 15–19 account for almost one-fifth 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 and help to reduce fertility.

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 9 percent of births over the three years preceding the survey and current pregnancies, mothers report that they did not want the pregnancy at all, and for another 12 percent, mothers say that they would have preferred to delay the pregnancy. When asked about their preferred family size, 41 percent of women who already have three children and 24 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. On average, a woman in India considers less than 3 children (2.7) ideal, but in Bihar, Uttar Pradesh, and several of the northeastern states, women's ideal number of children is 3.1 or above. In the country as a whole, 85 percent of women want at least one son and 80 percent want at least one daughter. A preference for sons is indicated by the fact that one-third want more sons than daughters but only a negligible proportion want more daughters than sons.

If many women in India 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 (98 percent), followed by male sterilization (89 percent), the pill (80 percent), the condom (71 percent), and the IUD (71 percent). Knowledge of modern spacing methods has increased by 10–13 percentage points since the time of NFHS-1, although use rates for these methods remain extremely low.

Forty-eight percent of currently married women are using some method of contraception, up from 41 percent at the time of NFHS-1. Contraceptive prevalence is considerably higher in urban areas (58 percent) than in rural areas (45 percent). Female sterilization is by far the most popular method: 34 percent of currently married women are sterilized, a substantial increase from 27 percent at the time of NFHS-1. By contrast, only 2 percent of women report that their husbands are sterilized, a decrease from 4 percent in NFHS-1. Overall, sterilization accounts for 75 percent of total contraceptive use. Only 18 percent of sterilized couples have ever used any

method other than sterilization. Current-use rates for the pill, IUD, and condom remain very low, each at about 2–3 percent.

Contraceptive prevalence varies widely among socioeconomic groups. Muslim women, scheduled-tribe women, and women belonging to poor households are less likely (37–40 percent) than most other women to use contraception at all. The three modern spacing methods—pills, IUDs, and condoms—are used more by Sikh women, more educated women, women from households with a high standard of living, Jain women, and urban women (13–23 percent) than other women. Contraceptive prevalence varies by state from 20 percent in Meghalaya, 25 percent in Bihar, and 28 percent in Uttar Pradesh to 67–68 percent in Punjab and Himachal Pradesh. Other states where contraceptive prevalence is at or below the national average of 48 percent are Rajasthan, Madhya Pradesh, Orissa, Goa, and all northeastern states except Mizoram and Sikkim. Modern temporary methods are most prevalent in Delhi, Punjab, and Sikkim (17–28 percent) and are also relatively common (9–14 percent) in West Bengal, Haryana, Jammu and Kashmir, and other northeastern states. Traditional methods are used most widely in West Bengal, followed by Assam, Manipur, Punjab, and Sikkim. Sterilization dominates the contraceptive method-mix in most states, but especially so in Maharashtra, Madhya Pradesh, Bihar, Rajasthan, and all the southern states.

Given the near-exclusive emphasis on sterilization in the contraceptive method-mix, 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 India, contraceptive use does indeed go up with age, peaking at 67 percent for women age 35–39. Use also goes up with the number of children, peaking at 68 percent for women with three living children. Son preference appears to have a strong effect on contraceptive use, especially the adoption of sterilization. Among women with two or more living children, only 23–30 percent of women with only daughters have been sterilized compared with 41–67 percent of women with at least one son.

Eight 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 8 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. Unmet need is highest (27 percent) for young women below age 20, who are particularly interested in spacing their births. Unmet need in different states varies from 7–9 percent of currently married women in Punjab, Haryana, Andhra Pradesh, Gujarat, and Himachal Pradesh to 25–36 percent in Meghalaya, Nagaland, Arunachal Pradesh, Uttar Pradesh, and Bihar. These results underscore the need for strategies that provide spacing as well as terminal methods in order to meet the changing needs of women over their lifecycle.

For many years, the Government of India has been using electronic and other mass media to promote family planning. Among the different types of media, television has the broadest reach across almost all categories of women, including illiterate women and women living in rural areas. Overall, 46 percent of ever-married women watch television at least once a week. Despite the fact that 40 percent of women are not regularly exposed to television, radio, and other types of media, however, 60 percent of women saw or heard a family planning message in the media during the few months before the survey. Women are more likely to have seen or heard a family planning message on television than through any other form of media. Exposure

to family planning messages is relatively low among poor, scheduled-tribe, illiterate, and rural women. Nonetheless, family planning messages are reaching about two out of five or more socioeconomically disadvantaged women. Exposure to family planning messages is particularly limited in Rajasthan, Bihar, Uttar Pradesh, and Madhya Pradesh, where less than half the women were exposed to a family planning message in the past few months.

More than three-fourths (76 percent) of current users of modern contraceptives obtained their method from a government hospital or other source in the public sector. Only 17 percent obtained their method from the private medical sector. The private medical sector along with shops is the major source of pills and condoms, however. Overall, the public medical sector plays a larger role in rural areas than in urban areas, and at least two-thirds of modern contraceptive users obtain their method from a public-sector source in every state except Meghalaya, Delhi, Nagaland, Assam, and Punjab.

An important indicator 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 India, only 15 percent of users of modern contraceptives who were motivated by someone to use their method were told about any other method. Only 22 percent were told about possible side effects of their current method by a health or family planning worker at the time of adopting the method. Sixty-nine percent of contraceptive users, however, received follow-up services.

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 by the time they reach their mid-20s. The median age for female sterilization has been declining in recent years and is now 26 years, one year earlier than at the time of NFHS-1. 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 examines factors associated with the survival of young children. During the five years preceding the survey, the infant mortality rate was 68 deaths at age 0–11 months per 1,000 live births, substantially lower than 79 per 1,000 in the five years preceding the NFHS-1 survey. The child mortality rate, 29 deaths at age 1–4 years per 1,000 children reaching age one, also declined from the corresponding rate of 33 per 1,000 in NFHS-1. Ninety-five children out of 1,000 born do not live to age five years. Expressed differently, 1 in 15 children die in the first year of life, and 1 in 11 die 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. Infant mortality rates are more than two and one-half times as high for women who did not receive any of the recommended types of maternity related medical care than for mothers who did receive all recommended types of care.

Along with various socioeconomic groups, efforts to promote child survival need to concentrate on very young mothers and mothers whose children are closely spaced. Infant mortality is almost 50 percent higher among children born to mothers under age 20 than among

children born to mothers age 20–29 (93 deaths, compared with 63, per 1,000 live births). Infant mortality is nearly 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 (110 deaths, compared with 39, 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. There are large variations in infant mortality among states. Infant mortality ranges from a high of 80–89 deaths per 1,000 live births in Meghalaya, Uttar Pradesh, Madhya Pradesh, Orissa, and Rajasthan to a low of 16 per 1,000 live births in Kerala and 34–37 per 1,000 live births in Himachal Pradesh, Goa, Mizoram, and Manipur.

Health, Health Care, and Nutrition

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 India, mothers of 65 percent of the children born in the three years preceding NFHS-2 received at least one antenatal check-up and 44 percent received at least three check-ups. For 67 percent of these births, mothers received the recommended number of tetanus toxoid vaccinations during pregnancy, up from 54 percent in NFHS-1. For 58 percent, mothers received iron and folic acid supplementation during pregnancy. Women in disadvantaged socioeconomic groups are less likely than other women to be covered by each of these interventions. Coverage is also low for women who already have four or more children. States that perform well below the national average with regard to the provision of recommended components of antenatal care include Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, and several of the northeastern states. Kerala, Goa, and Tamil Nadu, by contrast, have achieved relative success with regard to antenatal care. In these states, mothers of over 90 percent of births receive at least three antenatal check-ups, at least 86 percent receive two or more tetanus toxoid injections, and at least 93 percent receive iron and folic acid tablets. Even in these states, however, a substantial proportion of women do not receive all of the recommended components of antenatal care

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 one-third of births in India took place in a medical facility, up from one-fourth at the time of NFHS-1. Among births at home, over 50 percent were assisted by a traditional birth attendant, and only 13 percent were assisted by a health professional. Only 17 percent of births outside a medical facility were followed by a postpartum check-up within two months of delivery. While over 84 percent of deliveries were assisted by a health professional in Kerala, Goa, and Tamil Nadu, less than one-fourth were assisted by a health professional in Meghalaya, Assam, Uttar Pradesh, and Bihar. The proportion of noninstitutional deliveries with a postpartum check-up within two months ranges from a high of only 53 percent in Tamil Nadu to below 10 percent in Nagaland, Rajasthan, and Uttar Pradesh. Overall, these results show that maternal health services in India 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 Government of India recommends that breastfeeding should begin immediately after childbirth and that infants should be exclusively breastfed for the first four months of life. Although breastfeeding is nearly universal in India, very few children begin breastfeeding immediately after birth—only 16 percent in the first hour and 37 percent in the first day. Fifty-five percent of children under four months of age are exclusively breastfed. The median duration of breastfeeding is 25 months, or slightly over two years, and the median duration of exclusive breastfeeding is two months. At age 6–9 months, all children should be receiving solid or mushy food in addition to breast milk to provide sufficient nutrients for optimal growth. However, only 34 percent of children age 6–9 months receive the recommended combination of breast milk and solid or mushy food. The proportion of children age 6–9 months who receive solid or mushy food is even lower than the national average in six states, including Bihar, Uttar Pradesh, and Rajasthan, where this proportion is only 15–18 percent.

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, 47 percent of children under age three years in India are underweight, down slightly from 52 percent at the time of NFHS-1. Forty-six percent of children are stunted and 16 percent are wasted. Undernutrition is much higher in rural areas than in urban areas, and is particularly high among children from disadvantaged socioeconomic groups. Nearly three-quarters (74 percent) of children age 6–35 months are anaemic, with very little variation in anaemia rates for children in most subgroups of the population. Christian children, children whose mothers have completed at least high school, children from households with a relatively high standard of living, and children whose mothers are not anaemic, have anaemia rates that are substantially below the national average. Even among these groups, however, at least 61 percent of children are anaemic. The prevalence of anaemia among children age 6–35 months varies from 44 percent in Kerala and Nagaland to 80–84 percent in Haryana, Rajasthan, Bihar, and Punjab.

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 India, 42 percent of children age 12–23 months have received all the recommended vaccinations, 44 percent have received some but not all, and 14 percent have received none of the recommended vaccinations.

Immunization coverage, although far from complete, has improved substantially since NFHS-1, when only 36 percent of children were fully vaccinated and 30 percent had not been vaccinated at all. Coverage of individual vaccines has also increased considerably, and is much higher than would appear from information on full coverage alone. According to NFHS-2, 72 percent of children age 12–23 months have been vaccinated against tuberculosis, 63 percent have received three doses of the polio vaccine, 55 percent have received three doses of the DPT

vaccine, and 51 percent have been vaccinated against measles. The largest increases in vaccination coverage between NFHS-1 and NFHS-2 are for the first two doses of polio vaccine, undoubtedly because of the introduction of the Pulse Polio Immunization Campaign in 1995. Dropout rates for the series of DPT and polio vaccinations continue to be a problem, however. Eighty-four percent of children received the first polio vaccination, but only 63 percent received all three doses; 71 percent received the first DPT vaccination, but only 55 percent received all three doses. It is also recommended that children under age five years should receive oral doses of vitamin A every six months starting at age nine months. However, only 30 percent of children age 12–35 months have received any vitamin A supplementation and only 17 percent received a dose of vitamin A in the six months preceding the survey.

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 India 30 percent of children under age three had fever during the two weeks preceding the survey, 19 percent had symptoms of ARI, and 19 percent had diarrhoea. About two-thirds of the children who had symptoms of ARI or diarrhoea were taken to a health facility or health-care provider. Knowledge of the appropriate treatment of diarrhoea remains low. Only 62 percent of mothers of children age less than 3 years know about oral rehydration salt (ORS) packets and 34 percent of mothers incorrectly believe that children should be given less to drink than usual when sick with diarrhoea. Forty-eight percent of children with diarrhoea received some form of oral rehydration therapy (ORT), including 27 percent who received ORS. The percentage of children with diarrhoea who received ORS has increased substantially since NFHS-1, when it was only 18 percent, suggesting some improvement in the management of childhood diarrhoea. Among children sick with diarrhoea in the two weeks prior to the survey, the proportion who were given some form of ORT varies from 90 percent in Kerala, 76 percent in Goa, and 73 percent in West Bengal to 34 percent in Rajasthan and 36 percent in Uttar Pradesh. The proportion given ORS varies from 56 percent in Goa and 51 percent in Manipur to only 15–16 percent in Bihar and Uttar Pradesh.

Based on a weight-for-height index (the body mass index), more than one-third (36 percent) of women in India are undernourished. Nutritional deficiency is particularly acute for women in rural areas, younger women, women in disadvantaged socioeconomic groups, and women who work for someone else. Women who are undernourished themselves are also much more likely than other women to have children who are undernourished. The proportion of women undernourished is highest in Orissa (48 percent) and West Bengal (44 percent) and lowest in Arunachal Pradesh (11 percent), Sikkim (11 percent), and Delhi (12 percent). Obesity is a substantial problem among several groups of women in India, particularly urban women, well-educated women, and women from households with a high standard of living. Approximately one-quarter of these women have a body mass index of 25 or more, compared with 11 percent of all women in India. Obesity is particularly prevalent in Delhi and Punjab.

Overall, 52 percent of women in India have some degree of anaemia and 40 percent or more of women in every population subgroup are anaemic. The prevalence of anaemia is particularly high for scheduled-tribe women and poor women. Pregnant women are much more likely than nonpregnant women to be moderately to severely anaemic. The prevalence of anaemia is lowest in Kerala, Manipur, Goa, and Nagaland, where 23–38 percent of women are anaemic, and highest in Assam, Bihar, Meghalaya, Orissa, West Bengal, Arunachal Pradesh, and Sikkim, where 61–70 percent are anaemic.

Less than half of the households use cooking salt that is iodized at the recommended level of 15 parts per million, suggesting that iodine deficiency disorders are likely to be a serious problem. Rural households and households with a low standard of living are much less likely than other households to be using adequately iodized cooking salt. While 88–91 percent of households in Himachal Pradesh, Mizoram, Delhi, and Manipur consume adequately iodized salt, only 21 percent of households in Tamil Nadu and 27 percent in Andhra Pradesh do so.

About two-fifths (39 percent) of currently married women in India report some type of reproductive-health problem, including abnormal vaginal discharge, symptoms of a urinary tract infection, and pain or bleeding associated with intercourse. Among these women, 66 percent have not sought any advice or treatment. These results suggest a need to expand reproductive-health services and IEC programmes that encourage women to discuss their problems with a health-care provider. The percentage of currently married women reporting at least one reproductive-health problem varies among states from 19 percent in Karnataka to above 60 percent in Meghalaya and Jammu and Kashmir.

In recent years, there has been growing concern about domestic violence in India. NFHS-2 found that there is widespread acceptance among ever-married women that the beating of wives by husbands is justified under some circumstances. More than half (56 percent) the women accept at least one of six reasons as justification for a husband beating his wife. Domestic violence is also fairly common. At least one in five women have experienced beatings or physical mistreatment since age 15 and at least one in nine experienced such violence in the 12 months preceding the survey. Most of these women have been beaten or physically mistreated by their husbands. Domestic violence against women is especially prevalent (27–29 percent) among women working for cash, poor women, scheduled-caste women, and widowed, divorced, or deserted women.

Overall, only 13 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 three times, on average, in the year preceding the survey. A large majority of women who received a home visit expressed satisfaction with the amount of time that the worker spent with them and with the way the worker talked to them. Home visits are much more common in the southern states, western states, Mizoram, and West Bengal, where 17–33 percent of ever-married women received a home visit from a health and family planning worker, than in all other states.

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, 2 percent suffers from asthma, 4 percent suffered from malaria during the three months preceding the survey, and 1 percent suffered from jaundice during the 12 months preceding the survey. Prevalence of all four conditions is higher in rural areas than in urban areas and among men than among women.

Most households in India (65 percent) go to private hospitals/clinics or doctors for treatment when a family member is ill. Only 29 percent normally use the public medical sector. Even among poor households, only 34 percent normally use the public medical sector when members become ill. Most respondents are generally satisfied with the health care they receive.

Ratings on quality of services are, however, lower for public-sector facilities both in rural and urban areas than for private sector/NGO/trust facilities.

NFHS-2 also collected information on selected lifestyle indicators for household members. According to household respondents, 29 percent of men and 3 percent of women smoke, 17 percent of men and 2 percent of women drink alcohol, and 28 percent of men and 12 percent of women chew *paan masala* or tobacco.

Although the spread of HIV/AIDS is a major concern in India, 60 percent of women in India have not heard of AIDS. Awareness of AIDS is particularly low among women who are not regularly exposed to media, scheduled-tribe women, illiterate women, women living in households with a low standard of living, and rural women. Among women who have heard of AIDS, 79 percent learned about the disease from television and 42 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, one-third 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 India, only 4 percent of women who know about AIDS learned about the disease from a health worker. Only 12 percent of women have heard of AIDS in Bihar and 20–23 percent in Uttar Pradesh, Rajasthan, and Madhya Pradesh, compared with 87 percent or more in Mizoram, Manipur, Tamil Nadu, and Kerala. Among women who have heard of AIDS, at least one-fourth do not know of any way to avoid it in all states except Mizoram, Tamil Nadu, Orissa, and Delhi. These results suggest the need for effective IEC strategies throughout India.