FACT SHEET, KERALA
NATIONAL FAMILY HEALTH SURVEY, 1999

Sample Size
- Households....2,834
- Ever-married women age 15–49....2,884

Characteristics of Households
- Percent with electricity....71.8
- Percent within 15 minutes of safe water supply[1]....20.8
- Percent with flush toilet....17.9
- Percent with no toilet facility....14.8
- Percent using govt. health facilities for sickness....37.9
- Percent using iodized salt (at least 15 ppm)....39.3

Characteristics of Women[2]
- Percent urban....23.1
- Percent illiterate....12.6
- Percent completed high school and above....40.2
- Percent Hindu....51.3
- Percent Muslim....32.6
- Percent Christian....16.0
- Percent regularly exposed to mass media....88.5
- Percent working in the past 12 months....25.0

Status of Women[2]
- Percent involved in decisions about own health....72.6
- Percent with control over some money....66.2

Marriage
- Percent never married among women age 15–19....85.9
- Median age at marriage among women age 25–49....20.2

Fertility and Fertility Preferences
- Total fertility rate (for the past 3 years)....1.96
- Mean number of children ever born to all women 40–49....3.00
- Median age at first birth among women age 25–49....21.9
- Percent of births[3] of order 3 and above....21.0
- Mean ideal number of children[4]....2.5
- Percent of women with 2 living children wanting another child....11.7

Current Contraceptive Use[5]
- Any method....63.7

- Any modern method....56.1
  - Pill....0.4
  - IUD....1.6
  - Condom....3.1
  - Female sterilization....48.5
  - Male sterilization....2.5

- Any traditional method....7.6
  - Rhythm/safe period....3.8
  - Withdrawal....3.8

Unmet Need for Family Planning[5]
- Percent with unmet need for family planning....11.7
- Percent with unmet need for spacing....6.9

[1]Water from pipes, hand pump, covered well, or tanker truck
[2]Ever-married women age 15–49
[3]For births in the past 3 years
[4]Excluding women giving non-numeric responses
[5]Among currently married women age 15–49

Quality of Family Planning Services[6]
- Percent told about side effects of method....9.7
- Percent who received follow-up services....85.2

Childhood Mortality
- Infant mortality rate[7]....16.3
- Under-five mortality rate[7]....18.8

Safe Motherhood and Women's Reproductive Health
- Percent of births[8] within 24 months of previous birth....21.3

- Percent of births[3] whose mothers received:
  - Antenatal check-up from a health professional....98.8
  - Antenatal check-up in first trimester....81.1
  - Two or more tetanus toxoid injections....86.4
  - Iron and folic acid tablets or syrup....95.2

- Percent of births[3] whose mothers were assisted at delivery by a:
  - Doctor....91.4
  - ANM/nurse/midwife/LHV....2.7
  - Traditional birth attendant....3.1

- Percent[5] reporting at least one reproductive health problem....42.4

Awareness of AIDS
- Percent of women[2] who have heard of AIDS....86.9

Child Health
- Percent of children age 0–3 months exclusively breastfed....68.5
- Median duration of breastfeeding (months)....24.5

- Percent of children[9] who received vaccinations:
  - BCG....96.2
  - DPT (3 doses)....88.0
  - Polio (3 doses)....88.4
  - Measles....84.6
  - All vaccinations....79.7

- Percent of children[10] with diarrhoea in the past 2 weeks who received oral rehydration salts (ORS)....47.9

- Percent of children[10] with acute respiratory infection in the past 2 weeks taken to a health facility or provider....82.8

Nutrition
- Percent of women with anaemia[11]....22.7
- Percent of women with moderate/severe anaemia[11]....3.2
- Percent of children age 6–35 months with anaemia[11]....43.9
- Percent of children age 6–35 months with moderate/severe anaemia[11]....19.5
- Percent of children chronically undernourished (stunted)[12]....21.9
- Percent of children acutely undernourished (wasted)[12]....11.0
- Percent of children underweight[12]....26.9

[6]For current users of modern methods
[7]For the 5 years preceding the survey (1994–98)
[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) for children and pregnant women and < 12.0 g/dl for nonpregnant women. Moderate/severe anaemia –haemoglobin level < 10.0 g/dl.
[12]Stunting assessed by height-for-age, wasting assessed by weight-for-height, underweight assessed by weight-for-age

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 health, nutrition, 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, 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 a 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.

In Kerala, NFHS-2 field staff collected information from 2,834 households between 22 March and 20 July 1999 and interviewed 2,884 eligible women in these households. In addition, the survey collected information on 707 children born to eligible women in the three years preceding the survey. One health investigator on each survey team measured the height and weight of eligible women and young children and took blood samples to assess the prevalence of anaemia.

Background Characteristics of the Survey Population

Over three-fourths (77 percent) of the population in Kerala lives in rural areas. The age distribution is typical of populations that have experienced a fertility decline for some time. Twenty-eight percent of the population is below age 15 and 7 percent is age 65 and above. The sex ratio of the *de facto* population is 1,080 females for every 1,000 males, and the sex ratio of the *de jure* population is slightly lower at 1,067 females for every 1,000 males. Notably, Kerala continues to have more females than males in its population.

The survey provides a variety of demographic and socioeconomic background information. In the state as a whole, 55 percent of household heads are Hindu, 26 percent are Muslim, and 19 percent are Christian. Households headed by Hindus constitute a higher proportion of urban than rural households, whereas households headed by Muslims constitute a higher proportion of rural than urban households. Households headed by Christians are about equally represented in rural and urban areas. Nine percent of household heads belong to scheduled castes, 1 percent belong to scheduled tribes, and 41 percent belong to other backward classes (OBCs). Nearly half of household heads do not belong to any of these groups.

Questions about housing conditions and the standard of living of household members indicate that there have been improvements in only some areas since the time of NFHS-1. Seventy-two percent of households in Kerala have electricity and 85 percent have a toilet facility, compared with 60 percent with electricity and 71 percent with a toilet facility in NFHS-1. However, only 18 percent of households have piped drinking water, down from 20 percent at the time of NFHS-1.

Kerala has one of the highest literacy rates in the country. Ninety-three percent of males and 85 percent of females age six and above are literate, an increase of 3 percentage points each in the literacy rates of males and females since the time of NFHS-1. Ninety-seven percent of children age 6–14 currently attend school, an increase from 95 percent in NFHS-1. The proportion of children attending school has increased for all age groups in the period between the two surveys. The school attendance rates for both boys and girls are almost identical. At age 6–10, 97 percent of boys and 98 percent of girls attend school. By age 15–17, the school attendance rates drop to 74 percent for both boys and girls.

Unlike most states of India, very early marriage is not common in Kerala. The median age at first marriage for women age 25–49 is 20 years, much higher than the median, at 16 years, for the country as a whole. Only 14 percent of women age 15–19 are already married, and this proportion is only 16 percent even in rural areas where age at marriage tends to be lower than in urban areas. Older women are more likely than younger women to have married at an early age: 6 percent of women currently age 35–49 married before they were 15, compared with 1 percent of women currently age 15–19. Although this finding indicates that the proportion of women who marry young continues to decline in Kerala, one in six of even the younger women (age 20–24) married before reaching the legal minimum age of 18 years. On average, women are about six years younger than the men they marry.

As part of an increased emphasis on gender issues in NFHS-2, the survey asked women about their participation in household decisionmaking. In Kerala, 93 percent of women are involved in decisionmaking on at least one of four selected topics. More than one-fourth of women (27 percent), however, are not involved in making decisions about their own health care. Twenty-five percent of women do work other than housework, and 89 percent of these women work for cash. Only 42 percent of women who earn cash can decide independently how to spend the money that they earn. Forty-four percent of working women report that their earnings constitute at least half of total family earnings, including 7 percent who report that the family is entirely dependent on their earnings.

Fertility and Family Planning

Fertility continues to decline in Kerala. At current fertility levels, women will have an average of 1.96 children each throughout their childbearing years, one of the lowest levels in India. The total fertility rate has fallen only slightly since NFHS-1 when, at 2.00 children per woman, it had already reached below the replacement level of just over two children per woman. Higher than replacement level fertility is found in Kerala only among the Muslim population, which has a fertility rate of 2.46 children per woman. Despite low levels of overall fertility, urban-rural differences still persist in Kerala with rural women having 0.56 children more than urban women. Fertility is much lower among scheduled-caste women than among other women.

The median age at first childbirth is 22 years for women age 25–49, and women age 15–19 account for 10 percent of total fertility. Studies in India and other countries have shown that health and mortality risks—both for the women themselves and for their children—increase when women give birth at such young ages. Family planning programmes focusing on women in this age group could improve maternal and child health in the state.

The appropriate design of family planning programmes depends, to a large extent, on women's fertility preferences. Women may continue to have children 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 3 percent of births over the three years preceding NFHS-2, mothers report that they did not want the pregnancy at all, and for another 16 percent of births, mothers say that they would have preferred to delay the pregnancy. Also more than one out of five births in the three years preceding the survey took place within 18 months of a previous birth, a birth interval considered to be detrimental to the health of mothers and their children. When asked about their preferred family size, 31 percent of women who already have three children and 15 percent of women with four or more children say that they consider the two-child family ideal. This gap between women's actual fertility experience and what they want or would consider ideal, as well as the need to adequately space births, suggests that family welfare services should be expanded or improved to help women achieve their fertility goals while better satisfying maternal and child health needs. In Kerala, 73 percent of women want at least one son and 71 percent want at least one daughter. A preference for sons among a small proportion of women is indicated by the fact that 15 percent want more sons than daughters, but only 5 percent want more daughters than sons.

Knowledge of contraception is virtually universal in Kerala: 99.7 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 (94 percent), the condom (92 percent), the pill (90 percent), and the IUD (89 percent). Knowledge of most modern spacing methods is about the same as in NFHS-1.

Sixty-four percent of currently married women are currently using some method of contraception, almost unchanged since NFHS-1 when this proportion was 63 percent. Contraceptive prevalence is slightly higher in urban areas (66 percent) than in rural areas (63 percent). Female sterilization is by far the most popular method: 49 percent of currently married women are sterilized, a substantial increase from 42 percent at the time of NFHS-1. By contrast, only 3 percent of women have husbands who are sterilized, 3 percent report using the condom, 2 percent use the IUD, and less than 1 percent use the pill. Overall, female sterilization alone accounts for 76 percent of total contraceptive use. Almost one out of eight contraceptive users in Kerala use a traditional method.

Contraceptive prevalence varies widely among socioeconomic groups. Muslim women, more educated women, and women belonging to households with a high standard of living are less likely than other women to use contraception. Modern spacing-method use is limited among all population groups with condom use never exceeding 9 percent, IUD use never exceeding 6 percent, and pill use never exceeding 2 percent in any group. Scheduled-tribe women, more educated women, and women from households with a high standard of living are somewhat more likely than other women to use condoms. The use of IUDs and condoms, at 5 percent and 8 percent respectively, is also relatively high among women with only one child. Notably, among women with only one child, traditional method use, at 17 percent, is particularly high.

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 the number of living children. In Kerala, contraceptive use does indeed go up with age, peaking at 81 percent for women age 35–39. Use

also goes up with the number of children, peaking at 82 percent for women with three living children. Despite low levels of son preference in Kerala, contraceptive use by women with two or three children does vary by number of sons. This variation is most evident among women with three children. Among women with three children, 83–85 percent are using contraception if they have one or more sons, but only 72 percent are doing so if they have only daughters.

Seven 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 5 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. 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. Exposure to mass media is quite high in Kerala, where 100 percent of rural residents live in villages that are electrified and 79 percent live in villages that have a cable connection. Among the different types of media, radio has the broadest reach across all categories of women. Overall, 71 percent of ever-married women listen to the radio at least once a week. Nevertheless, 12 percent of women are not regularly exposed to radio, television, or other types of media. Eighty-one percent of women heard or saw a family planning message in the media during the few months preceding the survey. Given the relatively high level of exposure to radio, it is not surprising that women are more likely to have heard a family planning message on radio than on the television or in the newspaper or magazine. Notably, in Kerala, wall paintings and hoardings are as important a source of family planning messages as the radio. Exposure to family planning messages is low only among illiterate women and women from households with a low standard of living. Only about half of illiterate women had heard or seen a family planning message in the media in the few months before the survey.

Two-thirds of women who use a modern contraceptive method obtained their method from the public medical sector. Only 29 percent obtained their method from the private medical sector. The private medical sector, along with shops, is the major source of condoms, however. For all users of modern methods, the private sector plays a similar role in rural and urban areas, where it is the source for 28–29 percent of users.

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 Kerala, only 14 percent of users of modern contraceptives who were motivated by someone to use their method were told about any other method by the motivator. Only 10 percent of users of modern methods were told by a health or family planning worker about possible side effects of the method they adopted at the time of adopting the method, much lower than the proportion for the country as a whole, at 22 percent. By contrast, however, 85 percent of contraceptive users received follow-up services after accepting their method, compared with 69 percent for India as a whole.

The information provided in NFHS-2 shows that although age at first marriage is much higher in Kerala than the country as a whole, half of the women get married by age 20, have their first child by age 22, and complete their fertility by age 28. The median age for female

sterilization is only 26.5 years. Very few women use modern spacing methods that could help them delay their first birth 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 infant mortality rate was 16 deaths at age 0–11 months per 1,000 live births, a decrease from the corresponding rate of 24 deaths per 1,000 live births in NFHS-1. The child mortality rate, at 3 deaths at age 1–4 years per 1,000 children reaching age one, has almost halved from its level in NFHS-1 of 8 deaths per 1,000. Each of the infant and child mortality rates in Kerala is not only the lowest by far among all of the Indian states, but each of them is also a fraction of the corresponding rate for the country as a whole. For example, the infant mortality rate for India is, at 68 deaths per 1,000 live births, four times as high as the infant mortality rate in Kerala. Nonetheless, child-survival programmes might usefully focus on specific groups of children with relatively high infant and child mortality rates, such as children from households with a low standard of living and children whose mothers have only a low level of education.

Along with various socioeconomic groups, efforts to promote child survival need to concentrate on older mothers and mothers whose children are closely spaced. Infant mortality is more than twice as high among children born to mothers age 30–39 as among children born to mothers below age 30. Infant mortality is also more than twice 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. Clearly, efforts to expand the use of temporary contraceptive methods for delaying and spacing births would help in further reducing infant mortality.

Health and Health Care

Promotion of maternal and child health is one of the most important components of the Reproductive and Child Health 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 Kerala, mothers of virtually all the children (99 percent) born in the three years preceding NFHS-2 received at least one antenatal check-up, and mothers of 98 percent received at least three antenatal check-ups. For 86 percent of children, mothers received the recommended number of tetanus toxoid vaccinations, and for 95 percent of children, mothers received iron and folic acid supplementation. Coverage by these interventions, though high for all population groups, is relatively low for women with low levels of education, older and higher parity women, and for women from households with a low standard of living.

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, 93 percent of births in Kerala were delivered in a medical facility. Among the very small proportion of births delivered at home, 49 percent were assisted by a traditional birth attendant and only 19 percent were assisted by a health professional. Overall, 94 percent of all births in the three years preceding the survey were assisted by a health professional. Only 27 percent of non-institutional births received a postpartum check-up within a period of two months after birth. These results suggest that health services in Kerala are reaching more women during pregnancy than during and after delivery .

The Government of India recommends that breastfeeding should begin immediately after childbirth and that infants should be exclusively breastfed for about the first four months of life. Breastfeeding is nearly universal in Kerala, but less than half of the children begin breastfeeding immediately after birth—only 43 percent in the first hour. However, 92 percent children begin breastfeeding within the first day. More than two-thirds of children under four months of age are exclusively breastfed. The median duration of breastfeeding is 24.5 months and the median duration of exclusive breastfeeding is 2.8 months. At age 6–9 months, all children should be receiving solid or mushy food in addition to breast milk. However, only 74 percent of children age 6–9 months receive the recommended combination of breast milk and solid/mushy foods.

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, 27 percent of children under age three years are underweight, 22 percent are stunted, and 11 percent are wasted. Child nutritional status has not improved much in Kerala since the time of NFHS-1. There is no change in the percentage of underweight children since NFHS-1, although stunting has declined slightly from 25 percent to 22 percent and wasting from 13 percent to 11 percent between the two surveys. Undernutrition is much higher in rural areas than in urban areas and is relatively higher among children from disadvantaged socioeconomic groups. The prevalence of undernutrition is about the same for girls as for boys. Anaemia is of great concern among young children in Kerala. More than two-fifths (44 percent) of children age 6–35 months are anaemic. The prevalence of anaemia is particularly high among children age 6–11 months (60 percent) and among children whose mothers are anaemic (55 percent).

Child immunization is an important component of child-survival programmes in India, with efforts focussing 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 Kerala, 80 percent of children age 12–23 months are fully vaccinated, another 19 percent have received some but not all of the recommended vaccinations, and 2 percent have not been vaccinated at all.

Immunization coverage, although far from complete, has improved substantially since NFHS-1, when 54 percent of children were fully vaccinated and 11 percent had not been vaccinated at all. Coverage of individual vaccines in Kerala is much higher than would appear from information on full coverage alone. Ninety-six percent of children age 12–23 months have been vaccinated against tuberculosis, 88 percent have received three doses of the DPT vaccine, and 88 percent have received three doses of the polio vaccine. The largest increase in vaccination coverage between NFHS-1 and NFHS-2 is for the measles vaccine, from 61 percent to 85 percent. Dropout for the series of DPT and polio vaccinations continues to be of some concern. Ninety-six percent of children received the first DPT vaccination, but 88 percent received all three doses; similarly, 97 percent received the first polio vaccination, but 88 percent received all

three doses. It is recommended that children under age five years should receive oral doses of vitamin A every six months starting at age nine months. However, only 44 percent of children age 12–35 months have received any vitamin A supplementation, and only 28 percent received a dose of vitamin A in the six months preceding the survey. Although the vitamin A coverage is still low in Kerala, it is much higher than in India as a whole, where only 16 percent received any vitamin A supplementation.

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 Kerala, 42 percent of children under age three were ill with fever during the two weeks preceding the survey, 23 percent were ill with ARI, and 12 percent had diarrhoea. More than three-quarters of the children who became ill with diarrhoea were taken to a health facility or health-care provider, as were more than four-fifths of children who were sick with ARI. Knowledge of the appropriate treatment for diarrhoea is widespread, still 11 percent of mothers of children age less than three years do not know about oral rehydration salt (ORS) packets, and 12 percent of mothers incorrectly believe that when children are sick with diarrhoea, they should be given less or the same to drink as usual. Ninety percent of children with diarrhoea received some form of oral rehydration therapy (ORT), including 48 percent who received ORS. The percentage of children with diarrhoea who received ORS has increased since NFHS-1, when it was only 16 percent, suggesting that there has been a substantial improvement in the management of childhood diarrhoea.

Based on a weight-for-height measure (the body mass index), 19 percent of women in Kerala are undernourished. Nutritional deficiency is particularly serious for women age 20–29, women who have been married but are not currently married, illiterate women, and women in disadvantaged socioeconomic groups. Women who are undernourished themselves are more than twice as likely as women who are not undernourished to have undernourished children. Overall, 23 percent of women in Kerala have some degree of anaemia, and 3 percent are moderately to severely anaemic. Anaemia is a serious problem among women in every population group, with prevalence rates ranging from 19 to 34 percent. Pregnant women are much more likely than nonpregnant women to be moderately anaemic.

Nearly two-fifths of households (39 percent) 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, households whose head belongs to the scheduled-tribes, and households with a low standard of living are much less likely than other households to be using adequately iodized cooking salt.

More than two-fifths (42 percent) of currently married women in Kerala report some type of reproductive-health problem, including abnormal vaginal discharge, symptoms of urinary tract infections, and pain or bleeding associated with intercourse. Among women reporting a reproductive health problem, less than half (45 percent) 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 health-care provider.

In recent years, there has been growing concern about domestic violence in India. NFHS-2 found that in Kerala, there is widespread acceptance among ever-married women that the beating of wives by husbands is justified under some circumstances. Three out of five women

accept at least one of six reasons as justification for a husband beating his wife. Ten percent of ever-married women have experienced beatings or physical mistreatment since age 15 and 4 percent experienced such violence in the 12 months preceding the survey. Most of these women have been beaten or physically mistreated by their husbands.

Overall, only 18 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 twice, on average, in the year preceding the survey. A large majority of the 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.

The survey collected information on the prevalence of tuberculosis, asthma, malaria, and jaundice among all household members. Disease prevalence is based on reports from household heads and should, therefore, be interpreted with caution. The survey found that 5 percent of the population suffers from asthma, and 1 percent or less of the population suffers from each of the other three diseases. Prevalence of all four conditions is higher in rural areas than in urban areas. Men are more likely than women to suffer from all of the conditions, except asthma.

More than half of the households in Kerala (58 percent) use private hospitals, clinics, or doctors for treatment when a family member is ill. More than one-third (38 percent) normally use the public medical sector. Even among households with a low standard of living, more than two-fifths normally use the private medical sector when members become ill. Most respondents are generally satisfied with the health care they receive. Ratings on the quality of services are consistently better for private-sector facilities than for public-sector facilities.

NFHS-2 also collected information on selected lifestyle indicators for household members. According to household respondents, 28 percent of men and less than 1 percent of women smoke, 15 percent of men and less than 1 percent of women drink alcohol, and 10 percent of men and 11 percent of women chew *paan masala* or tobacco.

Although the spread of HIV/AIDS is a major concern in India, 13 percent of women in Kerala have not heard of AIDS. Knowledge of AIDS is particularly low among women who are not regularly exposed to the media or are illiterate: among these women only 55–56 percent have heard of AIDS. Awareness of AIDS is relatively low also among women living in households with a low standard of living, scheduled-tribe, and Muslim women. Among women who have heard of AIDS, 67 percent learned about the disease from the radio and 57 percent from television, suggesting that government efforts to promote AIDS awareness through the electronic mass media have achieved considerable success. Not surprisingly, given the high level of literacy in Kerala, 61 percent of women also report learning about AIDS from newspapers or magazines. Among women who have heard of AIDS, however, more than one-quarter (27 percent) do not know of any way to avoid infection. The most frequently mentioned method of avoiding AIDS is by having sex with only one sex partner. Only 12 percent mention the use of condoms as a way of avoiding AIDS. Survey results suggest that health personnel could play a much larger role in promoting AIDS awareness. In Kerala, only 4 percent of women who know about AIDS learned about the disease from a health worker.