



सत्यमेव जयते

Government of India

Ministry of Health and Family Welfare

Kerala



**National Family Health
Survey (NFHS-5)**

2019-21

India



International Institute for Population Sciences
Deonar, Mumbai 400 088

NATIONAL FAMILY HEALTH SURVEY (NFHS-5)

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KERALA

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For additional information about the 2019-21 National Family Health Survey (NFHS-5), please contact:

International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400088

Telephone: 022-4237 2442

Email: nfhs52017@gmail.com, director@iipsindia.ac.in

For related information, visit <http://www.rchiips.org/nfhs> or <http://www.iipsindia.ac.in>

CONTRIBUTORS

K.S. James

S.K. Singh

Laxmi Kant Dwivedi

Y. Vaidehi

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INTRODUCTION

The 2019-21 National Family Health Survey (NFHS-5), the fifth in the NFHS series, provides information on population, health, and nutrition for India and each state and union territory. Like NFHS-4, NFHS-5 also provides district-level estimates for many important indicators. All five NFHS surveys have been conducted under the stewardship of the Ministry of Health and Family Welfare (MoHFW), Government of India. MoHFW designated the International Institute for Population Sciences (IIPS), Mumbai, as the nodal agency for the surveys. Funding for NFHS-5 was provided by the Government of India. Technical assistance and additional funding for NFHS-5 was provided by the USAID-supported Demographic and Health Surveys Program, ICF, USA. Assistance for some of the Clinical, Anthropometric, and Biochemical (CAB) tests was provided by the ICMR and the National AIDS Research Institute (NARI), Pune.

Four survey questionnaires—household, woman’s, man’s, and biomarker—were used to collect information in 19 languages using Computer Assisted Personal Interviewing (CAPI). All women age 15-49 and men age 15-54 in the selected sample households were eligible for interviewing. In the household questionnaire, basic information was collected on all usual members of the household and visitors who stayed in the household the previous night, as well as socioeconomic characteristics of the household, water and sanitation, health insurance, and number of deaths in the household in the three years preceding the survey. Two versions of the woman’s questionnaire were used in NFHS-5. The first version (district module), which collected information on women’s characteristics, marriage, fertility, contraception, reproductive health, children’s immunizations, treatment of childhood illnesses, and nutrition was fielded in the entire sample of NFHS-5 households. Information on these topics is available at the district, state, and national levels. In the second version of the questionnaire (state module), four additional topics, namely, sexual behaviour, HIV/AIDS, husband’s background and women’s work, and domestic violence, were also included. This version was fielded in a subsample of NFHS-5 households designed to provide information only at the state and national levels. The man’s questionnaire covered the man’s characteristics, marriage, number of children, contraception, fertility preferences, nutrition, sexual behaviour, attitudes towards gender roles, HIV/AIDS, and lifestyle. The biomarker questionnaire covered measurements of height, weight, and haemoglobin levels for children; height, weight, waist and hip circumference, haemoglobin levels, and finger-stick blood for additional CAB testing in a laboratory for women age 15-49 and men age 15-54; and blood pressure and random blood glucose for women and men age 15 years and over. Questionnaire information and biomarkers were collected only with informed consent from the respondents.

The NFHS-5 sample was designed to provide estimates of all key indicators at the national and state levels, as well as estimates for most key indicators at the district level (for all 707 districts in India, as on 31 March, 2017). The total sample size of approximately 610,000 households for India was based on the size needed to produce reliable indicator estimates for each district. The rural sample was selected through a two-stage sample design with villages as the Primary Sampling Units (PSUs) at the first stage (selected with probability proportional

to size), followed by a random selection of 22 households in each PSU at the second stage. In urban areas, there was also a two-stage sample design with Census Enumeration Blocks (CEBs) selected at the first stage and a random selection of 22 households in each CEB at the second stage. At the second stage in both urban and rural areas, households were selected after conducting a complete mapping and household listing operation in the selected first-stage units.

Readers should be cautious while interpreting and comparing the trends as some States/UTs may have a smaller sample size. Moreover, at the time of survey, *Ayushman Bharat AB-PMJAY* and *Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)* were not fully rolled out and hence, their coverage may not have been factored in the results of the percentage of households with any usual member covered under a health insurance/financing scheme and the percentage of mothers who received 4 or more antenatal care visits, respectively. Hence, the results should be interpreted with caution. The decline in the percentage of mothers who received 4 or more antenatal care visits in some districts in Kerala particularly may be due to flooding, in-migration, or other such conditions that emerged in recent years.

NFHS-5 fieldwork for Kerala was conducted in all 14 districts of the state from 20 July, 2019 to 2 December, 2019 by the Society for Promotion of Youth and Masses (SPYM). Information was collected from 12,330 households, 10,969 women age 15-49 (including 1,659 women interviewed in PSUs in the state module), and 1,473 men age 15-54.

This report presents the key findings of the NFHS-5 survey in Kerala, followed by detailed tables and an appendix on sampling errors. At the time of finalization of this report, wealth quintiles for the country as a whole were not ready. Therefore, on finalization of the national report, the breakup of key indicators by wealth quintiles for all states will be provided as an additional document and uploaded on the official website of MoHFW and IIPS.

HOUSEHOLD CHARACTERISTICS

Important household characteristics includes household composition, housing characteristics, household possessions, access to a toilet facility, and education. The household characteristics reflect the environmental risk factors and behavioural outcomes of the household population, including their likely impact on health status.

Household composition

In Kerala, just over half (53%) of the households are in rural areas. On average, households are comprised of 3.7 members. Twenty-four percent of households are headed by women, with 20 percent of the population living in female-headed households.

Fifty-seven percent of households in Kerala have household heads who are Hindu. Twenty-four percent of households have household heads who are Muslim and 19 percent of households have household heads who are Christian.

Eleven percent of households in Kerala have household heads who belong to a scheduled caste, 2 percent belong to a scheduled tribe, and 50 percent belong to an other backward class. Thirty-six percent of household heads do not belong to a scheduled caste, a scheduled tribe, or an other backward class. Almost three-fifths (56%) of households are nuclear, and the same proportion of the population resides in non-nuclear households.

Slightly more than one-fifth (21%) of Kerala's population is under age 15; only 12 percent is age 65 and over. The overall sex ratio of the population is 1,121 females per 1,000 males, and the sex ratio of the population under 7 years of age is much lower at 967 females per 1,000 males. Ninety-five percent of persons have an *Aadhaar* card.

Among children below 18 years of age, 3 percent have experienced the death of one or both parents. In all, 74 percent of children below 18 years of age live with both parents, 25 percent live with one parent (mostly with their mother), and 2 percent live with neither parent. Births of almost all (99%) children under 5 years of age were registered with the civil authorities, and 90 percent of children have a birth certificate.

Death registration

Almost all deaths of usual household members (97%) in the three years preceding the survey were registered with the civil authorities. Overall, in Kerala death registration is slightly higher in urban areas (98%) than rural areas (97%) and among males (98%) than females (96%).

Disability

The respondent to the Household Questionnaire provided information for all usual household members on whether or not they have any disability in specified domains. The domains of disability are hearing, speech, visual, mental, locomotor, and other. Just over 1 percent (1.2%) of the *de jure* household population has any disability. The most prominent type of disability is locomotor (0.5%). Men are slightly more likely than women to have any disability (1.4% versus 0.9%). The proportion of household members who have any disability is higher at ages

35 and above (1.3-1.5%) than at younger ages (0.3-1.0%).

Housing characteristics

Over four-fifths (83%) of households in Kerala live in a *pucca* house and all households have electricity.

Ninety-five percent of households in Kerala use an improved source of drinking water, but only 25 percent of households have water piped into their dwelling, yard, or plot. Urban households (30%) are more likely than rural households (20%) to have water piped into their dwelling, yard, or plot. Ninety-five percent of households use an appropriate treatment method to make drinking water potable (mostly by boiling). A large majority (72%) of households in Kerala use a clean fuel for cooking.

Access to toilet facility

Safe sanitation is one of the foundations of a healthy, comfortable, and dignified life. Households without proper sanitation facilities have a greater risk of diseases like diarrhoea, dysentery, and typhoid than households with improved sanitation facilities that are not shared with other households.

Almost all (99%) households in Kerala use an improved sanitation facility.

Ninety-nine percent of households use an improved sanitation facility. In Kerala, access to a toilet facility is universal, that is, all households have access to a toilet facility.

Selected household possessions

In Kerala, 87 percent of households own a house (86% of urban households and 89% of rural households). Almost all urban households (98%) and rural households (97%) in Kerala have a mobile phone. Ninety-six percent of households have a bank or post office account. Fifty-eight percent of households own either a motorcycle or a scooter. BPL cards are held by 43 percent of households. Irrigated land is owned by 16 percent of rural households and 6 percent of urban households. Overall, 14 percent of all households in Kerala own agricultural land, and one-quarter of households own farm animals.

Background characteristics of respondents

Twenty-six percent of women and 31 percent of men are in the 15-24 age group, while 26 percent and 24 percent of women and men, respectively, are in the 25-34 age group. Fifty-two percent of women and 54 percent of men are in rural areas.

In NFHS-5, literate persons are those who have either completed at least standard 9 or passed a simple literacy test conducted as part of the survey. According to this measure, 97 percent each of women and men age 15-49 are literate.

Only 1 percent of women and 2 percent of men age 15-49 have never been to school. More

than half (51%) of women age 15-49 in Kerala have completed 12 or more years of schooling, compared with 43 percent of men. Women are more likely than men to be currently married (74% versus 52%) or widowed (2% versus 0.2%), while men are more likely than women to be never married (47% versus 22%).

Media exposure is quite widespread among women and men in Kerala. More than three-quarters (76%) of men and nearly three-quarters (72%) of women watch television at least once a week. However, men (66%) are much more likely than women (58%) to read a newspaper or magazine at least once a week. Seven percent of men and 13 percent of women are not regularly exposed to print media or other forms of media.

A majority of female respondents are Hindus (54%), while 30 percent are Muslims, and 16 percent are Christian. Fifty-eight percent of female respondents belong to an other backward class, while 11 percent belong to a scheduled caste. Two percent of both women and men belong to a scheduled tribe, while 29 percent of women and 27 percent of men 15-49 do not belong to a scheduled caste, a scheduled tribe, or an other backward class.

Almost three-quarters (74%) of women and one-quarter of men age 15-49 were not employed in the 12 months preceding the survey. Four percent of women and 7 percent of men were engaged in an agricultural occupation, while just over one-fifth (21%) of women and three-fifths of men were employed in a non-agricultural occupation.

EDUCATION

In NFHS-5, information related to preschool attendance has been collected for the first time, in addition to school attendance among children age 6-17 years and educational attainment of other members of the household, including reasons for drop-out in the case of those who discontinued education.

Preschool attendance

In India many children attend *anganwadi* centres that provide spaces for children to learn, play, eat nutritious food, and develop the skills needed for a lifetime of learning. Attending pre-primary education, such as at an *anganwadi* centre, improves children's school readiness by providing quality learning through interactive, play methods with qualified instructors. Also, parents or guardians can go to work at ease if children are enrolled in pre-primary education.

Are there gender differentials in children's school attendance?

Percentage of children attending school by age



In Kerala, 51 percent of boys and 56 percent of girls age 2-4 years attend preschool. Preschool attendance is lower among children in nuclear households (49%), than non-nuclear households (55%). Preschool attendance is higher among children in households headed by Christians (59%) or Hindus (58%) than, Muslims (46%). Preschool attendance does not vary much by caste/tribe. Overall, there is negligible difference in preschool attendance by residence (54% in urban areas and 53% in rural areas). Among the districts, preschool attendance is highest in Alappuzha (72%) and is lowest in Palakkad (48%) and Malappuram (46%).

School attendance among children

Almost all (98%) children age 6-17 years in Kerala attend school. School attendance is universal at age 6-14 years, but drops to 94 percent at age 15-17 years. There is no gender disparity in school attendance in the 6-14 years age group; however, in the age group 15-17 years, 96 percent of girls, compared with 93 percent of boys, are attending school.

FERTILITY

This section provides trends in the total fertility rate, age at marriage, pregnancy outcomes, teenage pregnancy, birth interval, the desire for more children, and son preference. NFHS-5 estimates on the median age at marriage, total fertility rate, and teenage motherhood illustrated in this section can help in setting benchmarks for the Sustainable Development Goals at the sub-national level.

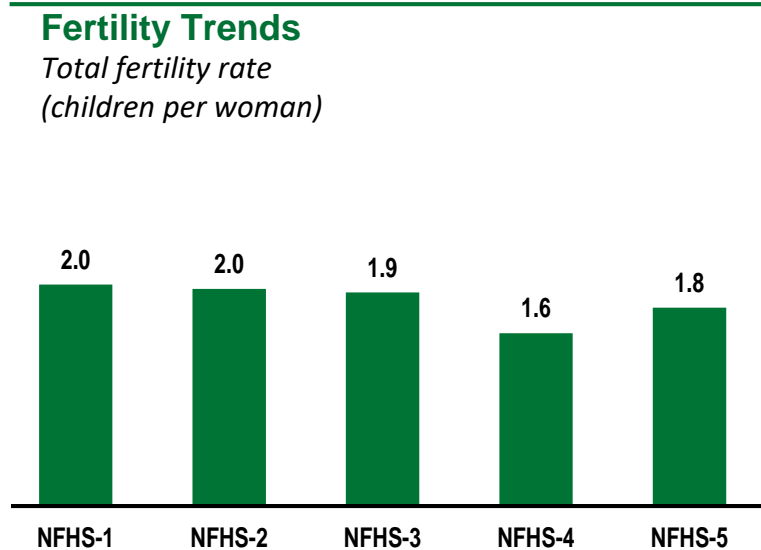
Age at first marriage

In Kerala, the median age at first marriage is 21.5 years among women age 25-49 years. Six percent of women age 20-24 years got married before attaining the legal minimum age of 18 years, down from 8 percent in NFHS-4. Only ten percent of women age 20-49 years have never married, compared with 36 percent of men age 20-49.

Fertility levels

The total fertility rate (TFR) in Kerala is 1.8 children per woman, which is well below the replacement level of fertility. Fertility has increased by 0.2 children between NFHS-4 and NFHS-5.

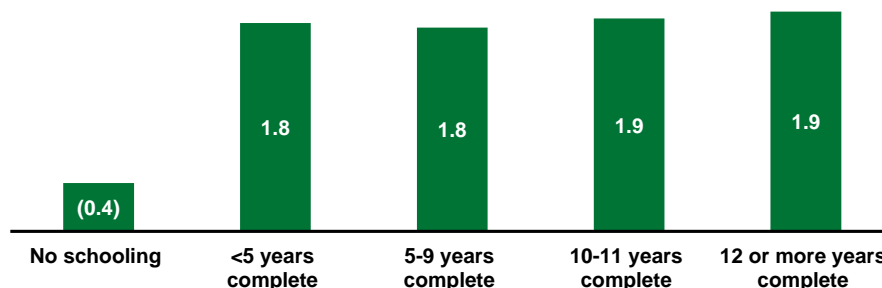
The total fertility rate in urban areas and rural areas is the same at 1.8 children per woman, and is below the replacement level. Among births in the three years preceding the survey, 17 percent were of birth order three or higher, compared with 13 percent in NFHS-4.



The greatest differentials in fertility are by religion and caste/tribe. The total fertility rate is below 2.0 children in every group except Muslim women (2.3) and scheduled tribe women (2.2).

How does fertility vary with schooling?

Total fertility rate (children per woman)



Pregnancy outcome

Ninety-two percent of last pregnancies in the five years preceding the survey ended in a live birth, and the remaining 8 percent terminated in foetal wastage (abortion, miscarriage, or stillbirth). Miscarriage is the most commonly reported type of foetal wastage, accounting for 5 percent of all pregnancies, and abortions accounted for 3 percent.

The main reasons for seeking abortion reported by women were complications in pregnancy (22%), unplanned pregnancy, and health did not permit (18% each). The most common methods used for performing abortions were medicines (77%), other surgical methods (10%), and manual vacuum aspiration (MVA) (5%). About half (49%) of abortions were performed in public health sector facilities and half in private health sector facilities. Thirteen percent of women reporting an abortion, reported having complications from the abortion.

Teenage pregnancy

Among young women age 15-19 in Kerala, 2 percent have already begun childbearing, that is, they have already had a live birth or are pregnant with their first child, which is almost the same (3%) as in NFHS-4. The proportion of women who started childbearing rises sharply from 3 percent among women age 18 years to 9 percent among women age 19 years. Muslim women age 15-19 (5%) are more likely to have begun childbearing than Hindu women (1%) and Christian women (2%). Also, women age 15-19 years belonging to a scheduled tribe (5%) are more likely to have begun childbearing, than women from any other caste/tribe group (1-3%).

Birth intervals

The median interval between births in the five years before the survey in Kerala is 50.7 months, 1.2 months longer than in NFHS-4. Four percent of births take place within 18 months of the previous birth and 12 percent occur within 24 months. The proportion of births occurring

within 24 months of a previous birth is particularly high for mothers age 20-29. Twenty-seven percent of all births occur within three years of the previous birth. Research shows that waiting at least three years between children reduces the risk of infant mortality and has a positive impact on maternal health.

Twenty-seven percent of all births occur within three years of the previous birth.

Fertility preferences

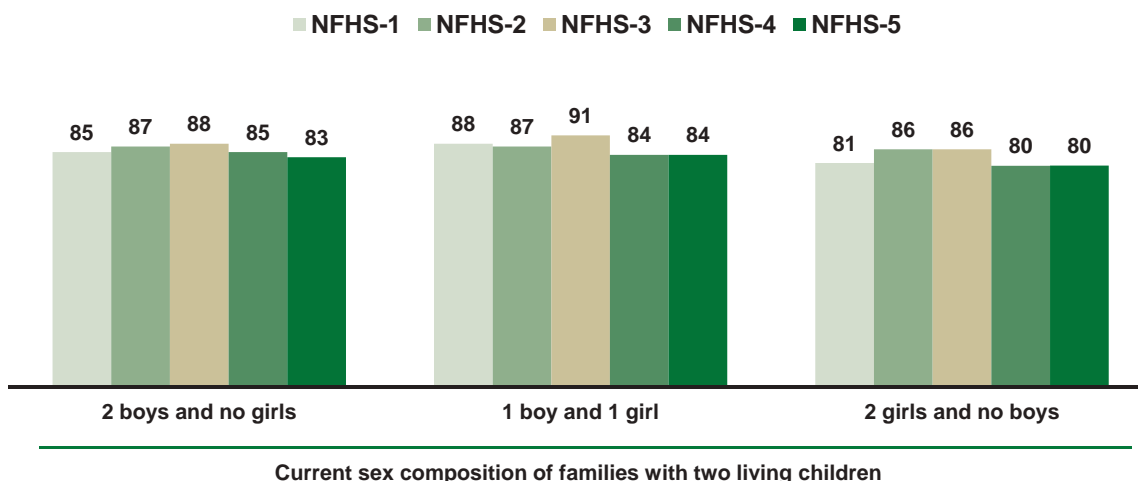
Sixty-five percent of currently married women and 63 percent of men age 15-49 years want no more children, are already sterilized, or have a spouse who is sterilized. Among those who want another child, 35 percent of women and 30 percent of men would like to wait at least two years before the next birth. Seventy-four percent of women and 76 percent of men consider the ideal family size to be two or fewer children.

In Kerala, there is some preference for sons. Eight percent of women and 14 percent of men want more sons than daughters, but only 6 percent of women and 5 percent of men want more daughters than sons. However, more than half (51%) of women would want at least one son while nearly three-fifths (58%) of men would like to have at least one son, and more than half of women (51%) and men (54%) want at least one daughter.

Women’s desire for more children is strongly affected by their current number of sons. For example, among women with two children, 83 percent with 2 sons want no more children, compared with 80 percent with two daughters who want no more children. Notably, the proportion of currently married women with two children who want no more children irrespective of their number of sons has remained unchanged (83%) in the 4 years since NFHS-4.

How does son preference affect women’s desire for children?

Percentage of currently married women with two children who want no more children



In Kerala, unplanned pregnancies are not common. There is almost no difference between the total wanted fertility rate (1.7 children per woman) and the total fertility rate (1.8 children per woman).

FAMILY PLANNING

The family planning section covers trends in contraceptive knowledge and current use, informed choice, and unmet need for family planning methods among women age 15-49 years. It also includes information on men’s attitude towards women using a contraceptive method. As in previous rounds of the survey, NFHS-5 provides estimates of the contraceptive prevalence rate and unmet need for family planning.

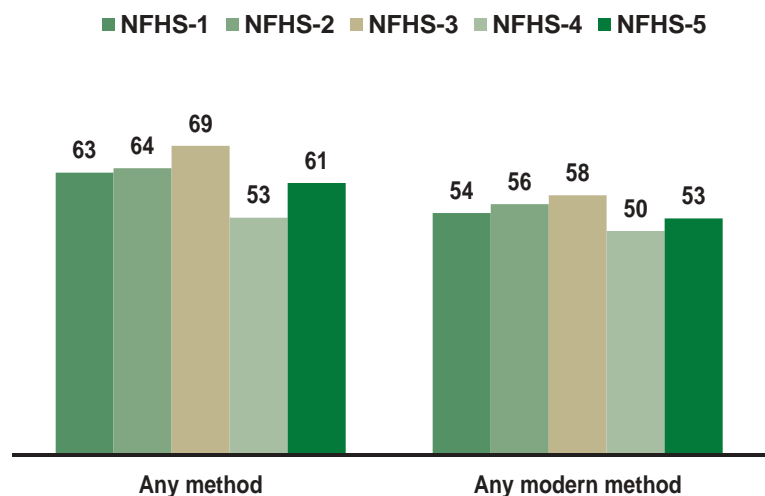
Contraceptive knowledge and use

Knowledge of contraception is almost universal (99%) in Kerala. However, some methods are still less well known. Only three-fifths of currently married women know about the lactational amenorrhoea method (LAM) and 52 percent know about female condom. Among all women, only 46 percent know about emergency contraception.

The contraceptive prevalence rate (CPR) among currently married women age 15-49 is 61 percent, considerable rise since NFHS-4 (53%). The use of modern family planning methods (53%) has increased marginally from its level in NFHS-4 (50%). The use of female sterilization has remained almost unchanged between NFHS-4 and NFHS-5 (46% versus 47%). Notably, the share of female sterilization in overall contraceptive use has decreased from 86 percent in NFHS-4 to 77 percent in NFHS-5. Contraceptive use in NFHS-5 increases sharply with age, from 9 percent for women age 15-19 to 75 percent for women age 40-49.

How many women use family planning?

Percentage of currently married women



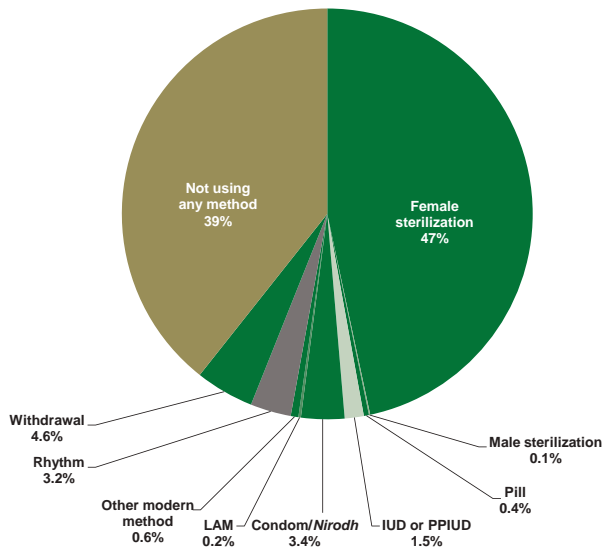
In Kerala, contraceptive use is almost the same in urban areas (61%) and rural areas (60%). Contraceptive prevalence decreases with increasing schooling of women. Seventy-two percent of currently married women with no schooling use female sterilization, compared with only 34 percent of women with 12 or more years of schooling. Muslim women (57%) are less likely to use contraception than either Hindu women or Christian women (62% each).

Women in Kerala are slightly more likely to use contraception if they already have a son. For example, among women with three children, 82 percent with at least one son use a method of

family planning, compared with 78 percent of women with two daughters and no sons.

What contraceptive methods do women use?

Currently married women



The most common modern spacing methods used by currently married women in Kerala are condoms (3%) and IUDs or PPIUDs (2%). In general, urban women and better-educated women are more likely than other women to use spacing methods.

Fifty-seven percent of sterilized women had their sterilization operation in the public health sector, mainly in a government or municipal hospital, and 79 percent of IUD or PPIUD users had their IUD insertion in the public health sector. More than half (53%) of condom/*Nirodh* users get their supply from the public health sector.

The 12-month discontinuation rate for any reason is 38 percent for all contraceptive methods. Three-fifths of users of modern spacing methods discontinued use within the first year after they adopted the method. The most common reason for discontinuation is 'other fertility related reason' which includes infrequent sex or husband away, difficult to get pregnant or menopausal, and marital dissolution or separation.

Three-fifths of users of modern spacing methods discontinued use within the first year after they adopted the method.

Informed choice

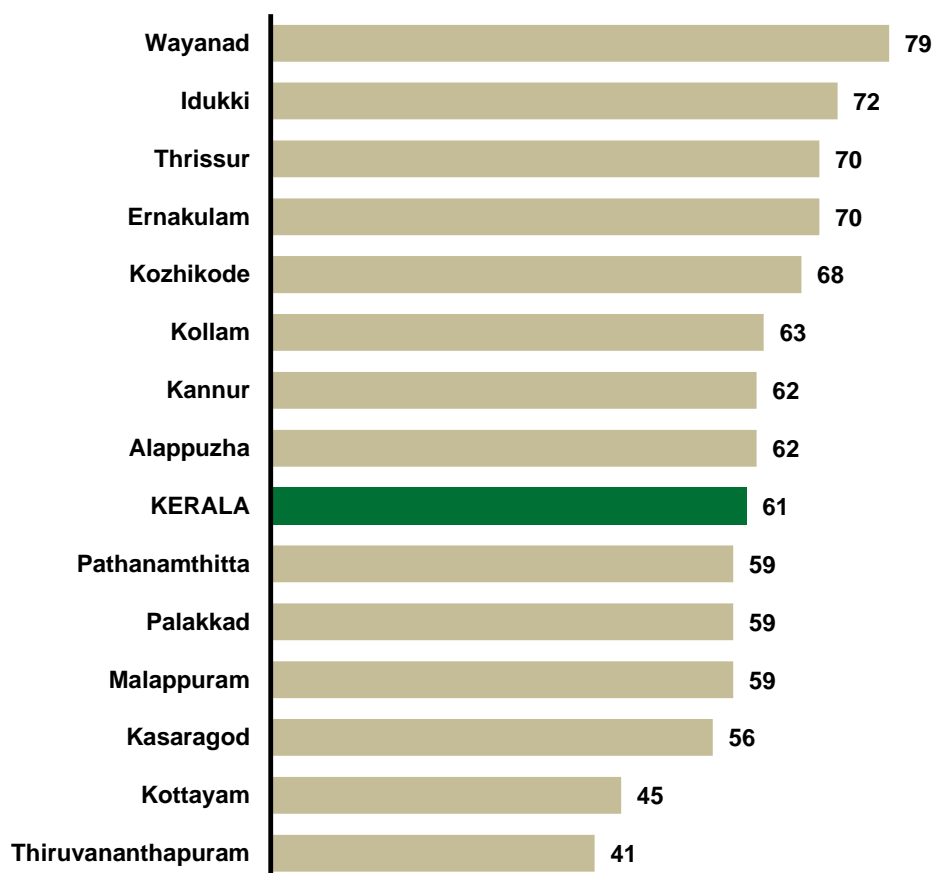
Women who know about all available contraceptive methods and their side effects can make better choices about what method to use. Only about two-thirds (65%) of users of selected modern contraceptive methods were ever told by a health or family planning worker about other methods they could use. Only 62 percent were told about the possible side effects or problems with their method, and even fewer (53%) were told what to do if they experienced any side effects.

Men's attitudes

Almost one-sixth (16%) of men age 15-49 in Kerala agree that contraception is women's business and a man should not have to worry about it. However, 44 percent of men think that women using contraception may become promiscuous. Half of men know that a condom, if used correctly, protects against pregnancy most of the time.

Contraceptive Prevalence Rate by District

Percentage of currently married women



Unmet need

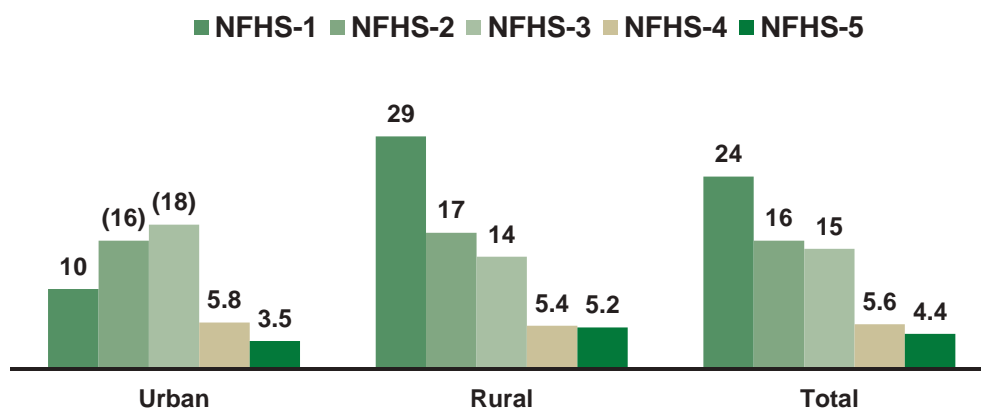
Unmet need for family planning is defined as the percentage of currently married women who either want to space their next birth or stop childbearing entirely, but are not using contraception. According to this definition, 13 percent of currently married women have an unmet need for family planning, almost unchanged since NFHS-4 (14%). Currently, 83 percent of the demand for family planning is being satisfied and 72 percent of the demand is being satisfied by modern methods.

INFANT AND CHILD MORTALITY

The mortality rate among children under age 5 years including neonatal, postneonatal, and infant mortality rates is an important indicator that measures the overall well-being of a country. The infant mortality rate in Kerala in NFHS-5 is estimated at 4 deaths before the age of one year per 1,000 live births, down from the NFHS-4 estimate of 6, the NFHS-3 estimate of 15, the NFHS-2 estimate of 16, and the NFHS-1 estimate of 24. The under-five mortality rate (U5MR) is estimated to be 5 deaths per 1,000 live births, lower than the NFHS-4 estimate of 7.

Trends in Infant Mortality

Deaths per 1,000 live births



Girls have slightly higher mortality rates than boys at all ages under 5 years. Infant and under-five mortality rates are less than 6 per 1,000 live births. The infant mortality rate is much higher for Hindus than for Muslims. The infant mortality rate is slightly higher in rural areas than urban areas.

Girls have slightly higher mortality rates than boys at all ages under 5 years.

MATERNAL HEALTH

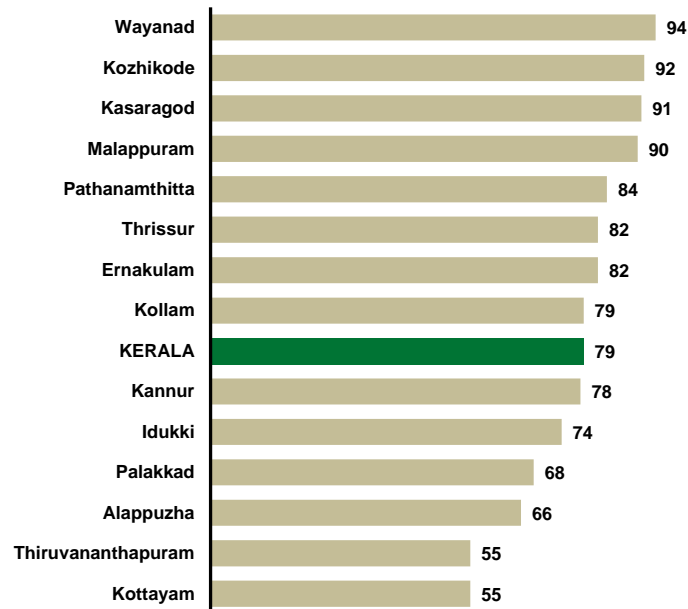
Maternal health is an important aspect for the development of any country in terms of increasing equity and reducing poverty. The survival and well-being of mothers are not only important in their own right, but are also central to solving broader economic, social, and developmental challenges. Maternal health care services are essential for the health and wellbeing of mothers, as well as their children, affecting the overall population and its health and nutritional status. This section describes the utilization of antenatal care, delivery care, and postnatal care by women who reported their last births in the five years preceding the survey. It also shows the extent of male involvement in maternal health care.

Antenatal care

Among mothers who gave birth in the five years preceding the survey, almost all (98%) mothers received antenatal care for their last birth from a health professional (almost 98% from a doctor). Two percent did not receive any antenatal care (ANC). Among mothers who gave birth in the five years preceding the survey, 97 percent registered the pregnancy for the most recent live birth. Among the registered pregnancies, 91 percent received a Mother and Child Protection Card (MCP Card).

Four or More Antenatal Care Visits by District

Percentage of last births in the past five years



Ninety-four percent of women received antenatal care during the first trimester of pregnancy, as is recommended. Only 79 percent of mothers had four or more antenatal care visits. There is not much difference in four or more antenatal care visits by residence. Since NFHS-4, the *percentage* of mothers who had an antenatal check in the first trimester has remained almost unchanged (95% vs. 94%) and there has been a substantial drop in the proportion of women who had four or more antenatal care visits (from 90% to 79%). For almost all (98%) of their last births, mothers received iron and folic acid (IFA) supplements, but only 80 percent consumed them for the recommended 100 days or more and only 67 percent consumed them for the newly recommended 180 days or more. Ninety-five percent of last births were protected against neonatal tetanus through tetanus toxoid vaccinations given to the mother. Twenty percent of mothers took an intestinal parasite drug during pregnancy.

Seventy-nine percent of mothers in Kerala had at least four antenatal care visits for their last birth.

Among women with a live birth in the five years preceding the survey who met with a community health worker in the last three months of pregnancy for their most recent live birth, more than 7 in 10 received advice on each of five different areas (89% received advice on breastfeeding, 81% on the importance of institutional delivery, 79% on keeping the baby warm, 77% on cord care, and 71% on family planning).

Even when women receive antenatal care, sometimes they do not receive all the services needed to monitor their pregnancy. In Kerala, nearly all (99-100%) women who received antenatal care for their last birth received each of the services needed to monitor their pregnancy: having their weight taken, their blood pressure measured, having a urine sample taken, having a blood sample taken, and having their abdomen examined.

An ultrasound test was performed during 95 percent of pregnancies in the five years preceding the survey. Because ultrasound testing is nearly universal, there is little variation in the prevalence of ultrasound testing by background characteristics.

Delivery care

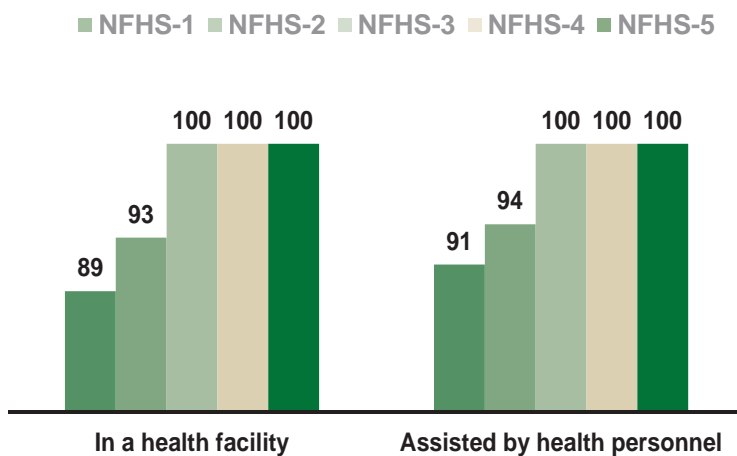
In Kerala, almost all births take place in a health facility; mostly in a private health facility or in an NGO/trust health facility (66%). Health facility births are universal in Kerala since NFHS-3. The universality of institutional births cuts across all background characteristics.

Almost all births during the past five years took place in health facility with assistance from a skilled provider. Nearly two-fifths (39%) of births were delivered by caesarean section, and 28 percent of caesarean sections (11% of all births) were emergency caesarean sections.

Among women who had a live birth in the five years preceding the survey that was delivered in a health facility, 13 percent received financial assistance under *Janani Suraksha Yojana* (JSY). Rural women and urban women are equally likely to receive financial assistance under JSY. Scheduled tribe women (38%) and scheduled caste women (22%) were more likely than women from any other caste/tribe group to receive financial assistance under JSY.

Are babies being delivered safely?

Percentage of births in the past five years



Postnatal care

Early postnatal care for a mother helps safeguard her health and can reduce maternal mortality. In Kerala, 94 percent of mothers had a postnatal check after their last birth and 93 percent of mothers had a postnatal check within two days of the birth, as is recommended.

Almost all children in Kerala who were born in the past five years were born in a health facility and birth took place with assistance from a skilled provider.

Ninety-one percent of last births in the five years preceding the survey received a health check in the first two days after birth and only 4 percent of newborns either did not have any health check or had it after a week.

Male involvement in maternal care

All men with a child under three years of age said that the youngest child's mother received antenatal care. Ninety-four percent of men with a child under three years said they were present during at least one antenatal check received by the child's mother, but only 81 percent were told by a health provider or health worker what to do if the child's mother had a pregnancy complication. Only 56 percent of men were told about vaginal bleeding as signs of pregnancy complications, and 63-66 percent of men were told about other signs of pregnancy complications (convulsions, prolonged labour, severe abdominal pain, and high blood pressure).

Most fathers with a child less than three years of age were given information about various aspects of maternal care. Eighty-six percent of men were told about the importance of proper nutrition for the mother during pregnancy and 81 percent were told about the importance of delivering the baby in a health facility. Sixty-eight percent of men were told by a health provider or a health worker about family planning or delaying the next child.

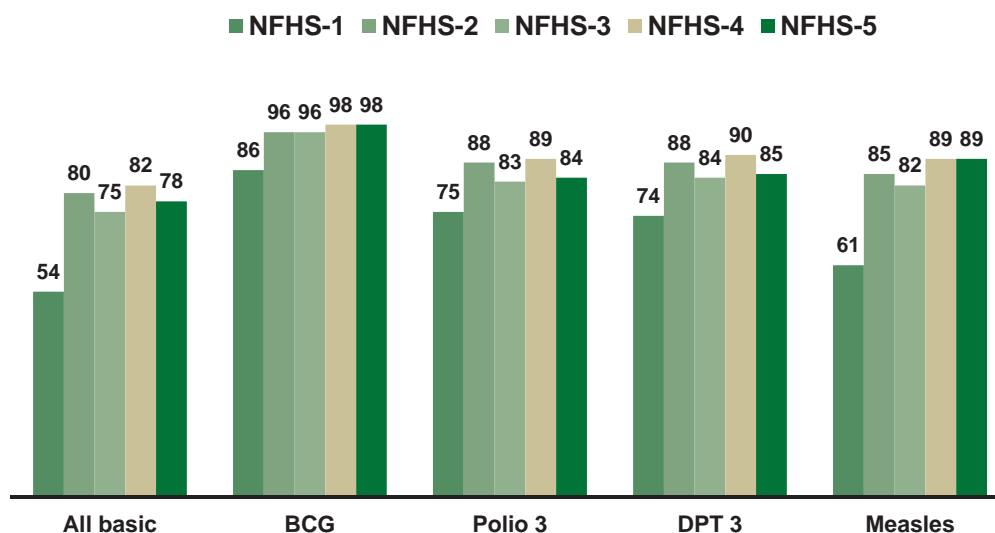
CHILD HEALTH

Vaccination of children

Vaccinations are considered as the most cost-effective intervention that can improve the overall health of children. Seventy-eight percent of children age 12-23 months received all basic vaccinations against six major childhood illnesses (tuberculosis, diphtheria, pertussis, tetanus, polio, and measles) at any time before the survey. However, 98 percent of children are at least partially vaccinated; only 2 percent have not received any vaccinations at all. Vaccinations were recorded from a vaccination card for a large majority (89%) of children, increase since NFHS-4 (86%).

Trends in Vaccination Coverage

Percentage of children 12-23 months receiving vaccinations



Ninety-eight percent of children have received a BCG vaccination. However, more than four-fifths (84%) have received the recommended three doses of polio vaccine, 85 percent have received the three recommended doses of DPT or Penta vaccine, and 89 percent have been vaccinated against measles. There is considerable dropout between the first and third doses of DPT vaccine (from 96% to 85%) and polio vaccine (from 95% to 84%). It should be noted that the Penta vaccine was not widely available at the time of NFHS-4 survey.

Between NFHS-4 and NFHS-5, there is a decrease in vaccination coverage for three doses of DPT (from 90% to 85%), measles and BCG coverage has remained unchanged between NFHS-4 and NFHS-5 (89% and 98%, respectively). The coverage for three doses of polio vaccine has decreased, from 89 percent to 84 percent. In addition, over nine-tenths (94%) of children have received at least one dose of hepatitis B vaccine, and 83 percent of children have received all three recommended doses of hepatitis B vaccine.

Coverage with all basic vaccinations is almost equal for boys and girls, and for rural areas and urban areas (77-78%). Children whose mothers have 8-9 years of schooling (70%), Muslim children (74%), and children from an other backward class (75%) were least likely to have received all basic vaccinations.

Childhood illnesses

In the two weeks before the survey, 2 percent of children under age five years had symptoms of an acute respiratory infection (cough accompanied by (1) short, rapid breathing that is chest related and/or (2) difficult breathing that is chest related). Of these children, 70 percent were taken to a health facility or health provider.

Twenty-three percent of children under age five years were reported to have had fever in the two weeks preceding the survey; 89 percent of these children were taken to a health facility or provider for treatment.

Overall, 4 percent of children under age five years had diarrhoea in the two weeks preceding the survey. Eighty-seven percent of these children were taken to a health facility or health provider. Ninety-eight percent of mothers of young children have heard of oral rehydration salt (ORS) packets for the treatment of diarrhoea, but only 61 percent of children with diarrhoea were given ORS. Fifty-four percent of children with diarrhoea were given gruel and three-quarters were given any type of oral rehydration therapy (ORT). Twenty-two percent were given zinc supplements. Thirteen percent of children with diarrhoea did not receive any type of treatment at all.

To reduce dehydration and minimise the effects of diarrhoea on nutritional status, it is recommended that normal feeding of children be continued when they have diarrhoea and that the amount of fluids given should be increased. However, in Kerala only 15 percent of children with diarrhoea received more to drink than normal. A little less than one-quarter (24%) of children received the same amount to drink as usual. Of greater concern, three-fifths of children with diarrhoea were given less to drink or nothing at all to drink. Nearly one-quarter (24%) of children with diarrhoea were given the same amount of food or more food, as recommended.

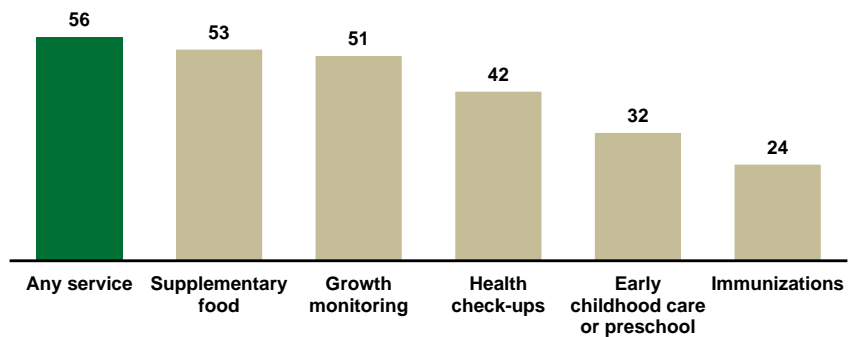
Integrated Child Development Services (ICDS)

The ICDS programme provides nutrition and health services for children under age six years and pregnant or breastfeeding women, as well as preschool activities for children age 3-5 years. These services are provided through community-based *anganwadi* centres.

Fifty-six percent of children under 6 years received services of some kind from an *anganwadi* centre in the 12 months preceding the survey. The most common services that age-eligible children receive are supplementary food (53%), growth monitoring (51%), health check-ups (42%), and early childhood care or preschool (32%). The service that is least likely to be accessed is immunizations (24%). More

How many children received *anganwadi* centre services?

Percentage of age-eligible children receiving services



than two-fifths (43%) of mothers of children who were weighed at an *anganwadi* centre received counselling from an *anganwadi* worker or an ANM. Among children under 6 years, nearly two-thirds (63%) of their mothers received any service from an *anganwadi* centre during pregnancy, and more than half (55%) of their mothers received any service while breastfeeding.

BREASTFEEDING, NUTRITION, AND ANAEMIA

Infant feeding

Although breastfeeding is nearly universal in Kerala, only 56 percent of children under 6 months are exclusively breastfed, as the World Health Organization (WHO) recommends. Ninety-five percent are put to the breast within the first day of life, but only 70 percent started breastfeeding in the first hour of life (as recommended). While exclusive breastfeeding indicators show an improvement since NFHS-4, many infants are still deprived of the highly nutritious first milk (colostrum) and the antibodies it contains.

It is recommended that nothing be given to children other than breastmilk even in the first three days when the milk has not begun to flow regularly because prelacteal feeds limit the frequency of suckling by the infant and expose the baby to the risk of infection. However, 8 percent of children are given something other than breastmilk during the first three days. Overall, 94 percent of children continue breastfeeding at 1 year and more than four-fifths (85%) continue breastfeeding at 2 years. The median duration of breastfeeding is 27.6 months, which is the age to which half of children are breastfed.

After the first 6 months, breastmilk is no longer enough to meet the nutritional needs of infants. Therefore, complementary foods should be added to the diet of the child. However, at age 6-8 months, only 71 percent of children in Kerala receive breastmilk and complementary foods.

WHO has several recommendations for infant and young child feeding (IYCF) practices for

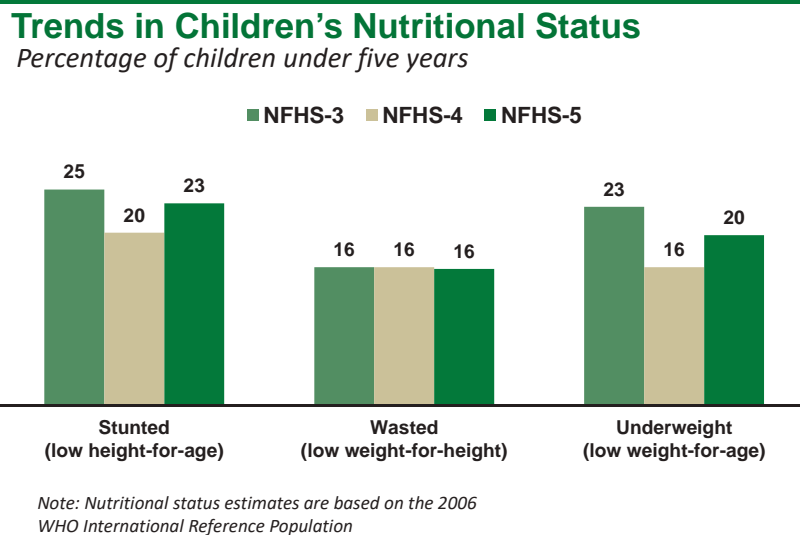
children age 6-23 months. The key IYCF indicators measure the adequacy of dietary diversity and meal frequency for breastfed and non-breastfed children. Nearly half (49%) of children age 6-23 months are fed the recommended minimum number of times per day and even fewer (46%) are fed from the appropriate number of food groups. Less than one-quarter (23%) are fed according to all three recommended practices.

Micronutrient deficiency is a major component of childhood undernutrition and a significant contributor to childhood morbidity and mortality. Vitamin A is an essential nutrient for growth, immunity, and vision. Severe vitamin A deficiency (VAD) can cause eye damage and a higher risk of dying from measles and diarrhoeal disease. The Government of India recommends that children under 5 years of age receive vitamin A supplements every six months, starting at age 9 months. In Kerala, more than four-fifths (84%) of children age 9-35 months were given a vitamin A supplement in the last six months, but only two-thirds of youngest children age 6-23 months living with their mother consumed vitamin A-rich foods during the day or night before the survey.

Iron deficiency is a primary cause of anaemia. Eating foods rich in iron and taking iron supplements can help prevent anaemia. Fifty-one percent of children age 6-23 months ate iron-rich foods during the day or night before the survey; however, 32 percent of children in the same age group were given iron supplements in the week before the survey.

Children’s nutritional status

Childhood undernutrition contributes to childhood diseases and is a major cause of child mortality in India. Twenty-three percent of children under age five years are stunted, or too short for their age, which indicates that they have been undernourished for some time. Sixteen percent are wasted, or too thin for their height, which may result from inadequate recent food intake or a recent illness causing weight loss, and 6 percent are severely wasted. Twenty percent are underweight, which takes into account both chronic and acute undernutrition. Even during the first six months of life when almost all babies are breastfed, 23 percent of children are stunted, 26 percent are wasted, and 29 percent are underweight.



Children’s nutritional status in Kerala has worsened since NFHS-4 by most measures. The percentage of children who are stunted increased marginally from 20 percent to 23 percent in the 4 years between NFHS-4 and NFHS-5. Similarly, the percentage of children who are underweight (20%) has increased since NFHS-4 (16%). The proportion of children wasted has

remained the same (16%). The continuing high levels of undernutrition are still a major problem in Kerala.

Differences in the levels of malnutrition are quite pronounced for several background characteristics. Stunting generally decreases with increasing mother's schooling, better nutritional status of the mother, and larger child's size at birth. Stunting is relatively high for children of higher birth orders. It is generally higher among scheduled tribe children and lower among Christian children than any other group of children. Malnutrition is somewhat higher for male children than female children on all three nutritional status measures.

Adults' nutritional status

Malnutrition refers to deficiencies, excesses, or imbalances in a person's intake of energy and/or nutrients, and includes undernutrition as well as overweight and obesity. The body mass index (BMI), which is defined as a person's weight in kilograms divided by the square of the person's height in metres, is a measure that indicates the nutritional status in adults.

Nearly half of women (48%) and men (46%) are either too thin or overweight or obese. Women and men are almost four times as likely to be overweight or obese as to be thin, which is slightly higher than the pattern observed in NFHS-4. Among women age 15-49, the proportion overweight or obese is 38 percent, which has increased from 32 percent in NFHS-4. Just over half of women and men are at a healthy weight for their height.

Undernutrition is particularly common among women and men in the younger age groups (especially age 15-19), in rural areas, and scheduled tribes. Overweight and obesity are most prevalent in older adults, and those in urban areas.

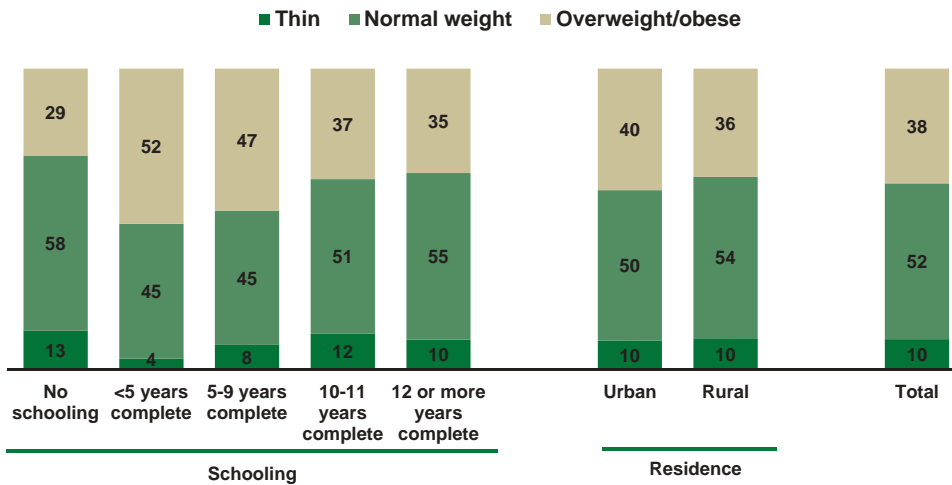
For the first time, the 2019-21 NFHS measured the waist circumference and hip circumference of women and men age 15-49 years. This information was used to calculate the waist-to-hip ratio (WHR). WHR helps to identify the distribution of body fat and predicts abdominal obesity. Abdominal obesity is associated with an increased risk of type 2 diabetes mellitus, myocardial infarction, stroke, and premature death.

More than two-thirds (71%) of women and 57 percent of men have a waist-to-hip ratio (WHR) that puts them at a substantially increased risk of metabolic complications. The proportion of adults with an increased risk WHR increases with age, from 50 percent for women age 15-19 to 82 percent for women age 40-49, and from 41 percent for men age 15-19 to 68 percent for men age 40-49. Women with 12 or more years of schooling are at less risk of metabolic complications than women with no schooling.

The use of iodized salt prevents iodine deficiency, which can lead to miscarriage, goitre, and mental retardation. Ninety-nine percent of households with tested salt were using iodized salt at the time of the survey.

How many women are at a healthy weight for their height?

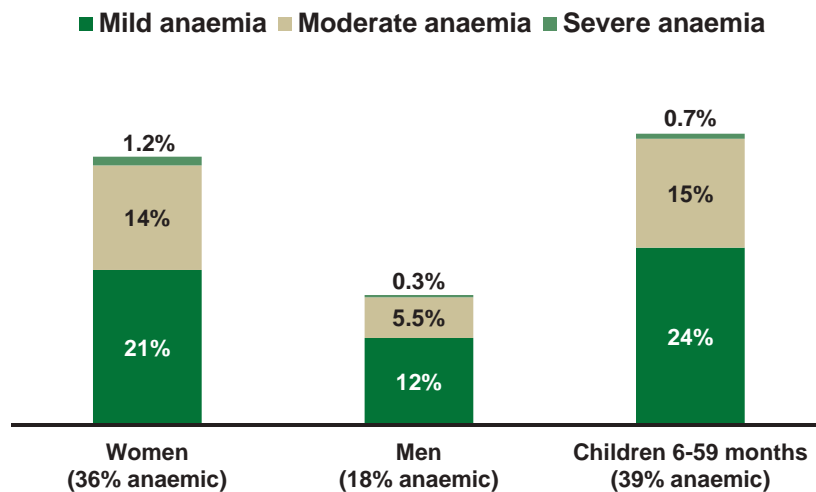
Percent distribution of women



Anaemia

Anaemia is a condition that is marked by low levels of haemoglobin in the blood. Iron deficiency is estimated to be responsible for about half of all anaemia globally, but anaemia can also be caused by malaria, hookworms and other helminths, other nutritional deficiencies, chronic infections, and genetic conditions. Anaemia can result in maternal mortality, weakness, diminished physical and mental capacity, increased morbidity from infectious diseases, perinatal mortality, premature delivery, low birth weight, and (in children) impaired cognitive performance, motor development, and scholastic achievement. Anaemia is a major health problem in Kerala, especially among women and children.

Anaemia among women, men, and children



Nearly two-fifths (39%) of children age 6-59 months are anaemic. This includes 24 percent who are mildly anaemic, 15 percent who are moderately anaemic, and 1 percent who have severe anaemia. The overall prevalence of anaemia in children increased from 36 percent in NFHS-4 to 39 percent in NFHS-5. Boys are more likely to be anaemic than girls (41% vs 38%). Children

of mothers who have anaemia are much more likely to be anaemic. Although anaemia levels vary somewhat according to background characteristics, anaemia among children is widespread in every group. Nearly two-fifths (39%) of children in Kerala are anaemic even if their mother has 12 or more years of schooling. Anaemia is much higher among scheduled tribe children (58%) and children in age groups below 2 years (55-60%).

Thirty-six percent of women in Kerala have anaemia, including 21 percent with mild anaemia, 14 percent with moderate anaemia, and 1 percent with severe anaemia. Almost three-fifths (58%) of women with no schooling and more than half (53%) of scheduled tribe women are anaemic. Anaemia among women has increased by 2 percentage points since NFHS-4. Nearly one-fifth (18%) of men in Kerala are anaemic. Men age 15-19, men with less than 10 years of schooling, scheduled caste men, and scheduled tribe men are particularly likely to be anaemic.

ADULT HEALTH AND HEALTH CARE

Tuberculosis

Tuberculosis is an infectious disease caused by a type of bacterium called *Mycobacterium tuberculosis*, which primarily affects the lungs. Tuberculosis is transmitted from person to person through the air, and people with lowered immunity, HIV, malnutrition, diabetes, and those who use tobacco or alcohol have higher chances of getting tuberculosis. Tuberculosis is both preventable and curable, however, mortality is high if not treated properly.

In Kerala, 453 persons per 100,000 are estimated to have medically treated tuberculosis, based on reports from household respondents. The prevalence of medically treated tuberculosis is higher among men (473), than among women (436) and is higher in rural areas (476) than in urban areas (429). The prevalence of tuberculosis is particularly high among younger people age less than 15 years (918 per 100,000) and in households using solid fuel for cooking (666 per 100,000).

Almost all respondents have heard of tuberculosis (98% of women and 96% of men), but even among those who have heard of tuberculosis, only 88 percent of women and 86 percent of men know that it is spread through the air by coughing or sneezing. One-sixth (17%) of women and more than one-fifth (22%) of men have misconceptions about how tuberculosis is spread. Overall, 84 percent of women and 89 percent of men know that tuberculosis can be cured, and only 7 percent of women and 12 percent of men say that if a family member had tuberculosis, they would want to keep it a secret.

Diabetes, asthma, goitre, heart disease, and cancer

According to self-reports, 4,081 women and 3,987 men age 15-49 per 100,000 have diabetes. Overall, 4,792 women and 833 men per 100,000 have asthma. The prevalence of asthma among women and men is higher in older age groups and those in urban areas. The prevalence of asthma among women is higher for women with little or no schooling. The prevalence of goitre or any other thyroid disorder is 8,696 per 100,000 among women and only 522 per 100,000 among men. The prevalence of any heart disease is lower among men (516 per 100,000)

than among women (777 per 100,000). Among the five diseases, cancer is the least common, with 192 women per 100,000 and 277 men per 100,000 reportedly having cancer.

Blood pressure (hypertension)

Blood pressure is the force exerted by circulating blood against the arterial walls. Hypertension or high blood pressure is a condition in which the blood vessels have persistently raised pressure. Hypertension is a major risk factor for cardiovascular diseases, chronic kidney diseases, and brain diseases, and it is a major cause of premature deaths worldwide. Some of the risk factors for developing hypertension are unhealthy diets, physical inactivity, alcohol and tobacco consumption, and excess body weight.

Twelve percent of women age 15-49 in Kerala have hypertension, including 7 percent with Stage 1 hypertension, 2 percent with Stage 2 and 1 percent with Stage 3 hypertension. Hypertension also includes women with normal blood pressure who are taking medicine to lower their blood pressure. Fifty-eight percent of women have normal blood pressure.

The prevalence of hypertension among men age 15-49 is higher than among women. Eighteen percent of men in Kerala have hypertension, including 14 percent with Stage 1 hypertension, 3 percent with Stage 2 hypertension, and 1 percent with Stage 3 hypertension. Hypertension also includes men with normal blood pressure who are taking medicine to lower their blood pressure. Thirty percent of men have normal blood pressure. For both women and men, hypertension increases with age.

Blood glucose

Diabetes mellitus is a chronic metabolic disease characterized by elevated levels of blood glucose. Diabetes over a period of time can cause severe damage to the heart, blood vessels, retina, kidneys, and nerves, and it puts sufferers at increased risk of various infectious and non-infectious diseases. Early diagnosis, determined by blood glucose testing, and adequate treatment are the key steps for managing diabetes and its complications. NFHS-5 has included random blood glucose measurement using capillary blood among women and men age 15 and above.

In Kerala, 5 percent of women age 15-49 have high blood glucose levels, and an additional 6 percent have very high blood glucose levels. In comparison, 5 percent of men age 15-49 have high blood glucose levels, and an additional 7 percent have very high blood glucose levels. Women and men in older age groups and with fewer than 12 years of schooling have relatively high blood glucose levels.

Almost 9 in 10 women (89%) and men (88%) age 15-49 have normal blood glucose levels. Men are more likely than women to have normal blood glucose levels and to be taking medicine to lower their blood glucose level (2% of men versus 1% of women). Twelve percent of women and 14 percent of men have high or very high blood glucose levels or are taking medicine to lower their blood glucose level.

Screening tests for cancer

Cancer is a group of diseases with high mortality, and it is the second leading cause of death globally. The chances of successful treatment of cancer increase if diagnosed early. One way of early detection is screening, which is identification of unrecognized disease by using simple tests or examinations among those individuals who have the disease but do not yet have symptoms. NFHS-5 collected information about whether women had ever undergone a screening test for cancer of the oral cavity, breast, and cervix.

In Kerala, 2 percent each of women age 15-49 have ever undergone a screening test for cervical cancer and breast cancer, and 1 percent each of women and men have ever undergone a screening test for cancer of the oral cavity.

Health insurance

Universal access to health care is the absence of any barriers in health care, including economic barriers. Adequate coverage by health insurance protects a person from financial hardships because of the costs of health care. Despite the emergence of a number of health insurance programmes and health schemes in India, only 52 percent of households in Kerala have any kind of health insurance that covers at least one member of the household. Health insurance/financing scheme coverage is higher in rural areas (55%) than urban areas (47%). In Kerala, among households with health insurance/financing scheme coverage one type of health scheme dominates: *Rashtriya Swasthya Bima Yojana* (RSBY) (78%), particularly in rural areas (84%), compared with urban areas (71%).

Half of women and men (51%) age 15-49 in Kerala are covered by any health insurance/financing scheme. Older women and men are more likely to be covered than younger women and men. Health insurance/financing scheme coverage is higher in rural areas than urban areas.

Tobacco and alcohol use

Almost one-fifth (18%) of men, but less than 1 percent (0.4%) of women age 15-49 use some form of tobacco. Tobacco products mostly used by men are cigarettes (16%), cigars or pipe (3%), *bidis* (2%), *paan* with tobacco (1%), and *gutkha* or *paan masala* with tobacco (1%). Among women and men, the use of any form of tobacco is slightly higher in rural areas (1% for women and 21% for men) than in urban areas (0.1% for women and 15% for men). Most men (61%) who smoke cigarettes smoked fewer than five cigarettes in the past 24 hours.

In Kerala, a negligible proportion (0.3%) of women say that they drink alcohol. Men are more likely to drink alcohol (26%) than use tobacco (18%). The consumption is higher in rural areas (28%) than urban areas (24%). Among men who drink alcohol, 9 percent drink alcohol almost every day, 41 percent say they drink alcohol at least once a week, and 50 percent drink alcohol less than once a week.

HIV/AIDS

This section presents the findings from NFHS-5 on HIV/AIDS knowledge and attitudes, prior HIV testing, and the prevalence of sexually transmitted infections (STIs), as well as sexual behaviour of the adult and youth population. Questions on HIV/AIDS were included only in the subsample of households selected for the state module.

Awareness of HIV or AIDS

In Kerala, almost all (99%) adult men and women, have heard of HIV or AIDS.

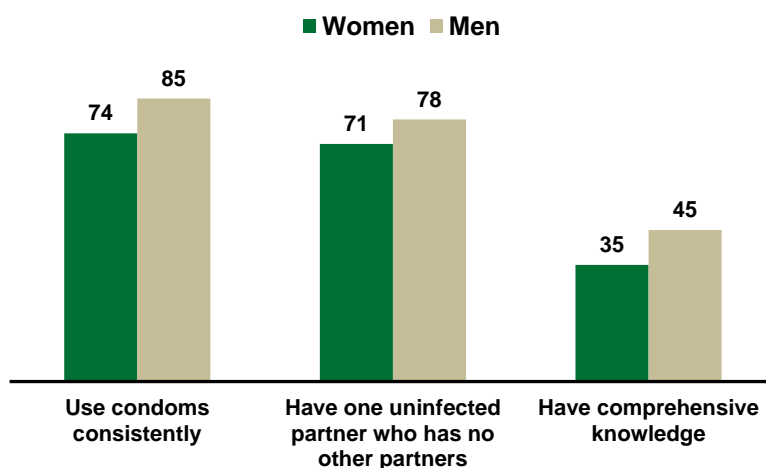
Knowledge of prevention and transmission

Men are much more likely than women to know how HIV/AIDS is transmitted and how to keep from getting it. For example, only 74 percent of women know that consistent condom use can help to prevent HIV/AIDS, compared with 85 percent of men, and 71 percent of women know that having just one uninfected partner who has no other partners can reduce the chance of getting HIV/AIDS, compared with 78 percent of men.

Only 35 percent of women and 45 percent of men in Kerala have a 'comprehensive knowledge' about HIV/AIDS. This means they know that consistent use of condoms every time they have sex and having just one uninfected sex partner who has no other partners can reduce the chance of getting HIV/AIDS, they know that a healthy-looking person can have HIV/AIDS, and they reject two common misconceptions about the transmission or prevention of HIV/AIDS.

Do people know how to prevent HIV/AIDS?

Percentage of women and men age 15-49



HIV-related stigma

Nearly three-quarters (71%) of women and 65 percent of men in Kerala would be willing to take care of a relative with HIV/AIDS in their home. A higher (85% each) proportion of women and men say that a female teacher who has HIV/AIDS but is not sick should be allowed to continue teaching. Over seven-tenths of women (72%) and men (79%) say that they would buy fresh vegetables from a shopkeeper with HIV/AIDS. Sixty percent of women and 52 percent of men say that if a family member got infected with HIV/AIDS, they would not want to keep it a secret. Eighty-two percent of women and 86 percent of men say that an HIV positive student should be allowed to attend school with students who are HIV negative. Almost four-fifths (79%) of women and about three-quarters (74%) of men think that people living with HIV/AIDS should be treated in the same public hospital as persons who are HIV negative. More than four-fifths (85% each) of women and men think that people living with HIV should be allowed to work in the same office with people who are HIV negative.

HIV testing prior to NFHS-5, blood transfusions, and safe injections

Only 47 percent of women and 12 percent of men age 15-49 had ever been tested for HIV prior to NFHS-5. Women in urban areas are somewhat more likely to have ever been tested for HIV prior to NFHS-5 than rural women (51% versus 44%). Forty-five percent of women who had a live birth in the past five years and received ANC during pregnancy were tested for HIV during ANC. Urban women (43%) are slightly less likely than rural women (47%) to have been tested for HIV during ANC.

Forty-five percent of women who had a live birth in the past five years and received ANC during pregnancy were tested for HIV during ANC.

In Kerala, 5 percent of women and 7 percent of men have ever had a blood transfusion. Women are more likely than men to have received an injection in the past 12 months (31% of women, compared with 28% of men). A disposable syringe was used for injections for 96 percent of adults who received an injection in the past 12 months.

SEXUAL BEHAVIOUR

NFHS-5 included questions on respondents' sexual behaviour. Respondents were asked about their age at first sex, their current and previous sexual partners, higher-risk intercourse, and condom use. In addition, men were asked whether they had paid for sex in the past year. These questions are sensitive and subject to reporting bias, so the results should be interpreted with caution.

Higher-risk behaviour

Higher-risk sex is sexual intercourse with someone who is neither a spouse nor a cohabiting partner. Among men who had sex in the past 12 months, only 1 percent men reported having had higher-risk sex during the past 12 months with almost same proportion in both rural areas (1.3%) and urban (0.8%) areas. A negligible proportion of adults said that they had multiple sex partners in the past 12 months (0.3% of men and 0.1% of women).

Only 0.2 percent of men in rural areas said they had paid for sex in the past year.

WOMEN'S EMPOWERMENT

Empowering women and promoting gender equality in every sphere of life are essential to improving their lives and achieving the Sustainable Development Goals. NFHS-5 has collected information related to women's empowerment and autonomy, including menstrual hygiene, employment and earnings, decision-making, ownership of assets, gender role attitudes, and domestic violence.

Women's hygiene

Using a hygienic method of menstrual protection is important for women's health and personal hygiene. In NFHS-5, young women age 15-24 were asked what method or methods they use for menstrual protection, if anything. In Kerala, 90 percent use sanitary napkins, 40 percent use cloth, 3 percent use locally prepared napkins. Overall, 93 percent of women age 15-24 use a hygienic method of menstrual protection, up from 90 percent in NFHS-4. Notably, 92 percent of rural women use a hygienic method of menstrual protection, compared with 95 percent of urban women. Use of a hygienic method is lowest among scheduled tribes (86%) and scheduled castes (88%).

Employment and earnings

Only a little over one-quarter (26%) of all women age 15-49, compared with three-quarters of men, were employed in the 12 months preceding the survey. Among employed women, almost all (99%) percent earned cash, including 2 percent who earned both cash and in-kind. Only 1 percent women were not paid at all. Similarly, almost all (99%) men who were employed earned cash, including 3 percent who earned both cash and in-kind. Only 1 percent of employed men were not paid at all. A large majority (86%) of employed women work in non-agricultural occupations, compared with 91 percent of employed men.

Only 26 percent of all women age 15-49 were employed in the 12 months preceding the survey.

Among currently married women who work and are paid in cash, 91 percent decide how their earnings will be used, either alone or jointly with their husbands. One-third of women who work for cash say that they earn more than or about the same as their husbands. Three-quarters of currently married men who have wives who have cash earnings report that they alone or jointly with their wives decide how her earnings are used, and 36 percent of men who have cash earnings and whose wives have cash earnings say that their wife earns more than or about the same as them.

Decision making

Currently married women were asked who makes decisions about their own health care, major household purchases, and visits to their own family or relatives. Women are somewhat more likely to participate in decisions about their own health care (83%) and visit to her family and relatives (85%) or about major household purchases (81%). Overall, 69 percent of currently married women participate in making all three of these decisions, and 6 percent do not participate in making any of the three decisions. Participation in all three decisions varies most by age, increasing sharply from 57 percent among women age 20-24 to 70 percent among women age 40-49.

In the case of currently married men, they are much more likely than women to report that they alone or jointly with their wives participated in making decisions about their own health care (90%) and 95 percent participated in decisions about major household purchases. Two percent

of men participated in making neither of these decisions.

Other indicators of women's empowerment

In Kerala, 53 percent of women have money that they can decide how to use. The proportion of women who have money that they can decide how to use is slightly higher among urban (54%) than rural (53%) women, it increases sharply with age, is much higher (58%) among women with 12 or more years of schooling, and is highest (88%) among women who are employed for cash (87%) than any other group of women.

Nearly four-fifths (79%) of women have a bank or savings account that they themselves use.

Seventy-nine percent of women have a bank or savings account that they themselves use. This percentage increases with age, and it is very high among employed women, Hindu women, women with 12 or more years of education, and scheduled caste women. Fifty-eight percent of women know about microcredit programmes, but only one-tenth of women have ever taken a loan from a microcredit programme.

Less than one-quarter (23%) of women who have a mobile phone use it for financial transactions. Urban women (24%) are more likely to use a mobile phone for financial transactions, than rural women (22%). This percentage increases with education with almost one-third (32%) of women with 12 or more years of education using a mobile phone for financial transactions, compared with only 6 percent of women having 5-7 years of schooling. About one-third (32%) of employed women who have a mobile phone use a mobile phone for financial transactions, compared with 19 percent of unemployed women who have a mobile phone. Muslim women (11%) are least likely to use a mobile phone for financial transactions, compared with Hindu (28%) or Christian (27%) women. Women not belonging to a scheduled caste, a scheduled tribe, or an other backward class are much more likely (28%) to use a mobile phone for financial transactions than women belonging to any other caste/tribe group.

Ownership of assets

Twenty-five percent of women and 54 percent of men age 15-49 in Kerala own a house alone or jointly with someone else, and 12 percent of women and 25 percent of men own land alone or jointly with someone else. Among men and women, ownership of a house and land is more common in rural than urban areas.

Twenty-five percent of women own a house alone or jointly with someone else, and 12 percent of women own land alone or jointly with someone else.

In Kerala, a large majority of women in rural areas (87%) and urban areas (86%) have a mobile phone that they themselves use. Among women who have a mobile phone that they themselves

use, 88 percent can read SMS messages. Women with 5-9 years of schooling are less likely to be able to read SMS messages.

Eighty-seven percent of women in Kerala have a mobile phone that they themselves use.

Gender-role attitudes

Fifty-two percent of women agree that a husband is justified in hitting or beating his wife under some circumstances. Women are most likely to agree that wife beating is justified if a woman shows disrespect for her in-laws (38%), followed by if she neglects the house or children (33%) and if he suspects her of being unfaithful (27%). In case of men, 63 percent say that wife beating is justified in some circumstances, especially if husband suspects her of being unfaithful (47%), the wife shows disrespect for in-laws (40%), or if she neglects the house or children (34%) and if she argues with him (20%). Even among women and men who have completed at least 12 years of schooling, 53 percent of women and 66 percent of men say that a husband is justified in hitting or beating his wife for one or more of the specified reasons.

Seventy-two percent of women and 75 percent of men believe that a woman is justified in refusing to have sex with her husband if she knows he has a sexually transmitted disease, if she knows he has intercourse with other women, and if she is tired or not in the mood. Only 69 percent of men agree that if a wife refuses to have sex with her husband he does not have a right to get angry and reprimand her, refuse to give her financial support, use force to have sex even if she doesn't want to, or have sex with another woman.

DOMESTIC VIOLENCE

The World Health Organization recognizes that violence against women, particularly domestic or spousal violence, is a major public and clinical health problem and a violation of women's human rights, which also reflects the scale of gender inequality and discrimination against women. The consequences of violence on physical, mental, sexual, and reproductive health often last a lifetime. NFHS-5 collected information on domestic violence from women age 18-49, related to behaviours of her husband that cause physical, sexual or emotional harm, including physical violence, sexual coercion, emotional abuse, and controlling behaviours. Information was also collected on violence during pregnancy and help seeking behaviour for any violence experienced.

In Kerala, 9 percent of all women age 18-49 have ever experienced physical violence, and 1 percent have ever experienced sexual violence. In all, 10 percent of women ever experienced physical or sexual violence and 1 percent experienced both physical and sexual violence. For ever-married women who experienced physical violence since age 15, the most common perpetrator was the current husband.

Ten percent of women age 18-49 in Kerala have ever experienced physical or sexual violence.

Violence during pregnancy

Less than 1 percent of women age 15-49 who have ever been pregnant have ever experienced physical violence during one or more of their pregnancies.

Spousal violence

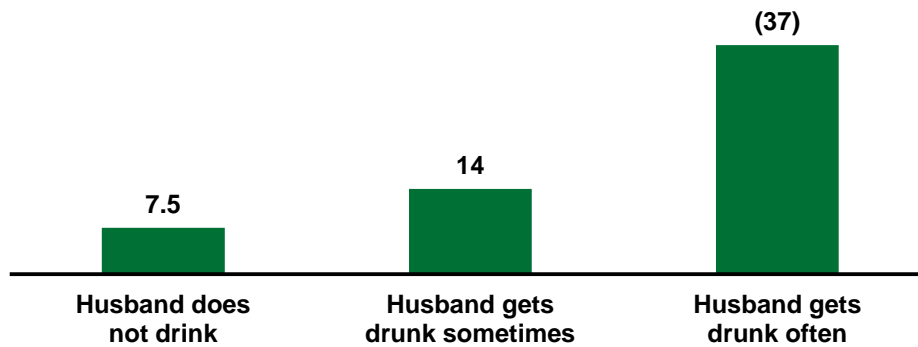
In Kerala, 10 percent of ever-married women age 18-49 have experienced any form of physical violence committed by their husband, 2 percent have experienced any form of sexual violence committed by their husband, and 7 percent have experienced any form of emotional violence committed by their husband. Seven percent of ever-married women report having been slapped by their husband. Six percent report being pushed, shaken, or having something thrown at them. Four percent experienced having their arm twisted or hair pulled, 3 percent report being kicked, dragged, or beaten up, and 2 percent being punched with a fist or something that could hurt her.

One percent of ever-married women age 18-49 report that their husband have physically forced them to have sex even when they did not want to, and 1 percent report that their husband forced them with threats or in any other way to perform sexual acts they did not want to perform. Overall, 10 percent of ever-married women have experienced spousal physical or sexual violence from their current husband or, if not currently married, from their most recent husband. Few (1%) ever-married women reported that they have initiated violence against their husband when he was not already beating or physically hurting them.

Spousal violence prevails across all groups of women. Although spousal violence is lower among more educated women, 1 in 9 women who have at least 12 years of schooling have experienced emotional, physical, or sexual spousal violence. The experience of spousal violence is higher among women in urban areas (14%) than in rural areas (12%); and among women who are employed for cash (20%) than women who are not employed (10%). Husband's characteristics are also related to overall spousal violence (emotional, physical, or sexual). For instance, women are more likely to experience spousal violence if their husband gets drunk sometimes (19%), and if the husband has less than 10 years of education. The contextual and intergenerational aspects of spousal violence are clear from the fact that women whose mothers were beaten by their fathers are more than three times as likely to be in abusive marriages themselves as women whose mothers were not beaten by their fathers.

Is alcohol use related to spousal physical or sexual violence?

Percentage of ever-married women experiencing violence



Note: Category "Husband drinks, but never gets drunks" not shown since there are fewer than 25 unweighted cases.

Nearly one-third (29%) of ever-married women age 18-49 who have ever experienced physical or sexual violence reported suffering from injuries from what their husband did to them. The most common types of injuries are cuts, bruises, or aches.

Help Seeking

Only 24 percent of women who have ever experienced physical violence by anyone have sought help. Nearly three-fifths of women (57%) have neither sought help nor told anyone about the violence.

Table 1 Results of the household and individual interviews

Number of households, number of interviews with women and men, and response rates, according to residence, Kerala, 2019-21

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	5,352	7,592	12,944
Households occupied	5,175	7,383	12,558
Households interviewed	5,047	7,283	12,330
Household response rate ¹	97.5	98.6	98.2
Interviews with women age 15-49			
Number of eligible women	4,751	6,600	11,351
Number of eligible women interviewed	4,564	6,405	10,969
Women response rate ²	96.1	97.0	96.6
Interviews with men age 15-54			
Number of eligible men	658	996	1,654
Number of eligible men interviewed	572	901	1,473
Men response rate ²	86.9	90.5	89.1

Note: Eligible women and men are women age 15-49 and men age 15-54 who stayed in the household the night before the household interview (including both usual residents and visitors). This table is based on the unweighted sample.

¹ Households interviewed/households occupied

² Respondents interviewed/eligible respondents

Table 2 Results of the household and individual interviews by district

Number of households, number of women and men interviewed, and response rates by residence and district, Kerala, 2019-21

District	Households interviewed			Household response rate ¹	Number of women interviewed			Women response rate ²	Number of men interviewed			Men response rate ²
	Urban	Rural	Total		Urban	Rural	Total		Urban	Rural	Total	
Alappuzha	486	400	886	98.7	376	309	685	96.3	57	54	111	94.9
Ernakulam	585	272	857	96.7	523	224	747	96.0	84	31	115	87.1
Idukki	41	816	857	97.2	41	669	710	96.5	9	112	121	86.4
Kannur	592	327	919	99.9	617	333	950	97.4	55	46	101	91.8
Kasaragod	351	571	922	99.9	343	602	945	97.8	43	73	116	95.1
Kollam	379	480	859	97.3	349	404	753	94.8	40	38	78	76.5
Kottayam	244	623	867	97.6	191	468	659	95.9	29	71	100	86.2
Kozhikode	587	301	888	98.2	543	282	825	97.3	73	34	107	88.4
Malappuram	413	492	905	99.3	475	529	1,004	98.7	57	84	141	97.9
Palakkad	217	695	912	99.7	208	673	881	97.9	25	88	113	91.9
Pathanamthitta	96	758	854	98.8	64	561	625	97.8	14	78	92	90.2
Thiruvananthapuram	445	388	833	95.0	340	317	657	90.0	42	42	84	71.8
Thirissur	570	282	852	96.3	463	252	715	97.1	37	29	66	86.8
Wayanad	41	878	919	99.7	31	782	813	97.5	7	121	128	97.0
Kerala	5,047	7,283	12,330	98.2	4,564	6,405	10,969	96.6	572	901	1,473	89.1

Note: This table is based on the unweighted sample; all subsequent tables are based on the weighted sample unless otherwise specified. The number of women and men is based on the *de facto* population.

na = Not applicable

¹ Households interviewed/households occupied

² Respondents interviewed/eligible respondents

Table 3 Household population by age, schooling, residence, sex, and possession of an Aadhaar card

Percent distribution of the *de facto* household population by age and schooling and percentage of *de facto* individuals who have an *Aadhaar* card, according to residence and sex, Kerala, 2019-21

Background characteristic	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Age									
0-4	6.4	5.7	6.0	6.8	5.6	6.2	6.6	5.6	6.1
5-9	7.1	6.4	6.7	7.3	6.7	7.0	7.2	6.6	6.9
10-14	8.3	7.6	7.9	8.1	6.7	7.4	8.2	7.1	7.6
15-19	7.8	6.3	7.0	7.5	6.3	6.8	7.6	6.3	6.9
20-24	7.3	6.0	6.6	6.8	6.3	6.5	7.0	6.2	6.6
25-29	5.7	5.6	5.7	5.7	5.9	5.8	5.7	5.8	5.7
30-34	5.5	6.8	6.2	6.5	6.5	6.5	6.0	6.6	6.3
35-39	6.4	7.4	6.9	6.6	7.7	7.2	6.5	7.6	7.1
40-44	6.6	7.4	7.0	6.9	6.8	6.8	6.7	7.1	6.9
45-49	6.9	7.1	7.0	7.0	7.4	7.2	6.9	7.3	7.1
50-54	7.3	7.7	7.5	6.4	8.4	7.4	6.8	8.1	7.5
55-59	6.4	6.6	6.5	7.0	6.5	6.7	6.7	6.6	6.6
60-64	6.4	6.2	6.3	6.2	6.4	6.3	6.3	6.3	6.3
65-69	4.8	5.1	5.0	4.5	4.5	4.5	4.6	4.8	4.7
70-74	3.4	3.4	3.4	3.1	3.3	3.2	3.3	3.4	3.3
75-79	1.9	1.9	1.9	1.8	2.3	2.1	1.9	2.1	2.0
80 and over	1.7	2.6	2.2	1.9	2.7	2.3	1.8	2.7	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Aadhaar card									
Percentage with an <i>Aadhaar</i> card	94.6	95.6	95.1	95.1	96.3	95.7	94.9	95.9	95.4
Number	10,386	11,818	22,205	11,491	12,698	24,189	21,876	24,516	46,394
Sex ratio, all ages ¹	na	na	1,138	na	na	1,105	na	na	1,121
Sex ratio, age 0-6 years ¹	na	na	999	na	na	940	na	na	967
Schooling²									
No schooling	1.3	3.0	2.2	2.8	5.7	4.4	2.1	4.4	3.3
<5 years complete	13.5	15.4	14.5	16.3	16.9	16.6	15.0	16.2	15.6
5-9 years complete	30.9	29.7	30.3	32.8	29.1	30.9	31.9	29.4	30.6
10-11 years complete	22.4	19.3	20.7	21.5	19.7	20.5	21.9	19.5	20.6
12 or more years complete	31.5	32.6	32.1	26.5	28.3	27.5	28.9	30.4	29.7
Don't know	0.3	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	9,566	11,010	20,576	10,539	11,813	22,352	20,104	22,823	42,929
Median number of years of schooling completed	9.2	9.1	9.2	8.8	8.8	8.8	9.0	9.0	9.0

Note: The total columns include transgender persons, who are not shown separately in the male and female columns.

na = Not applicable

¹ Females per 1,000 males

² Population age 6 and above

Table 4 Household and housing characteristics

Percent distribution of urban, rural, and total households and *de jure* population by household and housing characteristics, Kerala, 2019-21

Household and housing characteristic	Urban	Rural	Total	<i>De jure</i> population
Household headship				
Male	76.2	76.6	76.4	79.6
Female	23.8	23.4	23.6	20.4
Total	100.0	100.0	100.0	100.0
Mean household size	3.8	3.7	3.7	na
Household structure¹				
Nuclear	56.1	56.4	56.2	43.7
Non-nuclear	43.9	43.6	43.8	56.3
Total	100.0	100.0	100.0	100.0
Religion of household head				
Hindu	57.7	56.4	57.0	54.7
Muslim	26.9	21.3	24.0	27.7
Christian	15.3	22.3	19.0	17.6
Other	0.1	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0
Caste/tribe of household head				
Scheduled caste	9.6	12.0	10.9	10.9
Scheduled tribe	0.4	3.0	1.8	1.7
Other backward class	56.5	44.8	50.3	52.2
Other	33.0	39.4	36.4	34.6
Don't know	0.6	0.7	0.6	0.6
Total	100.0	100.0	100.0	100.0
Electricity				
Yes	99.9	99.2	99.5	99.6
No	0.1	0.8	0.5	0.4
Total	100.0	100.0	100.0	100.0
Source of drinking water				
Improved source	96.5	93.4	94.9	94.9
Piped water into dwelling/yard/plot	30.3	20.0	24.8	24.4
Piped to neighbour	1.3	1.5	1.4	1.4
Public tap/standpipe	5.5	5.2	5.3	5.0
Tube well or borehole	5.2	6.5	5.9	6.1
Other improved ²	54.2	60.2	57.4	58.1
Unimproved source	3.4	6.1	4.8	4.7
Unprotected dug well	3.4	5.0	4.2	4.2
Unprotected spring	0.0	0.6	0.3	0.3
Surface water	0.0	0.5	0.3	0.3
Other source	0.1	0.5	0.3	0.3
Total	100.0	100.0	100.0	100.0

Continued...

Table 4 Household and housing characteristics—*Continued*

Percent distribution of urban, rural, and total households and *de jure* population by household and housing characteristics, Kerala, 2019-21

Household and housing characteristic	Urban	Rural	Total	<i>De jure</i> population
Time to obtain drinking water (round trip)				
Water on premises/delivered to dwelling	96.5	94.2	95.3	95.6
Less than 30 minutes	3.2	5.2	4.2	4.0
Thirty minutes or longer	0.2	0.4	0.3	0.3
Don't know	0.1	0.2	0.2	0.1
Total	100.0	100.0	100.0	100.0
Percentage with basic drinking water service ³	96.2	92.9	94.5	94.6
Percentage with limited drinking water service ⁴	0.3	0.4	0.4	0.3
Water treatment prior to drinking⁵				
Boil	90.9	90.7	90.8	91.3
Bleach or chlorine tablets	44.5	48.3	46.5	47.5
Strain through cloth	0.9	0.5	0.7	0.7
Use ceramic, sand, or other water filter	3.9	1.5	2.6	2.5
Use electronic purifier	4.6	1.7	3.1	2.9
Use solar disinfection	0.0	0.0	0.0	0.0
Allow water to stand and settle	0.3	0.3	0.3	0.3
Other	1.0	1.5	1.3	1.2
No treatment	4.5	5.0	4.8	4.4
Percentage using an appropriate treatment method ⁶	95.2	94.9	95.1	95.4
Sanitation Facility				
Improved, not shared facility				
Flush/pour flush to piped sewer system, septic tank, or pit latrine	98.8	98.1	98.5	98.7
Flush/pour flush, don't know where	94.7	89.1	91.8	92.2
Pit latrine with slab	0.0	0.1	0.1	0.0
Pit latrine with slab	2.8	7.0	5.0	4.9
Other ⁷	1.2	2.0	1.6	1.5
Shared facility⁸				
Flush/pour flush to piped sewer system, septic tank, or pit latrine	0.4	0.8	0.6	0.5
Pit latrine with slab	0.4	0.7	0.6	0.5
Pit latrine with slab	0.0	0.1	0.1	0.0
Other ⁷	0.0	0.0	0.0	0.0
Unimproved				
Flush/pour flush not to piped sewer system, septic tank, or pit latrine	0.6	0.6	0.6	0.6
Pit latrine without slab/open pit	0.3	0.2	0.2	0.2
Pit latrine without slab/open pit	0.2	0.3	0.3	0.3
Dry toilet	0.2	0.3	0.3	0.3
Dry toilet	0.0	0.1	0.0	0.0
Other	0.0	0.1	0.1	0.1
No facility/uses open spaces/field	0.2	0.4	0.3	0.2
Total	100.0	100.0	100.0	100.0
Percentage with basic sanitation service ⁹	98.8	98.1	98.5	98.7
Percentage with limited sanitation service ¹⁰	0.4	0.8	0.6	0.5

Continued...

Table 4 Household and housing characteristics—*Continued*

Percent distribution of urban, rural, and total households and *de jure* population by household and housing characteristics, Kerala, 2019-21

Household and housing characteristic	Urban	Rural	Total	<i>De jure</i> population
Type of house¹¹				
<i>Kachha</i>	0.0	0.6	0.3	0.3
Semi- <i>pucca</i>	16.3	15.0	15.6	15.7
<i>Pucca</i>	82.9	83.8	83.4	83.3
Missing	0.7	0.6	0.7	0.7
Total	100.0	100.0	100.0	100.0
Persons per room used for sleeping				
<3	88.2	88.4	88.3	83.9
3-4	10.8	10.3	10.5	14.3
5-6	1.0	1.1	1.1	1.6
7 and over	0.0	0.1	0.1	0.2
Total	100.0	100.0	100.0	100.0
Cooking fuel				
Electricity	0.3	0.5	0.4	0.3
LPG/natural gas	78.0	65.4	71.3	71.1
Biogas	0.2	0.5	0.4	0.4
Kerosene	0.3	0.3	0.3	0.3
Coal/lignite	0.1	0.0	0.1	0.0
Charcoal	0.1	0.7	0.4	0.3
Wood	20.9	32.5	27.0	27.5
Straw/shrubs/grass	0.0	0.0	0.0	0.0
No food cooked in the household	0.2	0.1	0.2	0.1
Other	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0
Percentage using clean fuel for cooking ¹²	78.5	66.3	72.1	71.8
Percentage using solid fuel for cooking ¹³	21.0	33.2	27.4	27.8
Place for cooking				
In the house, separate room	94.8	91.6	93.2	93.6
In the house, no separate room	1.8	3.6	2.7	2.5
In a separate building	2.2	3.2	2.7	2.8
Outdoors	1.0	1.4	1.2	1.1
No food cooked in household	0.2	0.1	0.2	0.1
Other	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0
Number	5,838	6,492	12,330	46,072

Continued...

Table 4 Household and housing characteristics—Continued

Percent distribution of urban, rural, and total households and *de jure* population by household and housing characteristics, Kerala, 2019-21

Household and housing characteristic	Urban	Rural	Total	<i>De jure</i> population
Type of fire/stove among households using solid fuels¹³				
Stove	4.4	5.5	5.1	5.2
<i>Chullah</i>	85.7	81.6	83.1	84.2
Open fire	9.9	12.6	11.6	10.3
Other	0.0	0.3	0.2	0.2
Total	100.0	100.0	100.0	100.0
Number using solid fuel	1,229	2,156	3,384	12,827
Frequency of smoking in the house¹⁴				
Daily	8.5	12.9	10.8	11.2
Weekly	3.0	4.4	3.8	4.0
Monthly	0.7	1.0	0.9	0.9
Less than monthly	0.8	0.7	0.7	0.7
Never	87.0	80.9	83.8	83.2
Total	100.0	100.0	100.0	100.0
Number	5,838	6,492	12,330	46,072

na = Not applicable

¹ Nuclear households are households comprised of a married couple or a man or a woman living alone or with unmarried children (biological, adopted, or fostered) with or without unrelated individuals. The remaining households are non-nuclear households.

² Protected dug well, protected spring, rainwater, community RO plant, tanker truck, cart with small tank, bottled water

³ Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.

⁴ Drinking water from an improved source, provided round-trip collection time is more than 30 minutes or is unknown

⁵ Total may add to more than 100.0 because households may use more than one method of treatment.

⁶ Appropriate water treatment methods are boiling, adding bleach/chlorine tablets, filtering, electronic purifying, and solar disinfection

⁷ Includes ventilated improved pit (VIP) latrine/biogas latrine, and twin pit/composting toilet

⁸ Facilities that would be considered improved if they were not shared by two or more households

⁹ Defined as use of improved facilities that are not shared with other households

¹⁰ Defined as use of improved facilities shared by two or more households

¹¹ Houses made from mud, thatch, or other low-quality materials are called *kachha* houses, houses that use partly low-quality and partly high-quality materials are called semi-*pucca* houses, and houses made with high quality materials throughout, including the floor, roof, and exterior walls, are called *pucca* houses.

¹² Electricity, LPG/natural gas, biogas

¹³ Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crop waste, and dung cakes

¹⁴ Frequency of smoking by anyone inside the house

Table 5 Access to a toilet facility

Percentage of households having access to a toilet facility by selected background characteristics, according to residence, Kerala, 2019-21

Background characteristic	Urban	Rural	Total
Religion of household head			
Hindu	99.8	99.7	99.7
Muslim	100.0	99.9	100.0
Christian	100.0	99.8	99.9
Caste/tribe of household head			
Scheduled caste	99.6	99.8	99.7
Scheduled tribe	*	97.6	97.9
Other backward class	99.9	99.8	99.9
Other	99.9	100.0	100.0
Don't know	(95.7)	(94.7)	95.1
Total	99.9	99.8	99.8

Note: Includes households that have any type of toilet facility that household members usually use and households that do not use a toilet facility but report that they have access to a toilet facility. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes households with household head belonging to other religions, which are not shown separately.

Table 6 Access to a toilet facility by district

Percentage of households having access to a toilet facility by district, according to residence, Kerala, 2019-21

District	Urban	Rural	Total
Alappuzha	100.0	99.7	99.9
Ernakulam	99.6	100.0	99.7
Idukki	(100.0)	99.8	99.8
Kannur	100.0	100.0	100.0
Kasaragod	100.0	99.7	99.8
Kollam	99.7	100.0	99.9
Kottayam	100.0	99.5	99.6
Kozhikode	99.8	100.0	99.9
Malappuram	100.0	100.0	100.0
Palakkad	100.0	99.3	99.5
Pathanamthitta	99.0	99.9	99.8
Thiruvananthapuram	99.8	99.5	99.6
Thrissur	100.0	100.0	100.0
Wayanad	(100.0)	99.6	99.6
Kerala	99.9	99.8	99.8

Note: Includes households that have any type of toilet facility that household members usually use and households that do not use a toilet facility but report that they have access to a toilet facility. Figures in parentheses are based on 25-49 unweighted cases.

Table 7 Household possessions and land ownership

Percentage of urban, rural, and total households and *de jure* population possessing various household goods, means of transport, agricultural land, a house, and farm animals and having a bank/post office account, a health insurance/financing scheme, a BPL card, and a long-lasting insecticide-treated (LLIN) mosquito net, Kerala, 2019-21

Household possessions	Urban	Rural	Total	<i>De jure</i> population
Household goods				
Mattress	95.6	93.0	94.2	95.1
Pressure cooker	92.7	85.4	88.9	90.7
Chair	99.3	99.0	99.1	99.2
Cot or bed	99.1	98.2	98.6	98.8
Table	96.8	93.8	95.2	96.2
Electric fan	98.9	95.5	97.1	97.7
Radio or transistor	18.5	15.2	16.8	16.3
Television (black and white)	2.3	2.3	2.3	2.2
Television (colour)	86.9	87.4	87.1	87.8
Any television	87.4	88.4	87.9	88.5
Sewing machine	38.1	34.5	36.2	39.9
Mobile telephone	97.9	96.8	97.3	98.2
Landline telephone	13.0	8.6	10.7	10.4
Internet	31.9	23.1	27.2	28.7
Computer	21.3	15.3	18.1	18.7
Refrigerator	81.4	70.7	75.8	78.1
Air conditioner/cooler	17.6	9.7	13.5	13.8
Washing machine	46.1	32.2	38.8	39.8
Watch or clock	96.1	93.9	94.9	95.6
Water pump	63.8	61.2	62.4	64.2
Thresher	3.1	2.1	2.6	2.5
Tractor	0.2	0.4	0.3	0.3
None of the above	0.0	0.1	0.0	0.0
Means of transport				
Bicycle	27.9	21.4	24.5	28.0
Motorcycle or scooter	61.3	55.4	58.2	63.0
Animal-drawn cart	0.4	0.4	0.4	0.4
Car	26.4	22.1	24.2	25.9
None of the above	26.0	33.5	30.0	25.0
Agricultural land				
No agricultural land	92.5	80.9	86.4	86.2
Irrigated land only	6.1	14.9	10.7	10.9
Non-irrigated land only	0.8	2.6	1.7	1.7
Both irrigated and non-irrigated land	0.2	0.6	0.4	0.4
Irrigation not determined	0.4	1.0	0.7	0.8
Total	100.0	100.0	100.0	100.0
Percentage owning a house	85.7	88.8	87.4	88.3
Percentage owning farm animals ¹	18.2	31.3	25.1	27.9
Percentage having a bank account/post office account ²	96.1	96.2	96.1	96.7
Percentage covered by a health insurance/financing scheme ³	47.2	55.4	51.5	52.4
Percentage having a BPL card	37.5	48.7	43.4	44.0
Percentage with an LLIN mosquito net	3.8	2.9	3.3	3.7
Number	5,838	6,492	12,330	46,072

BPL = Below poverty line

¹ Cows, bulls, buffaloes, camels, horses, donkeys, mules, goats, sheep, chickens, or ducks

² Percentage of households in which any usual member of the household has a bank account/post office account

³ Percentage of households in which any usual member of the household is covered by a health insurance/financing scheme

Table 8 Preschool attendance

Percent of *de facto* household population age 2-4 years attending preschool by selected background characteristics, according to residence and sex, Kerala, 2019-21

Background characteristic	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Religion of household head									
Hindu	51.5	62.6	57.4	55.1	61.3	58.0	53.6	61.9	57.8
Muslim	47.1	47.2	47.2	43.5	46.7	45.0	45.5	47.0	46.2
Christian	(70.3)	(64.7)	67.5	53.5	55.9	54.7	58.8	58.9	58.8
Caste/tribe of household head									
Scheduled caste	(36.6)	(70.6)	57.1	54.6	55.6	55.1	49.3	62.0	55.8
Scheduled tribe	*	*	*	*	*	(64.0)	*	(57.2)	(58.3)
Other backward class	50.0	52.3	51.1	49.9	58.3	53.8	50.0	55.0	52.3
Other	58.3	61.9	60.0	51.1	50.5	50.8	53.8	54.8	54.3
Household structure¹									
Nuclear	46.6	52.3	49.4	53.3	41.7	48.4	50.4	47.0	48.9
Non-nuclear	53.0	57.5	55.2	50.0	59.4	54.6	51.4	58.5	54.9
Family size									
3-5 members	50.1	56.1	53.2	50.7	55.2	52.9	50.4	55.6	53.0
6 or more members	52.6	56.3	54.4	51.0	55.1	52.9	51.8	55.7	53.6
Total	51.3	56.2	53.7	50.9	55.3	53.0	51.1	55.8	53.4

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes children in households with household head whose caste/tribe is not known and children in households with 1-2 members, who are not shown separately.

¹ Nuclear households are households comprised of a married couple or a man or a woman living alone or with unmarried children (biological, adopted, or fostered) with or without unrelated individuals. The remaining households are non-nuclear households.

Table 9 Preschool attendance by district

Percentage of *de facto* household population age 2-4 years attending preschool by district, according to residence and sex, Kerala, 2019-21

District	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alappuzha	*	(89.6)	(82.5)	*	(64.5)	(62.3)	(62.5)	78.7	72.3
Ernakulam	(61.8)	(68.3)	65.1	*	*	(44.0)	55.5	58.3	56.9
Idukki	*	*	*	49.8	(69.6)	57.5	49.6	66.2	56.0
Kannur	49.7	48.9	49.3	(66.2)	(39.8)	53.0	55.0	45.8	50.5
Kasaragod	(54.9)	(52.3)	53.8	42.3	53.9	48.3	48.1	53.3	50.6
Kollam	*	*	(70.6)	(50.2)	(47.1)	48.5	(55.6)	56.4	56.1
Kottayam	*	*	(65.4)	(54.1)	(52.7)	53.4	52.2	(62.0)	56.8
Kozhikode	(52.2)	(59.9)	56.1	(56.9)	(53.7)	55.5	54.2	57.7	55.9
Malappuram	38.5	(41.2)	39.7	42.9	56.4	49.3	40.7	49.0	44.5
Palakkad	*	*	(41.4)	53.9	(45.5)	50.1	55.0	39.4	47.6
Pathanamthitta	*	*	*	(64.7)	(59.2)	62.2	(65.5)	(57.3)	61.9
Thiruvananthapuram	*	(51.2)	52.7	(51.3)	(75.8)	63.2	52.6	63.6	58.3
Thrissur	(48.7)	(53.6)	50.9	*	*	(53.8)	49.7	(54.6)	51.8
Wayanad	*	*	*	34.5	68.5	50.2	33.9	68.0	49.7
Kerala	51.3	56.2	53.7	50.9	55.3	53.0	51.1	55.8	53.4

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10 School attendance

Percentage of *de facto* household population age 6-17 years attending school in the 2019-20 school year by sex and residence, according to background characteristics, Kerala, 2019-21

Background characteristic	Male			Female			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Age									
6-10 (Primary)	99.3	99.5	99.4	99.8	99.4	99.6	99.6	99.5	99.5
6-13 (Elementary)	99.5	99.6	99.6	99.9	99.6	99.8	99.7	99.6	99.7
11-13 (Upper Primary)	99.7	99.8	99.7	100.0	99.9	100.0	99.8	99.9	99.8
14-15 (Secondary)	99.3	98.2	98.7	100.0	98.9	99.4	99.6	98.5	99.1
16-17 (Higher Secondary)	89.8	90.8	90.3	95.3	93.6	94.4	92.5	92.2	92.4
11-14 years	99.6	99.6	99.6	100.0	99.9	100.0	99.8	99.7	99.8
15-17 years	92.8	92.7	92.7	96.7	95.0	95.8	94.7	93.8	94.3
6-14 years	99.4	99.6	99.5	99.9	99.6	99.8	99.7	99.6	99.6
6-17 years	97.8	97.9	97.8	99.2	98.5	98.8	98.5	98.2	98.3
Religion of household head									
Hindu	98.0	97.6	97.8	99.0	98.0	98.4	98.5	97.8	98.1
Muslim	97.5	97.9	97.7	99.4	99.0	99.2	98.5	98.5	98.5
Christian	97.8	98.7	98.4	99.2	99.0	99.1	98.5	98.9	98.7
Caste/tribe of household head									
Scheduled caste	97.7	94.6	96.0	98.6	96.4	97.3	98.2	95.6	96.7
Scheduled tribe	*	93.8	94.3	*	86.9	86.5	*	90.0	90.0
Other backward class	98.0	98.7	98.3	99.3	99.2	99.3	98.7	99.0	98.8
Other	96.8	98.4	97.7	99.0	98.9	98.9	97.9	98.6	98.3

Note: In this table, children's age refers to their age at the start of the 2019-20 school year (assumed here to be April 2019). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes children in households with the household head belonging to other religions, who are not shown separately.

Table 11 Children's living arrangements and orphanhood

Percent distribution of *de jure* children under age 18 by their living arrangements, and percentage of children with one or both biological parents dead, according to background characteristics, Kerala, 2019-21

Background characteristic	Living with both parents	Living with mother but not with father	Living with father but not with mother	Not living with either parent	Total	Percentage with one or both parents dead ¹	Number of children
Age							
<5 years	69.6	28.1	0.7	1.5	100.0	0.8	2,767
5-9 years	73.8	23.5	1.1	1.6	100.0	1.8	3,140
10-14 years	76.0	20.9	1.6	1.5	100.0	2.9	3,526
15-17 years	75.3	20.7	2.0	1.9	100.0	5.4	1,881
Residence							
Urban	72.1	25.5	1.2	1.2	100.0	2.7	5,440
Rural	75.2	21.4	1.4	2.0	100.0	2.3	5,875
Sex							
Male	73.5	23.6	1.5	1.4	100.0	2.5	5,705
Female	74.0	23.1	1.1	1.8	100.0	2.5	5,610
Total age <15 years	73.4	23.9	1.2	1.6	100.0	1.9	9,433
Total age <18 years	73.7	23.4	1.3	1.6	100.0	2.5	11,315

¹ Includes children with father dead, mother dead, both parents dead, and one parent dead but missing information on survival status of the other parent

Table 12 Birth registration of children under age 5

Percentage of *de jure* children under age 5 years whose birth was registered with the civil authorities, according to background characteristics, Kerala, 2019-21

Background characteristic	Percentage of children whose birth was registered			<i>De jure</i> children
	Registered, has a birth certificate	Registered, does not have a birth certificate	Total registered	
Age				
<2	80.7	17.4	98.1	1,001
2-4	95.1	4.4	99.4	1,766
Sex				
Male	89.3	9.4	98.7	1,414
Female	90.6	8.7	99.2	1,353
Residence				
Urban	90.6	8.9	99.5	1,303
Rural	89.3	9.2	98.5	1,464
Total	89.9	9.1	99.0	2,767

Table 13 Birth registration of children under age 5 by district

Percentage of *de jure* children under age 5 years whose birth was registered with the civil authorities, by district, Kerala, 2019-21

District	Percentage of children whose birth was registered			<i>De jure</i> children
	Registered, has a birth certificate	Registered, does not have a birth certificate	Total registered	
Alappuzha	82.7	12.6	95.3	146
Ernakulam	85.9	12.1	98.0	252
Idukki	86.2	11.5	97.8	89
Kannur	90.6	9.1	99.6	262
Kasaragod	84.3	14.9	99.1	161
Kollam	95.2	4.8	100.0	182
Kottayam	83.3	13.8	97.2	129
Kozhikode	88.4	10.5	98.9	266
Malappuram	94.0	5.7	99.7	468
Palakkad	90.5	9.0	99.5	227
Pathanamthitta	91.9	8.1	100.0	63
Thiruvananthapuram	92.6	6.8	99.4	254
Thrissur	92.6	7.4	100.0	200
Wayanad	89.7	7.1	96.8	68
Kerala	89.9	9.1	99.0	2,767

Table 14 Death registration

Among deaths of usual residents during the 3 years preceding the survey, percentage of deaths registered with civil authority by selected background characteristics, according to residence and sex, Kerala, 2019-21

Background characteristic	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Age at death									
0-4	(100.0)	(100.0)	100.0	97.3	(95.8)	96.6	98.6	97.8	98.2
25-34	*	*	*	*	*	*	*	*	(95.4)
35 and over	98.6	96.2	97.6	98.0	95.9	97.1	98.3	96.0	97.3
Religion of household head									
Hindu	99.5	96.6	98.2	97.7	94.6	96.4	98.5	95.5	97.2
Muslim	100.0	(95.2)	98.1	(95.6)	(100.0)	97.8	98.4	97.5	98.0
Christian	(94.6)	(100.0)	97.0	98.8	96.9	97.9	97.1	98.1	97.6
Caste/tribe of household head									
Scheduled caste	(100.0)	*	100.0	96.9	(91.6)	94.7	98.3	95.3	97.1
Scheduled tribe	*	*	*	*	*	*	*	*	(89.9)
Other backward class	98.6	98.0	98.3	96.4	95.7	96.1	97.5	96.9	97.2
Other	98.7	95.1	97.1	99.3	98.3	98.8	99.0	97.1	98.1
Total	98.8	96.9	98.0	97.7	96.0	96.9	98.2	96.4	97.4

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes deaths of persons age 5-9 or 10-14 or 15-24 or 25-34, which are not shown separately.

Table 15 Death registration by district

Among deaths of usual residents during the 3 years preceding the survey, percentage of deaths registered with civil authority by district, according to residence and sex, Kerala, 2019-21

District	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alappuzha	(100.0)	(100.0)	100.0	*	(100.0)	(100.0)	(100.0)	100.0	100.0
Ernakulam	(96.3)	*	(98.0)	*	*	(100.0)	(97.2)	(100.0)	98.7
Idukki	*	*	*	98.2	(95.9)	97.5	98.3	(96.4)	97.6
Kannur	(100.0)	*	(97.7)	*	*	*	(100.0)	(96.0)	98.5
Kasaragod	*	*	(97.1)	(96.9)	*	(94.3)	98.3	(89.9)	95.5
Kollam	*	*	(100.0)	(93.4)	*	94.3	(95.3)	(97.1)	96.2
Kottayam	*	*	*	(97.5)	*	98.3	96.5	(100.0)	97.6
Kozhikode	(100.0)	*	(100.0)	*	*	*	(97.5)	*	98.5
Malappuram	*	*	(100.0)	*	*	(94.7)	(100.0)	(93.4)	97.3
Palakkad	*	*	*	(94.9)	(96.8)	95.8	(96.2)	(94.4)	95.4
Pathanamthitta	*	*	*	(100.0)	(89.7)	94.7	(100.0)	(90.0)	95.1
Thiruvananthapuram	*	*	(90.8)	*	*	(97.5)	(98.1)	(89.6)	94.2
Thrissur	(100.0)	(100.0)	100.0	*	*	(100.0)	(100.0)	(100.0)	100.0
Wayanad	*	*	*	(97.8)	*	96.9	(97.9)	*	97.1
Kerala	98.8	96.9	98.0	97.7	96.0	96.9	98.2	96.4	97.4

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16 Disability

Percentage of *de jure* household population having disability by type of disability, according to residence, age, and sex, Kerala, 2019-21

Background characteristic	Type of disability							Number of persons
	Any	Hearing disability	Speech disability	Visual disability	Mental disability	Locomotor	Other	
FEMALE								
Residence								
Urban	0.7	0.1	0.1	0.0	0.3	0.2	0.0	11,689
Rural	1.2	0.2	0.2	0.1	0.4	0.4	0.1	12,576
Age								
0-4	0.1	0.0	0.0	0.0	0.1	0.0	0.0	1,354
5-14	0.7	0.1	0.1	0.0	0.3	0.2	0.0	3,329
15-24	1.0	0.1	0.2	0.0	0.4	0.4	0.1	3,005
25-34	0.9	0.2	0.1	0.0	0.6	0.1	0.1	2,982
35-49	1.1	0.2	0.2	0.1	0.5	0.4	0.0	5,338
50-69	1.1	0.2	0.1	0.1	0.2	0.5	0.0	6,277
70 and over	0.9	0.1	0.0	0.2	0.3	0.2	0.0	1,980
Total	0.9	0.1	0.1	0.1	0.4	0.3	0.0	24,265
MALE								
Residence								
Urban	1.5	0.2	0.3	0.2	0.4	0.5	0.1	10,348
Rural	1.3	0.2	0.1	0.1	0.4	0.6	0.0	11,459
Age								
0-4	0.4	0.0	0.1	0.0	0.0	0.2	0.0	1,418
5-14	1.0	0.1	0.2	0.1	0.4	0.4	0.1	3,337
15-24	0.9	0.0	0.1	0.1	0.4	0.4	0.1	3,202
25-34	1.0	0.0	0.2	0.0	0.5	0.3	0.1	2,559
35-49	2.0	0.2	0.3	0.1	0.7	0.8	0.1	4,424
50-69	1.8	0.3	0.1	0.2	0.3	0.9	0.1	5,354
70 and over	2.0	0.7	0.3	0.3	0.2	0.7	0.1	1,513
Total	1.4	0.2	0.2	0.1	0.4	0.6	0.1	21,807
TOTAL								
Residence								
Urban	1.1	0.2	0.2	0.1	0.4	0.4	0.1	22,038
Rural	1.2	0.2	0.1	0.1	0.4	0.5	0.0	24,035
Age								
0-4	0.3	0.0	0.1	0.0	0.1	0.1	0.0	2,772
5-14	0.8	0.1	0.2	0.1	0.4	0.3	0.0	6,666
15-24	1.0	0.1	0.2	0.0	0.4	0.4	0.1	6,207
25-34	1.0	0.1	0.2	0.0	0.5	0.2	0.1	5,541
35-49	1.5	0.2	0.2	0.1	0.6	0.6	0.1	9,762
50-69	1.4	0.3	0.1	0.1	0.2	0.7	0.1	11,631
70 and over	1.3	0.4	0.1	0.3	0.3	0.4	0.1	3,493
Total	1.2	0.2	0.2	0.1	0.4	0.5	0.1	46,072

Note: Table is based on the responses of the respondent to the household questionnaire.

Table 17 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Kerala, 2019-21

Background characteristic	Weighted percent		Number of women		Number of men	
	Women	Men	Weighted	Unweighted	Weighted	Unweighted
Age						
15-19	13.4	16.5	1,472	1,459	215	208
20-24	13.0	14.0	1,426	1,422	182	186
25-29	12.1	11.6	1,332	1,337	150	153
30-34	14.1	12.2	1,541	1,522	159	161
35-39	16.0	15.1	1,760	1,752	197	188
40-44	15.3	14.4	1,679	1,690	187	190
45-49	16.0	16.2	1,758	1,787	210	208
Residence						
Urban	48.1	46.1	5,277	4,564	599	496
Rural	51.9	53.9	5,692	6,405	700	798
Schooling						
No schooling	0.8	2.3	83	122	30	32
<5 years complete	1.8	2.0	197	221	26	29
5-9 years complete	20.5	22.4	2,246	2,265	291	301
10-11 years complete	25.8	30.7	2,826	2,850	399	391
12 or more years complete	51.2	42.5	5,617	5,511	553	541
Literacy						
Literate ¹	97.4	97.1	10,679	10,607	1,261	1,254
Not literate	2.5	2.5	270	340	33	35
Not measured	0.2	0.4	20	22	5	5
Percentage exposed to various media						
Reads a newspaper/magazine at least once a week	58.0	65.9	6,361	6,233	856	857
Watches television at least once a week	72.2	75.8	7,916	7,987	985	991
Listens to the radio at least once a week	10.8	14.7	1,182	1,142	191	183
Visits the cinema/theatre at least once a month	11.8	41.4	1,294	1,252	538	526
Not regularly exposed to any media	13.3	7.1	1,460	1,460	93	95
Marital status						
Never married	21.5	46.5	2,360	2,384	604	608
Currently married	74.4	52.3	8,163	8,130	679	669
Married, <i>gauna</i> not performed	0.0	0.0	5	6	0	0
Widowed	2.4	0.2	259	264	2	3
Divorced/separated/deserted	1.7	1.0	181	185	13	14
Religion						
Hindu	54.3	57.1	5,958	6,094	742	762
Muslim	29.8	25.9	3,272	3,010	337	287
Christian	15.8	17.0	1,736	1,860	221	245
Other	0.0	0.0	4	5	0	0

Continued...

Table 17 Background characteristics of respondents—Continued

Percent distribution of women and men age 15-49 by selected background characteristics, Kerala, 2019-21

Background characteristic	Weighted percent		Number of women		Number of men	
	Women	Men	Weighted	Unweighted	Weighted	Unweighted
Caste/tribe						
Scheduled caste	11.0	10.6	1,210	1,281	138	147
Scheduled tribe	1.6	2.3	176	307	30	54
Other backward class	58.4	59.0	6,409	6,129	767	702
Other	28.6	27.0	3,139	3,220	351	377
Don't know	0.3	1.0	36	32	13	14
Employment status (past 12 months)						
Employed at any time	26.1	74.7	439	448	971	970
In agricultural occupation	3.6	6.6	61	63	85	105
In non-agricultural occupation	20.9	59.7	351	362	775	755
Don't know	1.6	8.5	27	23	111	110
Not employed	73.9	25.3	1,244	1,211	328	324
Total age 15-49	100.0	100.0	1,683	1,659	1,299	1,294
Age 50-54	na	11.8	na	na	174	179
Total age 15-54	na	100.0	na	na	1,473	1,473

na = Not applicable

¹ Refers to women/men who can read a whole sentence or part of a sentence and women/men who completed standard 9 or higher (who are assumed to be literate)

Table 18 Fertility trends

Age-specific and total fertility rates and crude birth rates for the 3 years preceding the survey from NFHS-5, NFHS-4, and NFHS-3, by residence, Kerala

Age	NFHS-5			NFHS-4			NFHS-3		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
15-19	0.015	0.021	0.018	0.022	0.020	0.021	0.022	0.042	0.035
20-24	0.120	0.125	0.123	0.109	0.111	0.110	0.113	0.162	0.144
25-29	0.132	0.122	0.127	0.122	0.113	0.117	0.143	0.140	0.141
30-34	0.072	0.062	0.067	0.045	0.052	0.048	0.056	0.050	0.052
35-39	0.021	0.021	0.021	0.014	0.013	0.013	0.012	0.012	0.012
40-44	0.005	0.001	0.003	0.001	0.001	0.001	0.000	0.001	0.001
45-49	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.000	0.000
TFR (15-49)	1.82	1.76	1.79	1.57	1.55	1.56	1.73	2.03	1.93
CBR	11.9	11.6	11.8	11.4	11.0	11.2	15.4	16.9	16.4

Note: Rates are for the period 1-36 months preceding the survey (approximately 2003-05 for NFHS-3, 2013-15 for NFHS-4, and 2017-19 for NFHS-5). Age-specific fertility rates are expressed per woman.
TFR = Total fertility rate, expressed per woman
CBR = Crude birth rate, expressed per 1,000 population

Table 19 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, mean number of children ever born to women age 40-49, and total wanted fertility by background characteristics, Kerala, 2019-21

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49	Total wanted fertility rate
Residence				
Urban	1.82	3.8	2.1	1.71
Rural	1.76	3.1	2.1	1.65
Schooling				
No schooling	(0.42)	0.4	2.2	(0.42)
<5 years complete	1.81	0.0	2.2	1.81
5-9 years complete	1.77	1.4	2.3	1.51
10-11 years complete	1.85	2.3	2.1	1.70
12 or more years complete	1.91	5.0	1.9	1.82
Religion				
Hindu	1.53	2.7	1.9	1.46
Muslim	2.25	4.8	2.7	2.09
Christian	1.77	3.5	2.0	1.63
Caste/tribe				
Scheduled caste	1.61	3.5	1.9	1.51
Scheduled tribe	2.15	4.8	2.1	1.95
Other backward class	1.83	3.7	2.2	1.73
Other	1.76	2.8	2.0	1.63
Total	1.79	3.4	2.1	1.68

Note: Total fertility rates are for the period 1-36 months preceding the interview. Figures in parentheses are based on 125-249 unweighted woman-years of exposure.

Table 20 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of women age 15-19 who:		Percentage of women age 15-19 who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
Age				
15-17	0.0	0.0	0.0	895
15	0.0	0.0	0.0	273
16	0.0	0.0	0.0	303
17	0.0	0.0	0.0	319
18	0.3	2.8	3.1	298
19	5.9	3.6	9.4	279
Residence				
Urban	0.2	1.5	1.8	714
Rural	2.1	1.0	3.0	758
Schooling				
5-9 years complete	0.0	0.6	0.6	194
10-11 years complete	0.4	0.6	1.1	659
12 or more years complete	2.3	2.1	4.4	618
Marital status				
Never married	0.0	0.0	0.0	1,394
Currently married	22.4	23.7	46.1	77
Religion				
Hindu	0.2	1.0	1.2	748
Muslim	2.5	2.3	4.8	476
Christian	1.5	0.0	1.5	248
Caste/tribe				
Scheduled caste	0.4	2.6	3.0	147
Scheduled tribe	0.0	5.1	5.1	29
Other backward class	1.7	1.1	2.8	883
Other	0.5	0.7	1.2	409
Total	1.2	1.2	2.4	1,472

Note: Total includes women with no schooling, women who are widowed/divorced/separated/deserted, women belonging to other religions, and women who don't know their caste/tribe, who are not shown separately.

Table 21 Birth order

Percent distribution of births to all women during the 3 years preceding the survey by birth order, according to background characteristics, Kerala, 2019-21, and percent distribution of births to women by birth order, NFHS-4

Background characteristic	Birth order				Total	Number of births
	1	2	3	4 or more		
Mother's current age						
20-29	56.7	36.6	5.9	0.8	100.0	944
30-39	21.0	46.7	25.4	6.9	100.0	581
40-49	(24.3)	(39.0)	(20.1)	(16.6)	100.0	26
Residence						
Urban	42.3	40.9	13.1	3.7	100.0	754
Rural	44.5	39.1	13.4	3.0	100.0	815
Mother's schooling						
5-9 years complete	21.2	38.0	30.3	10.4	100.0	130
10-11 years complete	25.0	37.6	27.0	10.5	100.0	280
12 or more years complete	50.5	40.7	8.0	0.8	100.0	1,154
Religion						
Hindu	49.6	45.4	4.7	0.2	100.0	710
Muslim	36.0	34.0	22.1	7.9	100.0	634
Christian	44.9	39.7	15.3	0.1	100.0	224
Caste/tribe						
Scheduled caste	45.2	46.1	7.9	0.7	100.0	159
Scheduled tribe	43.9	45.4	5.9	4.9	100.0	32
Other backward class	42.2	39.6	14.2	4.0	100.0	942
Other	45.5	38.0	13.9	2.6	100.0	430
Total	43.5	40.0	13.3	3.3	100.0	1,569
NFHS-4 (2015-16)	48.4	38.8	9.7	3.1	100.0	1,454

Note: Total includes information on births to women age 15-19, women with no schooling or less than 5 years of schooling, and women who don't know their caste/tribe, which is not shown separately.

Table 22 Birth intervals

Percent distribution of births during the 5 years preceding the survey by interval since the preceding birth, and median number of months since the preceding birth, according to background characteristics, Kerala, 2019-21

Background characteristic	Months since preceding birth						Total	Number of non-first order births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60 or more			
Mother's current age									
20-29	6.5	11.6	21.2	25.6	17.7	17.4	100.0	581	40.8
30-39	2.0	5.9	11.8	16.5	14.6	49.1	100.0	894	59.4
40-49	3.4	3.2	2.1	7.5	11.3	72.6	100.0	67	92.0
Residence									
Urban	3.9	7.5	13.8	20.7	14.2	39.9	100.0	741	51.2
Rural	3.6	8.4	15.9	18.5	17.0	36.6	100.0	801	50.5
Mother's schooling									
5-9 years complete	3.9	5.6	17.1	11.6	13.7	48.2	100.0	211	58.6
10-11 years complete	4.1	5.0	12.8	19.7	17.5	40.9	100.0	394	54.0
12 or more years complete	3.5	9.7	15.3	21.3	15.3	34.8	100.0	932	48.1
Religion									
Hindu	3.1	8.2	16.3	15.0	17.1	40.2	100.0	625	53.0
Muslim	3.8	6.9	12.5	23.4	15.3	38.1	100.0	704	50.4
Christian	5.4	10.6	18.8	19.9	12.9	32.4	100.0	213	45.3
Caste/tribe									
Scheduled caste	4.1	14.0	18.4	14.6	18.7	30.1	100.0	156	47.3
Scheduled tribe	(2.3)	(8.1)	(27.6)	(22.5)	(8.2)	(31.4)	100.0	22	(41.4)
Other backward class	2.7	7.0	14.2	20.9	14.5	40.8	100.0	959	52.5
Other	6.0	7.8	14.5	18.3	17.5	35.8	100.0	400	49.8
Birth order									
2-3	3.6	7.8	15.4	19.1	16.0	38.1	100.0	1,440	50.8
4-6	5.5	10.1	8.4	25.2	10.5	40.3	100.0	101	50.3
Sex of preceding birth									
Male	3.1	7.9	15.4	21.5	16.3	35.8	100.0	757	50.0
Female	4.4	8.0	14.4	17.6	15.1	40.5	100.0	785	51.6
Total	3.8	7.9	14.9	19.5	15.7	38.2	100.0	1,542	50.7

Note: The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. Figures in parentheses are based on 25-49 unweighted cases. Total includes information on births to women with no schooling or less than 5 years of schooling, women belonging to other religions, women who don't know their caste/tribe, and births of birth order 7 or more, which is not shown separately.

Table 23 Fertility preferences by number of living children

Percent distribution of currently married women and men age 15-49 by desire for children, according to number of living children, Kerala, 2019-21

Desire for children	Number of living children ¹						Total 15-49	Total 15-54
	0	1	2	3	4	5		
WOMEN								
Want another soon ²	79.1	29.5	6.0	4.2	2.2	(11.2)	15.8	na
Want another later ³	5.6	28.5	4.4	2.6	0.9	(4.7)	9.7	na
Want another, undecided when Undecided	2.7	5.6	1.1	0.6	0.0	(0.0)	2.1	na
Want no more	2.5	8.1	3.5	6.2	7.6	(8.8)	5.1	na
Sterilized ⁴	1.7	16.6	20.8	15.7	22.2	(20.4)	17.9	na
Declared infecund	0.3	8.0	62.1	69.0	66.1	(53.7)	46.7	na
Missing	7.0	2.0	0.8	0.6	0.6	(1.3)	1.4	na
Total	1.1	1.6	1.2	1.2	0.4	(0.0)	1.2	na
Total Number	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na
	528	1,891	4,168	1,250	264	52	8,163	na
MEN								
Want another soon ²	31.4	33.1	5.8	2.1	*	nc	16.7	13.7
Want another later ³	9.0	25.2	1.3	1.6	*	nc	8.3	6.8
Want another, undecided when Undecided	2.7	9.9	0.7	0.0	*	nc	3.0	2.4
Want no more	7.5	7.8	8.4	6.3	*	nc	8.0	6.8
Sterilized ⁴	46.3	19.5	68.9	81.1	*	nc	54.0	60.5
Declared infecund	0.2	3.5	14.6	8.9	*	nc	9.0	8.6
Missing	2.9	1.0	0.3	0.0	*	nc	0.9	1.2
Total	0.0	0.0	0.0	0.0	*	nc	0.0	0.0
Total Number	100.0	100.0	100.0	100.0	100.0	nc	100.0	100.0
	146	145	290	79	18	0	679	849

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men with 6 or more children, who are not shown separately.

na = Not applicable

nc = No cases

¹ Includes current pregnancy of woman/wife

² Want next birth within 2 years

³ Want to delay next birth for 2 or more years

⁴ For Women: Includes both female and male sterilization and women who have had a hysterectomy

For Men: Includes male sterilization and men who mention in response to the question about desire for children that their wife has been sterilized

Table 24 Desire not to have any more children

Percentage of currently married women and men age 15-49 who want no more children by number of living children, according to background characteristics, Kerala, 2019-21, and by number of living children, NFHS-4

Background characteristic	Women: Number of living children ¹					Total	Men: Number of living children ¹					Total
	0	1	2	3	4 or more		0	1	2	3		
Age												
15-24	0.3	3.6	36.4	*	*	9.1	*	*	*	*	*	
25-34	0.0	9.5	66.6	71.1	79.6	46.2	(8.4)	3.4	(74.2)	*	23.5	
35-49	6.5	55.3	93.0	90.1	86.7	83.8	60.5	41.3	84.9	90.5	74.0	
Residence												
Urban	1.8	24.0	82.0	79.9	79.5	63.2	41.8	28.5	83.6	*	62.1	
Rural	2.1	25.2	83.7	89.1	91.3	65.7	51.2	19.4	83.4	91.5	63.8	
Schooling												
No schooling	*	*	(100.0)	*	*	83.7	*	*	*	*	*	
<5 years complete	*	*	92.7	(94.6)	*	87.8	*	*	*	*	(90.2)	
5-9 years complete	7.0	43.2	87.2	89.0	84.9	78.7	(55.7)	(28.7)	90.9	(90.1)	72.7	
10-11 years complete	2.8	36.4	85.4	84.2	83.2	74.6	(48.9)	(26.7)	79.1	(89.1)	64.7	
12 or more years complete	0.4	18.0	78.8	78.0	(83.5)	52.0	32.4	15.6	79.1	*	47.5	
Religion												
Hindu	2.7	27.6	91.4	95.9	(96.4)	68.5	48.6	24.8	88.9	(100.0)	63.9	
Muslim	1.7	14.1	58.6	77.3	83.5	55.2	(50.2)	(23.1)	73.7	(82.4)	61.9	
Christian	0.0	30.9	86.1	95.4	*	70.7	*	*	78.4	*	61.7	
Caste/tribe												
Scheduled caste	8.3	21.3	88.7	96.5	*	67.4	*	*	(90.0)	*	66.2	
Scheduled tribe	(0.0)	12.3	93.8	(94.7)	*	56.7	*	*	*	*	(59.4)	
Other backward class	1.3	23.5	80.1	81.9	83.9	62.9	47.9	30.5	81.3	85.3	63.8	
Other	0.8	28.9	86.0	87.5	88.8	67.5	(45.7)	(14.6)	85.2	*	60.9	
Number of living sons²												
0	2.0	22.2	80.1	82.1	*	43.6	46.5	22.2	87.1	*	51.2	
1	na	27.5	84.0	87.0	91.6	70.8	na	24.4	83.5	(94.8)	69.7	
2	na	na	83.1	84.2	81.1	83.2	na	na	79.2	(84.3)	81.7	
3	na	na	na	83.3	84.8	83.7	na	na	na	*	*	
4 or more	na	na	na	na	na	(88.3)	na	na	na	na	*	
Total	2.0	24.6	82.9	84.8	85.3	64.5	46.5	23.1	83.5	90.0	63.0	
NFHS-4 (2015-16)	3.0	25.1	83.2	83.6	84.9	63.1	18.0	34.5	86.8	80.8	66.4	

Note: Women who have been sterilized or whose husband has been sterilized are considered to want no more children. Men who are sterilized or who mention in response to the question about desire for children that their wife has been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

¹ Includes current pregnancy of woman/wife

² Excludes pregnant women and men with pregnant wives

Table 25 Ideal number of children

Percent distribution of women and men age 15-49 by ideal number of children and mean ideal number of children, by number of living children, Kerala, 2019-21, and percent distribution of women and men age 15-49 by ideal number of children, NFHS-4

Ideal number of children	Number of living children ¹						Total	NFHS-4 (2015-16)
	0	1	2	3	4	5		
WOMEN								
0	8.3	2.6	1.8	4.0	4.1	(3.4)	4.0	2.9
1	7.1	14.3	1.5	0.8	0.0	(0.0)	5.2	5.3
2	65.5	68.5	78.9	21.9	9.3	(5.1)	64.5	66.5
3	12.9	11.5	14.3	57.2	16.2	(16.3)	18.6	18.1
4	2.4	2.2	2.4	11.8	56.2	(9.3)	4.9	5.1
5	0.5	0.6	0.5	2.7	10.7	(52.6)	1.3	1.2
6 or more	0.1	0.1	0.1	0.8	3.1	(13.3)	0.3	0.6
Non-numeric responses	3.2	0.2	0.4	0.9	0.5	(0.0)	1.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100
Number	2,952	2,020	4,355	1,300	277	55	10,969	11,033
Mean ideal number of children for²:								
All respondents	2.0	2.0	2.2	2.8	3.7	(4.5)	2.2	2.2
Number of all respondents	2,859	2,016	4,339	1,288	276	55	10,841	11,000
Currently married respondents	2.1	2.0	2.2	2.9	3.7	(4.4)	2.3	2.3
Number of currently married respondents	525	1,887	4,152	1,240	263	52	8,126	8,139
MEN								
0	6.1	2.1	3.0	3.8	*	nc	4.7	3.5
1	7.2	14.1	1.7	0.0	*	nc	6.2	6.9
2	65.6	69.9	80.2	10.2	*	nc	65.1	69.5
3	12.5	11.7	13.1	73.5	*	nc	16.5	12.8
4	3.9	2.1	1.3	9.7	*	nc	4.0	4.2
5	1.0	0.0	0.4	0.0	*	nc	0.9	1.2
6 or more	0.3	0.0	0.3	0.0	*	nc	0.4	0.5
Non-numeric responses	3.5	0.2	0.0	2.8	*	nc	2.2	1.5
Total	100.0	100.0	100.0	100.0	100.0	nc	100.0	100.0
Number	757	148	295	79	18	0	1,299	1,856
Mean ideal number of children for²:								
All respondents	2.1	2.0	2.1	2.9	*	nc	2.1	2.1
Number of all respondents	730	147	295	77	18	0	1,270	1,829
Currently married respondents	2.0	2.0	2.1	2.9	*	nc	2.2	2.3
Number of currently married respondents	154	147	292	77	18	0	691	991

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men with 6 or more children, who are not shown separately.

nc = No cases

¹ Includes current pregnancy for women or wife's current pregnancy for men

² Means are calculated excluding respondents who gave non-numeric responses

Table 26 Indicators of sex preference

Percentage women and men age 15-49 who want more sons than daughters, percentage who want more daughters than sons, percentage who want at least one son, and percentage who want at least one daughter, according to background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Women				Number of women	Men				Number of men
	Percentage who want more sons than daughters	Percentage who want more daughters than sons	Percentage who want at least one son	Percentage who want at least one daughter		Percentage who want more sons than daughters	Percentage who want more daughters than sons	Percentage who want at least one son	Percentage who want at least one daughter	
Age										
15-19	6.6	5.5	50.1	49.4	1,420	15.9	4.5	63.0	56.2	201
20-29	7.7	4.9	50.4	50.0	2,726	11.6	3.0	62.8	58.1	321
30-39	7.9	6.0	52.8	52.5	3,283	13.8	5.9	53.0	49.7	353
40-49	8.4	5.5	51.2	51.5	3,406	15.2	6.2	57.0	53.6	394
Residence										
Urban	7.7	5.4	48.6	48.5	5,198	16.9	4.3	55.7	47.4	584
Rural	8.0	5.6	53.9	53.6	5,637	11.5	5.7	60.6	59.8	685
Schooling										
No schooling	10.9	3.7	47.3	48.4	82	(22.4)	(14.9)	(67.0)	(74.6)	29
<5 years complete	8.6	4.7	39.7	41.1	194	(25.1)	(6.7)	(58.0)	(58.0)	26
5-9 years complete	9.9	5.3	51.5	50.3	2,211	17.2	4.8	61.6	55.8	281
10-11 years complete	7.7	6.1	52.2	52.0	2,784	15.5	3.3	58.5	52.7	393
12 or more years complete	7.0	5.4	51.4	51.5	5,564	10.3	5.8	56.0	52.8	538
Marital status										
Never married	6.4	5.3	48.5	48.2	2,278	14.3	3.7	61.6	55.4	578
Currently married	8.3	5.6	52.4	52.2	8,124	13.8	6.4	55.5	53.2	675
Widowed/divorced/separated/deserted	6.2	4.8	46.9	47.1	434	*	*	*	*	16
Religion										
Hindu	5.6	4.5	52.5	52.5	5,893	10.6	5.3	57.4	53.9	730
Muslim	11.8	7.0	49.2	48.7	3,234	22.4	6.6	60.2	55.1	324
Christian	7.7	6.1	51.4	51.3	1,705	13.1	1.8	58.5	53.1	214
Caste/tribe										
Scheduled caste	7.7	5.1	52.4	52.9	1,192	9.2	5.2	67.7	65.0	134
Scheduled tribe	5.5	2.2	57.4	56.6	175	18.5	10.1	62.1	63.6	30
Other backward class	7.7	5.3	49.7	49.6	6,323	14.9	4.6	56.4	51.5	750
Other	8.2	6.4	54.0	53.5	3,111	14.0	5.2	58.6	54.5	341
Don't know	(16.0)	(0.0)	(45.6)	(39.9)	35	*	*	*	*	13
Total	7.8	5.5	51.4	51.2	10,836	14.0	5.1	58.3	54.1	1,268
NFHS-4 (2015-16)	11.2	6.5	75.3	73.9	11,000	15.0	4.6	69.5	64.4	1,829

Note: Table excludes women and men who gave non-numeric responses to the questions on ideal number of children or ideal number of sons or daughters. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men belonging to other religions, who are not shown separately.

Table 27 Knowledge of contraceptive methods

Percentage of all women and men, currently married women and men, and never married women and men who know any contraceptive method by specific method and residence, Kerala, 2019-21

Method	Women			Men		
	All women	Currently married women	Never married women	All men	Currently married men	Never married men
URBAN						
Any method	99.0	99.9	95.9	98.7	100.0	97.3
Any modern method	99.0	99.9	95.8	98.7	100.0	97.3
Female sterilization	95.7	98.7	85.2	89.6	96.8	81.8
Male sterilization	79.5	86.6	55.3	85.5	94.8	75.3
Pill	84.5	89.2	69.4	84.6	89.4	79.2
IUD or PPIUD	76.0	85.0	46.2	51.3	64.9	35.8
Injectables	58.0	62.2	44.6	56.1	58.9	52.8
Condom/ <i>Nirodh</i>	94.2	96.4	87.7	97.5	99.7	95.1
Female condom	53.6	54.5	51.4	61.1	66.2	55.5
Emergency contraception	48.4	54.1	30.4	51.0	61.5	39.5
Diaphragm	33.0	34.3	29.8	28.4	31.9	24.3
Foam or jelly	25.0	26.4	20.9	29.6	35.2	23.7
Standard days method	57.1	64.4	33.9	58.4	69.6	46.0
Lactational amenorrhoea method (LAM)	53.8	61.5	29.1	35.3	50.5	19.7
Other modern method	0.1	0.1	0.1	0.5	0.7	0.3
Pill, IUD/PPIUD, and condom ¹	69.3	78.0	41.4	49.4	62.1	34.9
Any traditional method	78.5	88.2	45.5	86.2	96.9	74.5
Rhythm	66.7	75.1	38.6	61.7	80.0	41.9
Withdrawal	73.1	83.6	36.8	83.1	94.2	71.6
Other	0.1	0.1	0.0	0.5	0.5	0.5
Mean number of methods known by respondents age 15-49	9.0	9.8	6.6	8.8	10.0	7.4
Number of respondents age 15-49	5,277	3,916	1,155	599	306	288

Continued...

Table 27 Knowledge of contraceptive methods—Continued

Percentage of all women and men, currently married women and men, and never married women and men who know any contraceptive method by specific method and residence, Kerala, 2019-21

Method	Women			Men		
	All women	Currently married women	Never married women	All men	Currently married men	Never married men
RURAL						
Any method	98.8	99.8	95.3	98.7	99.9	97.2
Any modern method	98.8	99.8	95.3	98.0	99.2	96.6
Female sterilization	96.1	98.5	87.6	86.2	94.7	75.7
Male sterilization	76.4	82.5	55.4	82.7	92.6	70.9
Pill	81.2	84.8	70.2	80.9	87.8	72.7
IUD or PPIUD	75.0	82.7	48.7	50.3	64.2	34.1
Injectables	57.8	60.7	48.1	61.1	69.6	50.9
Condom/ <i>Nirodh</i>	89.9	92.4	83.0	94.6	96.7	92.1
Female condom	48.5	49.6	47.0	66.8	73.3	58.7
Emergency contraception	43.5	46.3	34.9	55.8	69.9	39.4
Diaphragm	29.8	30.7	29.1	29.7	34.0	25.2
Foam or jelly	21.1	21.9	20.4	28.8	33.1	23.4
Standard days method	54.7	61.0	35.0	54.5	68.5	37.6
Lactational amenorrhoea method (LAM)	51.7	57.7	31.8	39.3	52.5	23.2
Other modern method	0.1	0.1	0.2	0.0	0.0	0.1
Pill, IUD/PPIUD, and condom ¹	65.1	72.2	42.4	47.3	61.1	30.9
Any traditional method	74.8	82.6	48.0	83.3	93.6	71.0
Rhythm	61.4	68.2	39.2	64.4	82.0	43.4
Withdrawal	67.8	77.0	36.6	78.5	88.1	66.9
Other	0.1	0.1	0.0	0.5	0.0	1.0
Mean number of methods known by respondents age 15-49	8.6	9.2	6.7	8.8	10.1	7.2
Number of respondents age 15-49	5,692	4,247	1,210	700	373	317

Continued...

Table 27 Knowledge of contraceptive methods—Continued

Percentage of all women and men, currently married women and men, and never married women and men who know any contraceptive method by specific method and residence, Kerala, 2019-21

Method	Women			Men		
	All women	Currently married women	Never married women	All men	Currently married men	Never married men
TOTAL						
Any method	98.9	99.8	95.6	98.7	99.9	97.2
Any modern method	98.9	99.8	95.5	98.3	99.6	96.9
Female sterilization	95.9	98.6	86.4	87.8	95.6	78.6
Male sterilization	77.9	84.5	55.4	84.0	93.6	73.0
Pill	82.8	86.9	69.8	82.6	88.5	75.8
IUD or PPIUD	75.5	83.8	47.5	50.8	64.5	34.9
Injectables	57.9	61.4	46.4	58.8	64.8	51.8
Condom/ <i>Nirodh</i>	92.0	94.3	85.3	95.9	98.0	93.5
Female condom	51.0	51.9	49.2	64.2	70.1	57.2
Emergency contraception	45.9	50.1	32.7	53.6	66.1	39.4
Diaphragm	31.4	32.4	29.4	29.1	33.1	24.8
Foam or jelly	23.0	24.1	20.6	29.2	34.1	23.5
Standard days method	55.9	62.6	34.5	56.3	69.0	41.6
Lactational amenorrhoea method (LAM)	52.7	59.5	30.4	37.5	51.6	21.6
Other modern method	0.1	0.1	0.2	0.3	0.3	0.2
Pill, IUD/PPIUD, and condom ¹	67.2	75.0	41.9	48.2	61.6	32.8
Any traditional method	76.6	85.3	46.8	84.6	95.1	72.7
Rhythm	64.0	71.5	38.9	63.1	81.1	42.7
Withdrawal	70.4	80.2	36.7	80.6	90.8	69.2
Other	0.1	0.1	0.0	0.5	0.2	0.8
Mean number of methods known by respondents age 15-49	8.8	9.5	6.6	8.8	10.1	7.3
Number of respondents age 15-49	10,969	8,163	2,365	1,299	679	604

IUD = Intrauterine device; PPIUD = Postpartum intrauterine device

¹ All three methods

Table 28 Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Modern method					Traditional method					Total	Number of women				
	Any method	Female sterilization	Male sterilization	Pill	IUD or PPIUD	Injectables	Condom/ Nirodha	Female condom	LAM	Other modern method			Any traditional method	Rhythm	Withdrawal	Not currently using
Age																
15-19	8.7	3.4	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	5.3	0.0	5.3	91.3	100.0	77
20-24	24.3	14.9	3.4	0.0	0.3	3.0	8.0	0.0	0.1	0.0	9.4	3.9	5.4	75.7	100.0	698
25-29	36.6	27.5	18.2	0.0	0.8	2.5	4.9	0.1	0.5	0.4	9.0	3.2	5.8	63.4	100.0	1,157
30-39	65.0	55.6	49.0	0.0	0.3	1.7	3.5	0.1	0.3	0.6	9.4	3.9	5.5	35.0	100.0	3,143
40-49	74.9	69.3	65.8	0.1	0.3	0.7	1.7	0.0	0.0	0.7	5.6	2.5	3.1	25.1	100.0	3,088
Residence																
Urban	61.4	50.6	43.6	0.0	0.5	1.6	4.0	0.1	0.2	0.8	10.8	4.6	6.2	38.6	100.0	3,916
Rural	60.1	54.8	49.4	0.1	0.3	1.5	2.9	0.0	0.2	0.4	5.2	2.0	3.3	39.9	100.0	4,247
Schooling																
No schooling	74.8	71.5	71.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	2.4	0.9	25.2	100.0	64
<5 years complete	76.7	69.1	67.4	0.0	0.0	0.7	1.0	0.0	0.0	0.0	7.7	4.5	3.2	23.3	100.0	152
5-9 years complete	73.2	65.9	62.6	0.0	0.4	1.1	1.2	0.0	0.1	0.5	7.3	2.4	4.9	26.8	100.0	1,852
10-11 years complete	67.5	59.3	55.6	0.1	0.0	1.2	1.9	0.0	0.1	0.4	8.2	3.5	4.7	32.5	100.0	2,016
12 or more years complete	50.9	42.8	33.7	0.0	0.6	2.0	5.3	0.1	0.3	0.7	8.1	3.5	4.6	49.1	100.0	4,079
Religion																
Hindu	62.3	56.1	49.7	0.1	0.3	1.8	3.5	0.0	0.2	0.6	6.2	2.7	3.4	37.7	100.0	4,315
Muslim	57.3	45.0	39.5	0.0	0.5	1.0	3.1	0.1	0.2	0.6	12.3	4.4	7.9	42.7	100.0	2,618
Christian	62.4	57.8	51.2	0.0	0.3	1.8	3.9	0.0	0.2	0.4	4.6	2.5	2.1	37.6	100.0	1,227
Caste/tribe																
Scheduled caste	60.6	54.6	49.3	0.3	0.3	2.0	2.5	0.0	0.0	0.2	6.0	3.1	2.9	39.4	100.0	828
Scheduled tribe	59.7	48.2	44.2	0.6	0.0	1.4	1.9	0.0	0.0	0.0	11.6	4.3	7.3	40.3	100.0	122
Other backward class	61.1	52.3	46.0	0.0	0.4	1.4	3.6	0.1	0.2	0.7	8.7	3.3	5.4	38.9	100.0	4,863
Other	60.2	53.6	47.3	0.0	0.3	1.7	3.5	0.0	0.2	0.5	6.6	3.1	3.5	39.8	100.0	2,325

Continued...

Table 28 Current use of contraception by background characteristics—Continued

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Modern method						Traditional method				Total	Number of women					
	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD or PPIUD	Injectables	Condom/ Nirodha	Female condom	LAM			Other modern method	Any traditional method	With- drawal	Not currently using	
Number of living children																	
No children	5.7	3.0	0.3	0.0	0.2	0.0	0.0	2.4	0.0	0.0	0.1	2.7	0.9	1.9	94.3	100.0	700
1 child	30.4	19.7	8.1	0.0	0.7	2.8	0.1	7.0	0.0	0.3	0.6	10.7	4.3	6.4	69.6	100.0	1,861
1 son	30.7	20.3	9.5	0.0	0.4	2.7	0.0	6.8	0.0	0.2	0.6	10.4	3.7	6.7	69.3	100.0	941
No sons	30.1	19.2	6.6	0.1	1.1	2.9	0.1	7.2	0.0	0.4	0.7	10.9	4.8	6.1	69.9	100.0	920
2 children	76.2	68.9	63.4	0.0	0.3	1.4	0.0	2.8	0.1	0.2	0.7	7.3	3.1	4.2	23.8	100.0	4,080
1 or more sons	76.4	68.7	63.3	0.0	0.3	1.5	0.0	2.6	0.0	0.1	0.7	7.8	3.4	4.4	23.6	100.0	3,152
No sons	75.3	69.6	63.7	0.0	0.3	1.1	0.0	3.4	0.2	0.3	0.6	5.7	1.9	3.7	24.7	100.0	928
3 children	81.4	74.4	71.3	0.2	0.2	0.9	0.0	1.3	0.0	0.2	0.4	7.0	3.1	3.9	18.6	100.0	1,207
1 or more sons	82.1	74.9	71.8	0.2	0.1	0.9	0.0	1.3	0.0	0.2	0.5	7.2	3.3	3.9	17.9	100.0	1,034
No sons	77.5	71.5	68.4	0.0	0.7	0.6	0.0	1.7	0.2	0.0	0.0	6.0	1.7	4.3	22.5	100.0	173
4 or more children	82.3	68.3	65.4	0.0	0.0	1.4	0.0	0.4	0.0	0.4	0.6	14.0	5.6	8.4	17.7	100.0	316
1 or more sons	84.2	69.9	66.9	0.0	0.0	1.6	0.0	0.5	0.0	0.4	0.6	14.3	5.9	8.4	15.8	100.0	293
Total	60.7	52.8	46.6	0.1	0.4	1.5	0.0	3.4	0.0	0.2	0.6	7.9	3.2	4.6	39.3	100.0	8,163
NFHS-4 (2015-16)	53.1	50.3	45.8	0.1	0.2	1.6	0.0	2.6	0.0	0.0	0.1	2.8	0.9	1.9	46.9	100.0	8,147

Note: If more than one method is used, only the most effective method is considered in this table. Total includes women belonging to other religions, women who don't know their caste/tribe, and women who have 4 or more children but no sons, who are not shown separately.

IUD = Intrauterine device; PPIUD = Postpartum intrauterine device; LAM = Lactational amenorrhoea method

Table 29 Current use of contraceptive methods by district

Percentage of currently married women age 15-49 years using any contraceptive method, any modern method, female sterilization, male sterilization, any modern spacing method, and any traditional method, according to district, Kerala, 2019-21

District	Any method	Any modern method	Female sterilization	Male sterilization	Any modern spacing method ¹	Any traditional method ²	Number of women
Alappuzha	61.5	56.9	49.6	0.6	6.8	4.6	482
Ernakulam	69.7	61.5	51.9	0.0	9.6	8.2	781
Idukki	72.3	67.8	60.5	0.0	7.3	4.5	256
Kannur	61.9	54.2	47.7	0.0	6.5	7.6	692
Kasaragod	56.4	46.6	39.0	0.2	7.4	9.7	372
Kollam	62.9	60.5	57.2	0.0	3.3	2.4	633
Kottayam	44.7	40.3	33.0	0.0	7.2	4.4	421
Kozhikode	67.7	58.5	52.5	0.0	6.0	9.2	747
Malappuram	58.6	41.5	36.8	0.0	4.7	17.1	1,146
Palakkad	58.9	51.9	48.1	0.0	3.8	7.0	719
Pathanamthitta	59.3	54.4	47.6	0.2	6.5	4.9	229
Thiruvananthapuram	41.3	38.5	33.2	0.0	5.4	2.8	786
Thrissur	69.7	61.5	52.9	0.0	8.6	8.2	695
Wayanad	78.9	69.5	64.8	0.2	4.5	9.4	204
Kerala	60.7	52.8	46.6	0.1	6.2	7.9	8,163

¹ Includes pill, IUD/PPIUD, injectables, male condom, female condom, emergency contraception, lactational amenorrhoea method (LAM), and other modern methods

² Includes rhythm, withdrawal, and other traditional methods

Table 30. Contraceptive use by men at last sexual intercourse

Percent distribution of currently married men and sexually active unmarried men age 15-49 by contraceptive used the last time they had sex, according to type of partner and background characteristics, Kerala, 2019-21

Background characteristic	Modern method					Any traditional method			Total	Number of men				
	Any method	Any modern method	Female sterilization	Male sterilization	Any method	Pill	IUD or PPIUD	Condom/ <i>Nirodh</i>			Other modern method	Any traditional method	Rhythm	Withdrawal
Type of sexual partner														
Currently married	30.1	24.5	15.7	0.4	0.6	0.9	4.6	2.2	5.6	1.9	3.6	0.0	69.9	679
Wife	33.2	26.7	15.5	0.5	0.8	1.0	5.9	2.9	6.4	2.3	4.1	0.0	66.8	530
Other ¹	18.6	17.5	17.0	0.0	0.0	0.5	0.0	0.0	1.1	0.5	0.6	0.0	81.4	142
Age														
25-29	(25.0)	(19.9)	(5.3)	(0.0)	(0.0)	(2.1)	(12.5)	(0.0)	(5.1)	(0.0)	(5.1)	(0.0)	(75.0)	44
30-34	26.2	12.1	3.3	0.0	1.4	0.9	4.3	2.2	14.1	4.5	9.6	0.0	73.8	102
35-39	33.0	29.0	14.9	0.7	0.9	1.1	8.5	2.8	4.0	2.0	2.0	0.0	67.0	161
40-44	34.1	30.4	23.4	0.8	0.9	0.2	2.3	2.9	3.7	0.4	3.2	0.0	65.9	175
45-49	27.5	23.3	18.2	0.0	0.0	1.2	1.9	1.8	4.2	2.3	1.9	0.0	72.5	195
Residence														
Urban	30.5	21.7	13.1	0.4	0.5	0.2	3.8	3.7	8.8	3.7	5.1	0.0	69.5	306
Rural	29.7	26.8	17.7	0.3	0.8	1.5	5.3	1.1	2.9	0.5	2.4	0.0	70.3	374
Schooling														
<5 years complete	(22.5)	(22.5)	(19.3)	(0.0)	(0.0)	(0.0)	(3.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(77.5)	25
5-9 years complete	31.6	25.9	20.3	0.3	0.0	0.5	1.8	3.2	5.7	2.5	3.2	0.0	68.4	203
10-11 years complete	32.6	26.0	16.2	0.0	0.7	1.9	5.3	1.7	6.7	2.7	3.9	0.0	67.4	229
12 or more years complete	28.5	23.2	10.7	1.0	1.4	0.5	7.2	2.4	5.3	0.9	4.4	0.0	71.5	206
Religion														
Hindu	32.4	27.1	17.8	0.3	0.4	0.9	4.9	2.7	5.3	2.2	3.0	0.0	67.6	386
Muslim	29.7	22.5	15.6	0.6	0.0	0.9	2.7	2.7	7.2	2.5	4.7	0.0	70.3	182
Christian	22.6	18.7	8.3	0.0	2.6	0.9	6.8	0.0	3.9	0.0	3.9	0.0	77.4	112

Continued...

Table 30 Contraceptive use by men at last sexual intercourse—Continued

Percent distribution of currently married men and sexually active unmarried men age 15-49 by contraceptive used the last time they had sex, according to type of partner and background characteristics, Kerala, 2019-21

Background characteristic	Modern method					Traditional method					Number of men				
	Any method	Any modern method	Female sterilization	Male sterilization	Any modern method	Pill	IUD or PPIUD	Condom/ <i>Nirodh</i>	Other modern method	Any traditional method		Rhythm	Withdrawal	Other	Not used at last sex
Caste/tribe															
Scheduled caste	30.7	28.4	19.5	0.0	0.0	4.9	1.2	2.8	2.3	1.4	0.8	0.0	69.3	100.0	75
Scheduled tribe	(16.4)	(11.0)	(6.7)	(0.0)	(0.0)	(0.0)	(1.8)	(0.0)	(5.3)	(0.0)	(5.3)	(0.0)	(83.6)	100.0	16
Other backward class	31.1	24.7	15.8	0.3	0.7	0.4	4.7	2.7	6.5	2.9	3.6	0.0	68.9	100.0	397
Other	29.2	24.7	15.1	0.6	0.8	0.6	6.3	1.4	4.6	0.4	4.2	0.0	70.8	100.0	186
Total age 15-49	30.1	24.5	15.6	0.4	0.6	0.9	4.6	2.2	5.6	1.9	3.6	0.0	69.9	100.0	680
Age 50-54	35.9	27.1	22.1	0.0	0.0	0.2	3.2	1.6	8.8	1.6	6.8	0.5	64.1	100.0	170
Total age 15-54	31.2	25.0	16.9	0.3	0.5	0.8	4.3	2.1	6.2	1.9	4.2	0.1	68.8	100.0	850

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes men whose sexual partner is a live-in partner/girlfriend, men who are not currently married, men age 20-24, men with no schooling, and men who don't know their caste/tribe, who are not shown separately.

IUD = Intrauterine device; PPIUD = Postpartum intrauterine device

¹ Does not include live-in partner/girlfriend

Table 31 Source of modern contraceptive methods

Percent distribution of women age 15-49 who are current users of modern contraceptive methods by most recent source of the method, according to residence, Kerala, 2019-21

Most recent source of method	Female sterilization	Pill	IUD or PPIUD	Condom/ <i>Nirodh</i>	All modern methods ¹
URBAN					
Public health sector	51.6	*	80.6	45.9	51.3
Government/municipal hospital	46.2	*	26.7	10.8	42.0
<i>Vaidya/hakim/homeopath</i> (AYUSH)	0.0	*	0.0	0.0	0.0
Government dispensary	2.5	*	3.8	0.6	2.4
UHC/UHP/UFWC	0.1	*	3.3	0.0	0.2
CHC/rural hospital/Block PHC	1.7	*	4.3	3.7	2.0
PHC/Additional PHC	0.3	*	12.6	9.1	1.4
Sub-centre/ANM	0.1	*	0.0	0.0	0.1
Government mobile clinic	0.0	*	0.0	0.0	0.0
Camp	0.5	*	1.5	0.9	0.5
<i>Anganwadi/ICDS centre</i>	0.0	*	6.6	6.3	0.7
ASHA	0.0	*	21.8	13.7	1.7
Other community-based worker	0.0	*	0.0	0.0	0.0
Other public health sector	0.2	*	0.0	0.7	0.2
NGO or trust hospital/clinic	0.1	*	0.0	0.0	0.1
Private health sector	48.1	*	13.1	25.3	44.6
Private hospital	48.0	*	11.2	8.6	42.9
Private doctor/clinic	0.1	*	1.8	1.4	0.2
Private mobile clinic	0.0	*	0.0	0.9	0.1
<i>Vaidya/hakim/homeopath</i> (AYUSH)	0.0	*	0.0	0.0	0.0
Traditional healer	0.0	*	0.0	0.0	0.0
Pharmacy/drugstore	0.0	*	0.0	14.4	1.4
<i>Dai</i> (TBA)	0.0	*	0.0	0.0	0.0
Other private health sector	0.0	*	0.0	0.0	0.0
Other source	0.0	*	6.3	28.8	2.5
Shop	0.0	*	0.0	0.0	0.0
Husband	0.0	*	0.0	20.2	1.6
Friend/relative	0.0	*	6.3	2.6	0.4
Other	0.0	*	0.0	6.0	0.5
Don't know	0.0	*	0.0	0.0	0.0
Missing	0.2	*	0.0	0.0	1.4
Total	100.0	100.0	100.0	100.0	100.0
Number of users	1,782	18	63	156	2,052

Continued...

Table 31 Source of modern contraceptive methods—Continued

Percent distribution of women age 15-49 who are current users of modern contraceptive methods by most recent source of the method, according to residence, Kerala, 2019-21

Most recent source of method	Female sterilization	Pill	IUD or PPIUD	Condom/ <i>Nirodh</i>	All modern methods ¹
RURAL					
Public health sector	62.0	*	78.2	62.8	62.0
Government/municipal hospital	51.7	*	26.7	12.0	48.5
<i>Vaidya/hakim/homeopath</i> (AYUSH)	0.0	*	0.0	0.0	0.0
Government dispensary	5.3	*	5.8	5.0	5.3
UHC/UHP/UFWC	0.1	*	0.7	0.0	0.1
CHC/rural hospital/Block PHC	3.4	*	15.5	1.2	3.6
PHC/Additional PHC	0.4	*	8.2	15.6	1.4
Sub-centre/ANM	0.2	*	3.8	0.9	0.3
Government mobile clinic	0.0	*	0.7	0.0	0.0
Camp	0.9	*	0.5	5.5	1.1
<i>Anganwadi</i> /ICDS centre	0.0	*	3.7	9.7	0.6
ASHA	0.0	*	12.5	13.0	1.0
Other community-based worker	0.0	*	0.0	0.0	0.0
Other public health sector	0.0	*	0.0	0.0	0.0
NGO or trust hospital/clinic	0.0	*	0.0	0.0	0.0
Private health sector	37.7	*	19.9	17.2	36.1
Private hospital	37.4	*	19.9	12.5	35.5
Private doctor/clinic	0.1	*	0.0	0.7	0.1
Private mobile clinic	0.2	*	0.0	0.0	0.2
<i>Vaidya/hakim/homeopath</i> (AYUSH)	0.0	*	0.0	0.0	0.0
Traditional healer	0.0	*	0.0	0.0	0.0
Pharmacy/drugstore	0.0	*	0.0	4.0	0.3
<i>Dai</i> (TBA)	0.0	*	0.0	0.0	0.0
Other private health sector	0.1	*	0.0	0.0	0.1
Other source	0.1	*	1.9	20.0	1.3
Shop	0.0	*	0.0	0.6	0.1
Husband	0.0	*	0.0	14.0	0.8
Friend/relative	0.0	*	1.9	3.1	0.2
Other	0.1	*	0.0	2.3	0.2
Don't know	0.0	*	0.0	0.0	0.0
Missing	0.1	*	0.0	0.0	0.6
Total	100.0	100.0	100.0	100.0	100.0
Number of users	2,201	12	64	124	2,423

Continued...

Table 31 Source of modern contraceptive methods—Continued

Percent distribution of women age 15-49 who are current users of modern contraceptive methods by most recent source of the method, according to residence, Kerala, 2019-21

Most recent source of method	Female sterilization	Pill	IUD or PPIUD	Condom/ <i>Nirodh</i>	All modern methods ¹
TOTAL					
Public health sector	57.4	(43.4)	79.4	53.4	57.1
Government/municipal hospital	49.2	(18.1)	26.7	11.3	45.5
<i>Vaidya/hakim/homeopath</i> (AYUSH)	0.0	(0.0)	0.0	0.0	0.0
Government dispensary	4.0	(14.0)	4.8	2.6	4.0
UHC/UHP/UFWC	0.1	(0.0)	2.0	0.0	0.1
CHC/rural hospital/Block PHC	2.7	(3.9)	10.0	2.6	2.9
PHC/Additional PHC	0.4	(3.9)	10.4	12.0	1.4
Sub-centre/ANM	0.1	(0.0)	1.9	0.4	0.2
Government mobile clinic	0.0	(0.0)	0.4	0.0	0.0
Camp	0.7	(0.0)	1.0	2.9	0.9
<i>Anganwadi</i> /ICDS centre	0.0	(3.5)	5.1	7.8	0.7
ASHA	0.0	(0.0)	17.1	13.4	1.3
Other community-based worker	0.0	(0.0)	0.0	0.0	0.0
Other public health sector	0.1	(0.0)	0.0	0.4	0.1
NGO or trust hospital/clinic	0.1	(0.0)	0.0	0.0	0.1
Private health sector	42.4	(42.5)	16.5	21.7	40.0
Private hospital	42.1	(26.8)	15.6	10.3	38.9
Private doctor/clinic	0.1	(0.0)	0.9	1.1	0.2
Private mobile clinic	0.1	(0.0)	0.0	0.5	0.1
<i>Vaidya/hakim/homeopath</i> (AYUSH)	0.0	(0.0)	0.0	0.0	0.0
Traditional healer	0.0	(0.0)	0.0	0.0	0.0
Pharmacy/drugstore	0.0	(15.8)	0.0	9.8	0.8
<i>Dai</i> (TBA)	0.0	(0.0)	0.0	0.0	0.0
Other private health sector	0.0	(0.0)	0.0	0.0	0.0
Other source	0.0	(14.1)	4.1	24.9	1.8
Shop	0.0	(1.8)	0.0	0.3	0.0
Husband	0.0	(9.1)	0.0	17.5	1.1
Friend/relative	0.0	(3.2)	4.1	2.8	0.3
Other	0.0	(0.0)	0.0	4.3	0.3
Don't know	0.0	(0.0)	0.0	0.0	0.0
Missing	0.2	(0.0)	0.0	0.0	1.0
Total	100.0	100.0	100.0	100.0	100.0
Number of users	3,983	30	127	279	4,475

Note: All information in this table is based on women's reports. Table includes all users of modern contraceptive methods regardless of their marital status. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. All modern methods include male sterilization and injectables, which are not shown separately.

IUD = Intrauterine device; PPIUD = Postpartum intrauterine device; AYUSH = Ayurveda, yoga and naturopathy, unani, siddha and homeopathy; UHC = Urban health centre; UHP = Urban health post; UFWC = Urban family welfare centre; CHC = Community health centre; PHC = Primary health centre; ANM = Auxiliary nurse midwife;

ICDS = Integrated Child Development Services; ASHA = Accredited Social Health Activist; NGO = Nongovernmental organization; TBA = Traditional birth attendant

¹ Excludes standard days method, lactational amenorrhoea method (LAM), and "other" modern methods

Table 32 Informed choice

Among women who are current users of selected modern contraceptive methods who started the last episode of use within the 5 years preceding the survey, percentage who were informed about possible side effects or problems of that method, percentage who were informed about what to do if they experienced side effects, percentage who were ever told by a health or family planning worker about other methods of family planning they could use, and percentage who were informed of all three (Method Information Index) by method, according to residence, Kerala, 2019-21

Method	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Percentage who were informed about all three (Method Information Index)	Number of women
URBAN					
Female sterilization ¹	60.8	48.3	60.7	42.8	328
IUD or PPIUD	(71.8)	(63.9)	(83.7)	(59.0)	43
Total	62.6	50.8	64.1	45.4	381
RURAL					
Female sterilization ¹	60.4	53.3	63.6	46.6	434
IUD or PPIUD	80.5	67.4	76.2	54.3	39
Total	62.2	54.6	65.0	47.5	481
TOTAL					
Female sterilization ¹	60.6	51.2	62.4	45.0	763
IUD or PPIUD	75.9	65.5	80.1	56.7	82
Total	62.4	52.9	64.6	46.6	863

Note: Table includes only the contraceptive methods separately shown in the table and excludes users who obtained their method from friends/relatives or husband. Figures in parentheses are based on 25-49 unweighted cases. Table includes pill users, who are not shown separately.

IUD = Intrauterine device; PPIUD = Postpartum intrauterine device

¹ Among women who were sterilized in the 5 years preceding the survey

Table 33 Twelve-month contraceptive discontinuation rates

Among women age 15-49 who started an episode of contraceptive use within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, by reason for discontinuation and specific method, Kerala, 2019-21

Method	Reason for discontinuation								Switched to another method ⁴	Number of episodes of use ⁵
	Method failure	Desire to become pregnant	Other fertility related reason ¹	Side effects/ health concerns	Wanted more effective method	Other method related reason ²	Other reason	Any reason ³		
IUD or PPIUD	(4.1)	(8.3)	(2.7)	(4.9)	(0.9)	(3.3)	(2.1)	(26.4)	(0.2)	163
Condom/ <i>Nirodh</i>	1.0	18.4	21.5	3.4	3.5	7.3	7.9	63.1	2.9	634
Rhythm	0.5	14.9	17.7	1.7	2.3	1.5	5.0	43.6	3.6	353
Withdrawal	2.0	15.2	24.8	0.0	2.5	1.6	4.7	51.0	2.7	551
All modern spacing methods ⁶	1.6	15.5	21.0	4.3	4.3	6.0	6.8	59.6	3.9	963
All spacing methods ⁷	1.6	15.3	21.6	2.5	3.4	3.9	5.9	54.2	3.5	1,867
All methods	1.1	10.7	15.0	1.8	2.4	2.7	4.1	37.7	2.4	2,695

Note: Figures are based on life table calculations using information on episodes of contraceptive use that occurred 3-62 months preceding the survey. All methods include female and male sterilization, pill, injectables and other methods, which are not shown separately.

IUD = Intrauterine device; PPIUD = Postpartum intrauterine device

¹ Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation

² Includes lack of access/too far, costs too much, and inconvenient to use

³ Reasons for discontinuation are mutually exclusive and add to the total given in this column

⁴ The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.

⁵ All episodes of use that occurred within the 5 years preceding the survey are included. Number of episodes of use includes both episodes of use that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation.

⁶ Includes pill, IUD/PPIUD, injectables, male condom, female condom, lactational amenorrhoea method (LAM), diaphragm, foam/jelly, and other modern spacing methods that are not shown separately

⁷ Includes pill, IUD/PPIUD, injectables, male condom, female condom, lactational amenorrhoea method (LAM), diaphragm, foam/jelly, rhythm, withdrawal, and other modern spacing and traditional methods that are not shown separately

Table 34 Men's contraception-related perceptions and knowledge

Percentage of men age 15-49 who agree with two specific statements about women and contraception, and percent distribution of men according to their belief about the efficacy of condoms in preventing pregnancy, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of men who agree		Percentage of men who say that if a male condom is used correctly, it protects against pregnancy:				Total	Number of men
	Contraception is women's business and a man should not have to worry about it	Women who use contraception may become promiscuous	Most of the time	Sometimes	Not at all	Don't know/unsure ¹		
Age								
15-19	9.8	23.2	38.4	23.3	3.4	34.8	100.0	215
20-24	14.7	43.5	42.3	34.1	2.5	21.1	100.0	182
25-29	15.3	49.7	53.5	33.7	7.4	5.4	100.0	150
30-34	19.2	50.1	55.1	34.0	8.9	2.0	100.0	159
35-39	21.4	47.0	55.4	31.7	5.2	7.6	100.0	197
40-44	13.9	48.0	58.8	31.7	4.9	4.5	100.0	187
45-49	18.9	51.5	50.1	34.6	9.7	5.5	100.0	210
Residence								
Urban	19.1	43.4	47.3	33.7	6.3	12.7	100.0	599
Rural	13.6	44.8	52.6	29.8	5.6	11.9	100.0	700
Schooling								
No schooling	(8.4)	(23.7)	(40.6)	(28.6)	(1.7)	(29.2)	100.0	30
<5 years complete	(22.7)	(38.2)	(45.9)	(38.9)	(0.0)	(15.2)	100.0	26
5-9 years complete	17.4	42.2	50.3	28.4	6.9	14.4	100.0	291
10-11 years complete	18.2	44.3	49.6	31.1	5.8	13.6	100.0	399
12 or more years complete	14.0	46.4	51.2	33.6	6.1	9.2	100.0	553
Religion								
Hindu	15.7	45.2	51.5	32.8	4.9	10.8	100.0	742
Muslim	17.1	42.8	51.3	26.9	7.0	14.9	100.0	337
Christian	16.0	42.8	43.9	35.1	7.8	13.2	100.0	221
Caste/tribe								
Scheduled caste	21.1	43.0	55.2	27.9	6.0	10.9	100.0	138
Scheduled tribe	13.7	27.4	47.2	25.4	2.4	25.1	100.0	30
Other backward class	15.0	44.9	51.9	31.8	5.4	10.9	100.0	767
Other	17.0	45.4	45.5	33.2	7.2	14.0	100.0	351
Total age 15-49	16.1	44.1	50.1	31.6	5.9	12.3	100.0	1,299
Age 50-54	12.0	42.6	50.5	40.2	4.3	4.9	100.0	174
Total age 15-54	15.6	44.0	50.2	32.7	5.7	11.4	100.0	1,473

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes men who don't know their caste/tribe, who are not shown separately.

¹ Includes missing values and those who never heard of male condoms

Table 35 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Kerala, 2019-21

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning ¹			Number of women	Percentage of demand satisfied ²	Percentage of demand satisfied by modern methods ³
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	17.7	0.0	17.7	8.7	0.0	8.7	26.3	0.0	26.3	77	32.9	12.8
20-24	23.4	1.5	24.9	17.7	6.6	24.3	41.1	8.1	49.1	698	49.4	30.4
25-29	17.9	5.6	23.5	15.3	21.2	36.6	33.2	26.8	60.0	1,157	60.9	45.9
30-34	7.7	6.8	14.5	11.4	46.4	57.9	19.2	53.2	72.4	1,491	79.9	67.0
35-39	2.5	6.5	9.0	6.3	65.2	71.5	8.7	71.7	80.4	1,651	88.9	77.1
40-44	1.5	6.2	7.6	2.4	71.4	73.8	3.9	77.5	81.4	1,542	90.6	81.6
45-49	0.6	4.4	5.0	0.6	75.5	76.1	1.2	79.9	81.1	1,546	93.9	89.0
Residence												
Urban	7.2	5.8	13.0	9.2	52.2	61.4	16.4	58.0	74.4	3,916	82.5	68.0
Rural	6.8	5.2	12.0	6.3	53.7	60.1	13.1	58.9	72.0	4,247	83.4	76.1
Schooling												
No schooling	0.0	3.0	3.0	0.5	74.3	74.8	0.5	77.3	77.8	64	96.1	91.9
<5 years complete	0.0	3.5	3.5	1.5	75.2	76.7	1.5	78.7	80.2	152	95.7	86.1
5-9 years complete	1.9	4.2	6.1	4.2	69.0	73.2	6.1	73.2	79.3	1,852	92.3	83.1
10-11 years complete	4.5	6.0	10.5	5.5	61.9	67.5	10.0	67.9	78.0	2,016	86.5	76.0
12 or more years complete	10.9	5.9	16.8	10.7	40.2	50.9	21.6	46.1	67.7	4,079	75.2	63.2
Religion												
Hindu	5.9	6.1	12.0	6.4	55.8	62.3	12.3	61.9	74.3	4,315	83.9	75.6
Muslim	9.2	4.3	13.5	10.9	46.4	57.3	20.1	50.7	70.9	2,618	80.9	63.6
Christian	6.2	5.7	11.9	5.1	57.3	62.4	11.3	63.1	74.3	1,227	83.9	77.7
Caste/tribe												
Scheduled caste	6.6	6.4	13.0	6.9	53.7	60.6	13.5	60.1	73.6	828	82.4	74.2
Scheduled tribe	4.5	3.0	7.5	10.0	49.7	59.7	14.5	52.7	67.2	122	88.9	71.7
Other backward class	7.3	5.1	12.4	8.5	52.5	61.1	15.8	57.6	73.4	4,863	83.1	71.3
Other	6.6	6.2	12.7	6.1	54.1	60.2	12.7	60.2	72.9	2,325	82.5	73.5
Total	7.0	5.5	12.5	7.7	53.0	60.7	14.7	58.5	73.2	8,163	83.0	72.2

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012, Revising Unmet Need for Family Planning, DHS Analytical Studies No. 25, ICF International, Calverton, Maryland, USA. Total includes women belonging to other religions and women who don't know their caste/tribe, who are not shown separately.

¹ Total demand is the sum of unmet need and met need

² Percentage of demand satisfied is met need divided by total demand

³ Modern methods include female sterilization, male sterilization, pill, IUD/PPIUD, injectables, male condom, female condom, standard days method, diaphragm, foam/jelly, lactational amenorrhoea method (LAM), and other modern methods

Table 36 Unmet need for family planning by district

Percentage of currently married women age 15-49 with unmet need for family planning by district, and total for NFHS-4, Kerala, 2019-21

District	Total unmet need	Unmet need for spacing	Unmet need for limiting	Number of women
Alappuzha	12.3	6.0	6.3	482
Ernakulam	10.7	6.8	3.9	781
Idukki	9.4	5.3	4.1	256
Kannur	12.7	9.2	3.5	692
Kasaragod	12.5	6.4	6.1	372
Kollam	11.9	7.2	4.7	633
Kottayam	16.1	5.6	10.5	421
Kozhikode	9.5	5.9	3.6	747
Malappuram	13.8	8.5	5.3	1,146
Palakkad	10.8	6.7	4.1	719
Pathanamthitta	12.3	4.9	7.5	229
Thiruvananthapuram	19.3	9.8	9.5	786
Thrissur	10.8	4.9	6.0	695
Wayanad	5.6	4.0	1.6	204
Kerala	12.5	7.0	5.5	8,163
NFHS-4 (2015-16)	13.7	8.3	5.4	8,147

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012, Revising Unmet Need for Family Planning, DHS Analytical Studies No. 25, ICF International Calverton, Maryland, USA.

Table 37 Hysterectomy

Percentage of women age 15-49 who have had a hysterectomy, and among women with a hysterectomy, median age at the time of hysterectomy, and percent distribution by place the hysterectomy was performed, according to background characteristics, Kerala, 2019-21

Background characteristic	Percentage of women who have had a hysterectomy	Number of women	Median age at time of hysterectomy	Number of women who reported age at hysterectomy	Place of hysterectomy			Total	Number of women with a hysterectomy
					Percentage performed in the public health sector	Percentage performed in the private health sector ¹	Percentage performed elsewhere or don't know where it was performed		
Age									
15-29	0.0	4,230	*	2	*	*	*	100.0	2
30-39	0.4	3,302	*	14	*	*	*	100.0	14
40-49	5.8	3,437	41.1	200	34.4	64.8	0.8	100.0	200
Residence									
Urban	2.2	5,277	41.1	118	32.4	67.6	0.0	100.0	118
Rural	1.7	5,692	40.1	98	37.5	61.0	1.6	100.0	98
Schooling									
No schooling	2.2	83	*	2	*	*	*	100.0	2
<5 years complete	6.5	197	*	13	*	*	*	100.0	13
5-9 years complete	4.2	2,246	40.4	93	34.2	64.2	1.6	100.0	93
10-11 years complete	1.9	2,826	38.4	55	48.9	51.1	0.0	100.0	55
12 or more years complete	0.9	5,617	42.7	53	13.6	86.4	0.0	100.0	53
Religion									
Hindu	2.1	5,958	41.5	123	39.6	59.1	1.2	100.0	123
Muslim	1.6	3,272	(39.7)	51	(29.9)	(70.1)	(0.0)	100.0	51
Christian	2.3	1,736	(40.0)	39	(26.9)	(73.1)	(0.0)	100.0	39
Caste/tribe									
Scheduled caste	1.9	1,210	*	23	*	*	*	100.0	23
Scheduled tribe	0.4	176	*	1	*	*	*	100.0	1
Other backward class	1.9	6,409	40.4	123	33.6	66.4	0.0	100.0	123
Other	2.2	3,139	40.5	68	26.8	70.9	2.3	100.0	68
Don't know	(3.6)	36	*	1	*	*	*	100.0	1
Total	2.0	10,969	40.6	215	34.7	64.6	0.7	100.0	215

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women belonging to other religions, who are not shown separately.

¹ Includes nongovernmental organization or trust hospital/clinic

Table 38 Pregnancy outcome

Percent distribution of last pregnancies among women age 15-49 during the 5 years preceding the survey by pregnancy outcome, according to background characteristics, Kerala, 2019-21

Background characteristic	Pregnancy outcome				Total	Number of pregnancies
	Live birth	Abortion	Miscarriage	Stillbirth		
Mother's current age						
20-29	92.7	2.6	4.7	0.0	100.0	1,286
30-39	93.2	2.6	4.1	0.2	100.0	1,080
40-49	81.3	5.8	13.0	0.0	100.0	110
Residence						
Urban	93.2	3.1	3.7	0.0	100.0	1,188
Rural	91.5	2.4	5.9	0.2	100.0	1,308
Mother's schooling						
5-9 years complete	93.2	0.9	5.4	0.6	100.0	249
10-11 years complete	89.7	3.9	6.2	0.2	100.0	489
12 or more years complete	92.9	2.7	4.4	0.0	100.0	1,751
Religion						
Hindu	91.6	3.0	5.3	0.1	100.0	1,179
Muslim	93.6	2.2	4.1	0.1	100.0	978
Christian	91.4	3.2	5.4	0.0	100.0	339
Caste/tribe						
Scheduled caste	91.4	3.0	5.0	0.6	100.0	252
Scheduled tribe	94.0	1.3	4.7	0.0	100.0	37
Other backward class	92.5	2.6	4.8	0.1	100.0	1,528
Other	92.1	2.9	5.0	0.0	100.0	670
Total	92.3	2.7	4.9	0.1	100.0	2,496

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes pregnancies of women age 15-19, women with no schooling or less than 5 years of schooling, women belonging to other religions, and women who don't know their caste/ tribe, which are not shown separately.

Table 39 Characteristics of abortions

Among women age 15-49 whose last pregnancy in the last 5 years ended in an abortion, percent distribution by main reason for abortion, method of abortion, place of abortion and person who performed the abortion, percentage who had complications from the abortion, and among women who had complications, percentage who sought treatment for the complications, and among women who sought treatment for the complications, percent distribution of the place of treatment, according to residence, Kerala, 2019-21

Characteristic of abortion	Urban	Rural	Total
Main reason for abortion			
Unplanned pregnancy	(22.3)	(12.4)	17.7
Contraceptive failure	(0.0)	(4.5)	2.1
Complications in pregnancy	(29.0)	(13.9)	22.1
Health did not permit	(16.5)	(19.4)	17.8
Female foetus	(0.0)	(0.0)	0.0
Male foetus	(0.0)	(0.0)	0.0
Economic reasons	(0.0)	(0.0)	0.0
Last child too young	(11.6)	(11.3)	11.5
Foetus had congenital abnormality	(13.7)	(18.7)	16.0
Husband/mother-in-law did not want	(0.0)	(0.0)	0.0
Other	(6.8)	(19.9)	12.8
Total	100.0	100.0	100.0
Method of abortion			
Medicines	(79.0)	(74.5)	76.9
MVA	(4.6)	(4.7)	4.7
Other surgical	(8.4)	(11.9)	10.0
Other	(3.9)	(8.9)	6.2
Don't know	(4.1)	(0.0)	2.2
Total	100.0	100.0	100.0
Place of abortion			
Public health sector	(47.9)	(49.2)	48.5
Private health sector ¹	(49.4)	(50.8)	50.1
At home	(2.7)	(0.0)	1.5
Other	(0.0)	(0.0)	0.0
Total	100.0	100.0	100.0
Person who performed the abortion			
Doctor	(85.6)	(95.9)	90.3
Nurse/ANM/LHV	(0.0)	(2.6)	1.2
<i>Dai</i> (TBA)	(0.0)	(0.0)	0.0
Family member/relative/friend	(0.0)	(0.0)	0.0
Self	(14.4)	(0.0)	7.8
Other	(0.0)	(1.5)	0.7
Total	100.0	100.0	100.0
Complications from the abortion			
Percentage of women who had complications from the abortion	(11.0)	(14.8)	12.8
Number of women with abortions	37	31	68

Note: Figures in parentheses are based on 25-49 unweighted cases.

MVA = Manual vacuum aspiration; ANM = Auxiliary nurse midwife; LHV = Lady health visitor; TBA = Traditional birth attendant

¹ Includes nongovernmental organization or trust hospital/clinic

Table 40 Age at first marriage

Percentage of women age 15-49 and men age 15-54 who were first married by specific exact ages, percentage never married, and median age at first marriage, first cohabitation with spouse, and first sexual intercourse, according to current age, Kerala, 2019-21

Current age	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage	Median age at first cohabitation	Median age at first sex
	15	18	20	21	25					
WOMEN										
15-19	0.0	na	na	na	na	94.7	1,472	a	a	a
20-24	0.2	6.3	25.3	na	na	50.6	1,426	a	a	a
25-29	0.7	11.5	32.5	44.0	78.7	11.0	1,332	21.6	21.6	21.6
30-34	1.7	13.2	29.8	42.7	78.9	1.2	1,541	21.6	21.6	21.6
35-39	2.7	15.4	34.2	45.4	77.8	1.4	1,760	21.5	21.5	21.4
40-44	3.7	18.8	36.8	46.4	77.3	1.4	1,679	21.4	21.3	21.2
45-49	5.9	20.2	36.2	45.2	75.8	2.1	1,758	21.7	21.5	21.5
20-49	2.6	14.6	32.8	na	na	10.2	9,497	a	a	a
25-49	3.1	16.1	34.1	44.8	77.6	3.1	8,071	21.5	21.5	21.5
MEN										
15-19	0.0	na	na	na	na	100.0	215	a	a	a
20-24	0.0	0.0	0.4	na	na	99.0	182	a	a	a
25-29	0.0	0.0	0.0	1.4	11.8	70.8	150	a	a	a
30-34	0.0	0.0	1.3	4.0	15.7	31.9	159	29.7	29.7	30.0
35-39	0.0	0.0	2.9	4.9	18.8	15.6	197	28.2	28.3	28.5
40-44	0.0	0.0	0.9	1.4	15.4	5.3	187	29.3	29.1	29.3
45-49	0.0	0.3	1.9	5.4	24.1	5.9	210	28.1	28.1	28.3
50-54	0.0	0.7	3.6	4.8	19.8	1.4	174	28.6	28.2	29.0
20-49	0.0	0.0	1.3	na	na	35.9	1,085	a	a	a
25-49	0.0	0.1	1.5	3.6	17.6	23.2	903	a	a	a

na = Not applicable due to censoring

a = Omitted because less than 50 percent of the women or men were married, began living with their spouse, or had sexual intercourse for the first time before reaching the beginning of the age group.

Table 41 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey and for 0-4 years before NFHS-4 and NFHS-3, by residence, Kerala, 2019-21

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality ¹ (PNN)	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
URBAN					
0-4	2.6	0.9	3.5	0.3	3.9
5-9	4.6	0.3	4.9	1.8	6.7
10-14	3.0	1.9	4.9	2.6	7.5
NFHS-4 (0-4)	4.4	1.4	5.8	2.4	8.1
NFHS-3 (0-4)	(15.0)	(3.0)	(18.0)	(0.0)	(18.0)
RURAL					
0-4	4.2	1.1	5.2	1.1	6.4
5-9	2.3	3.9	6.2	1.5	7.8
10-14	5.8	4.8	10.6	2.5	13.1
NFHS-4 (0-4)	4.4	1.0	5.4	0.6	6.0
NFHS-3 (0-4)	9.9	4.2	14.1	1.4	15.5
TOTAL					
0-4	3.4	1.0	4.4	0.8	5.2
5-9	3.4	2.2	5.6	1.7	7.2
10-14	4.4	3.4	7.8	2.6	10.3
NFHS-4 (0-4)	4.4	1.2	5.6	1.5	7.1
NFHS-3 (0-4)	11.5	3.8	15.3	1.0	16.3

Note: All estimates are for the 5 years preceding the survey (approximately 2001-2005 for NFHS-3, 2011-2015 for NFHS-4 and 2015-2019 for NFHS-5). Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death.

¹ Computed as the difference between the infant and neonatal mortality rates

Table 42 Early childhood mortality rates by background characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the five-year period preceding the survey, by background characteristics, Kerala, 2019-21

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality ¹ (PNN)	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
Schooling					
<10 years complete	(4.3)	(5.1)	(9.5)	(1.3)	(10.8)
10 or more years complete	3.3	0.5	3.8	0.7	4.5
Religion					
Hindu	5.9	1.0	6.8	1.0	7.8
Muslim	1.4	1.4	2.7	0.4	3.2
Christian	(1.4)	(0.0)	(1.4)	(1.1)	(2.6)
Caste/tribe					
Scheduled caste	(1.1)	(0.0)	(1.1)	(3.0)	(4.1)
Other backward class	4.0	0.9	4.9	0.3	5.2
Other ²	1.5	1.6	3.0	0.6	3.6
Child's sex					
Male	3.0	0.2	3.2	0.5	3.7
Female	3.9	1.8	5.7	1.0	6.7
Mother's age at birth					
20-29	3.7	1.5	5.2	1.0	6.1
30-39	2.4	0.0	2.4	0.4	2.8
Birth order					
1	4.8	1.0	5.8	1.1	6.9
2-3	2.5	0.8	3.3	0.6	3.9
Previous birth interval³					
2-3 years	4.2	2.2	6.5	0.0	6.5
4 years or more	1.7	0.4	2.0	0.4	2.5
Total	3.4	1.0	4.4	0.8	5.2

Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death. Total includes children whose mothers have no schooling, children belonging to other religions, children whose caste/tribe is not known, children of birth order 4 or more, scheduled tribe children, children with mother's age at birth less than 20 or 40-49, and children with previous birth interval of less than 2 years, who are not shown separately.

¹ Computed as the difference between the infant and neonatal mortality rates

² Not belonging to scheduled caste, scheduled tribe, or other backward class

³ Excludes first-order births

Table 43 High-risk fertility behaviour

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Kerala, 2019-21

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women ¹
	Percentage of births	Risk ratio	
Not in any high-risk category	42.1	1.0	63.9 ^a
Unavoidable risk category			
First order births between ages 18 and 34 years	41.8	1.4	6.4
Single high-risk category			
Mother's age <18	0.3	*	0.0
Mother's age >34	6.1	0.0	18.3
Birth interval <24 months	5.7	0.0	5.2
Birth order >3	1.8	(1.4)	1.1
Subtotal	13.8	0.2	24.5
Multiple high-risk category			
Mother's age >34 and birth interval <24 months	0.3	*	0.3
Mother's age >34 and birth order >3	1.4	(0.0)	4.0
Mother's age >34 and birth interval <24 months and birth order >3	0.1	*	0.3
Birth interval <24 months and birth order >3	0.5	*	0.6
Subtotal	2.3	0.0	5.2
In any avoidable high-risk category	16.1	0.2	29.8
Total	100.0	na	100.0
Number of births	2,743	na	8,163

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer 25 unweighted cases and has been suppressed.

na = Not applicable

¹ Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or greater than 34 years and 2 months, latest birth less than 15 months ago, or latest birth of order 3 or higher

^a Includes sterilized women

Table 44 Antenatal care

Percent distribution of women who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent live birth and percentage receiving ANC from a skilled provider, according to background characteristics, Kerala, 2019-21

Background characteristic	Doctor	ANM/ nurse/ midwife/ LHV	Anganwadi/ ICDS worker	ASHA	No ANC	Total	Number of women	Percentage receiving ANC from a skilled provider ¹
Mother's age at birth								
<20	97.4	0.0	0.0	1.0	1.6	100.0	109	97.4
20-34	97.9	0.1	0.1	0.2	1.8	100.0	2,057	98.0
35-49	98.9	0.0	0.0	0.5	0.7	100.0	208	98.9
Birth order								
1	96.9	0.2	0.1	0.3	2.5	100.0	938	97.1
2-3	98.6	0.0	0.1	0.2	1.1	100.0	1,344	98.6
4 or more	98.5	0.0	0.0	0.0	1.5	100.0	92	98.5
Residence								
Urban	97.9	0.1	0.1	0.4	1.5	100.0	1,135	98.0
Rural	98.0	0.1	0.1	0.1	1.8	100.0	1,239	98.0
Schooling								
5-9 years complete	96.5	0.0	0.0	0.4	3.1	100.0	239	96.5
10-11 years complete	98.7	0.2	0.0	0.0	1.1	100.0	454	98.9
12 or more years complete	97.9	0.1	0.1	0.3	1.6	100.0	1,675	98.0
Religion								
Hindu	97.8	0.2	0.0	0.4	1.7	100.0	1,115	97.9
Muslim	98.7	0.0	0.0	0.1	1.2	100.0	935	98.7
Christian	96.5	0.0	0.7	0.0	2.8	100.0	323	96.5
Caste/tribe								
Scheduled caste	95.6	0.8	0.0	1.0	2.7	100.0	244	96.4
Scheduled tribe	100.0	0.0	0.0	0.0	0.0	100.0	35	100.0
Other backward class	98.2	0.0	0.1	0.2	1.5	100.0	1,454	98.2
Other	98.2	0.0	0.1	0.0	1.7	100.0	633	98.2
Total	97.9	0.1	0.1	0.2	1.7	100.0	2,374	98.0

Note: If more than one source of ANC was mentioned, only the provider with the highest qualification is considered in this table. Total includes women with no schooling or less than 5 years of schooling, women belonging to other religions, and women who don't know their caste/tribe, who are not shown separately.

ANM = Auxiliary nurse midwife; LHV = Lady health visitor; TBA = Traditional birth attendant; ICDS = Integrated Child Development Services; ASHA = Accredited Social Health Activist

¹ Skilled provider includes doctor, auxiliary nurse midwife, nurse, midwife, and lady health visitor.

Table 45 Antenatal care services and information received

Percent of women who had a live birth in the 5 years preceding the survey who received antenatal care (ANC) for the most recent live birth by services and information received, according to residence and source of antenatal care, Kerala, 2019-21

Services/information	Source of ANC						Total
	Residence		Public health sector	Private health sector ¹	Both public and private health sector ¹	ANC received only at home	
	Urban	Rural					
Percentage receiving selected services during antenatal care							
Weighed	99.3	99.8	99.6	99.5	100.0	100.0	99.6
Blood pressure measured	98.9	99.6	99.1	99.3	99.0	99.3	99.2
Urine sample taken	99.1	99.6	99.4	99.2	100.0	99.7	99.4
Blood sample taken	99.2	99.8	99.5	99.5	100.0	99.7	99.5
Abdomen examined	99.1	99.1	98.9	99.3	100.0	99.2	99.1
Percentage receiving information on specific pregnancy complications							
Vaginal bleeding	42.6	38.9	34.6	39.6	32.1	55.9	40.7
Convulsions	31.5	27.5	23.9	27.4	25.2	48.5	29.4
Prolonged labour	38.8	35.8	33.3	33.7	36.2	58.9	37.3
Severe abdominal pain	41.6	38.2	35.5	36.6	32.2	59.5	39.9
High blood pressure	42.1	38.4	35.1	37.9	31.0	57.2	40.2
Where to go if experienced pregnancy complications	86.1	89.4	87.7	86.2	89.7	94.6	87.8
Number of women	1,118	1,217	790	1,290	96	349	2,335

¹ Includes nongovernmental organizations and trust hospitals/clinics

Table 46 Antenatal care indicators

Among women with a live birth in the 5 years preceding the survey, percentage who received different types of antenatal care (ANC) during the pregnancy for their most recent live birth, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage who had four or more ANC visits	Percentage with an ANC visit in the first trimester of pregnancy	Percentage who received two or more TT injections during the pregnancy	Percentage whose last live birth was protected against neonatal tetanus ¹	Percentage who were given or bought IFA	Percentage who took IFA for at least 100 days	Percentage who took IFA for at least 180 days	Percentage who took an intestinal parasite drug	Number of women
Mother's age at birth									
<20	69.9	93.8	93.7	96.1	93.5	80.1	65.2	20.0	109
20-34	78.7	93.4	93.1	95.1	98.2	79.7	66.7	19.2	2,057
35-49	82.0	95.9	95.1	96.3	99.0	83.0	71.1	22.8	208
Birth order									
1	76.1	93.4	92.5	94.2	98.7	79.5	66.8	15.8	938
2-3	79.7	93.7	93.7	95.6	97.6	79.8	66.3	21.5	1,344
4 or more	88.0	94.8	96.0	100.0	97.0	86.7	78.9	28.9	92
Residence									
Urban	79.3	93.9	92.3	94.7	97.8	80.5	66.2	19.8	1,135
Rural	78.0	93.3	94.2	95.7	98.2	79.5	67.7	19.4	1,239
Schooling									
5-9 years complete	80.9	92.9	96.1	98.0	97.3	77.7	58.9	27.2	239
10-11 years complete	80.0	94.5	95.1	96.1	97.0	81.6	69.5	19.9	454
12 or more years complete	77.9	93.4	92.4	94.6	98.4	79.8	67.5	18.5	1,675
Religion									
Hindu	76.6	93.4	91.7	93.6	98.2	77.9	66.3	19.8	1,115
Muslim	82.7	94.7	96.0	97.4	97.4	83.7	67.3	21.1	935
Christian	73.7	91.1	91.1	94.4	99.2	76.2	68.3	14.4	323
Caste/tribe									
Scheduled caste	77.1	91.7	91.8	95.0	96.4	72.4	62.3	25.6	244
Scheduled tribe	86.0	96.7	95.5	96.9	100.0	93.0	75.4	14.5	35
Other backward class	79.2	94.2	94.1	95.5	98.3	80.3	66.4	19.1	1,454
Other	78.0	92.7	92.2	94.6	98.2	81.7	69.8	18.7	633
Total	78.6	93.6	93.3	95.2	98.0	80.0	67.0	19.6	2,374

Note: Total includes women with no schooling or less than 5 years of schooling, women belonging to other religions, and women who don't know their caste/tribe, who are not shown separately.

TT = Tetanus toxoid; IFA = Iron and folic acid

¹ Includes mothers with two injections during the pregnancy for her last live birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last live birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last live birth

Table 47 Antenatal care indicators

Among women with a live birth in the 5 years preceding the survey, percentage who received different types of antenatal care (ANC) during the pregnancy for their most recent live birth, by background characteristics, Kerala, 2019-21

District	Percentage who had four or more ANC visits	Percentage with an ANC visit in the first trimester of pregnancy	Percentage who received two or more TT injections during the pregnancy	Percentage whose last live birth was protected against neonatal tetanus ¹	Percentage who were given or bought IFA	Percentage who took IFA for at least 100 days	Percentage who took IFA for at least 180 days	Percentage who took an intestinal parasite drug	Number of women
Alappuzha	65.7	85.1	85.4	87.5	97.6	61.0	52.0	30.8	124
Ernakulam	82.2	92.6	94.0	96.5	99.4	82.8	70.6	8.9	214
Idukki	74.3	93.3	94.0	98.0	99.3	75.6	63.6	16.2	72
Kannur	78.3	94.8	97.2	97.7	95.0	78.0	58.8	20.8	223
Kasaragod	91.2	97.4	98.9	99.2	98.4	89.4	83.7	16.6	133
Kollam	79.3	92.6	97.8	98.5	99.2	89.0	81.5	16.2	162
Kottayam	55.1	81.6	75.6	83.6	96.2	51.1	44.0	16.6	107
Kozhikode	91.8	98.3	95.7	96.7	98.9	85.7	76.1	12.8	220
Malappuram	90.4	95.3	98.6	99.6	99.7	92.3	71.1	28.6	398
Palakkad	68.4	97.7	86.3	87.9	94.7	71.7	58.8	16.6	199
Pathanamthitta	83.9	92.9	92.0	94.2	98.0	74.7	58.6	39.6	55
Thiruvananthapuram	55.3	87.7	87.7	91.9	98.1	71.6	59.9	12.3	232
Thrissur	82.4	97.1	95.0	95.7	98.0	78.6	70.8	25.7	179
Wayanad	94.2	97.6	96.6	99.4	99.5	94.9	75.3	21.3	56
Kerala	78.6	93.6	93.3	95.2	98.0	80.0	67.0	19.6	2,374

TT = Tetanus toxoid; IFA = Iron and folic acid tablets or syrup

¹ Includes mothers with two injections during the pregnancy for her last live birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last live birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last live birth

Table 48 Advice received during pregnancy

Among women with a live birth in the 5 years preceding the survey who met with a community health worker in the last three months of pregnancy for their most recent live birth, percentage who received different types of advice, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage who received advice on:					Number of women who met with a community health worker in the last three months of pregnancy ¹
	Importance of institutional delivery	Cord care	Breastfeeding	Keeping the baby warm	Family planning	
Mother's age at birth						
<20	87.3	79.5	87.3	80.8	75.1	73
20-34	80.5	76.9	89.8	78.9	70.4	1,294
35-49	82.0	74.3	86.2	77.5	76.5	139
Birth order						
1	81.9	77.6	91.9	77.6	70.4	573
2-3	80.1	76.2	87.8	79.3	71.2	881
4 or more	85.2	77.1	88.7	83.9	80.9	51
Residence						
Urban	82.0	77.1	89.9	79.0	71.0	690
Rural	80.1	76.4	88.9	78.7	71.4	816
Schooling						
5-9 years complete	83.5	75.3	90.2	80.9	70.5	145
10-11 years complete	78.9	75.6	88.6	80.3	69.9	307
12 or more years complete	81.2	77.2	89.5	78.1	71.6	1,051
Religion						
Hindu	81.8	76.6	89.7	79.7	72.2	719
Muslim	81.1	77.7	87.7	78.2	71.8	563
Christian	77.9	74.6	92.4	77.7	66.6	223
Caste/tribe						
Scheduled caste	85.1	80.0	93.3	86.5	79.7	171
Scheduled tribe	(76.6)	(67.9)	(91.9)	(85.9)	(76.8)	29
Other backward class	80.7	77.5	88.5	77.6	71.6	920
Other	80.3	74.2	89.8	78.1	66.5	383
Total	80.9	76.7	89.4	78.8	71.2	1,505

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women with no schooling or less than 5 years of schooling and women who don't know their caste/tribe, who are not shown separately.

¹ Community health worker includes auxiliary nurse midwife (ANM), lady health visitor (LHV), Accredited Social Health Activist (ASHA), *anganwadi* worker, and other community health workers

Table 49 Pregnancies for which an ultrasound test was done

Percentage of all pregnancies in the 5 years preceding the survey for which an ultrasound test was done and percent distribution of pregnancies with an ultrasound test by pregnancy outcome, according to background characteristics, Kerala, 2019-21

Background characteristic	Percentage of pregnancies with an ultrasound test	Number of pregnancies	Pregnancy outcome ¹				Total	Number of pregnancies with an ultrasound test
			Son	Daughter	Termination	Still pregnant		
Mother's age at pregnancy								
<20	94.3	275	47.0	40.7	5.1	7.2	259	
20-34	94.8	2,830	41.7	40.6	6.4	11.3	2,682	
35-49	96.5	231	36.4	37.1	17.5	9.0	223	
Residence								
Urban	94.7	1,616	40.9	41.0	6.5	11.6	1,531	
Rural	95.0	1,720	42.6	39.8	7.6	10.1	1,634	
Antenatal care visits²								
None	(89.9)	50	(37.0)	(47.8)	(7.6)	(7.6)	45	
1-3	89.1	225	38.8	42.7	4.1	14.5	201	
4 or more	96.0	2,297	42.7	39.5	7.4	10.4	2,206	
Don't know	90.4	375	37.2	44.2	6.9	11.8	338	
Mother's schooling								
5-9 years complete	93.9	327	42.2	42.0	6.8	9.0	307	
10-11 years complete	95.6	649	43.5	38.2	8.5	9.8	621	
12 or more years complete	94.8	2,352	41.2	40.7	6.7	11.4	2,229	
Religion								
Hindu	94.4	1,539	41.1	40.6	8.3	10.0	1,453	
Muslim	95.5	1,318	43.1	39.7	5.8	11.3	1,259	
Christian	94.6	479	40.1	41.4	6.5	12.0	453	
Caste/tribe								
Scheduled caste	92.2	351	38.1	43.1	7.1	11.8	324	
Scheduled tribe	91.5	59	41.2	37.5	9.0	12.3	54	
Other backward class	94.8	2,036	41.9	39.8	7.0	11.2	1,929	
Other	96.3	879	43.1	40.2	7.0	9.7	847	

Continued...

Table 49 Pregnancies for which an ultrasound test was done—Continued

Percentage of all pregnancies in the 5 years preceding the survey for which an ultrasound test was done and percent distribution of pregnancies with an ultrasound test by pregnancy outcome, according to background characteristics, Kerala, 2019-21

Background characteristic	Percentage of pregnancies with an ultrasound test	Number of pregnancies	Pregnancy outcome ¹				Total percent	Number of pregnancies with an ultrasound test
			Son	Daughter	Termination	Still pregnant		
Mother's number of living children at time of pregnancy								
No children	94.6	1,452	40.4	41.9	6.5	11.2	100.0	1,375
1 child	95.2	1,330	42.9	39.9	6.7	10.4	100.0	1,266
0 sons	95.5	679	40.5	41.9	7.6	10.0	100.0	648
1 son	94.8	652	45.4	37.9	5.8	10.9	100.0	618
2 children	94.3	436	40.9	37.5	10.4	11.2	100.0	411
0 sons	96.7	124	44.7	29.1	9.8	16.3	100.0	120
1 or more sons	93.3	312	39.3	40.9	10.6	9.1	100.0	291
3 children	96.6	95	47.8	37.0	5.5	9.8	100.0	91
1 or more sons	98.2	79	52.6	35.1	3.0	9.3	100.0	78
Total	94.9	3,336	41.8	40.4	7.0	10.8	100.0	3,165

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes pregnancies of women with no schooling or less than 5 years of schooling, women belonging to other religions, women who don't know their caste/tribe, women with 3 children but no sons, and women with 4 or more children, which are not shown separately.

¹ For multiple births, sex of pregnancy outcome is the sex of the first listed birth

² Includes only the most recent pregnancy in the five years preceding the survey

Table 50 Pregnancy registration and Mother and Child Protection Card

Percentage of women age 15-49 who had a live birth in the 5 years preceding the survey who registered the pregnancy for the most recent live birth; and among registered pregnancies, percent distribution by the timing of the registration and percentage who received a Mother and Child Protection (MCP) Card, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of pregnancies that were registered	Number of pregnancies	Timing of pregnancy registration			Percentage of mothers given an MCP card	Number of registered pregnancies
			First trimester	Later	Don't know		
Mother's age at birth							
<20	97.6	109	93.4	4.6	2.0	97.1	107
20-34	96.6	2,057	91.1	6.7	2.1	91.2	1,986
35-49	95.3	208	90.2	7.9	1.9	88.7	198
Birth order							
1	95.9	938	91.1	6.4	2.5	93.1	900
2-3	96.9	1,344	90.8	7.3	1.8	90.2	1,302
4 or more	97.0	92	96.2	2.1	1.7	87.4	89
Residence							
Urban	94.7	1,135	90.5	6.3	3.1	89.8	1,075
Rural	98.2	1,239	91.7	7.2	1.2	92.5	1,216
Schooling							
5-9 years complete	97.2	239	94.1	3.2	2.4	95.3	232
10-11 years complete	97.7	454	94.0	5.4	0.7	94.2	444
12 or more years complete	96.1	1,675	89.9	7.7	2.4	89.8	1,609
Religion							
Hindu	96.4	1,115	91.1	5.9	2.8	93.3	1,075
Muslim	96.9	935	91.6	7.2	1.1	89.1	907
Christian	95.5	323	89.4	8.2	2.4	90.5	309
Caste/tribe							
Scheduled caste	99.5	244	93.7	4.8	1.5	99.0	242
Scheduled tribe	100.0	35	95.4	3.8	0.9	100.0	35
Other backward class	96.9	1,454	91.0	6.7	2.2	91.5	1,409
Other	94.6	633	90.1	7.8	1.9	87.0	599
Total	96.5	2,374	91.1	6.7	2.1	91.2	2,291

Note: Total includes pregnancies of women with no schooling or less than 5 years of schooling, women belonging to other religions, and women who don't know their caste/tribe, which are not shown separately.

Table 51 Delivery and postnatal care

Percent distribution of live births to women age 15-49 in the 5 years preceding the survey by place of delivery and assistance during delivery, percentage of live births delivered by a skilled provider and by caesarean section, percentage of live births delivered at home that were delivered by a skilled provider, and percentage for which the delivery protocol was followed, and percent distribution of women giving birth in the 5 years preceding the survey by timing and type of provider of the first postnatal check of the mother for their most recent live birth, by residence, Kerala, 2019-21

Delivery and postnatal care descriptors	Urban	Rural	Total
Place of delivery			
Health facility	99.7	99.8	99.8
Public sector	30.2	37.7	34.1
NGO/trust	0.5	0.5	0.5
Private sector	69.0	61.6	65.1
At home	0.2	0.2	0.2
Own home	0.2	0.1	0.1
Parent's home	0.0	0.1	0.0
Other ¹	0.1	0.0	0.1
Total	100.0	100.0	100.0
Assistance during delivery²			
Doctor	99.6	99.2	99.4
ANM/nurse/midwife/LHV	0.3	0.8	0.6
Friends/relatives	0.1	0.0	0.0
Other	0.0	0.0	0.0
Total	100.0	100.0	100.0
Percentage of all births delivered by a skilled provider ³	99.9	100.0	100.0
Percentage of home births delivered by a skilled provider ³	0.1	0.2	0.2
Percentage delivered by caesarean section	39.1	38.7	38.9
Percentage delivered by emergency caesarean section ⁴	10.8	10.7	10.7
Number of births	1,318	1,425	2,743
Timing after delivery of mother's first postnatal check⁶			
Less than four hours	86.6	88.3	87.5
4-23 hours	3.0	2.4	2.7
1-2 days	3.5	2.6	3.0
3-41 days	0.8	0.7	0.7
No postnatal check	6.1	6.0	6.1
Total	100.0	100.0	100.0
Type of provider of mother's first postnatal check⁶			
Doctor	92.0	90.8	91.4
ANM/nurse/midwife/LHV	1.7	3.0	2.3
Other health personnel	0.2	0.1	0.2
Dai (TBA)	0.0	0.1	0.0
No postnatal check	6.1	6.0	6.1
Total	100.0	100.0	100.0
Number of last live births	1,135	1,239	2,374

NGO = Nongovernmental organization; ANM = Auxiliary nurse midwife; LHV = Lady health visitor;
TBA = Traditional birth attendant

¹ Includes missing

² If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this table

³ Skilled health personnel includes doctor, auxiliary nurse midwife, nurse, midwife, lady health visitor, and other health personnel

⁴ A caesarean section for which the decision to have the operation was made after the onset of labour

⁵ Based on the last live birth in the five years preceding the survey

⁶ Based on the last live birth in the five years preceding the survey. Postnatal checks are checks on the woman's health within 42 days of the birth

Table 52 Delivery and postnatal care by background characteristics

Percentage of live births in the 5 years preceding the survey delivered in a health facility and percentage delivered with assistance from health personnel, and percentage of women who had a live birth in the 5 years preceding the survey who received a postnatal check and who received a postnatal check within 2 days of birth for their most recent birth, and among births in the year preceding the survey, percentage of deliveries assisted by health personnel, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of births delivered			Percentage of births delivered in a health facility		Percentage of deliveries assisted by health personnel ¹		Percentage of women with a postnatal check ^{2,3}		Percentage of women with a postnatal check within two days of birth ^{2,3}		Among births in the year preceding the survey:			
	in a public health facility	in a private health facility	in a health facility	in a health facility	in a health facility	in a health facility	in a health facility	in a health facility	in a health facility	in a health facility	in a health facility	Number of births	Number of women	Percentage of deliveries assisted by health personnel ¹	Number of births
Mother's age at birth															
<20	38.4	61.6	100.0	100.0	100.0	100.0	154	91.2	90.7	109	(100.0)	31			
20-34	34.0	65.7	99.7	99.9	2,372	94.1	93.4	2,057	99.7	492	100.0				
35-49	32.5	67.5	100.0	100.0	217	93.3	92.7	208	100.0	50					
Residence															
Urban	30.2	69.5	99.7	99.9	1,318	93.9	93.1	1,135	99.7	276					
Rural	37.7	62.1	99.8	100.0	1,425	94.0	93.3	1,239	99.8	296					
Birth order															
1	32.4	67.2	99.7	100.0	1,201	93.7	93.4	938	100.0	247					
2-3	36.0	63.8	99.8	99.9	1,440	93.9	92.9	1,344	99.6	301					
4 or more	26.7	73.3	100.0	100.0	102	97.0	95.9	92	*	24					
Antenatal care visits²															
None	(50.4)	(49.6)	(100.0)	(100.0)	40	(68.9)	(68.9)	40	*	6					
1-3	36.9	63.1	100.0	100.0	178	94.0	92.2	178	(100.0)	38					
4+	32.7	67.2	99.9	99.9	1,867	95.8	95.1	1,867	99.7	448					
Don't know	41.2	58.8	100.0	100.0	290	85.4	84.9	290	100.0	70					
Mother's schooling															
5-9 years complete	53.4	46.3	99.7	100.0	282	93.3	92.3	239	(98.8)	41					
10-11 years complete	46.5	53.2	99.7	99.9	526	94.9	93.9	454	100.0	96					
12 or more years complete	27.7	72.1	99.8	100.0	1,928	93.8	93.1	1,675	99.8	433					
Religion															
Hindu	43.7	56.1	99.8	99.9	1,248	93.2	92.9	1,115	99.7	256					
Muslim	23.4	76.3	99.8	100.0	1,105	94.9	93.7	935	99.8	228					
Christian	33.6	66.0	99.5	99.9	390	93.7	92.7	323	100.0	89					

Continued...

Table 52. Delivery and postnatal care by background characteristics—Continued

Percentage of live births in the 5 years preceding the survey delivered in a health facility and percentage delivered with assistance from health personnel, and percentage of women who had a live birth in the 5 years preceding the survey who received a postnatal check and who received a postnatal check within 2 days of birth for their most recent birth, and among births in the year preceding the survey, percentage of deliveries assisted by health personnel, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of births delivered in a public health facility	Percentage of births delivered in a private health facility	Percentage of births delivered in a health facility	Percentage of deliveries assisted by health personnel ¹	Number of births	Percentage of women with a postnatal check ^{2,3}	Percentage of women with a postnatal check within two days of birth ^{2,3}	Number of women	Among births in the year preceding the survey:	
									Percentage of deliveries assisted by health personnel ¹	Number of births
Caste/tribe										
Scheduled caste	65.1	34.9	100.0	100.0	284	90.8	90.2	244	100.0	56
Scheduled tribe	71.9	28.1	100.0	100.0	45	100.0	100.0	35	*	13
Other backward class	30.3	69.5	99.8	100.0	1,666	94.1	93.3	1,454	100.0	344
Other	28.1	71.5	99.6	99.8	737	94.7	93.8	633	99.1	155
Place of delivery										
Public health facility	100.0	0.0	100.0	99.9	935	93.2	92.7	815	100.0	212
Private health facility ⁴	0.0	100.0	100.0	100.0	1,801	94.4	93.5	1,557	99.9	359
Total	34.1	65.7	99.8	100.0	2,743	93.9	93.2	2,374	99.8	572

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes information on births of women with no schooling or less than 5 years of schooling, births of women belonging to other religions, births of women who don't know their caste/tribe, and births delivered at home or other place of delivery, which is not shown separately.

¹ Health personnel includes doctor, auxiliary nurse midwife, nurse, midwife, lady health visitor, and other health personnel. If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this table.

² For the most recent birth in the 5 years preceding the survey

³ Postnatal checks are checks on the woman's health within 42 days of the birth

⁴ Includes nongovernmental organizations or trust hospitals/clinics

Table 53 Delivery and postnatal care by district

Percentage of live births in the 5 years preceding the survey delivered in a health facility, percentage delivered with assistance from health personnel, and percentage delivered by caesarean section, and percentage of women who had a live birth in the 5 years preceding the survey who received a postnatal check within two days of birth for their most recent birth, by district, Kerala, 2019-21

District	Percentage of births delivered in a public health facility	Percentage of births delivered in a private health facility	Percentage of births delivered in a health facility	Percentage of deliveries assisted by health personnel ¹	Percentage of births delivered by caesarean section	Number of births	Percentage of women with a postnatal check within two days of birth ²	Number of women
Alappuzha	49.0	50.4	99.4	100.0	47.8	139	89.2	124
Ernakulam	23.2	76.0	99.1	100.0	51.1	250	96.1	214
Idukki	47.6	52.4	100.0	100.0	40.3	89	94.0	72
Kannur	33.6	66.4	100.0	100.0	39.7	253	93.4	223
Kasaragod	29.9	70.1	100.0	100.0	28.7	157	95.0	133
Kollam	44.7	55.3	100.0	100.0	49.1	186	91.4	162
Kottayam	44.3	54.4	98.7	99.3	48.0	127	85.0	107
Kozhikode	42.2	57.8	100.0	100.0	45.7	257	91.0	220
Malappuram	25.6	74.4	100.0	100.0	25.5	462	96.9	398
Palakkad	29.6	70.4	100.0	100.0	31.2	226	97.0	199
Pathanamthitta	36.7	62.3	99.1	99.2	57.6	61	94.2	55
Thiruvananthapuram	34.7	64.8	99.5	100.0	32.8	259	86.2	232
Thrissur	30.8	69.2	100.0	100.0	45.7	208	95.2	179
Wayanad	37.6	62.4	100.0	100.0	25.7	68	95.9	56
Kerala	34.1	65.7	99.8	100.0	38.9	2,743	93.2	2,374

¹ Health personnel includes doctor, auxiliary nurse midwife, nurse, midwife, lady health visitor, and other health personnel. If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this table.

² Postnatal checks are checks on the woman's health within 42 days of the birth

Table 54 Delivery costs and financial assistance

The average out-of-pocket cost paid for delivery for the most recent live birth among women who had a live birth in the 5 years preceding the survey that was delivered in a health facility by type of facility, and among women who had a live birth in the 5 years preceding the survey for the most recent birth that was delivered in a health facility, percentage who received financial assistance under *Janani Suraksha Yojana (JSY)*, according to background characteristics, Kerala, 2019-21

Background characteristic	Average cost (Rs.) ¹			Percentage who received financial assistance under JSY	Number of births in a health facility
	Public health facility	Private health facility	Any health facility		
Mother's age at birth					
<20	9,467	35,383	26,009	13.1	150
20-34	6,480	34,287	25,462	12.9	2,029
35-49	6,877	44,424	33,384	13.6	192
Birth order					
1	7,365	36,101	27,428	16.3	1,177
2-3	6,194	33,890	24,441	9.9	1,119
4 or more	5,086	39,107	31,369	6.6	76
Residence					
Urban	6,602	35,636	27,495	12.7	1,133
Rural	6,789	34,742	24,877	13.2	1,239
Schooling					
5-9 years complete	7,281	31,118	19,649	13.8	238
10-11 years complete	5,665	32,343	20,153	15.1	454
12 or more years complete	7,111	36,179	28,733	12.3	1,673
Religion					
Hindu	7,122	35,540	24,231	17.2	1,114
Muslim	5,631	34,676	27,778	8.5	934
Christian	7,388	35,724	27,884	11.2	323
Caste/tribe					
Scheduled caste	5,604	30,138	15,043	22.2	244
Scheduled tribe	5,215	32,085	14,908	38.3	35
Other backward class	7,168	35,653	27,457	12.5	1,453
Other	6,686	35,326	27,837	9.0	632
Total	6,710	35,195	26,134	13.0	2,372

Note: Total includes information on births of women with no schooling or less than 5 years of schooling, births of women belonging to other religions, and births of women who don't know their caste/tribe, which is not shown separately.

¹ Excludes women who don't know the cost

Table 55 Birth order and delivery characteristics by district

Percentage of births during the 3 years preceding the survey of birth order 3 or more, percentage of women who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent live birth, and among women who had a live birth in the 5 years preceding the survey for the most recent birth that was delivered in a health facility, the percentage of women who received financial assistance under *Janani Suraksha Yojana* (JSY) by district, Kerala, 2019-21

District	Percentage of births of birth order 3 or more	Number of births	Percentage of last births receiving antenatal care from doctor	Percentage of last births receiving antenatal care from ANM/nurse/midwife/LHV	Number of last births	Percentage of births in a health facility receiving financial assistance under JSY	Number of births in a health facility
Alappuzha	10.2	78	97.0	14.0	124	12.1	123
Ernakulam	10.1	146	100.0	21.5	214	6.7	214
Idukki	17.3	48	99.3	37.6	72	17.6	72
Kannur	21.9	151	98.3	35.0	223	18.1	223
Kasaragod	24.8	89	99.3	26.4	133	12.4	133
Kollam	4.9	110	97.1	10.0	162	20.4	162
Kottayam	11.2	74	86.6	12.2	107	15.9	106
Kozhikode	23.1	144	98.4	38.9	220	20.2	220
Malappuram	27.7	246	99.6	15.0	398	8.5	398
Palakkad	8.0	133	100.0	17.5	199	6.8	199
Pathanamthitta	14.7	31	99.1	6.8	55	19.1	55
Thiruvananthapuram	10.3	158	93.4	7.9	232	7.1	232
Thrissur	15.2	118	100.0	19.3	179	16.4	179
Wayanad	22.3	41	100.0	6.2	56	19.4	56
Kerala	16.6	1,569	97.9	19.9	2,374	13.0	2,372

ANM = Auxiliary nurse midwife; LHV = Lady health visitor

Table 56 Timing of first health check after birth for the newborn

Percent distribution of last births in the 5 years preceding the survey by time after birth of first health check, and the percentage of births with a health check in the first two days after birth, according to background characteristics, Kerala, 2019-21

Background characteristic	Time between delivery and newborn's first postnatal health check					No postnatal health check ¹	Total	Percentage of births with a health check in the first two days after birth	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days				
Mother's age at birth									
<20	36.7	54.2	0.2	1.8	0.0	4.7	100.0	92.8	150
20-34	36.2	52.4	0.6	1.7	0.1	3.9	100.0	90.9	2,032
35-49	45.5	44.9	0.5	1.7	0.0	4.1	100.0	92.5	192
Birth order									
1	35.2	52.2	0.8	2.5	0.0	3.8	100.0	90.7	938
2-3	37.7	52.1	0.4	1.2	0.1	4.0	100.0	91.3	1,344
4-5	46.9	44.8	1.1	1.1	0.0	5.2	100.0	93.8	89
Place of delivery									
Public health facility	32.9	55.2	0.5	2.0	0.0	3.7	100.0	90.5	815
Private health facility ²	39.2	50.2	0.6	1.5	0.1	4.0	100.0	91.6	1,557
Residence									
Urban	36.8	51.1	0.6	1.9	0.1	4.1	100.0	90.4	1,135
Rural	37.2	52.6	0.6	1.6	0.0	3.8	100.0	91.9	1,239
Religion									
Hindu	34.9	54.7	0.3	1.8	0.0	2.9	100.0	91.7	1,115
Muslim	39.0	50.1	0.7	1.4	0.1	5.2	100.0	91.2	935
Christian	38.5	47.4	1.0	2.4	0.0	3.9	100.0	89.3	323
Caste/tribe									
Scheduled caste	33.0	52.7	0.6	2.7	0.0	5.2	100.0	89.1	244
Scheduled tribe	24.2	72.6	0.0	3.1	0.0	0.0	100.0	100.0	35
Other backward class	37.9	50.9	0.6	1.6	0.1	3.7	100.0	90.9	1,454
Other	37.8	52.4	0.6	1.5	0.0	4.3	100.0	92.2	633
Mother's schooling									
5-9 years complete	42.2	46.4	0.8	2.7	0.0	5.2	100.0	92.1	239
10-11 years complete	39.2	52.6	0.3	1.2	0.0	2.9	100.0	93.3	454
12 or more years complete	35.6	52.6	0.6	1.7	0.1	4.0	100.0	90.5	1,675
Total	37.0	51.9	0.6	1.7	0.1	3.9	100.0	91.2	2,374

Note: Total includes information on births of birth order 6 or more, births delivered at home, births to women belonging to other religions, births to women who don't know their caste/tribe, and births to women with no schooling or less than 5 years of schooling, which is not shown separately.

¹ Includes newborns who received a health check after the first week

² Includes nongovernmental organization or trust hospital/clinic

Table 57 Trends in maternal care indicators

Maternal care indicators for births during the 5 years preceding the survey by residence, NFHS-5 and NFHS-4, Kerala

Indicator	NFHS-5 (2019-21)	NFHS-4 (2015-16)
URBAN		
Percentage who received antenatal care ¹	87.7	99.4
Percentage who had at least four antenatal care visits ¹	79.2	88.5
Percentage who received antenatal care within the first trimester of pregnancy ¹	93.9	96.2
Percentage of births delivered in a health facility ²	99.7	99.9
Percentage of deliveries assisted by health personnel ^{2,3}	99.9	100.0
RURAL		
Percentage who received antenatal care ¹	84.8	99.4
Percentage who had at least four antenatal care visits ¹	78.0	91.7
Percentage who received antenatal care within the first trimester of pregnancy ¹	93.3	94.2
Percentage of births delivered in a health facility ²	99.8	99.9
Percentage of deliveries assisted by health personnel ^{2,3}	100.0	100.0
TOTAL		
Percentage who received antenatal care ¹	86.2	99.4
Percentage who had at least four antenatal care visits ¹	78.6	90.2
Percentage who received antenatal care within the first trimester of pregnancy ¹	93.6	95.1
Percentage of births delivered in a health facility ²	99.8	99.9
Percentage of deliveries assisted by health personnel ^{2,3}	99.9	100.0

¹ Based on the last birth to women in the 5 years preceding the survey

² Based on all births in the 5 years preceding the survey

³ Doctor, auxiliary nurse midwife (ANM), nurse, midwife, lady health visitor (LHV), or other health personnel

Table 58 Male involvement in maternal care: Men's report

Among men age 15-49 whose youngest living child was age 0-35 months, percentage for whom the mother of the child received antenatal care (ANC), percentage who were present for at least one antenatal check-up, percentage who were told by a health provider or worker at any time during the pregnancy about specific signs of pregnancy complications, percentage to whom a health provider or worker spoke about specific aspects of maternal care at any time during the pregnancy, and percentage whose youngest child was delivered in a health facility, and among men with a child age 0-35 months whose youngest living child was not delivered in a health facility, percentage who were given specific home delivery related information, by residence, Kerala, 2019-21

Antenatal and delivery care information	Urban	Rural	Total
Percentage of men for whom the child's mother received antenatal care	(100.0)	100.0	100.0
Percentage of men who were present at any antenatal check-up	(95.7)	92.9	93.9
Percentage who were told by a health provider or worker about the following signs of pregnancy complications:			
Vaginal bleeding	(43.2)	62.6	55.7
Convulsions	(53.0)	68.3	62.9
Prolonged labour	(57.4)	69.5	65.2
Severe abdominal pain	(63.6)	65.8	65.0
High blood pressure	(57.1)	70.9	66.0
Percentage ever told what to do if the child's mother had any pregnancy complications	(75.3)	83.5	80.6
Percentage whose youngest child age 0-35 months was delivered in a health facility	(100.0)	100.0	100.0
Percentage to whom a health provider or worker spoke about the following aspects of maternal care:			
The importance of delivering the baby in a health facility	(74.1)	85.2	81.2
The importance of proper nutrition for the mother during pregnancy	(79.6)	90.2	86.4
Family planning or delaying his next child	(62.5)	70.9	67.9
Number of men with a youngest child age 0-35 months	55	100	155

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 59 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card seen by the interviewer, by background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	BCG				Hepatitis B or Pentavalent				DPT or Pentavalent				Polio ²			MCV/Measles/MMR/MR vaccinations ³	All age appropriate vaccinations ⁴	No vaccinations ⁵	Percentage with a vaccination card seen	Number of children
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2					
Sex																				
Male	98.1	81.9	94.6	91.3	84.6	96.6	93.3	86.7	92.5	96.4	91.5	83.8	88.7	78.2	65.5	1.5	87.6	258		
Female	96.9	80.8	92.8	88.3	81.3	94.9	90.2	83.5	92.5	93.7	88.4	84.3	89.1	77.4	63.5	2.2	89.8	221		
Birth order																				
1	98.8	88.6	94.2	88.5	84.4	95.8	92.4	88.1	96.2	96.3	90.8	84.3	88.7	78.5	70.3	1.2	86.0	194		
2-3	96.5	76.0	93.6	91.3	82.3	95.9	91.8	83.3	89.4	94.0	89.6	83.6	89.4	77.5	60.3	2.4	90.2	266		
Residence																				
Urban	98.2	80.1	94.6	92.8	85.3	95.9	92.1	86.1	93.6	96.3	92.3	85.8	87.0	77.6	63.1	1.0	90.8	230		
Rural	97.0	82.6	93.0	87.3	80.9	95.7	91.7	84.3	91.6	94.2	87.9	82.5	90.5	78.0	65.9	2.7	86.6	249		
Mother's schooling																				
8-9 years complete	98.0	80.6	87.0	82.3	78.2	86.1	80.0	75.9	90.2	88.2	84.0	77.3	81.6	69.5	56.2	2.0	92.7	47		
10-11 years complete	95.6	86.4	95.1	88.1	80.5	97.8	92.4	85.8	92.5	97.0	88.9	83.5	89.7	75.8	65.2	2.2	87.1	89		
12 or more years complete	98.1	80.0	94.3	91.7	84.4	96.7	93.7	86.4	92.9	95.7	91.4	85.2	89.8	79.5	65.4	1.6	88.3	335		
Religion																				
Hindu	97.6	83.9	95.2	93.6	86.3	97.4	94.1	88.6	96.0	96.4	93.6	85.7	91.7	79.9	68.7	1.5	90.4	224		
Muslim	97.4	79.8	91.7	86.2	79.4	93.2	87.5	80.7	87.0	93.9	84.9	81.1	83.5	73.9	61.2	2.6	87.3	192		
Christian	98.2	77.4	94.6	88.4	82.7	98.2	97.4	86.9	96.8	94.8	92.8	87.2	95.0	82.6	60.2	0.5	86.0	63		

Continued...

Table 59 Vaccinations by background characteristics—Continued

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card seen by the interviewer, by background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Hepatitis B or Penta ¹						DPT or Penta				Polio ²			MCV/Measles/MMR/MR	All basic vaccinations ³	All age appropriate vaccinations ⁴	No vaccinations ⁵	Percentage with a vaccination card seen	Number of children	
	BCG	0	1	2	3		0	1	2	3	0	1	2							3
Caste/tribe																				
Scheduled caste	96.2	81.2	93.4	93.4	83.4	94.3	93.4	87.2	87.2	95.3	96.2	92.0	86.6	94.1	83.0	69.3	3.8	86.1	54	
Other backward class	97.5	82.5	92.3	87.3	80.9	95.0	90.4	83.0	83.0	92.1	94.1	89.2	82.5	85.6	75.2	62.6	2.1	87.6	273	
Other ⁶	98.0	78.3	96.2	93.0	86.1	97.5	93.7	87.9	87.9	91.8	96.6	90.3	85.1	92.6	79.7	64.8	0.7	90.8	143	
Total	97.6	81.4	93.7	89.9	83.0	95.8	91.9	85.2	85.2	92.5	95.2	90.0	84.1	88.9	77.8	64.6	1.8	88.6	479	
NFHS-4 (2015-16)	98.1	76.4	92.6	90.0	82.4	95.4	93.8	90.4	90.4	95.1	96.7	94.5	88.5	89.4	82.1	na	1.7	86.1	486	

Note: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother. For children whose vaccination information is based on the mother's report, the date of vaccination is not collected. The proportions of vaccinations given during the first year of life are assumed to be the same as for children with a written record of vaccination. Total includes children of birth order 6 or more, children of mothers with less than 5 years of schooling or 5-7 years of schooling, and scheduled tribe children, who are not shown separately.

na = Not available

¹ Hepatitis B 0 is the hepatitis vaccination given at birth. There is no Penta 0 vaccine.

² Polio 0 is the polio vaccination given at birth

³ BCG, MCV/Measles/MMR/MR, and three doses each of DPT/Penta and polio vaccine (excluding polio vaccine given at birth)

⁴ BCG, MCV/Measles/MMR/MR, four doses of hepatitis B/Penta, and three doses each of DPT/Penta and polio vaccine (excluding polio vaccine given at birth)

⁵ Child has not received any vaccinations listed in the table

⁶ Not belonging to scheduled caste, scheduled tribe, or other backward class

Table 60 Vaccinations by district

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card seen by the interviewer, by district, Kerala, 2019-21

District	Hepatitis B or Penta ¹					DPT or Penta					Polio ²			MCV/ Measles/ MMR/MR	All basic vaccinations ³	All age appropriate vaccinations ⁴	No vaccinations ⁵	Percentage with a vaccination card seen	Number of children
	BCG	0	1	2	3	0	1	2	3	0	1	2	3						
Alappuzha	(96.9)	(74.3)	(91.1)	(91.1)	(76.8)	(100.0)	(94.1)	(76.8)	(94.1)	(96.9)	(91.1)	(88.5)	(79.3)	(87.1)	(61.9)	(51.3)	(0.0)	(80.8)	26
Ernakulam	(97.9)	(81.2)	(97.9)	(97.9)	(91.4)	(97.9)	(95.3)	(91.4)	(95.3)	(91.1)	(97.9)	(95.4)	(82.6)	(92.7)	(82.6)	(64.4)	(2.1)	(85.2)	49
Idukki	(100.0)	(86.7)	(100.0)	(96.6)	(89.6)	(100.0)	(96.6)	(89.6)	(96.6)	(96.7)	(100.0)	(100.0)	(96.6)	(93.0)	(89.6)	(79.7)	(0.0)	(100.0)	14
Kannur	98.0	94.5	94.9	89.0	87.5	93.0	91.0	87.5	98.0	94.5	89.0	79.5	83.7	83.7	77.7	75.7	2.0	87.9	47
Kasaragod	98.6	88.2	98.6	96.6	95.3	98.6	96.6	96.6	92.4	97.3	97.3	94.4	97.3	97.3	92.5	82.1	1.4	94.4	30
Kollam	(96.2)	(73.0)	(98.7)	(98.7)	(82.1)	(98.7)	(98.7)	(89.1)	(90.8)	(100.0)	(100.0)	(95.6)	(89.1)	(89.1)	(85.4)	(60.5)	(0.0)	(90.1)	27
Kozhikode	(98.1)	(92.7)	(94.5)	(94.5)	(89.4)	(94.5)	(94.5)	(90.7)	(96.3)	(98.1)	(96.2)	(96.2)	(90.7)	(90.7)	(88.8)	(87.5)	(1.9)	(96.2)	55
Malappuram	100.0	83.2	94.0	88.3	82.0	96.1	90.3	82.3	87.7	94.3	90.3	86.2	88.2	80.3	80.3	61.4	0.0	90.4	73
Palakkad	(90.2)	(76.0)	(78.7)	(68.0)	(62.4)	(87.6)	(73.9)	(71.0)	(81.5)	(87.4)	(65.1)	(57.0)	(77.0)	(77.0)	(51.8)	(43.2)	(9.8)	(70.8)	40
Thiruvananthapuram	(100.0)	(78.5)	(96.3)	(85.2)	(81.0)	(100.0)	(92.8)	(84.0)	(95.2)	(96.1)	(87.1)	(76.3)	(93.4)	(93.4)	(72.8)	(56.6)	(0.0)	(84.5)	41
Wayanad	(97.7)	(83.9)	(90.8)	(84.2)	(81.9)	(90.8)	(88.6)	(86.4)	(95.5)	(93.3)	(88.8)	(88.8)	(90.8)	(90.8)	(86.4)	(75.0)	(2.3)	(97.7)	14
Kerala	97.6	81.4	93.7	89.9	83.0	95.8	91.9	85.2	92.5	95.2	90.0	84.1	88.9	88.9	77.8	64.6	1.8	88.6	479

Note: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother. For children whose vaccination information is based on the mother's report, the date of vaccination is not collected. The proportions of vaccinations given during the first year of life are assumed to be the same as for children with a written record of vaccination. Figures in parentheses are based on 25-49 unweighted cases. Total includes children belonging to Kottayam, Pathanamthitta, and Thrissur districts, who are not shown separately.

¹ Hepatitis B 0 is the hepatitis vaccination given at birth. There is no Penta 0 vaccine.

² Polio 0 is the polio vaccination given at birth

³ BCG, MCV/Measles/MMR/MR, and three doses each of DPT/Penta and polio vaccine (excluding polio vaccine given at birth)

⁴ BCG, MCV/Measles/MMR/MR, four doses of hepatitis B/Penta, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

⁵ Child has not received any vaccinations listed in the table

Table 61 Prevalence and treatment of symptoms of ARI and fever

Among children under age 5 years, percentage who had symptoms of acute respiratory infection (ARI) and fever in the 2 weeks preceding the survey and among children with symptoms of ARI and fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought from a health facility or provider, according to background characteristics, Kerala, 2019-21

Background characteristic	Children under age five			Children under age five with symptoms of ARI			Children under age five with fever	
	Percentage with symptoms of ARI ¹	Percentage with fever	Number of children	Percentage for whom treatment was sought from a health facility or provider ²	Percentage who received antibiotics	Number of children	Percentage for whom treatment was sought from a health facility or provider ²	Number of children
Age in months								
<6	1.2	13.3	236	*	*	3	(77.1)	31
6-11	1.9	25.2	288	*	*	5	89.6	72
12-23	2.7	24.1	479	*	*	13	93.8	116
24-35	2.8	25.9	561	*	*	16	86.8	145
36-47	2.7	20.7	564	*	*	15	88.2	117
48-59	2.2	22.0	602	*	*	13	90.4	132
Sex								
Male	2.5	21.4	1,399	(66.2)	(42.2)	35	88.9	300
Female	2.3	23.6	1,331	(73.6)	(47.6)	30	89.0	315
Residence								
Urban	1.9	21.8	1,313	*	*	25	88.0	287
Rural	2.8	23.1	1,417	(70.1)	(40.9)	40	89.8	328
Mother's schooling								
5-7 years complete	6.9	27.1	34	*	*	2	*	9
8-9 years complete	1.4	20.2	247	*	*	3	(89.8)	50
10-11 years complete	2.2	20.2	535	*	*	12	89.0	108
12 or more years complete	2.5	23.4	1,906	(71.1)	(48.2)	48	89.0	447
Religion								
Hindu	2.7	23.7	1,239	(78.0)	(57.0)	33	89.0	294
Muslim	1.7	20.3	1,102	*	*	19	89.2	223
Christian	3.5	24.9	389	*	*	14	88.0	97
Caste/tribe								
Scheduled caste	1.6	25.1	284	*	*	5	93.9	71
Scheduled tribe	1.8	31.5	43	*	*	1	*	13
Other backward class	2.1	20.5	1,657	(77.5)	(51.9)	35	90.1	340
Other	3.4	25.7	735	*	*	25	85.1	189
Total	2.4	22.5	2,730	69.6	44.7	65	89.0	614

Note: Total includes children of mothers with no schooling or less than 5 years of schooling, children belonging to other religions, and children whose caste/tribe is not known, who are not shown separately.

¹ Symptoms of ARI are cough accompanied by short, rapid breathing which is chest related and/or difficult breathing which is chest related

² Includes advice or treatment from the public health sector, the private health sector, or shop. Excludes advice or treatment from a traditional healer or friend/relative

Table 62 Prevalence and treatment of diarrhoea

Percentage of children under age 5 years who had diarrhoea in the 2 weeks preceding the survey and among children under age 5 years who had diarrhoea in the 2 weeks preceding the survey, percentage who received advice or treatment from a health facility or health provider, percentage who received oral rehydration therapy (ORT), percentage who were given other treatments, and percentage who were given no treatment, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of children with diarrhoea	Number of children	Percentage of children who were given:										Number of children with diarrhoea						
			Percentage of children with diarrhoea for whom advice or treatment was sought from a health facility or provider ¹	A fluid made from an ORS packet	Gruel	Either ORS or gruel	Increased fluids	ORT (ORS, gruel, or increased fluids)	Zinc	ORS and zinc	ORS or increased fluids	Continued feeding and ORT ²		Anti-biotic drug	Anti-motility drug	Other drug ³	Intra-venous solution	Home remedy/ herbal/ other	No treatment
Age in months																			
<6	5.0	236	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12
6-11	8.7	288	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	25
12-23	5.3	479	(83.6)	(75.9)	(73.2)	(89.8)	(27.3)	(89.8)	(21.4)	(75.9)	(55.5)	(1.9)	(0.0)	(0.0)	(0.0)	(9.9)	(3.0)	25	
24-35	3.5	561	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20
36-47	2.3	564	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
48-59	3.6	602	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
Sex																			
Male	4.4	1,399	88.5	59.0	45.9	72.1	21.3	74.6	28.6	24.5	62.9	41.9	14.5	0.0	7.3	0.0	3.1	12.7	62
Female	4.1	1,331	(85.1)	(63.5)	(63.1)	(76.0)	(8.0)	(76.0)	(15.3)	(15.3)	(66.3)	(48.4)	(15.6)	(0.0)	(6.4)	(0.0)	(12.7)	(12.6)	55
Residence																			
Urban	4.2	1,313	(90.0)	(65.9)	(53.3)	(75.9)	(12.7)	(75.9)	(35.4)	(30.9)	(67.4)	(49.5)	(15.8)	(0.0)	(5.9)	(0.0)	(1.3)	(14.8)	55
Rural	4.3	1,417	84.1	56.8	54.5	72.2	17.2	74.7	10.6	10.6	61.9	41.0	14.3	0.0	7.7	0.0	13.3	10.8	61
Mother's schooling																			
5-7 years complete	0.0	34	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8-9 years complete	4.3	247	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	11
10-11 years complete	2.6	535	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14
12 or more years complete	4.8	1,906	87.9	60.3	55.7	73.3	13.7	75.0	24.3	22.7	63.6	40.9	14.7	0.0	6.4	0.0	6.1	11.3	92
Religion																			
Hindu	4.1	1,239	(86.8)	(70.2)	(63.6)	(83.1)	(12.6)	(83.1)	(21.4)	(18.5)	(70.2)	(51.3)	(14.0)	(0.0)	(4.8)	(0.0)	(3.8)	(5.1)	51
Muslim	4.5	1,102	(90.3)	(65.1)	(45.8)	(72.8)	(19.2)	(75.9)	(28.0)	(25.8)	(71.3)	(41.3)	(19.9)	(0.0)	(7.4)	(0.0)	(11.2)	(12.8)	50
Christian	4.1	389	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	16

Continued...

Table 62 Prevalence and treatment of diarrhoea—Continued

Percentage of children under age 5 years who had diarrhoea in the 2 weeks preceding the survey and among children under age 5 years who had diarrhoea in the 2 weeks preceding the survey, percentage who received advice or treatment from a health facility or health provider, percentage who received oral rehydration therapy (ORT), percentage who were given other treatments, and percentage who were given no treatment, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of children with diarrhoea	Number of children with diarrhoea	Percentage of children who were given:										Number of children with diarrhoea					
			Percentage of children whom advice was sought from a health facility or provider ¹	A fluid made from an ORS packet	Either ORS or gruel	Increased fluids	ORT (ORS, gruel, or increased fluids)	Zinc	ORS and zinc	ORS or increased fluids	Continued feeding and ORT ²	Anti-biotic drug		Anti-motility drug	Other drug ³	Intra-venous solution	Home remedy/ herbal/ other	
Caste/tribe																		
Scheduled caste	5.6	284	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	16
Scheduled tribe	1.8	43	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1
Other backward class	4.1	1,657	87.3 (84.0)	63.2 (54.3)	56.0 (49.3)	75.8 (68.9)	17.2 (18.5)	78.1 (68.9)	19.0 (22.9)	17.4 (18.3)	67.8 (56.9)	46.3 (40.3)	17.3 (9.8)	0.0 (0.0)	8.5 (6.0)	0.0 (0.0)	9.8 (7.1)	68
Other ⁴	4.3	735																32
Source of drinking water⁵																		
Improved	4.2	2,615	86.7	62.8	53.0	73.6	15.4	75.0	22.3	20.1	66.3	43.6	15.9	0.0	6.1	0.0	7.0	110
Unimproved	5.7	111	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6
Total	4.3	2,730	86.9	61.1	53.9	73.9	15.1	75.3	22.4	20.2	64.5	45.0	15.0	0.0	6.9	0.0	7.6	116

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes children of mothers with no schooling or less than 5 years of schooling, children belonging to other religions, children whose caste/tribe is not known, and children in households with other source of drinking water, who are not shown separately.

ORS = Oral rehydration salts

¹ Includes advice or treatment from the public health sector, the private health sector, or shop. Excludes advice or treatment from a traditional healer or friend/relative

² Continued feeding includes children who were given more, same as usual, or somewhat less food during the diarrhoea episode

³ Includes injection and unknown pill or syrup

⁴ Not belonging to scheduled caste, scheduled tribe, or other backward class

⁵ See Table 4 for definition of categories

Table 63 Feeding practices during diarrhoea

Percent distribution of children under age 5 years who had diarrhoea in the 2 weeks preceding the survey by amount of liquids and food given compared with normal practice, according to background characteristics, Kerala, 2019-21

Background characteristic	Amount of liquids given					Amount of food given					Number of children with diarrhoea					
	More	Same as usual	Somewhat less	Much less	None	Don't know	Total	More	Same as usual	Somewhat less		Much less	None	Never gave food	Don't know	Total
Sex																
Male	21.3 (8.0)	28.5 (19.4)	20.3 (44.4)	27.4 (25.4)	1.2 (2.8)	1.2 (0.0)	100.0	2.1 (1.9)	23.8 (19.0)	29.6 (43.4)	33.6 (29.8)	1.4 (0.0)	9.6 (6.0)	0.0 (0.0)	100.0	62
Female																
Residence																
Urban	(12.7)	(17.5)	(38.2)	(30.3)	(1.3)	(0.0)	100.0	(0.0)	(17.4)	(49.0)	(29.4)	(1.5)	(2.8)	(0.0)	100.0	55
Rural	17.2	30.3	25.7	23.0	2.5	1.2	100.0	3.8	25.3	24.5	33.9	0.0	12.5	0.0	100.0	61
Religion																
Hindu	(12.6)	(24.5)	(26.8)	(33.0)	(3.1)	(0.0)	100.0	(4.6)	(23.5)	(32.4)	(36.4)	(0.0)	(3.1)	(0.0)	100.0	51
Muslim	(19.2)	(19.0)	(38.0)	(22.3)	(1.5)	(0.0)	100.0	(0.0)	(15.4)	(40.4)	(30.5)	(0.0)	(13.8)	(0.0)	100.0	50
Caste/tribe																
Other backward class	17.2 (18.5)	20.8 (23.9)	40.4 (16.2)	20.5 (34.1)	1.1 (4.9)	0.0 (2.4)	100.0	1.5 (4.1)	14.3 (23.7)	42.4 (29.6)	30.5 (35.0)	0.0 (2.6)	11.3 (4.9)	0.0 (0.0)	100.0	68
Other ¹																
Total	15.1	24.2	31.6	26.4	2.0	0.7	100.0	2.0	21.5	36.1	31.8	0.7	7.9	0.0	100.0	116

Note: It is recommended that children should be given more liquids to drink during diarrhoea and food should not be reduced. Figures in parentheses are based on 25-49 unweighted cases. Total includes Christian children and children belonging to scheduled caste or scheduled tribe, who are not shown separately.

¹ Not belonging to scheduled caste, scheduled tribe, or other backward class

Table 64 Knowledge of ORS packets

Percentage of women age 15-49 who had a live birth in the 5 years preceding the survey who know about ORS packets for treatment of diarrhoea, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age		
20-24	96.4	457
25-34	98.7	1,459
35-49	98.1	442
Residence		
Urban	97.7	1,135
Rural	98.6	1,239
Schooling		
5-9 years complete	96.6	239
10-11 years complete	98.7	454
12 or more years complete	98.2	1,675
Religion		
Hindu	97.9	1,115
Muslim	98.3	935
Christian	98.8	323
Caste/tribe		
Scheduled caste	97.6	244
Scheduled tribe	95.9	35
Other backward class	98.6	1,454
Other	97.5	633
Total	98.1	2,374

Note: Total includes women age 15-19, women with no schooling or less than 5 years of schooling, women belonging to other religions, and women who don't know their caste/tribe, who are not shown separately.

ORS = Oral rehydration salts

Table 65 Indicators of utilization of ICDS services

Percentage of children under age 6 years who received any service and received specific services from an *anganwadi* centre (AWC) in the 12 months preceding the survey, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of children age 0-71 months who received from an AWC				Children age 36-71 months			Children age 0-59 months			Children age 0-59 months who were weighed at an AWC	
	Any services	Supplementary food ¹	Any immunizations	Health check-ups	Number of children	Percentage who went for early childhood care/preschool	Number of children	Percentage of children who were weighed at an AWC	Number of children	Percentage whose mothers received counselling from an AWC after child was weighed	Number of children	Percentage whose mothers received counselling from an AWC after child was weighed
Age in months												
<12	53.8	50.7	18.6	35.1	524	na	na	36.6	524	35.8	192	
12-23	74.7	73.2	33.9	56.4	479	na	na	64.2	479	43.3	307	
24-35	72.1	70.8	32.9	54.6	561	na	na	63.4	561	43.3	356	
36-47	61.9	59.6	25.3	50.9	564	45.9	564	54.7	564	45.8	309	
48-59	44.3	39.7	16.4	34.4	602	31.8	602	38.4	602	41.7	231	
60-71	33.1	28.1	18.6	25.3	604	18.9	604	na	na	na	na	
0-35	66.8	64.8	28.4	48.6	1,564	na	na	54.7	1,564	41.6	855	
36-71	46.1	42.1	20.0	36.5	1,770	31.9	1,770	na	na	na	na	
Sex												
Male	55.3	52.3	24.0	41.3	1,706	31.2	899	51.7	1,399	40.7	723	
Female	56.4	53.1	23.9	43.2	1,628	32.7	871	50.5	1,331	44.6	672	
Residence												
Urban	54.0	51.7	21.6	38.5	1,588	30.1	835	48.2	1,313	42.9	634	
Rural	57.5	53.7	26.1	45.5	1,746	33.5	935	53.7	1,417	42.3	761	
Mother's schooling												
5-7 years complete	54.8	53.8	20.7	45.0	44	(17.1)	22	53.0	34	(72.4)	18	
8-9 years complete	56.2	52.5	23.1	42.5	293	33.5	148	50.7	247	28.7	125	
10-11 years complete	54.7	51.8	22.5	41.6	643	33.1	375	48.4	535	48.1	259	
12 or more years complete	56.0	52.9	24.4	42.2	2,345	31.6	1,222	51.8	1,906	42.4	986	

Continued...

Table 65 Indicators of ICDS services—Continued

Percentage of children under age 6 years who received any service and received specific services from an *anganwadi* centre (AWC) in the 12 months preceding the survey, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of children age 0-71 months who received from an AWC				Children age 36-71 months			Children age 0-59 months			Children age 0-59 months who were weighed at an AWC	
	Any services	Supplementary food ¹	Any immunizations	Health check-ups	Number of children	Percentage who went for early childhood care/preschool	Number of children	Percentage of children who were weighed at an AWC	Number of children	Percentage whose mothers received counselling from an AWC after child was weighed	Number of children	Percentage whose mothers received counselling from an AWC after child was weighed
Religion												
Hindu	59.7	56.2	25.4	45.0	1,514	35.0	808	54.1	1,239	43.8	669	
Muslim	51.0	48.8	23.0	39.4	1,340	27.1	706	47.8	1,102	41.9	527	
Christian	57.0	52.5	21.9	41.5	480	35.4	255	50.9	389	40.0	198	
Caste/tribe												
Scheduled caste	63.9	60.0	26.0	46.9	342	38.0	182	58.0	284	42.5	165	
Scheduled tribe	76.2	69.5	36.5	63.6	50	(55.3)	19	71.0	43	59.5	30	
Other backward class	55.3	52.2	23.6	41.5	2,019	30.8	1,080	51.8	1,657	42.5	859	
Other	53.1	50.5	23.5	41.3	911	31.2	481	46.2	735	41.4	340	
Total	55.8	52.7	24.0	42.2	3,334	31.9	1,770	51.1	2,730	42.6	1,395	

Note: Total includes children of mothers with no schooling or less than 5 years of schooling, children belonging to other religions, and children whose caste/tribe is not known, who are not shown separately.

ICDS = Integrated Child Development Services

na = Not applicable

¹ Supplementary food includes both food cooked and served at the AWC on a daily basis or given in the form of take home rations

Table 66 Utilization of ICDS services during pregnancy and while breastfeeding

Among children under age 6 years, percentage whose mothers received specific benefits from an *anganwadi* centre (AWC) during pregnancy and while breastfeeding, according to background characteristics, Kerala, 2019-21

Background characteristic	Mother received from an AWC during pregnancy					Mother received from an AWC while breastfeeding ²				
	Any benefits	Supplementary food ¹	Health check-ups	Health and nutrition education	Number of children	Any services	Supplementary food ¹	Health check-ups	Health and nutrition education	Number of children breastfed
Residence										
Urban	58.8	58.6	45.8	39.3	1,588	52.1	51.7	38.4	33.4	1,588
Rural	66.9	66.1	52.1	49.2	1,746	57.4	57.1	43.0	41.4	1,744
Mother's schooling										
5-7 years complete	66.8	65.7	42.2	40.6	44	69.0	69.0	44.2	40.5	42
8-9 years complete	58.3	57.9	43.8	40.7	293	54.9	54.6	36.7	35.6	293
10-11 years complete	64.2	63.8	50.9	44.5	643	56.3	56.2	43.7	40.3	643
12 or more years complete	63.2	62.6	49.3	44.9	2,345	54.1	53.7	40.3	36.9	2,344
Religion										
Hindu	65.1	64.3	50.4	45.8	1,514	55.6	55.3	41.4	37.6	1,511
Muslim	61.6	61.3	48.8	44.2	1,340	55.2	54.8	42.6	39.0	1,340
Christian	60.8	60.3	45.9	41.0	480	51.6	51.2	33.8	33.7	480
Caste/tribe										
Scheduled caste	71.5	70.7	57.5	53.1	342	55.5	55.5	44.3	39.8	342
Scheduled tribe	86.3	84.4	65.9	58.8	50	83.7	83.7	61.1	56.0	49
Other backward class	64.1	63.7	49.8	44.3	2,019	55.5	55.0	40.9	37.2	2,018
Other	56.7	56.1	43.8	41.2	911	51.8	51.7	38.4	36.8	911
Total	63.0	62.5	49.1	44.5	3,334	54.9	54.5	40.8	37.6	3,331

Note: Total includes children of mothers with no schooling or less than 5 years of schooling, children belonging to other religions, and children whose caste/tribe is not known, who are not shown separately.

ICDS = Integrated Child Development Services

¹Supplementary food includes both food cooked and served at the AWC on a daily basis or given in the form of take home rations

² Excludes children who were not breastfed. Services are usually provided to breastfeeding mothers during the first 6 months of breastfeeding

Table 67 Nutritional status of children

Percentage of children under age 5 years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Height-for-age ¹				Weight-for-height				Weight-for-age					
	Percentage below -3 SD	Percentage below -2 SD ²	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD ²	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD ²	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months														
<6	8.6	22.9	-0.5	203	13.1	26.4	6.3	-0.8	193	11.5	28.7	0.0	-1.3	219
6-8	6.1	17.4	-0.3	121	5.6	19.1	2.7	-0.8	122	3.4	14.6	0.4	-0.9	127
9-11	11.8	22.8	-0.9	131	4.5	14.4	6.7	-0.3	133	5.3	13.4	0.9	-0.9	140
12-17	8.9	23.5	-0.8	246	5.0	18.3	4.1	-0.8	244	3.3	22.0	1.5	-1.0	253
18-23	11.2	33.1	-1.2	198	6.5	13.0	6.0	-0.6	198	3.0	21.5	2.1	-1.0	205
24-35	6.2	23.3	-1.0	528	6.5	17.2	2.8	-0.7	521	4.2	18.5	0.8	-1.1	535
36-47	5.2	24.3	-1.0	537	4.9	14.3	2.5	-0.7	521	3.8	18.4	2.3	-1.0	541
48-59	6.2	20.9	-1.1	562	3.8	11.5	4.6	-0.6	542	4.4	19.5	0.9	-1.1	561
Sex														
Male	8.3	25.6	-1.0	1,310	6.2	16.3	4.6	-0.7	1,283	3.9	20.7	1.4	-1.1	1,333
Female	5.9	21.0	-0.9	1,216	5.3	15.2	3.4	-0.7	1,191	5.4	18.6	1.1	-1.1	1,248
Birth interval in months³														
First birth ⁴	5.6	19.5	-0.8	1,103	4.7	15.7	5.1	-0.6	1,089	4.2	16.5	1.0	-1.0	1,126
<24	8.5	31.4	-1.3	156	5.0	14.6	1.6	-0.7	156	6.4	21.1	0.9	-1.2	159
24-35	6.9	28.6	-1.1	190	5.7	16.8	1.1	-0.7	182	6.0	24.2	1.1	-1.2	195
36 or more	8.6	25.4	-1.0	1,073	7.0	15.8	3.7	-0.7	1,044	4.6	21.9	1.5	-1.1	1,097
Birth order³														
1	5.5	19.4	-0.8	1,081	4.8	15.5	5.2	-0.6	1,067	4.1	16.4	1.0	-1.0	1,103
2-3	8.1	26.4	-1.1	1,348	6.4	15.3	3.2	-0.7	1,314	4.7	21.7	1.5	-1.1	1,380
4-5	12.0	26.2	-0.9	91	8.5	26.1	1.1	-1.0	86	9.5	27.8	0.0	-1.4	91
Residence														
Urban	6.4	20.1	-0.9	1,193	7.0	16.0	3.8	-0.7	1,170	4.7	19.4	1.3	-1.1	1,219
Rural	7.8	26.4	-1.0	1,332	4.6	15.5	4.2	-0.6	1,304	4.6	19.9	1.2	-1.1	1,362

Continued...

Table 67 Nutritional status of children—Continued

Percentage of children under age 5 years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Height-for-age ¹				Weight-for-height				Weight-for-age					
	Percentage below -3 SD	Percentage below -2 SD ²	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD ²	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD ²	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Size at birth³														
Small	5.2	31.3	-1.2	155	7.2	19.6	1.9	-1.0	155	11.6	33.9	0.7	-1.5	158
Average or larger	7.3	22.9	-0.9	2,353	5.7	15.5	4.2	-0.6	2,301	4.1	18.7	1.3	-1.1	2,404
Mother's schooling⁵														
5-7 years complete	7.0	24.7	-1.2	39	5.6	17.3	0.9	-0.8	39	6.3	26.3	0.0	-1.3	40
8-9 years complete	10.7	29.0	-1.3	221	3.0	15.6	1.1	-0.8	216	7.0	23.6	1.4	-1.3	226
10-11 years complete	7.0	24.3	-0.9	495	7.3	17.6	2.0	-0.8	479	5.3	21.1	0.9	-1.2	504
12 or more years complete	6.7	22.4	-0.9	1,765	5.7	15.3	5.0	-0.6	1,734	4.1	18.6	1.3	-1.0	1,804
Religion														
Hindu	7.0	24.4	-1.0	1,149	5.8	16.5	3.9	-0.7	1,131	4.7	20.4	1.2	-1.1	1,171
Muslim	7.8	23.6	-0.9	1,003	5.6	14.8	3.8	-0.7	976	4.9	18.5	1.1	-1.1	1,028
Christian	5.9	19.8	-0.8	361	6.4	16.3	4.9	-0.6	354	3.9	20.8	1.6	-1.0	369
Caste/tribe														
Scheduled caste	8.8	30.4	-1.1	260	8.0	19.2	1.2	-0.9	258	6.0	24.9	0.7	-1.3	267
Scheduled tribe	20.0	36.9	-1.6	42	1.6	10.3	3.9	-0.4	42	3.6	19.4	0.8	-1.1	45
Other backward class	6.6	22.4	-0.9	1,527	5.6	16.2	4.3	-0.7	1,488	4.7	18.6	1.1	-1.1	1,554
Other	7.1	22.2	-0.8	678	5.7	14.2	4.6	-0.6	668	4.0	19.9	1.8	-1.0	696
Mother's nutritional status⁶														
Underweight (BMI <18.5)	9.4	27.5	-1.0	191	4.5	16.2	2.3	-0.8	187	6.4	22.1	1.5	-1.2	200
Normal (BMI 18.5-24.9)	7.0	23.2	-1.0	1,344	5.8	15.6	3.5	-0.7	1,311	4.7	20.1	0.9	-1.1	1,371
Overweight (BMI ≥25.0)	6.9	22.8	-0.9	971	5.9	15.8	5.1	-0.6	958	3.9	18.3	1.7	-1.0	989

Continued...

Table 67 Nutritional status of children—Continued

Percentage of children under age 5 years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Height-for-age ¹			Weight-for-height			Weight-for-age				
	Percentage below -3 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD ²	Percentage above +2 SD	Percentage below -3 SD	Percentage below -2 SD ²	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Child's living arrangements											
Living with both parents	8.1	24.8	1,752	5.9	16.0	4.2	5.1	20.6	1.1	-1.1	1,797
Living with one or neither parent	5.0	20.2	772	5.5	15.3	3.5	3.5	17.5	1.5	-1.0	782
Total	7.1	23.4	2,526	5.8	15.8	4.0	4.6	19.7	1.2	-1.1	2,581
NFHS-4 (2015-16)	6.8	19.7	2,297	6.5	15.7	3.4	3.6	16.1	1.3	-0.9	2,297

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation (SD) units from the median of the WHO Child Growth Standards. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Total includes children of birth order 6 or more, children whose size at birth is very small or not known, children of mothers with no schooling or less than 5 years of schooling, children belonging to other religions, children whose caste/tribe is not known or who have no caste/tribe or whose caste/tribe is missing, and children whose mother's nutritional status is missing, who are not shown separately.

BMI = Body mass index

¹ Recumbent length is measured for children under age 2; standing height is measured for all other children

² Includes children who are below -3 standard deviations (SD) from the WHO Child Growth Standards population median

³ Excludes children whose mothers were not interviewed

⁴ First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

⁵ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the household schedule.

⁶ Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 78.

Table 68 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed, and percentages who started breastfeeding within 1 hour and 1 day of birth, and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed in the first 3 days after birth, by background characteristics, Kerala, 2019-21

Background characteristic	Among last-born children born in the past 2 years:				Among last-born children born in the past 2 years who were ever breastfed:	
	Percentage ever breastfed	Percentage who started breast-feeding within 1 hour of birth	Percentage who started breast-feeding within 1 day of birth ¹	Number of last-born children	Percentage who received a prelacteal feed ²	Number of last-born ever breastfed children
Residence						
Urban	98.2	67.1	94.4	471	9.5	463
Rural	98.9	71.9	95.9	511	7.0	506
Sex						
Male	99.0	69.8	95.0	512	9.9	507
Female	98.2	69.3	95.4	470	6.4	462
Mother's schooling						
8-9 years complete	99.7	67.0	96.8	97	6.5	96
10-11 years complete	98.8	71.2	95.7	166	8.1	164
12 or more years complete	98.4	69.4	94.8	706	8.6	694
Religion						
Hindu	98.3	67.6	95.5	453	10.5	445
Muslim	99.4	72.2	96.5	383	6.2	381
Christian	97.5	68.7	90.6	147	6.3	143
Caste/tribe						
Scheduled caste	98.6	69.1	96.7	102	11.4	100
Scheduled tribe	(100.0)	(74.7)	(97.7)	22	(5.3)	22
Other backward class	98.4	70.5	95.7	575	7.0	566
Other	98.9	67.6	93.1	280	9.8	277
Total	98.6	69.6	95.2	982	8.2	968

Note: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of the interview. Figures in parentheses are based on 25-49 unweighted cases. Total includes children of mothers with less than 5 years of schooling or 5-7 years of schooling, and children whose caste/tribe is not known, who are not shown separately.

TBA = Traditional birth attendant

¹ Includes children who started breastfeeding within 1 hour of birth

² Children given something other than breast milk during the first 3 days of life

³ Doctor, nurse, midwife, auxiliary nurse midwife, lady health visitor, or other health personnel

Table 69 Breastfeeding status by age

Percent distribution of youngest children under age 2 years living with the mother by breastfeeding status and percentage currently breastfeeding, and percentage of all children under age 2 years using a bottle with a nipple, according to age in months, Kerala, 2019-21

Age in months	Not breastfeeding	Exclusively breastfed	Breastfeeding and consuming:				Total	Percentage currently breastfeeding	Number of youngest children under age 2 years living with the mother	Percentage using a bottle with a nipple	Number of all children under age 2 years
			Plain water only	Non-milk liquids ¹	Other milk	Complementary foods					
<2	0.0	71.7	3.8	2.2	10.1	12.3	100.0	54	2.4	57	
2-3	0.7	64.6	15.6	1.6	9.3	8.3	100.0	88	9.3	88	
4-5	0.0	37.0	17.7	8.2	8.8	28.3	100.0	91	24.9	91	
6-8	3.1	4.8	13.6	3.1	4.1	71.3	100.0	129	32.8	133	
9-11	5.5	4.2	3.3	3.4	1.0	82.6	100.0	153	36.8	155	
12-17	7.1	1.0	1.3	1.1	1.3	88.2	100.0	257	30.1	263	
18-23	14.8	1.4	0.8	0.0	1.7	81.4	100.0	208	32.1	216	
0-3	0.4	67.3	11.1	1.8	9.6	9.8	100.0	142	6.6	146	
0-5	0.2	55.5	13.7	4.3	9.3	17.1	100.0	232	13.6	236	
6-9	4.9	4.2	11.5	3.5	3.9	71.9	100.0	175	33.7	179	
12-15	6.5	1.4	1.7	0.8	0.7	88.8	100.0	186	30.9	191	
12-23	10.5	1.2	1.1	0.6	1.5	85.2	100.0	464	31.0	479	
20-23	14.9	0.8	0.6	0.0	0.9	82.8	100.0	145	36.4	153	

Note: Breastfeeding status refers to a "24-hour" period (yesterday during the day or at night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

¹ Non-milk liquids include juice, juice drinks, clear broth, and other liquids.

Table 70 Median duration of breastfeeding and infant and young child feeding (IYCF) practices

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among last-born children born in the 3 years preceding the survey, by background characteristics, Kerala, 2019-21

Background characteristic	Median duration (months) of breastfeeding among last-born children born in the past 3 years ¹			Number of children
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding ²	
Sex				
Male	27.6	3.6	5.8	764
Female	27.5	3.4	5.1	722
Residence				
Urban	26.6	3.0	4.9	715
Rural	28.6	4.0	5.8	770
Mother's schooling				
10-11 years complete	27.3	*	5.8	261
12 or more years complete	27.3	3.9	5.5	1,067
Religion				
Hindu	34.0	3.3	5.7	677
Muslim	25.7	3.8	5.5	600
Christian	(31.2)	(3.3)	(4.7)	209
Caste/tribe				
Other backward class	27.1	3.5	5.2	904
Other ³	27.4	3.4	5.9	404
Total	27.6	3.5	5.4	1,486

Note: Median and mean durations are based on breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes children of mothers with no schooling or less than 10 years of schooling, and children belonging to scheduled caste or scheduled tribe, children whose caste/tribe is not known or who have no caste/tribe or whose caste/tribe is missing, who are not shown separately.

¹ For last-born children under age 24 months who live with the mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with the mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with the mother and all non-last-born children are not currently breastfeeding.

² Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

³ Not belonging to scheduled caste, scheduled tribe, or other backward class

Table 71. Minimum acceptable diet

Percentage of youngest children age 6-23 months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, Kerala, 2019-21

Background characteristic	Among breastfed children 6-23 months, percentage fed:				Among non-breastfed children 6-23 months, percentage fed:				Among all children 6-23 months, percentage fed:					
	Minimum dietary diversity ¹	Minimum meal frequency ²	Minimum acceptable diet ³	Number of breastfed children	Minimum milk feeding frequency ⁴	Minimum dietary diversity ⁴	Minimum meal frequency ⁵	Minimum acceptable diet ⁶	Number of non-breastfed children	Breast milk, products ⁷	Minimum dietary diversity ¹	Minimum meal frequency ⁸	Minimum acceptable diet ⁹	Number of all children
Age in months														
6-11	36.9	47.0	14.7	270	*	*	*	*	12	98.1	25.9	47.4	14.3	282
6-8	23.7	49.7	7.3	125	*	*	*	*	4	97.8	11.8	49.0	7.1	129
9-11	48.3	44.7	21.1	144	*	*	*	*	8	98.4	37.9	46.1	20.4	153
12-17	71.3	41.9	23.1	238	*	*	*	*	18	97.8	53.1	44.7	23.0	257
18-23	78.7	54.7	37.3	177	(70.4)	(50.4)	(59.6)	(28.9)	31	95.6	65.7	55.4	36.0	208
Sex														
Male	59.4	50.1	24.8	353	(71.1)	(38.6)	(74.0)	(27.4)	37	97.2	44.9	52.4	25.0	390
Female	60.0	44.2	22.0	333	(60.5)	(30.3)	(51.9)	(13.9)	24	97.4	47.9	44.7	21.5	356
Residence														
Urban	61.8	50.1	21.9	337	(63.1)	(31.8)	(60.4)	(14.3)	30	96.9	44.6	51.0	21.2	368
Rural	57.6	44.4	25.0	348	(70.8)	(38.9)	(70.4)	(30.0)	31	97.6	48.0	46.5	25.4	379
Mother's schooling														
8-9 years complete	55.1	50.4	26.8	66	*	*	*	*	8	95.9	45.9	49.7	24.5	74
10-11 years complete	64.0	48.2	22.5	122	*	*	*	*	6	99.6	50.1	50.1	21.5	128
12 or more years complete	59.3	46.6	22.9	487	(64.2)	(43.6)	(65.4)	(26.2)	46	96.9	45.3	48.2	23.2	533
Religion														
Hindu	61.5	46.9	21.4	323	(69.2)	(42.6)	(69.4)	(30.1)	28	97.6	46.7	48.7	22.1	351
Muslim	58.7	44.6	25.2	268	*	*	*	*	18	98.0	45.6	45.7	23.9	286
Christian	56.3	55.7	25.6	94	*	*	*	*	16	94.6	47.0	56.4	26.0	110

Continued...

Table 71. Minimum acceptable diet—Continued

Percentage of youngest children age 6-23 months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, Kerala, 2019-21

Background characteristic	Among breastfed children 6-23 months, percentage fed:			Among non-breastfed children 6-23 months, percentage fed:			Among all children 6-23 months, percentage fed:		
	Minimum dietary diversity ¹	Minimum meal frequency ²	Minimum acceptable diet ³	Minimum dietary diversity ⁴	Minimum meal frequency ⁵	Minimum acceptable diet ⁶	Minimum dietary diversity ¹	Minimum meal frequency ⁸	Minimum acceptable diet ⁹
Caste/tribe									
Scheduled caste	60.5 (48.0)	47.9 (52.4)	17.3 (14.5)	*	*	*	45.6 (25.4)	46.8 (53.2)	16.9 (14.3)
Scheduled tribe			18	nc	nc	nc			18
Other backward class	63.9	50.2	393	(62.9)	(57.2)	(12.1)	47.7	50.7	25.4
Other	51.8	40.7	187	(76.1)	(46.4)	(35.4)	45.9	45.6	23.0
Total	59.7	47.2	23.4	67.0	35.4	22.2	46.3	48.7	23.3

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes children of mothers with no schooling or less than 8 years of schooling and children whose caste/tribe is not known, who are not shown separately.

nc = No cases

¹ Minimum dietary diversity is receiving foods from 5 or more of the following 8 food groups: a. breast milk b. infant formula, milk other than breast milk, cheese or yogurt or other milk products; c. foods made from grains or roots, including porridge or gruel, fortified baby food made from grains; d. vitamin A-rich fruits and vegetables; e. other fruits and vegetables; f. eggs; g. meat, poultry, fish, shellfish, or organ meats; h. beans, peas, lentils, or nuts

² For breastfed children, minimum meal frequency is receiving solid or semi-solid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months

³ Breastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they are fed the minimum dietary diversity as described in footnote 1 and the minimum meal frequency as described in footnote 2

⁴ Includes two or more feedings of commercial infant formula; fresh, tinned and powdered animal milk; and yogurt

⁵ For non-breastfed children age 6-23 months, minimum meal frequency is receiving solid or semi-solid food or milk feeds at least four times a day. At least one of the feeds must be a solid or semi-solid food.

⁶ Non-breastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they receive other milk or milk products at least twice a day, receive the minimum meal frequency as described in footnote 5, and receive solid or semi-solid foods from at least four food groups not including the milk or milk products food group

⁷ Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt

⁸ Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 5

⁹ Children age 6-23 months are considered to be fed a minimum acceptable diet if they receive breast milk, other milk or milk products as described in footnote 7, are fed the minimum dietary diversity as described in footnote 1, and are fed the minimum meal frequency as described in footnotes 2 and 5

Table 72 Child feeding practices and nutritional status of children by district

Among last-born children who were born in the 2 years preceding the survey, percentage who started breastfeeding within 1 hour of birth, percentage of youngest children under age 6 months living with the mother who are exclusively breastfed, and percentage of children under age 5 years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by district, Kerala, 2019-21

District	Among last born children in the past 2 years		Percentage of children under age 6 months		Height-for-age ²		Weight-for-height		Weight-for-age	
	Percentage breastfed within 1 hour of birth	Number of children	exclusively breastfed ¹	Number of children	Percentage below -2 SD ³	Number of children	Percentage below -2 SD ³	Number of children	Percentage below -2 SD ³	Number of children
	Alappuzha	60.8	51	*	11	20.1	132	14.4	131	20.4
Ernakulam	70.7	101	*	20	22.0	233	17.1	227	19.4	234
Idukki	85.0	32	*	8	24.2	85	14.5	83	23.5	85
Kannur	65.1	92	*	18	19.4	234	14.0	221	17.9	237
Kasaragod	83.8	65	(68.2)	19	25.3	154	12.6	150	21.4	155
Kollam	76.3	63	*	21	15.5	166	21.4	162	17.0	176
Kottayam	46.2	47	*	13	23.4	111	8.4	109	17.3	116
Kozhikode	84.3	94	*	15	21.3	253	14.1	252	18.9	259
Malappuram	69.0	149	*	33	29.4	411	18.2	404	21.4	427
Palakkad	61.5	80	*	24	29.7	216	21.7	209	27.7	218
Pathanamthitta	(79.0)	20	*	5	22.7	56	11.4	57	11.2	57
Thiruvananthapuram	60.1	90	*	24	19.5	211	17.4	209	15.2	220
Thrissur	70.8	72	*	14	22.0	198	9.6	193	17.3	197
Wayanad	66.8	27	*	7	31.3	65	16.1	65	22.5	67
Kerala	69.6	982	55.5	232	23.4	2,526	15.8	2,474	19.7	2,581

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Based on the youngest child living with the mother

² Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85 cm; standing height is measured for all other children

³ Based on the WHO Growth Standards population median

Table 73 Prevalence of anaemia in children

Percentage of children age 6-59 months classified as having anaemia, by background characteristics, Kerala, 2019-21 and total for NFHS-4

Background characteristic	Anaemia status by haemoglobin level			Any anaemia (<11.0 g/dl)	Number of children
	Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (<7.0 g/dl)		
Age in months					
6-8	30.0	23.6	1.3	54.8	116
9-11	28.9	29.9	1.1	59.9	128
12-17	26.7	28.8	1.8	57.3	236
18-23	31.2	26.6	0.9	58.8	194
24-35	26.6	13.5	1.1	41.1	505
36-47	21.1	8.1	0.0	29.3	515
48-59	18.5	5.9	0.1	24.5	543
Sex					
Male	24.8	15.1	0.6	40.5	1,146
Female	23.3	14.1	0.8	38.2	1,092
Birth order¹					
1	22.7	13.0	0.8	36.4	938
2-3	25.0	15.6	0.6	41.3	1,206
4-5	26.1	18.3	0.0	44.3	88
Residence					
Urban	23.0	15.0	0.9	38.9	1,060
Rural	25.1	14.3	0.5	39.8	1,178
Mother's schooling²					
5-7 years complete	19.8	21.6	0.0	41.4	37
8-9 years complete	26.0	16.1	0.3	42.4	199
10-11 years complete	25.1	14.2	0.8	40.1	456
12 or more years complete	23.7	14.5	0.7	38.8	1,540
Religion					
Hindu	23.0	15.6	0.7	39.3	1,019
Muslim	26.4	13.9	0.6	40.8	897
Christian	21.4	13.5	0.8	35.6	313
Caste/tribe					
Scheduled caste	24.7	18.6	0.8	44.1	244
Scheduled tribe	25.6	32.1	0.0	57.6	41
Other backward class	23.7	14.2	0.6	38.5	1,341
Other	24.3	12.6	0.9	37.8	597
Child's living arrangements					
Living with both parents	23.3	15.2	0.8	39.3	1,581
Living with one or neither parent	25.9	13.3	0.3	39.5	657

Continued...

Table 73 Prevalence of anaemia in children—*Continued*

Percentage of children age 6-59 months classified as having anaemia, by background characteristics, Kerala, 2019-21 and total for NFHS-4

Background characteristic	Anaemia status by haemoglobin level			Any anaemia (<11.0 g/dl)	Number of children
	Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (<7.0 g/dl)		
Mother's anaemia status³					
Not anaemic	22.4	11.4	1.0	34.8	1,427
Mildly anaemic	25.5	18.7	0.0	44.2	492
Moderately/severely anaemic	30.8	22.1	0.5	53.4	298
Total	24.1	14.6	0.7	39.4	2,238
NFHS-4 (2015-16)	22.8	12.5	0.4	35.7	2,127

Note: Table is based on children who stayed in the household the night before the interview and who were tested for anaemia. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using the CDC formula (Centers for Disease Control (CDC). 1998. Recommendations to prevent and control iron deficiency in the United States. *Morbidity and Mortality Weekly Report* 47 (RR-3): 1-29). Haemoglobin levels shown in grams per decilitre (g/dl). Total includes children of birth order 6 or more, children of mothers with no schooling or less than 5 years of schooling, children belonging to other religions, and children whose caste/tribe is not known or who have no caste/tribe or whose caste/tribe is missing, who are not shown separately.

¹ Excludes children whose mothers were not interviewed

² For mothers who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the household schedule.

³ Mildly anaemic is 11.0-11.9 g/dl for non-pregnant women and 10.0-10.9 g/dl for pregnant women. Moderately/severely anaemic is <11.0 g/dl for non-pregnant women and <10.0 g/dl for pregnant women. Adjusted for altitude and for smoking status. Excludes children whose mother's anaemia status is not known.

Table 74. Micronutrient intake among children

Percentage of youngest children age 6-23 months living with their mother who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, percentage of children age 6-23 months who were given multiple micronutrient powder in the last 7 days, who were given iron supplements in the last 7 days, and who were given deworming medication in the last 6 months; percentage of children age 9-35 months who were given vitamin A supplements in the last 6 months; and percentage of children age 6-59 months who live in households using iodized salt, by background characteristics, Kerala, 2019-21

Background characteristic	Among youngest children age 6-23 months living with their mother:				Among children age 6-23 months:				Among children age 9-35 months:			Among children age 6-59 months in households with salt tested:	
	Percentage who consumed foods rich in vitamin A in last 24 hours ¹	Percentage who consumed foods rich in iron in last 24 hours ²	Number of children	Percentage given multiple micro-nutrient powder in last 7 days ³	Percentage given iron supplements in last 7 days ³	Percentage deworming medication in last 6 months ^{3,4}	Number of children	Percentage given vitamin A supplements in the last 6 months ⁵	Number of children	Percentage living in households using iodized salt ⁶	Number of children		
Age in months													
6-8	31.2	12.8	129	49.0	25.4	11.5	133	na	99.3	na	133	133	
9-11	57.7	36.6	153	69.4	36.1	15.5	155	74.0	99.2	155	155	155	
12-17	74.3	61.0	257	67.2	35.2	34.3	263	85.5	100.0	263	263	263	
18-23	82.3	72.9	208	61.8	29.1	47.1	216	88.5	99.4	216	216	216	
24-35	na	na	na	na	na	na	na	84.6	99.6	561	560	560	
36-47	na	na	na	na	na	na	na	na	99.7	na	559	559	
48-59	na	na	na	na	na	na	na	na	99.2	na	604	604	
Sex													
Male	65.5	50.3	390	63.7	31.4	30.7	400	84.7	99.7	610	1,281	1,281	
Female	65.8	51.8	356	62.2	32.6	29.6	367	83.5	99.4	585	1,210	1,210	
Birth order													
1	69.1	54.2	299	63.1	35.8	31.7	312	89.1	99.3	519	1,059	1,059	
2-3	62.9	48.7	412	61.6	28.8	28.6	418	80.9	99.6	634	1,329	1,329	
4-5	(67.1)	(48.1)	34	(75.7)	(32.1)	(33.1)	35	(70.1)	100.0	41	98	98	
Breastfeeding status⁷													
Breastfeeding	64.9	49.9	685	64.0	32.1	28.6	685	84.8	99.6	781	977	977	
Not breastfeeding	73.6	63.4	61	54.6	31.0	43.1	81	82.9	99.4	413	1,512	1,512	
Residence													
Urban	66.2	50.7	368	58.1	34.4	29.4	375	85.3	99.9	582	1,211	1,211	
Rural	65.1	51.3	379	67.6	29.6	30.9	392	83.0	99.2	613	1,280	1,280	
Mother's schooling													
5-7 years complete	*	*	9	*	*	*	9	(89.2)	100.0	17	39	39	
8-9 years complete	63.9	46.1	74	67.6	29.5	22.0	76	74.1	99.9	106	229	229	
10-11 years complete	71.1	57.9	128	65.9	31.8	37.7	133	79.4	99.2	207	486	486	
12 or more years complete	64.5	49.9	533	61.5	32.4	29.4	546	86.4	99.6	859	1,729	1,729	

Continued...

Table 74 Micronutrient intake among children—Continued

Percentage of youngest children age 6-23 months living with their mother who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, percentage of children age 6-23 months who were given multiple micronutrient powder in the last 7 days, who were given iron supplements in the last 7 days, and who were given deworming medication in the last 6 months; percentage of children age 9-35 months who were given vitamin A supplements in the last 6 months; and percentage of children age 6-59 months who live in households using iodized salt, by background characteristics, Kerala, 2019-21

Background characteristic	Among youngest children age 6-23 months living with their mother:			Among children age 6-23 months:				Among children age 9-35 months:		Among children age 6-59 months in households with salt tested:	
	Percentage who consumed foods rich in vitamin A in last 24 hours ¹	Percentage who consumed foods rich in iron in last 24 hours ²	Number of children	Percentage given multiple micro-nutrient powder in last 7 days ³	Percentage given iron supplements in last 7 days ³	Percentage deworming medication in last 6 months ^{3,4}	Number of children	Percentage given vitamin A supplements in the last 6 months ⁵	Number of children	Percentage living in households using iodized salt ⁶	Number of children
Religion											
Hindu	68.5	50.1	351	63.2	32.6	32.3	358	91.3	546	99.3	1,128
Muslim	63.2	50.3	286	64.4	31.9	27.1	299	74.2	484	99.6	1,006
Christian	63.1	55.5	110	58.3	30.0	31.5	111	89.4	165	100.0	343
Caste/tribe											
Scheduled caste	70.9	50.0	87	68.2	34.2	29.4	90	88.0	132	98.8	270
Scheduled tribe	(47.2)	(36.6)	18	(35.6)	(35.0)	(34.4)	19	(79.6)	24	99.2	42
Other backward class	66.8	51.9	424	63.4	31.0	28.8	436	81.9	708	99.6	1,493
Other	63.1	51.3	214	62.9	32.7	32.8	220	87.6	328	99.7	664
Total	65.6	51.0	747	63.0	31.9	30.2	767	84.1	1,195	99.5	2,491

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes children of birth order 6 or more, children of mothers with no schooling, children belonging to other religions, and children whose caste/tribe is not known or who have no caste/tribe or whose caste/tribe is missing, who are not shown separately.

- na = Not applicable
- ¹ Includes meat and organ meats, fish, poultry, eggs, pumpkin, carrots, squash, sweet potatoes that are yellow or orange inside, dark green leafy vegetables, ripe mango, papaya, cantaloupe, and jackfruit
- ² Includes meat and organ meats, fish, poultry, and eggs
- ³ Based on mother's recall
- ⁴ Deworming for intestinal parasites is commonly done for helminths and schistosomiasis
- ⁵ Based on mother's recall and the vaccination card (where available)
- ⁶ Excludes children in households in which salt was not tested. Includes children whose mothers were not interviewed.
- ⁷ Excludes children whose breastfeeding status is unknown

Table 75 Presence of iodized salt in household

Percent distribution of households by salt testing, and among households with salt tested, percentage with iodized salt, according to background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Percentage of households:				Number of households	Among households with tested salt:	
	With salt tested	With salt, but salt not tested ¹	With no salt in the household	Total		Percentage with iodized salt	Number of households
Residence							
Urban	99.7	0.0	0.2	100.0	5,838	99.5	5,822
Rural	99.8	0.0	0.2	100.0	6,492	99.2	6,480
Religion of household head							
Hindu	99.8	0.0	0.1	100.0	6,799	99.4	6,789
Muslim	99.8	0.0	0.2	100.0	3,076	99.5	3,070
Christian	99.6	0.0	0.4	100.0	2,034	99.4	2,027
Other	99.0	0.3	0.8	100.0	420	97.6	416
Caste/tribe of household head							
Scheduled caste	100.0	0.0	0.0	100.0	1,298	99.3	1,297
Scheduled tribe	100.0	0.0	0.0	100.0	196	99.0	196
Other backward class	99.7	0.0	0.3	100.0	6,684	99.3	6,668
Other	99.8	0.0	0.1	100.0	3,701	99.6	3,695
Don't know	(100.0)	(0.0)	(0.0)	100.0	34	(100.0)	34
No caste/tribe or missing	98.9	0.3	0.8	100.0	416	97.6	412
Total	99.8	0.0	0.2	100.0	12,330	99.3	12,302
NFHS-4 (2015-16)	99.8	0.0	0.2	100.0	11,346	98.4	11,527

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes households in which salt could not be tested for technical or logistical reasons

Table 76 Presence of iodized salt in household by district

Percent distribution of households by salt testing, and among households with salt tested, percentage with iodized salt, by district, Kerala, 2019-21

District	Percentage of households:				Number of households	Among households with tested salt:	
	With salt tested	With salt, but salt not tested ¹	With no salt in the household	Total		Percentage with iodized salt	Number of households
Alappuzha	99.7	0.1	0.2	100.0	845	99.9	842
Ernakulam	99.7	0.1	0.2	100.0	1,246	99.3	1,243
Idukki	99.6	0.0	0.4	100.0	420	99.6	418
Kannur	99.9	0.0	0.1	100.0	889	99.2	888
Kasaragod	100.0	0.0	0.0	100.0	491	99.6	491
Kollam	99.8	0.0	0.2	100.0	981	99.0	979
Kottayam	99.6	0.0	0.4	100.0	775	97.4	772
Kozhikode	99.9	0.0	0.1	100.0	1,092	99.8	1,091
Malappuram	99.8	0.0	0.2	100.0	1,380	99.4	1,377
Palakkad	99.9	0.0	0.1	100.0	1,020	99.7	1,019
Pathanamthitta	99.9	0.0	0.1	100.0	456	99.6	456
Thiruvananthapuram	99.6	0.0	0.4	100.0	1,234	99.3	1,229
Thrissur	99.9	0.0	0.1	100.0	1,182	99.7	1,181
Wayanad	99.3	0.0	0.7	100.0	319	99.0	317
Kerala	99.8	0.0	0.2	100.0	12,330	99.3	12,302

¹ Includes households in which salt could not be tested for technical or logistical reasons

Table 77 Women's and men's food consumption

Percent distribution of women and men age 15-49 by frequency of consumption of specific foods, Kerala, 2019-21

Type of food	Frequency of consumption				Total	Number of respondents
	Daily	Weekly	Occasionally	Never		
WOMEN						
Milk or curd	59.4	20.7	14.3	5.6	100.0	10,969
Pulses or beans	50.1	39.9	9.5	0.5	100.0	10,969
Dark green leafy vegetables	18.2	44.3	36.1	1.5	100.0	10,969
Fruits	20.6	55.4	23.4	0.6	100.0	10,969
Eggs	9.8	54.4	30.0	5.8	100.0	10,969
Fish	57.4	30.9	9.0	2.7	100.0	10,969
Chicken or meat	1.9	46.1	47.8	4.2	100.0	10,969
Fish or chicken/meat	57.9	32.6	7.9	1.6	100.0	10,969
Fried foods	16.7	35.2	44.2	3.9	100.0	10,969
Aerated drinks	2.6	13.1	62.1	22.3	100.0	10,969
MEN						
Milk or curd	62.5	24.9	8.3	4.2	100.0	1,299
Pulses or beans	36.7	52.8	9.9	0.6	100.0	1,299
Dark green leafy vegetables	31.1	51.6	16.0	1.3	100.0	1,299
Fruits	23.1	56.8	19.8	0.3	100.0	1,299
Eggs	14.0	54.1	26.6	5.3	100.0	1,299
Fish	49.6	38.4	9.3	2.6	100.0	1,299
Chicken or meat	3.9	52.3	40.1	3.7	100.0	1,299
Fish or chicken/meat	51.1	38.9	8.4	1.5	100.0	1,299
Fried foods	14.4	37.0	42.1	6.5	100.0	1,299
Aerated drinks	5.4	22.1	50.6	21.9	100.0	1,299

Table 78 Nutritional status of adults

Percentage of women and men age 15-49 with specific body mass index (BMI) levels, by background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Body Mass Index: Women ¹						Body Mass Index: Men						
	17.0-18.4			≥25.0			17.0-18.4			≥25.0			
	<18.5 (total thin)	18.4 (mildly thin)	<17.0 (moderately/severely thin)	<17.0 (moderately/severely thin)	18.4 (mildly thin)	≥25.0 (overweight or obese)	<18.5 (total thin)	18.4 (mildly thin)	<17.0 (moderately/severely thin)	<17.0 (moderately/severely thin)	18.4 (mildly thin)	≥25.0 (overweight or obese)	
	Number of women	Percentage of women	Number of women	Percentage of women	Number of women	Percentage of women	Number of men	Percentage of men	Number of men	Percentage of men	Number of men	Percentage of men	
Age													
15-19	34.8	19.2	15.5	6.9	5.3	1.6	36.0	17.7	18.3	7.1	5.1	2.1	205
20-29	13.7	7.8	5.9	24.9	18.3	6.6	10.2	7.7	2.5	31.9	25.1	6.7	308
30-39	4.3	2.5	1.8	46.0	34.1	11.9	3.1	1.4	1.7	45.4	37.2	8.1	334
40-49	2.5	1.8	0.8	53.3	39.8	13.6	1.9	1.0	1.0	47.9	40.0	7.9	375
Marital status													
Never married	29.2	16.2	12.9	10.5	7.7	2.8	19.4	10.5	8.9	20.8	16.2	4.7	562
Currently married	4.7	2.8	1.9	46.0	34.2	11.9	2.0	1.3	0.7	49.6	41.0	8.6	646
Widowed/divorced/separated/deserted	3.6	2.7	0.9	46.4	35.3	11.2	*	*	*	*	*	*	15
Residence													
Urban	9.7	5.7	4.0	40.4	29.0	11.4	6.9	3.8	3.1	40.1	33.2	6.9	564
Rural	10.4	5.9	4.5	36.0	27.7	8.3	12.7	7.1	5.7	33.2	26.6	6.6	658
Schooling													
No schooling	12.9	6.5	6.4	28.9	20.8	8.0	(7.3)	(4.0)	(3.4)	(33.9)	(31.0)	(2.9)	27
<5 years complete	3.6	2.1	1.5	51.5	40.3	11.2	(14.4)	(11.4)	(3.0)	(40.0)	(30.7)	(9.3)	26
5-9 years complete	8.2	4.7	3.4	47.2	33.5	13.7	11.3	4.3	7.0	34.0	27.9	6.1	278
10-11 years complete	12.0	6.7	5.3	36.7	27.4	9.2	10.2	5.1	5.1	36.6	27.9	8.6	375
12 or more years complete	10.0	5.9	4.2	34.7	26.3	8.4	9.2	6.4	2.8	37.4	31.7	5.7	516
Religion													
Hindu	11.1	6.2	4.9	35.3	26.7	8.6	11.4	6.1	5.3	34.8	28.4	6.3	695
Muslim	8.9	5.2	3.7	42.4	30.3	12.1	7.1	4.3	2.8	38.7	32.4	6.3	317
Christian	8.5	5.4	3.2	40.0	30.2	9.8	9.8	5.7	4.1	37.9	29.5	8.5	210

Continued...

Table 79. Waist circumference and waist-to-hip ratio

Among women and men age 15-49, percentage with specific waist circumferences and waist-to-hip ratios, by background characteristics, Kerala, 2019-21

Background characteristic	Women						Men					
	Waist circumference			Waist-to-hip ratio			Waist circumference			Waist-to-hip ratio		
	Normal (>80 cm)	Substantially increased risk of metabolic complications (>88 cm)	Substantially increased risk of metabolic complications (≥0.85)	Normal	Substantially increased risk of metabolic complications (≥0.85)	Number of women	Normal (>94 cm)	Substantially increased risk of metabolic complications (>102 cm)	Normal	Substantially increased risk of metabolic complications (≥0.90)	Number of men	
Age												
15-19	70.2	29.8	8.7	49.7	50.3	1,399	94.2	5.8	1.3	59.1	40.9	205
20-29	41.7	58.3	26.5	37.0	63.0	2,382	79.2	20.8	7.4	51.6	48.4	307
30-39	21.0	79.0	44.0	26.4	73.6	3,089	72.0	28.0	8.0	38.1	61.9	334
40-49	13.7	86.3	54.8	18.2	81.8	3,347	68.6	31.4	6.4	32.1	67.9	375
Marital status												
Never married	62.6	37.4	13.5	47.2	52.8	2,276	85.9	14.1	4.5	51.9	48.1	561
Currently married	20.8	79.2	45.9	24.5	75.5	7,510	68.7	31.3	7.7	36.0	64.0	646
Widowed/divorced/separated/deserted	21.6	78.4	45.3	21.3	78.7	431	*	*	*	*	*	15
Residence												
Urban	28.4	71.6	40.8	28.9	71.1	4,886	76.6	23.4	5.4	42.8	57.2	564
Rural	31.8	68.2	36.6	29.8	70.2	5,331	76.4	23.6	7.0	43.5	56.5	658
Schooling												
No schooling	43.0	57.0	22.6	20.8	79.2	82	(74.3)	(25.7)	(15.7)	(42.2)	(57.8)	27
<5 years complete	20.8	79.2	45.2	21.6	78.4	194	(67.6)	(32.4)	(1.9)	(40.4)	(59.6)	26
5-9 years complete	25.3	74.7	45.4	25.1	74.9	2,155	78.1	21.9	7.7	42.8	57.2	278
10-11 years complete	31.7	68.3	39.2	28.9	71.1	2,687	77.0	23.0	4.7	41.6	58.4	375
12 or more years complete	31.6	68.4	35.5	31.9	68.1	5,099	75.8	24.2	6.3	44.7	55.3	516
Religion												
Hindu	32.9	67.1	35.8	30.3	69.7	5,616	75.8	24.2	6.3	42.1	57.9	695
Muslim	27.0	73.0	42.2	28.6	71.4	2,996	79.7	20.3	5.4	45.7	54.3	317
Christian	26.4	73.6	41.8	27.6	72.4	1,603	74.0	26.0	7.5	43.1	56.9	210

Continued...

Table 79 Waist circumference and waist-to-hip ratio—Continued

Among women and men age 15-49, percentage with specific waist circumferences and waist-to-hip ratios, by background characteristics, Kerala, 2019-21

Background characteristic	Women						Men						
	Waist circumference			Waist-to-hip ratio			Waist circumference			Waist-to-hip ratio			
	Normal (>80 cm)	Substantially increased risk of metabolic complications (>88 cm)	Substantially increased risk of metabolic complications (≥0.85)	Normal (>80 cm)	Substantially increased risk of metabolic complications (≥0.85)	Substantially increased risk of metabolic complications (≥0.90)	Normal (>94 cm)	Substantially increased risk of metabolic complications (>102 cm)	Substantially increased risk of metabolic complications (≥0.90)	Normal (>94 cm)	Substantially increased risk of metabolic complications (>102 cm)	Substantially increased risk of metabolic complications (≥0.90)	
Caste/tribe													
Scheduled caste	38.2	61.8	31.0	31.0	69.0	69.0	1,134	81.6	18.4	4.1	34.1	65.9	127
Scheduled tribe	48.4	51.6	19.6	33.0	67.0	67.0	166	82.1	17.9	8.2	43.7	56.3	28
Other backward class	29.7	70.3	39.4	29.3	70.7	70.7	5,953	77.4	22.6	5.6	44.2	55.8	724
Other	26.9	73.1	41.2	28.6	71.4	71.4	2,930	72.6	27.4	7.3	44.4	55.6	331
Don't know	(40.7)	(59.3)	(36.2)	(43.9)	(56.1)	(56.1)	34	*	*	*	*	*	11
Total	30.2	69.8	38.6	29.4	70.6	70.6	10,217	76.5	23.5	6.3	43.2	56.8	1,222

Note: Table excludes pregnant women and women with a birth in the preceding 2 months. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men belonging to other religions, who are not shown separately.

Table 80 Prevalence of anaemia in adults

Percentage of women and men age 15-49 with anaemia by background characteristics, Kerala, 2019-21, and total for NFHS-4

Background characteristic	Women				Men					
	Mild (11.0-11.9 g/dl) ¹	Moderate (8.0-10.9 g/dl) ²	Severe (<8.0 g/dl) ³	Any anaemia (<12.0 g/dl) ⁴	Number of women	Mild (12.0-12.9 g/dl)	Moderate (9.0-11.9 g/dl)	Severe (<9.0 g/dl)	Any anaemia (<13.0 g/dl)	Number of men
Age										
15-19	20.6	10.5	1.4	32.5	1,395	15.9	11.5	0.0	27.4	205
20-29	20.6	10.5	0.6	31.7	2,620	9.1	3.3	0.3	12.7	300
30-39	22.0	14.5	1.2	37.7	3,124	11.5	5.0	0.1	16.6	322
40-49	20.6	18.1	1.7	40.4	3,274	11.8	4.6	0.7	17.0	369
Marital status										
Never married	21.4	10.5	1.4	33.2	2,245	11.8	6.9	0.2	18.9	549
Currently married	21.0	14.8	1.2	37.0	7,751	11.3	4.5	0.5	16.3	632
Widowed/divorced/ separated/deserted	19.1	19.5	2.0	40.6	416	*	*	*	*	15
Maternity status										
Pregnant	21.7	9.7	0.0	31.4	353	na	na	na	na	na
Breastfeeding	21.8	11.3	0.7	33.8	1,133	na	na	na	na	na
Neither	20.9	14.6	1.4	36.9	8,927	na	na	na	na	na
Residence										
Urban	21.1	14.7	1.1	37.0	4,979	13.8	4.9	0.6	19.4	547
Rural	20.9	13.5	1.4	35.8	5,433	10.0	6.1	0.1	16.1	649
Schooling										
No schooling	26.5	26.7	4.4	57.5	81	(12.0)	(18.2)	(4.2)	(34.5)	28
<5 years complete	22.6	17.8	2.8	43.2	193	(25.0)	(0.0)	(0.0)	(25.0)	26
5-9 years complete	21.9	17.1	1.6	40.6	2,144	14.3	8.7	0.5	23.4	275
10-11 years complete	20.2	14.3	1.6	36.1	2,704	9.8	6.8	0.1	16.7	370
12 or more years complete	21.0	12.4	0.8	34.2	5,290	11.1	2.4	0.2	13.7	497
Religion										
Hindu	21.1	15.0	1.4	37.5	5,662	11.4	6.2	0.2	17.9	683
Muslim	21.0	13.1	1.0	35.0	3,107	14.8	3.8	0.7	19.3	309
Christian	20.9	12.8	1.2	34.8	1,641	8.0	5.9	0.0	13.9	205

Continued...

Table 80 Prevalence of anaemia in adults—Continued

Percentage of women and men age 15-49 with anaemia by background characteristics, Kerala, 2019-21 and total for NFHS-4

Background characteristic	Women				Men					
	Mild (11.0-11.9 g/dl) ¹	Moderate (8.0-10.9 g/dl) ²	Severe (<8.0 g/dl) ³	Any anaemia (<12.0 g/dl) ⁴	Number of women	Mild (12.0-12.9 g/dl)	Moderate (9.0-11.9 g/dl)	Severe (<9.0 g/dl)	Any anaemia (<13.0 g/dl)	Number of men
Caste/tribe										
Scheduled caste	21.8	17.2	2.5	41.5	1,153	15.3	6.4	1.0	22.6	126
Scheduled tribe	20.4	26.9	5.6	52.9	172	17.7	12.5	1.4	31.7	29
Other backward class	20.9	13.4	1.0	35.3	6,101	10.9	5.3	0.1	16.3	704
Other	20.9	13.4	1.1	35.4	2,952	11.9	4.8	0.4	17.0	326
Don't know	(25.9)	(21.9)	(4.2)	(52.0)	34	*	*	*	*	11
Smoking status										
Smokes cigarettes/bidis	*	*	*	*	2	10.0	7.1	0.6	17.7	185
Does not smoke cigarettes/bidis	21.0	14.1	1.2	36.3	10,410	12.0	5.3	0.3	17.6	1,012
Total age 15-49	21.0	14.1	1.2	36.3	10,412	11.7	5.5	0.3	17.6	1,196
Age 50-54	na	na	na	na	na	16.9	9.1	0.9	26.9	161
Total age 15-54	na	na	na	na	na	12.4	6.0	0.4	18.7	1,357
Age 15-49										
NFHS-4 (2015-16)	20.8	12.8	0.8	34.3	10,851	8.3	2.9	0.5	11.7	1,810

Note: Table is based on women and men who stayed in the household the night before the interview. Prevalence is adjusted for altitude and for smoking status, if known, using the CDC formulae (Centers for Disease Control (CDC). 1998. Recommendations to prevent and control iron deficiency in the United States. *Morbidity and Mortality Weekly Report* 47 (RR-3): 1-29). Haemoglobin levels are shown in grams per decilitre (g/dl). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men belonging to other religions, who are not shown separately.

na = Not applicable

¹ For pregnant women the value is 10.0-10.9 g/dl

² For pregnant women, the value is 7.0-9.9 g/dl

³ For pregnant women, the value is <7.0 g/dl

⁴ For pregnant women the value is <11.0 g/dl

Table 81 Nutritional status and anaemia among children and women by district

Percentage of children age 6-59 months classified as having anaemia and percentage of women age 15-49 years with anaemia and specific body mass index (BMI) levels by district, Kerala, 2019-21

District	Percentage of children having any anaemia (<11.0 g/dl)	Number of children	Percentage of women having any anaemia (<12.0 g/dl) ¹	Number of women	Percentage of women with BMI <18.5 (total thin)	Percentage of women with BMI ≥25.0 (overweight or obese)	Number of women ²
Alappuzha	30.3	117	31.9	620	14.3	41.9	608
Ernakulam	36.4	209	31.6	1,027	8.0	39.6	1,003
Idukki	32.0	75	32.0	329	9.0	36.3	324
Kannur	37.2	211	39.7	850	8.7	32.4	820
Kasaragod	34.3	130	35.4	482	9.4	28.4	463
Kollam	32.5	148	36.0	812	9.5	43.5	807
Kottayam	36.8	88	38.7	542	12.3	39.8	547
Kozhikode	32.1	239	29.8	971	8.4	30.7	941
Malappuram	47.2	394	34.7	1,453	10.3	36.6	1,417
Palakkad	51.9	189	49.5	925	12.9	32.9	887
Pathanamthitta	44.2	51	36.4	304	12.3	43.8	305
Thiruvananthapuram	33.0	151	33.0	898	6.6	50.6	922
Thrissur	48.7	176	44.4	928	10.9	42.8	927
Wayanad	39.3	58	26.9	271	14.0	26.6	268
Kerala	39.4	2,238	36.3	10,412	10.1	38.1	10,237

Note: Table is based on children who stayed in the household the night before the interview. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using the CDC formula (Centre for Disease Control (CDC), 1998. Recommendations to prevent and control iron deficiency in the United States. *Morbidity and Mortality Weekly Report* 47 (RR-3): 1-29). Haemoglobin levels shown in grams per decilitre (g/dl). The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres (kg/m²).

¹ For pregnant women, the value is <11.0 g/dl

² Excludes pregnant women and women with a birth in the preceding 2 months

Table 82 Knowledge and prevention of HIV/AIDS

Percentage of women and men age 15-49 who have heard of HIV or AIDS and who, in response to prompted questions, say that people can reduce the risk of getting HIV/AIDS by using condoms every time they have sexual intercourse, who know that the risk of getting HIV/AIDS can be reduced by limiting sex to one uninfected partner, who have a comprehensive knowledge about HIV/AIDS, and who know that HIV/AIDS can be transmitted from a mother to her baby, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage who have heard of HIV or AIDS		Percentage who say that people can reduce their chances of getting HIV/AIDS by using a condom every time they have sex		Percentage who know that the risk of getting HIV/AIDS can be reduced by limiting sex to one uninfected sex partner ¹		Percentage who have a comprehensive knowledge about HIV/AIDS ²		Percentage who know that HIV/AIDS can be transmitted from a mother to her baby		Number	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Age												
15-24	99.6	98.6	69.0	81.1	66.1	75.4	30.2	40.6	83.6	71.7	432	396
15-19	99.3	97.9	63.9	79.7	62.0	73.3	26.6	41.1	83.1	68.8	204	215
20-24	99.8	99.5	73.6	82.9	69.7	78.0	33.4	40.0	84.1	75.1	228	182
25-29	98.8	99.8	77.2	86.9	76.8	80.6	40.2	49.6	89.8	83.3	193	150
30-39	98.9	99.7	78.0	88.9	71.4	79.8	39.1	48.3	87.4	80.6	538	355
40-49	99.4	99.5	73.0	83.0	72.3	78.7	32.3	45.4	85.4	78.6	520	397
Residence												
Urban	99.9	99.6	73.5	82.1	69.4	77.5	35.5	43.9	85.9	75.3	816	599
Rural	98.7	99.1	74.6	86.6	72.4	78.9	34.2	46.4	86.2	79.6	867	700
Schooling												
No schooling	*	(94.9)	*	(72.6)	*	(58.8)	*	(29.0)	*	(76.6)	11	30
<5 years complete	(90.2)	(98.8)	(53.0)	(68.3)	(42.0)	(63.3)	(12.1)	(21.8)	(58.5)	(85.0)	24	26
5-7 years complete	99.0	98.3	56.0	83.4	58.6	72.4	16.5	34.1	76.1	66.9	100	79
8-9 years complete	100.0	97.3	67.6	77.7	63.4	74.1	23.6	41.9	82.6	70.9	243	212
10-11 years complete	99.3	100.0	72.9	84.1	68.0	79.4	32.4	45.3	88.3	77.4	424	399
12 or more years complete	99.8	100.0	79.8	89.0	77.4	81.6	42.2	50.0	88.5	81.5	881	553
Regular media exposure³												
Yes	99.7	99.5	75.8	85.4	72.3	78.5	35.6	46.3	87.1	78.5	1,457	1,206
No	96.5	97.4	63.0	73.3	62.3	75.4	29.9	30.5	79.5	65.7	227	93
Marital status												
Never married	99.3	99.0	68.3	82.7	64.7	74.7	33.7	42.7	83.4	72.6	366	604
Currently married	99.3	99.5	75.9	86.0	72.8	81.3	35.4	46.9	87.1	81.9	1,260	679
Widowed/divorced/separated/deserted	96.8	*	70.2	*	69.6	*	29.8	*	81.7	*	57	16

Continued...

Table 82. Knowledge and prevention of HIV/AIDS—Continued

Percentage of women and men age 15-49 who have heard of HIV or AIDS and who, in response to prompted questions, say that people can reduce the risk of getting HIV/AIDS by using condoms every time they have sexual intercourse, who know that the risk of getting HIV/AIDS can be reduced by limiting sex to one uninfected partner, who have a comprehensive knowledge about HIV/AIDS, and who know that HIV/AIDS can be transmitted from a mother to her baby, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage who have heard of HIV or AIDS		Percentage who say that people can reduce their chances of getting HIV/AIDS by using a condom every time they have sex		Percentage who know that the risk of getting HIV/AIDS can be reduced by limiting sex to one uninfected sex partner ¹		Percentage who have a comprehensive knowledge about HIV/AIDS ²		Percentage who know that HIV/AIDS can be transmitted from a mother to her baby		Number	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Whether been away from home for 1 month or more at a time in the past 12 months⁴												
Been away	100.0	99.8	71.2	81.1	76.8	73.4	37.2	36.9	91.4	80.6	89	138
Not been away	99.2	99.3	74.2	84.9	70.6	78.8	34.7	46.2	85.8	77.2	1,595	1,161
Whether been away from home for 6 months or more at a time in the past 12 months⁴												
Been away	99.5	100.0	73.8	78.4	78.0	77.0	40.9	27.7	87.5	78.7	232	63
Not been away	99.2	99.3	74.1	84.8	69.8	78.3	33.9	46.1	85.8	77.5	1,451	1,236
Religion												
Hindu	98.9	99.2	75.9	85.8	73.2	78.2	36.8	45.6	87.7	80.0	920	742
Muslim	99.8	99.2	70.4	81.7	65.8	77.9	28.4	42.0	81.6	73.1	505	337
Christian	99.4	100.0	74.9	84.5	72.9	79.0	40.5	48.7	88.9	76.2	257	221
Caste/tribe												
Scheduled caste	97.5	99.2	68.2	81.5	66.1	71.9	30.3	43.1	90.3	75.7	157	138
Scheduled tribe	(89.4)	91.2	(57.8)	74.3	(63.9)	73.2	(23.5)	35.6	(59.1)	66.8	27	30
Other backward class	99.4	99.3	74.3	85.7	70.9	79.7	36.9	46.2	85.2	78.3	1,051	767
Other	100.0	100.0	76.6	84.9	73.0	78.6	32.3	45.5	88.2	79.1	447	351
Total	99.2	99.3	74.1	84.5	70.9	78.2	34.8	45.2	86.1	77.6	1,683	1,299

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men who don't know their caste/tribe, who are not shown separately.

¹ Partner who has no other partners

² Comprehensive knowledge means knowing that consistent use of a condom every time they have sex and having just one uninfected faithful sex partner can reduce the chance of getting HIV/AIDS, knowing that a healthy-looking person can have HIV/AIDS, and rejecting two common misconceptions about transmission or prevention of HIV/AIDS.

³ Exposure to radio, television, or newspapers/magazines at least once a week or cinema at least once a month

⁴ For women, visits to parental/in-laws' home excluded

Table 83.1 Accepting attitudes toward those living with HIV/AIDS: Women

Among women age 15-49 who have heard of HIV or AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristic, Kerala, 2019-21

Background characteristic	Percentage of women who:										Number of women who have heard of HIV or AIDS	
	Are willing to care for a relative with HIV/AIDS in own home	Would buy fresh vegetables from a vendor who has HIV/AIDS	Say that a female teacher who has HIV/AIDS but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with HIV/AIDS	Would allow an HIV positive student to attend school with students who are HIV negative	Think that people living with HIV/AIDS should be treated in the same public hospital as persons who are HIV negative	Think that people living with HIV should be allowed to work in the same office with people who are HIV negative	Express accepting attitudes on all seven indicators				
Age												
15-24	72.3	72.0	87.0	58.5	83.7	80.5	86.0	30.9	430			
15-19	72.5	69.9	83.8	62.0	81.1	78.9	83.2	33.8	203			
20-24	72.0	73.8	90.0	55.3	86.1	81.8	88.5	28.3	227			
25-29	71.0	78.0	92.7	59.8	87.6	83.0	92.6	30.6	190			
30-39	70.6	70.6	83.1	61.9	80.6	76.7	82.9	29.0	532			
40-49	70.3	70.1	82.7	59.6	79.2	77.1	84.1	26.6	517			
Residence												
Urban	72.7	73.4	84.6	60.0	82.1	79.0	85.1	32.2	815			
Rural	69.4	70.0	85.5	60.1	81.4	78.0	85.3	25.8	856			
Schooling												
5-7 years complete	66.0	59.4	66.2	60.7	59.8	68.8	70.1	23.7	99			
8-9 years complete	69.0	60.2	75.9	67.2	68.9	65.0	73.7	26.2	243			
10-11 years complete	71.2	70.5	83.7	60.8	82.5	78.6	87.0	28.4	421			
12 or more years complete	72.7	77.6	91.2	57.4	88.6	84.2	90.0	30.7	880			
Regular media exposure¹												
Yes	72.1	72.0	85.8	60.6	82.2	78.8	85.7	28.7	1,452			
No	63.6	69.5	80.0	56.4	79.2	76.2	81.6	30.7	219			

Continued...

Table 83.1 Accepting attitudes toward those living with HIV/AIDS: Women—Continued

Among women age 15-49 who have heard of HIV or AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristic, Kerala, 2019-21

Background characteristic	Percentage of women who:										Number of women who have heard of HIV or AIDS	
	Are willing to care for a relative with HIV/AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who has HIV/AIDS	Say that a female teacher who has HIV/AIDS but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with HIV/AIDS	Would allow an HIV positive student to attend school with students who are HIV negative	Think that people living with HIV/AIDS should be treated in the same public hospital as persons who are HIV negative	Think that people living with HIV should be allowed to work in the same office with people who are HIV negative	Express accepting attitudes on all seven indicators				
Marital status												
Never married	73.6	74.2	87.4	58.2	85.2	81.7	87.0	31.3			363	
Currently married	70.0	71.1	84.3	60.0	80.7	77.8	84.7	28.1			1,251	
Widowed/divorced/separated/deserted	76.6	67.4	87.5	74.8	82.5	72.2	83.1	31.4			56	
Religion												
Hindu	73.0	73.4	87.4	63.2	84.9	81.2	87.8	31.1			910	
Muslim	70.4	68.0	78.5	58.1	74.5	73.3	79.1	27.5			504	
Christian	64.9	72.8	89.8	52.9	84.8	79.1	87.6	24.2			256	
Caste/tribe												
Scheduled caste	70.8	68.4	82.0	66.1	82.2	81.5	86.7	32.9			153	
Scheduled tribe	(68.2)	(64.8)	(82.1)	(79.0)	(70.8)	(79.5)	(79.5)	(44.4)			24	
Other backward class	70.6	72.8	86.6	60.3	83.3	78.8	85.6	29.0			1,045	
Other	72.0	70.4	82.7	56.3	78.6	76.6	84.0	26.3			447	
Total	71.0	71.7	85.1	60.1	81.8	78.5	85.2	28.9			1,670	

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes women with no schooling or less than 5 years of schooling and women who don't know their caste/tribe, who are not shown separately.

¹ Exposure to radio, television, or newspapers/magazines at least once a week or cinema at least once a month

Table 83.2 Accepting attitudes toward those living with HIV/AIDS: Men

Among men age 15-49 who have heard of HIV or AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristic, Kerala, 2019-21

Background characteristic	Percentage of men who:							Number of men who have heard of HIV or AIDS
	Are willing to care for a relative with HIV/AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who has HIV/AIDS	Say that a female teacher who has HIV/AIDS but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with HIV/AIDS	Would allow an HIV positive student to attend school with students who are HIV negative	Think that people living with HIV/AIDS should be treated in the same public hospital as persons who are HIV negative	Think that people living with HIV should be allowed to work in the same office with people who are HIV negative	
Age								
15-24	66.3	75.6	87.1	49.1	86.0	73.0	85.9	391
15-19	61.4	76.4	88.5	49.5	86.1	76.2	85.9	210
20-24	71.9	74.7	85.4	48.7	86.0	69.3	86.0	181
25-29	67.8	81.6	87.7	53.3	88.0	70.5	85.1	150
30-39	63.5	80.8	86.6	54.5	86.5	75.1	86.8	354
40-49	65.0	79.4	81.0	52.3	83.2	75.3	82.9	395
Residence								
Urban	64.4	76.5	85.0	51.2	85.4	74.0	84.2	597
Rural	66.0	81.0	85.3	52.8	85.6	74.0	86.0	694
Schooling								
No schooling	(52.8)	(51.0)	(82.7)	(47.4)	(70.5)	(73.8)	(74.9)	29
<5 years complete	(66.4)	(71.4)	(73.3)	(57.2)	(75.5)	(70.7)	(82.0)	26
5-7 years complete	56.3	74.2	76.4	45.7	77.8	69.3	80.5	78
8-9 years complete	62.1	76.7	78.7	50.0	80.1	73.2	79.4	206
10-11 years complete	65.5	80.1	84.5	53.2	85.5	71.2	83.0	399
12 or more years complete	68.2	81.4	90.0	52.9	89.9	77.1	90.2	553
Regular media exposure¹								
Yes	65.8	79.9	86.0	52.2	86.0	74.1	86.1	1,200
No	58.7	65.6	74.6	51.0	79.0	72.9	72.4	90

Continued...

Table 83.2 Accepting attitudes toward those living with HIV/AIDS: Men—Continued

Among men age 15-49 who have heard of HIV or AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristic, Kerala, 2019-21

Background characteristic	Percentage of men who:										Number of men who have heard of HIV or AIDS	
	Are willing to care for a relative with HIV/AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who has HIV/AIDS	Say that a female teacher who has HIV/AIDS but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with HIV/AIDS	Would allow an HIV positive student to attend school with students who are HIV negative	Think that people living with HIV/AIDS should be treated in the same public hospital as persons who are HIV negative	Think that people living with HIV should be allowed to work in the same office with people who are HIV negative	Express accepting attitudes on all seven indicators				
Marital status												
Never married	65.4	77.4	87.0	52.2	86.0	72.5	86.2	24.6	598			
Currently married	64.8	80.2	83.3	51.7	85.0	75.5	84.0	25.9	676			
Religion												
Hindu	68.7	82.0	87.3	51.1	87.8	76.3	88.3	26.2	736			
Muslim	55.6	70.3	80.3	49.7	80.7	68.4	78.8	19.3	334			
Christian	68.4	81.6	85.3	59.0	85.0	74.8	84.3	31.7	221			
Caste/tribe												
Scheduled caste	65.1	75.6	81.8	59.1	84.4	66.8	78.7	21.2	137			
Scheduled tribe	(69.3)	(84.0)	(87.9)	(44.5)	(87.0)	(77.6)	(85.0)	(27.6)	28			
Other backward class	66.1	78.8	85.4	50.8	86.4	73.3	85.0	24.4	762			
Other	64.0	81.3	86.5	52.2	84.8	78.7	88.7	29.9	351			
Total	65.3	78.9	85.2	52.1	85.5	74.0	85.2	25.4	1,290			

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes women who are widowed or divorced or separated or deserted and women who don't know their caste/tribe, who are not shown separately.

¹Exposure to radio, television, or newspapers/magazines at least once a week or cinema at least once a month

Table 84 Sexual behaviour, HIV testing, blood transfusion, and injections

Indicators of higher-risk sexual behaviour, use of blood transfusion, prior HIV testing, and any injections for women and men age 15-49 by residence, Kerala, 2019-21

Behaviour	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Among those who had sexual intercourse in the past 12 months:									
Percentage who had two or more partners in the past 12 months	0.0	0.2	0.2	0.5	0.0	0.2	0.3	0.1	0.2
Percentage who had higher-risk intercourse in the past 12 months ¹	0.8	0.0	0.3	1.3	0.0	0.5	1.1	0.0	0.4
Percentage who had two or more partners and higher-risk intercourse in the past 12 months ¹	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.0	0.0
Number who had sexual intercourse in the past 12 months	251	509	760	295	509	804	546	1,018	1,565
Among those who have ever had sexual intercourse:									
Mean number of sexual partners in lifetime	1.0	1.3	1.2	1.0	1.4	1.3	1.0	1.4	1.2
Number who have ever had sexual intercourse	290	612	901	356	649	1,005	645	1,261	1,906
Among all men:									
Percentage who paid for sexual intercourse in the past 12 months	0.0	na	na	0.2	na	na	0.1	na	na
Number of men	599	na	na	700	na	na	1,299	na	na
Among women with a birth in the last 5 years who received ANC during pregnancy, percentage who were tested for HIV during ANC									
	na	43.3	na	na	47.1	na	na	45.4	na
Number of women with a birth in the last 5 years who received ANC during pregnancy									
	na	167	na	na	200	na	na	367	na
Percentage ever tested for HIV prior to NFHS-5	10.4	50.8	33.7	13.4	44.0	30.3	12.0	47.3	31.9
Percentage who have ever had a blood transfusion	5.9	5.6	5.7	7.5	4.7	6.0	6.8	5.2	5.9
Percentage who received any injection in the past 12 months	26.0	28.8	27.6	29.6	33.4	31.7	27.9	31.2	29.8
Mean number of injections in the past 12 months	2.7	3.4	3.1	2.5	2.9	2.7	2.6	3.1	2.9
Number of respondents	599	816	1,415	700	867	1,567	1,299	1,683	2,982
Among those who received an injection in the past 12 months, percentage for whom for the last injection, a disposable syringe was used									
	95.5	97.0	96.4	94.0	97.9	96.3	94.7	97.5	96.3
Number who received an injection in the past 12 months	156	235	390	207	290	497	363	525	887

na = Not applicable

ANC = Antenatal care

¹ Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent

Table 85 Knowledge of HIV/AIDS and sexual behaviour among youth

Indicators of HIV/AIDS knowledge and sexual behaviour for women and men age 15-24 by residence, Kerala, 2019-21

Knowledge and behaviour	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Knowledge									
Percentage with comprehensive knowledge about HIV/AIDS ¹	38.5	28.2	33.2	42.4	31.9	36.9	40.6	30.2	35.2
Percentage who know a condom source	86.7	60.8	73.2	81.4	58.2	69.2	83.8	59.4	71.1
Sexual behaviour									
Percentage who have ever had sexual intercourse	1.9	22.3	12.5	1.6	25.5	14.1	1.7	24.0	13.4
Percentage who had sexual intercourse before age 15	0.0	0.5	0.2	0.0	0.2	0.1	0.0	0.3	0.2
HIV testing, injections, and blood transfusion									
Percentage ever tested for HIV prior to NFHS-5	3.6	17.6	10.9	5.6	16.6	11.4	4.7	17.1	11.2
Percentage who have ever had a blood transfusion	7.5	2.5	4.9	7.0	0.4	3.6	7.3	1.4	4.2
Percentage who received any injection in the past 12 months	25.5	37.8	31.9	34.7	34.8	34.7	30.4	36.2	33.4
Mean number of injections in the past 12 months	2.0	3.3	2.8	1.9	2.3	2.1	1.9	2.8	2.4
Number age 15-24	186	201	387	211	231	442	396	432	828
Among those who received an injection in the past 12 months, percentage for whom a disposable syringe was used	(88.5)	98.5	94.6	95.1	96.8	96.0	92.5	97.6	95.4
Number who received an injection in the past 12 months	47	76	123	73	80	153	120	156	277
Among those who have ever had sexual intercourse, percentage who used a condom at first sexual intercourse	*	(14.2)	(17.1)	*	7.5	10.1	*	10.3	13.1
Number who have ever had sexual intercourse	3	46	50	3	63	67	7	110	117
Among those who had sexual intercourse in the past 12 months, percentage who had higher-risk sexual intercourse in the past 12 months ²	*	(0.0)	(4.4)	*	(0.0)	(0.0)	*	0.0	2.2
Number who had sexual intercourse in the past 12 months	2	37	39	1	38	40	4	75	79
Among the never married:									
Percentage who have never had sexual intercourse	98.4	100.0	99.1	99.1	98.8	99.0	98.7	99.4	99.0
Percentage who had sexual intercourse in the past 12 months	0.9	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.2
Number never married	185	155	340	209	170	379	394	324	719

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹Comprehensive knowledge means knowing that consistent use of condoms every time they have sex and having just one uninfected faithful sex partner can reduce the chance of getting HIV/AIDS, knowing that a healthy-looking person can have HIV/AIDS, and rejecting two common misconceptions about transmission or prevention of HIV/AIDS

²Sexual intercourse with a partner who was neither a spouse nor lived with the respondent

Table 86 Prevalence of tuberculosis

Number of persons per 100,000 usual household residents suffering from any tuberculosis and medically treated tuberculosis by age, sex, and main type of cooking fuel, according to residence, Kerala, 2019-21

Age and sex	Number of persons per 100,000 suffering from:		Number of usual residents
	Tuberculosis ¹	Medically treated tuberculosis ²	
URBAN			
Sex			
Female	412	412	11,689
Male	448	448	10,348
Age			
<15	981	981	4,526
15-59	252	252	13,351
60 and over	393	393	4,160
Cooking fuel			
Solid fuel ³	563	563	4,833
Other fuel	391	391	17,205
Total	429	429	22,038
RURAL			
Sex			
Female	465	458	12,576
Male	525	495	11,459
Age			
<15	859	837	4,907
15-59	328	306	14,698
60 and over	641	641	4,430
Cooking fuel			
Solid fuel ³	728	714	7,994
Other fuel	377	357	16,041
Total	494	476	24,035
TOTAL			
Sex			
Female	439	436	24,265
Male	489	473	21,807
Age			
<15	918	906	9,433
15-59	292	280	28,049
60 and over	521	521	8,590
Cooking fuel			
Solid fuel ³	666	657	12,827
Other fuel	384	375	33,246
Total	463	453	46,072

¹ Includes medically treated tuberculosis

² Suffering from tuberculosis and received medical treatment

³ Includes coal, lignite, charcoal, wood, straw/shrubs/grass, agricultural crop waste, and dung cakes

Table 87 Knowledge and attitudes toward tuberculosis

Percentage of women and men age 15-49 who have heard of tuberculosis (TB), and among those who have heard of TB, percentage with specific knowledge and beliefs, according to background characteristics, Kerala, 2019-21

Background characteristic	Among women who have heard of TB, percentage who:				Among men who have heard of TB, percentage who:							
	Percentage of women who have heard of TB	Report that TB is spread through the air by coughing or sneezing	Have mis-conceptions about transmission of TB ¹	Believe that TB can be cured	Would want a family member's TB kept secret	Number of women who have heard of TB	Percentage of men who have heard of TB	Report that TB is spread through the air by coughing or sneezing	Have mis-conceptions about transmission of TB ¹	Believe that TB can be cured	Would want a family member's TB kept secret	Number of men who have heard of TB
Age												
15-19	96.9	84.1	20.2	75.9	7.6	1,427	90.0	84.9	20.5	83.5	11.0	193
20-34	97.8	89.4	16.8	83.6	6.2	4,206	96.7	89.9	18.9	90.5	11.1	475
35-49	97.5	88.4	16.1	86.6	7.7	5,067	98.0	83.2	24.5	88.5	12.6	582
Residence												
Urban	98.0	88.6	17.1	84.3	7.4	5,174	96.8	85.5	21.0	86.7	13.5	580
Rural	97.1	87.8	16.8	83.7	6.8	5,527	95.7	86.4	22.4	90.0	10.4	669
Schooling												
No schooling	83.0	50.0	17.2	50.1	7.7	69	(92.4)	(78.5)	(16.1)	(85.0)	(27.6)	28
<5 years complete	92.8	70.2	13.1	64.8	10.1	183	(97.6)	(75.9)	(22.6)	(93.4)	(4.6)	26
5-7 years complete	95.8	77.7	16.3	75.5	8.8	597	94.4	75.4	23.9	80.0	14.7	75
8-9 years complete	96.6	82.6	16.0	80.0	6.2	1,568	93.8	84.0	24.6	85.1	15.3	199
10-11 years complete	97.4	87.0	17.8	83.8	6.8	2,752	97.0	83.6	20.8	88.2	12.0	387
12 or more years complete	98.5	92.6	17.0	87.2	7.2	5,532	97.0	90.8	21.3	91.0	9.4	536
Religion												
Hindu	97.6	88.7	17.1	85.2	6.9	5,815	96.3	86.9	24.6	89.1	11.8	715
Muslim	97.2	85.2	18.6	80.1	7.0	3,181	94.5	82.5	15.7	85.4	14.7	318
Christian	98.0	92.2	13.1	87.0	8.2	1,701	98.3	88.1	21.2	90.9	7.5	217

Continued...

Table 87 Knowledge and attitudes toward tuberculosis—Continued

Percentage of women and men age 15-49 who have heard of tuberculosis (TB), and among those who have heard of TB, percentage with specific knowledge and beliefs, according to background characteristics, Kerala, 2019-21

Background characteristic	Among women who have heard of TB, percentage who:				Among men who have heard of TB, percentage who:							
	Percentage of women who have heard of TB	Report that TB is spread through the air by coughing or sneezing	Have misconceptions about transmission of TB ¹	Believe that TB can be cured	Would family member's TB kept secret	Number of women who have heard of TB	Percentage of men who have heard of TB	Report that TB is spread through the air by coughing or sneezing	Have misconceptions about transmission of TB ¹	Believe that TB can be cured	Would family member's TB kept secret	Number of men who have heard of TB
Caste/tribe												
Scheduled caste	96.0	84.0	17.9	82.5	8.2	1,161	98.5	84.1	22.7	86.4	10.5	136
Scheduled tribe	90.7	71.5	18.1	71.5	3.9	160	94.4	83.4	13.2	83.5	16.6	28
Other backward class	98.0	88.5	17.3	83.3	6.7	6,280	95.8	86.7	20.3	88.8	11.9	734
Other	97.6	90.1	15.7	86.6	7.5	3,065	97.0	85.2	25.8	88.9	11.9	341
Don't know	(98.0)	36	(30.7)	(78.6)	(20.5)	35	*	*	*	*	*	10
Total	97.6	88.2	16.9	84.0	7.1	10,701	96.2	86.0	21.7	88.5	11.8	1,250

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women belonging to other religions, who are not shown separately.

¹ Misconceptions about the transmission of TB include that it can be spread by sharing utensils, by touching a person with TB, through food, through sexual contact, through mosquito bites, or through any other means except through the air when coughing or sneezing

Table 88 Health insurance coverage among women and men

Percentage of women and men age 15-49 who are covered by a health insurance/financing scheme, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of women covered by any health insurance/financing scheme	Number of women	Percentage of men covered by any health insurance/financing scheme	Number of men
Age				
15-19	44.5	1,472	41.6	215
20-24	45.7	1,426	48.2	182
25-34	45.7	2,873	55.5	309
35-49	54.9	5,198	52.4	594
Residence				
Urban	45.5	5,277	46.1	599
Rural	53.9	5,692	54.8	700
Schooling				
No schooling	53.8	83	(48.2)	30
<5 years complete	57.1	197	(63.1)	26
5-7 years complete	52.8	623	56.6	79
8-9 years complete	50.6	1,623	54.1	212
10-11 years complete	51.2	2,826	45.6	399
12 or more years complete	48.3	5,617	52.0	553
Religion				
Hindu	57.6	5,958	54.3	742
Muslim	36.0	3,272	42.1	337
Christian	49.4	1,736	52.2	221
Caste/tribe				
Scheduled caste	59.9	1,210	54.6	138
Scheduled tribe	61.2	176	58.4	30
Other backward class	48.2	6,409	48.9	767
Other	48.8	3,139	53.1	351
Don't know	(48.6)	36	*	13
Total age 15-49	49.9	10,969	50.8	1,299
Age 50-54	na	na	63.4	174
Total age 15-54	na	na	52.3	1,473

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women belonging to other religions, who are not shown separately.

na = Not applicable

Table 89 Source of health care and health insurance coverage among households

Percent distribution of households by the source of health care that household members generally use when they get sick, percentage of households with at least one usual member covered by a health insurance/financing scheme, and among households with at least one usual member covered by a health insurance/financing scheme, type of health insurance/financing scheme coverage, according to residence, Kerala, 2019-21

Source	Urban	Rural	Total
Public health sector	72.3	79.3	76.0
Government/municipal hospital	42.7	39.2	40.9
Government dispensary	8.2	8.5	8.3
UHC/UHP/UFWC	0.4	0.4	0.4
CHC/rural hospital/block PHC	4.7	7.7	6.2
PHC/additional PHC	14.7	22.4	18.8
Sub-centre	0.1	0.1	0.1
Vaidya/hakim/homeopath (AYUSH)	0.6	0.3	0.4
Anganwadi/ICDS centre	0.0	0.0	0.0
Government mobile clinic	0.0	0.0	0.0
Other public health sector	0.8	0.7	0.7
NGO or trust hospital/clinic	0.1	0.1	0.1
Private health sector	27.2	20.1	23.5
Private hospital	24.2	18.5	21.2
Private doctor/clinic	2.2	1.2	1.7
Private paramedic	0.0	0.0	0.0
Vaidya/hakim/homeopath (AYUSH)	0.3	0.2	0.3
Other private health sector	0.4	0.2	0.3
Other source	0.2	0.1	0.1
Total	100.0	100.0	100.0
Health insurance			
Percentage of households in which at least one usual member is covered by a health insurance/financing scheme	47.2	55.4	51.5
Number of households	5,838	6,492	12,330
Type of coverage among households in which at least one usual member is covered by a health insurance/financing scheme			
Employees' State Insurance Scheme (ESIS)	4.7	2.3	3.3
Central Government Health Scheme (CGHS)	4.3	3.2	3.7
State health insurance scheme	5.0	4.3	4.6
Rashtriya Swasthya Bima Yojana (RSBY)	71.2	83.6	78.2
Community health insurance programme	0.3	0.0	0.2
Other health insurance through employer	1.0	0.5	0.7
Medical reimbursement from employer	0.4	0.3	0.4
Other privately purchased commercial health insurance	9.9	4.2	6.7
Other	6.5	3.5	4.8
Number of households	2,754	3,597	6,352

UHC = Urban health centre; UHP = Urban health post; UFWC = Urban family welfare centre; CHC = Community health centre; PHC = Primary health centre; AYUSH = Ayurveda, yoga and naturopathy, unani, siddha and homeopathy; ICDS = Integrated Child Development Services; NGO = Nongovernmental organization

Table 90 Health problems

Number of women and men age 15-49 per 100,000 who reported that they have diabetes, asthma, goitre or any other thyroid disorder, heart disease, or cancer, by background characteristics, Kerala, 2019-21

Background characteristic	Number of women per 100,000					Number of men per 100,000						
	Diabetes	Asthma	Goitre or other thyroid disorder	Any heart disease	Cancer	Number of women	Diabetes	Asthma	Goitre or other thyroid disorder	Any heart disease	Cancer	Number of men
Age												
15-19	207	3,781	2,139	96	32	1,472	0	0	0	0	0	215
20-34	1,161	3,808	7,099	371	119	4,299	1,727	565	555	390	378	491
35-49	7,594	5,891	11,874	1,307	299	5,198	7,295	1,356	684	807	294	594
Residence												
Urban	3,834	4,893	9,603	650	250	5,277	4,031	978	466	389	0	599
Rural	4,311	4,698	7,855	896	139	5,692	3,950	709	571	625	515	700
Schooling												
No schooling	4,389	9,405	3,123	0	0	83	(5,509)	(6,521)	(0)	(0)	(0)	30
<5 years complete	10,289	8,551	10,102	4,612	0	197	(7,796)	(1,460)	(0)	(0)	(0)	26
5-7 years complete	10,244	6,858	9,664	1,331	167	623	4,921	3,608	0	0	0	79
8-9 years complete	7,432	6,206	8,726	971	266	1,623	3,934	0	916	974	641	212
10-11 years complete	4,326	4,007	7,911	822	293	2,826	5,028	138	389	462	313	399
12 or more years complete	2,085	4,349	9,008	515	133	5,617	2,857	917	596	507	181	553
Marital status												
Never married	720	3,960	2,583	223	125	2,365	1,133	675	85	0	83	604
Currently married	4,919	4,900	10,415	932	192	8,163	6,617	993	923	988	457	679
Widowed/divorced/separated/deserted	6,614	7,246	9,654	890	561	441	*	*	*	*	*	16
Religion												
Hindu	3,809	4,894	9,353	813	162	5,958	4,791	853	529	674	318	742
Muslim	4,305	4,109	7,138	561	230	3,272	2,645	387	698	87	371	337
Christian	4,549	5,647	9,395	1,065	227	1,736	3,331	1,447	232	642	0	221

Continued...

Table 90 Health problems—Continued

Number of women and men age 15-49 per 100,000 who reported that they have diabetes, asthma, goitre or any other thyroid disorder, heart disease, or cancer, by background characteristics, Kerala, 2019-21

Background characteristic	Number of women per 100,000					Number of men per 100,000						
	Diabetes	Asthma	Goitre or other thyroid disorder	Any heart disease	Cancer	Number of women	Diabetes	Asthma	Goitre or other thyroid disorder	Any heart disease	Cancer	Number of men
Caste/tribe												
Scheduled caste	3,994	4,161	9,258	767	340	1,210	3,374	1,445	0	0	362	138
Scheduled tribe	2,412	5,411	5,160	902	0	176	1,586	0	0	0	2,843	30
Other backward class	3,962	4,829	8,431	671	195	6,409	4,287	741	781	690	130	767
Other	4,406	4,924	9,229	975	142	3,139	3,412	897	227	403	355	351
Don't know	(8,228)	(4,798)	(7,724)	(2,291)	(0)	36	*	*	*	*	*	13
Total age 15-49	4,081	4,792	8,696	777	192	10,969	3,987	833	522	516	277	1,299
Age 50-54	na	na	na	na	na	na	19,328	2,383	0	4,931	1,104	174
Total age 15-54	na	na	na	na	na	na	5,798	1,016	461	1,037	375	1,473

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women belonging to other religions, who are not shown separately.
na = Not applicable

Table 91 Screening tests for cancer

Percentage of women age 15-49 who have ever undergone specific screening tests for cancer, and percentage of men age 15-49 who have ever undergone an oral cavity screening test for oral cancer, by background characteristics, Kerala, 2019-21

Background characteristic	Type of screening test for women			Number of women	Oral cavity screening test for men	Number of men
	Cervix	Breast	Oral cavity			
Age						
15-19	0.3	0.1	0.1	1,429	0.9	209
20-24	0.5	0.3	0.3	1,386	0.0	173
25-29	1.3	0.7	0.3	1,290	0.6	140
30-34	2.4	1.9	0.8	1,514	1.0	151
35-39	2.7	1.9	0.8	1,725	0.3	187
40-44	3.7	3.0	0.7	1,652	0.4	179
45-49	5.2	2.9	0.4	1,722	0.4	204
Residence						
Urban	2.7	2.0	0.6	5,148	0.2	573
Rural	2.2	1.3	0.4	5,570	0.7	669
Schooling						
No schooling	0.0	0.0	0.0	83	(0.0)	28
<5 years complete	8.4	3.3	2.1	196	(0.0)	26
5-7 years complete	2.8	1.2	0.8	613	0.0	76
8-9 years complete	2.9	1.7	0.4	1,594	0.7	210
10-11 years complete	2.4	1.5	0.5	2,767	0.7	380
12 or more years complete	2.1	1.7	0.4	5,466	0.4	522
Religion						
Hindu	2.8	2.0	0.8	5,838	0.3	708
Muslim	1.9	1.1	0.1	3,187	0.0	318
Christian	2.3	1.4	0.4	1,689	1.8	216
Caste/tribe						
Scheduled caste	2.0	1.2	0.2	1,187	0.8	130
Scheduled tribe	1.1	1.0	0.6	175	0.0	29
Other backward class	2.6	1.6	0.6	6,260	0.3	733
Other	2.3	2.0	0.4	3,062	0.6	335
Don't know	(4.2)	(0.0)	(0.0)	34	*	14
Total	2.4	1.6	0.5	10,718	0.5	1,242

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women belonging to other religions, who are not shown separately.

Table 92.1 Blood pressure status: Women

Among women age 15-49, prevalence of hypertension, percent distribution of blood pressure values, and percentage having normal blood pressure and taking medication to lower blood pressure, by background characteristics, Kerala, 2019-21

Background characteristic	Prevalence of hypertension ¹	Normal	Pre-hypertensive	Hypertensive			Total	Percentage with normal blood pressure and taking medicine to lower blood pressure	Number of women
		SBP <120 mmHg and DBP <80 mmHg	SBP 120-139 mmHg or DBP 80-89 mmHg	Stage 1: SBP 140-159 mmHg or DBP 90-99 mmHg	Stage 2: SBP 160-179 mmHg or DBP 100-109 mmHg	Stage 3: SBP ≥180 mmHg or DBP ≥110 mmHg			
Age									
15-19	2.2	82.7	16.0	1.1	0.1	0.1	100.0	0.6	1,419
20-24	3.3	77.7	19.8	2.1	0.4	0.0	100.0	0.5	1,376
25-29	2.7	72.4	25.7	1.7	0.1	0.2	100.0	0.5	1,281
30-34	6.7	61.0	33.5	4.7	0.6	0.3	100.0	0.5	1,495
35-39	12.5	51.3	38.4	8.1	1.8	0.5	100.0	1.0	1,708
40-44	19.5	39.6	44.1	12.6	3.3	0.5	100.0	0.9	1,639
45-49	30.2	30.9	45.1	17.3	4.6	2.2	100.0	1.2	1,716
Residence									
Urban	11.5	59.0	32.0	7.0	1.4	0.5	100.0	0.9	5,097
Rural	12.2	56.5	33.4	7.5	2.0	0.6	100.0	0.7	5,538
Schooling									
No schooling	30.0	22.8	52.0	17.8	6.3	1.1	100.0	0.3	83
<5 years complete	28.8	34.9	41.6	16.0	7.2	0.2	100.0	2.8	195
5-7 years complete	23.5	34.4	46.1	13.3	4.3	1.9	100.0	1.3	612
8-9 years complete	17.4	49.6	36.4	10.4	2.7	0.9	100.0	1.0	1,583
10-11 years complete	11.8	55.2	35.2	7.4	1.6	0.6	100.0	0.8	2,752
12 or more years complete	8.1	65.3	28.2	5.2	0.9	0.4	100.0	0.6	5,409
Religion									
Hindu	12.5	57.7	32.3	7.6	1.7	0.6	100.0	0.9	5,795
Muslim	11.2	56.9	34.1	6.7	1.8	0.5	100.0	0.6	3,171
Christian	11.1	59.3	31.4	7.3	1.4	0.6	100.0	0.6	1,666
Caste/tribe									
Scheduled caste	12.6	58.0	31.5	7.1	2.5	0.8	100.0	0.9	1,177
Scheduled tribe	15.0	53.4	34.0	8.0	4.4	0.3	100.0	0.2	175
Other backward class	11.8	57.8	32.7	7.5	1.4	0.5	100.0	0.8	6,223
Other	11.6	57.8	33.0	6.9	1.7	0.6	100.0	0.6	3,025
Don't know	(14.6)	(50.0)	(35.3)	(10.6)	(4.0)	(0.0)	100.0	(0.0)	34
Total	11.9	57.7	32.7	7.3	1.7	0.6	100.0	0.8	10,635

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes women belonging to other religions, who are not shown separately.

SBP = Systolic blood pressure; DBP = Diastolic blood pressure

¹A woman is classified as having hypertension if she has SBP≥140 mmHg or DBP≥90 mmHg at the time of the survey, or she is currently taking antihypertensive medication to control blood pressure. The term hypertension as used in this table is not meant to be a clinical diagnosis of the disease, but rather to provide an indication of the disease burden in the population at the time of the survey.

Table 92.2 Blood pressure status: Men

Among men age 15-49, prevalence of hypertension, percent distribution of blood pressure values, and percentage having normal blood pressure and taking medication to lower blood pressure, by background characteristics, Kerala, 2019-21

Background characteristic	Prevalence of hypertension ¹	Normal	Pre-hypertensive	Hypertensive			Total	Percentage with normal blood pressure and taking medicine to lower blood pressure	Number of men
		SBP <120 mmHg and DBP <80 mmHg	SBP 120-139 mmHg or DBP 80-89 mmHg	Stage 1: SBP 140-159 mmHg or DBP 90-99 mmHg	Stage 2: SBP 160-179 mmHg or DBP 100-109 mmHg	Stage 3: SBP ≥180 mmHg or DBP ≥110 mmHg			
Age									
15-19	3.3	66.6	30.6	2.6	0.0	0.2	100.0	0.5	206
20-24	6.3	45.1	49.1	3.5	1.3	0.9	100.0	0.6	170
25-29	16.8	31.2	52.4	15.0	1.5	0.0	100.0	0.0	138
30-34	15.9	14.6	69.4	10.8	4.4	0.8	100.0	0.0	147
35-39	22.2	19.8	58.9	18.1	3.2	0.0	100.0	0.0	186
40-44	31.7	13.1	57.2	24.2	4.7	0.8	100.0	0.0	176
45-49	30.6	15.5	56.3	22.0	4.6	1.5	100.0	0.0	199
Residence									
Urban	18.7	31.0	51.6	14.0	3.0	0.4	100.0	0.3	562
Rural	17.7	29.5	53.5	13.6	2.6	0.8	100.0	0.0	660
Schooling									
No schooling	(19.5)	(28.4)	(52.1)	(16.7)	(2.8)	(0.0)	100.0	(0.0)	28
<5 years complete	(45.5)	(25.2)	(33.6)	(28.9)	(9.1)	(3.2)	100.0	(0.0)	26
5-7 years complete	27.7	10.1	63.4	25.2	1.2	0.0	100.0	0.0	73
8-9 years complete	21.9	29.6	49.3	16.4	3.5	1.2	100.0	0.0	207
10-11 years complete	17.8	33.0	50.2	12.6	3.4	0.8	100.0	0.0	373
12 or more years complete	14.1	31.6	55.2	11.0	2.0	0.2	100.0	0.4	516
Religion									
Hindu	20.3	28.5	52.4	14.7	3.7	0.7	100.0	0.1	697
Muslim	14.1	32.0	55.2	11.1	1.1	0.7	100.0	0.3	316
Christian	17.3	33.2	49.5	14.5	2.4	0.4	100.0	0.0	209
Caste/tribe									
Scheduled caste	20.2	26.3	54.7	16.8	1.8	0.5	100.0	0.0	127
Scheduled tribe	31.7	18.4	53.0	21.7	5.3	1.6	100.0	0.0	29
Other backward class	17.8	31.1	52.4	13.3	2.5	0.6	100.0	0.3	725
Other	17.4	30.5	52.1	13.2	3.6	0.6	100.0	0.0	330
Total age 15-49	18.2	30.2	52.6	13.8	2.8	0.6	100.0	0.2	1,222
Age 50-54	43.1	22.3	45.4	25.9	4.3	2.0	100.0	0.8	165
Total age 15-54	21.1	29.3	51.8	15.2	3.0	0.8	100.0	0.2	1,387

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes men who don't know their caste/tribe, who are not shown separately. SBP = Systolic blood pressure; DBP = Diastolic blood pressure

¹ A man is classified as having hypertension if he has SBP≥140 mmHg or DBP≥90 mmHg at time of survey, or he is currently taking antihypertensive medication to control blood pressure. The term hypertension as used in this table is not meant to be a clinical diagnosis of the disease, but rather to provide an indication of the disease burden in the population at the time of the survey.

Table 93.1 Random blood glucose levels: Women

Among women age 15-49, percent distribution of random blood glucose values, by background characteristics, Kerala, 2019-21

Background characteristic	Random blood glucose values			Total	Percentage with normal blood glucose levels and taking medicine to lower their blood glucose level	Percentage with >140 mg/dl blood glucose levels or taking medicine to lower their blood glucose level	Number of women
	≤140 mg/dl (normal)	141-160 mg/dl (high)	>160 mg/dl (very high)				
Age							
15-19	97.7	1.7	0.6	100.0	0.2	2.5	1,395
20-24	96.7	2.1	1.2	100.0	0.3	3.6	1,366
25-29	95.6	2.9	1.5	100.0	0.8	5.2	1,256
30-34	91.0	4.7	4.3	100.0	0.8	9.8	1,457
35-39	89.0	6.0	5.1	100.0	0.8	11.8	1,670
40-44	82.1	7.8	10.0	100.0	1.8	19.6	1,617
45-49	76.4	9.2	14.4	100.0	2.2	25.8	1,658
Residence							
Urban	89.6	5.1	5.3	100.0	1.0	11.4	4,985
Rural	88.8	5.2	6.0	100.0	1.0	12.2	5,434
Schooling							
No schooling	85.0	5.1	9.9	100.0	0.4	15.5	81
<5 years complete	81.0	7.4	11.6	100.0	1.7	20.7	193
5-7 years complete	78.6	7.9	13.5	100.0	0.6	22.0	599
8-9 years complete	84.2	6.8	9.0	100.0	1.5	17.3	1,548
10-11 years complete	88.1	5.0	6.9	100.0	0.8	12.7	2,704
12 or more years complete	92.7	4.3	3.0	100.0	1.0	8.3	5,296
Religion							
Hindu	89.0	5.5	5.5	100.0	1.0	12.0	5,668
Muslim	89.3	4.8	5.9	100.0	1.0	11.6	3,108
Christian	89.4	4.6	5.9	100.0	1.1	11.7	1,642
Caste/tribe							
Scheduled caste	89.7	5.0	5.2	100.0	1.3	11.6	1,153
Scheduled tribe	89.2	7.1	3.7	100.0	1.0	11.8	173
Other backward class	89.1	5.2	5.7	100.0	1.0	11.8	6,107
Other	89.0	5.1	5.9	100.0	1.0	12.0	2,953
Don't know	(93.9)	(2.8)	(3.3)	(100.0)	(0.0)	(6.1)	34
Total	89.2	5.2	5.7	100.0	1.0	11.9	10,420

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes women belonging to other religions, who are not shown separately.

Table 93.2 Random blood glucose levels: Men

Among men age 15-49, percent distribution of random blood glucose values, by background characteristics, Kerala, 2019-21

Background characteristic	Random blood glucose values			Total	Percentage with normal blood glucose levels and taking medicine to lower their blood glucose level	Percentage with >140 mg/dl blood glucose levels or taking medicine to lower their blood glucose level	Number of men
	≤140 mg/dl (normal)	141-160 mg/dl (high)	>160 mg/dl (very high)				
Age							
15-19	97.9	1.0	1.0	100.0	0.5	2.5	204
20-24	98.5	0.7	0.8	100.0	0.6	2.1	168
25-29	95.3	1.0	3.7	100.0	0.9	5.6	134
30-34	91.1	3.1	5.8	100.0	1.0	9.8	145
35-39	82.6	8.2	9.1	100.0	3.1	20.5	179
40-44	80.4	7.5	12.1	100.0	4.5	24.1	175
45-49	74.2	10.7	15.2	100.0	2.8	28.7	194
Residence							
Urban	86.2	6.0	7.8	100.0	2.3	16.1	549
Rural	89.9	3.8	6.3	100.0	1.6	11.7	649
Schooling							
No schooling	(80.7)	(7.0)	(12.3)	100.0	(2.7)	(22.0)	28
<5 years complete	(71.0)	(11.1)	(17.9)	100.0	(4.5)	(33.5)	26
5-7 years complete	87.3	7.6	5.0	100.0	1.3	13.9	73
8-9 years complete	86.7	4.7	8.6	100.0	2.0	15.4	202
10-11 years complete	85.1	7.0	7.9	100.0	2.2	17.1	372
12 or more years complete	92.6	2.3	5.1	100.0	1.7	9.1	499
Religion							
Hindu	86.6	5.5	8.0	100.0	1.9	15.3	683
Muslim	91.0	3.5	5.4	100.0	2.2	11.1	308
Christian	89.5	4.5	6.0	100.0	1.9	12.4	208
Caste/tribe							
Scheduled caste	88.8	5.1	6.1	100.0	2.5	13.7	126
Scheduled tribe	93.5	1.7	4.8	100.0	8.9	15.4	29
Other backward class	87.6	5.2	7.3	100.0	1.9	14.3	707
Other	89.2	4.4	6.4	100.0	1.3	12.0	326
Total age 15-49	88.2	4.8	7.0	100.0	2.0	13.7	1,199
Age 50-54	71.9	11.9	16.2	100.0	10.2	38.3	161
Total age 15-54	86.3	5.6	8.1	100.0	2.9	16.6	1,360

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes men who don't know their caste/tribe, who are not shown separately.

Table 94 Tobacco and alcohol use by women and men

Percentage of women and men age 15-49 by their use of tobacco and alcohol, percent distribution of those who smoke cigarettes or *bidis* by number of cigarettes/*bidis* smoked in the 24 hours preceding the survey, and among those who drink alcohol, the percent distribution of the frequency of alcohol consumption, by residence, Kerala, 2019-21

Tobacco/alcohol use	Women			Men		
	Urban	Rural	Total	Urban	Rural	Total
Use of tobacco/alcohol						
Smokes cigarettes	0.0	0.0	0.0	13.8	17.1	15.6
Smokes <i>bidis</i>	0.0	0.0	0.0	0.5	2.4	1.6
Smokes cigars or pipe	0.0	0.0	0.0	1.8	3.3	2.6
Chews <i>gutkha</i> or <i>paan masala</i> with tobacco	0.0	0.0	0.0	0.2	1.0	0.6
Uses <i>khaini</i>	0.0	0.0	0.0	0.0	0.6	0.3
Chews <i>paan</i> with tobacco	0.1	0.4	0.2	0.6	2.1	1.4
Uses other chewing tobacco	0.0	0.3	0.1	0.0	0.5	0.3
Uses snuff	0.0	0.0	0.0	0.0	0.2	0.1
Uses other tobacco product	0.0	0.0	0.0	0.0	0.3	0.2
Uses any type of tobacco	0.1	0.7	0.4	14.5	20.5	17.8
Drinks alcohol	0.4	0.3	0.3	24.0	27.8	26.0
Number of respondents	5,277	5,692	10,969	599	700	1,299
Among those who smoke cigarettes, number of cigarettes smoked in the past 24 hours						
<5	nc	*	*	68.9	54.7	60.6
5-9	nc	*	*	16.8	28.2	23.5
10-14	nc	*	*	12.4	10.8	11.5
15-24	nc	*	*	1.6	2.2	1.9
Missing	nc	*	*	0.2	4.1	2.5
Total	nc	*	*	100.0	100.0	100.0
Number of cigarette smokers	0	2	2	83	120	202
Among those who smoke <i>bidis</i>, number of <i>bidis</i> smoked in the past 24 hours						
<5	nc	nc	nc	*	*	(32.1)
5-9	nc	nc	nc	*	*	(10.3)
10-14	nc	nc	nc	*	*	(39.8)
15-24	nc	nc	nc	*	*	(17.8)
25 or more	nc	nc	nc	*	*	(0.0)
Missing	nc	nc	nc	*	*	(0.0)
Total	nc	nc	nc	*	*	100.0
Number of <i>bidi</i> smokers	0	0	0	3	17	20
Among those who drink alcohol, frequency of drinking						
Almost every day	*	*	(0.0)	6.2	11.5	9.2
About once a week	*	*	(11.9)	41.1	40.3	40.6
Less than once a week	*	*	(88.1)	52.8	48.3	50.2
Don't know	*	*	(0.0)	0.0	0.0	0.0
Total	*	*	100.0	100.0	100.0	100.0
Number who drink alcohol	22	16	38	144	195	338

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

nc = No cases

Table 95 Methods of menstrual protection

Percentage of women age 15-24 who use various methods of menstrual protection and percentage using a hygienic method, according to background characteristics, Kerala, 2019-21

Background characteristic	Type of menstrual protection ¹					Percentage using a hygienic method ²	Number of women
	Cloth	Locally prepared napkins	Sanitary napkins	Tampons	Menstrual cup		
Age							
15-19	39.7	3.3	90.4	0.2	0.0	93.6	1,472
20-24	40.5	2.3	90.5	0.1	0.3	92.6	1,426
Residence							
Urban	35.4	2.2	92.7	0.1	0.2	94.8	1,384
Rural	44.4	3.3	88.3	0.2	0.1	91.5	1,514
Schooling							
8-9 years complete	38.6	3.0	88.3	0.7	0.0	92.0	214
10-11 years complete	41.2	3.3	89.3	0.0	0.1	92.3	774
12 or more years complete	39.7	2.6	91.2	0.1	0.2	93.6	1,897
Religion							
Hindu	40.1	2.4	90.2	0.2	0.1	92.6	1,516
Muslim	45.4	3.4	89.6	0.1	0.1	92.9	904
Christian	30.2	2.8	92.6	0.0	0.4	94.9	477
Caste/tribe							
Scheduled caste	50.8	1.6	86.3	0.0	0.2	88.1	312
Scheduled tribe	46.6	2.7	83.4	0.0	0.0	86.1	54
Other backward class	40.7	3.1	91.2	0.1	0.2	94.3	1,710
Other	34.8	2.6	90.7	0.2	0.0	92.8	809
Total	40.1	2.8	90.4	0.1	0.2	93.1	2,898

Note: Table is based on women age 15-24 who have ever menstruated. Total includes women with no schooling or less than 8 years of schooling, women belonging to other religions, and women who don't know their caste/tribe, who are not shown separately.

¹ Respondents may report multiple methods so the sum may exceed 100 percent

² Locally prepared napkins, sanitary napkins, tampons, and menstrual cup are considered to be hygienic methods of protection

Table 96 Employment and cash earnings of women and men

Percentage of women age 15-49 and men age 15-54 who were employed at any time in the 12 months preceding the survey and percent distribution of women and men employed in the 12 months preceding the survey by type of earnings and type of employment, according to age, Kerala, 2019-21

Age	Percentage employed in the past 12 months	Number of respondents	Percent distribution of employed respondents by type of earnings				Percent distribution of employed respondents by sector			Total	Number of employed respondents		
			Cash only	Cash and in-kind	In-kind only	Not paid	Missing	Total	Agriculture			Non-agriculture	
WOMEN													
15-19	0.9	204	*	*	*	*	*	*	*	100.0	*	100.0	2
20-24	15.9	228	(97.1)	(2.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(0.0)	100.0	36
25-29	22.7	193	(96.7)	(3.3)	(0.0)	(0.0)	(0.0)	(0.0)	(3.1)	100.0	(96.9)	100.0	44
30-34	29.0	257	97.6	0.0	2.4	0.0	0.0	0.0	4.7	100.0	95.3	100.0	74
35-39	32.9	281	96.6	1.6	0.0	1.8	0.0	0.0	15.0	100.0	85.0	100.0	93
40-44	37.3	238	94.5	4.4	0.6	0.6	0.0	0.0	23.8	100.0	76.2	100.0	89
45-49	35.9	282	97.8	1.7	0.0	0.5	0.0	0.0	20.5	100.0	79.5	100.0	101
Total	26.1	1,683	96.7	2.2	0.1	1.0	0.0	0.0	13.8	100.0	86.2	100.0	439
MEN													
15-19	8.1	215	*	*	*	*	*	*	*	100.0	*	100.0	17
20-24	53.3	182	98.6	1.4	0.0	0.0	0.0	0.0	5.7	100.0	94.3	100.0	97
25-29	84.5	150	98.7	1.3	0.0	0.0	0.0	0.0	3.8	100.0	96.2	100.0	127
30-34	97.7	159	99.2	0.8	0.0	0.0	0.0	0.0	5.1	100.0	94.9	100.0	155
35-39	96.8	197	95.7	3.9	0.2	0.3	0.0	0.0	12.0	100.0	88.0	100.0	190
40-44	96.2	187	96.7	2.5	0.0	0.8	0.0	0.0	8.9	100.0	91.1	100.0	180
45-49	97.4	210	93.4	4.2	0.9	1.5	0.0	0.0	12.6	100.0	87.4	100.0	205
Total	74.7	1,299	96.6	2.5	0.2	0.7	0.0	0.0	8.8	100.0	91.2	100.0	971
Age 50-54	94.9	174	96.4	2.2	0.9	0.5	0.0	0.0	15.9	100.0	84.1	100.0	165
Total age 15-54	77.1	1,473	96.6	2.5	0.3	0.7	0.0	0.0	9.8	100.0	90.2	100.0	1,136

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 97 Control over and magnitude of women's and men's cash earnings

Percentage of currently married women and men age 15-49 by who decide how women's and men's cash earnings are used and by the magnitude of women's cash earnings compared with their husband's cash earnings, according to background characteristics, Kerala, 2019-21

Background characteristic	Percentage of currently married women who report that they:				Percentage of currently married men who report that:				
	Alone or jointly with their husband decide how their own cash earnings are used	Alone or jointly with husband decide how their husband's cash earnings are used	Number of women whose husbands are employed for cash	Earn more or about the same as their husband	Number employed for cash and whose husbands are employed for cash	They alone or jointly with their wife decide how their wife's cash earnings are used	Number of men with wives who are employed for cash	Their wife alone or jointly with them decides how their own cash earnings are used	Number employed for cash and whose wives are employed for cash
Age									
20-29	(92.2)	63.4	148	(35.3)	28	*	11	(79.4)	45
30-39	92.7	70.3	321	32.2	97	67.4	63	69.4	259
40-49	89.0	69.5	252	32.8	88	76.6	93	66.6	352
Residence									
Urban	91.2	64.6	344	33.5	101	70.8	75	70.6	297
Rural	90.8	72.2	380	32.4	113	77.6	92	66.9	360
Schooling									
<5 years complete	*	*	12	*	5	*	6	(62.4)	25
5-7 years complete	(94.0)	(72.1)	42	*	21	*	15	62.5	62
8-9 years complete	(85.5)	65.0	122	(46.9)	28	(78.3)	33	66.4	135
10-11 years complete	90.4	70.2	202	28.9	56	(77.6)	45	71.6	214
12 or more years complete	92.8	68.9	341	34.7	100	74.7	65	71.3	204
Religion									
Hindu	92.1	70.3	404	32.1	154	73.2	124	65.5	371
Muslim	(86.5)	59.9	197	*	22	*	10	71.4	177
Christian	88.9	76.9	124	(37.3)	37	(75.7)	33	74.4	109
Caste/tribe									
Scheduled caste	(95.3)	67.4	68	(38.5)	28	(78.4)	27	68.0	72
Other backward class	88.3	68.8	441	31.9	124	72.0	80	69.7	385
Other ¹	94.8	69.0	201	30.3	54	75.0	53	67.5	179
Total	91.0	68.6	724	32.9	213	74.5	167	68.6	656

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women age 15-19, women with no schooling, and women who don't know their caste/tribe, who are not shown separately.

¹ Not belonging to scheduled caste, scheduled tribe, or other backward class

Table 98 Participation in decision making

Percent distribution of currently married women and men age 15-49 by who usually make decisions about specific issues, by residence, Kerala, 2019-21

Decision	According to women, person who usually makes the decision					According to men, person who usually makes the decision				
	Respondent and husband jointly		Mainly husband	Someone else	Other	Respondent and wife jointly		Mainly respondent	Someone else	Total
	Mainly respondent					Mainly wife			Mainly wife	
	URBAN									
Own health care	16.7	64.4	18.5	0.4	0.2	100.0	33.7	56.8	9.4	100.0
Major household purchases	10.8	68.2	18.1	2.7	0.2	100.0	18.1	75.7	5.5	100.0
Visits to her family or relatives	11.3	71.6	16.9	0.2	0.0	100.0	na	na	na	na
	RURAL									
Own health care	18.0	66.6	15.4	0.0	0.0	100.0	26.6	63.7	9.8	100.0
Major household purchases	15.4	67.8	14.6	2.1	0.1	100.0	14.3	81.0	4.7	100.0
Visits to her family or relatives	8.1	78.1	13.7	0.0	0.1	100.0	na	na	na	na
	TOTAL									
Own health care	17.3	65.5	16.9	0.2	0.1	100.0	29.8	60.6	9.6	100.0
Major household purchases	13.2	68.0	16.3	2.4	0.1	100.0	16.0	78.7	5.1	100.0
Visits to her family or relatives	9.6	74.9	15.3	0.1	0.1	100.0	na	na	na	na

na = Not applicable

Table 99 Decision making by background characteristics

Percentage of currently married women and currently married men age 15-49 who usually make specific decisions either by themselves or jointly with their spouse, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of women who usually make specific decisions alone or jointly with their husband				Percentage of men who usually make specific decisions alone or jointly with their wife						
	Own health care purchases	Making major household purchases	Visits to her family or relatives	Percentage who participate in all three decisions	Percentage who participate in none of the three decisions	Number of women	Own health care purchases	Making major household purchases	Percentage who participate in both decisions	Percentage who participate in neither decision	Number of men
Age											
20-24	76.2	69.5	79.3	56.5	10.9	101	*	*	*	*	2
25-29	76.0	80.9	80.3	66.6	9.1	169	(89.5)	(96.5)	(86.0)	(0.0)	44
30-39	86.5	82.9	85.8	72.7	4.7	519	92.3	94.3	89.2	2.6	263
40-49	82.8	81.7	85.9	69.6	5.1	467	89.2	94.6	85.1	1.4	370
Residence											
Urban	81.0	79.0	82.9	66.4	6.4	618	90.6	93.8	86.6	2.2	306
Rural	84.6	83.2	86.2	72.2	5.4	642	90.2	95.3	87.0	1.4	373
Schooling											
<5 years complete	*	*	*	*	*	19	(95.2)	(93.2)	(93.2)	(4.8)	25
5-7 years complete	82.3	76.2	78.5	65.2	9.6	88	84.1	91.2	79.1	3.9	64
8-9 years complete	80.1	79.9	81.9	67.8	7.5	199	92.4	98.0	91.1	0.7	138
10-11 years complete	83.2	84.2	83.1	70.1	4.4	306	92.4	95.2	87.6	0.0	229
12 or more years complete	83.5	81.2	87.1	70.1	5.3	637	88.9	94.5	86.0	2.6	206
Employment (past 12 months)											
Employed	87.1	84.2	88.3	73.1	2.4	365	90.2	94.5	86.6	1.8	662
Employed, for cash	87.3	84.6	88.6	73.7	2.4	360	90.4	94.7	86.7	1.6	656
Not employed	81.1	79.9	83.0	67.8	7.3	895	*	*	*	*	17
Number of living children											
0	80.6	77.3	85.5	64.3	5.9	102	89.3	95.0	86.0	1.7	164
1-2	84.0	81.9	85.0	70.1	5.4	920	90.7	94.0	86.4	1.7	419
3-4	79.6	80.2	82.3	68.8	7.8	232	90.8	97.5	90.4	2.1	94
Household structure¹											
Nuclear	82.5	82.5	85.7	69.9	5.4	518	88.7	93.3	85.0	3.0	252
Non-nuclear	83.0	80.2	83.8	68.9	6.3	742	91.4	95.5	87.9	1.0	427

Continued...

Table 99 Decision making by background characteristics—Continued

Percentage of currently married women and currently married men age 15-49 who usually make specific decisions either by themselves or jointly with their spouse, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage of women who usually make specific decisions alone or jointly with their husband				Percentage of men who usually make specific decisions alone or jointly with their wife						
	Own health care	Making major household purchases	Visits to her family or relatives	Percentage who participate in all three decisions	Percentage who participate in none of the three decisions	Number of women	Own health care	Making major household purchases	Percentage who participate in both decisions	Percentage who participate in neither decision	Number of men
Religion											
Hindu	84.4	82.7	86.4	71.1	4.6	672	90.2	94.6	86.2	1.3	386
Muslim	77.8	77.0	79.1	63.1	9.1	403	94.0	97.4	93.0	1.6	182
Christian	87.9	84.5	90.0	76.5	3.9	184	85.0	90.2	78.7	3.4	111
Caste/tribe											
Scheduled caste	84.5	79.4	87.1	74.1	6.2	107	93.2	90.9	85.8	1.7	75
Scheduled tribe	(90.7)	(85.0)	(78.7)	(71.5)	(7.8)	20	(97.1)	(90.1)	(87.1)	(0.0)	16
Other backward class	81.3	82.2	84.7	67.6	5.1	783	91.2	94.6	87.7	1.9	396
Other	85.4	78.9	83.9	71.5	7.5	349	86.6	96.4	84.7	1.7	186
Total	82.8	81.1	84.6	69.3	5.9	1,260	90.4	94.7	86.8	1.8	679

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men age 15-19, women/men with no schooling, women/men who are employed but not for cash, women/men with 5 or more living children, and women/men who don't know their caste/tribe, who are not shown separately.

¹ Nuclear households are households comprised of a married couple or a man or a woman living alone or with unmarried children (biological, adopted, or fostered) with or without unrelated individuals. The remaining households are non-nuclear households.

Table 100 Women's access to money and credit

Percentage of women age 15-49 who have access to money, who know of a microcredit programme, who have taken a loan from a microcredit programme, and who are allowed to go to three specified places alone, and among women who own a mobile phone, percentage who use it for financial transactions by background characteristics, Kerala, 2019-21

Background characteristic	Women's access to money						Women's knowledge and use of microcredit programmes				Percentage who use mobile phone for financial transactions	Number of women who have a mobile phone
	Percentage who have money that they can decide how to use	Percentage who have a bank or savings account that they themselves use	Percentage who know of a microcredit programme	Percentage who have taken a loan from a microcredit programme	Percentage of women allowed to go to three specified places alone ¹	Number of women	Percentage who use mobile phone for financial transactions	Number of women who have a mobile phone				
Age												
15-19	8.2	62.3	35.9	1.9	2.8	204	11.9	77				
20-24	41.6	73.5	52.9	1.0	10.5	228	35.0	208				
25-29	64.2	82.6	60.8	11.5	11.0	193	30.1	183				
30-39	62.0	83.8	62.6	13.4	17.3	538	21.9	521				
40-49	63.5	80.2	61.4	12.3	20.8	520	16.7	468				
Residence												
Urban	54.4	78.9	56.3	9.4	14.1	816	23.8	703				
Rural	52.5	78.2	58.6	10.2	15.8	867	21.5	754				
Schooling												
<5 years complete	(46.4)	(63.0)	(41.3)	(2.0)	(7.6)	24	*	16				
5-7 years complete	59.2	86.4	56.0	14.7	25.6	100	6.1	83				
8-9 years complete	47.0	72.3	55.6	13.3	15.9	243	8.8	199				
10-11 years complete	45.6	74.7	58.0	15.8	14.8	424	12.9	331				
12 or more years complete	58.4	81.7	58.8	5.7	13.8	881	32.0	820				
Employment (past 12 months)												
Employed	87.3	94.6	66.5	15.4	26.9	439	31.7	412				
Employed, for cash	87.5	94.6	66.5	15.3	27.1	434	31.6	407				
Not employed	41.5	72.8	54.3	7.8	10.7	1,244	19.0	1,045				
Number of living children												
0	30.0	71.0	47.6	4.2	10.2	477	29.4	320				
1-2	66.1	83.2	63.0	13.0	16.9	962	23.6	911				
3-4	49.2	75.5	54.8	7.7	16.5	239	9.1	221				

Continued...

Table 100 Women's access to money and credit—Continued

Percentage of women age 15-49 who have access to money, who know of a microcredit programme, who have taken a loan from a microcredit programme, and who are allowed to go to three specified places alone, and among women who own a mobile phone, percentage who use it for financial transactions by background characteristics, Kerala, 2019-21

Background characteristic	Women's access to money		Women's knowledge and use of microcredit programmes			Percentage of women allowed to go to three specified places alone ¹	Number of women	Percentage who use mobile phone for financial transactions	Number of women who have a mobile phone
	Percentage who have money that they can decide how to use	Percentage who have a bank or savings account that they themselves use	Percentage who know of a microcredit programme	Percentage who have taken a loan from a microcredit programme	Percentage of women allowed to go to three specified places alone ¹				
Household structure²									
Nuclear	50.7	78.6	55.7	9.9	15.0	788	20.3	657	
Non-nuclear	55.8	78.5	59.1	9.7	15.0	895	24.5	800	
Religion									
Hindu	57.1	81.8	62.3	12.3	16.4	920	27.7	794	
Muslim	45.9	71.8	48.4	6.3	12.1	505	10.8	430	
Christian	55.0	80.0	57.9	7.8	15.5	257	27.1	233	
Caste/tribe									
Scheduled caste	60.5	82.3	59.7	14.3	21.6	157	14.4	129	
Scheduled tribe	(47.6)	(83.2)	(55.7)	(16.1)	(10.0)	27	(21.0)	18	
Other backward class	51.3	77.7	59.2	9.5	14.8	1,051	21.2	904	
Other	56.1	78.7	52.6	8.3	13.3	447	28.2	406	
Total	53.4	78.5	57.5	9.8	15.0	1,683	22.6	1,457	

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women with no schooling, women who are employed but not for cash, women with 5 or more living children, and women who don't know their caste/tribe, who are not shown separately.

¹ To the market, to the health facility, and to places outside the village/community

² Nuclear households are households comprised of a married couple or a man or a woman living alone or with unmarried children (biological, adopted, or fostered) with or without unrelated individuals. The remaining households are non-nuclear households.

Table 101 Ownership of assets

Percentage of women and men age 15-49 who own a house or land either alone or jointly, percentage of women who own a mobile phone that they themselves use, and among women who own a mobile phone, percentage who can read SMS messages, according to background characteristics, Kerala, 2019-21

Background characteristic	Women			Among women who have a mobile phone, percentage who can read SMS messages			Men		
	Own a house alone or jointly	Own land alone or jointly	Have a mobile phone that they themselves use	Number of women	percentage who can read SMS messages	Number of women	Own a house alone or jointly	Own land alone or jointly	Number of men
Age									
15-19	7.5	3.9	37.8	204	100.0	77	26.7	13.2	215
20-24	13.8	6.9	91.1	228	97.7	208	28.2	13.2	182
25-29	23.0	15.0	94.9	193	97.6	183	53.8	32.6	150
30-34	22.2	10.2	97.7	257	94.2	251	53.5	22.0	159
35-39	26.1	11.9	96.1	281	85.9	270	64.4	33.8	197
40-44	35.5	15.9	90.2	238	77.6	215	71.6	26.2	187
45-49	37.9	15.2	89.8	282	71.8	254	77.0	35.0	210
Residence									
Urban	22.9	9.5	86.2	816	88.6	703	48.6	22.5	599
Rural	26.1	13.3	86.9	867	86.6	754	58.0	27.3	700
Religion									
Hindu	23.6	11.3	86.3	920	88.0	794	54.0	25.8	742
Muslim	25.4	12.6	85.0	505	84.5	430	55.6	25.8	337
Christian	26.5	9.9	90.5	257	91.5	233	49.5	21.4	221
Caste/tribe									
Scheduled caste	26.6	7.5	81.9	157	81.5	129	54.9	34.1	138
Scheduled tribe	(30.3)	(9.0)	(66.1)	27	(63.8)	18	56.5	27.4	30
Other backward class	22.5	10.2	86.0	1,051	88.1	904	52.0	21.2	767
Other	28.4	16.0	90.8	447	89.2	406	56.3	29.5	351

Continued...

Table 101. Ownership of assets—Continued

Percentage of women and men age 15-49 who own a house or land either alone or jointly, percentage of women who own a mobile phone that they themselves use, and among women who own a mobile phone, percentage who can read SMS messages, according to background characteristics, Kerala, 2019-21

Background characteristic	Women			Among women who have a mobile phone, percentage who can read SMS messages			Men		
	Own a house alone or jointly	Own land alone or jointly	Have a mobile phone that they themselves use	Number of women	percentage who can read SMS messages	Number of women	Own a house alone or jointly	Own land	Number of men
Schooling									
No schooling	* (45.7)	* (1.3)	* (68.3)	11	*	7	(70.9)	(41.8)	30
<5 years complete	38.6	7.5	83.1	24	*	16	(76.6)	(30.1)	26
5-7 years complete	23.5	11.8	81.9	100	42.1	83	79.8	28.8	79
8-9 years complete	25.9	12.2	78.1	243	65.5	199	59.6	29.4	212
10-11 years complete				424	90.9	331	50.5	22.0	399
12 or more years complete	22.0	11.8	93.1	881	98.3	820	47.8	24.0	553
Household structure¹									
Nuclear	26.9	10.3	83.4	788	85.1	657	53.1	22.1	633
Non-nuclear	22.4	12.5	89.4	895	89.6	800	54.2	27.9	666
Total age 15-49	24.5	11.5	86.6	1,683	87.5	1,457	53.6	25.1	1,299
Age 50-54	na	na	na	na	na	na	88.4	43.6	174
Total age 15-54	na	na	na	na	na	na	57.8	27.3	1,473

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men who don't know their caste/tribe, who are not shown separately.

na = Not applicable

¹ Nuclear households are households comprised of a married couple or a man or a woman living alone or with unmarried children (biological, adopted or fostered) with or without unrelated individuals. The remaining households are non-nuclear households.

Table 102 Gender role attitudes

Percentage of women and men age 15-49 with specific attitudes toward wife beating and refusal by a wife to have sex with her husband by reason, and percentage of men age 15-49 who agree that a man can behave in specific ways if his wife refuses to have sex with him, according to marital status, Kerala, 2019-21

Reason/behaviour	Ever-married		Never married		Total	
	Women	Men	Women	Men	Women	Men
Percentage who agree that a husband is justified in hitting or beating his wife if:						
She goes out without telling him	23.1	19.9	15.6	16.7	21.5	18.4
She neglects the house or children	34.6	33.7	26.0	33.2	32.7	33.5
She argues with him	23.8	20.9	15.5	19.6	22.0	20.3
She refuses to have sexual intercourse with him	13.1	10.4	8.1	9.1	12.0	9.8
She doesn't cook properly	13.2	11.3	8.3	8.5	12.1	10.0
He suspects her of being unfaithful	28.9	47.0	19.1	46.4	26.8	46.7
She shows disrespect for in-laws	39.7	40.7	30.1	38.9	37.6	39.9
Percentage who agree with at least one specified reason	55.3	64.4	41.7	60.8	52.4	62.7
Percentage who agree that a wife is justified in refusing to have sex with her husband when she:						
Knows her husband has a sexually transmitted disease	82.4	86.4	72.5	82.1	80.2	84.4
Knows her husband has sex with other women	86.8	86.6	75.5	79.7	84.4	83.4
Is tired or not in the mood	84.2	84.7	72.8	77.1	81.7	81.2
Percentage who agree with all three reasons	73.4	76.9	65.0	72.5	71.6	74.8
Percentage who agree with none of the three reasons	6.1	7.1	18.5	14.8	8.8	10.7
Percentage who agree that when a wife refuses to have sex with her husband, he has the right to:						
Get angry and reprimand her	na	24.6	na	20.3	na	22.6
Refuse to give her financial support	na	11.9	na	10.9	na	11.4
Use force to have sex even if she doesn't want to	na	9.2	na	8.4	na	8.8
Have sex with another woman	na	13.4	na	12.6	na	13.0
Percentage who agree with all four behaviours	na	4.1	na	3.6	na	3.9
Percentage who agree with none of the four behaviours	na	67.5	na	71.2	na	69.2
Number of respondents	1,317	695	366	604	1,683	1,299

na = Not applicable

Table 103 Gender role attitudes by background characteristics

Percentage of women and men age 15-49 who agree that a husband is justified in hitting or beating his wife for at least one specified reason, who agree that a wife is justified in refusing to have sex with her husband for all specified reasons, and percentage of men who agree that when a wife refuses to have sex with her husband, the husband does not have the right to any of the four specified behaviours, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage who agree that a husband is justified in hitting or beating his wife for at least one specified reason ¹		Percentage who agree that a wife is justified in refusing to have sex with her husband for all specified reasons ²		Percentage who agree that when a wife refuses to have sex with her husband, he does not have the right to any of the four specified behaviours ³		Number	
	Women	Men	Women	Men	Women	Men	Women	Men
Age								
15-19	44.2	60.5	64.0	70.7	57.9	57.9	204	215
20-24	49.3	57.3	72.3	72.5	63.9	63.9	228	182
25-29	51.9	59.1	71.1	76.1	67.7	67.7	193	150
30-39	53.5	61.0	71.7	75.1	63.3	63.3	538	355
40-49	55.9	69.4	74.3	77.4	67.8	67.8	520	397
Residence								
Urban	51.0	65.5	73.0	71.9	58.0	58.0	816	599
Rural	53.7	60.4	70.2	77.4	69.8	69.8	867	700
Schooling								
No schooling	*	(58.8)	*	(69.3)	(57.7)	(57.7)	11	30
<5 years complete	(60.2)	(75.9)	(56.0)	(77.6)	(65.3)	(65.3)	24	26
5-7 years complete	47.5	75.8	69.7	72.5	66.6	66.6	100	79
8-9 years complete	57.1	68.3	74.8	72.2	63.8	63.8	243	212
10-11 years complete	52.5	65.9	67.7	73.9	64.2	64.2	424	399
12 or more years complete								
Employment (past 12 months)								
Employed	51.7	64.8	72.9	76.2	66.4	66.4	439	971
Employed, for cash	51.6	64.7	73.2	76.2	66.5	66.5	434	962
Not employed	52.6	56.6	71.1	70.8	58.4	58.4	1,244	328
Marital status								
Never married	41.7	60.8	65.0	72.5	61.5	61.5	366	604
Currently married	55.7	64.1	73.3	77.0	67.1	67.1	1,260	679
Widowed/divorced/separated/deserted	46.6	*	76.5	*	*	*	57	16

Continued...

Table 103 Gender role attitudes by background characteristics—Continued

Percentage of women and men age 15-49 who agree that a husband is justified in hitting or beating his wife for at least one specified reason, who agree that a wife is justified in refusing to have sex with her husband for all specified reasons, and percentage of men who agree that when a wife refuses to have sex with her husband, the husband does not have the right to any of the four specified behaviours, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage who agree that a husband is justified in hitting or beating his wife for at least one specified reason ¹		Percentage who agree that a wife is justified in refusing to have sex with her husband for all specified reasons ²		Percentage who agree that when a wife refuses to have sex with her husband, he does not have the right to any of the four specified behaviours ³		Number
	Women	Men	Women	Men	Women	Men	
Number of living children							
0	45.1	61.8	65.4	72.7	62.8	62.8	477
1-2	54.8	63.7	72.6	78.4	66.5	66.5	962
3-4	57.8	66.0	80.1	75.5	67.4	67.4	239
Household structure⁴							
Nuclear	50.0	64.5	71.8	76.0	64.3	64.3	788
Non-nuclear	54.4	61.1	71.4	73.7	64.4	64.4	895
Religion							
Hindu	50.7	65.1	70.9	75.5	66.9	66.9	920
Muslim	55.0	57.7	71.6	74.3	61.9	61.9	505
Christian	53.1	62.5	73.9	73.4	59.7	59.7	257
Caste/tribe							
Scheduled caste	55.4	72.2	65.8	72.8	73.0	73.0	157
Scheduled tribe	(39.9)	61.1	(73.8)	71.3	76.3	76.3	27
Other backward class	50.5	62.5	74.3	76.4	63.9	63.9	1,051
Other	56.3	60.2	67.3	73.9	60.6	60.6	447
Total	52.4	62.7	71.6	74.8	64.4	64.4	1,683

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women/men who are employed but not for cash, women/men with 5 or more living children, and women/men who don't know their caste/tribe, who are not shown separately.

¹ Specified reasons are: she goes out without telling him, she neglects the house or children, she argues with him, she refuses to have sexual intercourse with him, she doesn't cook properly, he suspects she is unfaithful, and she shows disrespect for in-laws.

² Specified reasons are: knows husband has a sexually transmitted disease, knows husband has sex with other women, and is tired or not in the mood.

³ Specified behaviours are: gets angry and reprimands her, refuses to give her financial support, uses force to have sex, and has sex with another woman.

⁴ Nuclear households are households comprised of a married couple or a man or a woman living alone or with unmarried children (biological, adopted, or fostered) with or without unrelated individuals. The remaining households are non-nuclear households.

Table 104 Experience of physical and sexual violence

Percentage of women age 18-49 who have ever experienced physical or sexual violence; among those who have experienced physical violence, the person committing the violence, by marital status, Kerala, 2019-21

Type of violence/perpetrator	Ever-married	Never married	Total
Type of violence experienced			
Physical violence only	9.4	2.5	8.4
Sexual violence only	0.4	0.0	0.4
Physical and sexual violence	1.1	0.0	1.0
Physical or sexual violence	11.0	2.5	9.7
Number of women	993	185	1,178
Person committing physical violence¹			
Current husband	89.6	na	85.7
Former husband	0.5	na	0.4
Father/step-father	5.6	*	6.4
Mother/step-mother	6.3	*	9.7
Sister/brother	4.6	*	5.1
Other relative	0.9	*	0.9
Other	1.1	*	1.0
Number who experienced physical violence since age 15	105	5	110

Note: All women were asked about their experience of physical violence since age 15. Ever-married women were also asked about their experience of spousal physical violence at any age. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

¹ Women can report more than one person who committed the violence

Table 105 Experience of violence during pregnancy

Among women age 18-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Kerala, 2019-21

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
20-24	1.8	68
25-29	1.1	112
30-39	0.6	388
40-49	0.0	373
Residence		
Urban	0.5	455
Rural	0.5	487
Marital status		
Currently married	0.5	908
Widowed/divorced/separated/deserted	(0.0)	34
Number of living children		
0	(0.0)	30
1-2	0.5	729
3-4	0.7	178
Schooling		
5-7 years complete	0.7	68
8-9 years complete	0.0	166
10-11 years complete	0.5	252
12 or more years complete	0.7	439
Religion		
Hindu	0.4	510
Muslim	0.6	296
Christian	0.4	135
Caste/tribe		
Scheduled caste	0.0	83
Scheduled tribe	(0.0)	14
Other backward class	0.5	595
Other	0.6	248
Total	0.5	942

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes women age 18-19, women with 5 or more living children, women with no schooling or less than 5 years of schooling, and women who don't know their caste/tribe, who are not shown separately.

Table 106 Forms of spousal violence

Percentage of ever-married women age 18-49 who have experienced various forms of violence committed by their husband ever and in the 12 months preceding the survey, Kerala, 2019-21

Type of violence	Ever ¹	In the past 12 months		
		Often	Sometimes	Often or sometimes
Physical violence				
Any form of physical violence	9.5	1.4	5.1	6.5
Pushed her, shook her, or threw something at her	5.5	0.3	3.3	3.7
Twisted her arm or pulled her hair	3.7	0.4	3.0	3.4
Slapped her	7.2	0.9	3.6	4.5
Punched her with his fist or with something that could hurt her	1.8	0.4	0.9	1.3
Kicked her, dragged her, or beat her up	2.9	0.2	1.5	1.7
Tried to choke her or burn her on purpose	0.2	0.0	0.2	0.2
Threatened her or attacked her with a knife, gun, or any other weapon	0.8	0.0	0.3	0.3
Sexual violence				
Any form of sexual violence	1.5	0.1	0.9	1.1
Physically forced her to have sexual intercourse with him even when she did not want to	1.3	0.0	0.8	0.8
Physically forced her to perform any sexual acts she did not want to	0.1	0.0	0.1	0.1
Forced her with threats or in any other way to perform sexual acts she did not want to	0.7	0.1	0.5	0.6
Emotional violence				
Any form of emotional violence	6.9	0.9	5.4	6.3
Said or did something to humiliate her in front of others	3.3	0.4	2.4	2.8
Threatened to hurt or harm her or someone close to her	1.1	0.1	0.9	1.1
Insulted her or made her feel bad about herself	5.6	0.7	4.5	5.2
Any form of physical and/or sexual violence	9.9	1.5	5.3	6.9
Any form of physical and sexual violence	1.1	0.0	0.7	0.7
Any form of physical and/or sexual and/or emotional violence	13.1	2.0	8.1	10.1
Any form of physical and sexual and emotional violence	0.9	0.0	0.5	0.5
Any violence by women against their husband ²	0.9	0.1	0.5	0.6
Number of ever-married women	993	993	993	993

Note: Husband refers to the current husband for currently married women and the most recent husband for widowed, divorced, separated, or deserted women.

¹ Includes in the past 12 months

² Any violence by women against their husband when he was not already beating or physically hurting her

Table 107 Spousal violence by background characteristics

Percentage of ever-married women age 18-49 by whether they have ever experienced emotional, physical, or sexual violence committed by their husband, according to background characteristics, Kerala, 2019-21

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of women
Age						
20-24	5.5	5.5	1.3	5.5	5.5	76
25-29	5.7	5.7	1.8	6.7	10.7	127
30-39	5.8	9.8	1.0	10.2	12.7	403
40-49	8.6	11.2	2.1	11.5	15.7	384
Residence						
Urban	8.9	9.4	1.8	9.9	14.4	476
Rural	5.1	9.7	1.3	9.9	11.9	517
Schooling						
5-7 years complete	9.0	5.5	0.0	5.5	12.2	72
8-9 years complete	7.5	10.0	1.8	10.7	14.9	170
10-11 years complete	7.8	10.9	1.4	11.0	14.9	263
12 or more years complete	6.1	8.5	1.7	8.9	11.0	470
Employment (past 12 months)						
Not employed	5.0	7.2	0.8	7.5	10.3	692
Employed for cash	11.4	14.5	3.3	15.3	19.5	298
Marital status						
Currently married	6.2	8.5	1.6	8.9	12.0	951
Widowed	(9.0)	(12.4)	(0.0)	(12.4)	(15.9)	26
Marital duration¹						
Married only once	7.0	9.5	1.5	9.9	13.2	979
0-4 years	5.7	4.8	0.7	4.8	6.1	129
5-9 years	3.8	8.0	2.0	8.8	10.3	152
10 or more years	7.9	10.8	1.6	11.1	15.1	699
Number of living children						
0	7.1	9.5	0.0	9.5	12.7	81
1-2	7.9	9.6	1.7	10.2	13.9	729
3-4	2.7	9.3	1.4	9.3	10.1	178
Household structure²						
Nuclear	6.8	10.9	1.8	11.8	15.5	423
Non-nuclear	7.0	8.5	1.3	8.5	11.3	570
Religion						
Hindu	6.6	9.9	1.1	10.0	12.9	538
Muslim	7.9	8.2	3.0	9.1	13.1	312
Christian	6.0	11.3	0.0	11.3	14.0	143

Continued...

Table 107 Spousal violence by background characteristics—*Continued*

Percentage of ever-married women age 18-49 by whether they have ever experienced emotional, physical, or sexual violence committed by their husband, according to background characteristics, Kerala, 2019-21

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of women
Caste/tribe						
Scheduled caste	6.5	11.2	2.1	11.2	14.3	90
Scheduled tribe	(12.5)	(14.1)	(8.4)	(14.1)	(14.1)	14
Other backward class	7.0	9.7	1.4	10.1	13.4	627
Other	6.5	8.2	1.2	8.7	11.9	260
Respondent's father beat her mother						
Yes	17.1	30.3	3.8	31.8	38.1	83
No	6.0	7.5	1.3	7.8	10.7	907
Total	6.9	9.5	1.5	9.9	13.1	993

Note: Husband refers to the current husband for currently married women and the most recent husband for widowed, divorced, separated, or deserted women. Figures in parentheses are based on 25-49 unweighted cases. Total includes women age 18-19, women with no schooling or less than 5 years of schooling, women who are employed but not for cash, women who are divorced or separated or deserted, women who are married more than once, women with 5 or more children, women who don't know their caste/tribe, and women who don't know if their father ever beat their mother, who are not shown separately.

¹ Currently married women only

² Nuclear households are households comprised of a married couple or a man or a woman living alone or with unmarried children (biological, adopted, or fostered) with or without unrelated individuals. The remaining households are non-nuclear households.

Table 108 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 18-49 who have ever suffered emotional, physical, or sexual violence committed by their husband, according to his characteristics, marital characteristics, and selected empowerment indicators, Kerala, 2019-21

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of women
Husband's schooling						
<5 years complete	(9.2)	(17.6)	(5.6)	(20.8)	(23.9)	41
5-7 years complete	9.8	10.2	1.0	10.2	16.3	108
8-9 years complete	9.9	13.7	3.8	14.5	17.9	169
10-11 years complete	5.5	8.7	1.0	8.7	11.4	353
12 or more years complete	5.6	6.3	0.5	6.6	9.1	300
Husband's alcohol consumption						
Does not drink	4.5	7.0	1.0	7.5	9.8	756
Gets drunk sometimes	12.0	13.8	3.5	13.8	18.5	197
Gets drunk often	(28.5)	(37.1)	(0.6)	(37.1)	(51.3)	39
Spousal age difference¹						
Wife 1-4 years younger	6.5	8.3	2.5	8.9	11.3	260
Wife 5-9 years younger	5.0	7.2	0.7	7.2	10.3	474
Wife 10 or more years younger	9.5	12.0	1.8	12.7	17.1	187
Spousal schooling difference						
Husband has more schooling	4.6	6.6	0.6	7.0	8.5	195
Wife has more schooling	7.7	10.8	2.0	11.3	14.2	523
Both have equal schooling	7.1	9.4	1.3	9.4	14.5	269
Number of marital control behaviours displayed by husband²						
0	3.3	5.2	0.1	5.3	7.7	779
1-2	15.7	19.7	6.8	21.3	25.2	181
Number of decisions in which women participate³						
0	6.8	7.6	0.0	7.6	14.0	50
1-2	9.3	12.1	3.6	12.7	16.2	238
3	5.1	7.2	0.9	7.6	10.4	663
Number of reasons for which wife beating is justified⁴						
0	5.4	6.8	0.9	7.3	9.9	457
1-2	8.4	11.4	1.0	11.5	16.1	230
3-4	7.3	13.2	4.0	14.0	15.7	164
5-6	10.4	10.3	1.4	10.3	15.8	90
7	5.7	11.9	1.4	11.9	15.0	52

Continued...

Table 108 Spousal violence by husband's characteristics and empowerment indicators—*Continued*

Percentage of ever-married women age 18-49 who have ever suffered emotional, physical, or sexual violence committed by their husband, according to his characteristics, marital characteristics, and selected empowerment indicators, Kerala, 2019-21

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of women
Number of reasons given for refusing to have sexual intercourse with husband⁵						
0	2.6	8.7	0.0	8.7	8.7	54
1-2	6.8	9.8	1.7	10.5	14.3	201
3	7.2	9.5	1.6	9.8	13.1	738
Afraid of husband						
Most of the time	(23.6)	(33.4)	(0.6)	(33.4)	(43.0)	36
Sometimes	9.3	12.1	2.9	12.9	17.1	486
Never	3.2	5.1	0.2	5.1	6.8	472
Total	6.9	9.5	1.5	9.9	13.1	993

Note: Husband refers to the current husband for currently married women and the most recent husband for widowed, divorced, separated, or deserted women. Figures in parentheses are based on 25-49 unweighted cases. Total includes women whose husband has no schooling, women whose husband drinks alcohol but never gets drunk, women who are older than their husband or are the same age, women who have not attended school and whose husband has not attended school, women whose husband displayed 3-4 or 5-6 marital control behaviours, and women who are afraid of their husband most of the time, who are not shown separately.

¹ Currently married women only

² Behaviours include: Is jealous or angry if she talks to other men, frequently accuses her of being unfaithful, does not permit her to meet her female friends, tries to limit her contact with her family, insists on knowing where she is at all times, and does not trust her with any money

³ Currently married women only. Decisions included are decisions about own health care, major household purchases, and visits to her family or relatives.

⁴ Reasons given for which wife beating is justified include: she goes out without telling him, she neglects the house or children, she argues with him, she refuses to have sexual intercourse with him, she doesn't cook properly, he suspects she is unfaithful, and she shows disrespect for in-laws

⁵ Reasons given for refusing to have sexual intercourse with husband include: she knows her husband has a sexually transmitted disease, she knows her husband has sex with other women, and she is tired or not in the mood

Table 109 Injuries to women due to spousal violence

Percentage of ever-married women age 18-49 who have experienced physical or sexual spousal violence by types of injuries resulting from what their husband did to them, and whether they have experienced the violence ever and in the 12 months preceding the survey, Kerala, 2019-21

Type of spousal violence experienced	Percentage of women who have had:				Number of ever-married women
	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or minor burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	
Experienced physical violence					
Ever ¹	30.3	2.0	4.6	30.3	95
In the past 12 months	43.9	2.9	6.8	43.9	64
Experienced physical or sexual violence					
Ever ¹	29.2	1.9	4.4	29.2	98
In the past 12 months	41.5	2.7	6.4	41.5	68

Note: Husband refers to the current husband for currently married women and the most recent husband for widowed, divorced, separated, or deserted women.

¹ Includes violence in the past 12 months

Table 110 Help seeking

Among women age 18-49 who have ever experienced physical or sexual violence, percentage who never sought help and never told anyone, percentage who never sought help but told someone, and percentage who sought help, Kerala, 2019-21

Help seeking	Percentage
Never sought help and never told anyone	57.0
Never sought help but told someone	19.3
Sought help	23.8
Number of women who experienced violence	114

APPENDIX

ESTIMATES OF SAMPLING ERRORS

The estimates from a sample survey are affected by two types of errors: (1) non-sampling errors, and (2) sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the fifth National Family Health Survey (NFHS-5) to minimize this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in NFHS-5 is only one of many samples that could have been selected from the same population, using the same design and expected sample size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the NFHS-5 sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for NFHS-5 is programmed in SAS. This procedure uses the Taylor linearization method for variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as total fertility rates and child mortality rates.

The Taylor linearization method treats any proportion or mean as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y , and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[\frac{m_h}{m_h - 1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}, \text{ and } z_h = y_h - rx_h$$

- where h represents the stratum, which varies from 1 to H ,
 m_h is the total number of clusters selected in the h^{th} stratum,
 y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,
 x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
 f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers all but one cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the NFHS-5 sample for Kerala, there were 588 clusters. Hence, 588 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^k (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

- where r is the estimate computed from the full sample of 588 clusters,
 $r_{(i)}$ is the estimate computed from the reduced sample of 587 clusters (i^{th} cluster excluded), and
 k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is computed, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. The relative standard error (SE/R) and confidence limits ($R \pm 2SE$) for each estimate are also computed.

Sampling errors for NFHS-5 are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for Kerala as a whole and for the urban and rural areas of the state. For each variable, the type of statistic (mean, proportion, rate, or ratio) and the base population are given in Table A.1. Tables A.2-A.4 present the total, urban, and rural values of the statistic (R), their standard errors (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ($R \pm 2SE$) for each variable. The DEFT is considered undefined when the standard error for a simple random sample is zero (when the estimate is close to 0 or 1).

Table A.1 List of variables for sampling errors, Kerala, 2019-21

Variable	Estimate	Base population
HOUSEHOLDS		
Using an improved source of drinking water	Proportion	Households
Using an improved sanitation facility	Proportion	Households
Using iodized salt	Proportion	Households
Sex ratio (females per 1,000 males)	Ratio	<i>De facto</i> household population, all ages
WOMEN		
No schooling (Females age 6 years and above)	Proportion	<i>De facto</i> household population of females age 6 and above
Urban residence	Proportion	Women age 15-49
No schooling (Women age 15-49)	Proportion	Women age 15-49
Completed 10 or more years of schooling	Proportion	Women age 15-49
Never married, including married <i>gauna</i> not performed	Proportion	Women age 15-49
Currently married	Proportion	Women age 15-49
Married before age 18	Proportion	Women age 20-49
Currently using any contraceptive method	Proportion	Currently married women age 15-49
Currently using a modern contraceptive method	Proportion	Currently married women age 15-49
Currently using a traditional contraceptive method	Proportion	Currently married women age 15-49
Currently using pill	Proportion	Currently married women age 15-49
Currently using IUD/PPIUD	Proportion	Currently married women age 15-49
Currently using condom/ <i>Nirodh</i>	Proportion	Currently married women age 15-49
Currently using female sterilization	Proportion	Currently married women age 15-49
Using public health sector source of contraception	Proportion	Women age 15-49 currently using modern methods of contraception
Unmet need for family planning	Proportion	Currently married women age 15-49
Want no more children	Proportion	Currently married women age 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women age 15-49
Mother received four or more antenatal care (ANC) visits	Proportion	Women with at least one birth in last five years (last birth)
Took iron and folic acid (IFA) for 100 days or more	Proportion	Women with at least one birth in last five years (last birth)
Birth registration	Proportion	<i>De jure</i> children under age 5 years
Births delivered by a skilled provider	Proportion	Births in last 5 years
Institutional delivery	Proportion	Births in last 5 years
Postnatal check for mother within 2 days of birth	Proportion	Women with at least one birth in last five years (last birth)
Postnatal check for newborn within 2 days of birth	Proportion	Women with at least one birth in last five years (last birth)
Exclusive breastfeeding	Proportion	Children under age 6 months
Children with diarrhoea in the last two weeks	Proportion	Children under age 5 years
Treated with oral rehydration salt (ORS) packets	Proportion	Children under age 5 years with diarrhoea in last 2 weeks
Children with diarrhoea taken to a health provider	Proportion	Children under age 5 years with diarrhoea in last 2 weeks
Child received BCG vaccination	Proportion	Children age 12-23 months
Child received penta or DPT vaccination (3 doses)	Proportion	Children age 12-23 months
Child received polio vaccination (3 doses)	Proportion	Children age 12-23 months
Child received first dose of measles vaccine	Proportion	Children age 12-23 months
Child received penta or hepatitis B vaccination (3 doses)	Proportion	Children age 12-23 months
Child with all basic vaccinations	Proportion	Children age 12-23 months
Height-for-age, stunting (below -2SD)	Proportion	Children under age 5 years who were measured
Weight-for-height, wasting (below -2SD)	Proportion	Children under age 5 years who were measured
Weight-for-age, underweight (below -2SD)	Proportion	Children under age 5 years who were measured
Children with any anaemia	Proportion	Children age 6-59 months with an anaemia test
Women with any anaemia	Proportion	Women age 15-49 with an anaemia test
Body mass index (BMI) <18.5 kg/m ²	Proportion	Women age 15-49 who were measured
Body mass index (BMI) ≥25.0 kg/m ²	Proportion	Women age 15-49 who were measured
Waist-to-hip ratio ≥0.85	Proportion	Women age 15-49 who were measured
Have heard of HIV or AIDS	Proportion	Women age 15-49
Have comprehensive knowledge about HIV/AIDS	Proportion	Women age 15-49
Ever experienced physical or sexual violence	Proportion	Women age 15-49
Total fertility rate (last 3 years)	Rate	Women
Neonatal mortality	Rate	Births in last 5 years
Postneonatal mortality	Rate	Births in last 5 years
Infant mortality	Rate	Births in last 5 years
Child mortality	Rate	Births in last 5 years
Under-five mortality	Rate	Births in last 5 years
MEN		
No schooling (Males age 6 years and above)	Proportion	<i>De facto</i> household population of males age 6 and above
Urban residence	Proportion	Men age 15-49
No schooling (Men age 15-49)	Proportion	Men age 15-49
Completed 10 or more years of schooling	Proportion	Men age 15-49
Never married, including married <i>gauna</i> not performed	Proportion	Men age 15-49
Currently married	Proportion	Men age 15-49
Married before age 21	Proportion	Men age 25-49
Want no more children	Proportion	Currently married men age 15-49
Want to delay next birth at least 2 years	Proportion	Currently married men age 15-49
Men with any anaemia	Proportion	Men age 15-49 with an anaemia test
Body mass index (BMI) <18.5 kg/m ²	Proportion	Men age 15-49 who were measured
Body mass index (BMI) ≥25.0 kg/m ²	Proportion	Men age 15-49 who were measured
Waist-to-hip ratio ≥0.90	Proportion	Men age 15-49 who were measured
Have heard of HIV or AIDS	Proportion	Men age 15-49
Have comprehensive knowledge about HIV/AIDS	Proportion	Men age 15-49

Table A.2 Sampling errors: Total sample, Kerala, 2019-21

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Using an improved source of drinking water	0.949	0.003	12,330	12,330	1.415	0.003	0.943	0.954
Using an improved sanitation facility	0.985	0.002	12,330	12,330	1.517	0.002	0.981	0.988
Using iodized salt	0.993	0.001	12,300	12,302	1.579	0.001	0.991	0.996
Sex ratio (females per 1,000 males)	1,120.661	9.297	21,810	21,876	1.212	0.008	1,102.067	1,139.255
WOMEN								
No schooling (Females age 6 years and above)	0.044	0.002	22,635	22,823	1.437	0.045	0.040	0.048
Urban residence	0.481	0.007	10,969	10,969	1.442	0.014	0.467	0.495
No schooling (Women age 15-49)	0.008	0.001	10,969	10,969	1.202	0.131	0.006	0.010
Completed 10 or more years of schooling	0.770	0.006	10,969	10,969	1.390	0.007	0.759	0.781
Never married, including married <i>gauna</i> not performed	0.216	0.004	10,969	10,969	1.061	0.019	0.207	0.224
Currently married	0.744	0.005	10,969	10,969	1.112	0.006	0.735	0.753
Married before age 18	0.146	0.005	9,510	9,497	1.428	0.035	0.136	0.156
Currently using any contraceptive method	0.607	0.008	8,130	8,163	1.453	0.013	0.591	0.623
Currently using a modern contraceptive method	0.528	0.008	8,130	8,163	1.371	0.014	0.513	0.543
Currently using a traditional contraceptive method	0.079	0.005	8,130	8,163	1.710	0.065	0.069	0.089
Currently using pill	0.004	0.001	8,130	8,163	1.065	0.196	0.002	0.005
Currently using IUD/PPIUD	0.015	0.001	8,130	8,163	1.070	0.095	0.013	0.018
Currently using condom/ <i>Nirodh</i>	0.034	0.002	8,130	8,163	1.148	0.068	0.030	0.039
Currently using female sterilization	0.466	0.007	8,130	8,163	1.347	0.016	0.451	0.481
Using public health sector source of contraception	0.571	0.011	4,571	4,475	1.439	0.018	0.550	0.592
Unmet need for family planning	0.125	0.005	8,130	8,163	1.261	0.037	0.115	0.134
Want no more children	0.645	0.007	8,130	8,163	1.338	0.011	0.631	0.660
Want to delay next birth at least 2 years	0.097	0.004	8,130	8,163	1.358	0.046	0.088	0.106
Mother received four or more antenatal care (ANC) visits	0.786	0.011	2,360	2,374	1.361	0.015	0.763	0.809
Took iron and folic acid (IFA) for 100 days or more	0.800	0.011	2,360	2,374	1.291	0.013	0.778	0.821
Birth registration	0.990	0.002	2,741	2,767	1.041	0.002	0.985	0.994
Births delivered by a skilled provider	1.000	0.000	2,734	2,743	0.849	0.000	0.999	1.000
Institutional delivery	0.998	0.001	2,734	2,743	1.011	0.001	0.996	0.999
Postnatal check for mother within 2 days of birth	0.932	0.006	2,360	2,374	1.214	0.007	0.919	0.944
Postnatal check for newborn within 2 days of birth	0.912	0.007	2,360	2,374	1.205	0.008	0.898	0.926
Exclusive breastfeeding	0.555	0.036	243	232	1.106	0.065	0.483	0.627
Children with diarrhoea in the last two weeks	0.043	0.005	2,719	2,730	1.306	0.120	0.032	0.053
Treated with oral rehydration salt (ORS) packets	0.611	0.048	102	116	1.047	0.078	0.515	0.707
Children with diarrhoea taken to a health provider	0.869	0.032	102	116	1.015	0.037	0.805	0.933
Child received BCG vaccination	0.976	0.006	487	479	0.923	0.007	0.963	0.989
Child received penta or DPT vaccination (3 doses)	0.852	0.018	487	479	1.089	0.021	0.816	0.888
Child received polio vaccination (3 doses)	0.841	0.020	487	479	1.167	0.024	0.801	0.881
Child received first dose of measles vaccine	0.889	0.016	487	479	1.075	0.018	0.857	0.920
Child received penta or hepatitis B vaccination (3 doses)	0.830	0.019	487	479	1.095	0.023	0.792	0.869
Child with all basic vaccinations	0.778	0.022	487	479	1.154	0.029	0.734	0.823
Height-for-age, stunting (below -2SD)	0.234	0.010	2,521	2,526	1.170	0.044	0.214	0.254
Weight-for-height, wasting (below -2SD)	0.158	0.009	2,471	2,474	1.235	0.060	0.139	0.177
Weight-for-age, underweight (below -2SD)	0.197	0.009	2,566	2,581	1.143	0.047	0.178	0.215
Children with any anaemia	0.394	0.015	2,222	2,238	1.386	0.037	0.365	0.423
Women with any anaemia	0.363	0.007	10,440	10,412	1.546	0.020	0.349	0.378
Body mass index (BMI) <18.5 kg/m ²	0.101	0.004	10,263	10,237	1.259	0.037	0.093	0.108
Body mass index (BMI) ≥25.0 kg/m ²	0.381	0.006	10,263	10,237	1.347	0.017	0.368	0.394
Waist-to-hip ratio ≥0.85	0.706	0.009	10,245	10,217	1.950	0.012	0.688	0.724
Have heard of HIV or AIDS	0.992	0.002	1,659	1,683	1.159	0.002	0.987	0.997
Have comprehensive knowledge about HIV/AIDS	0.348	0.013	1,659	1,683	1.096	0.037	0.323	0.374
Ever experienced physical or sexual violence	0.097	0.011	1,178	1,178	1.241	0.111	0.075	0.118
Total fertility rate (last 3 years)	1.791	0.045	31,607	31,577	1.148	0.025	1.700	1.882
Neonatal mortality	3.427	1.127	2,745	2,755	1.019	0.329	1.173	5.680
Postneonatal mortality	0.994	0.632	2,764	2,783	1.065	0.636	0.000	2.259
Infant mortality	4.421	1.437	2,745	2,755	1.046	0.325	1.547	7.294
Child mortality	0.772	0.398	2,806	2,821	0.902	0.516	0.000	1.568
Under-five mortality	5.189	1.486	2,746	2,756	1.028	0.286	2.217	8.161
MEN								
No schooling (Males age 6 years and above)	0.021	0.002	20,054	20,104	1.447	0.073	0.018	0.024
Urban residence	0.461	0.018	1,294	1,299	1.321	0.040	0.425	0.498
No schooling (Men age 15-49)	0.023	0.006	1,294	1,299	1.330	0.240	0.012	0.034
Completed 10 or more years of schooling	0.732	0.014	1,294	1,299	1.129	0.019	0.705	0.760
Never married, including married <i>gauna</i> not performed	0.465	0.016	1,294	1,299	1.142	0.034	0.433	0.497
Currently married	0.523	0.015	1,294	1,299	1.095	0.029	0.493	0.553
Married before age 21	0.036	0.006	900	903	0.997	0.173	0.023	0.048
Want no more children	0.627	0.020	669	679	1.042	0.031	0.587	0.666
Want to delay next birth at least 2 years	0.083	0.012	669	679	1.162	0.149	0.058	0.108
Men with any anaemia	0.177	0.015	1,207	1,196	1.320	0.087	0.146	0.208
Body mass index (BMI) <18.5 kg/m ²	0.100	0.010	1,231	1,222	1.053	0.095	0.081	0.119
Body mass index (BMI) ≥25.0 kg/m ²	0.363	0.017	1,231	1,222	1.179	0.047	0.329	0.398
Waist-to-hip ratio ≥0.90	0.568	0.019	1,230	1,222	1.350	0.034	0.530	0.606
Have heard of HIV or AIDS	0.993	0.003	1,294	1,299	1.094	0.003	0.988	0.998
Have comprehensive knowledge about HIV/AIDS	0.452	0.021	1,294	1,299	1.551	0.048	0.409	0.495

Table A.3 Sampling errors: Urban sample, Kerala, 2019-21

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Using an improved source of drinking water	0.965	0.003	5,047	5,838	1.286	0.003	0.958	0.972
Using an improved sanitation facility	0.988	0.003	5,047	5,838	1.819	0.003	0.983	0.994
Using iodized salt	0.995	0.001	5,033	5,822	1.284	0.001	0.993	0.998
Sex ratio (females per 1,000 males)	1,137.940	14.326	8,992	10,386	1.169	0.013	1,109.287	1,166.592
WOMEN								
No schooling (Females age 6 years and above)	0.030	0.002	9,498	11,010	1.337	0.079	0.025	0.034
No schooling (Women age 15-49)	0.003	0.001	4,564	5,277	1.137	0.301	0.001	0.005
Completed 10 or more years of schooling	0.788	0.009	4,564	5,277	1.471	0.011	0.770	0.806
Never married, including married <i>gauna</i> not performed	0.219	0.006	4,564	5,277	0.974	0.027	0.207	0.231
Currently married	0.742	0.007	4,564	5,277	1.032	0.009	0.729	0.755
Married before age 18	0.128	0.007	3,964	4,563	1.326	0.055	0.114	0.142
Currently using any contraceptive method	0.614	0.013	3,393	3,916	1.534	0.021	0.589	0.640
Currently using a modern contraceptive method	0.506	0.012	3,393	3,916	1.374	0.023	0.483	0.530
Currently using a traditional contraceptive method	0.108	0.010	3,393	3,916	1.824	0.090	0.088	0.127
Currently using pill	0.005	0.001	3,393	3,916	1.002	0.256	0.002	0.007
Currently using IUD/PPIUD	0.016	0.002	3,393	3,916	1.056	0.142	0.011	0.021
Currently using condom/ <i>Nirodh</i>	0.040	0.004	3,393	3,916	1.090	0.092	0.032	0.047
Currently using female sterilization	0.436	0.012	3,393	3,916	1.353	0.026	0.413	0.459
Using public health sector source of contraception	0.513	0.017	1,775	2,052	1.390	0.032	0.480	0.546
Unmet need for family planning	0.130	0.007	3,393	3,916	1.267	0.056	0.115	0.145
Want no more children	0.632	0.011	3,393	3,916	1.319	0.017	0.610	0.654
Want to delay next birth at least 2 years	0.094	0.006	3,393	3,916	1.207	0.064	0.082	0.106
Mother received four or more antenatal care (ANC) visits	0.793	0.016	1,004	1,135	1.217	0.020	0.762	0.825
Took iron and folic acid (IFA) for 100 days or more	0.805	0.016	1,004	1,135	1.274	0.020	0.773	0.838
Birth registration	0.995	0.002	1,151	1,303	1.018	0.002	0.991	0.999
Births delivered by a skilled provider	0.999	0.001	1,163	1,318	0.858	0.001	0.998	1.001
Institutional delivery	0.997	0.001	1,163	1,318	0.862	0.001	0.995	1.000
Postnatal check for mother within 2 days of birth	0.931	0.009	1,004	1,135	1.058	0.009	0.914	0.948
Postnatal check for newborn within 2 days of birth	0.904	0.011	1,004	1,135	1.145	0.012	0.882	0.925
Exclusive breastfeeding	0.503	0.059	95	101	1.113	0.118	0.385	0.622
Children with diarrhoea in the last two weeks	0.042	0.008	1,159	1,313	1.245	0.181	0.027	0.057
Treated with oral rehydration salt (ORS) packets	0.659	0.072	42	55	1.031	0.109	0.515	0.803
Children with diarrhoea taken to a health provider	0.900	0.046	42	55	1.064	0.052	0.807	0.993
Child received BCG vaccination	0.982	0.009	204	230	0.944	0.009	0.965	1.000
Child received penta or DPT vaccination (3 doses)	0.861	0.027	204	230	1.092	0.031	0.807	0.915
Child received polio vaccination (3 doses)	0.858	0.029	204	230	1.133	0.033	0.801	0.915
Child received first dose of measles vaccine	0.870	0.026	204	230	1.080	0.030	0.819	0.922
Child received penta or hepatitis B vaccination (3 doses)	0.853	0.026	204	230	1.036	0.031	0.801	0.905
Child with all basic vaccinations	0.776	0.033	204	230	1.102	0.043	0.710	0.842
Height-for-age, stunting (below -2SD)	0.201	0.013	1,061	1,193	1.028	0.067	0.174	0.227
Weight-for-height, wasting (below -2SD)	0.160	0.013	1,039	1,170	1.102	0.084	0.133	0.187
Weight-for-age, underweight (below -2SD)	0.194	0.013	1,079	1,219	1.059	0.067	0.168	0.221
Children with any anaemia	0.389	0.024	929	1,060	1.463	0.063	0.340	0.438
Women with any anaemia	0.370	0.012	4,304	4,979	1.672	0.033	0.345	0.394
Body mass index (BMI) <18.5 kg/m ²	0.097	0.006	4,230	4,892	1.244	0.058	0.086	0.109
Body mass index (BMI) ≥25.0 kg/m ²	0.404	0.009	4,230	4,892	1.235	0.023	0.385	0.423
Waist-to-hip ratio ≥0.85	0.711	0.014	4,225	4,886	1.974	0.019	0.683	0.738
Have heard of HIV or AIDS	0.999	0.001	686	816	1.008	0.001	0.996	1.001
Have comprehensive knowledge about HIV/AIDS	0.355	0.019	686	816	1.045	0.054	0.317	0.393
Ever experienced physical or sexual violence	0.091	0.020	485	568	1.489	0.214	0.052	0.130
Total fertility rate (last 3 years)	1.824	0.068	13,132	15,157	1.095	0.037	1.689	1.959
Neonatal mortality	2.621	1.622	1,164	1,320	1.077	0.619	0.000	5.865
Postneonatal mortality	0.903	0.904	1,169	1,329	1.027	1.001	0.000	2.711
Infant mortality	3.524	1.856	1,164	1,320	1.068	0.527	0.000	7.235
Child mortality	0.345	0.345	1,182	1,348	na	1.001	0.000	1.035
Under-five mortality	3.867	1.885	1,164	1,320	1.068	0.487	0.097	7.637
MEN								
No schooling (Males age 6 years and above)	0.013	0.002	8,269	9,566	1.148	0.122	0.010	0.017
No schooling (Men age 15-49)	0.015	0.006	496	599	1.064	0.388	0.003	0.027
Completed 10 or more years of schooling	0.768	0.021	496	599	1.100	0.027	0.727	0.810
Never married, including married <i>gauna</i> not performed	0.480	0.026	496	599	1.170	0.055	0.428	0.533
Currently married	0.511	0.027	496	599	1.182	0.052	0.458	0.564
Married before age 21	0.026	0.009	342	414	1.014	0.333	0.009	0.044
Want no more children	0.617	0.033	252	306	1.065	0.053	0.551	0.682
Want to delay next birth at least 2 years	0.071	0.016	252	306	0.986	0.225	0.039	0.103
Men with any anaemia	0.194	0.028	452	547	1.447	0.143	0.138	0.249
Body mass index (BMI) <18.5 kg/m ²	0.069	0.013	468	564	1.061	0.191	0.043	0.095
Body mass index (BMI) ≥25.0 kg/m ²	0.401	0.027	468	564	1.131	0.067	0.347	0.454
Waist-to-hip ratio ≥0.90	0.572	0.033	468	564	1.458	0.059	0.505	0.638
Have heard of HIV or AIDS	0.996	0.003	496	599	1.049	0.003	0.989	1.002
Have comprehensive knowledge about HIV/AIDS	0.439	0.033	496	599	1.498	0.076	0.372	0.506

Table A.4 Sampling errors: Rural sample, Kerala, 2019-21

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Using an improved source of drinking water	0.934	0.004	7,283	6,492	1.523	0.005	0.925	0.943
Using an improved sanitation facility	0.981	0.002	7,283	6,492	1.277	0.002	0.977	0.985
Using iodized salt	0.992	0.002	7,267	6,480	1.769	0.002	0.988	0.995
Sex ratio (females per 1,000 males)	1,105.044	12.032	12,818	11,491	1.230	0.011	1,080.98	1,129.108
WOMEN								
No schooling (Females age 6 years and above)	0.057	0.003	13,137	11,813	1.541	0.054	0.051	0.064
No schooling (Women age 15-49)	0.012	0.002	6,405	5,692	1.270	0.146	0.008	0.015
Completed 10 or more years of schooling	0.753	0.007	6,405	5,692	1.294	0.009	0.739	0.767
Never married, including married <i>gauna</i> not performed	0.213	0.006	6,405	5,692	1.140	0.027	0.201	0.224
Currently married	0.746	0.006	6,405	5,692	1.182	0.009	0.733	0.759
Married before age 18	0.163	0.008	5,546	4,933	1.514	0.046	0.148	0.178
Currently using any contraceptive method	0.601	0.009	4,737	4,247	1.323	0.016	0.582	0.619
Currently using a modern contraceptive method	0.548	0.010	4,737	4,247	1.354	0.018	0.529	0.568
Currently using a traditional contraceptive method	0.052	0.004	4,737	4,247	1.271	0.079	0.044	0.060
Currently using pill	0.003	0.001	4,737	4,247	1.112	0.304	0.001	0.005
Currently using IUD/PPIUD	0.015	0.002	4,737	4,247	1.063	0.126	0.011	0.019
Currently using condom/ <i>Nirodh</i>	0.029	0.003	4,737	4,247	1.186	0.100	0.023	0.035
Currently using female sterilization	0.494	0.010	4,737	4,247	1.339	0.020	0.475	0.514
Using public health sector source of contraception	0.620	0.014	2,796	2,423	1.481	0.022	0.592	0.647
Unmet need for family planning	0.120	0.006	4,737	4,247	1.227	0.048	0.108	0.131
Want no more children	0.657	0.009	4,737	4,247	1.341	0.014	0.639	0.676
Want to delay next birth at least 2 years	0.099	0.006	4,737	4,247	1.491	0.065	0.086	0.112
Mother received four or more antenatal care (ANC) visits	0.780	0.017	1,356	1,239	1.493	0.021	0.747	0.813
Took iron and folic acid (IFA) for 100 days or more	0.795	0.014	1,356	1,239	1.290	0.018	0.767	0.823
Birth registration	0.985	0.003	1,590	1,464	1.088	0.004	0.978	0.992
Births delivered by a skilled provider	1.000	0.000	1,571	1,425	0.761	0.000	0.999	1.000
Institutional delivery	0.998	0.001	1,571	1,425	1.163	0.001	0.995	1.001
Postnatal check for mother within 2 days of birth	0.933	0.009	1,356	1,239	1.358	0.010	0.914	0.951
Postnatal check for newborn within 2 days of birth	0.919	0.009	1,356	1,239	1.251	0.010	0.901	0.938
Exclusive breastfeeding	0.595	0.043	148	131	1.062	0.072	0.509	0.681
Children with diarrhoea in the last two weeks	0.043	0.007	1,560	1,417	1.351	0.160	0.029	0.057
Treated with oral rehydration salt (ORS) packets	0.568	0.062	60	61	1.031	0.109	0.445	0.691
Children with diarrhoea taken to a health provider	0.841	0.042	60	61	0.951	0.050	0.757	0.925
Child received BCG vaccination	0.970	0.009	283	249	0.920	0.010	0.951	0.989
Child received penta or DPT vaccination (3 doses)	0.843	0.024	283	249	1.078	0.029	0.795	0.892
Child received polio vaccination (3 doses)	0.825	0.028	283	249	1.180	0.034	0.769	0.880
Child received first dose of measles vaccine	0.905	0.019	283	249	1.037	0.021	0.867	0.944
Child received penta or hepatitis B vaccination (3 doses)	0.809	0.028	283	249	1.145	0.035	0.753	0.866
Child with all basic vaccinations	0.780	0.030	283	249	1.195	0.039	0.720	0.841
Height-for-age, stunting (below -2SD)	0.264	0.015	1,460	1,332	1.268	0.056	0.235	0.294
Weight-for-height, wasting (below -2SD)	0.155	0.013	1,432	1,304	1.355	0.086	0.128	0.182
Weight-for-age, underweight (below -2SD)	0.199	0.013	1,487	1,362	1.213	0.065	0.173	0.225
Children with any anaemia	0.398	0.017	1,293	1,178	1.260	0.044	0.364	0.433
Women with any anaemia	0.358	0.008	6,136	5,433	1.343	0.023	0.341	0.374
Body mass index (BMI) <18.5 kg/m ²	0.104	0.005	6,033	5,345	1.261	0.048	0.094	0.114
Body mass index (BMI) ≥25.0 kg/m ²	0.360	0.009	6,033	5,345	1.448	0.025	0.342	0.378
Waist-to-hip ratio ≥0.85	0.702	0.011	6,020	5,331	1.889	0.016	0.679	0.724
Have heard of HIV or AIDS	0.987	0.005	973	867	1.242	0.005	0.977	0.996
Have comprehensive knowledge about HIV/AIDS	0.342	0.017	973	867	1.132	0.050	0.308	0.377
Ever experienced physical or sexual violence	0.102	0.010	693	610	0.856	0.097	0.082	0.121
Total fertility rate (last 3 years)	1.759	0.061	18,475	16,420	1.187	0.035	1.636	1.881
Neonatal mortality	4.166	1.565	1,581	1,435	0.982	0.376	1.035	7.296
Postneonatal mortality	1.078	0.889	1,595	1,454	1.096	0.825	0.000	2.856
Infant mortality	5.243	2.167	1,581	1,435	1.052	0.413	0.909	9.578
Child mortality	1.149	0.687	1,624	1,473	0.956	0.598	0.000	2.523
Under-five mortality	6.386	2.262	1,582	1,436	1.030	0.354	1.863	10.910
MEN								
No schooling (Males age 6 years and above)	0.028	0.003	11,785	10,539	1.628	0.090	0.023	0.033
No schooling (Men age 15-49)	0.030	0.009	798	700	1.486	0.297	0.012	0.048
Completed 10 or more years of schooling	0.702	0.018	798	700	1.105	0.026	0.666	0.738
Never married, including married <i>gauna</i> not performed	0.452	0.019	798	700	1.066	0.042	0.415	0.490
Currently married	0.533	0.017	798	700	0.940	0.031	0.500	0.566
Married before age 21	0.043	0.008	558	489	0.983	0.195	0.026	0.060
Want no more children	0.634	0.023	417	373	0.989	0.037	0.588	0.681
Want to delay next birth at least 2 years	0.093	0.018	417	373	1.289	0.198	0.056	0.130
Men with any anaemia	0.163	0.016	755	649	1.102	0.098	0.131	0.195
Body mass index (BMI) <18.5 kg/m ²	0.127	0.013	763	658	1.060	0.105	0.101	0.154
Body mass index (BMI) ≥25.0 kg/m ²	0.332	0.022	763	658	1.218	0.067	0.287	0.376
Waist-to-hip ratio ≥0.90	0.565	0.021	762	658	1.165	0.037	0.523	0.607
Have heard of HIV or AIDS	0.991	0.004	798	700	1.140	0.004	0.983	0.999
Have comprehensive knowledge about HIV/AIDS	0.464	0.028	798	700	1.558	0.059	0.409	0.519

na = Not applicable



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