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Ministry of Health and Family Welfare
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A Profile of Youth in India

National Family Health Survey (NFHS-3) India 2005-06

International Institute for Population Sciences
Deonar, Mumbai – 400 088

NATIONAL FAMILY HEALTH SURVEY (NFHS-3)
INDIA
2005-06

A PROFILE OF YOUTH IN INDIA

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About NFHS-3

The 2005-06 National Family Health Survey (NFHS-3) is the third in the NFHS series of surveys. The first NFHS was conducted in 1992-93 and the second (NFHS-2) was conducted in 1998-99. All three NFHS surveys were conducted under the stewardship of the Ministry of Health and Family Welfare (MOHFW), Government of India. The MOHFW designated the International Institute for Population Sciences (IIPS), Mumbai, as the nodal agency for the surveys. Funding for NFHS-3 was provided by the United States Agency for International Development (USAID), the United Kingdom Department for International Development (DFID), the Bill and Melinda Gates Foundation, UNICEF, UNFPA, and the Government of India. Technical assistance for NFHS-3 was provided by ICF Macro, Calverton, Maryland, USA. Assistance for the HIV component of the survey was provided by the National AIDS Control Organization (NACO) and the National AIDS Research Institute (NARI), Pune.

The survey provides trend data on key indicators of family welfare, maternal and child health, and nutrition, and includes information on several new topics such as use of the Integrated Child Development Services (ICDS) programme, HIV prevalence, attitudes toward family life education for girls and boys, men's involvement in maternal care, high-risk sexual behaviour, and health insurance coverage. NFHS-3 collected information from a nationally representative sample of 124,385 women age 15-49 and 74,369 men age 15-54 in 109,041 households.

This report presents key findings on youth in India. More information about the definitions of indicators included in this report is contained in Volume I of the NFHS-3 National Report, and the questionnaires and details of the sampling procedure for NFHS-3 are contained in Volume II of the NFHS-3 National Report (available at www.nfhsindia.org).

EXECUTIVE SUMMARY

This report uses data from the 2005-06 National Family Health Survey (NFHS-3) to provide a profile of youth in India—who they are, what they know, what they think, how they behave, and what their health and nutritional status is—that is relevant for population, health, and nutrition programmes and for policy makers. Youth are defined as women and men age 15-24. All analyses in this report provide information separately for women and men, and most also do so by age (15-19 and 20-24) and marital status, in order to better highlight the different needs of these groups. Data on state-level variation and by slum and non-slum residence for eight cities are also provided throughout the report. Comparisons of indicators for youth with those for the older cohort age 25-49 are provided when relevant throughout the report. Key findings at the national level are summarized below.

WHO THEY ARE

- ***Many youth are illiterate or have very low educational attainment***
  - Thirty-one percent of young women and 14 percent of young men are illiterate. However, literacy is much higher among the youngest youth age 15 years (77% among women and 92% percent among men) than among youth only a decade older (63% among women and 84% among men).
  - Despite improvements over time, educational attainment remains very low even among youth: only 29 percent of young women and 38 percent of young men have completed 10 or more years of education.
  - Urban-rural differentials are much wider for women than men in literacy and educational attainment and the gender gap is also much greater in rural than in urban areas.
  - Only 41 percent of adolescents age 15-17 were attending school in the school year 2005-06, suggesting a very high school dropout rate. School attendance rates for youth age 15-17 years increase sharply with household wealth. The gender gap is also much narrower in wealthier households than in poorer households.

- ***Most youth are exposed to some form of media***
  - Seventy percent of women and 88 percent of men age 15-24 have at least weekly exposure to television, radio, or newspapers/magazines or monthly exposure to the cinema. Media exposure is much lower in rural than in urban areas.
  - The most common form of media to which youth are exposed is television.
  - Women are much less likely than men to be exposed to each type of media. Women with no education and women in rural areas have particularly low levels of regular media exposure.

- ***Female youth are more likely than male youth to belong to the lowest wealth quintile and less likely to be in the higher wealth quintiles***
  - Female youth, on average, live in poorer households than male youth.

- ***The majority of unmarried youth live in nuclear households, whereas the majority of married youth live in non-nuclear households***

- ***Many youth are economically active***
  - Thirty-four percent of women and 67 percent of men age 15-24 were employed at any time in the 12 months preceding the survey, with the vast majority being currently employed.
  - Among men, the proportion employed increases sharply with age from 33 percent among those age 15 to 92 percent among those age 24; among women, by contrast, employment varies little with age.
  - Employment is higher among rural than among urban youth and is much lower among youth with 10 or more years of education than among those with no education. Almost all men with no education are employed.
  - The majority of employed women are agricultural workers; however, there is greater diversity in male employment.
  - Less than two-thirds of employed women (64%) earn cash for their work, compared with 88 percent of employed men.

- ***Many youth are married***
  - Half of women and almost one in five men age 15-24 are currently married.
  - Nineteen percent of women age 15-17 and 7 percent of men age 15-20 are married.
  - About 2 percent of youth are married but their *gauna* has yet to be performed and a very small proportion (1% of women and 0.3% of men) have experienced a marital disruption.

- ***Many youth are heading households***
  - One percent of women and 8 percent of men age 15-24 are household heads. Among currently married men age 15-24, 29 percent are heading their own households.
  - Youth in households headed by youth are poorer than youth from households headed by someone who is older.

WHAT THEY KNOW

- ***Most youth lack basic knowledge of women's menstrual cycle***
  - A large proportion of youth, both women and men, are not aware that a woman is fertile only during specific days in her menstrual cycle. Only 5 percent of women age 15-19 and 14 percent age 20-24 know that a woman is fertile only during the middle of her menstrual cycle. An even lower proportion of men have correct knowledge of a woman's fertile period.

- *Messages about family planning are not reaching all youth*
  - Only 65 percent of women and 84 percent of men have heard or seen a family planning message on TV, radio, wall paintings, or in newspapers/magazines.

- *Many youth have not heard of available modern contraceptive spacing methods*
  - Ninety-three percent of women know of female sterilization, but only 83 percent know about pills and 71 percent each know about IUDs and condoms.
  - Ninety-three percent of men know about condoms, but only 78 percent know about pills, and 37 percent know about the IUD.
  - Only 8 percent of women and 15 percent of men know about emergency contraception.

- *A majority of youth lack comprehensive knowledge of HIV/AIDS*
  - About two-thirds of women and 88 percent of men have heard of AIDS
  - Three out of four men know that the risk of HIV/AIDS can be reduced by condom use and by limiting sex to one uninfected partner; however, less than half of women know about these means of HIV/AIDS prevention.
  - Only 20 percent of women and 36 percent of men have comprehensive knowledge about HIV/AIDS, i.e., they have correct knowledge of all the ways of transmission and prevention of the infection.
  - In many states, less than one-half of women have heard of AIDS.

WHAT THEY THINK

- *Most youth desire a small family*
  - The desire for a small family of two or fewer children is more common among youth than among older cohorts. Over one in every ten youth desire only one child, and two-thirds want only two children; among the never married, more than four out of five want two or fewer children.
  - Like many Indians, youth in India also show a preference for sons. Among women with two children, 75 percent with two sons want no more children, compared with 32 percent with two daughters.

- *Most young men have a positive attitude toward contraception, but some are misinformed about it*
  - Only one-fifth of men think that contraception is women's business and that a man should not have to worry about it and only 15 percent of men believe that women who use contraception may become promiscuous.
  - However, more than one-third of men do not know that a woman who is breastfeeding can become pregnant and only about two-thirds know that if a male condom is used properly, it can protect against pregnancy most of the time.

- *A majority of youth think that HIV/AIDS education should be part of the school curriculum*
  - Most young men and women believe that information on HIV/AIDS should be part of the school curriculum.
  - Two-thirds of men and less than half of women say that both boys and girls should be taught about sex and sexual behaviour in school.

- *A higher proportion of youth have accepting attitudes toward persons living with HIV/AIDS than persons age 25-49*

- *Youth attitudes toward gender roles are, in general, no more egalitarian than the attitudes of the older cohort age 25-49*
  - A majority of young women and men agree that it is justified for a husband to beat his wife under specific circumstances. Male youth are somewhat more likely than older men to agree with wife beating, irrespective of whether they are currently married or unmarried.
  - However, a majority of youth, somewhat more than persons who are older, appear to have attitudes that reject norms that do not give women any control over when to have sex with their husband.

HOW THEY BEHAVE

- *Early childbearing defines India's fertility pattern*
  - By the time a woman in India completes the period of youth, she already has, on average, 1.5 children.
  - Thirty-nine percent of female youth either have a child or are currently pregnant.
  - Youth fertility accounts for more than half of India's total fertility.

- *Both traditional and modern methods of contraception are popular among youth*
  - More than one-fourth (28%) of married women age 15-24 use a method of contraception.
  - Contraceptive use increased between NFHS-2 and NFHS-3 by more than one percentage point per annum.
  - Female sterilization is the most preferred method among older youth age 20-24: 1 in every 8 married women age 20-24 is sterilized. By contrast, among married adolescents, the most preferred methods are rhythm (4%), condom (3%), and withdrawal and pill (2% each); 1 percent of married adolescents are sterilized.
  - Among older married youth, 7 percent of women are using a traditional method, 6 percent are using condoms, and 4 percent are using pills.
  - Thus, despite great ignorance about a woman's menstrual cycle, one-fourth of contraceptive use by youth is accounted for by traditional methods, with the rhythm method dominating this use.

- ***The pattern of contraceptive use by youth reveals son preference***
  - Among women with two children, 58 percent of women with two sons and 50 percent with one son and one daughter use a method of family planning, compared with 31 percent of women with no sons.
  - Female sterilization is more likely to be adopted by women who have one or more sons.

- ***Youth have a large unmet need for family planning***
  - About one-fourth of married teenagers and one-fifth of married women age 20-24 have unmet need for family planning.
  - There has been only a small decline in unmet need for family planning since NFHS-2.
  - Unmet need is particularly high in some states that have both high fertility and low contraceptive use among youth; this suggests that many youth may be having more births than they want because their specific needs are not being met by family planning programmes.

- ***Early marriage leads to early initiation of sexual activity among young women***
  - Among all youth, 51 percent of women and 27 percent of men have ever had sexual intercourse; however, among never married youth, 12 percent of men and 1 percent of women report ever having had sexual intercourse.
  - Ten percent of young women and 2 percent of young men had sexual intercourse before they were 15 years of age.

- ***There is evidence of higher-risk sex among male youth unprotected by condom use***
  - Among youth who have ever had sexual intercourse, men on average have had 1.8 partners and women have had slightly more than one partner.
  - Among the 22 percent of men who had sexual intercourse in the 12 months prior to the survey, a little more than one-quarter had higher-risk intercourse, i.e., they had intercourse with a partner who was neither a spouse nor lived with them. Among men who had higher-risk sexual intercourse, more than one-third used a condom at last higher-risk intercourse.

- ***Tobacco use and alcohol consumption by youth are matters of concern***
  - Forty percent of men use tobacco in some form, including one in five who smoke cigarettes or *bidis* and 30 percent who consume *pan masala, gutkha,* or other tobacco products. Five percent of female youth report tobacco use, mainly in the form of chewing tobacco.
  - About two out of five men who smoke cigarettes or *bidis*, smoke at least five in a 24-hour period.
  - One-fifth of young men and 1 percent of young women age 15-24 consume alcohol. About one in four men who consume alcohol do so at least once a week.
  - Tobacco and alcohol consumption begin early: Even among men who are only 15 years of age, 16 percent use some form of tobacco and 6 percent consume alcohol.

HEALTH AND NUTRITIONAL STATUS OF YOUTH

- *Young mothers are not receiving all necessary maternal care services*
  - Among young women who had a birth in the past five years, 54 percent received three or more antenatal care visits for their last pregnancy and less than one-half received the first antenatal care visit in the first trimester as recommended; four in five women received two or more tetanus toxoid injections and less than one in four took IFA tablets for iron supplementation for 90 days or more.
  - Utilization of most antenatal care services is only somewhat higher among youth than among older mothers.
  - Among all births to youth in the past five years, 40 percent were delivered in a health institution and only about one-half were delivered with assistance from health personnel.
  - Thirty-seven percent of last births to women in the past five years were followed by a postnatal check of the mother within two days of delivery.
  - Despite their greater vulnerability and the much higher infant mortality for mothers in their teens, compared with mothers in their 20s (77 vs. 50 deaths per 1,000 live births), the evidence suggests that neither pregnant adolescents nor older youth who are having higher-order births are receiving adequate maternal-health care services. Reaching young mothers who account for more than half of all fertility with maternity-related services would help to increase the health of mothers and the survival and health of the majority of children born in any time period.

- *Sexually transmitted infections (STI) and STI symptoms are not uncommon among youth, particularly sexually active unmarried male youth*
  - Eleven percent of women and 8 percent of men who have ever had sexual intercourse reported an STI or STI symptom in the 12 months preceding the survey.
  - Among men, self-reported prevalence of the two STI symptoms—abnormal bad smelling genital discharge and genital sore or ulcer--is higher among adolescents than among men age 20-24 and the prevalence of STIs or STI symptoms is higher among never married youth than among ever-married youth irrespective of age, residence, or education.
  - One in every 1,000 youth in India is HIV positive.

- *Prevalence of lifestyle diseases such as diabetes among youth is a matter of concern*
  - About 2 per 1,000 young women and men suffer from diabetes and 9 per 1,000 suffer from asthma; 5 per 1,000 women suffer from goitre or other thyroid disorders. Men are much less likely than women to suffer from goitre or other thyroid disorders.
  - About 3 per 1,000 women and men suffer from tuberculosis.

- *Undernutrition is very common among youth*
  - Forty-four of percent of women and 47 percent of men are abnormally thin.

- The proportion who are abnormally thin is much higher among adolescents than among older youth, particularly among men.
- Youth are more likely to be abnormally thin and less likely to be overweight or obese than women and men in the older cohort age 25-49.
- Fifty-six percent of women and 25 percent of men age 15-24 are anaemic, with rates of anaemia being higher in rural than in urban areas.
- Ever-married women are more likely to be anaemic than never married women; but among men, the never married are more likely than the ever married to be anaemic.
- Sixty-five percent of breastfeeding women and 57 percent of pregnant women are anaemic, compared with 53 percent of women who are neither pregnant nor breastfeeding.

- ***The high prevalence of spousal violence is a continuing hurdle to the achievement of health goals and gender equality***
  - More than one in three married female youth (37%) have experienced physical, sexual, or emotional violence by their husband.
  - Seven percent of all female youth and 11 percent of married female youth have experienced sexual violence.

The key findings of this report all point to a substantial squandering of the potential demographic dividend in India that has resulted from the changes in the age structure. To fully exploit the demographic dividend, India's youth need to be healthy, educated, forward-looking, and skilled. Instead, the report finds that significant proportions of youth have little education, many are still illiterate, and many are burdened with responsibilities. Female youth and rural youth are particularly disadvantaged with respect to education. Thus, the preparation of youth for the challenges of nation building is very limited.

Significant proportions of youth who should be completing their education are employed, married, and are heading households. Young women, even adolescent women, are already burdened with childbearing and rearing. Early marriage at ages well below the legal minimum age at marriage is still prevalent among female youth and is a hurdle to achieving all round development as envisaged by India's Youth Policy.

Despite relatively high levels of knowledge of one or more modern spacing methods, there is limited use of contraception for spacing. Traditional methods are also among the more popular spacing methods. However, these methods dominated by the rhythm method, are unlikely to be fully effective since few youth have correct knowledge of the fertile period for women.

Unmet need among youth remains high. Addressing this unmet need in ways that meet the special needs of youth needs to be a priority. Early marriage also leads to early childbearing which puts both mother and child at high risk of mortality. Despite this, young mothers are still receiving inadequate antenatal, delivery, and postpartum care.

The pattern of sexual activity among younger men and the prevalence of STIs and STI symptoms among them, underscore the need for educating young men and women about safe-sex practices. Translating widespread knowledge of condoms among men into condom use remains an issue.

The high prevalence of undernutrition and anaemia among youth needs urgent attention. Anaemia levels are also high among pregnant and breastfeeding women, affecting not only the health of women but also of their children. Tobacco use and alcohol consumption even among very young men is likely to further undermine youth health.

The high prevalence of spousal violence combined with high acceptance among youth of norms that justify wife beating, suggest that a basic, necessary tenet of good health—freedom from violence—is far from being met.

If youth are to become a national asset, it is urgent that their unique need for education and reproductive and other health information and resources be met. This report finds only limited progress toward this goal.

1 INTRODUCTION

As per the 2001 Census of India, population age 15-24 years accounts for 195 million of the 1,029 million of India's population. In other words, every fifth person in India belongs to the age group 15-24 years. This population, which is the focus of this report, is identified by the United Nations Population Fund (United Nations, 2009) as *youth* or the *youth population.* By 2011, this age group is expected to grow to 240 million (Office of the Registrar General, 2006) and account for a slightly higher proportion of the total population than in 2001.

Notably, not all definitions refer to only the age group 15-24 as youth. For example, the 2003 National Youth Policy of India (Ministry of Youth Affairs and Sports, 2003) defines the youth population as those in the age group 15-29. Nonetheless, in this report, the youth population is defined in accordance with the UNFPA definition. Also in accordance with the UNFPA definition of adolescents—population age 10-19—this report refers to youth in the older adolescent ages of 15-19 as adolescents or teenagers.

The youth in any nation are critical for its continued economic development and demographic evolution. The youth population, which typically constitutes the entering cohort in the country's labour force, is expected to bring in freshly learned and updated skills that will help renew and improve the country's stock of human capital. Youth also represent the age group that forms the basis of demographic renewal, as these young people form unions and begin child bearing.

With declining fertility and a large population base, India is in a unique phase of its demographic transition. The transition has led to significant changes in the rate of growth of population, but also, and importantly, in its age structure. The population growth rate, which was over 2 percent from 1971 to 2001, declined to 1.6 percent in 2007, and is expected to fall further to less than 1 percent by 2016. The recent transition to lower fertility has lead to a reduction in the proportion of population below age 15, and hence, to a lower dependency burden. Of the total projected increase of 371 million in India's population between 2001 and 2026, 83 percent of the increase will be in the working age group of 15-59 years (Office of the Registrar General, 2006). This increase in the share of the population in working ages represents a potential "demographic dividend" for economic growth in the form of increased productivity of the nation's population as a whole. However, the youth of the nation—their skills, knowledge, attitudes, and behaviours, all elements of their human resource capacity—are essential to whether, and how well, the demographic dividend is successfully exploited and converted into sustained increases in productivity and economic growth.

Further, the large and increasing relative share and absolute numbers of the youth population in India makes it even more necessary that the nation ensure that the youth of India become a vibrant, constructive force that can address social and economic issues and contribute to sustained and just governance and nation building. In recognition of the important role for

youth in nation building, the preamble of India's 2003 National Youth Policy "reiterates the commitment of the entire nation to the composite and all-round development of the young sons and daughters of India and seeks to establish an All-India perspective to fulfill their legitimate aspirations so that they are all strong of heart and strong of body and mind in successfully accomplishing the challenging tasks of national reconstruction and social changes that lie ahead." The thrust of the policy is youth empowerment in different spheres of national life (National Youth Policy, 2003).

Education, employment, and health, including sexual and reproductive health, are all key elements of youth empowerment.

Education: Educational attainment not only affects the economic potential of youth, but also their effectiveness as informed citizens, parents, and family members. Article 26 of the 1948 Declaration of Human Rights gives everyone the right to education, and further states that, "Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit" (United Nations, 1948). It points to continuing and unacceptable differentials in education by residence and gender. In particular, it recognizes the need to address the great disparity in primary and higher education between rural compared with urban areas, and for females compared with males. Contributing to low educational access and attainment, particularly of girls, is the low age at first marriage. Although, the age at first marriage has been increasing over time, a sizeable proportion of girls in India continue to be married at an age when they should still be in school or completing their education. Another important element contributing to low educational attainment is the mismatch between the numbers who need admission to quality higher level educational institutions and the ability of available institutions to them in large numbers.

Employment: Article 23 of the Declaration of Human Rights, gives everyone a right to work, to free choice in employment, to just and favorable conditions of work, and to protection against unemployment (United Nations, 1948). However, in India, employment, unemployment and under-employment are all challenging youth issues. Adequate and appropriate employment at the appropriate ages is key to successful development and exploitation of the human capital that youth represent. India is faced with a dual challenge in this regard: on the one hand, it needs to prevent youth from entering the labour force and working in exploitative and unskilled jobs *before* they have had an opportunity to mature, complete their education, and develop marketable skills; and on the other, it must provide for the full and appropriate employment of the youth population that has successfully completed its education or has acquired the requisite skills and is ready to enter the labour force. A large unemployed youth population not only puts the nation at risk of instability, but also costs the country in terms of productivity and health expenses. Some research suggests that one year of unemployment among youth reduces life expectancy by about five years (Sahni, 2005).

Marriage and family formation: The youth ages are also critical because they represent a period when sexual activity typically begins and family formation and child bearing is initiated. Too

early an age at marriage can hinder healthy and responsible family life and parenthood, however. It is recommended that marriage and family formation be initiated after the legal age at marriage, and, preferably, after completion of education and the attainment of economic independence. For women in particular, an early age at marriage not only hinders the completion of education and the acquisition of marketable professional skills, but also pushes women into motherhood at ages when their bodies are not mature enough to safely bear children. Although, in India the legal minimum age at marriage for girls and boys is 18 years and 21 years, respectively, a sizeable proportion of women and men marry at much younger ages.

Reproductive and sexual health: Reproductive and sexual health is an important component of the overall health of all of the adult population, but is particularly cogent for the youth population. Youth is a period of life when heightened emotions, a sense of invulnerability, and an intensively heightened sex drive often lead to high-risk taking and sexual experimentation. Despite the resulting need for information on sex and sexual and reproductive health, youth, particularly unmarried youth, face many social barriers to obtaining accurate and complete information on these subjects. As a consequence, many youth enter marriage without even the basic knowledge about sex and reproduction, let alone the knowledge necessary to negotiate a safe and healthy sexual and reproductive life. While limited access to information on sex and sexual health is often more of a barrier for girls than for boys, even boys lack accurate and pertinent information on sexual health issues. As a result, many preventable reproductive-health related problems, including unwanted teenage pregnancies and sexually transmitted diseases (STD), persist. Some research suggests that youth account for a high proportion of new STD infections (Sahni, 2005). The emerging trends in new HIV cases in India shows that nearly two-fifths of new infections are reported among people below 25 years of age (NACO, 2004).

Additionally, the life-cycle approach adopted by the Reproductive and Child Health Program of Government of India recognizes that health status during any phase of life impinges upon health status in the next phase. Thus, although the reproductive and sexual health issues that concern women and men may differ, it is equally true for both women and men that good health during the adolescent years provides the foundation for good health during the reproductive years.

Ensuring reproductive and sexual health for the youth population is particularly challenging in India. As noted, a large proportion of marriages are still taking place during the adolescent ages, a period when body and mind are not yet mature enough for parenthood. Putting young parents at a further disadvantage is the fact that women and men married at young ages are less likely to be educated and are more likely to have had only limited exposure to any communication media. As a result, young couples often lack even minimal information on contraception and the need for birth spacing with consequences for infant and child health and survival, as well as the survival of mothers. Further, ignorance or misinformation on sex-

related matters can put sexually active youth at a higher risk of sexually transmitted infections, including HIV.

Other health-related issues: Even during late adolescence, the bodies of boys and girls are continuing to mature, with most still putting on height. Proper nutrition, in the form of a balanced diet rich in nutrients, including iron, is key to the health of youth. Not only are malnourished youth unlikely to contribute to their full potential to the economic growth of the nation, but their malnourishment can also threaten the health of the next generation. Most female youth in India have either already initiated childbearing or are only a few years away from initiating it. Thus, the extra nutritional demands of pregnancy and breastfeeding are already here or not too far in the future for most female youth. Of particular concern are the high rates of iron-deficiency anaemia among adolescent females after menarche. For all of these reasons, the nutritional status of youth should be of grave concern.

Another issue of grave concern among youth is substance abuse. Drug use, smoking and irresponsible alcohol consumption are common problems associated with youth. Substance abuse has many negative effects on the health of youth as well as on their educational attainment and productivity.

This report studies the youth population of India with a special focus on their knowledge, attitudes, and behaviour, specially related to reproductive health and nutrition. In particular, the report provides a profile of youth based on data from the third National Family Health Survey (NFHS-3).

In NFHS-3, all usual residents as well as visitors who stayed in the selected households the night before the household interview were interviewed. Of the 124,385 women age 15-49 interviewed in NFHS-3, 47,590 were age 15-24 and of the 74,369 men age 15-54 interviewed, 24,997 were age 15-24. While the sample on which this report is based is very large, there is an important limitation of this study that needs to be noted: The NFHS-3 questionnaire was designed to provide data on population, health, and nutrition indicators for women and men in all reproductive ages; it was not designed to get information on youth per se. Thus, some youth-relevant issues, such as factors affecting sexual initiation or choice of marital partner or peer influences, were not included. Despite this qualification, the NFHS-3 data are rich enough to provide a multidimensional portrait of the youth of India. This report has five other chapters: Chapter 2 provides a profile of youth and examines who the youth of India are; Chapter 3 discusses what youth know about selected health-related issues; Chapter 4 discusses youth attitudes toward selected population, health, and gender concerns; Chapter 5 discusses behaviour of youth in health-related spheres; and finally, Chapter 6 provides a health and nutritional profile of youth.

2. Who Are They: Profile of Youth

The health, nutrition, and demographic situation of youth varies by their own characteristics, such as age, marital status, religion, and caste, as well as the characteristics of their households, such as the type of family and wealth status. In addition, education and media exposure are important catalysts for health and demographic change. Information about the education and employment of youth is also critical in assessing the stock of human resources in the population. This chapter provides a demographic and socioeconomic profile of the youth interviewed in NFHS-3 and also explores in detail their mass media exposure, marriage patterns, and employment.

2.1 Background Characteristics

Table 2.1 provides a profile of female and male respondents by age, residence, marital status, education and literacy, media exposure, religion, caste or tribe, employment status, and the wealth index. Among youth age 15-24, slightly more than half (52%) are teenagers. The distribution of respondents by residence shows that men are somewhat more likely to be in urban areas (38%) than women (31%). This is consistent with the higher rural-urban migration rates for men than women. Among youth, almost equal proportions of women are never married and ever married; however, due to the later age at marriage among men, only 17 percent of young men are currently married. Almost 2 percent each of women and men age 15-24 are married but have not started living together, as their *gauna* has not yet been performed. For analysis purposes, however, in this report, women and men who are married but have not started living with their spouse are included among the never married. A small proportion of youth has already had their marriage ended due to the death of their spouse, divorce, separation, or desertion.

The distribution of the population by completed number of years of education reveals low overall educational attainment among young women and men in India, as well as persistent gender inequality in education. Twenty-six percent of young women, compared with 10 percent of young men, have no education, and an additional 7 percent of women and 4 percent of men have been to school but left school before completing five years of education. Among youth, only 29 percent of women and 38 percent of men have completed 10 or more years of education.

In keeping with the overall religious mix of the Indian population, a large majority of young women and men interviewed in NFHS-3 are Hindu (79 and 81 percent, respectively) and a minority are Muslim (15 and 14 percent, respectively), followed by Christians, Sikhs, and Buddhists/Neo-Buddhists. Youth from all other religions together account for less than 1 percent each of female and male respondents. About one-fifth of women and men belong to scheduled castes, 8 percent belong to scheduled tribes, and 39-40 percent belong to other backward classes. About one-third do not belong to any of these three groups.

Table 2.1 Background characteristics

Percent distribution of women and men age 15-24 years by selected background characteristics, India, 2005-06

Background characteristic	Women			Men		
	Weighted percent	Number		Weighted percent	Number	
		Weighted	Unweighted		Weighted	Unweighted
Age						
15-19	52.1	24,811	23,955	52.0	13,008	13,078
20-24	47.9	22,779	22,807	48.0	11,989	12,460
Residence						
Urban	31.4	14,931	20,810	37.7	9,435	13,518
Rural	68.6	32,660	25,952	62.3	15,561	12,020
Marital status						
Never married	47.9	22,781	26,585	81.3	20,327	22,026
Currently married	49.4	23,508	19,258	16.8	4,205	3,217
Married, but *gauna* not performed	1.7	806	453	1.6	394	221
Formerly married	1.0	495	466	0.3	71	74
Education						
No education	26.3	12,524	9,025	9.8	2,440	1,943
<5 years complete	7.2	3,422	3,101	7.6	1896	970
5-7 years complete	17.7	8,412	8,056	17.7	4,422	4,318
8-9 years complete	20.2	9,597	10,570	27.1	6,778	6,979
10-11 years complete	14.5	6,912	7,713	19.3	4,828	5,211
12 or more years complete	14.1	6,721	8,293	18.5	4,624	5,342
Missing	0.0	3	4	0.0	8	10
Literacy						
Literate[1]	69.3	32,962	35,869	86.4	21,576	22,728
Not literate	30.5	14,493	10,691	13.5	3,373	2,722
Not measured	0.2	103	165	0.1	36	69
Missing	0.1	31	31	0.1	13	19
Media exposure[2]						
Reads a newspaper/magazine at least once a week	27.1	12,918	16,014	56.7	14,165	15,471
Watches radio at least once a week	32.7	15,542	16,266	48.8	12,203	12,748
Listens to the television at least once a week	58.7	27,965	31,925	70.3	17,592	19,913
Visits the cinema/theatre at least once a month	7.7	3,666	4,066	30.0	7,501	8,245
Not regularly exposed to any media	29.8	14,199	10,394	12.0	2,995	2,209
Religion						
Hindu	79.2	37,705	32,981	81.0	20,239	18,239
Muslim	15.4	7,307	7,194	13.6	3,398	3,819
Christian	2.2	1,043	4,128	2.0	503	2,324
Sikh	1.7	789	987	2.0	494	364
Buddhist/Neo-Buddhist	0.8	380	679	0.9	217	405
Jain	0.3	133	178	0.3	64	99
Other	0.4	196	561	0.3	76	282
Missing	0.1	37	54	0.0	7	6
Caste/tribe						
Scheduled caste	19.3	9,171	8,014	19.6	4,903	4,513
Scheduled tribe	8.4	4,014	6,608	7.8	1,960	3,126
Other backward class	39.8	18,921	14,911	39.1	9,773	9,119
Other	31.8	15,116	16,838	32.9	8221	8,622
Don't know	0.4	194	207	0.2	52	65
Missing	0.4	176	184	0.3	87	93
Employment (past 12 months)						
Employed at any time	33.9	16,133	14,953	66.0	16,511	15,838
In agricultural occupation	20.1	9,551	7,309	20.4	5,102	4,053
In non-agricultural occupation	13.8	6,583	7,644	45.6	11,409	11,785
Not employed	66.1	31,451	31,783	33.8	8,445	9,642
Missing	0.0	6	26	0.2	38	58
Wealth index						
Lowest	17.2	8,175	5,230	13.8	3,460	2,107
Second	19.5	9,284	6,859	18.3	4,577	3,464
Middle	21.3	10,131	9,485	21.6	5,407	5,355
Fourth	21.5	10,241	11,737	23.2	5,808	6,997
Highest	20.5	9,759	13,451	23.0	5,743	7,615
Total	100.0	47,590	46,762	100.0	24,997	25,538

[1] Refers to women/men who can read a sentence or part of a sentence and women/men who completed standard 6 or higher (who are assumed to be literate).
[2] Total percentages add to more than 100.0 because multiple answers are allowed.

The distributions of women and men by wealth index are more or less similar, although women are slightly less likely to be in the upper wealth quintiles and slightly more likely to be

in the lowest wealth quintile. Specifically, 17 percent of women are in the lowest wealth quintile, compared with 14 percent of men, and 46 percent of men are in the top two wealth quintiles, compared with 42 percent of women.

2.2 Household Headship and Type of Family

Household heads usually bear major responsibility for providing household members with the necessities of life and making major household decisions. In India, elderly persons are often honoured by having household headship bestowed on them, although they may not be responsible for providing for daily necessities. When young persons are reported as the head of the household, however, it is mainly because they are seen as responsible for the household rather than that they are being honoured. The percentages of youth who are household heads are presented in Table 2.2.

Only 1 percent of women and 8 percent of men age 15-24 are heading their households. The responsibility of headship increases with age; 2 percent of women and 13 percent of men age 20-24 are household heads. Among women, those who are formerly married are more likely to be household heads. Eight percent of formerly married women, compared with 2 percent of currently married women and less than 1 percent of never married women, are household heads. Married men are much more likely than married women to be household heads. Twenty-nine percent of currently married men (14% of men age 15-19 and 31% of men age 20-24) are heading their households. These data provide evidence of the great amount of responsibility that youth bear in many households.

Table 2.2 Household headship by marital status

Percentage of women and men age 15-24 years who are heads of households by age and marital status, India, 2005-06

	Women			Men		
Marital status	15-19	20-24	15-24	15-19	20-24	15-24
Never married	0.2	0.6	0.3	1.7	5.2	3.0
Currently married	1.6	2.7	2.4	14.1	30.7	29.2
Formerly married	6.1	7.9	7.5	*	15.2	14.3
Total	0.6	2.3	1.4	2.0	13.4	7.5

* Percentage not shown; based on fewer than 25 unweighted cases.

The distribution of youth by wealth, according to the sex of the household head (Table 2.3) indicates that youth in youth-headed households are more likely to be poorer than youth in households headed by persons above age 24. For example, 56 percent of women from youth-headed households belong to the two lowest wealth quintiles, compared with 36 percent of women from households headed by persons above age 24.

Table 2.3 Wealth status by household headship

Distribution of women and men age 15-24 years by wealth index, according to type of household head, India, 2005-06

	Women living in household with:			Men living in households with:		
Wealth index	Youth household head	Non-youth household head	Any household head	Youth household head	Non-youth household head	Any household head
Lowest	31.0	16.5	17.2	21.7	13.1	13.8
Second	25.1	19.2	19.5	22.1	18.0	18.3
Middle	22.3	21.2	21.3	22.6	21.5	21.6
Fourth	15.5	21.8	21.5	22.8	23.3	23.2
Highest	6.2	21.3	20.5	10.7	24.1	23.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 2.4 Youth in nuclear households

Percentage of women and men age 15-24 years who are living in nuclear households by age and marital status, India, 2005-06

	Women			Men		
Marital status	15-19	20-24	15-24	15-19	20-24	15-24
Never married	57.9	57.0	57.7	54.9	48.9	52.6
Currently married	19.7	35.3	31.1	7.8	21.2	20.0
Formerly married	5.6	7.2	6.8	*	9.0	8.5
Total	48.6	40.6	44.8	53.6	40.6	47.1

* Percentage not shown; based on fewer than 25 unweighted cases.

The behaviour of young persons may be influenced by the type of household in which they reside. The majority of never married youth live in nuclear households (Table 2.4). Fifty-eight percent of never married women and 53 percent of never married men live in nuclear households. However, the majority of married women and men live in non-nuclear households. Slightly less than one-third of currently married women (31%) and one-fifth of currently married men live in nuclear households. One-fifth of currently married women age 15-19 and 35 percent of currently married women age 20-24 live in nuclear households.

2.3 Literacy and Educational Attainment

The educational attainment of a population, particularly of the young population, is an important indicator of the society's stock of human capital and its level of socioeconomic development. The educational attainment of youth in the age group 15-24 also reflects the achievement of the educational sector in the past 20 years. In this section, differentials in educational attainment of women and men are discussed by selected background characteristics.

A. Levels and trends

In NFHS-3, each respondent who had not completed standard six was given a card with four pre-printed sentences and asked to read one of the sentences. Respondents who have either completed six years of education or 'passed' the literacy test by being able to read all or part of a sentence on the card are defined as literate. The proportion of literate youth by single year of age shows the increasing level of literacy among younger respondents. Literacy levels increase from 63 percent and 84 percent among women and men age 24 to 77 percent and 92 percent among women and men age 15 (Figure 2.1). The increasing trend in the literacy rates indicates progress toward achieving universal literacy in recent years.

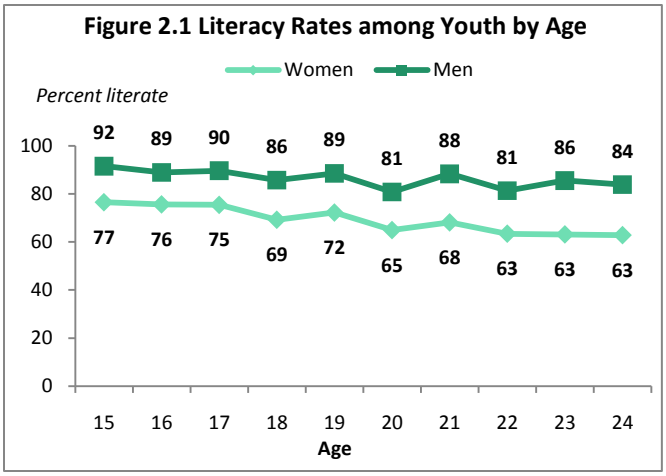


Table 2.5 shows the percentage of women and men who have no education, who have 10 or more years of education, and who are literate. Slightly more than one-fourth of young women

and 1 in 10 young men in India do not have any education. Sixty-nine percent of young women and 86 percent of young men are literate, and 29 percent of young women and 38 percent of young men have completed 10 or more years of education. A comparison with the educational attainment of the older cohort of respondents age 25-49 shows substantial improvement in educational achievement in India over time. Sixty-nine percent of women age 15-24 are literate, compared with only 46 percent of women age 25-49. Even in the recent past, there has been an improvement in educational achievement, reflected in a decrease in literacy rates and an increase in the proportions of persons with no education from age 15-19 to age 20-24. The change in literacy rates has been more rapid for women, who started from a lower base, than for men. However, as many persons age 15-19 have yet to complete secondary schooling, there is some drop in the proportion of persons who have completed 10 or more years of schooling from age 20-24 to age 15-19. Nonetheless, these data show that despite the increasing need for an educated labour force, a large proportion of young women and men still have little or no education.

Table 2.5 Education and literacy

Percentage of women and men age 15-24 years who have no education, who have completed 10 or more years of education, and who are literate by selected background characteristics, India, 2005-06

	Women				Men			
	Percentage who have:				Percentage who have:			
Background characteristic	No education	10 or more years of education	Literate[1]	Number	No education	10 or more years of education	Literate[1]	Number
Age								
15-19	21.7	27.5	73.7	24,811	7.6	35.4	88.7	13,008
20-24	31.4	29.9	64.4	22,779	12.3	40.5	83.7	11,989
Residence								
Urban	11.7	47.0	85.6	14,931	6.1	49.1	91.6	9,435
Rural	33.0	20.3	61.8	32,660	12.0	31.0	83.1	15,561
Marital status								
Never married	12.4	40.5	84.0	23,588	7.3	41.6	89.1	20,721
Ever married	40.0	17.0	54.7	24,003	21.6	19.8	72.6	4,276
Religion								
Hindu	25.8	29.3	69.4	37,705	8.9	39.2	87.1	20,239
Muslim	33.6	20.5	63.8	7,307	15.8	26.7	80.3	3,398
Christian	9.6	44.9	86.0	1,043	6.9	41.5	90.1	503
Sikh	12.2	50.2	85.4	789	7.1	51.0	91.0	494
Buddhist/Neo-Buddhist	8.4	28.2	84.9	380	3.2	41.2	95.2	217
Jain	0.0	76.7	100.0	133	0.0	74.6	100.0	64
Other	54.0	9.1	39.0	198	22.4	6.6	57.3	64
Caste/tribe								
Scheduled caste	32.3	20.0	61.7	9,171	12.3	29.2	82.4	4,903
Scheduled tribe	43.6	11.8	49.2	4,014	18.9	17.1	73.6	1,960
Other backward class	28.7	27.3	67.5	18,921	9.4	38.8	87.1	9,773
Other	15.1	40.5	81.6	15,116	6.4	47.1	91.0	8,221
Don't know	20.2	18.7	64.9	193	5.8	17.3	73.1	52
Wealth index								
Lowest	59.9	3.4	33.1	8,175	29.5	10.4	64.4	3,460
Second	40.9	7.6	52.3	9,284	15.6	20.1	78.3	4,577
Middle	24.4	19.3	70.3	10,131	9.6	32.0	86.9	5,407
Fourth	10.6	38.1	86.5	10,241	4.2	46.1	93.5	5,808
Highest	2.9	69.5	96.5	9,759	1.2	69.4	98.2	5,743
Total age 15-24	26.3	28.6	69.3	47,590	9.8	37.8	86.3	24,997
Total age 25-49	49.4	18.4	46.3	76,795	22.6	32.8	73.4	44,754

Note: Total includes women and men with missing information on religion and caste/tribe, who are not shown separately.
[1] Refers to women/men who can read a sentence or part of a sentence and women/men who completed standard 6 or higher (who are assumed to be literate).

A striking point that emerges from the table is the large gender gap in educational attainment. Women are less likely than men to have any education and to have completed secondary schooling. Even at age 15-19, the women's literacy rate lags behind the literacy rate of men by 15 percentage points. The gap between the literacy rates of adolescent women and men reflects the persistence of gender bias in education even in the recent period.

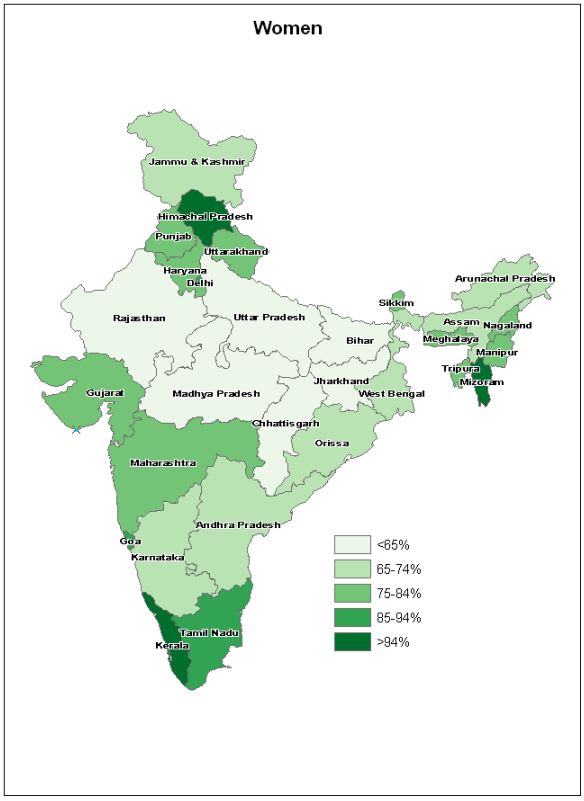
As expected, persons in urban areas are much more likely than those in rural areas to have attended school. For example, the proportion of urban women who have completed 10 or more years of education, at 47 percent, is more than twice as high as the proportion of rural women who have an equivalent level of education (20%). Nonetheless, even in urban areas, one in eight women has no education and 14 percent are not literate. Educational attainment among ever-married persons is much lower than that among never married persons, mainly due to early marriage among groups with lower education. Among ever-married women, who constitute half of women age 15-24, 40 percent have not been to school, and 45 percent are illiterate.

The proportion of persons who have never attended school is higher among Muslims (34% of women and 16% of men) than among Hindus (26% of women and 9% of men) and women belonging to other religions. Muslim youth are also less likely than youth of other religions to have completed secondary education. By caste/tribe, the proportion of women who have never attended school is highest, at 44 percent, for women belonging to scheduled tribes, followed by 32 percent for women belonging to scheduled castes, and 29 percent for women belonging to other backward classes. The same pattern prevails among men. Educational attainment among both women and men varies more with relative wealth status as measured by the wealth index than by any other background characteristic. The proportion of women who have never attended school declines steadily from 60 percent for women belonging to the lowest wealth quintile to only 3 percent for women belonging to the highest wealth quintile. By contrast, the proportion of women with 10 or more years of education increases only slowly, from 3 percent for women in the lowest wealth quintile to 19 percent for women in the third wealth quintile, and then jumps to 38 percent for women in the fourth wealth quintile and 70 percent for women in the highest wealth quintile.

Gender differentials in educational attainment are evident in almost every population group. Gender differentials are especially large in rural areas, among married persons, among those from scheduled castes and tribes, and among those from lower wealth quintiles. For example, 60 percent of women from the lowest wealth quintile have no education, compared with 30 percent of men in the same wealth group.

State-level variations in literacy rates, especially among young women are very large (Figures 2.2 and 2.3). In Kerala, Himachal Pradesh, and Mizoram, 95 percent or more of young women are literate, but in Bihar and Jharkhand, less than half of young women are literate. In every

Figure 2.2 Literacy among Youth



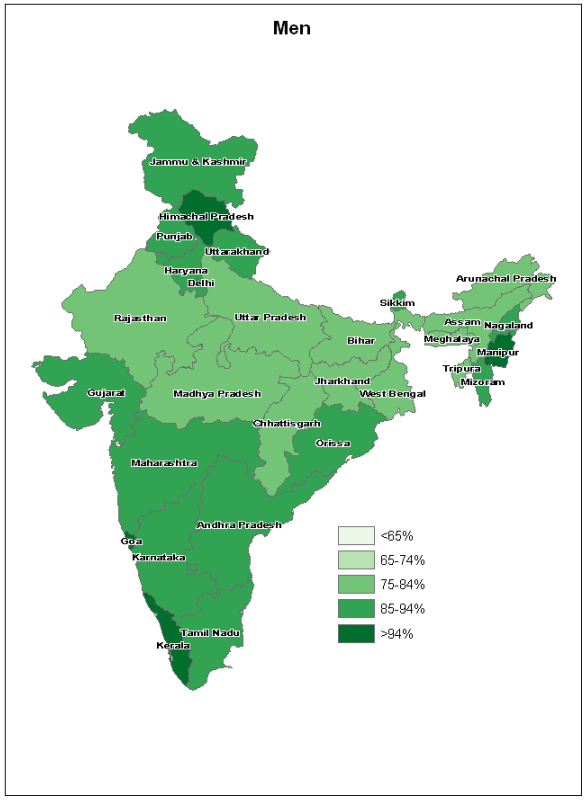
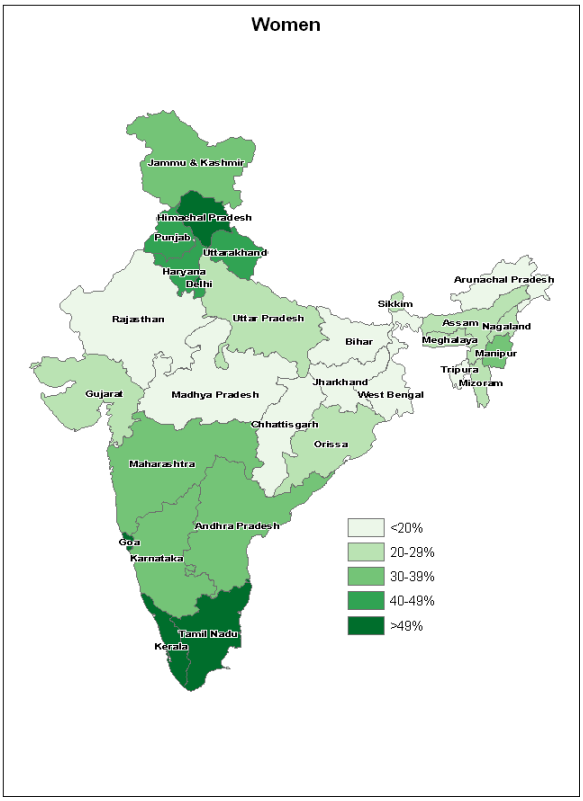
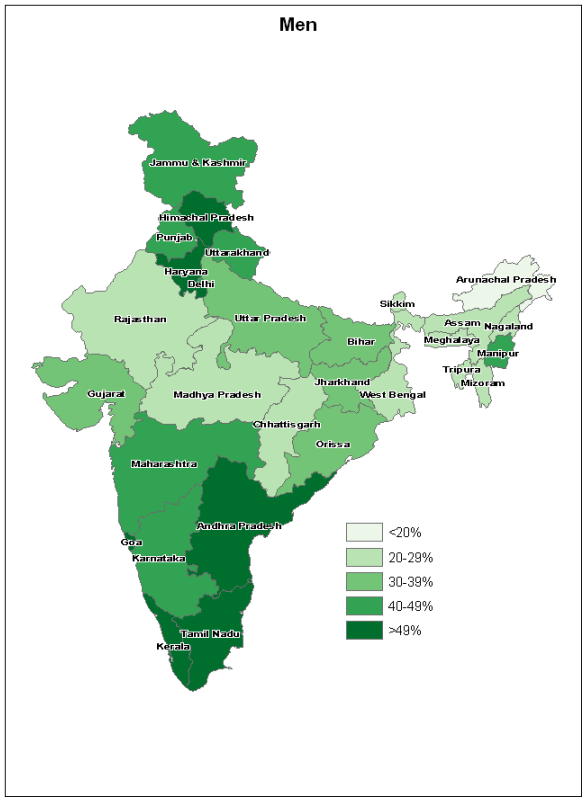


Figure 2.3 Completion of 10 or More Years of Education among Youth





state, at least three-fourths of men are literate, and in Kerala, Himachal Pradesh, and Goa, 95 percent of men or more are literate. As mentioned earlier, 23 percent of young women and 39 percent of young men in India have completed 10 or more years of education. In 5 out of 29 states, namely, Kerala (68%), Himachal Pradesh (64%), Goa (57%), Delhi (56%), and Tamil Nadu (50%), at least half of young women have completed 10 or more years of schooling. Although educational attainment is higher among men than women, only in Himachal Pradesh (73%), Kerala (61%), Goa (59%), Tamil Nadu (52%), Andhra Pradesh (51%), Haryana (52%), and Delhi (50%) have 50 percent of men or more completed 10 or more years of education. In most states there is a wide gender gap in educational achievement, but the gender gap is much wider in literacy than in completion of at least 10 years of school. In many states, especially Bihar, Jharkhand, Rajasthan, Uttar Pradesh, and Madhya Pradesh, literacy rates of young women are lower than those of young men by 20 or more percentage points.

In the eight surveyed cities for which separate estimates of literacy are available, the literacy rates are 89 percent or higher among young men and 84 percent or higher among young women (Table 2.6).

With the exception of Indore, literacy rates are lower in slum areas than in non-slum areas, although the slum/non-slum differentials among men are quite small. Women are less likely to be literate than men, but they are more likely than men to have completed at least 10 years of education in five of the eight cities (Delhi, Meerut, Nagpur, Hyderabad, and Chennai). In all the cities, non-slum youth are much more likely than slum youth to have completed 10 or more years of education, but even in slum areas, a substantial proportion of young women and men have completed that much education (27-59%).

Table 2.6 Literacy and higher education among youth in cities

Percentage of women and men age 15-24 years who are literate and who have completed 10 or more years of education by residence and city, India, 2005-06

City	Women			Men		
	Slum	Non-slum	Total	Slum	Non-slum	Total
			Literacy			
Delhi	72.5	90.5	86.8	85.2	94.3	92.2
Meerut	78.5	88.3	83.7	87.7	91.0	89.4
Kolkata	76.6	89.9	84.8	89.6	93.1	91.7
Indore	92.9	93.0	93.0	96.4	95.2	96.5
Mumbai	89.0	96.9	93.2	95.1	97.0	96.1
Nagpur	92.5	96.9	95.1	93.9	97.6	96.2
Hyderabad	88.2	92.7	91.9	90.5	90.9	90.9
Chennai	86.4	95.2	93.4	93.4	97.6	96.8
			10 or more years of education			
Delhi	29.0	63.8	56.5	27.0	56.0	49.1
Meerut	36.4	56.3	46.9	34.5	50.0	42.7
Kolkata	28.0	48.6	40.8	27.9	53.6	43.2
Indore	38.6	54.8	51.4	44.9	59.4	56.3
Mumbai	37.6	57.6	48.1	47.2	65.8	56.9
Nagpur	40.9	63.4	54.0	34.3	55.0	46.8
Hyderabad	59.2	66.2	65.0	54.1	64.7	62.8
Chennai	39.3	70.0	63.6	43.0	67.1	62.5

Table 2.7 School attendance

Percentage of the de facto household population age 15-17 years attending school in the 2005-06 school year by residence and sex, India, 2005-06

Residence	Women	Men	Total
Urban	50.5	52.1	51.3
Rural	27.7	47.1	36.7
Total	34.4	48.8	41.3

Note: In this table, age refers to age at the start of the 2005-06 school year (assumed here to be April 2005).

Only 41 percent of youth age 15-17 were attending school in the 2005-06 school year (Table 2.7). The school attendance rate in rural areas (37%) was much lower than that in urban areas (51%). Similarly, school attendance was lower among girls (34%) than boys (49%). Urban-rural differentials are much wider among girls, and the gender gap is much wider in rural areas than in urban areas.

School attendance rates at age 15-17 years show a substantial increase with increasing household wealth. The school attendance rate for girls age 15-17 years increases from 13 percent among girls from the poorest households to 68 percent among girls from the richest households (Figure 2.4). The differentials are also substantial for men. However, the gender gap in school attendance rates decreases with an increase in wealth status.

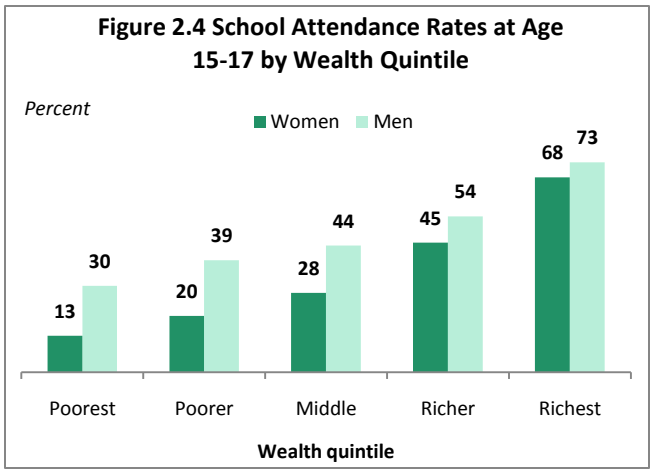


Table 2.8 shows that the highest school attendance rate among the states is in Himachal Pradesh, where 69 percent of children age 15-17 are in school, followed by Kerala (67%), Manipur (62%), and Delhi (60%). In contrast, in Orissa (24%), Gujarat (32%), and Bihar (34%), only about one-third of children or less are in school.

Table 2.8 School attendance by state

Percentage of the de facto household population age 15-17 attending school in the 2005-06 school year by urban-rural residence and state, India, 2005-06

	Urban			Rural			Total		
State	Women	Men	Total	Women	Men	Total	Women	Men	Total
North									
Delhi	65.3	56.9	60.2	54.5	57.1	56.2	64.3	56.9	59.8
Haryana	62.2	53.4	57.5	34.4	51.9	43.7	42.5	52.4	47.8
Himachal Pradesh	73.9	63.0	67.8	64.5	72.8	68.8	65.4	71.7	68.7
Jammu & Kashmir	59.2	65.9	62.8	41.8	57.7	49.9	45.7	59.8	52.9
Punjab	60.0	51.6	55.1	40.9	50.4	46.0	47.2	50.9	49.2
Rajasthan	44.7	54.4	49.9	15.0	49.2	32.9	23.4	50.7	37.8
Uttarakhand	63.2	48.9	56.1	44.8	65.9	54.9	49.7	61.1	55.2
Central									
Chhattisgarh	61.4	63.3	62.3	22.3	42.4	31.5	30.5	47.5	38.5
Madhya Pradesh	48.7	56.3	53.0	23.5	48.7	37.0	30.8	51.1	41.8
Uttar Pradesh	42.6	47.7	45.3	28.2	48.9	37.5	31.5	48.6	39.5
East									
Bihar	55.8	56.8	56.3	18.5	45.6	28.4	24.0	48.4	33.6
Jharkhand	50.0	57.7	53.8	19.5	45.4	31.0	26.7	48.9	36.9
Orissa	36.6	36.1	36.4	13.4	31.7	21.3	17.3	32.6	24.0
West Bengal	42.8	47.7	45.6	30.5	35.4	32.8	33.4	39.4	36.3
Northeast									
Arunachal Pradesh	46.5	58.0	52.1	51.7	60.2	56.0	50.2	59.6	54.9
Assam	62.6	55.9	59.0	39.3	47.5	43.4	43.3	49.1	46.2
Manipur	63.5	69.0	66.1	49.0	62.4	55.2	53.1	64.4	58.3
Meghalaya	79.5	72.7	76.0	61.0	54.5	57.5	66.0	59.2	62.4
Mizoram	57.3	64.0	60.9	28.9	34.6	32.1	44.8	50.4	47.9
Nagaland	66.1	60.4	63.1	52.9	48.2	50.5	56.9	51.9	54.4
Sikkim	55.4	63.8	59.5	57.0	53.5	55.1	56.7	55.2	55.9
Tripura	60.4	61.1	60.7	46.2	54.2	50.0	48.1	55.0	51.4
West									
Goa	57.1	61.7	59.4	55.4	61.5	58.6	56.4	61.6	59.1
Gujarat	38.6	38.5	38.6	20.8	32.8	26.4	27.8	35.6	31.8
Maharashtra	52.7	57.7	55.3	31.7	48.9	39.8	41.6	53.4	47.4
South									
Andhra Pradesh	45.2	53.4	48.9	22.6	46.3	33.5	30.9	48.8	39.0
Karnataka	51.8	45.9	49.3	27.2	44.6	34.8	36.8	45.1	40.4
Kerala	67.3	66.0	66.7	70.3	63.4	66.8	69.3	64.2	66.8
Tamil Nadu	63.0	52.1	57.9	40.8	62.1	50.6	50.7	57.6	53.9
India	50.5	52.1	51.3	27.7	47.1	36.7	34.4	48.8	41.3

In Himachal Pradesh, Uttarakhand, Goa, and Kerala, there are almost no differences in the urban and rural school attendance rates. In Himachal Pradesh and Arunachal Pradesh, the rural school attendance rate slightly exceeds the urban rate. In all the remaining states, school attendance rates are higher in urban areas than in rural areas. In Rajasthan, Bihar, Mizoram, Meghalaya, Assam, Jharkhand, Orissa, Chhattisgarh, Madhya Pradesh, Maharashtra, and Andhra Pradesh, school attendance rates are higher in urban areas than in rural areas by 15 percentage points or more.

Boys age 15-17 are more likely to be in school than girls of the same age in 24 of the 29 states. However, in urban areas of 11 states, the school attendance rate is higher among girls than among boys. Even in rural areas of Sikkim, Nagaland, Meghalaya, and Kerala, attendance rates are higher for girls than for boys.

In non-slum areas of all eight cities for which separate estimates are available, at least half of children age 15-17 attend school (Table 2.9). School attendance is considerably higher among non-slum children than slum children, but the differences are small in Indore and Hyderabad. In Delhi, in both slum and non-slum areas, school attendance is higher among girls than boys. In slum areas of Nagpur and non-slum areas of Meerut and Chennai, a higher proportion of girls than boys attend school.

Table 2.9 School attendance in cities

Percentage of de facto household population age 15-17 years attending school in the 2005-06 school year by sex, according to residence and city, India, 2005-06

	Slum			Non-slum			Total		
City	Women	Men	Total	Women	Men	Total	Women	Men	Total
Delhi	44.1	32.6	36.8	70.9	64.1	66.8	65.3	56.9	60.2
Meerut	38.1	43.1	40.7	57.9	54.5	56.0	48.0	49.2	48.7
Kolkata	36.0	45.0	40.7	58.8	61.0	60.0	49.4	54.7	52.2
Indore	47.3	50.9	49.5	52.0	53.1	52.6	51.0	52.6	51.9
Mumbai	44.8	51.2	48.3	60.7	67.4	64.4	51.3	57.8	54.9
Nagpur	48.8	45.6	47.2	65.1	69.5	67.4	58.6	60.7	59.6
Hyderabad	51.0	56.1	53.5	54.8	60.9	57.9	54.1	60.1	57.1
Chennai	39.8	47.1	43.4	65.6	60.2	62.8	60.5	57.7	59.1

Note: In this table, children's age refers to their age at the start of the 2005-06 school year (assumed here to be April 2005).

Despite the gains in educational attainment that have been made in recent years, a sizeable proportion of youth in India lack education and basic literacy skills. This will present a challenge for human resource development in the coming years.

B. Determinants of school attendance

As discussed above, school attendance of older adolescents varies by many different individual, household, and regional characteristics. In order to determine which characteristics have a statistically significant net association with school attendance, a logistic regression was run in which the dependent variable, which measures school attendance, codes all youth age 15-17 who attended school in the school year 2005-06 as 1 and 0 otherwise. The explanatory

variables included in the analysis are: sex, household size (taken as a continuous variable), sex of household head, father's survival status, religion, caste/tribe, urban/rural residence, region (as shown in Table 2.8), and wealth quintile. Table 2.10 provides the odds ratios (OR) for each variable. An OR value of greater than 1.00 shows a positive association of the variable with school attendance and an OR of less than 1.00 shows a negative association. Key findings of the analysis are:

a) Controlling for all other relevant factors, the odds that a girl age 15-17 will be in school, are half that for a boy in the same age group (OR=0.52 vs. OR=1.00).
b) As expected, if the father is alive, youth are more likely to be attending school; however, controlling for all other factors, youth in female-headed household are more likely than youth in male-headed households to be in school. The greater is household size, the lower is the likelihood, on average, of a 15-17 year old youth being in school.
c) Muslim youth are much less likely than Hindu youth to be in school; and youth belonging to the scheduled tribes are no different from scheduled-caste youth in this respect.
d) Although school attendance at the national level and in many states is much lower in rural areas than in urban areas, when the effect of other characteristics such as wealth, sex, and region are controlled, youth in rural areas have higher odds of being in school than youth in urban areas.
e) School attendance differs substantially across states, partly due to the different socio-economic conditions in different states. Nonetheless, even after controlling for several of these factors, the odds of children's school attendance vary greatly by region. Youth age 15-17 in the central, east, northeast, and south regions have higher odds of attending school than youth in the north region, whereas youth in the west region, have lower odds.
f) The odds of being in school vary most consistently by wealth and this effect is net of all other factors being used as controls.

Table 2.10 Logistic regression analysis of school attendance

Odds ratios (OR) from the logistic regression of school attendance for children age 15-17 years for selected background characteristics, NFHS-3, India

	Persons age 15-17 years who are attending school
Background characteristic	OR
Sex	
Ref. cat.: Male	
Female	0.52***
Household size	0.87***
Sex of household head	
Ref. cat.: Male	
Female	1.18**
Father alive	
Ref. cat.: No	
Yes	1.89***
Religion	
Ref. cat.: Hindu	
Muslim	0.37***
Christian	1.27
Buddhist/neo-Buddhist	2.39***
Other	0.93
Caste/tribe	
Ref. cat.: Scheduled caste	
Scheduled tribe	0.94
Other backward class	1.23***
Other	1.35***
Residence	
Ref. cat.: Urban	
Rural	1.62***
Region	
Ref. cat.: North	
Central	1.39***
East	1.23***
Northeast	2.15***
West	0.80***
South	1.40***
Wealth index	
Ref. cat.: Lowest	
Second	1.55***
Middle	2.19***
Fourth	5.10***
Highest	17.22***

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

This analysis shows that school attendance varies consistently by wealth and region and gender differentials persist even when other factors are controlled for.

2.4 Exposure to Media

Mass media exposure is an effective instrument to gain knowledge about the outside world. Media exposes the population to important information and increases awareness of health and family welfare issues, in addition to a variety of social issues. To some extent, media exposure can compensate for a lack of education if there is regular exposure to educational media messages.

Table 2.11 gives information on the exposure of women and men to several types of media and the proportions not regularly exposed to any media by background characteristics. Overall, 30 percent of women and 12 percent of men age 15-24 are not regularly exposed to any media. The most common form of media accessed by both women and men is television, followed by radio for women and newspapers/magazines for men. The majority of youth (59 percent of women and 70 percent of men) watch television regularly. Gender differentials are evident for each type of media. Consistent with the gender gap in literacy, the gender gap is also very wide in exposure to print media. Only 27 percent of young women, compared with 57 percent of young men, read a newspaper or magazine regularly. Compared with the older cohort of persons age 25-49, exposure to each medium of communication is higher among youth, particularly for men.

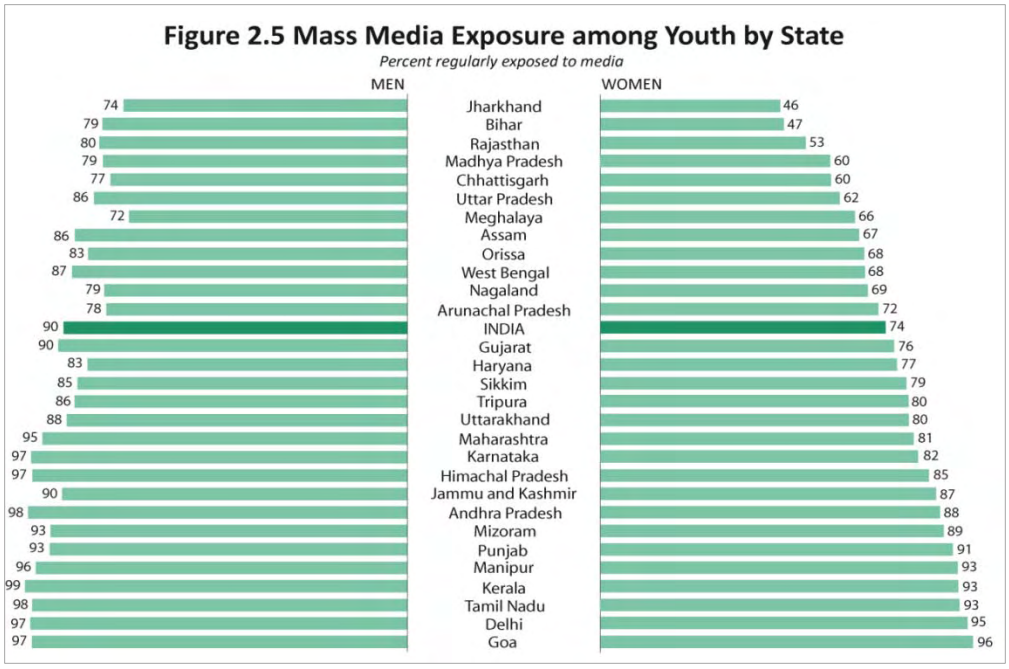
Exposure to each type of media increases with educational attainment. Among women and men with 10 or more years of schooling, 95-97 percent are exposed to any of the media. However, the majority of women with no education (63%) are not exposed to any media. Women with no education, who constitute one-fourth of the young population, are in a doubly disadvantageous position. They neither have schooling, nor are they exposed to any communication media. Media exposure increases with wealth, except for radio listening among men. Almost all youth in the highest wealth quintile are exposed to some media, whereas 68 percent of women in the lowest wealth quintile are not exposed to any media. Exposure to media is much lower among rural than urban youth. The difference is especially large for women. Media exposure is lower among ever-married persons than among those who have never been married.

Table 2.11 Exposure to mass media

Percentage of women and men age 15-24 years who usually read a newspaper or magazine, watch television, or listen to the radio at least once a week, who usually visit the cinema or theatre at least once a month, and who are not regularly exposed to any of these media by background characteristics, India, 2005-06

	Exposure to mass media											
	Women						Men					
Background characteristic	Reads a newspaper or magazine at least once a week	Watches tele-vision at least once a week	Listens to the radio at least once a week	Visits the cinema/ theatre at least once a month	Not regularly exposed to any media	Number of women	Reads a newspaper or magazine at least once a week	Watches tele-vision at least once a week	Listens to the radio at least once a week	Visits the cinema/ theatre at least once a month	Not regularly exposed to any media	Number of men
Age												
15-19	28.7	59.5	34.3	7.6	29.0	24,811	55.7	71.2	48.9	26.9	11.8	13,008
20-24	25.6	58.0	30.9	7.8	31.3	22,779	57.7	69.5	48.8	33.3	12.2	11,989
Residence												
Urban	46.5	84.7	34.5	12.5	10.0	14,931	68.6	87.1	47.6	39.0	3.7	9,435
Rural	18.4	46.9	31.8	5.5	38.9	32,660	49.5	60.2	49.6	24.6	17.0	15,561
Education												
No education	0.0	25.7	19.2	3.3	62.5	12,524	1.3	39.2	36.6	22.4	38.2	2,440
<5 years complete	3.2	44.3	27.5	6.1	42.4	3,422	13.6	53.3	47.5	28.4	22.6	1,896
5-9 years complete	25.2	63.9	35.3	6.9	23.2	18,009	52.5	68.6	48.2	26.0	12.3	11,200
10 or more years complete	60.4	85.9	42.8	13.2	5.5	13,633	84.5	84.0	52.9	37.0	2.7	9,452
Marital status												
Never married	39.6	70.5	38.3	8.5	19.2	23,588	60.0	74.2	49.7	31.5	10.1	20,721
Ever married	14.9	47.3	27.2	6.9	40.3	24,003	40.6	52.0	44.8	22.8	21.5	4,276
Wealth index												
Lowest	3.6	18.2	19.4	3.1	67.7	8,175	25.3	36.0	43.3	18.8	34.7	3,460
Second	8.8	36.5	29.1	5.4	46.7	9,284	40.1	50.7	49.5	24.5	19.9	4,577
Middle	19.3	57.4	34.7	7.5	27.9	10,131	54.5	69.1	52.0	32.1	10.0	5,407
Fourth	35.3	79.3	37.6	7.6	12.2	10,241	65.9	84.4	49.8	33.7	4.2	5,808
Highest	63.9	93.8	39.9	14.1	2.5	9,759	81.2	93.8	47.7	35.5	1.7	5,743
Total age 15-24	27.2	58.8	32.7	7.7	29.8	47,590	56.7	70.4	48.8	30.0	12.0	24,997
Total age 25-49	20.3	52.7	28.8	5.7	28.6	76,795	51.0	59.2	41.8	13.6	23.0	44,754

Note: Total includes women and men with missing information on education, who are not shown separately.



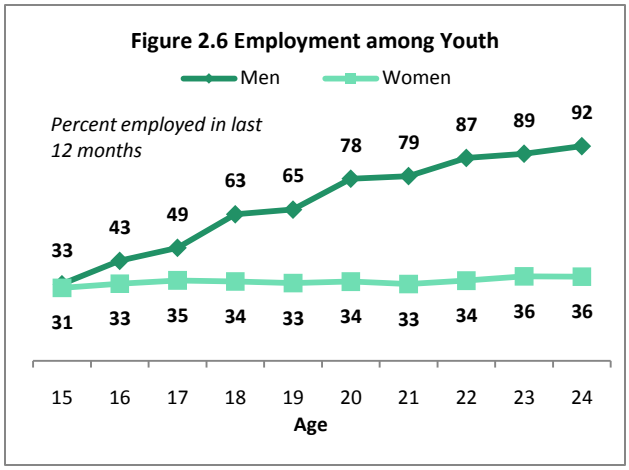
The majority of young women from Jharkhand and Bihar are not only illiterate, but they also do not have regular exposure to any media (Figure 2.5). With the exception of Jharkhand (46%), Bihar (47%), and Rajasthan (53%), 60 percent or more of women in all states are regularly exposed to some media. The proportion of women exposed to media exceeds 90 percent in Punjab, Manipur, Kerala, Tamil Nadu, Delhi, and Goa. Media exposure is much higher among men than among women. In every state, more than 70 percent of young men are exposed to media, and in 13 of the 29 states, at least 90 percent of men are regularly exposed to media.

With the exception of Meerut, in every one of the remaining seven cities for which separate estimates are available, more than 90 percent of men and women from both slum and non-slum areas are exposed to at least one mass communication medium (data not shown in the table).

2.5 Employment

NFHS-3 data provide important information about employment among youth, including information on the following issues: (1) employment below the legal age for work (18 years) and (2) unemployment in the age group 20-24 years. Table 2.12 shows the percentage of employed women and men age 15-24 by selected background characteristics. Overall, 27 percent of women and 64 percent of men age 15-24 were employed at the time of the survey. An additional 7 percent of women and 3 percent of men were not employed at the time of survey, but were employed sometime in the 12 months preceding the survey. These data show that women are only half as likely as men to be employed.

As seen in Figure 2.6, the proportion of men who are employed increases from 33 percent at age 15 to 92 percent at age 24. Employment for men increases sharply from age 17 to age 18, the minimum legal age for employment. From age 19 to age 20 and then from age 21 to age 22 there are also sharp increases in the proportion of men employed. In contrast, the employment rate for women remains practically unchanged at all ages, increasing from 31 percent at age 15 to 36 percent at age 24. More than two in five men and one in three women age 15-17 are engaged in economic activity, even though they are below the legal age of employment.



Urban youth are less likely than rural youth to be employed (Table 2.12), mainly due to the higher school/college attendance of urban youth. The proportion of employed men and women decreases sharply with increases in education and wealth. For example, practically all young men (94%) with no education were employed at the time of survey, whereas a majority

Table 2.12 Employment status

Percent distribution of women and men age 15-24 by employment status, according to background characteristics, India, 2005-06

	Women					Men				
	Employed in the last 12 months		Not employed in the last 12 months			Employed in the last 12 months		Not employed in the last 12 months		
Background characteristic	Currently employed[1]	Not currently employed		Total	Number of women	Currently employed[1]	Not currently employed		Total	Number of men
Age										
15-19	26.6	6.8	66.6	100.0	24,812	47.4	3.0	49.5	100.0	13,008
20-24	28.1	6.7	65.2	100.0	22,779	81.6	3.2	15.1	100.0	11,989
Residence										
Urban	19.9	2.3	77.8	100.0	14,931	58.8	2.1	39.0	100.0	9,435
Rural	30.7	8.8	60.5	100.0	32,660	66.8	3.7	29.4	100.0	15,561
Education										
No education	36.2	11.0	52.8	100.0	12,524	93.5	3.2	3.2	100.0	2,440
<5 years complete	36.6	9.8	53.7	100.0	3,422	89.7	4.3	6.1	100.0	1,896
5-9 years complete	26.5	5.9	67.5	100.0	18,009	68.6	3.5	27.8	100.0	11,200
10 or more years complete	17.8	3.2	79.0	100.0	13,633	45.2	2.3	52.3	100.0	9,452
Marital status										
Never married	29.9	5.5	64.6	100.0	23,588	57.8	2.9	39.2	100.0	20,721
Ever married	24.6	8.0	67.3	100.0	24,003	92.6	4.1	3.2	100.0	4,276
Wealth index										
Lowest	37.0	15.2	47.8	100.0	8,175	77.5	5.0	17.4	100.0	3,460
Second	34.9	8.9	56.2	100.0	9,285	74.0	4.2	21.8	100.0	4,577
Middle	30.9	6.1	63.0	100.0	10,131	68.7	2.9	28.2	100.0	5,407
Fourth	21.5	3.3	75.1	100.0	10,242	63.3	2.3	34.3	100.0	5,808
Highest	14.2	1.9	83.9	100.0	9,759	43.3	2.1	54.5	100.0	5,743
Total age 15-24	27.3	6.8	65.9	100.0	47,590	63.8	3.1	33.0	100.0	24,997
Total age 25-49	41.9	6.4	51.7	100.0	76,794	96.1	2.1	1.8	100.0	44,754

Note: Total includes women and men with missing information on education, who are not shown separately.

[1] 'Currently employed' is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reasons.

of young men with 10 or more years of education were not employed. A large proportion of ever-married men (93%) are employed, whereas only 58 percent of never married men are employed.

The largest proportion of women who work, work in agriculture (59%), whereas, the largest proportion of employed men (42%) are engaged in production occupations (Table 2.13). In rural areas, the largest proportion of both women and men are engaged in agricultural work, whereas in urban areas, production work is the most common occupation for both women and men.

The majority of young women who are engaged in agricultural work are employed by a family member (64%), 28 percent are employed by a non-family member, and 7 percent are self-employed (Table 2.14). Even among non-agricultural workers, almost one-quarter are employed by a family member.

Table 2.13 Occupation

Percent distribution of women and men age 15-24 employed in the 12 months preceding the survey by occupation, according to residence, India, 2005-06

Occupation	Urban	Rural	Total
WOMEN			
Professional[1]	18.2	2.8	6.0
Sales	6.6	1.6	2.6
Service	15.7	1.5	4.4
Production[2]	44.3	21.3	26.0
Agricultural	8.7	71.9	58.9
Other	5.8	0.5	1.6
Missing	0.6	0.3	0.4
Total	100.0	100.0	100.0
Number of women	3,322	12,885	16,207
MEN			
Professional[1]	7.6	2.6	4.3
Sales	22.9	9.3	14.0
Service	8.3	3.9	5.4
Production[2]	51.2	36.6	41.6
Agricultural	3.6	44.6	30.5
Other	5.1	1.7	2.9
Missing	1.2	1.3	1.2
Total	100.0	100.0	100.0
Number of men	5,745	10,977	16,722

[1] Includes technical, administrative, and managerial occupations.
[2] Includes skilled and unskilled manual occupations.

Table 2.14 Type of employment

Percent distribution of women age 15-24 employed in the 12 months preceding the survey by type of employer and continuity of employment, and percent distribution of women and men age 15-24 employed in the 12 months preceding the survey by type of earnings, according to type of occupation (agricultural or non-agricultural), India, 2005-06

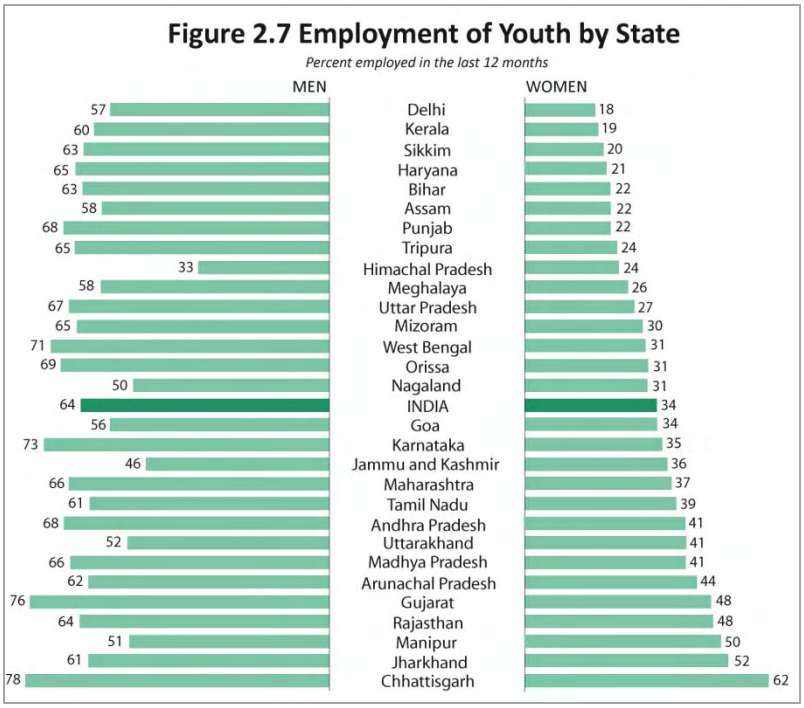
Employment characteristic	Type of occupation: Agricultural work	Non-agricultural work	Total[1]
WOMEN			
Type of employer			
Employed by family member	64.4	23.1	47.5
Employed by non-family member	28.3	55.8	39.4
Self-employed	7.3	21.1	13.0
Missing	0.0	0.1	0.1
Total	100.0	100.0	100.0
Continuity of employment			
All year	39.5	73.3	53.4
Seasonal	53.8	17.1	38.7
Occasional	6.7	9.6	7.9
Total	100.0	100.0	100.0
Type of earnings			
Cash only	27.4	89.2	52.5
Cash and in-kind	14.8	4.3	10.5
In-kind only	18.3	0.9	11.2
Not paid	39.4	5.5	25.7
Missing	0.1	0.1	0.1
Total	100.0	100.0	100.0
Number of women	9,551	6,583	16,198
MEN			
Type of earnings			
Cash only	29.8	93.1	72.8
Cash and in-kind	40.7	4.3	15.4
In-kind only	11.7	0.3	3.8
Not paid	17.9	2.3	7.9
Missing	0.0	0.1	0.2
Total	100.0	100.0	100.0
Number of men	5,102	11,410	16,722

[1] Includes women/men with missing information on type of occupation who are not shown separately.

More than one in five women in non-agricultural occupations are self-employed. More than half of women who are doing agricultural work (54%) have only seasonal employment. Less than two-thirds of employed women (64%) earn cash for their work, compared with 88 percent of men who are employed. Eleven percent of employed women are paid only in kind and 26 percent are not paid at all (that is, they are unpaid family workers). By contrast, only 8 percent of young men are not paid for the work that they do.

State differentials in urbanization, higher education, age at marriage, and the availability of work are important factors in the large variations

in the proportion of youth who are employed. In addition, cultural factors are likely to affect state employment rates for women. As Figure 2.7 shows, at least 50 percent of young men in every state except Himachal Pradesh and Jammu and Kashmir are employed. The proportion of men employed exceeds 75 percent in Chhattisgarh and Gujarat. In Delhi and Kerala, not even one-fifth of women are employed, whereas in Jharkhand and Chhattisgarh, more than half are employed.



Among the eight cities with separate estimates of employment, the employment rate for young men is highest in Meerut (63%). In every city, the employment rate among men in slums is 8-23 percentage points higher than it is among men in non-slum areas. In the cities of Kolkata, Indore, Mumbai, and Chennai, about one-third or more of young women are employed (Table 2.15). In Kolkata and Mumbai, almost equal proportions of slum and non-slum women are engaged in economic activity, whereas in the other cities a somewhat higher proportion of slum women than non-slum women are employed.

Table 2.15 Employment

Percentage of women and men age 15-24 years who were employed in the last 12 months by slum/non-slum residence in selected cities, India, 2005-06

	Women			Men		
City	Slum	Non-slum	Total	Slum	Non-slum	Total
Delhi	25.3	22.3	22.8	71.5	51.3	56.1
Meerut	33.4	24.2	28.2	69.2	57.9	63.2
Kolkata	31.0	32.0	31.7	63.4	49.2	55.0
Indore	36.0	32.5	33.2	64.9	56.9	58.7
Mumbai	34.3	35.8	35.1	64.3	44.3	53.8
Nagpur	35.7	26.3	29.8	68.6	45.3	54.5
Hyderabad	31.8	24.4	25.7	60.3	50.4	52.2
Chennai	44.2	37.7	38.9	69.1	58.3	60.4

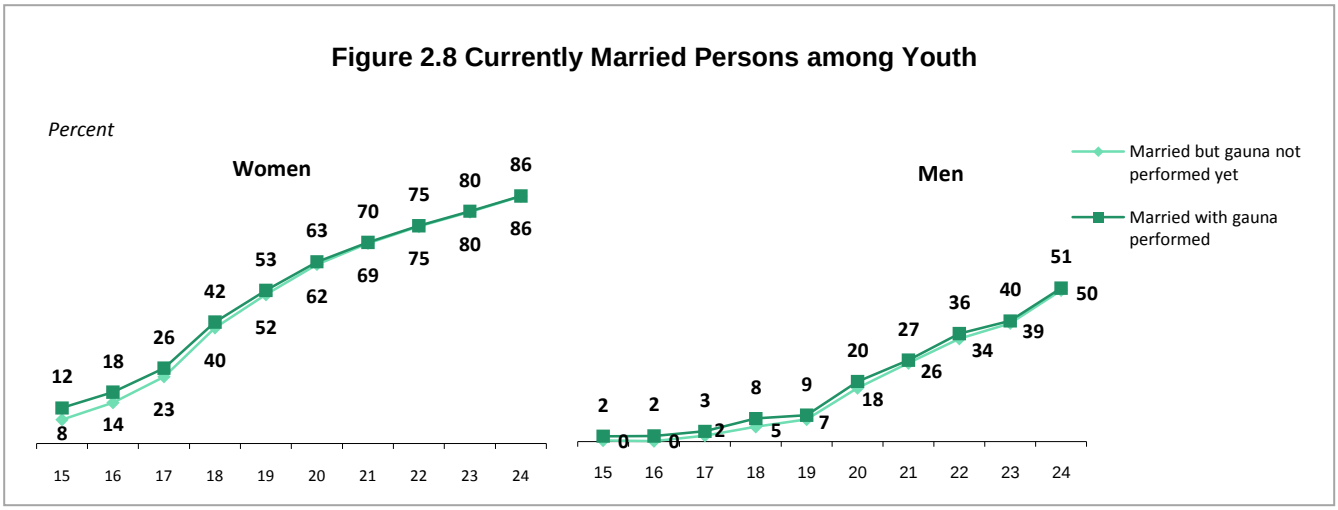
2.6 Marital Status

Traditionally, the Indian population is characterized by universal marriage and an early age at marriage. The data collected in the NFHS-3 survey are consistent with this traditional pattern.

Table 2.16 Marital status

Percent distribution of women and men age 15-24 years by marital status, according to age, India, 2005-06

Marital status	Never married	Currently married	Currently married but *gauna* not performed	Widowed	Divorced/ separated/ deserted	Total	Number
Women							
15-24	47.9	49.4	1.7	0.3	0.8	100.0	47,590
15-19	69.6	27.1	2.9	0.1	0.4	100.0	24,811
20-24	24.3	73.7	0.4	0.5	1.2	100.0	22,779
Men							
15-24	81.3	16.8	1.6	0.1	0.2	100.0	24,997
15-19	95.4	2.8	1.8	0.0	0.0	100.0	13,008
20-24	66.1	32.0	1.4	0.2	0.3	100.0	11,989

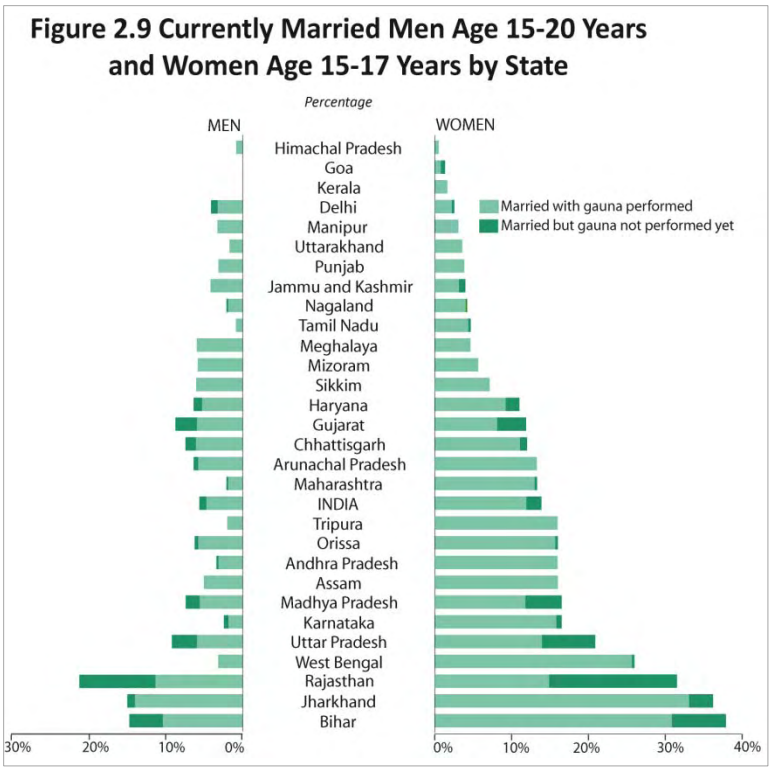


A. Early marriage

Table 2.16 shows that every second woman but less than one in every five men age 15-24 have ever been married. Eight percent of women who are 15 years old have already started living with their husband and an additional 4 percent are married but have not started living with their husband yet (Figure 2.8). The proportion of women who have ever been married increases steadily with age and reaches 86 percent by age 24. Although very few men age 15-17 years have been married, by age 24 half of men are married. A sharp increase in the proportion married is observed from age 17 to age 18 among women.

Among teenage women, only one in 1,000 are already widowed and only four in 1,000 are divorced, separated, or deserted. At age 20-24 years, only 2 percent of women are widowed, divorced, separated, or deserted.

Table 2.17 shows the proportion of women and men in each state who are currently married, including those who are married but who have not started living with their spouse, by age group (see also Figure 2.9). The proportions are presented in unconventional age groups to highlight the proportion of men and women who got married below the legal minimum age at marriage.



At the national level, one in every five women age 15-17 years is married, and slightly more than half of women age 15-24 are married. Similarly, one in every 17 men age 15-20 have ever been married. More than 80 percent of men age 15-24 have never been married.

Table 2.17 Marital status by state

Percentage of women and men age 15-24 years who are ever married[1], by age and state, India, 2005-06

	Women				Men		
State	15-17	18-19	20-24	15-24	15-20	21-24	15-24
North							
Delhi	2.6	16.8	52.4	31.2	4.1	22.0	10.7
Haryana	11.2	44.0	80.3	50.5	6.5	44.0	20.0
Himachal Pradesh	0.4	14.1	59.0	34.0	0.8	16.4	5.5
Jammu & Kashmir	4.1	11.7	40.5	24.0	4.2	22.7	9.8
Punjab	3.9	22.7	59.2	37.0	3.2	36.0	15.0
Rajasthan	31.0	61.9	87.0	64.0	21.4	63.5	35.1
Uttarakhand	3.9	22.1	64.1	35.1	2.3	31.0	11.6
Central							
Chhattisgarh	12.1	47.9	79.6	49.9	7.6	55.7	24.8
Madhya Pradesh	16.4	54.6	84.6	57.0	10.2	49.5	24.2
Uttar Pradesh	21.0	52.0	83.0	54.0	11.1	50.9	23.4
East							
Bihar	38.0	69.4	89.0	67.1	14.5	53.7	27.3
Jharkhand	36.1	64.4	83.8	64.5	12.5	54.0	26.9
Orissa	16.0	34.0	68.0	45.2	6.4	23.9	13.0
West Bengal	26.0	59.1	80.9	59.7	3.3	41.1	19.2
Northeast							
Arunachal Pradesh	13.2	42.1	67.0	42.3	6.6	41.5	18.0
Assam	16.0	45.0	64.0	46.3	4.9	23.6	11.6
Manipur	3.4	17.3	40.6	25.8	3.0	21.3	10.2
Meghalaya	4.6	23.7	53.0	32.0	6.0	30.2	13.3
Mizoram	5.5	22.3	53.5	34.3	5.6	35.9	16.7
Nagaland	4.2	18.7	47.0	28.2	2.2	19.1	8.2
Sikkim	7.3	30.5	56.9	35.1	6.0	34.6	17.0
Tripura	15.8	46.0	73.9	47.0	2.2	26.1	12.9
West							
Goa	2.1	12.5	31.4	19.8	0.0	11.4	5.1
Gujarat	11.5	39.0	74.0	49.0	8.9	49.2	22.9
Maharashtra	13.2	37.2	71.8	47.1	2.0	24.1	11.0
South							
Andhra Pradesh	15.9	52.2	80.7	57.0	3.2	35.7	16.1
Karnataka	16.5	40.3	71.0	49.0	2.6	22.4	11.0
Kerala	2.2	23.8	57.9	34.3	0.0	5.1	1.9
Tamil Nadu	4.6	23.3	59.3	38.7	0.8	18.5	8.5
India	19.0	47.5	75.7	52.1	7.4	38.2	18.7

[1] Includes married, but *gauna* not performed.

In Bihar, Jharkhand, Rajasthan, West Bengal, and Uttar Pradesh, more than one-fifth of women age 15-17 years are married. The proportions of women age 15-17 years who are married are particularly high in Bihar (38%) and Jharkhand (36%). More than one in every five men age 15-20 in Rajasthan are married, and more than 1 in 10 in Bihar, Jharkhand, Uttar Pradesh, and Madhya Pradesh are married. Jammu and Kashmir and Goa are the only states where at least three-fourths of women age 15-24 have never been married. Along with these three states, in Himachal Pradesh, Nagaland, Kerala, and Tamil Nadu, 90 percent or more of young men have never been married. In Kerala, 98 percent of young men have never been married.

In Bihar, Jharkhand, Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat, and Haryana, a sizeable proportion of women are married but have not yet started living with their husband. The same is true for young men in Rajasthan, Bihar, Uttar Pradesh, Gujarat, and Madhya Pradesh.

B. Determinants of early marriage

For identifying factors that are associated with early marriage, two different logistic regressions were run. The first regression, which tries to capture the current situation, includes only women age 15-17 with the dependent variable assuming a value of 1 if the woman is ever married (including women whose *gauna* was not performed) and 0 otherwise. In this regression, some of the women who are not married could still get married before they are age 18. Thus, to get a more complete, if not the most current, insight into the correlates of early marriage, a second regression is run to capture the experience of women age 18-24 years. For this regression the dependent variable assumes a value of 1 if a woman age 18-24 was married before she was age 18 (including women whose *gauna* was not performed), and 0 otherwise. Note that in this regression, women who are not married and who were married after age 18 years are all coded as 0. The predictors included in the analysis are education, religion, caste, residence, region, and the wealth index. Table 2.18 provides the odds ratios for the different explanatory variables. The key findings of this analysis are:

a) The higher the education the lower the odds that a woman age 15-17 would be married and the lower the odds that a woman age 18-24 would have been married before age 18. Notably, even small amounts of education are associated with lower odds of early marriage. For example, the odds that a woman age 15-17 who has 0-4 years of education is married are only 46 percent of the odds that a woman age 15-17 who has no education is married (OR=0.46 vs. OR=1.00).
b) Even when all other predictors are being controlled for, the odds of be-

Table 2.18 Logistic regression analysis of marriage

Odds ratios (OR) from logistic regressions of women age 15-17 years who are married and of women age 18-24 years who were married before age 18 years for selected background characteristics, NFHS-3, India

Background characteristic	Women age 15-17 years who are ever married OR	Women age 18-24 years who were married before age 18 years OR
Education		
Ref. Cat.: No education		
<5 years complete	0.46***	0.53***
5-9 years complete	0.23***	0.32***
10+ years complete	0.12***	0.08***
Religion		
Ref. Cat.: Hindu		
Muslim	0.41	0.68***
Christian	0.78	0.53***
Other	0.40	0.55***
Caste/tribe		
Ref. Cat.: Scheduled caste		
Scheduled tribe	0.61***	0.67***
Other backward class	2.64***	1.23*
Other	1.11	1.18
Residence		
Ref. Cat.: Urban		
Rural	2.01***	1.38***
Region		
Ref. Cat.: North		
Central	0.88	1.10*
East	1.49***	1.20***
Northeast	0.70*	0.72***
West	1.04	1.11
South	0.86	0.93
Wealth		
Ref. Cat.: Lowest		
Second	1.16*	0.95
Middle	0.96	0.74***
Fourth	0.74***	0.59***
Highest	0.33***	0.35***

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

ing married are much higher for rural than for urban women. For rural women age 15-17, the odds of being married are twice those for urban women.

c) Hindu women age 18-24 are more likely than women from other religions to have been married before age 18; however, religion does not affect the likelihood of being currently married for women age 15-17.
d) Compared with women from the scheduled castes, women from other backward classes have higher odds of being married early and women from the scheduled tribes have lower odds, whereas women from other castes or tribes are no different.
e) Early marriage among both women age 15-17 and women age 18-24 is consistently more likely among women in the east region and less likely among women in the northeast region, compared with women in the north region.
f) Women in wealthier households are much less likely to be married early than women in the poorest households, even after education and residence along with other relevant variables are controlled.

This analysis shows that even small amounts of education lower the odds that women will be married early. Wealth, belonging to the scheduled tribes, and living in the northeast also have a strong negative association with the likelihood that a woman will be married early. Living in a rural area raises the odds of early marriage even when education is controlled for.

3. What They Know: Knowledge of Youth

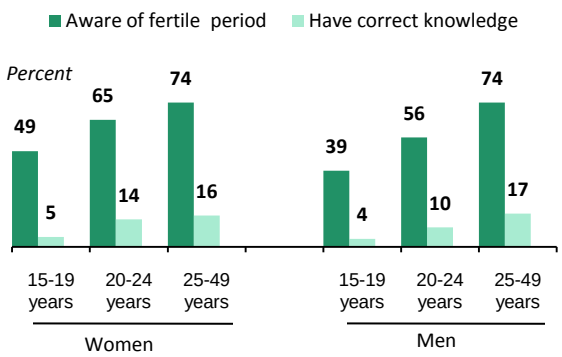
This chapter discusses the level of knowledge of youth on key issues of family welfare and health. The specific topics discussed are i) knowledge of the fertile period, ii) knowledge of family planning methods, and iii) knowledge of HIV/AIDS.

Age 15-24 is the period when most women and men enter marital unions and begin sexual activity. During this period, it is important for young men and women to have an awareness of these areas and as accurate information as possible.

3.1 Awareness of the Fertile Period

Adult women and men need to have basic knowledge of women's physiology. This is particularly crucial for those who want to use coitus-related methods of family planning, such as periodic abstinence, withdrawal, vaginal methods, and condoms. Effective use of periodic abstinence depends not only on the woman's knowledge of the method but also on the man's knowledge and his cooperation in avoiding sexual intercourse during the middle of the woman's menstrual cycle, when she is most likely to become pregnant.

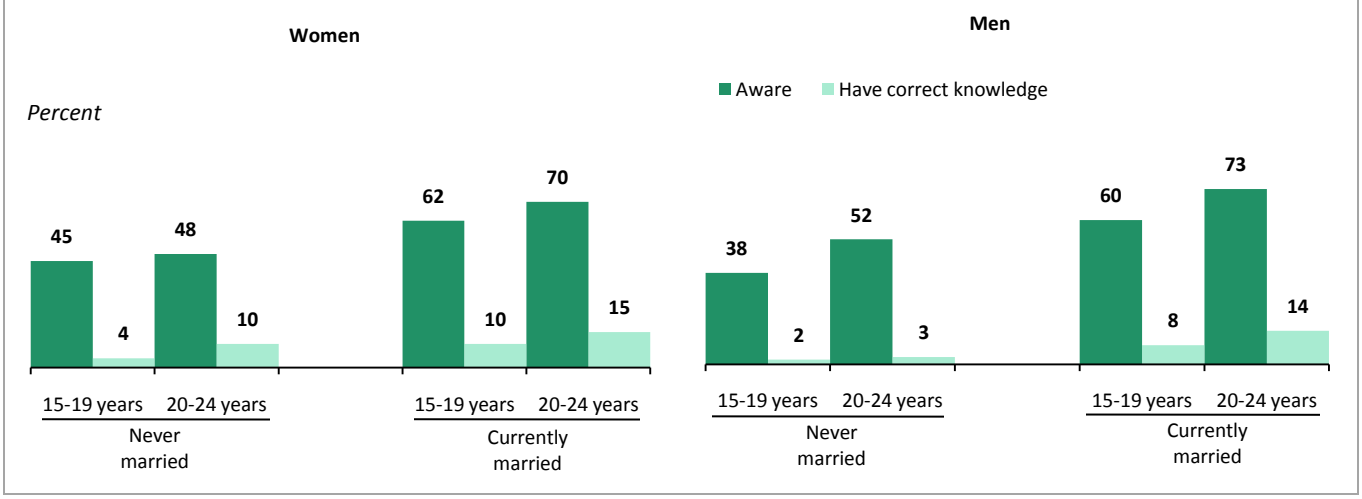
Figure 3.1 Knowledge of the Fertile Period



A large proportion of young women and men are not aware that a woman is more likely to get pregnant on specific days in a menstrual cycle. About half of teenage women (age 15-19 years) and two-thirds of women age 20-24 years reported that they know about the fertile period, however, only 5 and 14 percent in these two age groups, respectively, know that a woman is fertile only during the middle of the menstrual cycle (Figure 3.1). Awareness is even lower among young men. A large proportion of youth have misconceptions about the fertile period. Even at age 20-24 years, only 1 in 10 men have correct knowledge about the fertile period. Among the older population age 25-49 years, although awareness of the fertile period is more common for both women and men than among youth, correct knowledge remains very low.

Correct knowledge about the fertile period is almost non-existent among never married youth, and even among currently married youth, only 8-15 percent have correct knowledge about the fertile period (Figure 3.2). Most currently married women and men who reported that they know of the fertile period wrongly believe that the fertile period is immediately before or after the menstrual cycle or that it could be any time during the menstrual cycle. The findings underscore the need to educate youth about these basic facts of the reproduction process. In India, 4-5 percent of young married women say that they currently use the rhythm method to delay or avoid a pregnancy (see Chapter 5). Practice of the rhythm method with incorrect knowledge of the fertile period can lead to unwanted pregnancy and the possibility that the pregnancy will result in abortion.

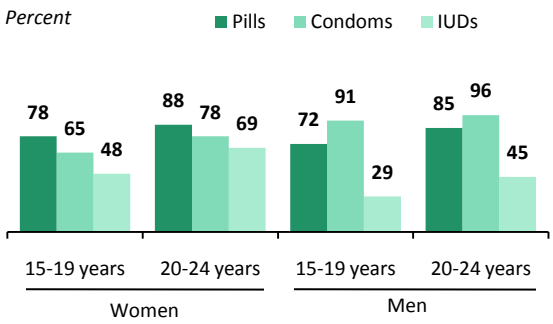
Figure 3.2 Awareness and Knowledge among Youth of Fertile Period by Marital Status



3.2 Knowledge of Family Planning Methods

Knowledge of family planning methods is a precondition for their use. Knowledge of different family planning methods, especially spacing methods, is essential for providing young couples with the means to delay or avoid a pregnancy. Knowledge of condoms is also important for the practice of safe sex, and knowledge of emergency contraception is essential for avoiding an unwanted pregnancy after unprotected sex.

Figure 3.3 Knowledge among Youth of Pills, Condoms, and IUDs



As seen in Table 3.1, almost all women and men age 15-24 years know at least one method of contraception and at least one modern method. Awareness of sterilization, especially of female sterilization, is very widespread. Knowledge of spacing methods is less common, even though this type of knowledge is crucial for young persons who will be initiating family building soon or are in the early stages of family building (Figure 3.3).

Knowledge of female condoms is very low (only 7 percent for women and 14 percent for men). Among the remaining modern spacing methods, women are most likely to know about pills and least likely to know about injectables. Men are least likely to know about IUDs, but their knowledge of condoms is very high (more than 90 percent). Women are more likely than men to know about pills, IUDs, and injectables, but much less likely to know about condoms. Knowledge of emergency contraception among youth is quite scant. Only 8 percent of women and 15 percent of men know about emergency contraception. Currently married respondents are more likely than never married respondents to know about every method except female

Table 3.1 Knowledge of contraceptive methods

Percentage of all women and men, currently married women and men, and never married women and men age 15-24 who know any contraceptive method, by specific method and residence, India, 2005-06

Method	Women			Men		
	All women	Currently married women	Never married women	All men	Currently married men	Never married men
			URBAN			
Any method	97.3	99.2	96.2	98.4	99.6	98.2
Any modern method	97.3	99.1	96.2	98.3	99.6	98.2
Female sterilization	94.6	98.0	92.5	91.0	97.2	90.3
Male sterilization	72.5	81.2	67.2	82.9	91.5	82.0
Pill	87.1	92.0	84.2	82.9	88.4	82.3
IUD	65.2	79.5	56.4	40.7	52.9	39.3
Injectables	46.9	55.7	41.5	39.9	43.7	39.5
Condom/Nirodh	81.2	85.7	78.5	96.6	98.2	96.4
Female condom	11.6	10.2	12.5	18.6	14.2	19.0
Emergency contraception	11.3	15.4	8.9	17.8	20.9	17.5
Other modern method	0.1	0.2	0.1	0.1	0.0	0.1
Pill, IUD, and condom[1]	59.8	73.6	51.5	40.1	52.0	38.8
Any traditional method	33.0	54.9	19.7	39.2	61.9	36.7
Rhythm	29.1	47.8	17.6	30.8	55.2	28.2
Withdrawal	16.3	33.1	6.1	26.6	42.6	24.8
Folk method	1.8	2.7	1.1	0.6	1.4	0.5
Mean number of methods known by respondents age 15-24	5.2	6.0	4.7	5.3	6.1	5.2
Number of respondents age 15-24	14,931	5,578	9,253	9,435	921	8,500
			RURAL			
Any method	95.4	98.4	91.7	96.6	98.7	96.1
Any modern method	95.3	98.2	91.6	96.6	98.6	96.0
Female sterilization	92.9	96.8	87.9	88.8	94.0	87.4
Male sterilization	69.8	77.6	60.1	76.4	85.1	74.1
Pill	80.9	86.5	74.1	75.6	83.2	73.6
IUD	54.5	64.0	42.8	34.4	45.9	31.3
Injectables	42.3	49.6	33.3	36.1	42.5	34.4
Condom/Nirodh	66.8	72.1	60.5	91.4	93.9	90.7
Female condom	5.1	4.9	5.3	11.9	11.4	12.0
Emergency contraception	6.8	8.3	4.8	13.7	18.0	12.5
Other modern method	0.1	0.1	0.0	0.1	0.0	0.1
Pill, IUD, and condom[1]	46.6	55.8	35.4	33.5	44.7	30.4
Any traditional method	35.2	52.1	14.1	38.2	61.1	31.9
Rhythm	27.9	41.3	11.2	28.5	52.9	21.9
Withdrawal	19.5	31.8	4.0	26.4	39.3	22.9
Folk method	4.1	5.3	2.5	1.1	2.2	0.8
Mean number of methods known by respondents age 15-24	4.7	5.4	3.9	4.8	5.7	4.6
Number of respondents age 15-24	32,660	17,931	14,334	15,561	3,283	12,220
			TOTAL			
Any method	96.0	98.6	93.5	97.3	98.9	96.9
Any modern method	95.9	98.4	93.4	97.2	98.8	96.9
Female sterilization	93.4	97.1	89.8	89.6	94.7	88.6
Male sterilization	70.7	78.4	62.9	78.9	86.5	77.3
Pill	82.8	87.8	78.0	78.4	84.4	77.1
IUD	57.9	67.7	48.2	36.8	47.4	34.6
Injectables	43.7	51.1	36.5	37.5	42.8	36.5
Condom/Nirodh	71.3	75.3	67.6	93.4	94.8	93.1
Female condom	7.1	6.2	8.1	14.4	12.0	14.9
Emergency contraception	8.2	10.0	6.4	15.2	18.6	14.5
Other modern method	0.1	0.1	0.0	0.0	0.0	0.1
Pill, IUD, and condom[1]	50.8	59.9	41.7	35.9	46.3	33.8
Any traditional method	34.5	52.7	16.3	38.5	61.3	33.9
Rhythm	28.3	42.8	13.7	29.4	53.4	24.5
Withdrawal	18.5	32.1	4.8	26.5	40.0	23.7
Folk method	3.3	4.7	1.9	0.9	2.1	0.6
Mean number of methods known by respondents age 15-24	4.9	5.5	4.2	5.0	5.8	4.9
Number of respondents age 15-24	47,590	23,508	23,587	24,997	4,205	20,720

[1] All three methods.

condoms. Similarly, urban youth are more likely than rural youth to know about every method of contraception except withdrawal and folk methods. Overall, however, differentials by residence and marital status are often quite small.

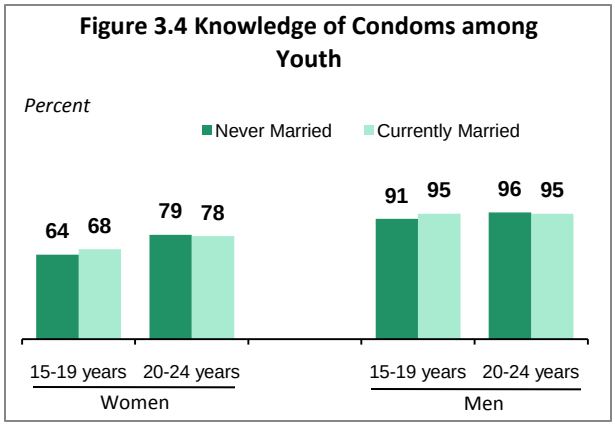
Table 3.2 shows differentials in the knowledge of selected modern spacing methods and emergency contraception by age, education, and the wealth index. For ever-married and never married women and men, knowledge of every method is higher in urban areas than in rural areas and at age 20-24 than age 15-19. Knowledge increases substantially with education and the wealth index. Ever-married women and men are more knowledgeable about each of the methods than never married women and men.

Table 3.2 Knowledge of modern contraceptive spacing methods and emergency contraception

Percentage of women and men age 15-24 years who know about selected modern contraceptive spacing methods and emergency contraception by marital status, according to background characteristics, India, 2005-06

	Never married					Ever married				
Background characteristic	Pill	IUD	Condom	Emergency contraception	Number	Pill	IUD	Condom	Emergency contraception	Number
				WOMEN						
Age										
15-19	75.7	44.0	64.0	5.2	17,969	85.3	57.1	67.7	7.9	6,842
20-24	85.6	61.5	79.3	10.3	5,618	88.6	71.5	77.9	10.8	17,161
Education										
No education	60.7	31.6	38.2	1.3	2,917	81.9	56.2	63.4	4.8	9,607
<5 years complete	67.4	31.9	45.4	2.5	1,385	84.1	57.6	65.9	10.5	2,037
5-9 years complete	76.0	42.0	62.7	5.1	9,737	91.5	73.4	81.9	12.1	8,272
10 or more years complete	86.9	62.1	84.7	9.9	9,546	95.1	86.3	93.0	17.6	4,087
Wealth index										
Lowest	63.0	28.3	42.1	3.0	2,850	82.0	51.0	61.0	5.1	5,324
Second	71.0	36.0	52.5	3.2	3,683	85.4	60.0	69.1	7.7	5,598
Middle	74.0	44.0	61.0	4.1	4,818	86.5	69.4	75.3	9.3	5,307
Fourth	82.0	53.0	74.1	7.4	5,559	92.3	78.8	85.5	12.7	4,678
Highest	88.6	63.1	86.3	10.7	6,657	96.3	88.4	93.9	19.7	3,090
Total age 15-24	78.0	48.2	67.6	6.4	23,587	87.7	67.4	75.0	10.0	24,002
Total age 25-49	84.2	68.0	77.1	12.6	1,874	86.4	75.8	75.3	12.3	74,920
				MEN						
Age										
15-19	71.9	28.8	91.2	10.6	12,635	81.0	38.7	95.1	12.0	373
20-24	85.3	43.6	96.1	20.7	8,086	84.5	48.2	94.7	19.0	3,903
Education										
No education	53.6	19.2	77.4	4.9	1,517	71.6	28.3	88.1	8.4	923
<5 years complete	62.6	19.5	85.9	9.9	1372	74.8	29.9	90.3	15.6	524
5-9 years complete	72.2	25.5	91.5	9.6	9,219	87.3	50.0	96.8	18.3	1,980
10 or more years complete	88.8	49.4	98.7	22.2	8,608	96.6	73.8	99.8	31.5	845
Wealth index										
Lowest	62.0	20.5	81.3	7.9	2,465	76.6	31.1	88.6	13.4	995
Second	72.8	28.0	90.3	9.9	3,450	83.0	39.3	94.3	17.0	1,126
Middle	74.0	31.5	93.3	12.6	4,427	85.0	52.1	96.5	18.9	980
Fourth	80.4	36.8	95.5	14.8	5,008	91.0	62.7	99.0	21.3	801
Highest	86.4	46.0	97.8	21.9	5,371	94.2	70.0	99.1	28.9	372
Total age 15-24	77.1	34.6	93.1	14.5	20,721	84.2	47.3	94.7	18.4	4,276
Total age 25-49	86.8	53.1	96.2	25.9	4,587	84.8	58.8	92.4	22.8	40,167

The groups of ever-married women who are most knowledgeable about every method are those with 10 or more years of education and those in the highest wealth quintile. However, even in these groups, knowledge of emergency contraception is quite low. Among never married persons, knowledge of spacing and emergency contraception is lower among youth than among older respondents age 25-49. Among ever-married persons, however, the knowledge of pills and condoms is almost the same among youth and older respondents.



Since condoms serve a dual purpose of protecting against pregnancy and reducing the risk of acquiring and spreading sexually transmitted infections, knowledge of condoms is particularly important among youth. As shown in Figure 3.4, awareness of condoms among youth is almost universal among both never married and ever-married men, but only two-thirds of never married women and less than 8 out of 10 ever-married women have heard of condoms.

State-level variations in the knowledge of modern spacing methods are quite large as is evident from Table 3.3. In Delhi, Madhya Pradesh, Uttar Pradesh, Bihar, Sikkim, and Tripura, 90 percent or more of young women are aware of pills. By contrast, in Meghalaya, Mizoram,

Table 3.3 Awareness of Modern Spacing Methods

Percentage of women and men age 15-24 who are aware of specific modern spacing methods by state, India, 2005-06

	Women				Men			
State	Pill	IUD	Condom	Emergency contraception	Pill	IUD	Condom	Emergency contraception
North								
Delhi	97.9	83.3	95.5	13.7	92.0	46.4	99.3	21.1
Haryana	82.9	66.7	77.8	9.8	73.4	36.9	92.3	13.4
Himachal Pradesh	85.5	57.1	86.5	7.7	81.2	40.4	95.5	16.9
Jammu & Kashmir	76.7	49.6	63.9	3.1	68.9	29.3	88.6	6.3
Punjab	81.7	60.1	80.1	7.7	70.2	33.1	95.1	13.8
Rajasthan	84.4	59.1	72.7	11.2	78.5	40.7	92.1	19.9
Uttarakhand	87.6	63.0	82.5	11.8	88.1	52.0	96.9	12.5
Central								
Chhattisgarh	88.5	51.7	77.2	7.4	81.7	32.7	93.3	4.9
Madhya Pradesh	91.0	59.1	79.9	17.3	84.2	34.7	95.5	18.7
Uttar Pradesh	90.4	73.1	83.2	5.2	89.1	60.2	96.6	12.3
East								
Bihar	92.7	67.0	72.3	3.4	76.9	36.0	92.6	11.4
Jharkhand	75.6	45.1	59.2	4.5	74.2	29.5	86.5	6.4
Orissa	84.6	35.2	64.2	4.4	78.2	19.9	90.1	9.7
West Bengal	88.3	41.2	71.1	11.5	80.4	27.5	90.6	30.9
Northeast								
Arunachal Pradesh	82.8	52.3	76.4	6.3	75.0	36.3	92.5	4.6
Assam	88.4	44.1	63.1	2.8	79.0	11.2	86.7	11.9
Manipur	83.9	75.3	92.8	11.8	84.0	49.6	98.0	34.1
Meghalaya	63.6	31.6	64.4	7.2	34.1	8.3	70.9	3.1
Mizoram	67.5	69.6	89.3	6.4	67.6	43.6	96.2	24.0
Nagaland	54.0	37.4	67.8	5.8	40.0	13.8	88.0	11.1
Sikkim	91.1	66.4	87.7	9.1	82.8	30.3	94.2	30.0
Tripura	91.6	42.2	73.5	30.7	91.0	23.5	91.8	40.3
West								
Goa	85.9	36.7	82.1	15.4	75.5	18.9	94.5	14.3
Gujarat	82.7	68.6	78.2	22.5	79.8	41.5	96.3	20.9
Maharashtra	85.7	62.4	70.7	6.2	82.8	29.2	95.3	11.8
South								
Andhra Pradesh	60.3	35.0	51.9	4.4	64.5	24.7	93.0	8.3
Karnataka	65.8	54.1	46.3	9.5	67.2	31.9	87.2	20.3
Kerala	75.4	51.2	72.4	13.8	59.1	21.1	88.2	21.1
Tamil Nadu	65.8	65.0	68.0	4.8	64.5	40.6	97.1	11.7
India	82.8	57.9	71.3	8.2	78.4	36.8	93.4	15.2

[1] Includes married, but gauna not performed.

Nagaland, Andhra Pradesh, Karnataka, and Tamil Nadu, two-thirds or less of young women or less know about pills. In every state except Mizoram, the proportion of young women who are aware of IUDs is much lower than the proportion of young women who are aware of the pill. In Jharkhand, Orissa, West Bengal, Assam, Meghalaya, Nagaland, Tripura, Goa, and Andhra Pradesh, the majority of young women have not heard about IUDs.

Men are less likely than women to know about the two female spacing methods, pills and IUDs, in almost every state. In every state, the difference in the awareness of IUDs between women and men is more than 10 percentage points. The difference is very large (more than 30 percentage points) in Delhi, Haryana, Assam, Sikkim, Maharashtra, and Kerala. Although women are more aware of pills and IUDs than men, they are less aware of condoms, a male method. More than 85 percent of men have heard of condoms in every state except Meghalaya, where only 71 percent of men know about condoms. In fact, in 11 states, 95 percent or more of men are aware of condoms.

Awareness of emergency contraception is quite low among both women and men in every state. In most states, less than one-fourth of women and men know about emergency contraception. Knowledge of emergency contraception among women is highest in Tripura and Gujarat. For men, knowledge of emergency contraception is highest in Tripura, Manipur, West Bengal, and Sikkim.

Table 3.4 Knowledge of condoms in eight cities

Percentage of women and men age 15-24 years who know about condoms, by slum/non-slum residence, India, 2005-06

	Women			Men		
City	Slum	Non-slum	Total	Slum	Non-slum	Total
Delhi	93.9	95.8	95.4	98.4	99.7	99.4
Meerut	88.5	92.5	90.6	99.3	99.7	99.5
Kolkata	84.8	90.1	88.1	98.4	93.9	95.7
Indore	92.4	96.3	95.5	98.7	99.3	99.2
Mumbai	84.7	93.1	89.2	98.7	100.0	99.4
Nagpur	75.3	93.3	85.8	94.9	99.1	97.4
Hyderabad	53.7	56.5	56.0	94.3	94.5	94.5
Chennai	72.6	78.9	77.6	94.9	97.4	96.9

In all the cities where separate estimates of contraceptive knowledge are available, at least 95 percent of young men know about condoms, with a very small difference in the awareness of condoms among slum and non-slum dwellers (Table 3.4). Knowledge of condoms is relatively low among young women in Hyderabad (56%) and Chennai (78%). In the remaining six cities, more than 85 percent of young women know about condoms. In every city, knowledge is lower in slum than in non-slum areas.

3.3 Exposure to Media Messages on Family Planning

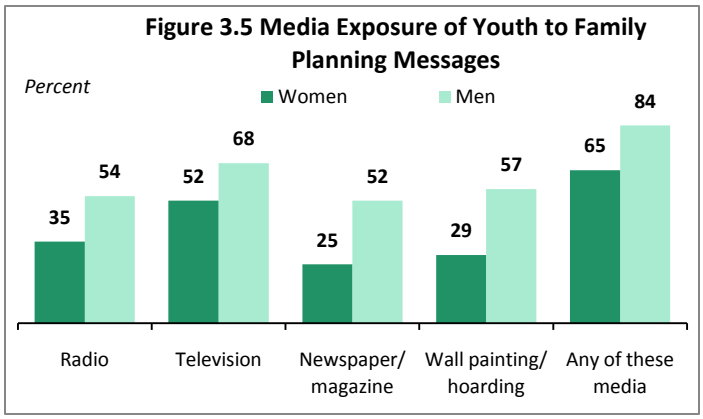
The Mass Education Media Division of the Department of Family Welfare promotes family planning methods and disseminates information about other reproductive health and population issues through communication channels and through interpersonal communications with peer groups and families. Family planning information is also disseminated by other government departments, as well as nongovernmental organizations and private sector companies. Accordingly, in NFHS-3, respondents were asked if they had heard or seen any message about family planning in the last few months on the radio, on the television, in a newspaper or magazine, or on a wall painting or hoarding.

Table 3.5 Exposure to family planning messages

Percentage of women and men age 15-24 years who heard or saw a family planning message on radio, television, in a newspaper or magazine, or on a wall painting or hoarding in the past few months, according to background characteristics, India, 2005-06

	Women						Men					
Background characteristic	Radio	Tele-vision	Newspaper or magazine	Wall painting or hoarding	None of these four media sources	Number of women	Radio	Tele-vision	News-paper or magazine	Wall painting or hoarding	None of these four media sources	Number of men
Age												
15-19	34.2	50.7	24.7	28.7	36.3	24,811	52.8	66.0	49.7	54.4	17.8	13,008
20-24	35.3	53.3	25.3	29.8	34.5	22,779	56.1	69.8	54.6	60.1	14.1	11,989
Residence												
Urban	35.6	74.9	42.1	42.6	19.0	14,931	52.5	81.9	63.1	66.2	9.7	9,435
Rural	34.3	41.4	17.2	23.0	42.9	32,660	55.5	59.3	45.3	51.7	19.8	15,561
Education												
No education	21.8	21.9	0.7	5.3	64.6	12,524	39.7	35.0	2.1	14.2	42.9	2,440
<5 years complete	28.0	34.6	3.5	13.4	51.2	3,422	45.1	45.3	12.6	27.3	32.6	1,896
5-9 years complete	36.6	56.2	22.8	30.5	29.8	18,009	53.1	65.6	47.8	54.6	16.0	11,200
10 or more years complete	45.7	78.3	55.5	53.3	12.2	13,633	61.5	83.5	77.9	77.2	5.6	9,452
Wealth index												
Lowest	24.9	17.8	3.9	9.9	64.1	8,175	49.9	38.2	24.0	35.4	33.5	3,460
Second	31.7	32.8	8.7	16.2	49.7	9,284	55.1	51.8	36.7	44.5	23.2	4,577
Middle	35.9	49.2	18.3	26.9	35.9	10,131	55.2	66.6	50.4	55.5	15.7	5,407
Fourth	38.9	68.9	32.7	37.2	22.0	10,241	55.0	79.3	61.3	64.8	10.3	5,808
Highest	40.0	83.6	57.0	51.6	11.5	9,759	54.9	87.9	73.4	74.3	5.8	5,743
Total age 15-24	34.7	51.9	25.0	29.2	35.4	47,590	54.3	67.8	52.0	57.2	16.0	24,997
Total age 25-49	31.6	47.9	20.6	25.1	40.6	76,357	52.2	62.0	49.1	55.2	19.6	44,754

As Table 3.5 and Figure 3.5 show, 65 percent of young women and 84 percent of young men in NFHS-3 had heard a family planning message in the few months preceding the survey from one of the media sources. Television is the most widely accessed communication media, as more than half of young women and two-thirds of young men reported watching family planning messages on TV in the past few months.



Exposure to media messages is much higher among urban youth than rural youth. Exposure to family planning messages in the media increases substantially with education and the wealth index. Ever-married youth are less likely to have heard family planning messages than never married youth, mainly due to the higher proportion of never married youth in rural areas with little or no education and from the lower wealth quintiles (data not shown).

3.4 Knowledge of AIDS

Knowledge of AIDS and sexual behaviour among youth are of particular interest because the period between sexual initiation and marriage is for many young people a time of sexual experimentation that may involve high-risk behaviours. This issue has special importance since nearly two-fifths of new HIV infections in India are reported among people below 25

years of age (NACO, 2004). An equally important concern is the narrowing gender gap in new infections, suggesting an urgent need to address the issues and concerns of youth.

Around two-thirds of women and 88 percent of men are aware of AIDS (Table 3.6). Although knowledge of AIDS is higher among young persons age 15-24 years than older persons age 25-49 years, one in three young women and one in eight young men have not heard of AIDS at all. Knowledge of HIV transmission and prevention is crucial for young people, particularly if they engage in casual sex or other risky behaviours. NFHS-3 found that knowledge of HIV/AIDS prevention is more widespread among young men than among young women.

Table 3.6 Knowledge of HIV/AIDS and its prevention

Percentage of women and men age 15-24 who have heard of 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 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, India, 2005-06

	Percentage who have heard of AIDS		Percentage who say that the risk of HIV/AIDS can be reduced by using condoms		Percentage who know that the risk of HIV/AIDS can be reduced by limiting sex to one uninfected partner		Percentage who have a comprehensive knowledge about HIV/AIDS[1]		Percentage who know that HIV/AIDS can be transmitted from a mother to her baby		Number	
Background characteristic	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Age												
15-19	64.3	86.4	36.5	71.4	46.3	73.1	18.6	34.5	48.9	62.3	24,811	13,008
20-24	66.5	89.8	42.2	77.4	50.6	79.7	21.4	37.8	52.1	68.5	22,779	11,989
Residence												
Urban	86.3	95.1	56.7	82.9	66.8	84.9	32.9	47.1	69.6	72.4	14,931	9,435
Rural	55.8	83.7	31.2	69.1	39.9	71.0	13.9	29.4	41.6	60.9	32,660	15,561
Education												
No education	25.5	55.9	10.3	37.7	15.4	41.1	2.7	8.9	15.8	31.3	12,524	2,440
<5 years complete	46.2	71.8	17.7	51.6	25.3	54.3	4.1	10.7	28.4	43.8	3,422	1,896
5-9 years complete	72.9	88.5	40.3	71.9	50.8	74.6	17.0	29.7	53.5	60.3	18,009	11,200
10 or more years complete	96.9	99.0	69.7	91.1	81.1	91.9	43.6	55.7	83.6	84.2	13,633	9,452
Regular media exposure[2]												
Yes	80.4	92.2	50.2	78.8	60.9	80.6	26.5	39.3	63.6	69.6	33,392	22,002
No	30.1	57.5	13.4	40.9	18.8	44.8	4.6	12.6	19.2	33.5	14,199	2,995
Marital status												
Never married	75.5	89.4	45.3	75.7	55.9	77.2	25.3	38.2	59.4	66.9	23,588	20,721
Ever married	55.4	81.6	33.3	67.5	40.9	71.9	14.7	25.9	41.6	57.1	24,003	4,276
Wealth index												
Lowest	29.2	65.1	12.4	49.9	17.8	51.3	3.8	14.7	18.2	41.3	8,175	3,460
Second	45.7	81.4	21.0	64.5	28.9	66.8	7.1	23.6	31.7	55.4	9,284	4,577
Middle	66.8	90.6	36.4	74.6	46.4	77.9	14.7	31.8	49.6	66.6	10,131	5,407
Fourth	82.5	94.7	51.3	82.7	62.9	83.9	26.1	43.5	65.2	72.7	10,241	5,808
Highest	94.9	97.9	69.2	87.9	79.1	89.7	44.5	55.3	80.6	78.8	9,759	5,743
Total age 15-24	65.4	88.0	39.2	74.3	48.4	76.3	19.9	36.1	50.4	65.3	47,590	24,997
Total age 25-49	58.1	81.1	34.5	67.8	42.1	70.9	15.7	31.2	44.3	62.2	76,795	44,754

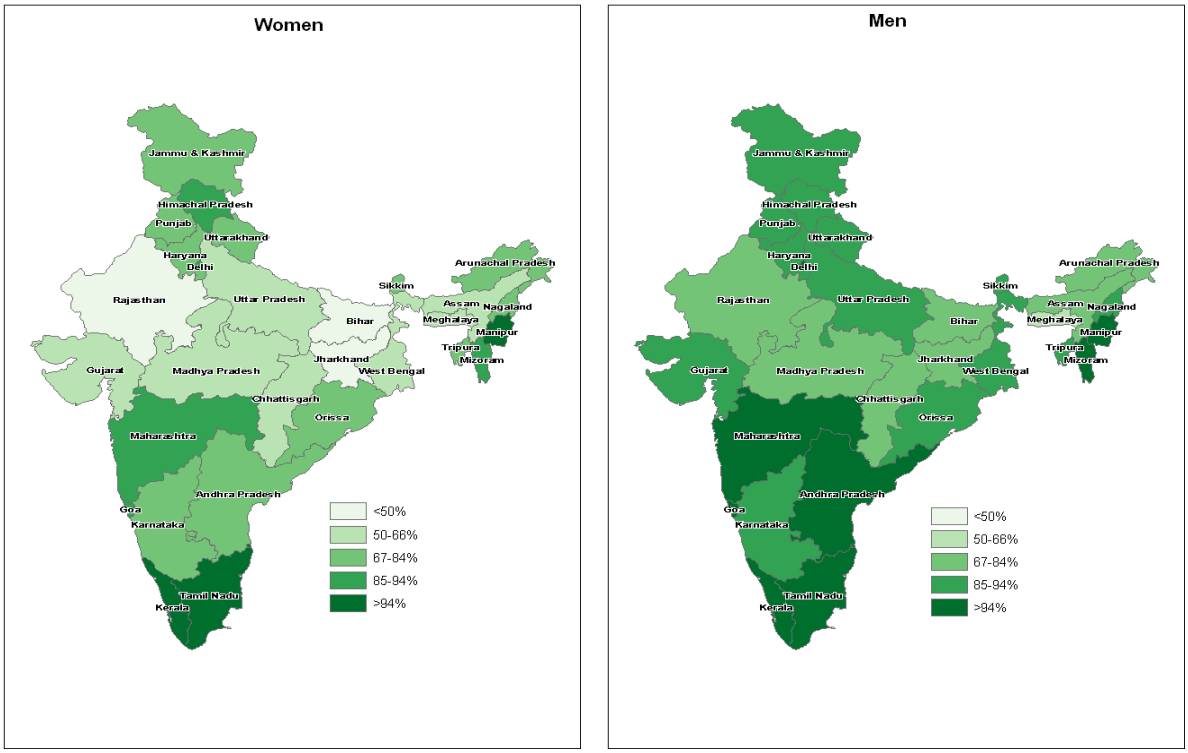
[1] Respondents with comprehensive knowledge say that the use of a condom for every act of sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV/AIDS, say that a healthy-looking person can have HIV/AIDS, and reject the two most common misconceptions in NFHS-3, namely that HIV/AIDS can be transmitted by mosquito bites and by sharing food.

[2] Exposure to radio, television, or newspapers/magazines at least once a week.

About three out of every four men know that the risk of HIV/AIDS can be reduced by condom use or by limiting sex to one uninfected partner. However, only 39-48 percent of young women know about these ways of preventing HIV/AIDS.

At the national level, about two-thirds of young women are aware of AIDS, but there are three states (Jharkhand, Bihar, and Rajasthan) where less than half of women have heard of AIDS. In Jharkhand, only 40 percent of women and 71 percent of men are aware of AIDS. In Bihar and Rajasthan, only 44-46 percent of women but 82-83 percent of men have heard of AIDS. In two

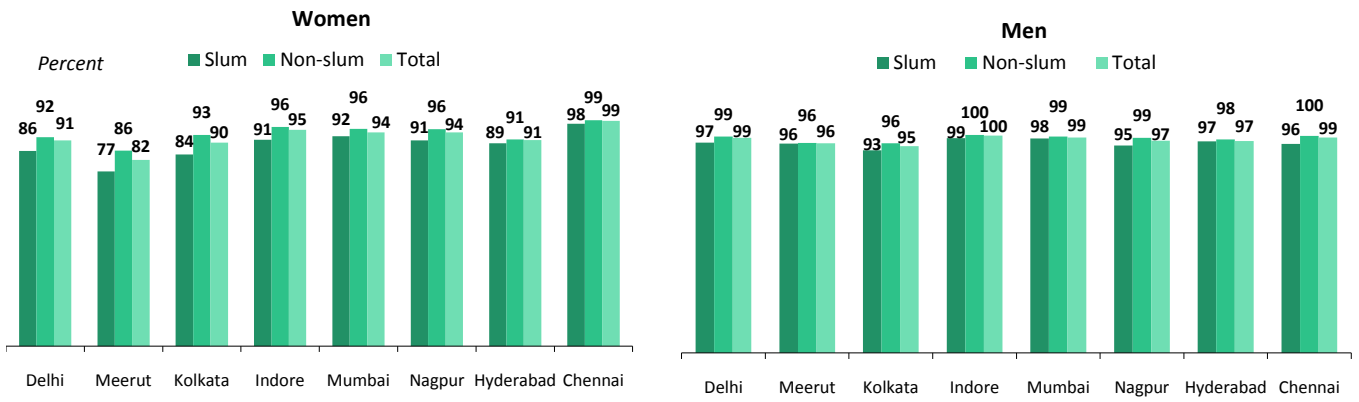
Figure 3.6 Knowledge of AIDS among Youth by State



of the high HIV prevalence states (Manipur and Tamil Nadu) and in Kerala, almost all young women and men are aware of AIDS. However, knowledge is lower in the remaining four high HIV prevalence states of Maharashtra, Nagaland, Andhra Pradesh, and Karnataka (76-86 percent for women, but 90-95% for men). In almost all the states, women are less likely to know about AIDS than men (Figure 3.6).

With the exception of men in slums in Kolkata, at least 95 percent of men in slum and non-slum areas of the other seven cities for which separate estimates are available are aware of AIDS (Figure 3.7). Among women, AIDS awareness exceeds 85 percent in slum and non-slum areas of all cities, except in the slum areas of Meerut and Kolkata.

Figure 3.7 Knowledge of AIDS among Youth by City

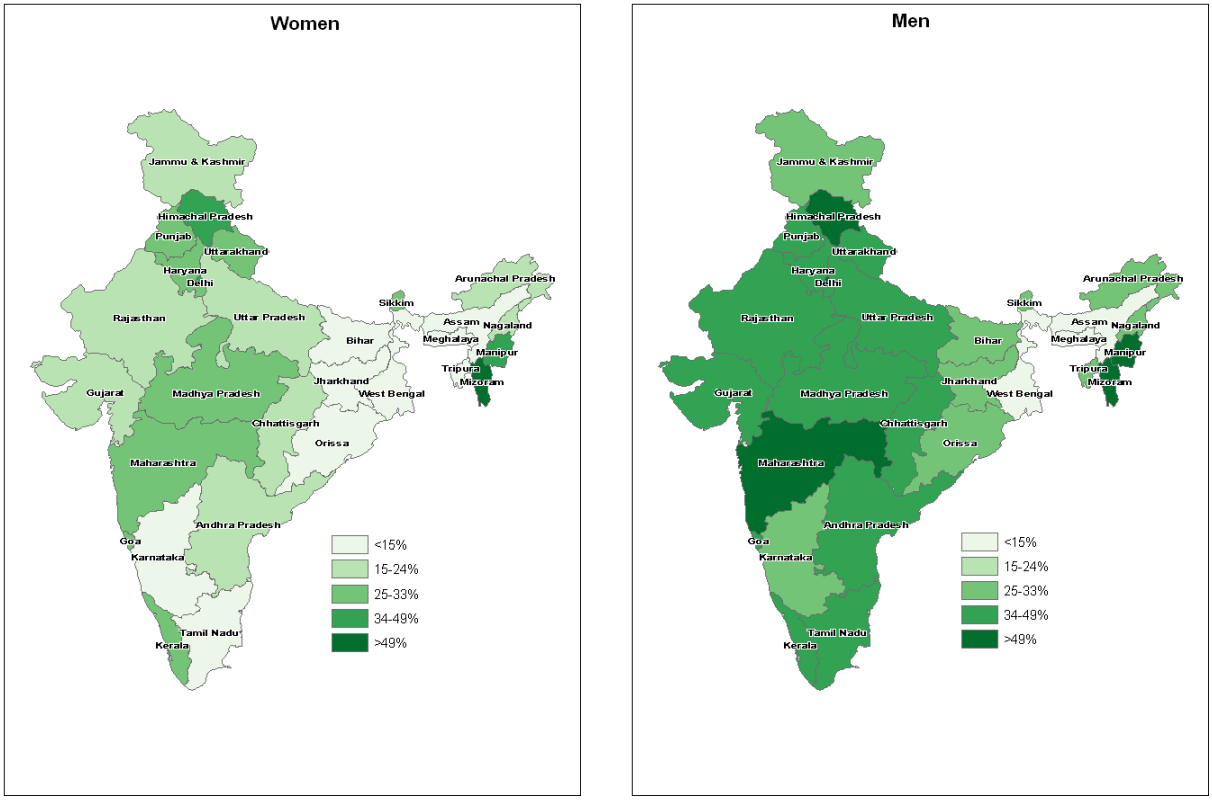


3.5 Comprehensive Knowledge of HIV/AIDS

Comprehensive knowledge about HIV/AIDS is very low (only 20% among young women and 36% among young men). Comprehensive knowledge means that youth know that a healthy-looking person can have HIV/AIDS, that HIV/AIDS cannot be transmitted through mosquito bites or by sharing food, and that condom use and having only one faithful, uninfected partner can help prevent HIV/AIDS. Almost two-thirds of young men and half of young women know that HIV infection can be transmitted from a mother to her baby.

Although awareness of AIDS is widespread among men, most of them do not have a comprehensive knowledge of HIV/AIDS. Mizoram and Himachal Pradesh are the only two states in which more than 60 percent of men have a comprehensive knowledge of AIDS. In two of the six high HIV prevalence states (Maharashtra and Manipur) and in Delhi, 56-57 percent of men have comprehensive knowledge. In the remaining high HIV prevalence states of Nagaland (32%), Karnataka (33%), Andhra Pradesh (37%), and Tamil Nadu (41%), comprehensive knowledge is much lower. In three states (Meghalaya, Assam, and West Bengal), only 13-15 percent of men are aware of all aspects of HIV/AIDS. With the exception of Mizoram, in every state, a smaller proportion of women than men have a comprehensive knowledge of HIV/AIDS. Even in high HIV prevalence states, except in Maharashtra (33%) and Manipur (44%), only 12-20 percent of women have a comprehensive knowledge of HIV/AIDS (Figure 3.8).

Figure 3.8 Comprehensive Knowledge of HIV/AIDS among Youth by State



Determinants of comprehensive knowledge of HIV/AIDS: In order to better understand the factors that contribute to increasing comprehensive knowledge of HIV/AIDS, logistic regressions were run separately for women and men. For each regression, the dependent variable coded women/men who had comprehensive knowledge as 1 and those who had only partial or no knowledge as 0. Age, marital status, education, regular media exposure, religion, caste/tribe, residence, region (as shown in Table 3.3), and wealth index were included as explanatory variables. Table 3.7 shows the odds ratios for each variable. Odds ratios greater than 1 show a positive association and those less than 1 show a negative association. The key findings of the analysis are:

Table 3.7 Logistic regression analysis of comprehensive knowledge of HIV/AIDS

Odds ratios (OR) from logistic regressions of comprehensive knowledge of AIDS for women and men age 15-24 years for selected background characteristics, NFHS-3, India

	Comprehensive knowledge	
Background characteristic	Women OR	Men OR
Age		
Ref. cat.: 15-19		
20-24	1.28***	1.21***
Marital status		
Ref. cat.: Never married		
Ever married	0.98	0.83***
Education		
Ref. cat.: No education		
<5 years complete	1.35**	1.09
5-9 years complete	4.45***	2.84***
10+ years complete	11.99***	6.75***
Regular media exposure		
Ref. cat.: No		
Yes	2.28***	1.98***
Religion		
Ref. cat.: Hindu		
Muslim	0.91*	0.80***
Christian	1.45***	1.17
Other	0.83**	1.17*
Caste/tribe		
Ref. cat.: Scheduled caste		
Scheduled tribe	1.04	1.14
Other backward class	0.64***	1.06
Other	0.86	0.98
Residence		
Ref. cat.: Urban		
Rural	0.82***	0.81***
Region		
Ref. cat.: North		
Central	1.18***	1.17**
East	0.65***	0.56***
Northeast	0.49***	0.42***
West	0.89**	1.27***
South	0.40***	0.70***
Wealth index		
Ref. cat.: Lowest		
Second	1.25***	1.38***
Middle	1.86***	1.66***
Fourth	2.36***	2.10***
Highest	3.14***	2.32***

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

a) Older youth are more likely than adolescents to have comprehensive knowledge of HIV/AIDS. However, controlling for age, education, and other relevant characteristics, ever-married men are less likely than never married men to have comprehensive knowledge of HIV/AIDS.
b) Education, media exposure, and wealth all have a strong positive association with youth having comprehensive knowledge of HIV/AIDS. Notably, even women with less than five years of education have significantly higher odds of having comprehensive knowledge of HIV/AIDS than women with no education. For male youth, only men who have at least five years of education have higher odds than men with no education. These data suggest that education has a stronger association with youth having comprehensive knowledge for women than for men. Wealth, however, has a similarly positive association with comprehensive knowledge for both women and men.
c) Controlling for education and other relevant factors, youth in rural areas have lower odds of having comprehensive knowledge than youth in urban areas.
d) Christian women have 45% higher odds of having comprehensive knowledge than Hindu women, whereas Muslim women and women from other religions have lower odds of having comprehensive knowledge. Among men, it is youth who belong to other

religions who have higher odds of having comprehensive knowledge than Hindu men. Muslim men, like Muslim women, are less likely than Hindu men to have comprehensive knowledge.

e) In comparison to the odds of women having comprehensive knowledge of HIV/AIDS in the north region (OR=1.00), the odds for women in all the other regions except the central region, are lower. For men, the odds in the central and west regions are higher and in the other regions are lower, compared with the odds for men in north region Thus, even though most of the high HIV prevalence states in India are in the south and northeast regions, controlling for education, wealth, and other relevant factors, youth in these two regions have much lower odds of having comprehensive knowledge than youth in the north.

This analysis shows that education, wealth, media exposure, and living in an urban area are all important determinants of youth having comprehensive knowledge of HIV/AIDS. Religion and regional factors also play a role, net of education and wealth. It is however disturbing to note that once education is controlled for, youth in the south and northeast regions have lower odds of having comprehensive knowledge of HIV/AIDS even though these are the regions where most of the high HIV prevalence states are.

4. What They Think: Attitudes of Youth

A study of youth attitudes toward demographic and health issues provides insight into youth motivations and the context for youth behaviour. Attitudes of youth are particularly important for at least two reasons: youth are either already making or will soon be making fertility-related decisions that will be key to demographic change in the nation; and because youth today are tomorrow's adults, and their attitudes will have an important influence on what constitutes acceptable behaviour in tomorrow's world. This chapter explores attitudes of youth on five key demographic and health-related topics: i) ideal family size; ii) use of contraception; iii) acceptance of persons living with HIV/AIDS; iv) teaching of family life education in schools; and v) gender roles.

4.1 Family-Size Preferences

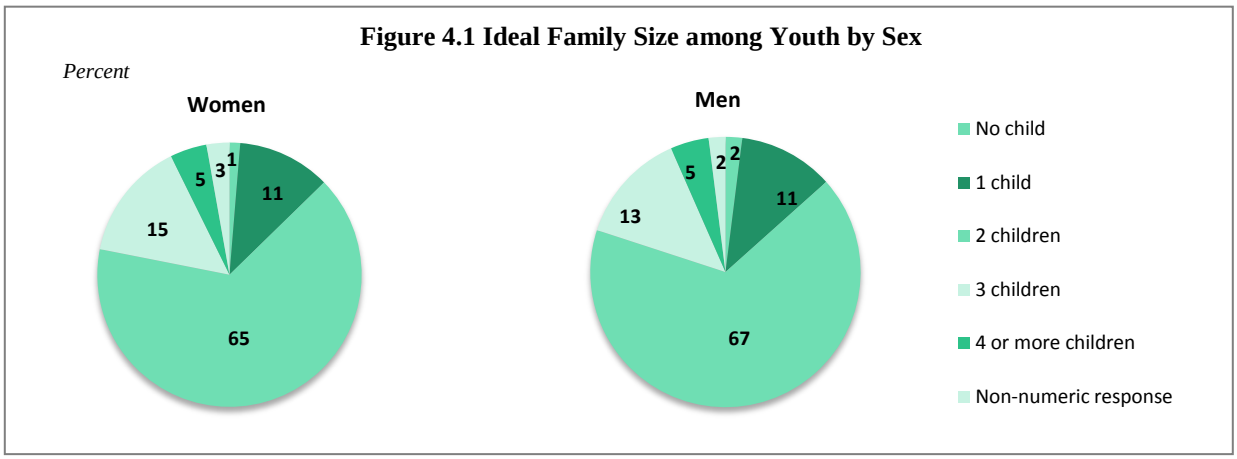
Most youth are just initiating childbearing or will be doing so soon; thus, the family size that they consider to be ideal will influence their own family size and the future level of fertility in the country. NFHS-3 data show that youth in India, both females and males, desire small families; two children is the most preferred family size (Table 4.1 and Figure 4.1).

The ideal family size is only one child or less for about one in eight youth; and for about two in

Table 4.1 Ideal family size

Percent distribution of women and men age 15-24 years by ideal family size, according to selected background characteristics, India, 2005-06

	Ideal family size: Women							Ideal family size: Men						
Background characteristic	0	1	2	3	4+	Non-numeric response	Total	0	1	2	3	4+	Non-numeric response	Total
Age														
15-19	1.6	11.8	65.2	13.6	4.1	3.7	100.0	2.4	11.2	66.5	12.9	4.8	2.2	100.0
20-24	1.1	10.9	65.5	15.7	4.9	1.9	100.0	1.7	11.5	66.9	13.9	4.3	1.7	100.0
Residence														
Urban	1.5	18.6	68.8	6.6	2.1	2.4	100.0	2.2	15.8	69.5	8.0	2.8	1.6	100.0
Rural	1.3	8.1	63.8	18.2	5.6	3.0	100.0	1.9	8.7	65.0	16.7	5.6	2.1	100.0
Marital status														
Never married	2.0	16.2	66.0	8.7	2.9	4.3	100.0	2.3	12.7	67.4	11.4	4.1	2.1	100.0
Ever married	0.7	6.7	64.7	20.5	6.0	1.4	100.0	0.8	5.1	63.1	23.1	6.6	1.3	100.0
Education														
No education	1.1	2.7	51.7	29.7	11.5	3.3	100.0	1.8	2.7	51.7	27.4	13.4	2.9	100.0
<5 years complete	1.3	6.0	66.2	17.5	5.2	3.8	100.0	2.3	4.7	58.7	20.3	10.4	3.6	100.0
5-9 years complete	1.3	9.9	72.3	11.5	2.3	2.7	100.0	2.1	7.9	68.5	15.1	4.3	2.1	100.0
10 or more years complete	1.6	22.6	68.5	4.1	0.8	2.3	100.0	1.9	19.1	70.0	6.4	1.3	1.2	100.0
Wealth index														
Lowest	1.3	3.1	54.6	28.1	9.9	3.0	100.0	1.4	3.4	56.9	25.3	10.2	2.8	100.0
Second	1.2	6.0	62.4	20.5	6.8	3.0	100.0	2.1	6.0	66.0	18.3	5.6	2.0	100.0
Middle	1.3	8.6	70.3	13.7	3.6	2.6	100.0	2.3	8.4	69.2	13.6	4.7	1.8	100.0
Fourth	1.3	13.2	71.0	9.3	2.4	2.9	100.0	1.9	14.1	69.3	9.9	3.1	1.7	100.0
Highest	1.4	24.5	66.1	4.2	1.0	2.7	100.0	2.2	20.6	68.1	5.7	1.7	1.8	100.0
Total age 15-24	1.3	11.4	65.4	14.6	4.5	2.8	100.0	2.0	11.4	66.7	13.4	4.6	2.0	100.0
Total age 25-49	1.2	7.0	55.5	21.7	12.0	2.4	100.0	1.4	7.9	59.0	19.6	10.3	1.7	100.0



three, the ideal is two children. Overall, almost four out of five youth have an ideal family size of two children or less.

A comparison of ideal family size of youth with the ideal among older adults age 25-49 years, shows a sizeable decline in the ideal family size between the two cohorts. For example, for the older cohort, the ideal is three or more children for 34 percent of women and 30 percent of men, but in the younger cohort only 19 percent of women and 18 percent of men consider three or more children to be ideal. Nonetheless, it is notable that a large family size of four or more children is still desired by 10-12 percent of youth who have no education or who are from the poorest households.

An important finding from the data on ideal family size is that a one-child family norm is slowly emerging in India. Eleven percent of all young women and men report an ideal family size of only one child; among youth with 10 or more years of education and among those belonging to the highest wealth quintile, about one in five or more desire only a one-child family. Further, 19 percent of women from urban areas and 16 percent of never married women consider one child to be ideal.

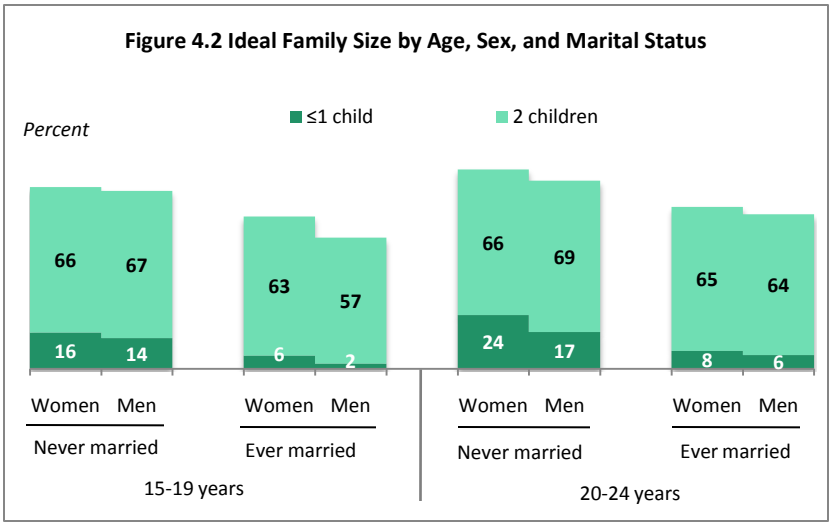
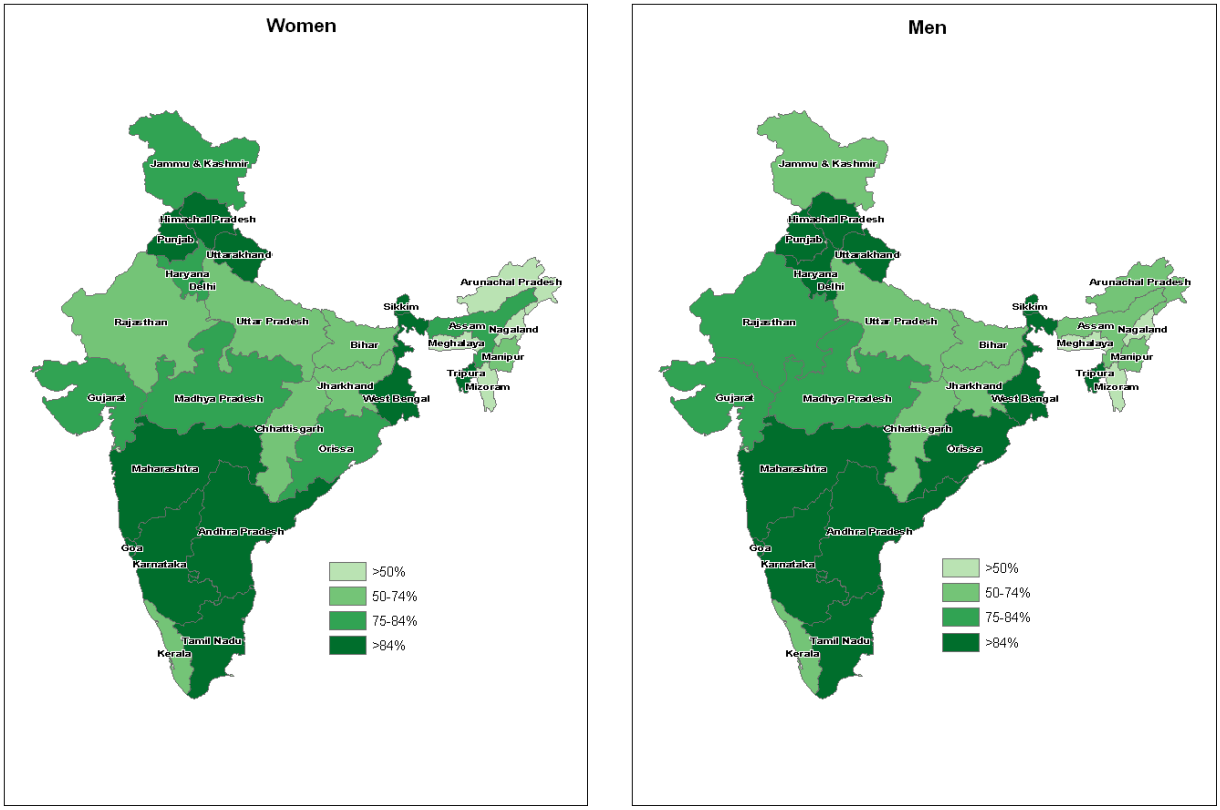


Figure 4.2 shows that a desire for one or fewer children is quite high among never married youth. Almost one in four never-married women age 20-24 want one or fewer children. Thus, if the Family Welfare Programme were to succeed in helping the youth population realize its family-size ideals, fertility decline in India is likely to be enhanced.

Figure 4.3 Youth with an Ideal Family Size of Two or Fewer Children



There is large state-level variation in the desire for a small family among youth (Figure 4.3). In Andhra Pradesh, Tamil Nadu, Maharashtra, Sikkim, and Himachal Pradesh, 90 percent or more young women and men have two or fewer children as their ideal family size. In contrast, in Mizoram, Meghalaya, and Nagaland, less than 40 percent of women and men desire two or fewer children.

A small family is the ideal for female youth in all the eight cities for which separate estimates for ideal family size are available. The percentage of women age 15-24 who desire two or fewer children is 83 percent or higher in each city, and in Indore, Mumbai, and Chennai, 95 percent or more young women from both slum and non-slum areas desire two or fewer children (Table 4.2). Notably too, in four of the eight cities, the small family norm is slightly more common in slum than in non-slum areas, and in the remaining four cities, the differential by residence in slum and non-slum areas, although evident, is quite small.

Table 4.2 Ideal family size in cities

Percentage of women age 15-24 who report two or less children as ideal family size by residence and city, 2005-06

City	Slum	Non-slum	Total
Delhi	82.6	90.9	89.2
Meerut	80.6	84.4	82.6
Kolkata	88.8	95.4	92.9
Indore	96.2	95.5	95.6
Mumbai	94.9	98.7	96.9
Nagpur	92.7	91.0	91.7
Hyderabad	89.3	88.6	88.7
Chennai	96.3	95.0	95.2

Like many Indians, youth in India show a preference for sons. About one in six female and male youth want more sons than daughters, but only 2-3 percent want more daughters than sons (data not shown). However, most youth would like to have at least one son and a majority would like to have at least one daughter.

4.2 Desire for No More Children

In addition to ideal family size, the desire for more children among married youth provides key information on fertility desires and family-size preferences. As seen in Table 4.3, about one-third of married women age 15-24 (32%) and about one-sixth of married men (17%) age 15-24 want no more children. Among youth at the same parity, the desire to stop childbearing increases with education and wealth quintile. In most categories of age, residence, education, and the wealth index, a higher proportion of women than men at the same parity desire to stop childbearing.

In keeping with the desire for a small family, the majority of young women (64%) and men (56%) who already have two living children want to stop childbearing. Nonetheless, compared with those in the older cohort age 25-49, a lower proportion of youth want to stop childbearing irrespective of parity. It is worth noting that youth who are married and already have children, particularly two or more, are likely to have been married at very young ages. These data

Table 4.3 Desire to limit childbearing

Percentage of currently married women and men age 15-24 years who want no more children by number of living children, according to selected background characteristics, India, 2005-06

	Women					Men				
	Number of living children[1]					Number of living children[1]				
Background characteristic	1	2	3	4+	Total[2]	1	2	3	4+	Total[2]
Age										
15-19	7.9	53.9	68.3	*	10.8	1.4	*	nc	nc	4.0
20-24	12.8	65.9	76.5	83.6	39.8	8.1	56.3	70.5	(78.8)	18.2
Residence										
Urban	15.5	72.1	85.6	84.4	34.4	7.0	60.3	*	*	16.7
Rural	9.6	61.9	74.2	83.5	30.6	7.9	55.0	70.6	(81.9)	17.0
Education										
No education	5.6	51.7	70.9	83.2	30.9	6.1	47.9	(67.0)	*	16.5
<5 years complete	9.5	69.2	79.7	(70.5)	33.5	3.1	51.2	*	*	13.4
5-9 years complete	11.6	72.1	84.5	94.0	33.1	7.7	56.4	69.8	*	16.6
10 or more years complete	19.1	78.7	86.6	*	28.7	11.7	70.5	*	*	20.4
Wealth index										
Lowest	5.9	49.7	70.2	81.9	28.4	2.7	43.5	(85.0)	*	15.1
Second	7.6	63.5	71.2	85.2	31.3	7.4	54.2	(63.7)	*	15.4
Middle	10.7	67.5	84.3	83.0	32.9	6.5	61.0	(61.7)	*	17.4
Fourth	13.8	70.8	83.4	81.2	33.8	11.7	63.5	*	*	19.7
Highest	19.1	77.1	84.2	*	31.2	15.3	(73.8)	*	*	19.2
Total age 15-24	11.2	64.4	76.2	83.6	31.5	7.7	56.2	70.5	(78.8)	16.9
Total age 25-49	48.7	89.2	92.2	91.4	83.7	32.9	85.3	91.1	94.8	76.6

Note: Women who have been sterilized or whose husbands have 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.
nc = No cases.
[1] Includes current pregnancy of woman/wife.
[2] Includes women and men with no children, who are not shown separately.

suggest that these married youth may not be representative of all youth.

Data on desire for children by sex composition of children shows strong son preference among both male and female youth. For example, among youth with two children, 75 percent of women and 73 percent of men with two sons want no more children, compared with only 32 percent of women and 26 percent of men with two daughters (data not shown).

4.3 Men's Attitude toward Contraception

Men's attitudes about contraception may influence their partners' attitudes, as well as their own and their partners' adoption of contraception. Only a minority of male youth, one-fifth, think that contraception is women's business and that a man should not have to worry about it (Table 4.4). Further, only 15 percent believe that women who use contraception may become promiscuous. Thus, male youth in India appear to have a fairly accepting attitude toward contraception.

Many male youth are misinformed about some aspects of fertility and contraception: more than one-third believe that a woman who is breastfeeding cannot become pregnant and only about two-thirds know that if a male condom is used correctly it protects against pregnancy most of the time. Although youth do not differ much from the older cohort age 25-49 years in their attitudes toward contraception, they are less likely than the older cohort to be misinformed about the efficacy of breastfeeding. Further, similar proportions of men age 25-49 and age 20-24 (68-69%) know that if condoms are used correctly they protect against pregnancy most of the time; however, this knowledge is somewhat less common among men age 15-19.

Table 4.4 Men's contraception-related perceptions and knowledge

Percentage of men age 15-24 years who agree with two specific statements about women and contraception and say that a woman who is breastfeeding cannot become pregnant, and percent distribution of men, according to their belief about the efficacy of condoms in preventing pregnancy by age, India, 2005-06

	Percentage of men who agree			Percentage of men who say that if a male condom is used correctly, it protects against pregnancy:					
Age	Contraception is women's business and a man should not have to worry about it	Women who use contraception may become promiscuous	A woman who is breastfeeding cannot become pregnant	Most of the time	Some-times	Not at all	Don't know/ unsure[1]	Total	Number of men
15-19	18.5	14.6	29.4	56.8	14.6	2.3	26.3	100.0	13,008
20-24	21.2	16.3	43.0	68.8	15.4	2.8	13.0	100.0	11,989
Total age 15-24	19.8	15.4	36.0	62.8	15.0	2.6	19.6	100.0	24,997
Total age 25-49	22.7	16.5	56.1	67.9	15.4	2.3	14.4	100.0	44,754

[1] Includes missing values and those who had never heard of condoms.

4.4 Attitude toward Family Life Education in Schools

There are many reasons why youth attitudes about family life education in schools are important. Adolescents are among the main targets for family life education and many older youth have only recently completed their schooling and will have many relevant real-life experiences related to the need for such education in schools. Thus, information on youth approval for such education being provided in schools, as well as on specific topics that should be included in a family life education curriculum, is going to be very relevant for policy and programmes.

Table 4.5 shows that virtually all female and male youth agree that children should be taught moral values in school. Most of them also think that children should learn about the changes in their own bodies during puberty. However, much fewer think that children should learn about puberty-related changes in the bodies of the opposite sex. Among youth, men and women differ somewhat in whether they think that children should be taught in school about contraception. About two-thirds of men age 15-24 think that girls and boys should learn about contraception in school, compared with 44-52 percent of women age 15-24.

Although a majority of youth believe that information on HIV/AIDS should be part of the school curriculum, women are less likely than men to agree: more than 8 in 10 men think that boys and girls should learn about HIV/AIDS in school, compared with about 7 in 10 women. About two-thirds of men and less than half of women among youth say that both boys and girls should be taught about sex and sexual behaviour in school. With few exceptions, a lower proportion of women than men agree that each of the listed topics of family life education should be taught to boys and girls in schools.

Table 4.5 Attitudes toward family life education in school

Percentage of women and men age 15-24 who agree that specific family life education topics should be taught in school to girls and to boys, India, 2005-06

	Women			Men		
	Percentage who say that the topic should be taught in school to:			Percentage who say that the topic should be taught in school to:		
Topics	Girls	Boys	Number	Girls	Boys	Number
Moral values	98.3	98.4	47,590	98.9	99.1	24,997
Changes in boys' bodies at puberty	55.4	69.3	47,590	69.2	82.2	24,997
Changes in girls' bodies at puberty including menstruation	78.2	41.8	47,590	77.3	64.1	24,997
Sex and sexual behaviour	48.9	44.6	47,590	64.1	64.9	24,997
Contraception	51.8	44.1	47,590	67.9	65.9	24,997
HIV/AIDS	68.2	67.7	47,590	83.6	84.7	24,997
Condom use to avoid sexually transmitted Diseases	47.2	46.1	47,590	70.7	72.9	24,997

4.5 Attitudes toward Persons Living with HIV/AIDS

Knowledge and beliefs about HIV/AIDS are likely to affect how people treat those they know to be living with HIV or AIDS. Youth, being relatively better informed about HIV/AIDS and having had greater access to education and the media than their elders, are expected to be more accepting of persons infected with HIV/AIDS. Table 4.6 shows the questions used to assess acceptance of persons living with HIV/AIDS and the percentage of female and male youth who have heard of AIDS who gave a favourable response.

Both women and men tend to express more positive attitudes in response to the questions concerning willingness to care for a family member with HIV/AIDS (77% and 79%, respectively) and a female teacher with HIV/AIDS who is not sick should be allowed to continue to teach (78% and 75%) than to the questions about buying fresh vegetables from a shopkeeper with HIV/AIDS (66-67%) and not wanting to keep secret that a family member was infected with HIV/AIDS (63-64%).

The percentage expressing accepting attitudes on all four indicators listed in the table remains low even among youth, however. Only 37-38 percent of youth say yes to each of these questions. Although the proportions with a positive attitude on all four indicators increase with education and wealth, even among youth with 10 or more years of education or those from households in the highest wealth quintile, less than one-half have accepting attitudes on all four indicators. Nonetheless, compared with persons from the older cohort age 25-49, youth, particularly female youth, do appear in general to be more accepting of persons living with HIV/AIDS.

4.6 Gender-Role Attitudes

An examination of youth attitudes toward gender roles provides insight into what youth believe to be acceptable behaviour for women and men and whether they believe in and accept men's control of women. In NFHS-3, several questions were asked to assess attitudes toward gender roles. Specifically, questions were asked that probed whether women and men thought that wife beating was justified in various situations and whether women would be justified in refusing sex to their husbands in various situations. In addition, men were asked questions on what was acceptable for a man to do if his wife refused to have sex with him. Tables 4.7 and 4.10 show the questions asked and the level of agreement.

A. Attitudes toward wife beating

Table 4.7 shows that more than half of youth (53% of women and 56% of men) agree that it is justified for a husband to beat his wife under specific circumstances. There is also close agreement in the responses of women and men by reason. Both young women and men are most likely to say that wife beating is justified if a woman shows disrespect for her in-laws (39% of women and 42% of men) and if she neglects the house or children (32-33%), and least

Table 4.6 Accepting attitudes toward those living with HIV/AIDS

Among women and men age 15-24 years who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by selected background characteristics, India, 2005-06

	Percentage of women who:						Percentage of men who:					
Background characteristic	Are willing to care for a relative with HIV/AIDS in own home	Would buy fresh vegetables from a shopkeeper 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	Percentage of women expressing accepting attitudes on all four indicators	Number of women who have heard of AIDS	Are willing to care for a relative with HIV/AIDS in own home	Would buy fresh vegetables from a shopkeeper 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	Percentage of men expressing accepting attitudes on all four indicators	Number of men who have heard of AIDS
Age												
15-19	78.3	66.1	79.0	64.1	37.6	15,965	78.7	65.8	74.2	62.3	37.3	11,244
20-24	76.4	65.6	77.7	64.5	37.3	15,155	79.2	68.1	75.4	63.7	39.1	10,761
Residence												
Urban	80.1	71.6	83.7	60.9	39.5	12,885	81.2	74.2	80.4	60.8	41.3	8,974
Rural	75.5	61.8	74.6	66.7	36.0	18,235	77.4	62.0	71.0	64.5	36.1	13,031
Education												
No education	66.8	45.9	59.7	61.8	23.3	3,200	66.9	45.1	51.0	59.5	21.1	1,363
<5 years complete	69.2	47.6	61.8	65.0	25.6	1,579	65.2	41.2	52.4	56.7	18.7	1,361
5-9 years complete	75.1	59.7	74.3	66.3	34.5	13,123	74.9	59.6	69.0	63.5	33.8	9,914
10 or more years complete	83.2	78.9	88.9	62.8	45.2	13,216	86.9	81.6	87.6	63.9	48.1	9,360
Wealth index												
Lowest	72.3	51.5	67.1	67.6	28.7	2,390	70.1	48.9	59.5	63.8	27.5	2,253
Second	71.4	53.3	68.7	66.9	29.5	4,245	73.8	56.5	66.5	64.1	31.8	3,727
Middle	74.6	58.7	73.6	64.7	33.9	6,768	77.0	62.6	71.0	61.5	35.1	4,899
Fourth	77.8	67.9	79.8	63.9	39.0	8,451	81.4	72.6	78.9	62.7	40.9	5,502
Highest	83.2	78.6	87.9	62.3	44.5	9,267	85.1	79.3	85.8	63.5	46.7	5,623
Total age 15-24	77.4	65.9	78.4	64.3	37.4	31,120	79.0	66.9	74.8	63.0	38.2	22,004
Total age 25-49	72.8	56.2	70.8	63.7	31.0	44,646	76.2	60.4	68.8	66.4	36.0	36,271

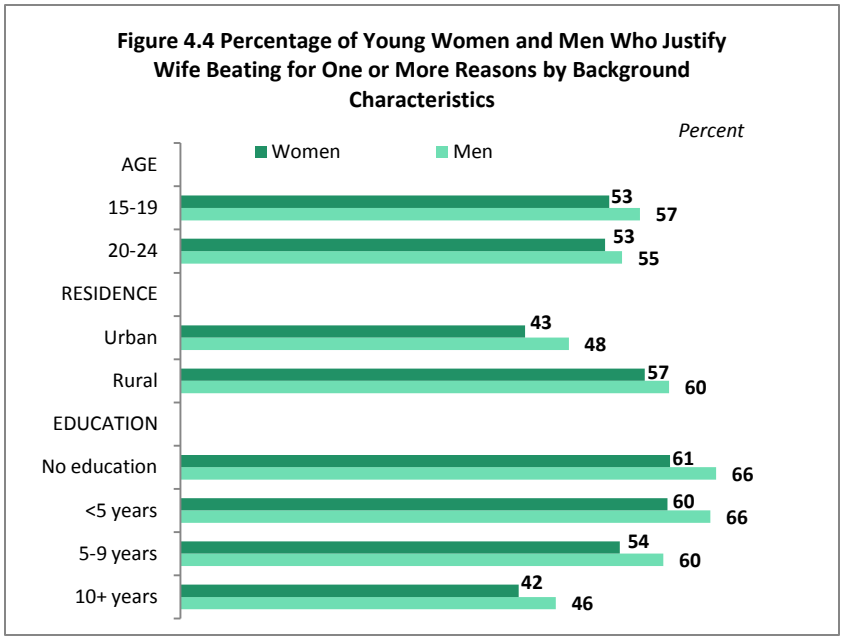
Table 4.7 Gender-role attitudes toward wife beating

Percentage of women and men age 15-24 who agree with specific reasons justifying wife beating by marital status, India, 2005-06

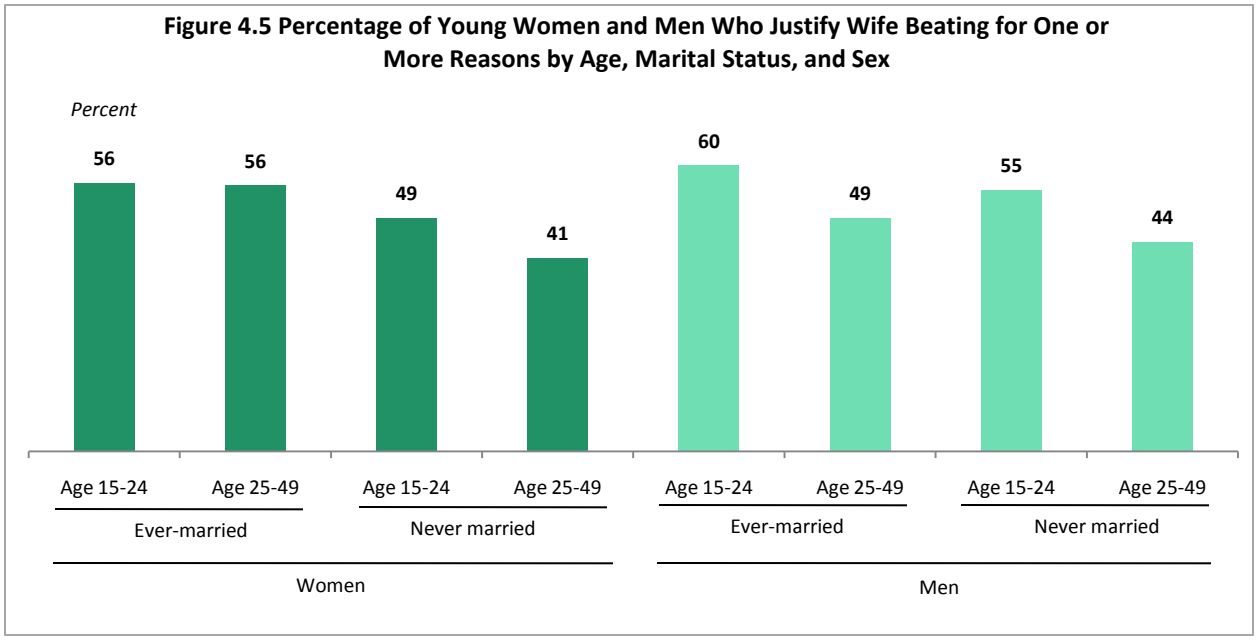
	Ever married		Never married		Total	
Reason/behaviour	Women	Men	Women	Men	Women	Men
Percentage who agree that a husband is justified in hitting or beating his wife if:						
She goes out without telling him	29.6	31.4	22.6	24.1	26.2	25.4
She neglects the house or children	35.0	34.4	31.1	31.3	33.1	31.8
She argues with him	32.0	34.7	24.9	27.9	28.5	29.0
She refuses to have sexual intercourse with him	14.6	10.6	9.1	9.5	11.9	9.7
She doesn't cook food properly	20.6	17.2	17.0	14.2	18.8	14.7
He suspects she is unfaithful	26.1	30.6	19.5	24.5	22.9	25.5
She shows disrespect for in-laws	42.1	44.5	36.4	41.6	39.3	42.1
Percentage who agree with at least one specified reason:						
Age 15-24	56.4	60.0	49.0	54.8	52.8	55.7
Age 25-49	55.8	49.8	40.5	43.9	55.5	48.4
Number of respondents age 15-24	24,003	4,276	23,588	20,721	47,590	24,997

likely to say that wife beating is justified if the wife refuses to have sex with her husband (12% women and 10% of men). Notably, among youth, there is no reason for wife beating for which the difference in the proportions of women and men who agree is greater than 4 percentage points. These data suggest that there is virtually no difference between women and men in their acceptance of norms regarding wife beating.

Notably, wife beating is less acceptable among never married youth than among ever-married youth. Among the ever-married, 56 percent of women and 60 percent of men agree with at least one reason for wife beating, which is 5-7 percentage points higher than for never married women and never married men. Never married women are also less likely to agree with wife beating for each reason than ever-married women; however, among men, the differential by marital status is not evident for some of the reasons asked about. The greater agreement among ever-married than never married youth shows that persons who are married in this very young age group are different from those who delay marriage.



Agreement with wife beating for one or more reasons among youth is lower in urban than in rural areas, but does not vary much by age (Figure 4.4). As



expected, more educated youth are much less likely than those who have less education to agree with one or more reasons for wife beating. Nonetheless, even among youth with 10 or more years of schooling, more than two in five justify wife beating for at least one reason.

Youth are expected to be more progressive in their attitudes than persons in older cohorts. However, this expectation is upheld only partially for women and not at all for men (Figure 4.5). The proportion of women age 15-24 who agree with wife beating for one or more reasons, at 53 percent, is slightly less than the proportion who agree among women age 25-49, at 56 percent. However, among men, 56 percent of younger men, compared with 48 percent of older men agree with one or more reasons for wife beating. Further, as Figure 4.5 shows, married and unmarried male youth are more likely to agree with wife beating than the married and unmarried older male cohort, respectively.

Agreement with wife beating among youth differs substantially by state (Table 4.8). In several of the states in the Northeast (Arunachal Pradesh, Sikkim, Nagaland, Manipur, and Mizoram), in most states in the South (Andhra Pradesh, Karnataka, and Kerala), and in Jammu and Kashmir in the North, almost two-thirds or more young women and men justify wife beating. Additionally, a large majority of men in Rajasthan and Gujarat also agree that wife beating is justified in some circumstances. In contrast, one-third or fewer women in Himachal Pradesh, Delhi, and Chhattisgarh and men in Himachal Pradesh, Uttarakhand, and Assam agree with one or more reasons for wife beating.

Table 4.8 also shows that a higher proportion of women than men age 15-24 agree with wife beating in 12 states and about the same proportions of men and women agree in 2 states. In the remaining 15 states, i.e., in more than half of all states in India, young men are more likely than young women to agree with one or more reasons for wife beating.

Table 4.8 Acceptance of wife beating by state

Percentage of women and men age 15-24 who agree with at least one reason for wife beating by marital status and state, India 2005-06

	Women			Men		
State	Never married	Ever married	Total	Never married	Ever married	Total
North						
Delhi	25.5	42.1	30.7	37.6	27.4	36.5
Haryana	34.9	49.3	42.0	39.6	35.0	38.7
Himachal Pradesh	27.9	25.7	27.2	31.3	27.9	31.1
Jammu & Kashmir	64.0	61.3	63.4	68.6	81.0	69.8
Punjab	41.4	55.2	46.5	48.6	49.3	48.7
Rajasthan	49.1	56.8	53.5	65.0	71.6	66.8
Uttarakhand	44.6	56.9	48.9	23.3	35.1	24.7
Central						
Chhattisgarh	29.0	31.8	30.4	48.1	47.8	48.0
Madhya Pradesh	44.5	51.1	48.1	54.5	71.6	58.3
Uttar Pradesh	44.9	46.4	45.7	48.5	49.9	48.8
East						
Bihar	48.9	60.9	56.6	59.0	76.6	63.3
Jharkhand	45.3	54.2	50.9	42.0	43.2	42.3
Orissa	58.1	62.7	60.2	42.6	57.3	44.4
West Bengal	42.0	46.9	44.9	44.7	46.3	45.0
Northeast						
Arunachal Pradesh	75.0	73.9	74.5	62.7	68.2	63.7
Assam	47.0	46.8	46.9	30.6	32.4	30.8
Manipur	91.4	89.7	90.9	88.1	89.1	88.2
Meghalaya	48.0	61.1	52.2	65.0	72.0	65.9
Mizoram	83.9	80.1	82.6	88.1	86.9	87.9
Nagaland	81.6	83.3	82.1	72.3	79.8	72.9
Sikkim	72.8	79.8	75.2	85.6	80.7	84.8
Tripura	57.7	56.7	57.2	37.8	40.4	38.1
West						
Goa	37.7	45.1	39.2	38.2	28.9	37.7
Gujarat	55.0	58.2	56.5	81.7	83.2	82.0
Maharashtra	44.5	56.9	50.3	55.6	57.1	55.8
South						
Andhra Pradesh	67.6	78.2	73.6	74.0	75.7	74.2
Karnataka	55.4	72.3	63.6	65.0	73.5	65.8
Kerala	66.9	70.6	68.2	65.1	66.6	65.2
Tamil Nadu	53.3	65.7	58.1	55.0	67.0	56.0
India	49.0	56.4	52.8	54.8	60.0	55.7

Notably, in 22 of the 29 states, ever-married women and men agree with wife beating more often than never married women and men. However, the 22 states in which this is true for men are not all the same as the 22 states in which this is true for women.

Determinants of agreement with wife beating: The proportion of youth who agree with at least one reason for wife beating varies by age, marital status, residence, and education. To understand the net effects of these and other background characteristics, two logistic regressions, one each for women's and men's agreement with wife beating, were run. For the dependent variable,

included controls for region (as shown in Table 4.8), media exposure (exposed at least every week to television, radio, or newspapers/magazines or to cinema at least once a month), caste/tribe, and religion. Table 4.9 shows the odds ratios for each independent variable. The key findings of the multivariate analysis are given below:

Table 4.9 Logistic regression results for agreement with wife beating

Odds ratios (OR) from logistic regressions of agreement with wife beating for women and men age 15-24 years for selected background characteristics, India, 2005-06

	Women who agree that a husband is justified in hitting or beating his wife for at least one specified reason	
	Women	Men
Background characteristic	OR	OR
Age		
Ref. cat.: 15-19		
20-24	0.91***	0.88***
Marital status		
Ref. cat.: Never married		
Ever married	1.13***	1.09*
Education		
Ref. cat.: No education		
<5 years complete	0.95	0.95
5-9 years complete	0.83***	0.74***
10+ years complete	0.58***	0.48***
Regular media exposure		
Ref. cat.: No		
Yes	1.08**	1.27***
Religion		
Ref. cat.: Hindu		
Muslim	1.14***	1.30***
Christian	1.21**	0.94
Other	1.10	0.93
Caste/tribe		
Ref. cat.: Scheduled caste		
Scheduled tribe	1.02	0.98
Other backward class	1.10	0.85***
Other	0.68***	1.82
Residence		
Ref. cat.: Urban		
Rural	1.42***	1.36***
Region		
Ref. cat.: North		
Central	0.70***	0.78***
East	0.88***	0.73***
Northeast	1.02	0.57***
West	1.30***	1.87***
South	2.23***	1.86***
Wealth index		
Ref. cat.: Lowest		
Second	0.95	0.91
Middle	0.86***	0.84***
Fourth	0.75***	0.68***
Highest	0.51***	0.53***

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

a) Controlling for all other factors, older youth, both women and men are less likely to agree with wife beating than adolescents. Even controlling for age and education, married youth are more likely to see wife beating as justified than never married youth.
b) As expected, urban living, having at least five years of education, and belonging to a household in the higher wealth quintiles are associated with a lower likelihood of agreement with wife beating among both male and female youth.
c) Exposure to media is expected to have an association with acceptance of wife beating which is similar to that of education. However, contrary to expectations, exposure to media does not have a negative net association with agreement; instead, the odds of agreeing with wife beating are 8 percent higher for female youth and 27 percent higher for male youth if they are regularly exposed to media than if they are not .
d) Net of other characteristics, Muslim and Christian female youth are more likely than Hindu female youth to agree with wife beating. However, among male youth, only Muslim men are more likely to agree with wife beating than Hindu men; Christian men are no different from Hindu men in this respect.
e) Among women, only those who do not belong to scheduled castes, scheduled tribes, or other backward classes have a lower likelihood of agreeing with wife beating; among men it is only those who belong to other backward classes who have lower odds of agreeing than men belonging to the scheduled castes.

f) Despite controls for education and all other relevant variables, the region where youth reside is significantly associated with their justification of wife beating. Compared with female youth in the northern states, those living in the central and eastern states are less likely to agree with wife beating, and those living in the western and southern states are much more likely to justify wife beating. Specifically, the odds of a female youth agreeing with wife beating are more than twice as high if she lives in the southern region, than if she lives in the northern region (OR=2.23 vs. OR=1.00). Male youth in the central, eastern, and northeast regions of the country are much less likely than those in the north to justify wife beating, and as was also the case for female youth, those in the western and southern regions are much more likely to justify wife beating. These results suggest that once education and other characteristics are controlled for, the Northeastern states taken together are either no different regarding youth agreement with wife beating than the northern states taken together, or youth in this region have lower odds of agreeing with wife beating.

Overall, the regression analysis shows that, irrespective of controls, urban living, education, and wealth are all negatively associated with acceptance of wife beating and that, controlling even for education and wealth, there are marked differences in youth attitudes toward wife beating by region and religion. Contrary to expectations, controlling for education and other relevant variables, regular media exposure is associated with more rather than less agreement with wife beating.

B. Attitudes toward a wife refusing her husband sex

The extent of control women have over when they have sexual intercourse has important implications for demographic and health outcomes. It is also an indicator of women's empowerment because it measures acceptance of norms that socialize women and men into believing that a woman should not refuse to have sexual intercourse with her husband for any reason.

About two-thirds of youth (64% of women and 68% of men) believe that a woman is justified in refusing to have sex with her husband for all three of the following reasons: when she knows he has a sexually transmitted disease, when she knows her husband has sex with other women, and when she is tired or not in the mood (Table 4.10). Overall, 74-77 percent of women age 15-24 agree with each of the three reasons asked about, and 16 percent do not agree with any of the three reasons. Men are somewhat more likely than women to agree that a woman is justified in refusing to have sex with her husband for each of the three reasons asked about.

Among youth, ever-married women and men are more likely than never married women and men to agree with a woman's right to refuse her husband sex for all reasons and for each reason. Notably, only 11 percent of ever-married women and 6 percent of ever-married men do not agree with any of the three reasons for a woman to refuse her husband sex; the

corresponding proportion is almost twice as high among never married women and men, respectively. These data suggest that women and men are more likely to believe in the norm that women must not refuse their husbands sex till such time as they are themselves in a marital relationship.

Young women and men are expected to have more gender-egalitarian views than older cohorts. However, compared with the women and men age 25-49, a lower proportion of young women and men agree with a woman's right to refuse her husband sex for all reasons, and a higher proportion of them agree with none of the reasons.

In order to examine attitudes toward women's right to decide when to have sex, men were asked a question on what is appropriate for a man to do when his wife refuses him sex. The behaviours asked about were: get angry and reprimand her, refuse to give her financial support, use force to have sex with her, and have sex with another woman. Table 4.10 also shows the percentages of men age 15-24 who agree with each of these behaviours.

Twenty-one percent of male youth agree that a man has the right to get angry and reprimand his wife if she refuses to have sex with him and 5-6 percent agree with each of the other specified behaviours. Overall, 75 percent do not agree with any of these behaviours as

Table 4.10 Gender-role attitudes regarding a wife refusing her husband sex

Percentage of women and men age 15-24 years who agree that a wife is justified in refusing her husband sex for specified reasons and percentage of men age 15-24 who agree that a man can behave in specific ways if his wife refuses him sex, according to marital status, India, 2005-06

	Ever-married		Never married		Total	
Reason/behaviour	Women	Men	Women	Men	Women	Men
Percentage who agree that a wife is justified in refusing to have sex with her husband when she:						
Knows husband has a sexually transmitted disease	79.9	84.5	69.0	78.2	74.5	79.3
Knows husband has sex with other women	81.1	81.9	72.3	76.8	76.8	77.7
Is tired or not in the mood	79.8	87.0	67.9	81.1	73.9	82.1
Percentage who agree with all three reasons						
Age 15-24	69.2	73.2	59.2	66.9	64.2	68.0
Age 25-49	69.7	71.6	63.5	71.1	69.5	71.6
Percentage who agree with none of the three reasons						
Age 15-24	10.7	6.3	21.4	11.9	16.0	10.9
Age 25-49	11.1	8.0	19.7	7.9	11.3	8.0
Percentage who agree that when a woman refuses to have sex with her husband, he has the right to:						
Get angry and reprimand her	na	25.5	na	19.8	na	20.7
Refuse to give her financial support	na	7.6	na	6.1	na	6.4
Use force to have sex	na	8.1	na	5.3	na	5.8
Have sex with another woman	na	4.7	na	4.7	na	4.7
Percentage who agree with all four behaviours						
Age 15-24	na	1.1	na	1.2	na	1.2
Age 25-49	na	1.0	na	0.8	na	1.0
Percentage who agree with none of the four behaviours						
Age 15-24	na	70.1	na	76.0	na	75.0
Age 25-49	na	76.5	na	79.2	na	76.8
Number of respondents age 15-24	24,003	4,276	23,588	20,721	47,590	24,997

na = Not applicable

appropriate, and only 1 percent agree with them all.

Thus, the majority of youth appear to have attitudes that reject norms that do not give women any control over when to have sex. However, youth are somewhat less likely than men in the older cohort age 25-49 to disagree with all four behaviours as appropriate for a man if his wife refuses him sex.

These data suggest that the younger generation, contrary to expectations, is somewhat more conservative than the older generation in terms of their attitudes toward women's sexual rights in marriage—however, the intergenerational differences are small. Further, marriage, and the associated experience with sexual life, appears to increase acceptance of gender egalitarian sexual rights for women among youth.

5. WHAT THEY DO: YOUTH BEHAVIOUR

Earlier chapters of this report have presented data on youth knowledge and attitudes; this chapter focuses on reported demographic and health-related behaviours of youth. The chapter first examines youth behaviour related to reproduction, in particular, the fertility performance of youth and their use of contraception. This is followed by a discussion of sexual initiation and behaviour related to higher-risk sex among youth. Finally, data are presented on the use of tobacco and alcohol by youth which are two lifestyle choices that have consequences for health.

5.1 Fertility Performance

The period of youth is a time when individuals are expected to acquire knowledge and skills necessary to become responsible adults and adequately prepare for the demands of family formation, successful employment, and informed citizenship. However, for most women in India, the period of youth is when childbearing activity is at its peak.

The age-specific fertility rates given in Table 5.1 show that in the three years preceding NFHS-3, there were 90 births per 1,000 women age 15-19 and 209 births per 1,000 women age 20-24, the highest of any age group. These age-specific fertility rates imply that by the time a woman in India passes through the period of youth, she will have 1.5 children on average. Although urban fertility is lower than rural fertility, the urban age-specific fertility rates show that even in urban areas women have, on average, more than one child before they are 25 years of age. Further, fertility during the youth years accounts for more than half (56%) of total fertility.

Table 5.1 Current fertility

Age-specific and total fertility rates from NFHS-3, NFHS-2, and NFHS-1 by residence, India

	NFHS-3			NFHS-2			NFHS-1		
Age	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
15-19	0.057	0.105	0.090	0.068	0.121	0.107	0.075	0.131	0.116
20-24	0.166	0.231	0.209	0.179	0.222	0.210	0.203	0.243	0.231
25-29	0.123	0.146	0.139	0.127	0.150	0.143	0.154	0.177	0.170
30-34	0.048	0.069	0.062	0.057	0.075	0.069	0.071	0.108	0.097
35-39	0.013	0.031	0.025	0.018	0.033	0.028	0.027	0.051	0.044
40-44	0.004	0.009	0.007	0.003	0.011	0.008	0.006	0.019	0.015
45-49	0.001	0.004	0.003	0.001	0.004	0.003	0.004	0.006	0.005
Cumulative fertility rate 15-24	1.12	1.68	1.50	1.24	1.72	1.59	1.39	1.87	1.74
TFR 15-49	2.06	2.98	2.68	2.27	3.07	2.85	2.70	3.67	3.39
Percentage of total fertility achieved by age 25	54	56	56	54	56	56	52	51	51

Note: Rates are for the period 1-36 months preceding the survey (approximately 1990-92 for NFHS-1, 1996-98 for NFHS-2, and 2003-05 for NFHS-3). Age-specific fertility rates are expressed per woman. Rates for the age group 45-49 might be slightly biased due to truncation.
TFR = Total fertility rate expressed per woman

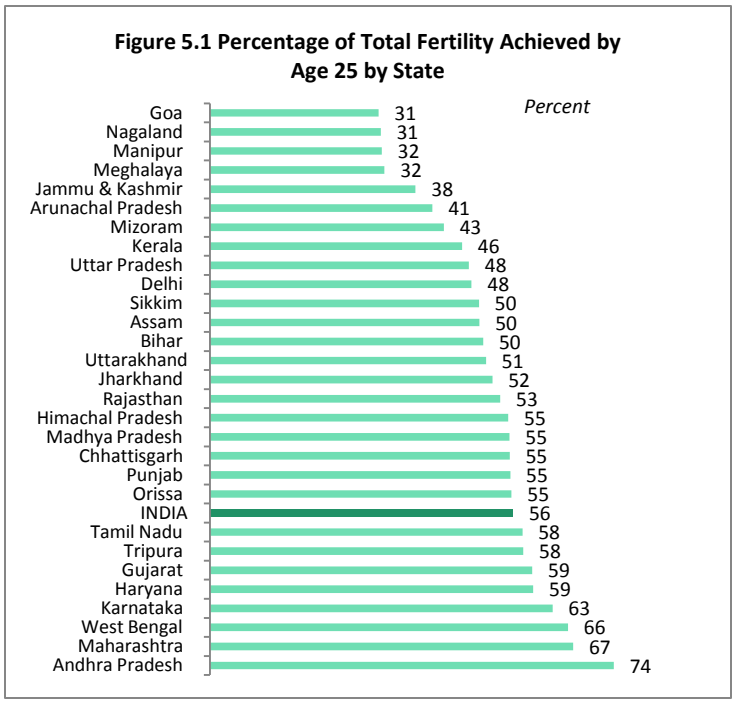


Table 5.1 also shows that there has been a drop in the fertility of adolescents age 15-19 over time; however, the fertility of women age 20-24 fell between NFHS-1 and NFHS-2, but did not change in the period between NFHS-2 and NFHS-3.

Figure 5.1 shows that in most states, half or more of total fertility is accounted for by the fertility of women age 15-24. In several states, particularly states characterized by low age at first marriage and relatively low fertility such as West Bengal, Maharashtra, Andhra Pradesh, and Karnataka, about two-thirds or more of total fertility is accounted for by the fertility of youth.

5.2 Initiation of Childbearing

A direct indicator of early childbearing is the proportion of youth who have initiated childbearing, i.e., they have already had a child or are pregnant with their first child. Overall, 39 percent of women age 15-24 have initiated child bearing, including 36 percent who already have a birth and 4 percent who are pregnant with their first child.

The proportion of women who have begun childbearing is about three times as high among women who have no education as women who have 10 or more years of education. Early initiation of childbearing is much more common in rural than in urban areas, and declines sharply with wealth.

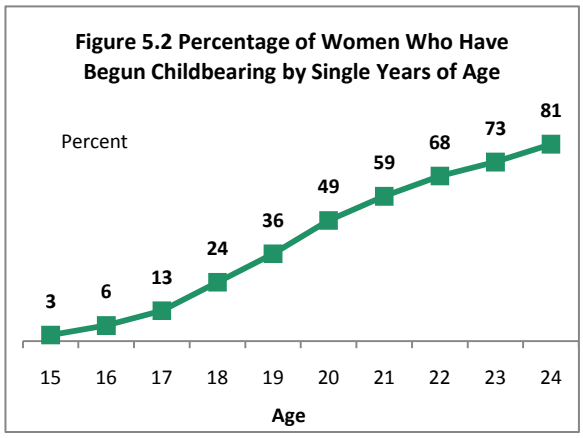
Table 5.2 and Figure 5.2 show that the proportion of women who initiate childbearing ranges from 3 percent among women age 15 to 81 percent among

Table 5.2 Initiation of child bearing and motherhood

Percentage of women age 15-24 years who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, India, 2005-06

Background characteristic	Percentage who: Have had a live birth	Percentage who: Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	1.3	1.2	2.5	4,814
16	4.2	2.3	6.4	5,237
17	8.6	3.8	12.5	4,801
18	18.0	6.1	24.1	5,606
19	29.7	6.1	35.8	4,353
20	43.4	6.0	49.4	5,504
21	54.2	5.0	59.3	4,184
22	63.9	3.7	67.6	4,781
23	70.6	2.7	73.3	4,310
24	78.6	2.0	80.6	4,000
Residence				
Urban	26.9	3.2	30.1	14,931
Rural	39.5	4.3	43.7	32,660
Education				
No education	57.0	4.7	61.7	12,524
<5 years complete	41.3	4.1	45.4	3,422
5-9 years complete	32.0	3.8	35.8	18,008
10 or more years complete	18.8	3.4	22.3	13,633
Wealth index				
Lowest	46.8	4.6	51.5	8,175
Second	42.9	4.1	47.0	9,284
Middle	36.9	3.9	40.8	10,131
Fourth	32.2	4.1	36.3	10,241
Highest	20.9	3.1	24.0	9,759
Total	35.5	3.9	39.4	47,590

Note: Total includes women with missing information on education, who are not shown separately.



women age 24. Childbearing increases gradually at first with each single year of age from age 15 to age 17, and then increases rapidly till about age 21, before beginning to level off. Notably, by age 21, a majority of women have already initiated childbearing.

During the period of youth, not only do many women initiate childbearing, but many have more than one birth. Even among adolescents age 15-19 years, 9 percent have had one birth, 3 percent have had two births, and a smaller proportion have had three births. Among older youth (age 20-24 years), 25 percent have had one birth, 23 percent have had two births, 9 percent have had three births, and 4 percent have had four or more births (data not shown). Thus, not only is childbearing initiated at very young ages in India, but a sizeable proportion of women who are very young and whose bodies are still maturing are burdened with repeated childbearing.

Table 5.3 shows state-level variation in the proportion of women age 15-24 who have given birth or are pregnant for the first time by age. One-fourth or more adolescent girls age 15-19 in Jharkhand, Bihar, and West Bengal and 17-18 percent in Andhra Pradesh, Karnataka, and Tripura have already initiated childbearing. By contrast, 5 percent or fewer adolescent girls in Delhi, Himachal Pradesh, Jammu & Kashmir, and Goa have initiated childbearing.

In all states except Goa, at least one-third of women age 20-24 have initiated childbearing. In many states in the north and central parts of India, as well as in Bihar, West Bengal, Tripura, and Andhra Pradesh, at least two-thirds of women have already begun childbearing.

In each of the eight cities for which separate estimates are available, 5-8 percent of adolescent girls have begun childbearing (Table 5.4). Among women age 20-24, the proportion who have begun

Table 5.3 Initiation of childbearing by state

Percentage of women age 15-24 who have begun childbearing by age, according to state, India, 2005-06

	Percentage among women age:		
State	15-19	20-24	15-24
North			
Delhi	5.0	42.9	24.5
Haryana	12.1	70.0	39.1
Himachal Pradesh	3.1	47.6	26.2
Jammu & Kashmir	4.2	34.1	19.1
Punjab	5.5	48.2	28.3
Rajasthan	16.0	69.2	40.7
Uttarakhand	6.2	52.2	27.0
Central			
Chhattisgarh	14.6	68.2	38.2
Madhya Pradesh	13.6	71.0	41.0
Uttar Pradesh	14.3	72.5	39.2
East			
Bihar	25.0	79.1	47.8
Jharkhand	27.5	75.6	49.9
Orissa	14.4	56.0	35.0
West Bengal	25.3	72.9	48.6
Northeast			
Arunachal Pradesh	15.4	58.8	34.0
Assam	16.4	58.5	38.3
Manipur	7.3	37.2	23.0
Meghalaya	8.3	48.3	27.4
Mizoram	10.1	53.8	33.2
Nagaland	7.5	43.8	25.5
Sikkim	12.0	51.0	29.9
Tripura	18.5	66.1	38.8
West			
Goa	3.6	23.6	14.3
Gujarat	12.7	59.3	36.4
Maharashtra	13.8	63.2	38.5
South			
Andhra Pradesh	18.1	67.9	43.7
Karnataka	17.0	62.0	39.6
Kerala	5.8	45.2	25.5
Tamil Nadu	7.7	48.4	30.3
India	16.0	65.0	39.4

childbearing in these cities ranges from 36 percent in Kolkata to 52 percent in Indore. In all eight cities, women age 20-24 in slum areas are much more likely to have initiated childbearing than women in non-slum areas. This is also true for the younger age group (age 15-19) in all cities except Indore.

Table 5.4 Initiation of childbearing in cities

Percentage of women age 15-24 years who have begun childbearing, by age, residence and city, India, 2005-06

	Age					
	15-19			20-24		
City	Slum	Non-slum	Total	Slum	Non-slum	Total
Delhi	11.8	3.1	4.9	52.2	39.8	42.3
Meerut	9.2	2.0	5.6	53.3	44.6	48.5
Kolkata	8.7	6.9	7.7	39.4	35.0	36.4
Indore	6.2	7.7	7.3	55.1	51.4	52.2
Mumbai	9.8	2.9	6.7	49.5	34.6	41.8
Nagpur	7.0	3.6	5.0	45.5	38.6	41.5
Hyderabad	7.4	5.6	5.9	50.4	41.9	43.3
Chennai	12.6	4.3	5.9	52.0	38.5	41.3

5.3 Use of Contraception

In India, not only are significant proportions of women married during the years of early youth, but as the previous sections have shown, initiation of childbearing and repeated childbearing is also common at these young ages. Mothers' early age at childbirth and short birth intervals are both risk factors for maternal and child mortality. Hence, the use of contraception by sexually active women age 15-24, particularly the use of spacing methods, is likely to be of great importance for the health and welfare of young mothers and their children.

A. Levels and trends

Twenty-eight percent of currently married women age 15-24 use a method of contraception. The contraceptive prevalence rate among youth increases from 13 percent among teenagers to 33 percent among women age 20-24 years (Figure 5.3). Contraceptive use has been increasing over the years among both younger and older youth and the increase has been particularly marked in the years between NFHS-2 and NFHS-3.

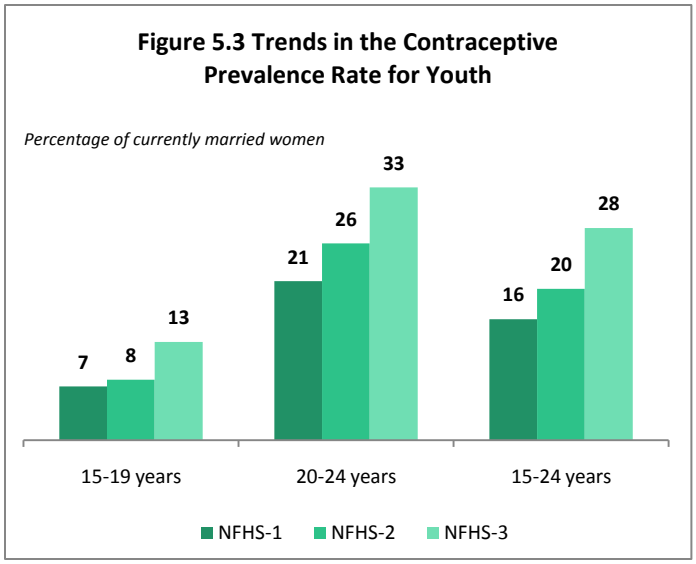


Table 5.5 and Figure 5.4 show that among teenagers, the preferred methods are rhythm, condom, withdrawal, and pill. As expected, these are all spacing methods that allow women to delay first and subsequent births. Among women age 20-24, however, female sterilization, a permanent method, is the most preferred: in fact, female sterilization accounts for 40 percent of all contraceptive use in this age group and one out of eight married women in this age group are already sterilized.

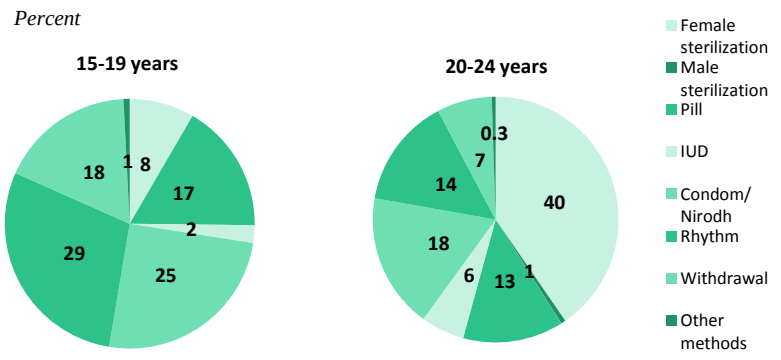
Table 5.5 Current use of contraception by background characteristics

Percent distribution of currently married women age 15-24 years by contraceptive method currently used, according to background characteristics, India, 2005-06

			Modern method								Traditional method					
Background characteristic	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Condom/ Nirodh	Other modern method	Any traditional method	Rhythm	With-drawal	Folk method	Not currently using	Total	Number of women
Age																
15-19	13.0	7.0	1.1	0.0	2.2	0.3	0.1	3.3	0.0	6.1	3.8	2.3	0.0	87.0	100.0	6,727
20-24	33.4	25.9	13.4	0.2	4.4	1.9	0.1	5.9	0.0	7.4	4.8	2.4	0.2	66.6	100.0	16,780
Residence																
Urban	35.0	28.2	10.1	0.0	5.2	3.3	0.1	9.5	0.0	6.5	4.0	2.5	0.0	65.0	100.0	5,578
Rural	25.2	18.2	9.9	0.2	3.3	0.9	0.1	3.8	0.0	7.1	4.6	2.3	0.2	74.8	100.0	17,930
Education																
No education	21.1	15.7	10.8	0.1	1.9	0.4	0.1	2.4	0.0	5.3	4.0	1.2	0.1	78.9	100.0	9,354
<5 years complete	30.5	22.4	12.5	0.3	6.2	0.4	0.0	3.0	0.0	8.2	4.5	3.2	0.5	69.5	100.0	1,988
5-9 years complete	31.1	22.6	10.5	0.1	5.1	1.4	0.1	5.4	0.0	8.5	5.3	3.1	0.1	68.9	100.0	8,111
10 or more years complete	33.8	26.7	5.5	0.0	4.2	4.5	0.2	12.3	0.0	7.0	4.0	3.0	0.0	66.2	100.0	4,052
Wealth index																
Lowest	19.8	13.9	9.0	0.2	2.8	0.3	0.1	1.5	0.0	6.0	4.3	1.5	0.2	80.2	100.0	5,155
Second	24.4	17.2	10.2	0.2	3.8	0.3	0.0	2.6	0.1	7.1	5.0	2.0	0.1	75.6	100.0	5,475
Middle	27.8	20.5	12.2	0.2	3.6	0.7	0.2	3.6	0.0	7.4	4.6	2.7	0.1	72.2	100.0	5,214
Fourth	32.3	25.7	11.0	0.0	4.6	2.1	0.1	7.9	0.0	6.5	3.8	2.6	0.1	67.7	100.0	4,623
Highest	38.7	30.6	5.3	0.1	4.6	5.7	0.2	14.7	0.0	8.0	4.7	3.3	0.0	61.3	100.0	3,041
Number of living children																
No children	7.4	3.2	0.1	0.1	0.6	0.0	0.0	2.4	0.0	4.2	2.5	1.7	0.0	92.6	100.0	7,314
1 child																
1 son	27.1	17.5	0.9	0.1	6.4	2.4	0.2	7.5	0.0	9.7	6.9	2.8	0.0	72.9	100.0	4,284
No sons	24.5	15.1	0.7	0.0	5.3	2.2	0.2	6.6	0.1	9.4	5.8	3.5	0.1	75.5	100.0	3,936
2 children																
1 son	49.9	42.7	27.7	0.2	4.9	2.6	0.1	7.1	0.1	7.1	4.4	2.4	0.3	50.1	100.0	2,920
2 sons	57.8	50.1	37.2	0.3	4.7	2.6	0.0	5.3	0.0	7.7	4.6	2.8	0.3	42.2	100.0	1,460
No sons	31.2	23.9	10.3	0.4	6.4	1.6	0.2	5.0	0.0	7.4	5.3	2.1	0.0	68.8	100.0	1,212
3 children																
1 son	41.7	37.7	28.2	0.0	3.5	0.8	0.0	5.2	0.0	3.9	2.5	1.3	0.1	58.3	100.0	751
2 sons	60.8	55.1	46.2	1.0	2.4	0.6	0.3	4.6	0.0	5.7	3.7	1.7	0.3	39.2	100.0	697
3 sons	55.6	48.1	41.6	0.5	2.8	0.9	0.0	2.3	0.0	7.5	5.1	0.5	1.9	44.4	100.0	214
No sons	30.8	20.5	8.5	0.0	3.8	0.9	0.0	7.3	0.0	10.3	10.3	0.0	0.0	69.2	100.0	234
4+ children																
1 son	30.6	27.3	14.9	0.0	5.0	3.3	0.0	4.1	0.0	3.3	0.8	2.5	0.0	69.4	100.0	121
2 sons	46.8	41.1	35.3	0.0	2.6	0.0	0.0	3.2	0.0	5.8	4.2	1.6	0.0	53.2	100.0	190
3 sons	55.2	50.5	38.1	0.0	2.9	0.0	0.0	9.5	0.0	4.8	0.0	2.9	1.9	44.8	100.0	105
4 sons	(61.3)	(61.4)	(41.9)	(0.0)	(6.5)	(6.5)	(0.0)	(6.5)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(38.7)	100.0	31
No sons	(16.7)	(11.9)	(7.1)	(0.0)	(4.8)	(0.0)	(0.0)	(0.0)	(0.0)	(4.8)	(4.8)	(0.0)	(0.0)	(83.3)	100.0	42
Total 15-24	27.5	20.5	9.9	0.1	3.8	1.4	0.1	5.2	0.0	6.9	4.5	2.3	0.1	72.5	100.0	23,508
Total 25-49	66.1	57.9	46.6	1.3	2.8	1.8	0.1	5.3	0.0	8.1	5.1	2.6	0.4	33.9	100.0	69,581

Note: Total includes women with missing information on education, who are not shown separately.
( ) Based on 25-49 unweighted cases.

Figure 5.4 Percentage of Currently Married Women Age 15-24 who are Currently Using Contraception by Method of Contraception Being Used



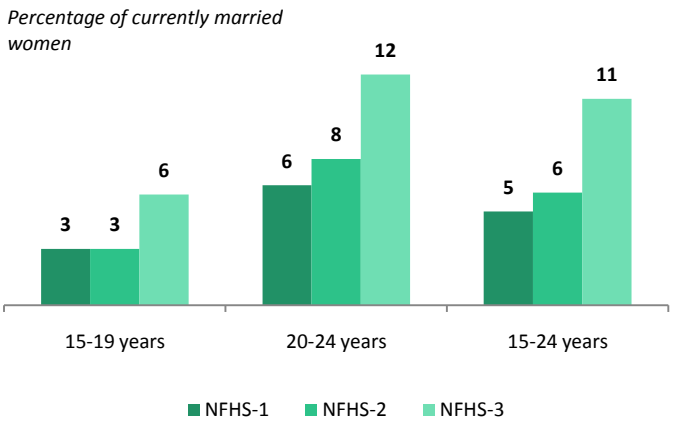
Note: Percentage of women age 15-19 years who are using male sterilization is 0.0.

Thus these data show that in India, not only are large proportions of youth married but significant numbers have also completed childbearing. Even among women age 15-19, an age group when most are too young to even be legally married, 1 percent have completed their childbearing and are already sterilized.

Modern temporary methods are used by 11 percent of youth (6% of those age 15-19 and 12% of those age 20-24). Among the modern temporary methods, condoms (5%) and pills (4%) are most popular. Notably, although married women in the 25-49 age cohort are more than twice as likely as married youth to be using contraception, they are somewhat less likely than youth to be using the pill.

Figure 5.5 shows that between NFHS-2 and NFHS-3, the proportion of youth using a modern temporary method has risen substantially. Among currently married women age 15-19, modern temporary method use doubled in the seven years between NFHS-2 and NFHS-3, and among those age 20-24, it increased by 50% in the same period. Notably, traditional method use is also quite common among youth: the two traditional methods, rhythm and withdrawal, are used by 7 percent of youth and account for one-fourth of contraceptive use by youth (Table 5.5).

Figure 5.5 Trends in Modern Spacing Method Use among Youth

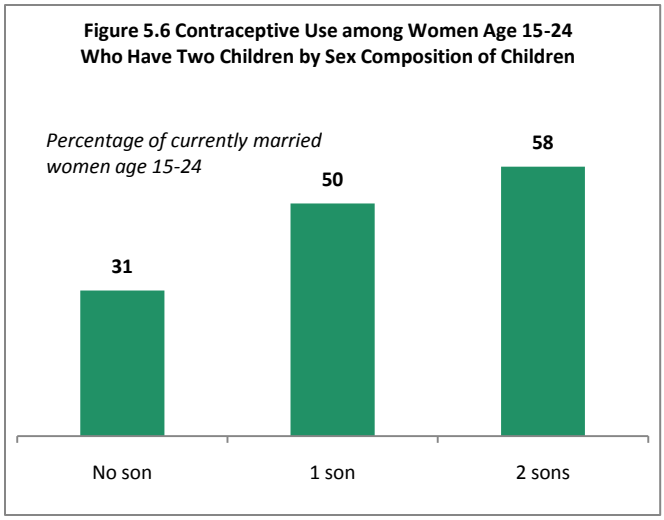


Among youth, condom and pill use increases with education and the wealth index, as does the use of traditional methods. Overall, any contraceptive use increases from 20-21 percent among women with no education or women in the lowest wealth quintile, to 34 percent for women with 10 or more years of education and 39 percent for women in the highest wealth quintile. Thus, even among youth, contraceptive use is closely linked to education and wealth.

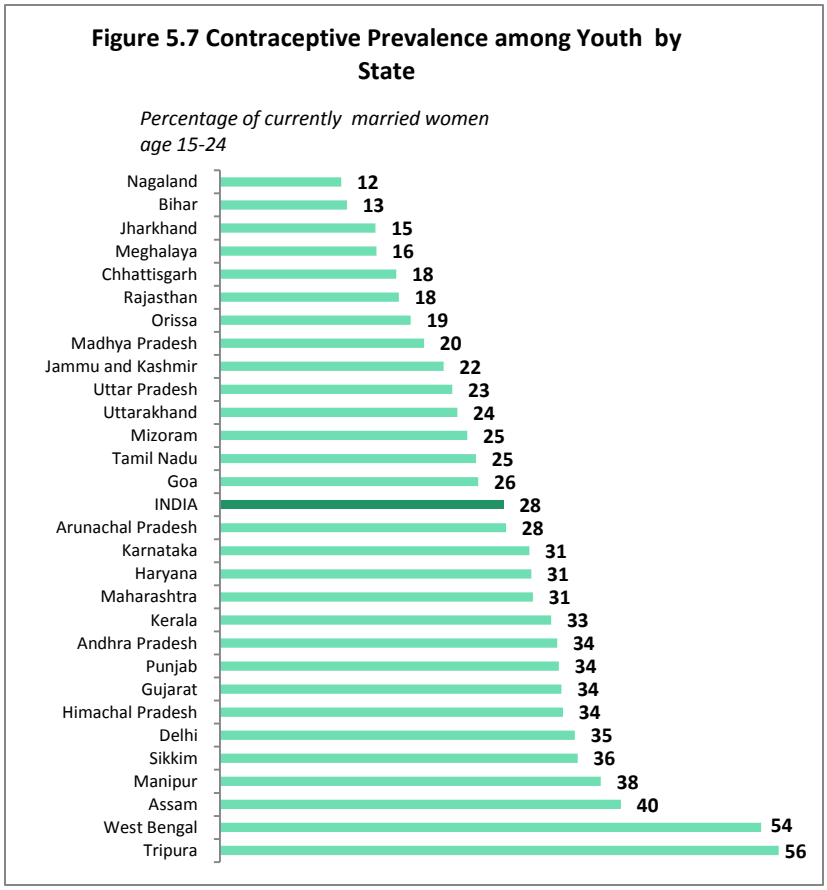
As discussed earlier, awareness of pills and condoms is high among youth. Nonetheless, a significant proportion of youth–both current and ever users who have discontinued use—use only traditional methods. The heavy reliance on traditional methods is particularly disturbing given the poor knowledge of the fertile period among both married women and men. Thus,

the issue of method choice among youth is an area which clearly needs further attention and exploration.

Despite belonging to a new generation, married youth in India also show evidence of son preference. As seen earlier in the report, the desire for more children is positively associated with the number of sons born. The data on contraceptive use by sex composition of living children provides further evidence (Table 5.5 and Figure 5.6).



Young women are more likely to be using a method of contraception if they already have a son. For example, among women age 15-24 who have two children, 58 percent of women with two sons and 50 percent with one son and one daughter are using contraception, compared with 31 percent of women with no sons. Further, sterilization use is much higher among women at any parity who have at least one son than among women who have no sons.



Among currently married youth in India, contraceptive prevalence varies substantially by state, from 12-13 percent in Nagaland and Bihar, to 54-56 percent in West Bengal and Tripura (Figure 5.7). Contraceptive prevalence among currently married youth is 25 percent or more in 18 of the 29 states in India.

Even youth who are not current users may have used a contraceptive method in the past but then have discontinued its use. Among currently married youth, almost one in four teenagers and one-half of women age 20-24 have ever used a method of contraception (including those who are currently using a method). Among youth who have ever used contraception,

one in four first used a method before their first birth; 41 percent first used a method between their first and second births, and the remaining 33 percent used contraception only after having two children (data not shown).

B. Determinants of contraceptive use before having any children

As mentioned above, one in four currently married women age 15-24 who have ever used a method, or about 1 in 10 of all currently married women in this age group first used a method before they had any children: such women are an exception, not only because of the timing of first use, but also because, in India, female sterilization is by far the most popular method used to end childbearing.

Delaying the first the birth, particularly in cases of early marriage is highly desirable for the health of the mother and child. Thus, a logistic regression was run to better understand the characteristics of women who display this pioneering behaviour. The dependent variable that is defined only for currently married women age 15-24, assigns a value of 1 to women who used any method of contraception when they had no children, and 0 to all those remaining who have either never used contraception or used it after having one or more children. Characteristics examined and the corresponding odds ratios (OR) are provided in Table 5.6. Regular media exposure refers to exposure at least once a week to television, radio, or newspapers or magazines or at least once a month to the cinema. The states included in each region are as shown in Table 5.3. The key results of the analysis are:

Table 5.6 Logistic regression results of first use of contraception before the first child

Odds ratios (OR) from the logistic regression of currently married women age 15-24 years whose first use of contraception was before they had any children for selected background characteristics, NFHS-3, India

	Use of contraception before first child
	OR
Age	
Ref. Cat.: 15-19	
20-24	0.62***
Education	
Ref. Cat.: No education	
<5 years complete	1.34**
5-9 years complete	2.08***
10+ years complete	2.89***
Regular media exposure	
Ref. Cat.: No	
Yes	1.69***
Religion	
Ref. Cat.: Hindu	
Muslim	1.03
Christian	0.98
Other	0.60**
Caste/tribe	
Ref. Cat.: Scheduled caste	
Scheduled tribe	0.75**
Other backward class	2.11***
Other	2.73***
Residence	
Ref. Cat.: Urban	
Rural	1.08
Region	
Ref. Cat.: North	
Central	1.41***
East	2.10***
Northeast	2.58***
West	1.14
South	0.29***
Wealth index	
Ref. Cat.: Lowest	
Second	1.06
Middle	1.06
Fourth	1.04
Highest	1.62***

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

a) Currently married women age 20-24 are significantly less likely than those age 15-19 to have used contraception before having any children. This suggests that very young married women may indeed be recognizing the need to delay their first birth.
b) A woman's level of education and regular media exposure increase the likelihood of using contraception before the first birth. Compared with women with no education, the odds of having used contraception before the first

birth are at least twice as high among women who have 5-9 years of education and almost three times as high among women who have 10 or more years of education.

c) Wealth is positively associated with contraceptive use before the first birth only for women in the highest wealth quintile: such women have 62 percent higher odds of having used contraception before the first birth than women in the lowest wealth quintile. Women in other wealth quintiles are no different from women in the lowest wealth quintile in this respect.

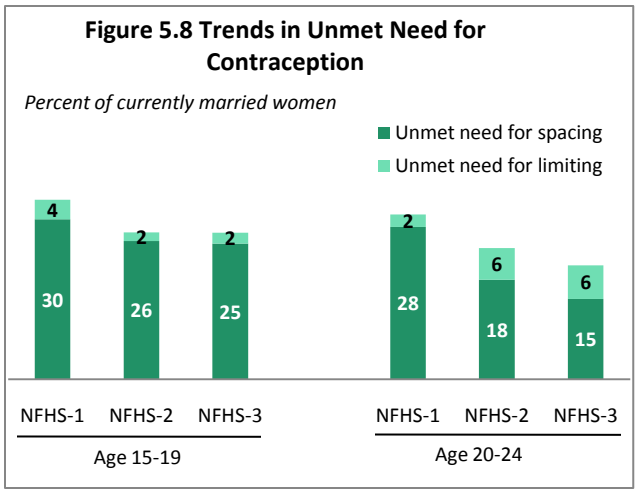
d) There is no significant variation among Hindu, Muslim, or Christian women; however, compared with women belonging to the scheduled castes, scheduled-tribe women have a lower likelihood, and other women, including women belonging to the other backward classes, have a much higher likelihood to have used contraception before the first child.

e) Differentials by region are marked. Compared with women in the north region, women in the central, east and northeast regions have higher odds of first using contraception before a first birth. However, the odds for women in the south are only 0.29; i.e., women in the south region are only 29 percent as likely as women in the north region to use a method before a first child.

This analysis shows the importance of education and media exposure in the use of contraception for delaying first births. It also shows that region has a major role to play; all else being equal, women in the southern states taken together are much less likely to use a method to delay first births. Finally, the analysis suggests that very young women who are married are indeed more likely to have used a method to delay their first birth than women who are 20-24.

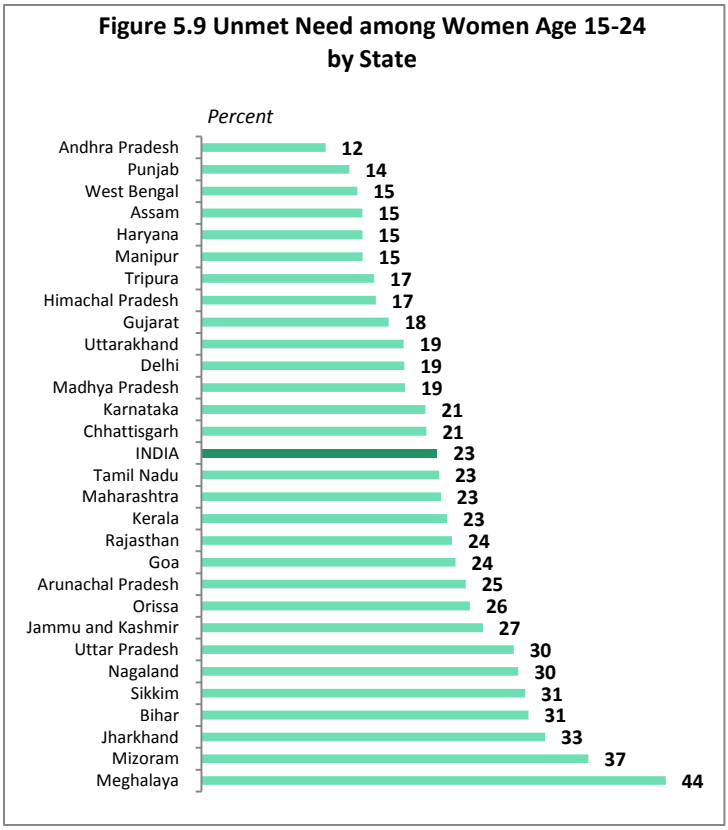
C. Unmet need

Although 28 percent of married women age 15-24 are using contraception, many more youth are not doing so, even though they do not want to have a child soon or want no more children at all. Overall, 23 percent of married youth, including over one-fourth of teenagers age 15-19 and one-fifth of women age 20-24, have an unmet need for family planning, i.e., they want to wait at least two years for their next birth or want no more children but are not using any method of contraception (Figure 5.8). Unmet need among married youth is more than three times the unmet need among women in the older cohort age 25-49 at 7 percent (data not shown).



The unmet need for family planning among teenagers, at 27 percent, is virtually unchanged since NFHS-2 when it had first fallen to 28 percent from its higher level in NFHS-1. Even

among women age 20-24, although unmet need for spacing has fallen between NFHS-2 and NFHS-3, the unmet need for limiting has remained unchanged at 6 percent.



Unmet need among youth varies greatly by state, from less than 15 percent in Punjab and Andhra Pradesh, to 37 percent in Mizoram and 44 percent in Meghalaya (Figure 5.9). Notably, Bihar, Jharkhand, Nagaland, and Meghalaya—states with the lowest rates of contraceptive use—have rates of unmet need that are among the highest in the country. These are also the states with high fertility. This suggests that for at least some youth, high fertility may not be by choice but may be due, at least in part, to family planning programmes failing to meet their needs.

The data on unmet need show clearly that young married women need to be a key focus of family planning programmes. A significant proportion of these women are not using a method even though they desire to stop childbearing or to space their next birth. This non-use could be because of any number of supply or demand related hurdles or because family planning programmes are not catering to the special needs of young women; this possibility is also supported by the data by state on unmet need, fertility, and contraceptive use. States with low contraceptive use and high fertility are among those with the highest unmet need among youth.

5.4 Sexual Behaviour

In NFHS-3, married and unmarried persons were asked several questions related to sexual behaviour, including their age at first sex, if any, lifetime number of sexual partners, and higher-risk sexual intercourse, i.e., intercourse with a partner who is neither a spouse nor lives with them. Since questions on sexual activity, particularly sexual activity outside of marriage, tend to be highly sensitive, they can be subject to a reporting bias of an unknown extent. Hence, the results in this section need to be interpreted with caution.

Given the very low mean age at marriage among women, it is not surprising that a much higher proportion of female than male youth have ever had sexual intercourse: 51% vs. 27%. Table 5.7 also shows that among youth, one-tenth of women and 2 percent of men had sexual

Table 5.7 Sexual behaviour

Indicators of sexual behaviour for women and men age 15-24 years by residence, India, 2005-06

	Urban		Rural		Total	
Sexual behaviour	Women	Men	Women	Men	Women	Men
Percentage who have ever had sexual intercourse	38.2	18.9	56.4	31.8	50.7	26.9
Percentage who had sexual intercourse before age 15	4.5	1.0	12.7	3.0	10.1	2.3
Percentage who had sexual intercourse in the past 12 months	36.9	14.7	53.9	26.7	48.6	22.1
Percentage who used a condom at first sexual intercourse	4.1	25.5	2.3	11.3	2.8	15.0
Mean number of lifetime partners	1.01	2.08	1.02	1.69	1.02	1.79
Number who ever had sexual intercourse	5,702	1,787	18,404	4,948	24,111	6,735
Percentage who had higher-risk intercourse[1] in the past 12 months	0.4	34.5	0.4	23.2	0.4	26.0
Percentage who had two or more partners in the past 12 months	0.1	8.1	0.1	6.8	0.1	6.9
Number who had sexual intercourse in the past 12 months	5,510	1,386	17,596	4,145	23,106	5,532
Percentage who reported using a condom at last higher-risk intercourse[1]	36.5	53.1	17.4	28.2	22.2	36.5
Number who had higher-risk sexual intercourse[3] in the past 12 months	21	479	64	960	85	1,439
Among those never married						
Percentage who have never had sexual intercourse	99.6	90.0	99.0	86.8	99.3	88.1
Percentage who had sexual intercourse in the past 12 months	0.3	5.6	0.7	7.3	0.5	6.6
Number of never married respondents	9,253	8,501	14,335	12,220	23,588	20,721

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

intercourse before they had reached age 15. Further, among those who have ever had sexual intercourse, men had, on average, 1.8 partners, whereas, women had slightly more than one partner; and 3 percent of female youth, compared with 15 percent of male youth used a condom at first sexual intercourse.

Forty-nine percent of women and 22 percent of men age 15-24 had sexual intercourse in the 12 months prior to the survey. Among youth who have ever had sexual intercourse, less than 1 percent of women, but 26 percent of men (or 7% of all male youth), reported having had higher-risk sexual intercourse in the past 12 months. Higher-risk sexual intercourse is of particular interest since it has been found to be positively associated with the risk of sexually transmitted infections such as HIV. Seven percent of men and less than one-half percent of women had sexual intercourse with two or more partners in the past year. Virtually all of the men who had two or more partners also had higher-risk sexual intercourse. Less than two in five men age 15-24 (37%) who had higher-risk sexual intercourse used a condom at the time of their last higher-risk intercourse.

Among never married youth, 12 percent of men and 1 percent of women reported having sexual intercourse. The proportion of never married youth who report ever having had sex is higher in rural than in urban areas among both men and women.

Although relatively low, these statistics point to the fact that higher-risk sex and sex with multiple partners is not uncommon among youth in India. Further, the majority of youth who are having higher-risk sex are not using condoms which protect against both disease and

unwanted pregnancy. These statistics underscore the need to educate youth about safe sex and transmission and prevention of HIV.

5.5 Prevalence of Tobacco Use and Alcohol Consumption

Substance abuse is an important issue related to youth health worldwide. In NFHS-3, data were collected on tobacco consumption and alcohol consumption by women and men. Annually, about 5 million people die worldwide due to tobacco-related diseases, which is more than deaths caused by any other single agent (Global Tobacco Surveillance, 2007). According to Mishra et al. (2005), if the current consumption of tobacco trends persist, tobacco-related deaths will be around 10 million per year by 2030. While cigarettes are the dominant form of tobacco use in much of the world, oral use of smokeless tobacco (chewing or applying to the teeth or gums) and smoking of *bidis* are the dominant forms of tobacco consumption in India.

A. Levels of tobacco and alcohol use

Among youth, 40 percent of men and 5 percent of women use tobacco (Table 5.8). Nineteen percent of men report smoking cigarettes or *bidis* and 30 percent report consumption of *pan masala*, *gutkha,* or other tobacco products. Among women, by contrast, chewing tobacco in the

Table 5.8 Tobacco and alcohol use

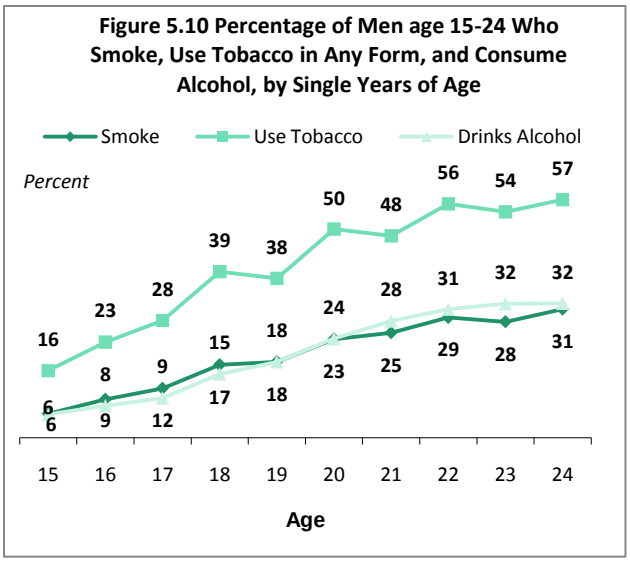
Percentage of women and men age 15-24 years by their use of tobacco and alcohol, percent distribution of those who smoke cigarettes or *bidis* by number of cigarettes/*bidis* smoked in the 24 hours preceding the survey, and among those who drink alcohol, the frequency of alcohol consumption, by residence, India, 2005-06

	Women			Men		
Tobacco/alcohol use	Urban	Rural	Total	Urban	Rural	Total
Use of tobacco/alcohol						
Smokes cigarettes or *bidis*	0.1	0.3	0.2	17.4	20.2	19.2
Smokes cigars or pipe	0.0	0.1	0.0	0.2	0.3	0.3
Chews *paan masala, gutkha*, or other tobacco	2.4	4.4	3.8	24.5	33.3	30.0
Uses snuff	0.2	0.4	0.3	0.2	0.5	0.4
Other	0.1	0.5	0.4	0.2	0.5	0.3
Does not use tobacco	97.2	94.7	95.5	65.5	56.6	59.9
Drinks alcohol	0.4	1.6	1.2	18.5	20.1	19.5
Number of respondents	14,931	32,660	47,591	9,436	15,561	24,997
Number of cigarettes/*bidis* smoked in the past 24 hours						
0	5.3	2.1	2.6	13.2	17.0	15.7
1-4	42.1	43.3	43.1	52.3	41.5	45.2
5-9	26.3	24.7	25.0	18.1	16.3	17.0
10 or more	5.3	14.5	12.9	16.2	25.1	22.0
Missing	21.1	15.5	16.4	0.2	0.1	0.1
Total[1]	100.0	100.0	100.0	100.0	100.0	100.0
Number of cigarette/*bidi* smokers	20	98	118	1,640	3,150	4,790
Among those who drink alcohol, frequency of drinking						
Almost every day	7.7	9.3	9.1	3.2	4.2	3.8
About once a week	21.2	43.2	41.1	20.5	22.3	21.7
Less than once a week	67.3	46.2	48.1	76.1	73.0	74.1
Missing	3.8	1.4	1.6	0.2	0.4	0.3
Total[1]	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents who drink alcohol	52	507	559	1,742	3,130	4,873

[1]Percentages may not add to 100.0 due to rounding.

form of *pan masala*, *gutkha,* or other tobacco products accounts for the majority of use. Only 2 in 1,000 young women reported smoking cigarettes/*bidis*.

Most male youth who smoke, do so regularly: 84 percent of cigarette or *bidi* users say they had smoked at least one cigarette/*bidi* in the past 24 hours, including 22 percent who had smoked more than 10 in the period. The prevalence of tobacco use is higher among rural than urban youth. One-fifth of young men and 1 percent of young women age 15-24 consume alcohol. One-fourth of men and one-half of women, who consume alcohol, drink alcohol at least once in a week.



Tobacco use in any form, smoking, and consumption of alcohol among men increases sharply from age 15 to 24 years (Figure 5.10). Among the oldest youth, more than half use tobacco, including 3 in 10 who smoke; 32 percent consume alcohol. Even among adolescents age 15 years, tobacco and alcohol use is

Table 5.9 Use of tobacco and alcohol consumption

Percentage of women and men age 15-24 years who smoke cigarettes or *bidis*, use chewing tobacco, use any form of tobacco, and who drink alcohol by selected background characteristics, India, 2005-06

	Women					Men				
Background characteristic	Percentage who smoke cigarettes or *bidis*	Percentage who use chewing tobacco	Percentage who use any form of tobacco	Percentage who drink alcohol	Number of women	Percentage who smoke cigarettes or *bidis*	Percentage who use chewing tobacco	Percentage who use any form of tobacco	Percentage who drink alcohol	Number of men
Age										
15-19	0.1	2.9	3.5	1.0	24,811	12.3	22.0	28.7	11.0	13,008
20-24	0.4	4.6	5.7	1.4	22,779	26.7	38.6	52.4	28.8	11,989
Residence										
Urban	0.1	2.4	2.8	0.4	14,931	17.4	24.5	34.5	18.5	9,435
Rural	0.4	4.4	5.3	1.6	32,660	20.3	33.3	43.4	20.1	15,561
Marital status										
Never married	0.1	2.1	2.5	0.7	23,588	16.1	25.6	34.3	16.3	20,721
Ever married	0.5	5.4	6.6	1.7	24,003	34.5	51.3	68.0	34.8	4,276
Education										
No education	0.9	7.2	8.9	2.8	12,523	33.8	50.1	66.7	31.3	2,440
<5 years complete	0.2	7.5	8.6	1.6	3,421	31.3	45.1	61.5	29.7	1,896
5-9 years complete	0.1	3.1	3.7	0.6	18,009	19.9	34.1	43.9	19.6	11,200
10 or more years complete	0.0	0.6	0.7	0.4	13,633	12.2	16.8	24.4	14.3	9,452
Wealth index										
Lowest	1.0	8.9	10.9	3.5	8175	25.8	44.4	56.2	26.3	3,460
Second	0.2	4.9	5.9	1.0	9284	23.3	39.7	50.4	22.5	4,577
Middle	0.1	3.1	3.7	1.2	10131	20.6	32.9	43.9	20.6	5,407
Fourth	0.1	2.0	2.3	0.4	10241	17.5	25.8	35.9	16.8	5,808
Highest	0.1	0.9	1.2	0.3	9,759	12.5	14.9	22.8	14.7	5,743
Total age 15-24	0.3	3.8	4.6	1.2	47,590	19.2	30.0	40.1	19.5	24,997
Total age 25-49	2.3	11.3	14.8	2.8	76,795	40.5	40.2	66.4	38.8	44,754

Note: Total includes women/men with missing information on education, who are not shown separately.

quite high: 16 percent of males age 15 reported use of tobacco in any form including smoking, 6 percent reported smoking cigarettes/*bidis*, and 6 percent reported alcohol consumption. Using these data to estimate the proportions who use tobacco and alcohol shows that among male youth in India, one in every ten smoke and drink alcohol and 15 percent use some form of tobacco (including smoking cigarettes/*bidis*) and drink alcohol.

Table 5.9 shows that use of tobacco and consumption of alcohol among youth varies with marital status, education, and the wealth index. The prevalence of both tobacco use and smoking is much higher among, young ever-married women and men than among the never married. Thirty-five percent of ever-married young men report smoking, 51 percent report use of chewing tobacco, and 35 percent report consumption of alcohol. Use of tobacco and consumption of alcohol decreases with increases in education and the wealth quintile.

There are large state-level variations in tobacco use and consumption of alcohol (Figures 5.11A and 5.11 B). Tobacco use among young men varies from 16 percent in Himachal Pradesh and Goa to 77 percent in Mizoram. In Orissa, Arunachal Pradesh, Madhya Pradesh, Manipur, West Bengal, Chhattisgarh, Assam, Nagaland, Tripura, and Mizoram one-half or more young men use tobacco in some form. In Arunachal Pradesh, Mizoram, Meghalaya, Chhattisgarh, and Tripura one-third or more young men consume alcohol.

Among the eight cities for which indicators can be separately generated, tobacco use among youth is most prevalent in Kolkata, where about half of men use tobacco, and is lowest in Hyderabad and Chennai where about one in five use tobacco. Use of tobacco is much higher in the slum than in the non-slum areas of all of these cities except Kolkata, where there is little

Figure 5.11A Use of Tobacco among Men by State

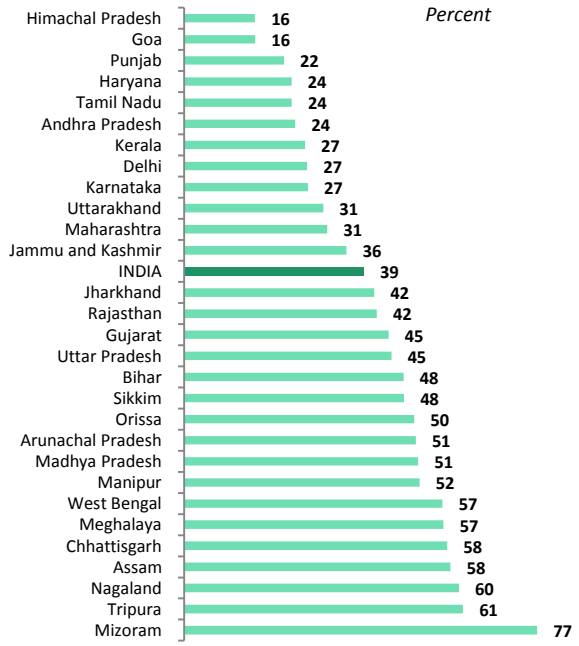
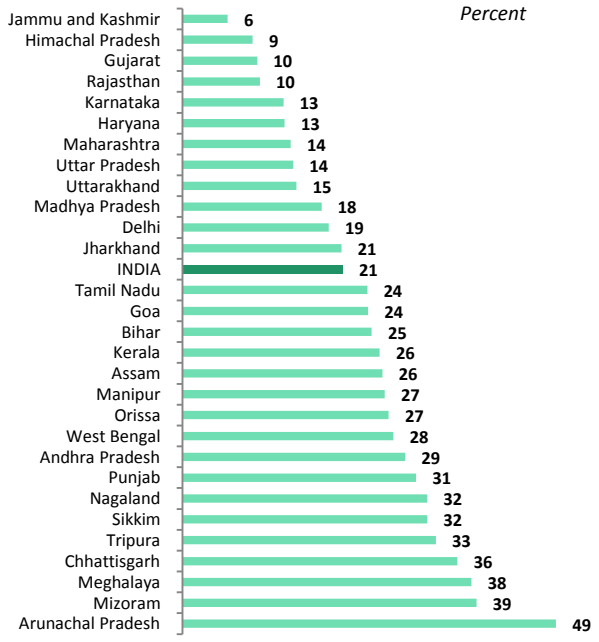


Figure 5.11B Alcohol Consumption among Young Men by State



difference by slum/non-slum residence (Table 5.10).

Table 5.10 Tobacco use and alcohol consumption among men in cities

Percentage of men age 15-24 years who use tobacco and drink alcohol by slum/non-slum residence in selected cities, India, 2005-06

City	Tobacco use			Alcohol consumption		
	Slum	Non-slum	Total	Slum	Non-slum	Total
Delhi	38.2	23.0	26.6	17.9	18.1	18.0
Meerut	32.8	24.9	28.7	16.8	13.7	15.2
Kolkata	51.2	50.0	50.5	18.7	26.8	23.5
Indore	42.1	32.4	34.5	14.5	12.1	12.6
Mumbai	33.2	22.2	27.5	25.2	14.6	19.7
Nagpur	46.6	30.9	37.1	25.1	16.4	19.8
Hyderabad	25.8	19.5	20.6	24.0	22.2	22.5
Chennai	31.1	19.1	21.4	36.3	27.1	28.9

Alcohol consumption also varies by city. With the exception of Meerut and Indore, in the remaining six cities, 18 percent or more men consume alcohol. Alcohol consumption among male youth is highest in Chennai, at 29 percent, and lowest in Indore, at 13 percent. Alcohol consumption is much higher in slum areas of Meerut, Indore, Mumbai, Nagpur, and Chennai, than in non-slum areas and in Delhi and Hyderabad, there is only a small difference in alcohol consumption by slum/non-slum residence. In Kolkata, however, male youth in non-slum areas are more likely than those in slum areas to report alcohol consumption.

B. Determinants of smoking and alcohol use among men

To identify the characteristics of men age 15-24 who smoke and who consume alcohol, two separate logistic regressions were run. Since the prevalence of both smoking and alcohol consumption are very low among women, this analysis was not done for women. The dependent variable for the logistic regressions are defined for male youth age 15-24 and are as follows: For the first regression, men who smoke cigarettes or *bidis* are coded 1 and those who do not are coded 0 and for the second, male youth who consume alcohol are coded 1 and those who do not are coded 0. Explanatory variables are the same as in Table 5.6. Table 5.11 provides the odds ratios (OR) for each variable. Key results are as follows:

a) Both smoking and alcohol consumption are significantly higher among men age 20-24 than among men age 15-19. In fact, the odds of smoking and of alcohol consumption for men age 20-24 are two and a half times and three times higher, respectively, than for adolescents. Similarly the odds of smoking and alcohol consumption for ever-married youth are also much higher than for never married youth.
b) Men who have five or more years of education are much less likely to smoke or drink alcohol than men with no education. However, regular media exposure is positively associated with both smoking and consumption of alcohol, as is urban living.
c) Compared with men in the lowest wealth quintile, only men who belong to the highest two wealth quintiles have odds of smoking that are significantly different: men in the highest two quintiles have lower odds of smoking. The odds of alcohol consumption are also similarly lower in the top three wealth quintiles.
d) While the odds of smoking do not vary among Hindu, Muslim, and Christian youth, there are significant differences in the odds for alcohol consumption. Muslim youth have

lower odds and Christian youth have higher odds of consuming alcohol than Hindu youth.

e) Compared with youth belonging to the scheduled castes, those belonging to all other caste/tribe groups have lower odds of smoking. However, the odds of consuming alcohol are higher among scheduled-tribe youth than among scheduled-caste youth, but the odds for youth belonging to the other two caste/tribe groups are lower than for scheduled-caste youth. This would suggest that, controlling for education, wealth, and other relevant characteristics, youth belonging to the scheduled castes have the highest odds of smoking and youth belonging to the scheduled tribes have the highest odds of consuming alcohol.

f) The odds of smoking for men in the east and northeast regions of the country are higher, and those for men in the west and south regions are lower, than for men in the north region. Similarly, the odds for alcohol consumption for men in the central, east, and northeast regions are higher, and those for men in the west region are lower, than for men in the north. Men in the south are however about twice as likely as men in the north to consume alcohol. In other words, compared with men in the north region, men in the west region only are significantly less likely to smoke and to consume alcohol, and those from the east and northeast regions are significantly more likely to smoke or consume alcohol, once education and other characteristics are controlled for. In central and south regions the results for smoking and alcohol consumption are not consistent in comparison to the north region.

Table 5,11 Logistic regression analysis of smoking and alcohol consumption

Odds ratios (OR) from the logistic regressions of smoking and alcohol consumption among men age 15-24 years for selected background characteristics, NFHS-3, India

	Smoking	Drinking alcohol
Background characteristic	OR	OR
Age		
Ref. cat.: 15-19		
20-24	2.46***	3.01***
Marital status		
Ref. cat.: Never married		
Ever married	1.45***	1.46***
Education		
Ref. cat.: No education		
<5 years complete	0.92	1.03
5-9 years complete	0.63***	0.69***
10+ years complete	0.36***	0.42***
Regular media exposure		
Ref. cat.: No		
Yes	1.41***	1.40***
Religion		
Ref. cat.: Hindu		
Muslim	0.97	0.33***
Christian	1.23	1.32**
Other	0.59***	2.27***
Caste/tribe		
Ref. cat.: Scheduled caste		
Scheduled tribe	0.87*	1.27***
Other backward class	0.69***	0.71***
Other	0.77***	0.71***
Residence		
Ref. cat.: Urban		
Rural	0.85***	0.76***
Region		
Ref. cat.: North		
Central	0.95	1.20*
East	1.15**	2.03***
Northeast	2.09***	2.47***
West	0.48***	0.83***
South	0.76***	1.90***
Wealth index		
Ref. cat.: Lowest		
Second	1.00	0.91
Middle	0.92	0.87*
Fourth	0.86***	0.74***
Highest	0.73***	0.76***

*** $p < 0.001$; **$p < 0.01$; *$p < 0.05$

Overall, these data show that only a few factors are consistently associated with a lower likelihood of youth smoking and consuming alcohol. These factors include higher education, lower media exposure, greater wealth, rural residence, and living in the west region.

6. Health and Nutritional Status of Youth

In this final chapter, selected indicators of youth access to maternal health care services, youth health and nutritional status, and the extent to which female youth are subject to domestic violence are discussed. An examination of whether youth are utilizing maternal health care services, such as antenatal and delivery care, is important for several reasons. Key among these reasons are that youth fertility accounts for the majority of all fertility and births to very young mothers are at higher risk of adverse health outcomes than births to older women whose bodies are fully developed. The chapter also presents data on an oft-ignored aspect of physical, sexual, and mental health of women: freedom from violence. Domestic violence is among the most common forms of violence experienced by women and has been shown to undermine the health and welfare of victims and their children (United Nations, 2006). Indicators of youth health examined in this chapter include prevalence of sexually transmitted diseases, HIV, diabetes, asthma, tuberculosis and goitre and other thyroid disorders. Indicators of nutritional status include measures based on the body mass index (BMI) of youth calculated from weight measurements taken as part of NFHS-3 and on anaemia status of youth.

6.1 Maternal Health Care

India's Family Welfare Programme has always had as key objectives the need to provide services that enable safe motherhood, including a safe and healthy pregnancy and delivery, and ensure the health and survival of the mother and her newborn. In order to meet these objectives, every pregnancy needs to be monitored by health personnel for signs of complications starting in the first trimester, the delivery needs to take place under the supervision of a health professional and preferably in a health institution, and the health of the woman and the newborn needs to be checked by a health professional very soon after the birth. Elements of antenatal care include three or more antenatal checkups, protection against tetatnus toxoid, and iron supplementation.

Although risks of pregnancy-related complications and of adverse health outcomes, including maternal and infant mortality, exist for all women, the risks tend to be higher for pregnancies to adolescents whose bodies have yet to fully mature. In addition, a large proportion of births to youth are first births, which also carry a higher risk of mortality than most second or higher order births.

A. Antenatal care

Table 6.1 shows that four-fifths of women age 15-24 received antenatal care (ANC) for their most recent birth during the five years preceding the survey. However, only 54 percent received three or more antenatal care visits and less than one-half received the first antenatal care visit in the first trimester, as recommended. Four in five women received two or more

tetanus toxoid injections, and less than one in four took IFA tablets for iron supplementation for 90 days or more as recommended. Nonetheless, utilization of most of these antenatal care services is slightly higher for youth than for the older cohort age 25-49.

Table 6.1 Antenatal care indicators

Among women age 15-24 with a live birth in the five 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, India, 2005-06

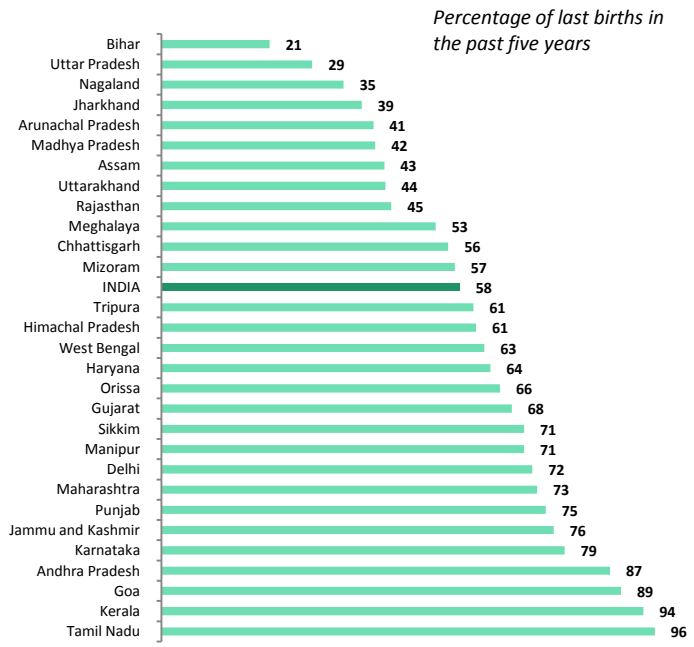
Background characteristic	Percentage who had at least one ANC visit	Percentage who had three or more ANC visits	Percentage with an ANC visit in the first trimester of pregnancy	Percentage who received two or more TT injections during the pregnancy	Percentage who were given or bought IFA	Percentage who took IFA for at least 90 days	Number of women
Mother's age at birth							
15-19	77.3	53.0	42.9	79.7	66.3	19.5	6,881
20-24	81.3	54.8	46.7	79.1	68.3	23.8	9,390
Birth order							
1	85.2	61.8	52.6	84.3	72.8	26.0	7,689
2	82.1	53.3	43.0	78.2	66.9	20.7	5,607
3+	65.8	35.6	29.8	68.9	54.5	14.0	2,976
Residence							
Urban	91.0	73.7	61.2	87.1	75.5	31.1	3,831
Rural	77.4	48.0	40.2	77.0	64.9	19.2	12,442
Education							
No education	67.5	34.8	29.3	68.6	52.6	10.6	6,841
<5 years complete	83.9	52.2	38.5	79.9	71.6	21.5	1,348
5-9 years complete	89.2	65.5	53.2	86.4	76.6	26.3	5,566
10 or more years complete	95.3	82.1	73.8	93.0	85.1	44.0	2,516
Wealth index							
Lowest	66.9	32.3	26.9	67.4	54.8	10.7	3,700
Second	74.9	41.6	33.7	74.1	61.4	14.0	3,837
Middle	83.7	58.7	47.8	82.1	70.5	22.9	3,585
Fourth	90.2	70.9	59.2	88.3	76.2	29.9	3,184
Highest	96.1	83.3	74.1	92.8	83.1	44.2	1,966
Total age 15-24	80.3	54.1	45.1	79.4	67.4	22.0	16,272
Total age 25-49	73.6	50.5	43.1	74.2	63.5	23.9	23,405

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

Among youth, there was either no difference by age in utilization of antenatal care services, or as in the case of ANC visits in the first trimester and iron supplementation, adolescents were somewhat less likely than older youth to receive services. Further, most antenatal care services were utilized by youth more than by women in the older cohort age 25-49. The only exception is the percentage who took IFA for at least 90 days which was slightly lower among youth than among women age 25-49.

Utilization of ANC services varies substantially by birth order. Women pregnant with their first child are more likely to receive most ANC-related services than women having second or higher-order births. Youth having a third or higher order birth are the most disadvantaged: not only are these young women having three or more births before reaching the age of 25, which for many of them implies very early initiation of childbearing and/or very short birth intervals, but they are also least likely to be receiving all the necessary antenatal care services. Notably, only 66 percent of women having a third or higher order birth received any ANC visits and only 36 percent received three or more. Further, utilization of antenatal care services by youth is much higher in urban than in rural areas. In rural areas, only 77 percent of young women receive any ANC and less than half receive adequate and timely ANC. Antenatal care

Figure 6.1 Three or More Antenatal Care Visits among Youth by State



service utilization also increases sharply with education and wealth. About one-third or fewer youth with no education and youth in the lowest wealth quintile received at least three ANC visits and received the first ANC check in the first trimester.

Whether youth receive ANC varies greatly by the state they are in (Figure 6.1). Less than one in three youth received three or more ANC visits for their last birth in the past five years in Uttar Pradesh and Bihar, whereas, more than nine in ten did so in Kerala and Tamil Nadu. This variation among youth is similar to the variation by state among all women in reproductive ages.

Even when youth receive antenatal care, they do not receive several of the services needed to

Table 6.2 Antenatal care services and information

Among women age 15-24 with a live birth in the five years preceding the survey who received antenatal care for the most recent live birth, percentage receiving specific services and information on specific signs of pregnancy complications and where to go if there was a pregnancy complication, according to background characteristics, India, 2005-06

	Percentage receiving selected services during antenatal care					Percentage receiving information on specific pregnancy complications				Number of women who received antenatal care
Background characteristic	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	Abdomen examined	Vaginal bleeding	Convulsions	Prolonged labour	Where to go if experienced pregnancy complications	
Age at birth										
15-19	62.7	62.3	57.1	57.9	70.2	13.8	13.9	18.0	35.4	5,532
20-24	64.5	65.1	60.2	61.5	73.9	16.6	15.2	20.5	41.7	7,686
Birth order										
1	68.1	69.5	66.0	67.0	77.5	16.9	16.9	21.7	42.7	6,600
2	64.1	62.9	55.9	56.7	70.8	15.4	13.7	18.9	38.1	4,639
3+	48.3	47.6	42.3	44.1	58.8	10.7	9.5	13.2	29.1	1,979
Residence										
Urban	78.5	81.0	79.4	79.1	85.5	20.7	19.3	23.9	48.7	3,515
Rural	58.4	57.7	51.5	53.1	67.6	13.5	13.0	17.8	35.6	9,707
Education										
No education	47.3	44.7	39.3	40.3	57.3	9.7	9.5	13.1	24.9	4,671
<5 years complete	64.3	63.0	51.7	55.3	68.2	14.9	13.3	18.6	33.6	1,136
5-7 years complete	69.9	71.4	66.3	67.6	78.6	16.6	16.0	21.3	45.9	4,996
8-9 years complete	82.3	85.9	84.8	84.5	90.6	24.3	22.5	28.2	54.6	2,414
Wealth index										
Lowest	48.9	40.0	32.3	35.2	52.7	10.2	10.2	13.4	26.2	2,492
Second	52.3	53.0	44.1	46.9	63.8	11.8	11.3	16.3	30.6	2,907
Middle	65.0	65.7	60.8	61.1	73.9	13.5	13.5	17.5	39.9	3,019
Fourth	73.8	77.5	76.1	75.8	84.5	18.3	16.0	22.6	46.8	2,891
Highest	83.3	88.2	87.2	86.5	90.3	26.3	25.3	30.2	55.5	1,908
Total age 15-24	63.7	63.9	58.9	60.0	72.4	15.4	14.6	19.4	39.1	13,218
Total age 25-49	62.8	63.7	57.5	59.1	71.8	17.5	16.0	20.6	42.6	17,403

monitor their pregnancy effectively (Table 6.2). Seventy-two percent of women age 15-24 who received antenatal care, had their abdomen examined; less than two-thirds had their weight or blood pressure taken (64% each); and three in five had their blood and urine tested (59-60%). Only 39 percent were told where to go if they experienced pregnancy complications. The coverage of these tests and checkups was higher among first time mothers. However, even among first time mothers, only 78 percent had an abdominal examination and about two-thirds or more had each type of test/checkup. Young women having third or higher order births were least likely to receive any of these services.

B. Delivery Care

Given that only 39 percent of all births in the five years preceding NFHS-3 were delivered in a health facility (IIPS and Macro International, 2007), it is not surprising that the majority of births to women age 15-24 were also not delivered in a facility and were delivered at home, and only about one-half of births were delivered with the assistance of health personnel. Among births to youth that were delivered at home, only 16 percent were assisted by health personnel. Only for 37 percent of births did the mother receive a postnatal check-up within two days of delivery (Table 6.3).

Kerala is the only state in India where virtually all births are delivered in a health facility (Figure 6.2). The other states with a high prevalence of institutional deliveries are Tamil Nadu and Goa where more than 8 in 10 births to youth are institutional births. In all the remaining states, less than two-thirds of births to youth were delivered in a health institution. Institutional deliveries are least common in Nagaland (13%) and Chhattisgarh (14%). Even in Jharkhand, Assam, Uttar Pradesh, and Bihar, less than one in four births take place in a health facility.

Figure 6.2 Institutional Delivery among Youth by State

Percentage of births in the past five years

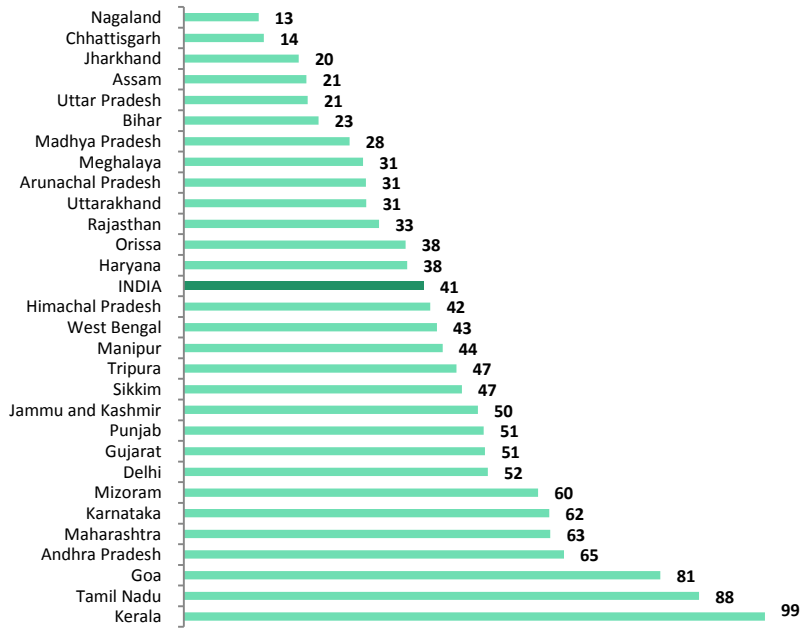


Table 6.3 also shows that births to adolescents were somewhat less likely to be delivered in a health facility than births to older youth (38% vs. 42%). Half of first births to youth, generally considered to be higher-risk births, were delivered at home, and only 59 percent were delivered under the supervision of health personnel. In general, delivery care, like antenatal care, varies as expected by background characteristics.

Table 6.3 Delivery and postnatal care

Among women age 15-24, percentage of live births in the five years preceding the survey delivered in a health facility and percentage delivered with assistance from health personnel, and percentage of women age 15-24 who had a live birth in the five years preceding the survey who received a postnatal check-up and who received a postnatal check-up within two days of birth for their most recent birth, by selected background characteristics, India, 2005-06

Background characteristic	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-up[2, 3]	Percentage of women with a postnatal check-up within two days of birth[2]	Number of women
Mother's age at birth						
15-19	37.9	47.2	11,882	38.6	34.9	6,881
20-24	42.3	51.4	11,841	43.3	39.0	9,390
Birth order						
1	50.0	59.4	12,382	48.7	44.9	7,689
2	33.5	42.8	7,558	39.0	34.5	5,607
3+	20.9	29.1	3,784	22.6	26.7	2,976
Residence						
Urban	64.7	71.9	5,365	60.8	57.3	3,831
Rural	32.9	42.7	18,359	35.4	31.1	12,442
Education						
No education	21.9	30.8	10,587	25.1	21.1	6,841
<5 years complete	36.0	45.9	2,034	36.2	31.1	1,348
5-9 years complete	51.8	61.4	7,853	49.1	45.0	5,566
10 or more years complete	73.7	82.2	3,249	70.9	67.6	2,516
Wealth index						
Lowest	17.3	25.0	5,665	21.9	16.9	3,700
Second	28.7	38.8	5,687	30.1	26.6	3,837
Middle	42.1	53.1	5,244	43.7	38.2	3,585
Fourth	58.8	67.5	4,565	55.7	52.7	3,184
Highest	78.9	86.0	2,562	72.3	70.0	1,966
Place of delivery						
Public health facility	na	99.1	4,852	72.9	71.4	3,451
NGO or trust hospital/clinic	na	100.0	86	87.4	84.8	61
Private health facility	na	99.2	4,583	80.3	78.0	3,381
Home	na	15.9	14,128	15.4	9.8	9,342
Total age 15-24	40.1	49.3	23,723	41.3	37.3	16,272
Total age 25-49	37.6	44.6	32,714	41.2	37.3	23,405

Note: Total includes births with missing information on place of delivery, which are not shown separately.
NGO = Nongovernmental organization
[1]If more than one person attended during delivery, only the most qualified person is considered in this tabulation. Health personnel include doctor, auxiliary nurse midwife, nurse, midwife, lady health visitor, or other health personnel.
[2] Based on the last live birth in the five years preceding the survey.
[3] Postnatal check-ups are checks on the woman's health within 42 days of the birth.

The proportion of births in urban areas delivered in a health facility is about twice that in rural areas; and institutional deliveries increase sharply with wealth and education. However, even among young women who belong to the highest wealth quintile and who have 10 or more years of education, more than one-fifth of births in the five years preceding the survey were not delivered in a health facility. Notably, births to youth are somewhat more likely than births to older women (age 25-49) to be delivered in a health facility and to be assisted by health personnel. However, youth and older women do not differ in terms of whether they received any postnatal care for their last live birth in the past five years.

C. Maternal Health Problems

In addition to data on care received during pregnancy, delivery, and postpartum, NFHS-3 provides information on self-reported pregnancy-related complications for women. Table 6.4 gives the list of health problems asked about and the percentage of women who report having had the problem during pregnancy for their most recent live birth. Only women with a birth in the five years preceding the survey were asked these questions.

As shown in the table, the pregnancy-related health problems most commonly reported by youth are excessive fatigue and swelling of the legs, body, or face. Ten percent of young mothers had convulsions that were not from fever and 8 percent reported night blindness. Four percent had vaginal bleeding during the pregnancy.

Table 6.4 Health problems during pregnancy

Among women who had a live birth in the five years preceding the survey, percentage who experienced specific health problems during pregnancy for the most recent live birth, by mother's age at birth, India, 2005-06

	Age at birth of mother			
Problem during pregnancy	15-19	20-24	15-24	25-49
Difficulty with vision during daylight	6.6	5.9	6.1	6.6
Night blindness	9.4	8.0	8.4	9.5
Convulsions not from fever	10.6	9.8	10.0	10.6
Swelling of the legs, body, or face	23.4	24.5	24.1	26.5
Excessive fatigue	48.2	46.7	47.1	48.7
Vaginal bleeding	4.1	4.3	4.2	4.6
Number of women	6,881	15,844	22,705	16,952

The reported prevalence of both kinds of vision problems, convulsions that were not from fever, and excessive fatigue is higher among adolescent women than among women age 20-24. Notably, however, adolescent women are about equally likely to report most of the problems listed in the table as women age 25-49, even though women age 25-49 are more likely to have health problems common to women at older ages that are not related to pregnancy but that can complicate pregnancy. These data highlight the greater vulnerability of very young mothers to complications. By contrast, older youth age 20-24, whose bodies are likely to be fully developed, are somewhat less likely than women age 25-49 to report each of the problems.

The discussion about utilization of maternal care services by youth, suggests that, despite their greater vulnerability, young mothers do not appear to get the special attention that they need. Even adolescent mothers do not appear to receive any special attention despite the fact that data on maternal health problems show adolescents to be as prone to maternity-related problems as older women. Further, NFHS-3 shows that the infant mortality of children born to mothers who are not yet age 20 is 77 deaths per 1,000 live births, compared with 50 for mothers who are age 20-29 (IIPS and Macro International, 2007). Reaching young mothers who account for more than half of all fertility with maternity-related services would help to increase the health of mothers and the survival and health of the majority of children born in any time period.

Table 6.5 Self-reported prevalence of sexually-transmitted infections (STI) and STI symptoms

Among women and men age 15-49 years who have ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the past 12 months by age, India, 2005-06

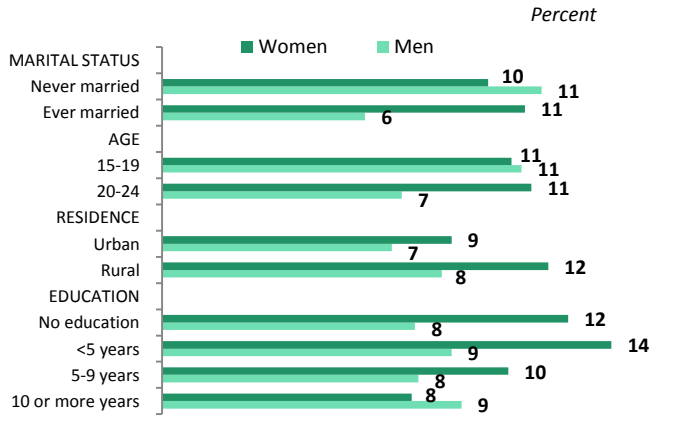
	Percentage of women who report that in the past 12 months they had a:				Number of women who ever had sexual intercourse	Percentage of men who report that in the past 12 months they had a:				Number of men who ever had sexual intercourse
Age	STI	Bad smelling, abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/ sore or ulcer		STI	Abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/ sore or ulcer	
15-19	1.4	9.8	1.7	10.5	6,900	0.6	7.5	5.5	10.8	1,463
20-24	1.5	9.8	2.1	11.1	17,211	0.9	4.7	3.4	7.3	5,273
Total age 15-24	1.4	9.8	2.0	10.9	24,111	0.8	5.3	3.8	8.0	6,735
Total age 25-49	1.5	10.0	2.3	11.2	74,878	0.4	2.5	2.1	4.1	41,095

6.2 Sexually Transmitted Diseases

In NFHS-3, all respondents who had ever had sexual intercourse were asked whether, in the 12 months prior to the survey, they had a sexually transmitted infection (STI), a genital sore or ulcer, or had experienced any abnormal (for men) or bad smelling abnormal (for women) genital discharge. An abnormal genital discharge and genital sores or ulcers are symptoms of STIs and are useful in identifying these infections, particularly in men.

Table 6.5 shows that 11 percent of women and 8 percent of men age 15-24 who have ever had sexual intercourse had an STI or STI symptom in the 12 months preceding the survey. Women are almost five times more likely to say that they had an abnormal bad smelling genital discharge than to report a genital sore or ulcer in the past 12 months. Among men, the reported prevalence of abnormal genital discharge is only slightly higher than the reported prevalence of a genital sore or ulcer. Self-reported prevalence of a sexually transmitted infection in the 12 months preceding the survey is marginally higher among women (1.4%), than among men (0.8%) age 15-24.

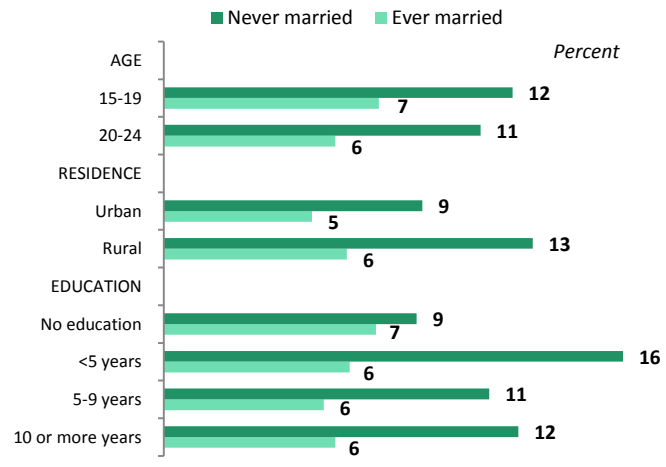
Figure 6.3 Sexually Transmitted Infection (STI) and STI Symptoms among Youth by Background Characteristics According to Sex



Among women, the prevalence of STIs or STI symptoms does not vary by age; however, among men the reported prevalence of the two STI symptoms is much higher among adolescents than older youth (Figure 6.3). Among women, but not men, STIs/STI symptoms are more common in rural than urban areas and among the less educated than the more educated. The prevalence of STIs/STI symptoms among never married men is almost twice as high as among ever-married men, whereas among women, there is little difference by marital status.

Figure 6.4 shows the prevalence of STIs/STI symptoms for male youth by background characteristics, according to marital status. The figure shows clearly that irrespective of age, education, and residence, never married men age 15-24 are more likely than ever-married men in the same age group to report STIs/STI symptoms. The higher prevalence of STIs/STI symptoms among never married male youth, compared with ever-married male youth, is likely to be, at least in part, a consequence of the fact that at least 7 percent of never married male youth are sexually active, and most of these youth are having higher-risk sexual intercourse without using a condom (Chapter 5).

Figure 6.4 Sexually Transmitted Infections (STI) and STI symptoms among Men by Marital Status



6.3 HIV Prevalence

The prevalence of HIV among the youth population is 0.11 percent, or, in other words, 1 youth per 1,000 is HIV positive (Table 6.6). HIV prevalence is lower among youth age 15-19 (0.04%) than among both older youth (0.18%) and the older cohort age 25-49 (0.38%).

Very few women or men age 15-17 are HIV positive and HIV prevalence also remains low at age 18-19. Among youth, HIV prevalence is highest for women age 20-22 and for men age 23-24 and is higher in urban than rural areas, with the difference being more marked for women than for men.

HIV prevalence among youth is highest, at 1.9 percent, for the small proportion of women who are divorced, separated, or widowed. Even among women and men who reported never having had sex, there are a few who are HIV positive.

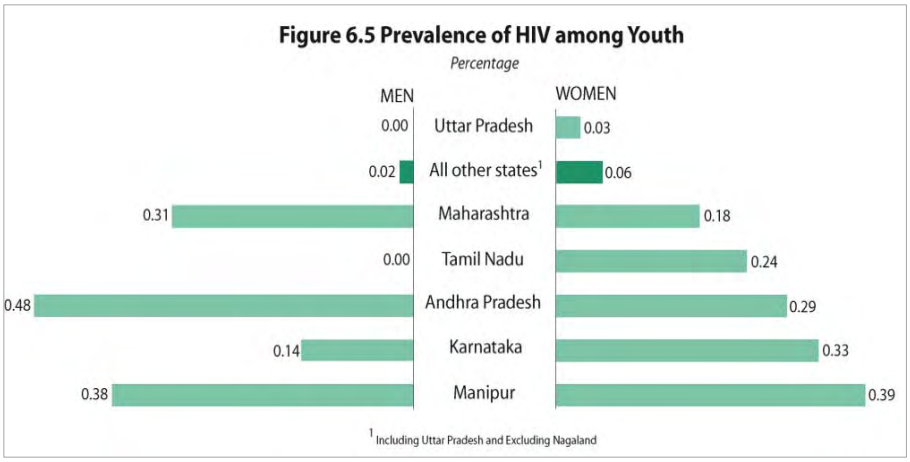
Table 6.6 HIV prevalence among young people by background characteristics

Percentage HIV positive among women and men age 15-24 who were tested for HIV, by background characteristics, India, 2005-06

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age						
15-19	0.07	10,704	0.01	8,663	0.04	19,366
15-17	0.03	6,354	0.00	5,293	0.02	11,647
18-19	0.12	4,350	0.02	3,369	0.07	7,719
20-24	0.17	9,573	0.19	7,825	0.18	17,398
20-22	0.21	5,964	0.17	5,129	0.19	11,093
23-24	0.10	3,609	0.21	2,696	0.15	6,305
Residence						
Urban	0.16	6,382	0.11	6,024	0.14	12,406
Rural	0.09	13,895	0.08	10,464	0.09	24,358
Marital status						
Never married	0.02	9,993	0.08	13,624	0.06	23,616
Ever had sex	0.00	70	0.17	1,611	0.16	1,681
Never had sex	0.02	9,923	0.07	12,013	0.05	21,936
Currently married	0.17	10,068	0.15	2,809	0.16	12,877
Widowed/divorced/ separated/deserted	1.91	216	0.00	55	1.53	270
Total age 15-24	0.11	20,276	0.09	16,488	0.10	36,764
Total age 25-49	0.28	33,055	0.50	30,019	0.38	63,074

Note: Table excludes Nagaland.

NFHS-3 also provides state-level estimates for six states: five high-HIV prevalence states and Uttar Pradesh. Figure 6.5 shows that among youth in Uttar Pradesh, very few men, but 3 in 1,000 female youth are infected with HIV. HIV prevalence is higher for men than for women in Andhra Pradesh and Maharashtra, lower for men than for women in Karnataka and Tamil Nadu, and about the same in Manipur. For youth, the highest levels of HIV prevalence among the five high HIV prevalence states are found in Manipur and Karnataka for women and in Andhra Pradesh and Manipur for men. The HIV prevalence rate for all states except the five high-HIV prevalence states and Nagaland is low and is much lower for men than for women.



6.4 Prevalence of Other Selected Diseases

Table 6.7 shows the self-reported prevalence of diabetes, asthma, and tuberculosis, as well as the self-reported prevalence of goitre or other thyroid disorders among youth. About 2 per 1,000 youth suffer from diabetes, 9 per 1,000 suffer from asthma, and 3 per 1,000 suffer from tuberculosis. Women are much more likely than men to suffer from goitre or other thyroid disorders. Among youth, girls are about twice as likely as boys to have goitre or other thyroid disorders. Although the prevalence of all of these diseases is lower among youth than among adults age 25-49, these data suggest that significant numbers of youth also suffer from each of these diseases. The data on diabetes among youth points to the need to educate youth and parents on ways to prevent this largely lifestyle-related disease.

Table 6.7 Health problems

Number of women and men age 15-24 per 100,000 who reported that they have diabetes, asthma, or goitre or any other thyroid disorders, and number of women and men per 100,000 usual household residents suffering from any tuberculosis and medically treated tuberculosis, by age and sex, India, 2005-06

	Number of women per 100,000 who have:					Number of men per 100,000 who have:				
Age	Diabetes	Asthma	Goitre or other thyroid disorders	Tuberculosis[1]	Medically treated tuberculosis	Diabetes	Asthma	Goitre or other thyroid disorder	Tuberculosis[1]	Medically treated tuberculosis
15-19	189	842	439	240	209	100	938	215	270	261
20-24	220	949	562	386	337	358	909	267	359	359
15-24	203	895	500	307	267	224	928	244	312	300
25-49	1,340	2,193	1,227	500	467	1,513	2,018	463	882	852

[1] Includes medically treated tuberculosis.

6.5 Nutritional Status

The Body Mass Index (BMI), estimated from the height and weight measurements of individuals, is a widely accepted measure of nutritional status.[1] Based on the BMI, women and men are classified as abnormally thin if their BMI is less than 18.5; overweight or obese if their BMI is 25 or more; and normal if their BMI is 18.5 or higher but less than 25. Persons with a BMI which is less than 18.5 are usually classified as having chronic energy deficiency. Table 6.8 shows that among youth, 44 percent of women are abnormally thin and 4 percent are overweight or obese; only about half have a BMI in the normal range. Compared with female youth, male youth are slightly more likely to be abnormally thin, but slightly less likely to be overweight or obese.

Table 6.8 Nutritional status of adults

Percentage of women and men age 15-24 with specific body mass index (BMI) levels, by selected background characteristics, India, 2005-06

	Body mass index (BMI) in kg/m²									
	Women[1]					Men				
Background characteristic	<18.5 (thin)	≥18.5 and <25.0 (normal)	≥25.0 (over-weight or obese)	Total	Number of women	<18.5 (thin)	≥18.5 and <25.0 (normal)	≥25.0 (over-weight or obese)	Total	Number of men
Age										
15-19	46.8	50.8	2.4	100.0	22,154	58.1	40.2	1.7	100.0	12,254
20-24	40.7	53.4	5.9	100.0	18,612	35.5	59.8	4.7	100.0	11,211
Marital status										
Never married	46.0	50.5	3.6	100.0	22,336	49.1	47.9	3.1	100.0	19,397
Ever married	41.7	53.8	4.5	100.0	18,429	38.8	57.7	3.4	100.0	4,068
Residence										
Urban	39.1	53.2	7.7	100.0	12,845	42.4	52.0	5.6	100.0	8,600
Rural	46.3	51.4	2.3	100.0	27,919	50.1	48.2	1.7	100.0	14,864
Education										
No education	47.7	50.9	1.4	100.0	9,922	47.0	52.0	1.1	100.0	2,251
<5 years complete	48.6	49.3	2.1	100.0	2,928	49.0	50.1	1.2	100.0	1,755
5-9 years complete	46.0	50.3	3.7	100.0	15,723	54.1	44.2	1.7	100.0	10,580
10 or more years complete	37.4	55.6	6.9	100.0	12,191	39.0	55.3	5.7	100.0	8,870
Wealth index										
Lowest	51.3	47.8	0.9	100.0	6,713	58.3	41.2	0.5	100.0	3,299
Second	50.9	48.0	1.1	100.0	7,801	52.0	47.3	0.7	100.0	4,359
Middle	45.4	52.2	2.5	100.0	8,795	49.9	48.8	1.4	100.0	5,115
Fourth	40.9	54.5	4.6	100.0	8,912	44.7	52.0	3.3	100.0	5,425
Highest	34.1	56.0	9.9	100.0	8,543	36.7	55.1	8.2	100.0	5,266
Total age 15-24	44.1	52.0	4.0	100.0	40,766	47.3	49.6	3.1	100.0	23,465
Total age 25-49	30.7	51.6	17.7	100.0	71,015	26.9	60.4	12.7	100.0	42,277

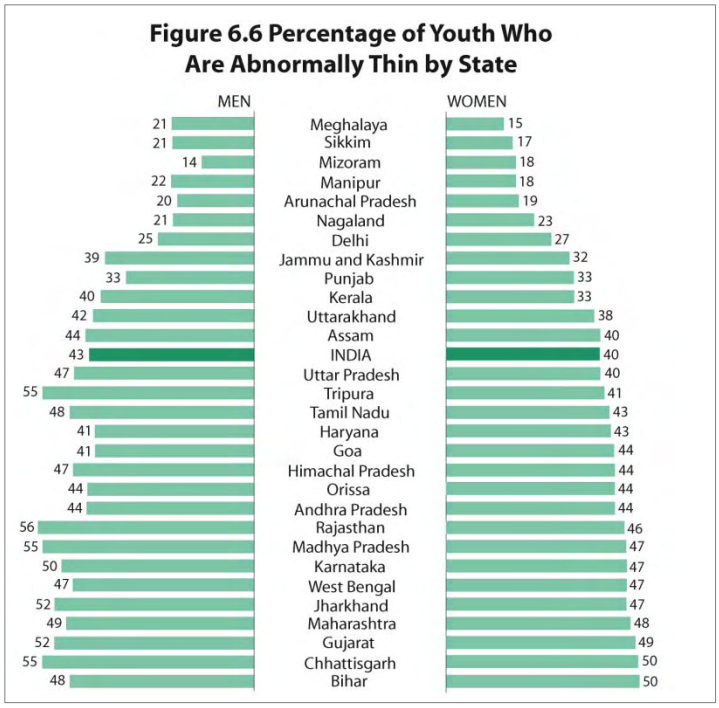
[1] Excludes pregnant women and women with a birth in the preceding 2 months.

Male and female youth are more likely than adults age 25-49 to be abnormally thin and much less likely to be overweight or obese. Only about a quarter of men age 25-49 are too thin, compared with almost half of men age 15-24; for women, the differential is also large but smaller than it is for men. Notably too, among those age 25-49, women are more likely than

[1] The BMI is defined as weight in kilograms divided by height in metres squared (kg/m²).

men to be abnormally thin; among youth, as already noted, men are more likely than women to be abnormally thin.

Among youth, adolescents are more likely than older youth to be abnormally thin. The differential by age is particularly large for boys. More than half (58%) of adolescent boys and 47 percent of adolescent girls are too thin, compared with 36 percent of men and 41 percent of women age 20-24. Youth in rural areas are more likely than youth in urban areas to be abnormally thin and less likely to be overweight or obese. As can be expected, the likelihood of having a BMI less than 18.5 generally declines with education and wealth and the likelihood of being overweight/obese increases.



There is large interstate variation in the proportion of youth who are abnormally thin (Figure 6.6). The proportion of youth who are abnormally thin varies for women from 15 percent in Meghalaya, to 50 percent in Chhattisgarh and Bihar, and for men it varies from 14 percent in Mizoram to 56 percent in Rajasthan. Youth, both female and male, are least likely to be abnormally thin in all of the Northeastern states, except Assam and Tripura, compared with youth from all other states in the country. However, the states with the highest proportion of female youth in the abnormally thin category are not all the same as those with the highest proportion of male youth in the abnormally thin category. Notably, in most states the proportion of male youth who are abnormally thin is higher than the proportion of female youth

In both slum and non-slum areas of each of the eight cities for which separate estimates are available, at least one in four women age 15-24 is abnormally thin. In Delhi, Kolkata, Indore, and Nagpur, slum women are much more likely to be underweight than non-slum women (Table 6.9). For example, in Delhi, 34 percent of slum women but 25 percent of non-slum women are abnormally thin. In seven of the eight cities, one-third or more men age 15-24 are abnormally thin. Delhi is the only

Table 6.9 Abnormally thin youth in cities

Percentage of women and men age 15-24 who are abnormally thin by residence and city, India, 2005-06

	Women			Men		
City	Slum	Non-slum	Total	Slum	Non-slum	Total
Delhi	34.0	25.0	27.0	26.2	22.5	23.4
Meerut	33.3	33.3	33.3	35.0	30.4	32.6
Kolkata	31.9	24.7	27.4	35.0	31.0	32.7
Indore	45.5	32.5	25.3	33.3	31.8	32.1
Mumbai	41.3	38.8	40.3	42.9	33.0	39.1
Nagpur	50.0	46.3	47.9	60.0	52.3	55.4
Hyderabad	37.5	37.5	37.5	39.3	36.1	36.6
Chennai	32.1	31.8	31.9	41.9	40.9	41.1

exception where 23 percent of male youth are too thin. In every city, men in slum areas are more likely to be abnormally thin than men in non-slum areas; however, the differential is relatively large only for the two Maharashtra cities of Mumbai and Nagpur.

6.6 Prevalence of Anaemia

Iron deficiency anaemia is one of the most common forms of malnutrition in the world. Characterized by a low level of haemoglobin in the blood it can have detrimental effects on an individual's health. Anaemia is of particular concern for female youth since it can become an underlying cause for maternal and perinatal mortality and is associated with an increased risk of premature delivery and low birth weight for children. Table 6.10 shows a high prevalence of anaemia among youth in India.

Table 6.10 Prevalence of anaemia

Percentage of women and men age 15-24 with anaemia, by background characteristics, India, 2005-06

	Women					Men				
Background characteristic	Mild (10.0-11.9 g/dl)[1]	Moderate (7.0-9.9 g/dl)	Severe (<7.0 g/dl)	Any anaemia (<12.0 g/dl)[2]	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	39.1	14.9	1.7	55.7	23,206	16.7	12.1	1.4	30.2	12,109
20-24	38.2	16.6	1.8	56.7	21,269	10.5	7.3	1.1	19.0	11,048
Marital status										
Never married	37.4	12.9	1.6	51.9	21,873	14.0	10.1	1.2	25.4	19,140
Ever married	40.0	18.5	1.9	60.4	22,601	12.6	8.5	1.3	22.5	4,017
Maternity status										
Pregnant	25.9	29.2	2.1	57.2	3,837	na	na	na	na	na
Breastfeeding	45.6	17.7	1.6	64.9	10,369	na	na	na	na	na
Neither	38.0	13.4	1.7	53.1	30,271	na	na	na	na	na
Residence										
Urban	35.7	14.6	1.5	51.9	13,478	11.7	6.9	0.7	19.4	8,424
Rural	40.0	16.2	1.8	58.1	30,997	15.0	11.5	1.5	28.0	14,734
Education										
No education	41.4	19.9	2.3	63.6	11,520	19.0	14.4	2.0	35.4	2,224
<5 years complete	40.9	18.4	2.2	61.5	3,249	18.2	13.1	2.5	33.8	1,734
5-9 years complete	39.3	15.1	1.7	56.0	16,991	15.1	11.0	1.5	27.6	10,456
10 or more years complete	34.9	12.2	1.1	48.3	12,712	10.0	6.5	0.6	17.1	8,736
Wealth index										
Lowest	43.7	19.4	2.1	65.2	7,642	19.3	16.1	1.5	36.9	3,269
Second	41.0	17.3	2.1	60.4	8,719	16.7	12.1	2.0	30.9	4,311
Middle	38.1	16.3	2.1	56.4	9,605	14.1	10.5	1.5	26.0	5,059
Fourth	37.6	14.5	1.5	53.6	9,664	11.5	7.7	1.0	20.1	5,346
Highest	34.1	11.9	0.9	46.9	8,845	9.9	5.5	0.5	15.9	5,171
Total age 15-24	38.7	15.7	1.7	56.2	44,475	13.8	9.8	1.3	24.9	23,156
Total age 25-49	38.5	14.5	1.8	54.8	72,380	12.6	9.9	1.3	23.8	41,579

Note: Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude and for smoking status, if known, 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 deciliter (g/dl).

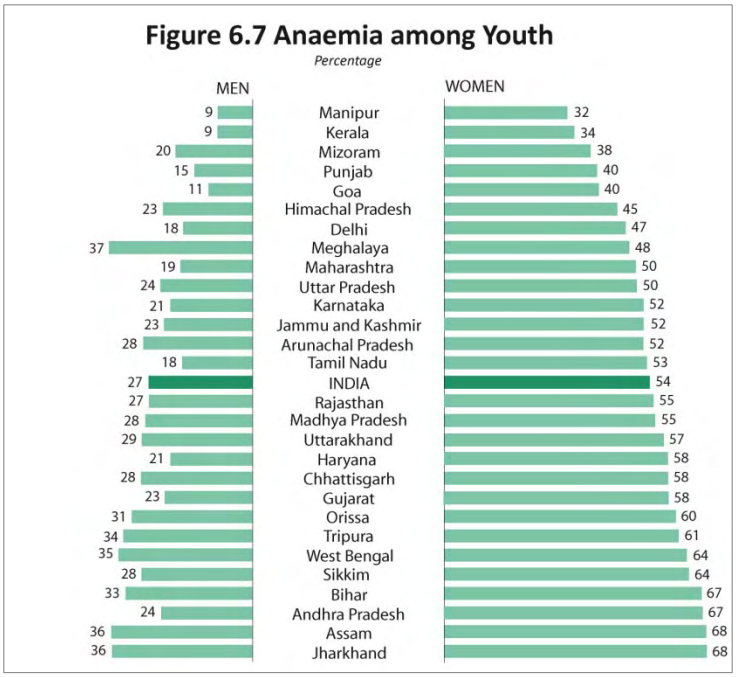
na = Not applicable

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

[2] For pregnant women the value is <11.0 g/dl.

Fifty-six percent of women and 25 percent of men age 15-24 are anaemic. Thirty-nine percent of women are mildly anaemic, 16 percent are moderately anaemic, and 2 percent are severely anaemic. The prevalence of anaemia among youth is not very different from the prevalence among the older cohort age 25-49. Adolescent girls and women age 20-24 are equally likely to be anaemic, though adolescent boys are much more likely to be anaemic than men age 20-24.

The prevalence of anaemia is higher for youth in rural areas than in urban areas. Ever-married women age 15-24 are more likely to be anaemic than their never married counterparts, but among men, the differential by marital status is not only much smaller, but is reversed. The prevalence of anaemia among both women and men decreases with education and wealth quintile. About two-thirds of women with no education and women in the lowest quintile are anaemic. However, even among women with 10 or more years of education or from the wealthiest quintile, 47-48 percent are anaemic.



Women's anaemia status varies also by their maternity status: 65 percent of breastfeeding women and 57 percent of pregnant women are anaemic, compared with 53 percent of women who are neither pregnant nor breastfeeding.

There is wide variation in the prevalence of anaemia among youth by state (Figure 6.7). The proportion of female youth who are anaemic ranges from about one-third in Manipur and Kerala to two-thirds in Bihar, Andhra Pradesh, Assam, and Jharkhand. Nonetheless, in most states, at least one-half of young women are anaemic. Among young men, prevalence of anaemia varies from a low of 9 percent in Manipur and Kerala to a high of 35-37 percent in Meghalaya, West Bengal, Assam, and Jharkhand. In most states, at least one-fifth of men are anaemic.

In all eight cities for which separate estimates are available, at least 4 in 10 female youth and at least 1 in 8 male youth are anaemic (Table 6.11). Among women, the prevalence is highest in Kolkata, but more than half of young women are also anaemic in Hyderabad, Chennai, and Nagpur. Although there are differentials by slum/non-slum residence in anaemia

Table 6.11 Anaemia among youth in cities

Percentage of women and men age 15-24 who have anaemia by residence and city, India, 2005-06

	Women			Men		
City	Slum	Non-slum	Total	Slum	Non-slum	Total
Delhi	52.1	46.5	47.7	24.7	15.5	17.8
Meerut	40.5	48.5	44.7	12.8	14.0	13.4
Kolkata	48.5	57.6	54.1	19.6	22.1	21.1
Indore	43.6	40.8	41.4	15.8	12.1	12.9
Mumbai	46.9	47.3	47.1	14.5	12.3	13.4
Nagpur	49.6	53.9	52.0	20.4	19.6	20.0
Hyderabad	58.1	49.2	50.8	16.6	11.1	12.1
Chennai	53.5	51.6	52.0	13.6	14.8	14.6

for both women and men, there is no consistent pattern that emerges, and a high proportion of women, in particular, are anaemic irrespective of whether they live in a slum or a non-slum area.

6.7 Domestic Violence

Experience of violence affects the health of victims directly through the injuries they sustain and through life-long detrimental effects on their mental and physical health. Although both women and men face violence, women are disproportionately more likely to experience domestic violence than men, and spousal violence is one of the most common forms of violence that women ever experience. Further, a large and expanding body of research highlights strong positive effects of domestic violence on the likelihood of victims experiencing a wide range of adverse demographic and reproductive health outcomes (United Nations, 2007). Thus, freedom from violence is not only a health goal on its own, it is also important for the health and nutritional status of women. As a consequence, the topic of domestic violence has become an integral part of demographic and reproductive health studies.

Table 6.12 Experience of physical and sexual violence

Percentage of all women age 15-24 by whether they have ever experienced physical, sexual, physical or sexual, physical and sexual violence, according to selected background characteristics, India, 2005-06

Background characteristic	Physical violence	Sexual violence	Physical or sexual violence	Physical and sexual violence	Number of women
Age					
15-19	20.7	4.5	22.5	2.7	16,617
20-24	30.8	8.6	33.2	6.2	15,427
Residence					
Urban	22.2	3.8	23.3	2.7	10,069
Rural	27.1	7.7	29.7	5.1	21,974
Marital status					
Never married	16.5	1.1	17.2	0.4	15,758
Ever-married	34.3	11.7	37.8	8.2	16,285
Total age 15-24	25.6	6.5	27.7	4.4	32,043
Total age 25-49	38.5	9.7	40.1	8.1	51,660

Among female youth, 26 percent report having experienced physical violence since age 15 or since they were first married, and 7 percent report having ever experienced sexual violence (Table 6.12). In all, 28 percent of female youth reported having experienced physical or sexual violence. The extent of both physical and sexual violence is higher in rural areas than in urban areas. The prevalence of each form of violence is higher among older youth than adolescents and among the ever-married than the never married. This is not surprising since most domestic violence is perpetrated by husbands against their wives.

Table 6.13 Spousal violence

Percentage of ever-married women age 15-24 by whether they have ever experienced emotional, physical, or sexual violence committed by their husband[1], according to age and residence, India, 2005-06

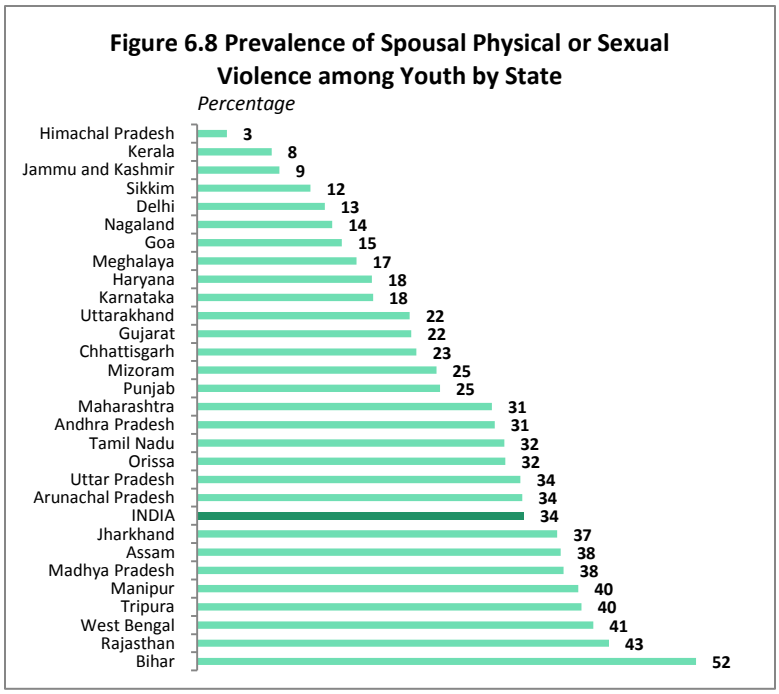
Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of women
Age						
15-19	12.5	25.3	12.9	30.6	33.7	4,643
20-24	14.4	32.3	10.5	35.2	37.6	11,642
Residence						
Urban	12.6	27.2	8.1	29.1	31.4	3,874
Rural	14.2	31.3	12.2	35.4	38.1	12,411
Total age 15-24	13.9	30.3	11.2	33.9	36.5	16,285
Total age 25-49	16.4	36.6	9.6	38.2	40.8	50,373

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

Table 6.13 shows the prevalence of spousal violence among ever-married female youth. Among ever-married women age 15-24, 14 percent have experienced spousal emotional violence, 30 percent have experienced

spousal physical violence, and 11 percent have experienced spousal sexual violence.

Overall, 37 percent of ever-married female youth have experienced physical, sexual, or emotional violence perpetrated by their spouse. As for any domestic violence, spousal violence is also higher in rural areas than in urban areas, and among older youth age 20-24 than among adolescents.



The proportion of married youth who have experienced spousal violence is similar to the proportion who have experienced spousal violence among ever-married women in the older cohort age 25-49. This suggests that most women who are likely to experience spousal violence experience such violence early in marriage when they are still in their years of youth.

The prevalence of spousal physical or sexual violence varies greatly by state, from 3 percent in Himachal Pradesh and 8-9 percent in Kerala and Jammu and Kashmir to 52 percent in Bihar (Figure 6.7). In almost half the states of India, at least one in three ever-married women age 15-24 has experienced spousal violence.

The proportion of female youth who have experienced domestic violence varies greatly between the eight cities for which separate estimates are available. The prevalence is least in Delhi, at 12 percent, and highest in Chennai, at 30 percent (Table 6.14). Similarly, the prevalence of spousal violence among ever-married female youth is also lowest in Delhi and highest in Chennai.

Table 6.14 Experience of violence in cities

Percentage of all women age 15-24 who have ever experienced physical or sexual violence, and percentage of ever-married women age 15-24 who have experienced spousal violence by residence slum residence and city, India, 2005-06

	All women who have ever experienced violence			Ever-married women who have experienced spousal violence		
City	Slum	Non-slum	Total	Slum	Non-slum	Total
Delhi	24.1	9.4	12.4	25.3	9.1	13.6
Meerut	34.9	17.9	25.7	36.9	22.5	30.3
Kolkata	25.4	23.6	24.3	36.2	21.6	27.2
Indore	19.1	19.5	19.4	23.7	26.4	25.8
Mumbai	21.2	12.1	17.3	27.4	14.1	22.8
Nagpur	23.2	10.2	15.3	26.1	19.1	22.2
Hyderabad	16.2	21.3	20.4	22.9	24.0	23.7
Chennai	49.6	24.5	30.2	65.4	32.0	41.4

With the exception of Hyderabad and Indore, in all other cities, female youth are much more likely to experience domestic violence if they are in slums than if they are in non-slums. The differential by residence is particularly large in Delhi and Chennai. For example, in Chennai, 65 percent of ever-married female youth living in slum areas have experienced spousal violence, compared with 32 percent of female youth living in

non-slum areas. Notably, however, one in three female youth even in the non-slum areas of Chennai are subject to spousal violence.

These data show that domestic violence, particularly spousal violence, is very prevalent among youth. Such violence needs to be addressed directly in order for programmes to be successful in enhancing the health and nutritional status of women and their children.

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