Ministry of Health and Family Welfare
Government of India

Gender Equality and Women's Empowerment in India

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

International Institute for Population Sciences
Deonar, Mumbai – 400 088

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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 gender equality and women's empowerment 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).

1. INTRODUCTION

Summary and Key Findings

- *Gender equality and women's empowerment are two sides of the same coin.*

- *Both have multiple dimensions that together yield a wide variety of indicators.*

- *The report provides information on*
  - *progress in India toward the twin goals of gender equality and women's empowerment;*
  - *determinants of selected indicators of gender equality and women's empowerment; and,*
  - *associations of women's empowerment with selected health and nutritional outcomes.*

Over the past decade, gender equality and women's empowerment have been explicitly recognized as key not only to the health of nations, but also to social and economic development. India's National Population Policy 2000 has 'empowering women for health and nutrition' as one of its crosscutting strategic themes. Additionally, the promotion of gender equality and empowering of women is one of the eight Millennium Development Goals (MDG) to which India is a signatory.

The pairing of the two concepts of women's empowerment and gender equality into one MDG implicitly recognizes that gender equality and women's empowerment are two sides of the same coin: progress toward gender equality requires women's empowerment and women's empowerment requires increases in gender equality as shown.
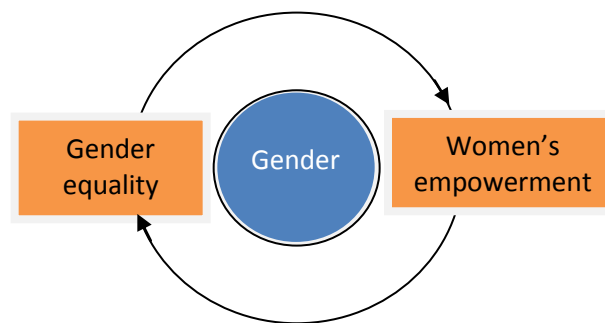
Since gender inequality and women's disempowerment occur in all the different domains in which women and men interact and function, both concepts are multi-dimensional; consequently, they give rise to a large number of potential indicators. Indicators of gender equality/inequality are typically designed to compare the status of women and men on particular characteristics of interest; whereas, by definition, indicators of empowerment/ disempowerment tend not to be relative. Instead, indicators of empowerment are designed to measure roles, attitudes, and rights of women and sometimes men.

In order to measure gender equality and women's empowerment, the concepts need to be clearly defined and their hypothesized associations with each other and health outcomes discussed. In common parlance, the terms gender and sex are often used interchangeably; however, they are distinct concepts. Whereas, sex of individuals is largely determined by biology, their gender is socially constructed and comprises the roles, rights, and obligations that attach to them on the basis of their sex. Kishor (2006) identifies three important aspects of gender namely:

a) "Gender tends not be value neutral". The roles, rights, and obligations assigned to each sex are not just different, but also unequal with male roles and rights generally being valued more highly than female roles and rights.

b) "Gender involves differences in power, both *power to* and *power over*". The concept of *power to* encompasses legal and informal rights, access to resources, and pursuit of knowledge and personal goals, and cuts across most domains of human functioning, including familial, cultural, and institutional domains. *Power over* refers to control over societal and household resources and decisions, cultural and religious ideology, and one's own and others' bodies. Importantly, men tend to have greater power than women, and, in some domains, even have power *over* women.

c) "Gender is not static or immutable". Being socially constructed, gender roles, rights, and expectations can change over time and across geographical space as societal needs, opportunities, and customs change.

As a result of (a) and (b), inequalities based on gender, as also the disempowerment of females, are pervasive in most societies, particularly patriarchal ones such as in India. Gender-based differences in power and resource-access have consequences for the quality of life of the population, including its health, as shown in the figure below.
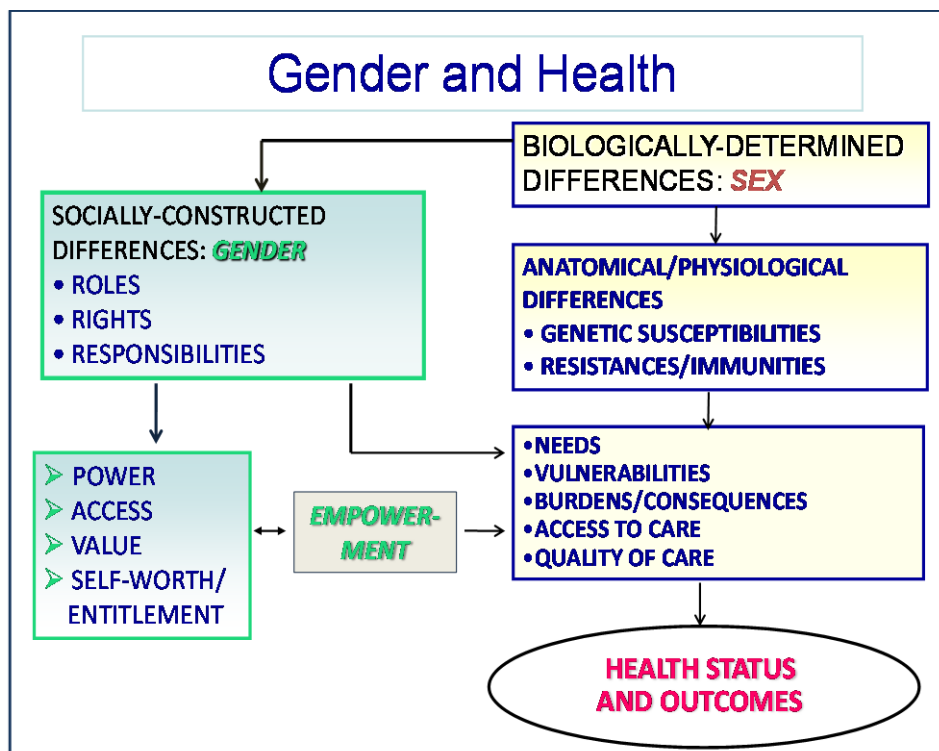
As the figure shows, gender affects health outcomes through male and female differences in roles, access, and power, and sex differentially affects the health of women and men because of biologically determined physiological and genetic differences that manifest in differences in

needs and vulnerabilities. While the type of health care needed can vary by sex, whether, for example, the type of care needed can be *accessed* is affected by gender, empowerment, and sex.

Gender-based inequalities translate into greater value being placed on the health and survival of males than of females. In India, examples of health and population indicators that are driven by gender differences in the perceived worth of males and females include sex ratios at birth, infant and child mortality by sex, and low ages at marriage for women. Further, at the household level, disempowerment of women results in their lowered access to resources such as education, employment, and income, and limits their power over decisionmaking and freedom of movement. Men's power over women can be measured, on the one hand, by assessing the level of women's and men's agreement with norms that give men the right to exercise control over women and, on the other hand, by measuring the extent to which women are subject to spousal violence.

This report examines these and related indicators to provide a snapshot of gender equality and levels of women's empowerment in India. Specifically, it presents data on multiple indicators drawn from the 2005-06 National Family Health Survey (NFHS-3) to examine the levels in the codependent concepts of women's empowerment and gender equality in India and its 29 states. Also, in keeping with the third aspect of gender noted above, i.e., the ability of gender to change and adapt, trends over time in key indicators of gender equality and women's empowerment are also discussed. The discussion of trends is based on data from NFHS-1 (1992-93) and NFHS-2 (1998-99), in addition to NFHS-3 data. The report also examines the determinants of specified indicators and their linkages to selected health and nutritional outcomes.

In addition to this chapter, the report has 11 other chapters. Each of the first nine of these chapters is organized around a set of related indicators of gender equality and/or women's empowerment. Chapter 11 examines gender differences in children's immunization and child and adult nutrition, and shows how these indicators and women's contraceptive use are related to selected indicators of women's empowerment. Chapter 12 presents some conclusions. At the end of most chapters, appendix tables show key indicators discussed in the chapter by state and for the eight cities for which representative indicators can be estimated. The indicators for these cities are also provided separately for the slum and nonslum areas in these eight cities.

The information in this report should be treated as complementary to the gender-related information in Volume 1 of the NFHS-3 National Report, especially in its Chapters 14 and 15.

2. SON PREFERENCE: SEX RATIOS AND RELATED INDICATORS

Summary and Key Findings

- *Trend data based on the three NFHS surveys provide strong evidence of declines in the sex ratio (females per 1,000 males) of the population age 0-6 and in the sex ratio at birth for births in the five years preceding each survey.*

- *Females are under-represented among births and over-represented among births that die.*

- *Sex ratios at birth decline with wealth, suggesting that sex selection of births is more common among wealthier than poorer households.*

- *Ultrasound tests are being widely used for sex selection, with sex selection being more evident for the wealthiest women than for women in the other wealth quintiles.*

- *Sex ratios of all last births and last births of sterilized women show clearly that couples typically stop having children once they have the desired number of sons.*

- *The child mortality rate, defined as the number of deaths to children age 1-4 years per 1,000 children reaching age 1 year, is 61% higher for girls than for boys.*

A fundamental indicator of gender inequality in India, and arguably, one of the most power-ful, is a preference for sons so strong that it is manifested as limiting the birth and survival of girls. The 2001 census data for India revealed a sharp decline in the sex ratio for the population age 0-6, from 945 females in 1991 to 927 females per 1,000 males. The trend in the sex ratio of the under-seven population based on National Family Health Survey data for the period 1992-93 to 2005-06 also provides evidence of continued decline and shows that in 2005-06 the under-seven sex ratio had fallen further to 918 females per 1,000 males (Figure 2.1).

Figure 2.1 Trends in the sex ratio (females per 1,000 males) of the defacto population age 0-6 years, India
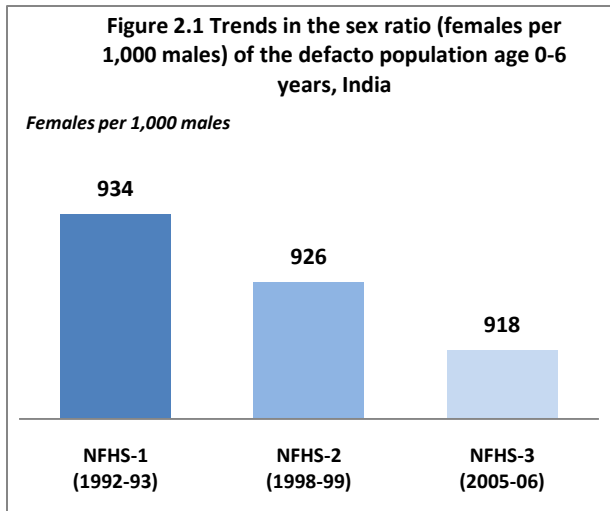
The decline over time in the under-seven sex ratio can have one or more of mainly three possible causes: a decrease in the sex ratio at birth through the use of technologies that enable sex selection; an increase in the mortality of girl children com-pared with the mortality of boy children, sug-gesting intensification of the already documented discrimination against the girl child (Miller, 1981; Das Gupta, 1987; Kishor, 1993); or a systematic undercount of female children, compared with male children under the age of seven[1].

Even as the role, if any, of the last of these possible causes is debated, it is commonly accepted that the other two causes, fueled by strong son preference and the low status of women in many regions of India, play a substantial role in reducing the under-seven sex ratio. Indeed, discrimination against the female child was recognized not just by social scientists but also by policy makers long before the release of the 2001 Census. This is evident in various policy initiatives undertaken earlier. For example, the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act prohibiting the use of prenatal diagnostic techniques for the purpose of prenatal sex determination was passed as early as 1994 in recognition of the widespread use of ultrasound and related technologies to eliminate unwanted female foetuses. Further, the National Population Policy of 2000 explicitly recognized the problem and suggested policy initiatives directed toward ending discriminatory practices that adversely affect the health of the girl child (Ministry of Health and Family Welfare, 2000).

Since the pathways to a lower sex ratio of the population age 0-6 mainly involve a low sex ratio at birth and/or excess female mortality after birth, this chapter examines the levels of these and related indicators, including the sex ratio of live births by whether the mother had

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[1] Differential rates of migration by sex are unlikely to play a role in the decline of the sex ratio of the population age 0-6, since young children generally move with their parents and such movement is unlikely to be differentiated by the sex of the very young child.

an ultrasound test during pregnancy. The chapter focuses on the sex ratio at birth, providing insight into how this ratio varies for all births and last births.

The overall sex ratio at birth can be directly affected by the use of modern technologies that allow couples to have only children of a desired sex[2]. In addition, where strong couple-level gender preferences exist, couples are more likely to stop having children only when their desired sex combination of children has been achieved. This 'stopping' behaviour will not affect the overall sex ratio at birth, but will affect the sex ratios at birth of last births. For example, in societies with strong son preference, last births are more likely to be male, and females are more likely to grow up in large families. Thus, an examination of sex ratios of last births provides insight into the pervasiveness of son preference.

Sex Ratios at Birth

The sex ratio at birth is defined as the number of live female births per 1,000 live male births. A fall in this ratio implies that the number of females born alive is declining relative to the number of males born alive. In evaluating sex ratios in terms of relative female or male deficits at birth, the relevant comparator is not equality in the number of females and males (i.e., a sex ratio of 1,000), however. This is because in most populations more males than females are born (Waldron, 1983; 1998). The sex ratio at birth recorded across most developing countries has been found to vary in a narrow range from 943 to 971 (United Nations Development Programme, 1998).

Levels and trends in the sex ratio at birth In India, the sex ratio at birth calculated for all births in the five complete calendar-year periods before each of the three National Family Health Surveys not only shows a downward trend in the sex ratio at birth in the six years between 1987-91 and 1993-97, but also shows an acceleration in the decline in the sex ratio between 1993-97 and 2000-04 (Figure 2.2). In the late 1980s and early 1990s, the sex ratios at birth at 941 and 938 respectively, did not deviate too far from 943, which is the

Figure 2.2 Trends in the sex ratios at birth for all children born in the five complete calendar years preceding NFHS-1, NFHS-2, and NFHS-3, India

Females per 1,000 males

NFHS-1 (1987-91)	NFHS-2 (1993-97)	NFHS-3 (2000-04)
941	938	919
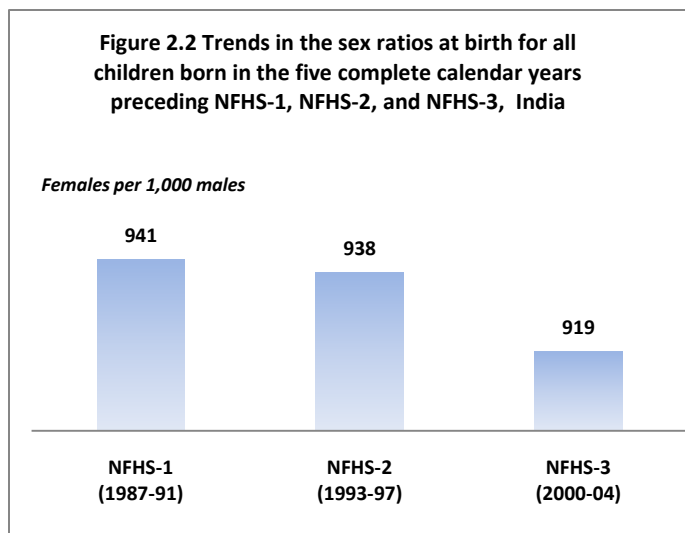
lowest sex ratio at birth within the normal range. However, by the early 2000s the sex ratio at birth in India had fallen well below the normal range to 919.

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[2] Such technologies include ultrasound and amniocentesis tests, which can routinely reveal the sex of a foetus. A foetus of an unwanted sex can then be aborted. Other, even more advanced technologies, such as sperm-sorting techniques, can select the sex of the child before conception; these techniques are less commonly available in India, however.

After birth, genetic vulnerabilities result in higher male than female mortality during early childhood in most populations, especially at the neonatal stage. An examination of the trends in the sex ratios at birth by the survival status of the child in the five complete calendar-year periods before each of the three NFHS surveys, however, reveals a strong female disadvantage in survival (Figure 2.3).

Figure 2.3 Trends in the sex ratios at birth of live births and births that have died in the five complete calendar-years preceding NFHS-1, NFHS-2, and NFHS-3, India
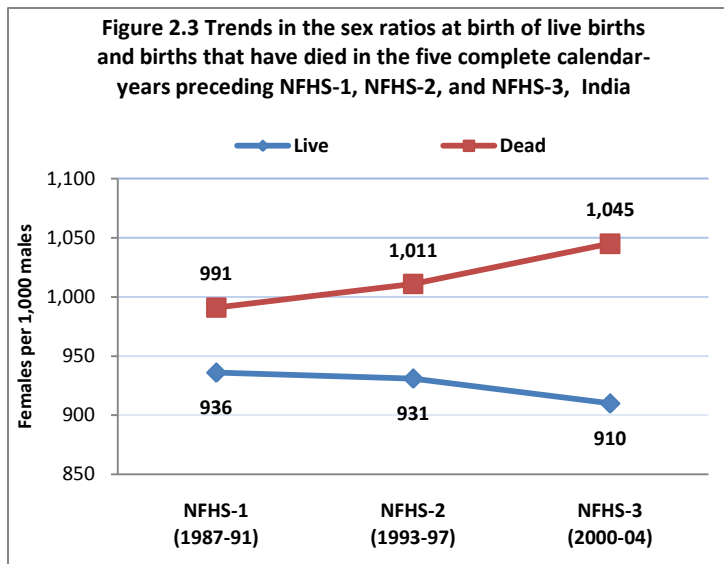
The sex ratio of births that died in each of the five calendar-year periods increased from 991 females per 1,000 males in the period 1987-91 to 1,045 females in the period 2000-04. In the same time period, the sex ratio of surviving births declined from 936 to 910. (Notably, the sex ratio at birth of surviving births closely mirrors the sex ratio at birth for all births, since births that survive constitute a large majority of all births.) These data suggest that not only are fewer than expected females being born, but females are increasingly over-represented in births that die.

Sex ratios at birth by wealth status In India the sex ratio at birth, as well as the sex ratio of the population age 0-6 years, varies greatly by household wealth status. In fact, the sex ratio at birth in the five years preceding NFHS-3 is highest, at 954 females per 1,000 males, in the lowest wealth quintile (Figure 2.4). The sex ratio at birth for births to women in the second wealth quintile, though slightly lower, is also within the normal range for sex ratios at birth (943-971). Beyond the second wealth quintile, however, the sex ratio at birth falls dramatically by wealth to a low of 854 for births to women in the highest quintile. As expected, the sex ratio of the population age 0-6, which captures the sex ratio of surviving births, also follows a similar pattern.

Figure 2.4 Sex ratio of population age 0-6 years and sex ratio at birth for all births to women age 15-49 in the five years preceding NFHS-3 by wealth quintile, NFHS-3, India

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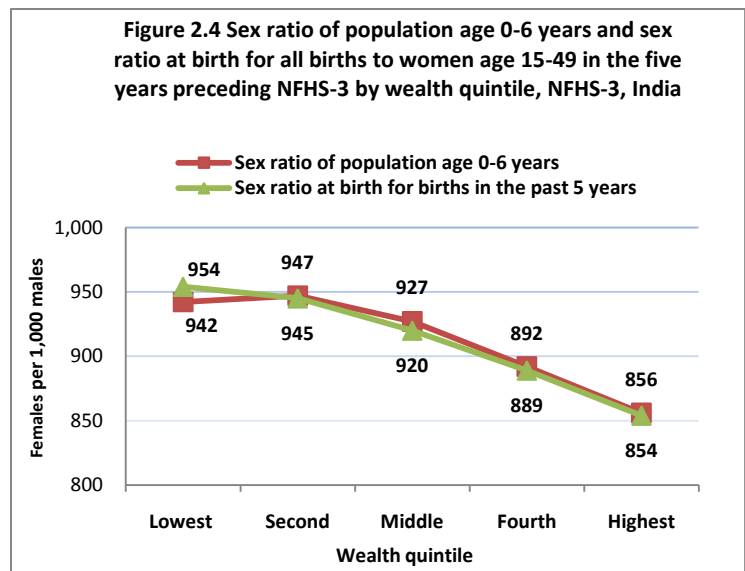
Sex ratios at birth by use of ultrasound testing during pregnancy Sex ratios at birth can diverge greatly from the normal range only with the use of technologies that can help choose or determine the sex of the foetus, such as ultrasound diagnostic testing during pregnancy. In India, 24% of all pregnancies in the five years preceding NFHS-3 received an ultrasound test (IIPS and Macro International, 2007). NFHS-3 shows that it is pregnancies to women in the highest wealth quintile that are most likely to receive an ultrasound test: the proportion of pregnancies receiving an ultrasound test increases from only 4% and 10% for pregnancies to women in the lowest and the second wealth quintile to 21% and 38% for pregnancies in the next two quintiles, and finally to a high of 62% in the highest wealth quintile. While a substantial proportion of ultrasound tests are done for diagnostic purposes, an examination of sex ratios at birth can reveal the extent to which ultrasound testing is being used for sex selection.

In India, sex ratios at birth estimated separately for pregnancies with and without ultrasound testing provide clear evidence that many women are using ultrasound tests for sex selection. The sex ratio at birth for completed pregnancies in the five years preceding NFHS-3 with an ultrasound test during pregnancy is only 851, compared with 941 for completed pregnancies with no ultrasound test. Thus, pregnancies with an ultrasound test have a sex ratio at birth that is much lower than the biologically normal sex ratio, while those with no test have a sex ratio that is close to the normal.

Figure 2.5 Sex ratios of completed pregnancies in the five years preceding NFHS-3 with and without an ultrasound test by wealth quintile, NFHS-3, India
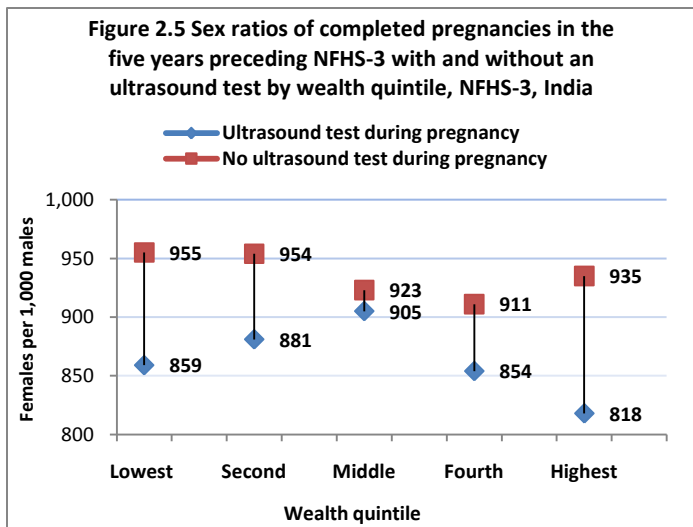
The much lower sex ratios at birth at each level of wealth for completed pregnancies that had an ultrasound test, compared with those that did not, provide evidence that ultrasound tests are often being used for the purpose of sex selection at all levels of wealth. Figure 2.5 also shows that the sex ratio of completed pregnancies with an ultrasound test to women in the highest wealth quintile (818) is much lower than for pregnancies with an ultrasound to women in any other wealth quintile (854-905). This suggests that women in the highest wealth quintile are more likely than women in the lower wealth quintiles to be using ultrasound tests for sex selection.

It could be argued that while wealth may only help to increase access to sex-selection technology, education has the additional potential to inform and empower women in ways that can reduce son preference. NFHS-3 shows that use of ultrasound tests increases with women's education: For pregnancies in the five years prior to NFHS-3, 9% had an ultrasound test if the mother had no education, compared with 58% if the mother had 10 or more years of education.

Figure 2.6 shows that pregnancies with an ultrasound test have an abnormally low sex ratio at birth irrespective of mother's level of education. Further, pregnancies to women with 10 or more years of education have a somewhat lower sex ratio at birth (830) than those to women with less or no education at all (841-878). Thus, more highly educated women, contrary to expectations, are using ultrasound testing for sex selection more than less educated women.

Figure 2.6 Sex ratios of completed pregnancies in the five years preceding NFHS-3 with and without an ultrasound test by mother's education, NFHS-3, India
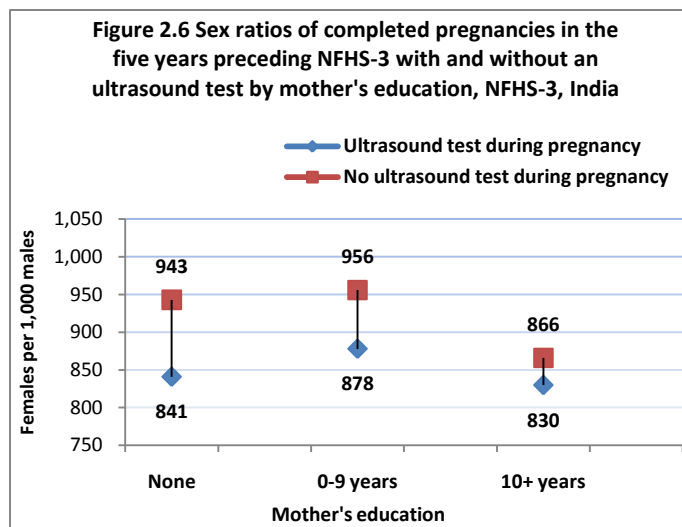
In addition, pregnancies without an ultrasound test to women with no education or less than 10 complete years of education result in normal sex ratios at birth, but pregnancies without an ultrasound test to women with 10 or more years of education have an abnormally low sex ratio at birth. This suggests that some educated women may be using sex-selection methods that are not being reported.

Overall, these data show that more educated women are having disproportionately more sons than daughters, both in absolute terms and compared with women in other educational groups.

Sex ratios at birth by birth order The sex ratio at birth for a population is a single number, an average for all births in a given time period. This ratio does not differentiate between sex ratios at birth for births with different characteristics or for births to couples with different fertility-related desires. This section explores how sex ratios at birth vary by birth order.

If son preference exists in a society, evidence of it will typically be found in lower sex ratios at lower birth orders relative to those at higher birth orders and for last births compared with all other births. A caveat regarding a potential source of error is necessary here since this analysis is based on all children ever born (i.e., all births in the survey and not just recent births) to women in the age range of 15-49. Recall error tends to increase the further back in time one goes. The sex ratio at birth will be affected if there is any tendency to recall births of one sex more than births of another sex.

It is expected that sex ratios at birth for first births are less likely than sex ratios of births at higher orders to be affected by factors such as 'stopping rules' that make it more likely that a couple will stop having children after the birth of a child of the desired sex. The total fertility rate in India of 2.7 children per woman suggests that most women do not stop having children after only one child. Further, since first births are often perceived to be risky, it is also expected that ultrasound and other diagnostic tests would be less likely to be performed primarily for

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sex selection for first births. Additionally, 7 out of 10 or more currently married women and men in India want at least one daughter. Together these factors suggest that the sex of the first child is less likely to be controlled.

Despite expectations to the contrary, Table 2.1 shows that the sex ratio at birth for first-born children has been below normal in all three NFHS surveys and has been declining steadily since NFHS-1. This is also true for births at birth order two. However, in all three surveys, the sex ratio at birth for births at order two is substantially lower than at order one and at any other birth order. The sex ratio at birth for births at order three is also lower than the sex ratio at birth for all births except births at order two. This suggests that substantial proportions of couples with two or three children stop having more children if

Table 2.1 Trends in sex ratios at birth (females per 1,000 males) by birth order of all births to women age 15-49, India

	NFHS-1	NFHS-2	NFHS-3
Birth order			
1	901	873	843
2	819	765	762
3	832	819	837
4	921	919	961
5	986	1,019	1,026
6	1,002	1,052	1,054
7+	1,039	1,034	1,094
Total	935	920	926

their last birth is a boy and this has been happening since the early 1990s at the time of NFHS-1. Stopping after two or three children is in keeping with the mean ideal family size of currently married women in India, which has been between 2 and 3 children in all three surveys.

Sex ratios at birth (females per 1,000 males) for all births in the five years preceding the survey, NFHS-3, India
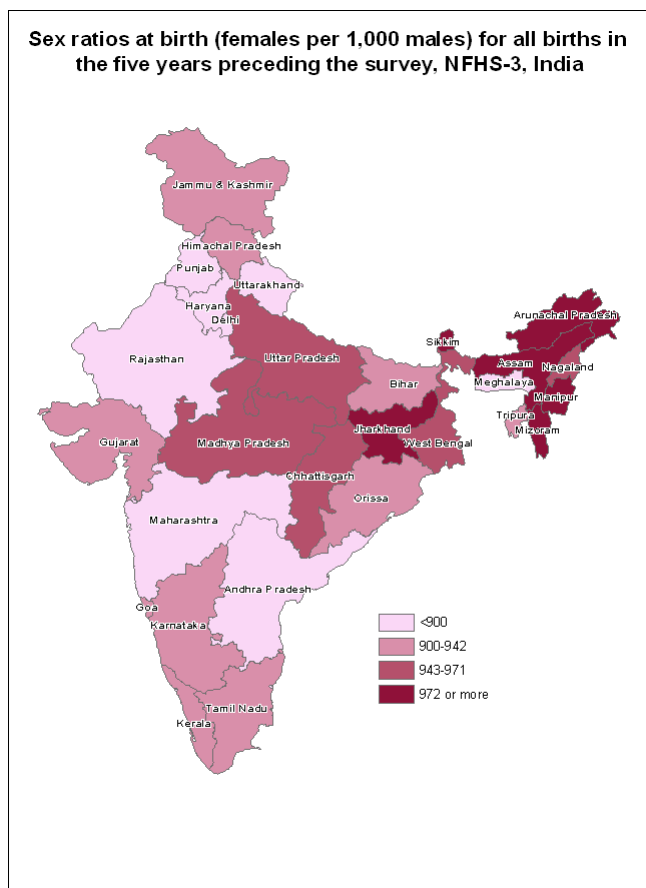
Sex ratios at birth by state The sex ratio at birth by state ranges from a low of 728 in Punjab and 756 in Haryana to a high of 1,102 in Jharkhand (Appendix 2).

There are only five states—Chhattisgarh, Madhya Pradesh, Uttar Pradesh, West Bengal, and Nagaland—where the sex ratio at birth lies in the normal range (943-971) and six states where it lies above the normal range. Of the six states with higher than normal sex ratios at birth, all except Jharkhand are in the northeast of the country.

Thus, in 18 of the 29 states in India the sex ratio at birth is below normal. Notably, all four of the southern states, including Kerala, have lower than normal sex ratios at birth.

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Sex Ratios at Birth of Last Births

Yet another way to examine gender preferences is to examine sex ratios at birth of last births. If son preference is affecting family-building strategies, sex ratios of last births will be lower than for other births since couples will stop having children when they have completed their family with a birth of a son.

Table 2.2 shows the total sex ratios, sex ratios of last births, and sex ratios of all other births for all births in the birth histories of women age 15-49 in NFHS-1, NFHS-2, and NFHS-3. In all three surveys, the sex ratio of last births has been much lower than that for all births and the disparity has been growing over time. In NFHS-1, the sex ratio of last births was 14% lower than the sex ratio of all other births; this disparity increased to 19% in NFHS-2 and then to 26% in NFHS-3.

Table 2.2 Trends in sex ratios at birth (females per 1,000 males) of last births, all other births, and all births, India			
	Sex ratio at birth		
	NFHS-1	NFHS-2	NFHS-3
Last births only	837	791	756
All births except last births	976	981	1,016
All births	935	920	926

NFHS-3. Thus, sex ratios of last births favour boys much more now than they did in the early 1990s. Strong son preference also suggests that if a birth results in a female child then it is not likely to be a last birth. Thus, the fact that the sex ratios of all births other than last births are predominantly female is well in keeping with son preference. The increase over time in the proportion of females in the sex ratio of births that are not last births suggests that now, even more than before, female births are less likely to be last births.

Sex ratios of last births by women's contraceptive use Because birth histories are collected from women who are at different points in their family formation process, some of the births considered to be last births will not in fact be 'last'. One way to refine this analysis is to look at sex ratios of last births to women by their current use of contraception. Of particular importance in this context is the adoption of sterilization, since sterilization signifies the end of childbearing. Notably, at the time of NFHS-3, sterilization accounted for more than two-thirds of current contraceptive use in India.

The sex ratio at birth of last births to women who are sterilized, at 630, is much lower than for last births to women who are not using any method of contraception (926). It is also lower, as expected, than the sex ratio for all last births (756), which include some births to women who are planning to have more children. Notably, too, the sex ratio of last births to even women using a temporary method of contraception is much lower than normal. Sex ratios at birth of last

Figure 2.7 Trends in sex ratios at birth for last births by mothers' current use of contraception

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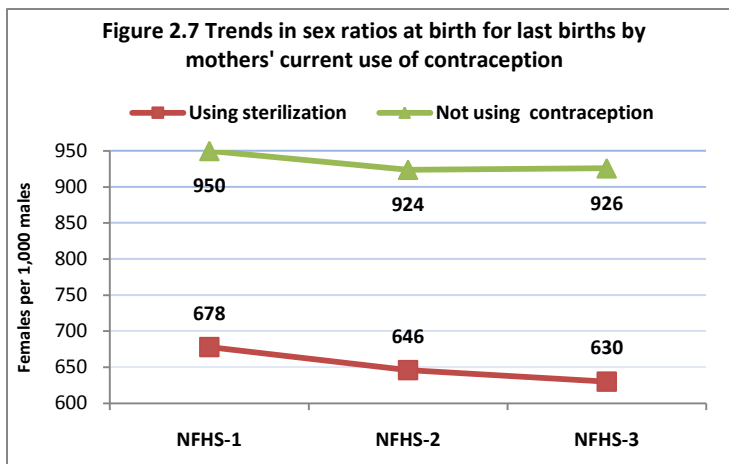
births were in the 600s for sterilized women even in NFHS-1; but as Figure 2.7 shows, they have fallen somewhat over time from 678 at the time of NFHS-1 to 630 in NFHS-3. Also notable is that the sex ratio at birth of last births to women who are not using any contraception fell from a normal level in NFHS-1 to below normal in NFHS-2 and has changed little since then.

Table 2.3 shows that for sterilized women, the sex ratios of last births are in the 600s, irrespective of wealth status or mothers' education. Further, the sex ratio of last births declines sharply with wealth and mothers' education even among women who are not using any contraception although it is in the normal or above-normal range for women with no education and women belonging to the lowest two wealth quintiles. For women using a method other than sterilization, the sex ratio of last births also declines sharply with education and wealth, but is never above normal in any education or wealth category.

Table 2.3 Sex ratios at birth of last births by current contraceptive use according to mothers' education and wealth quintile, NFHS-3, India

| | Type of contraception being used | | |
	Sterilization	Any other method	No method
Education			
None	625	818	950
0-9 years	632	739	652
10+ years	645	634	640
Wealth quintile			
Lowest	644	869	1017
Second	620	788	960
Middle	664	780	903
Fourth	600	745	872
Highest	629	654	822
Total	630	735	926
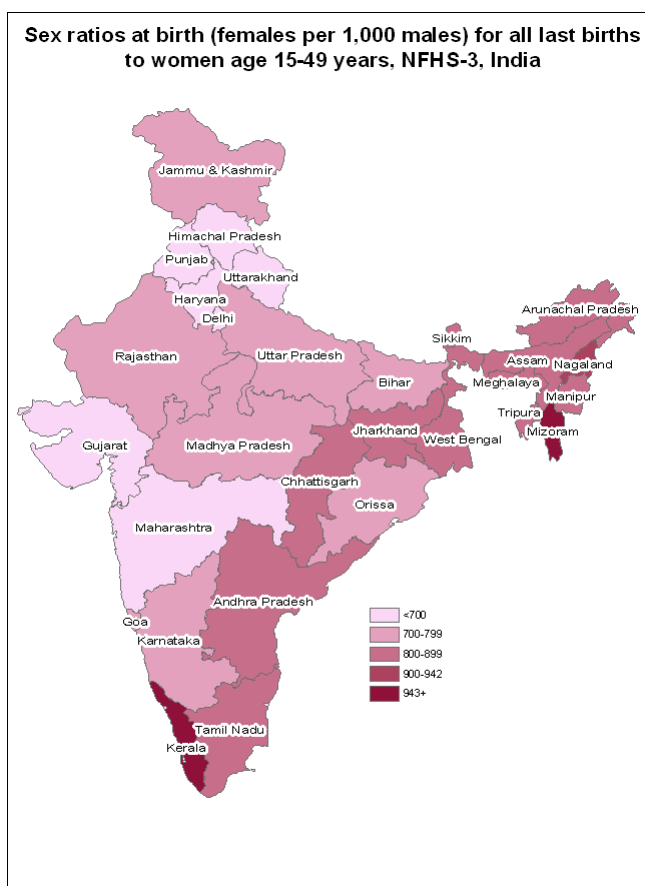
Thus, the sex ratio at birth for last births to women using any method of contraception are below normal, irrespective of the method or the education or wealth category to which the women belong.

Sex ratios of last births by state The sex ratio of last births is below normal in all states of India except Kerala and Mizoram. The sex ratio of last births ranges from a low of 504 in Punjab, 540 in Haryana, and 572 in Himachal Pradesh, to a high of 944 in Mizoram and 973 in Kerala. The only other state where the sex ratio of last births is anywhere close to normal is Nagaland (see Appendix 2). These very low sex ratios of last births in most states of India suggest that son preference is continuing to influence fertility decisions in most of India.

Sex ratios at birth (females per 1,000 males) for all last births to women age 15-49 years, NFHS-3, India

Legend:
<700
700-799
800-899
900-942
943+

Sex Differentials in Mortality

Sex ratios at birth measure gender inequality in terms of the extent to which the number of female births relative to male births deviates from biological expectations and focus attention on whether girls are being discriminated against regarding their right to birth. However, what about the girls that are born? Does son preference differentially affect girls' survival by subjecting them to gender-based discrimination in access to life-sustaining resources, including food and medical care? If such discrimination is common, it will manifest in differential rates of mortality by sex at early ages.

On biological grounds, mortality in infancy should be higher for male infants than female infants particularly in the first month of life. In accordance with this expectation, NFHS-3 shows that the neonatal mortality rate (the number of deaths to children age less than one month per 1,000 live births) in India was 41 for males, compared with 37 for females per 1,000 births in the five years preceding the survey. Further, as Figure 2.8 shows, male neonatal mortality is higher than female neonatal mortality for births in all wealth quintiles.

Figure 2.8 Neonatal mortality in the five years preceding NFHS-3 by sex, according to wealth quintile, NFHS-3, India
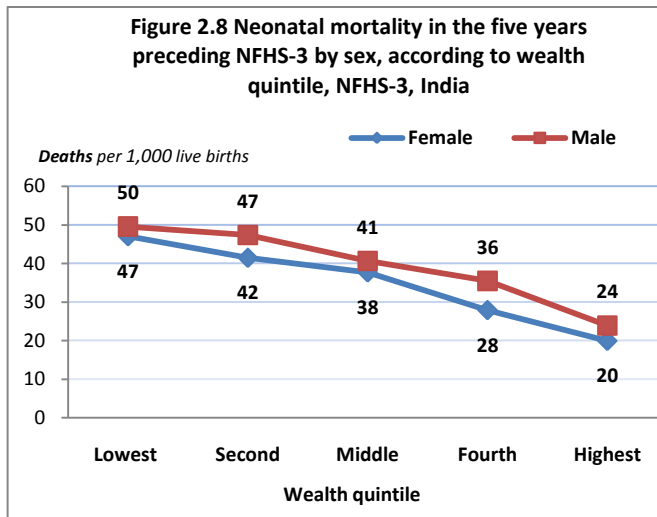
Excess female mortality becomes evident in India in the period beyond one month of life. In most countries where infant and child mortality is driven by biology alone, female mortality in the first year of life beyond the first month continues to be lower than male mortality. In India, however, the postneonatal mortality rate (the number of deaths to children age 1–11 months per 1,000 live births) for females is 21, compared with only 15 for boys. Further, as shown in Figure 2.9, although the female-male differential in postneonatal mortality is lowest for children born to mothers in the highest wealth quintile, the female disadvantage is, nonetheless, evident in all wealth quintiles.
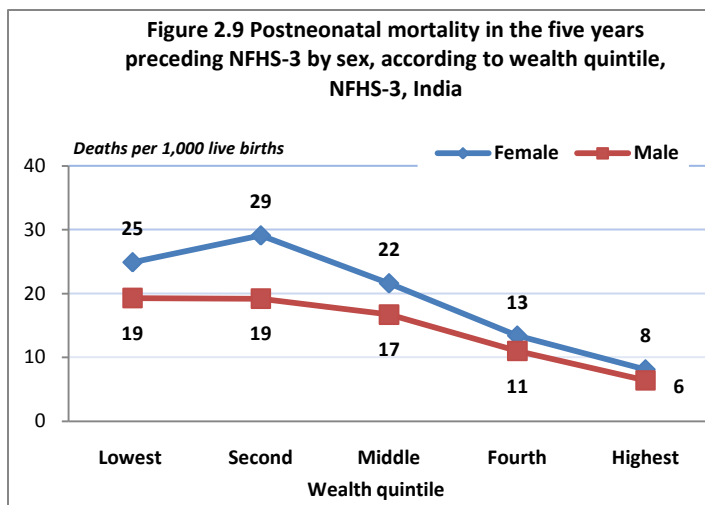
Figure 2.9 Postneonatal mortality in the five years preceding NFHS-3 by sex, according to wealth quintile, NFHS-3, India

A similar pattern in gender differentials is also observed in the child mortality rate (the number of deaths to children age 1–4 years per 1,000 children reaching age 1 year). In India as a whole, the child mortality rate for girls, at 23 per 1,000, is 61% higher than for boys, at 14 per 1,000.

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As shown in Figure 2.10, female child mortality is higher than male child mortality in every wealth quintile. However, female child mortality drops more sharply with wealth than does male child mortality. As a consequence, the gender gap in child mortality is virtually nonexistent in the highest wealth quintile.

Thus, although wealthier households have a lower sex ratio at birth than poorer households, the data on mortality yield two conclusions: a) girls born in wealthier households are more likely to survive their early childhood than girls born in poorer households; and b) the gender differential in survival is lower in wealthier households than in poorer households. Thus, girls born in poorer households have a much higher probability of dying than boys in poorer households; by contrast, in the wealthiest households, the probability of dying is fairly similar for both boys and girls.

Figure 2.10 Child mortality in the five years preceding NFHS-3 by sex, according to wealth quintile, NFHS-3, India

Deaths between the ages of 1-4 years per 1,000 children surviving to age 1 year
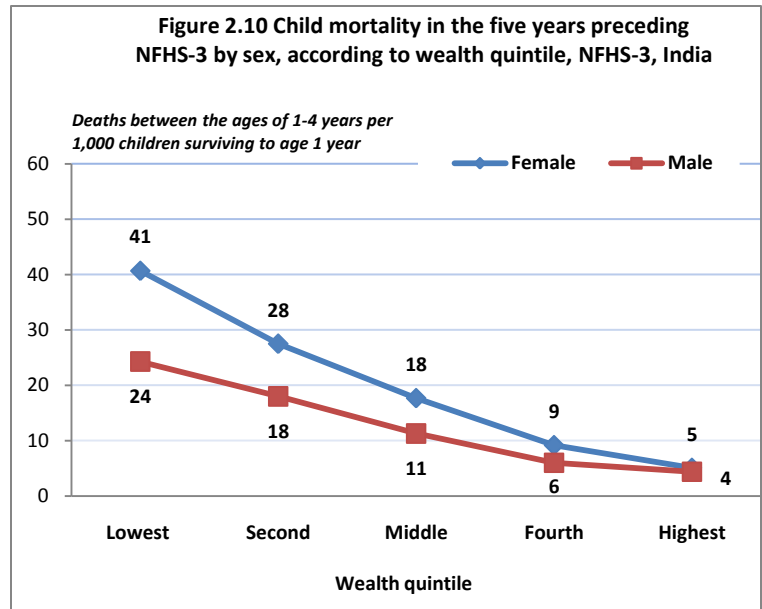
Appendix 2 Sex ratio at birth (female per 1,000 males) for all births in the five years preceding the survey and sex ratio at birth for all last births, by state, NFHS-3, India

	Sex ratio at birth for births in past five years*	Sex ratio at birth for all last births to women age 15-49
North		
Delhi	848	681
Haryana	756	540
Himachal Pradesh	901	572
Jammu & Kashmir	912	770
Punjab	728	504
Rajasthan	894	717
Uttarakhand	892	633
Central		
Chhattisgarh	948	807
Madhya Pradesh	968	741
Uttar Pradesh	949	790
East		
Bihar	902	784
Jharkhand	1,102	891
Orissa	932	723
West Bengal	963	819
Northeast		
Arunachal Pradesh	1,009	809
Assam	985	830
Manipur	1,001	834
Meghalaya	891	877
Mizoram	1,087	944
Nagaland	945	938
Sikkim	974	805
Tripura	907	856
West		
Goa	933	783
Gujarat	900	615
Maharashtra	860	667
South		
Andhra Pradesh	876	844
Karnataka	914	761
Kerala	902	973
Tamil Nadu	930	819
India	920	756

*Sex ratios based on live births in the five-year period before the survey, and not the five complete calendar years before the survey.

3. GENDER DIFFERENCES IN EDUCATION

Summary and Key Findings

Children's school attendance

- *Only two-thirds of girls and three-fourths of boys age 6-17 years are attending school. The sex ratio of children attending school is 889 girls per 1,000 boys.*
- *There is gender equality in school attendance in urban areas; but, in rural areas, the female disadvantage in education is marked and increases with age.*
- *Age-appropriate school attendance is lower than any school attendance for both boys and girls. However, boys and girls who are in school are about equally likely to be in an age-inappropriate class.*
- *School dropout beyond primary school is a major problem for both girls and boys.*

Literacy and educational attainment among adults

- *The percentage of adults who are literate is much lower in rural than in urban areas; nonetheless, even in urban areas one-fourth of women and more than one-tenth of men are not literate. Gender disparity in literacy is much greater in rural than in urban areas and declines sharply with household wealth.*
- *Forty-one percent of women and 18% of men age 15-49 have never been to school.*
- *Educational attainment remains very low: even among the 20-29 age group, only 27% of women and 39% of men have 10 or more years of education.*
- *The percentage of ever-married women with 10 or more years of education has risen very slowly from 11% in NFHS-1 to 17% in NFHS-3.*

Eliminating gender differences in access to education and educational attainment are key elements on the path to attaining gender equality and reducing the disempowerment of women. In recognition of the pivotal role of education in development and of persistent gender inequalities in access to education, the elimination of gender disparity in primary education is one of the Millennium Development Goals.

The achievement of universal primary education has been a key goal of Indian planning since Independence. However, increasing access to primary schooling still leaves the twin questions of educational quality and school retention unanswered. Continued economic development cannot be sustained with a population that has merely completed primary school; it needs a dependable supply of highly educated and skilled human capital for which a high level of educational attainment of both women and men is necessary. However, ensuring a continued supply of skilled human capital to sustain economic growth is only one objective of reducing gender inequalities in educational attainment: the other is that education, particularly higher education of women, is a key enabler of demographic change, family welfare, and better health and nutrition of women and their families. Higher education has the potential to empower women with knowledge and ways of understanding and manipulating the world around them. Education of women has been shown to be associated with lower fertility, infant mortality, and better child health and nutrition.

This chapter focuses both on gender differentials in children's school attendance and in educational attainment of the adult population. The analysis of children's school attendance is based on their attendance at any time during the 2005-06 school year. To increase accuracy and comparability, children's ages are adjusted to the start of the 2005-06 school year assumed here to be April 2005.

School Attendance of Children Age 6-17 Years: Levels and Differentials

Figure 3.1 Percentage of boys and girls attending school in the 2005-06 school year, NFHS-3, India
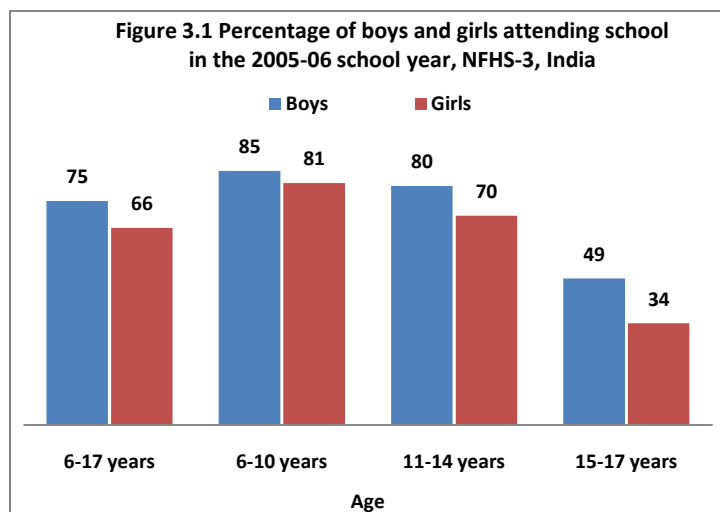
School attendance by age In the school year 2005-06, 71% of children age 6-17 attended school—77% in urban areas and 69% in rural areas (IIPS and Macro International, 2007). As Figure 3.1 shows, 66% of girls age 6-17 attended school, compared with 75% of boys in the same age group. The sex ratio of children 6-17 attending school in the 2005-06 school year is 889 girls per 1,000 boys.

While gender differentials in school at-

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tendance are minimal among children age 6-10, they increase with age. In fact, the sex ratio of girls attending school per 1,000 boys attending school declines from 957 in the age-group 6-10, to 884 in the age-group 11-14, and then to a low of only 717 in the age-group 15-17. In addition to the gender differential in school attendance among children age 15-17, the low absolute levels of school attendance for both girls and boys in this age group is also of concern. Less than half of boys and about one-third of girls age 15-17 attend school.

An examination of the data on school attendance by age, however, reveals that gender disparity in school attendance is largely a rural phenomenon (Figures 3.2A & 3.2B). In urban areas, about equal proportions of boys and girls attend school at each age; however, in rural areas, gender inequality in attendance is evident in every age group and increases with age. Notably, even in urban areas, only about half the children age 15-17 attend school.

Figure 3.2A Percentage of boys and girls attending school in the 2005-06 school year, NFHS-3, India: Urban

Figure 3.2B Percentage of boys and girls attending school in the 2005-06 school year, NFHS-3, India: Rural
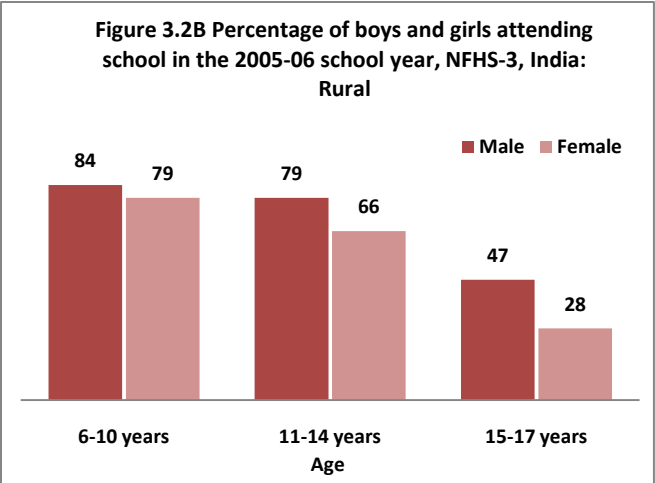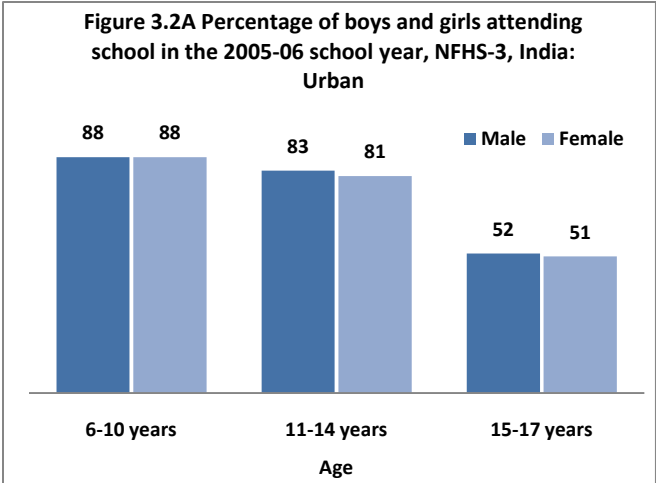
Both supply and demand-side factors play a role in whether children attend school or not. Key supply-side factors include the availability, accessibility, and quality of schools—factors for which no information is available in NFHS-3. The demand-side factors include the level of education of household members and household wealth—factors whose influence can be examined using NFHS-3 data. Adults who are educated are more likely to ensure that their children are educated. Wealth enables access to education by providing the resources needed to buy quality education and by reducing the opportunity cost of children's time. For poorer households, children's time spent in school is time not spent in contributing to the economic sustainability of the household.

School attendance by education of household head As shown in Table 3.1, school attendance at all ages and for both boys and girls increases with the education level of the household head. Among all children age 6-17, only 53% of girls and 65% of boys attended school in 2005-06 if they belonged to a household with an uneducated head of household. By contrast, 9 out of 10 boys and girls attended school if they belonged to a household where the head had 12 or more years of education. It is also notable that belonging to a household in

which the household head has a high level of education is associated with higher educational attainment for the next generation: almost three out of four children age 15-17 in households where the household head has 12 or more years of education were attending school, compared with the national average of 35% for girls and 48% for boys age 15-17.

Table 3.1 Percentage of male and female children attending school by education of the household head and wealth quintile of the household, NFHS-3, India

| | | Current age in years | | | |
		6-10	11-14	15-17	Total
Education of household head					
None	Female	69.5	53.9	18.6	52.9
	Male	76.0	68.0	34.0	64.9
0-4 years	Female	87.1	70.6	28.2	67.0
	Male	87.6	77.1	40.7	73.4
5-9 years	Female	88.4	78.6	38.7	73.4
	Male	90.3	86.0	50.7	79.9
10-11 years	Female	91.2	90.2	55.9	82.2
	Male	93.2	93.7	68.5	87.7
12+ years	Female	94.4	94.2	71.6	88.8
	Male	94.6	96.4	79.6	91.8
Wealth quintile					
Lowest	Female	65.3	46.9	12.8	49.7
	Male	72.8	63.8	30.0	62.6
Second	Female	78.3	62.3	20.2	60.3
	Male	83.4	74.2	38.8	71.4
Middle	Female	85.8	71.7	28.0	66.6
	Male	88.0	81.7	43.9	75.9
Fourth	Female	92.2	84.7	45.4	77.6
	Male	91.1	86.7	53.8	80.6
Highest	Female	95.4	93.9	68.8	87.4
	Male	95.3	94.9	73.5	89.6
Total	**Female**	**81.0**	**70.3**	**34.6**	**66.6**
	Male	**84.7**	**79.5**	**48.3**	**75.1**

Figure 3.3 Sex ratio of children age 6-17 who attended school in 2005-06 by education of household head, NFHS-3, India
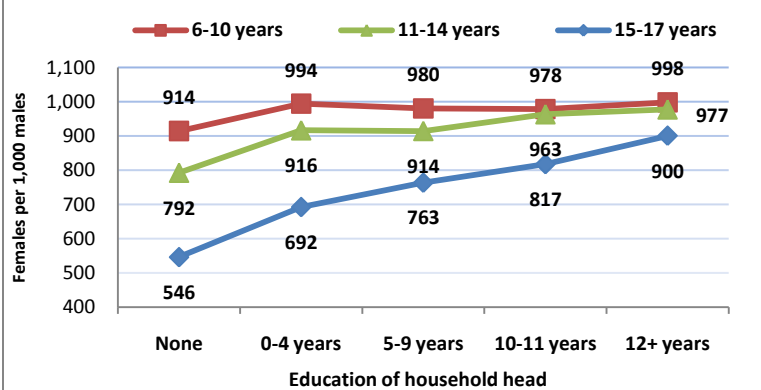
Gender differentials in school attendance decline sharply as the educational level of the household head increases (Figure 3.3). The differentials are particularly notable for the age-group 15-17: in this age group, the sex ratio of children (females per 1,000 males) attending school increases from a low of 546 in households with an uneducated household head to 900 in households with a household head who has at least 12 years of education.

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Figure 3.4 Sex ratio of children age 6-17 who attended school in 2005-06 by wealth quintile, NFHS-3, India

School attendance by household wealth School attendance also increases sharply by the wealth status of households (Table 3.1). The data suggest that belonging to a household in the lowest wealth quintile is associated with even lower rates of school attendance at every age than belonging to a household where the household head is uneducated. In addition, gender inequality in school attendance also varies more sharply by wealth in every age group than it does by education of the household head. The greatest variation in the sex ratio (females per 1,000 males) of children attending school by wealth is for the age-group 15-17: in this age group, the sex ratio of those attending school increases from a low of 426 in households belonging to the lowest wealth quintile to 936 in households belonging to the highest wealth quintile (Figure 3.4).

School attendance by state The sex ratio (girls per 1,000 boys) of children age 6-17 who attended school in the 2005-06 school year ranges from 745 in Rajasthan and Bihar to 1,081 in Meghalaya. There are nine states where the sex ratio of children attending school is less than 900, 16 states where the ratio is 900-999 and four states where the proportion of girls attending school is more than the proportion of boys attending school.

These results suggest that, despite the variation across states in the proportion of children attending school, gender equality in school attendance has been attained in some states and is close to being attained in several other states. States where gender equality in school attendance is close to being attained stretch from the south and west of India, through the center into the north, with several states in the northeast also falling in this group.

Sex ratio (females per 1,000 males) of population age 6-17 years who attended school in the 2005-06 school year, NFHS-3, India

Age-appropriate school attendance Examining school attendance of children by age does not tell us whether children are beginning school at the right age (considered to be age 6 years in India) and are progressing from class to class in an age-appropriate manner. The net attendance rate (NAR) and the gross attendance rate (GAR) are measures of age-appropriate school attendance. These rates are defined separately for the primary and secondary levels of education as follows:

For primary school
    NAR: Children age 6-10 years in classes 1-5 as a proportion of all children age 6-10 years
    GAR: All children in classes 1-5 as a proportion of all children age 6-10 years
For secondary school
    NAR: Children age 11-17 years in classes 6-12 as a proportion of children age 11-17 years
    GAR: All children in classes 6-12 as a proportion of all children age 11-17 years

Figure 3.5 Net attendance rate (NAR) for children age 6-17 for the school year 2005-06, NFHS-3, India
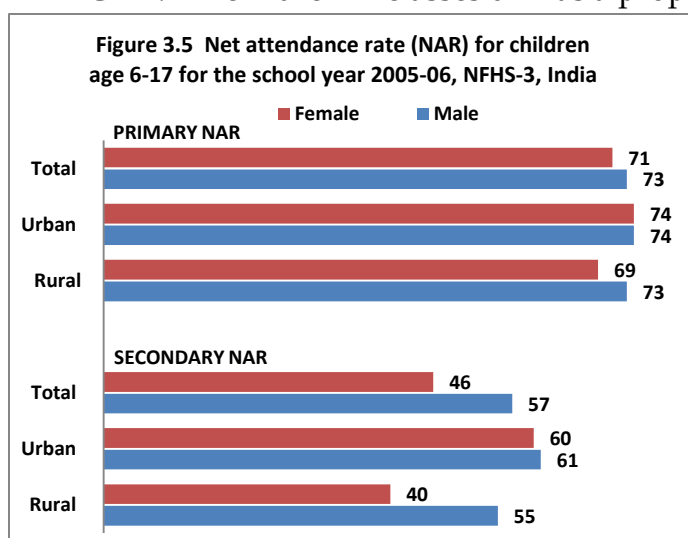
Figure 3.5 shows the net attendance rates for all boys and girls by residence. Age-appropriate primary level school attendance, at about 7 out of 10 children, is considerably lower than school attendance by children age 6-10 discussed earlier (more than 8 out of 10). This suggests that a large number of children are not starting school at the recommended age. Even at the primary level, gender inequalities are evident in rural areas.

The NAR at the secondary level also reveals large gender disparities in rural areas and a high dropout rate for girls as well as for boys. Girls and boys are also about equally likely to be in an age-inappropriate grade. The proportion of girls age 11-17 attending school is 55%, 9 percentage points lower than the secondary school NAR for girls (46%). For boys the corresponding difference between the proportion in this age group attending school (67%) and the NAR (57%) is 10 percentage points (not all data shown).

The GAR estimates (Figure 3.6) also lead to similar conclusions. Gender disparities are much greater in rural areas and at the secondary school level; and age-inappropriate

Figure 3.6 Gross attendance rate (GAR) for children age 6-17 for the school year 2005-06, NFHS-3, India
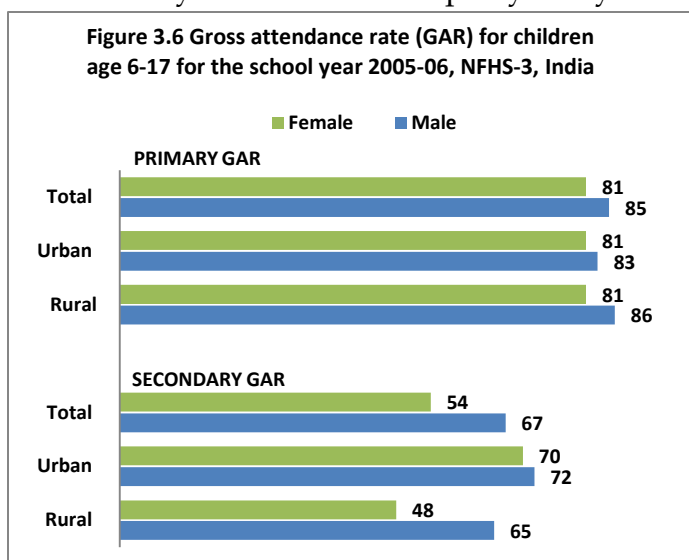
school attendance is more common at the secondary school level than at the primary school level for both boys and girls.

Gender Differentials in Adult Literacy

Literacy, i.e., the ability to read and write, is the foundation of education. NFHS-3 shows that only 55% of women and 78% of men are literate in India. Literacy has, however, been increasing over time for both women and men as measured by changes across age groups (Figure 3.7). In fact, literacy among women is almost twice as high in the 15-19 age group than in the age-group 45-49 that is 30 years older. Nonetheless, even in the youngest age group, one in four women and one in ten men are not literate.

Figure 3.7 Percentage literate among women and men age 15-49 by age, NFHS-3, India
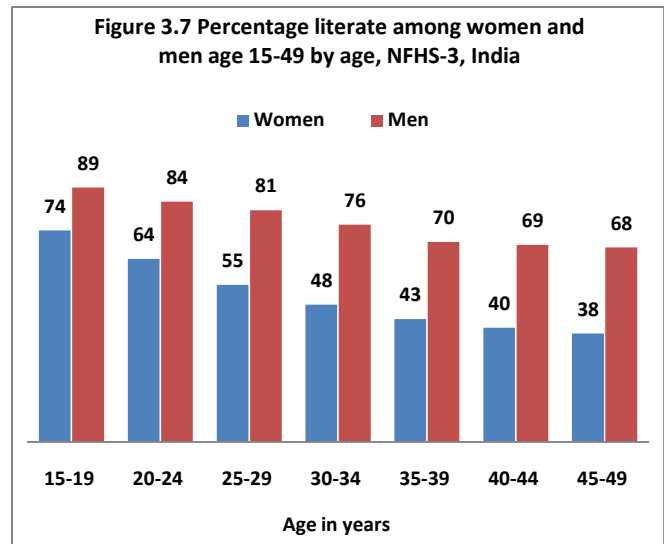
Although the gender differential in literacy has declined over time, the differential remains high even in the youngest age group: among those 15-19 years of age, the percentage of females who are literate (74%) is 15 percentage points less than the percentage of males who are literate (89%).

Table 3.2 Percentage of women and men age 15-49 who are literate by residence, NFHS-3, India

	Women	Men
Urban	75	88
Rural	46	72
Total	55	78

Table 3.2 shows that literacy is much higher in urban areas than in rural areas. Notably, the differential by residence for women is much greater than for men (29 percentage points for women vs. 16 for men) and the gender disparity in literacy is also much greater in rural than in urban areas. Nonetheless, even in urban areas, one-fourth of women are not literate.

Figure 3.8 shows great disparity in literacy by wealth, especially for women. In the lowest wealth quintile, only 19% of women are literate, compared with 47% of men. However, literacy increases sharply with wealth and the increase for women is greater than for men. Consequently, the gender differential in literacy narrows rapidly with wealth, so that in the highest wealth quintile, 90% of women are literate, compared with 97% of men.

Figure 3.8 Percentage of women and men age 15-49 literate by wealth quintile, NFHS-3, India

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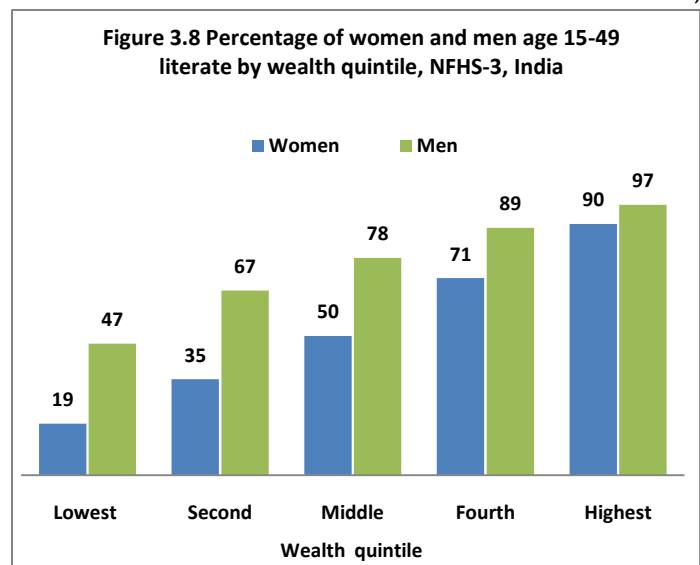
Educational Attainment among Adults: Levels and Trends

Figures 3.9 and 3.10 depict the educational attainment of women and men age 15-49 in two different ways. Figure 3.9 shows the percentage of women and men with years of education greater than the number of years specified on the x-axis. Only 59% of women and 82% of men age 15-49 years have ever been to school and only 22% of women and 35% of men have 10 or more years of schooling. While this figure clearly shows that educational attainment at each level of education is lower for women than for men, the pattern of gender differentials is easier to see in Figure 3.10 which shows the percentage of women and men with a specified number of years of education. Gender differentials in favour of men are very small at low levels of education (<5 and 5-7 completed years of education): 23% of women, compared with 27% of men who have 0-7 complete years of education. Beyond seven completed years of education,

Figure 3.9 Percentage of women and men age 15-49 by cumulative number of years of education completed, NFHS-3, India

Figure 3.10 Percentage of women and men age 15-49 with specified number of years of education completed, NFHS-3, India
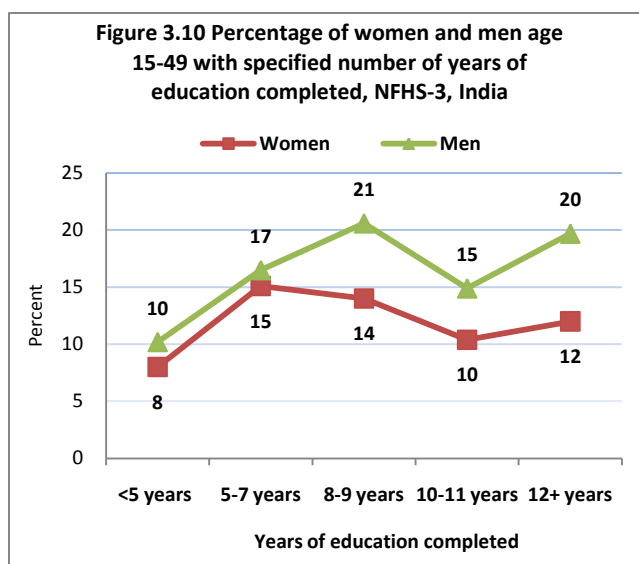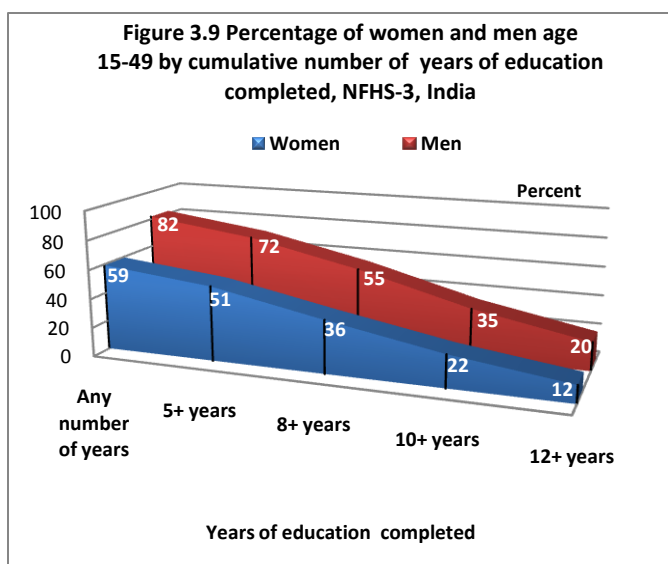
gender differentials widen dramatically and remain wide.

Although educational attainment is very low among both women and men age 15-49, it is higher among the younger age groups than among the older age groups (Figure 3.11). Among the age-group 40-49, only 14% of women and 28% of men had 10 or more years of education. By contrast, among the 20-29 year-old population, 27% of women and 39% of men have 10 or more years of education.

Despite the continuing absolute low level of educational attainment even in the 20-29 age group, the proportion who have 10 or more

Figure 3.11 Percentage of women and men age 20-49 who have completed at least 10 years of education by age, NFHS-3, India
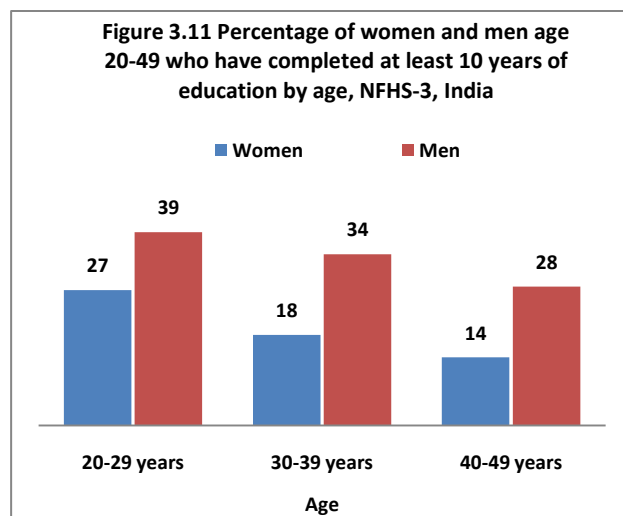
years of education has increased at a faster rate for women than for men. Specifically, the proportion of women with at least 10 years of education has nearly doubled between the youngest and the oldest age cohort; whereas, for men, it has increased by only 40%. There is also a slight decline in the gender differential in the proportions who have 10 or more years of education.

Figure 3.12 Percentage of women and men age 20-49 who have completed at least 10 years of education by wealth quintile, NFHS-3, India
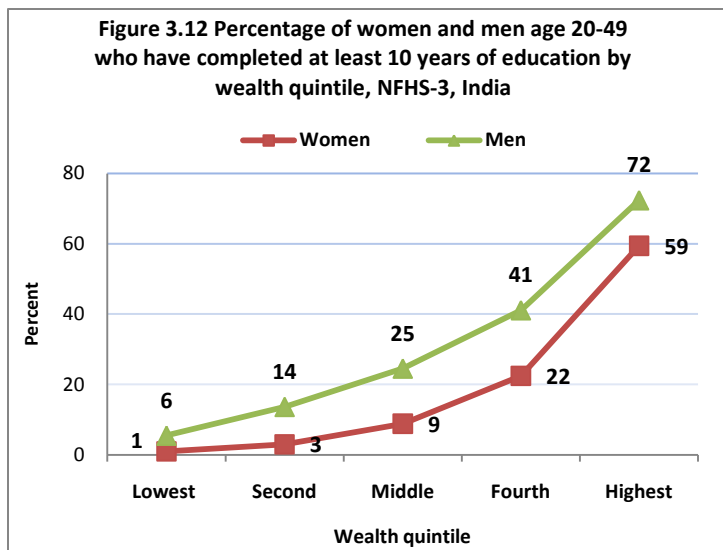
Figure 3.12 shows that educational attainment increases rapidly with household wealth for both women and men, although, at every level of wealth, women are much less likely than men to have 10 or more years of education. Further, the percentage point change with each unit increase in the wealth quintile is greater for men than for women, except between the fourth and the highest quintiles. Consequently, the gender differential in absolute terms increases from 6 percentage points in the lowest wealth quintile to 19 in the fourth wealth quintile, and then narrows to 13 in the highest wealth quintile. It is also worth noting that negligibly small proportions of women and men have 10 or more years of education in the lowest wealth quintile.

Trends in educational attainment Trends in educational attainment can be examined by looking at changes across age cohorts or at data from multiple time points collected using the same questions. Figure 3.13 shows the proportion of ever-married women age 15-49 who have 10 or more years of education in each of the three NFHS surveys. This comparison of educational attainment is restricted to ever-married women since never married women were not interviewed in NFHS-1 and NFHS-2.
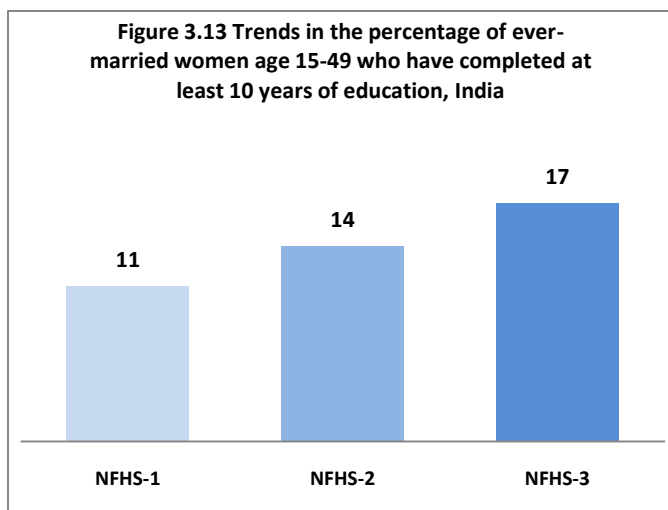
The educational attainment of a sample of ever-married women is not representative of all women since the more educated women in the younger age cohorts, particularly the 15-19 and 20-24 cohorts, are less likely to be married and, hence, will be under-represented in this sample. Nonetheless, a sample of ever-married women serves well in representing the women cur-

Figure 3.13 Trends in the percentage of ever-married women age 15-49 who have completed at least 10 years of education, India

rently bearing and rearing children and making reproductive health and nutritional decisions.

Figure 3.13 shows that educational attainment of ever-married women has increased between the three surveys. In NFHS-1, only 11% of ever-married women had 10 or more completed years of education; this proportion rose to 14% in NFHS-2 and is now at 17% in NFHS-3. Despite this increase, however, less than 1 in 5 ever-married women have completed 10 or more years of education in India.

Appendix 3A Percentage of women and men age 20-49 who have at least 10 years of education by wealth quintile, by state, NFHS-3, India

	Percentage of women 20-49 with 10+ years of education						Percentage of men 20-49 with 10+ years of education					
	Lowest	Second	Middle	Fourth	Highest	Total	Lowest	Second	Middle	Fourth	Highest	Total
North												
Delhi	0.0	0.9	3.1	11.3	68.4	53.9	0.0	8.6	18.8	28.7	77.4	60.9
Haryana	0.0	2.7	4.6	19.3	55.9	26.4	8.3	15.6	21.3	46.7	71.6	43.5
Himachal Pradesh	0.0	3.9	19.1	38.5	66.4	41.6	14.3	14.7	33.4	62.6	85.4	59.4
Jammu & Kashmir	0.0	2.9	6.5	20.9	59.6	26.1	0.0	10.9	12.6	42.6	67.6	35.9
Punjab	0.0	1.2	7.0	19.9	58.7	37.5	0.0	4.3	14.1	30.1	60.8	42.2
Rajasthan	0.2	0.7	1.5	6.3	42.3	11.3	1.0	9.3	16.8	22.4	70.4	26.4
Uttarakhand	1.8	2.6	11.9	24.6	64.5	32.8	0.0	7.0	26.7	41.1	76.7	46.1
Central												
Chhattisgarh	0.3	2.1	10.1	29.8	62.3	12.2	4.9	15.8	36.8	56.3	77.4	27.5
Madhya Pradesh	0.5	2.1	7.8	17.0	60.2	13.2	6.9	13.6	24.1	42.4	81.7	27.8
Uttar Pradesh	1.1	3.0	7.0	21.5	59.7	16.1	8.1	16.0	32.5	41.5	72.1	32.3
East												
Bihar	0.0	2.4	8.4	24.3	60.3	12.8	4.9	19.2	31.2	67.1	89.1	36.5
Jharkhand	1.0	3.7	12.3	16.9	70.6	14.3	7.4	19.9	45.1	49.7	86.1	29.5
Orissa	1.1	6.6	11.3	27.4	64.4	15.5	2.9	10.3	30.8	49.1	79.9	25.8
West Bengal	0.5	1.4	7.5	20.8	65.5	16.1	2.4	9.3	23.7	40.4	75.3	27.7
Northeast												
Arunachal Pradesh	1.5	2.4	7.1	19.9	55.2	16.7	4.3	6.8	20.0	34.9	62.8	25.0
Assam	0.8	2.9	13.8	33.3	67.1	19.7	0.4	10.8	30.0	54.2	79.9	31.2
Manipur	3.4	6.9	21.8	43.3	78.9	37.1	2.4	18.8	40.2	67.8	89.3	54.7
Meghalaya	1.5	3.5	8.0	32.4	72.1	25.4	2.4	9.5	10.2	36.3	75.8	28.1
Mizoram	0.0	2.5	3.6	17.1	52.6	28.9	0.0	3.3	9.9	18.5	55.0	31.7
Nagaland	1.5	1.4	8.0	29.6	66.1	22.7	0.3	6.7	19.7	42.3	75.1	31.4
Sikkim	0.0	0.0	1.1	12.7	52.0	24.0	0.0	2.9	5.3	25.9	61.3	31.7
Tripura	0.0	2.2	8.7	36.1	65.2	16.3	2.3	5.2	17.7	45.3	82.6	23.2
West												
Goa	1.9	4.5	12.3	26.0	68.8	47.6	3.9	15.6	14.5	38.5	67.5	47.6
Gujarat	0.6	3.7	4.2	15.1	47.8	23.1	5.9	11.0	16.3	26.9	52.5	31.1
Maharashtra	4.1	3.3	11.5	21.7	58.7	29.5	7.8	17.3	26.5	42.0	72.5	43.8
South												
Andhra Pradesh	1.3	1.8	6.0	19.4	55.4	17.4	6.4	10.4	20.8	42.4	72.9	33.4
Karnataka	1.4	3.9	12.4	27.3	64.1	24.6	6.9	14.4	24.5	40.1	78.3	36.4
Kerala	7.7	10.8	17.7	34.5	62.7	44.4	16.6	14.7	9.8	36.4	67.5	45.5
Tamil Nadu	5.3	8.4	14.4	30.3	67.9	27.9	8.9	14.8	20.1	42.3	78.1	36.8
India	**1.1**	**3.2**	**9.9**	**24.7**	**61.6**	**24.4**	**5.9**	**13.4**	**24.9**	**43.1**	**73.5**	**36.6**

Appendix 3B Percentage of male and female children attending school by type of residence, NFHS-3, selected cities, India

	Female				Male				Female to male ratio			
	6-10	11-14	15-17	6-17	6-10	11-14	15-17	6-17	6-10	11-14	15-17	6-17
Chennai												
Slum	97.6	87.2	40.4	80.5	97.5	87.8	49.0	82.0	1,000	993	826	982
Non-slum	100.0	96.6	65.3	89.4	98.7	89.2	59.4	85.2	1,013	1,084	1,100	1,049
Total	99.5	94.7	60.7	87.6	98.5	88.9	57.3	84.6	1,010	1,065	1,059	1,035
Delhi												
Slum	77.4	68.3	44.8	67.3	80.7	70.9	33.1	63.9	959	963	1,354	1,053
Non-slum	92.3	89.3	71.4	86.1	92.0	88.4	64.0	82.6	1,003	1,010	1,117	1,042
Total	88.5	84.0	65.8	81.5	89.2	84.6	56.8	78.2	993	993	1,158	1,042
Hyderabad												
Slum	86.4	81.9	51.0	75.6	88.3	74.4	55.9	75.1	978	1,101	912	1,007
Non-slum	92.0	83.6	54.9	79.0	87.3	81.7	61.4	78.7	1,053	1,023	895	1,004
Total	90.9	83.3	54.2	78.4	87.5	80.4	60.5	78.1	1,039	1,035	897	1,004
Indore												
Slum	93.0	81.5	47.7	79.0	90.5	82.5	51.2	76.9	1,027	988	932	1,027
Non-slum	90.7	87.6	53.2	81.3	91.5	85.7	52.7	79.5	991	1,022	1,009	1,022
Total	91.2	86.3	52.0	80.8	91.3	85.0	52.4	78.9	999	1,015	994	1,024
Kolkata												
Slum	79.8	65.7	36.3	62.2	77.0	73.0	43.1	65.7	1,037	900	841	947
Non-slum	87.0	89.3	58.8	79.2	89.7	82.7	62.0	78.1	970	1,080	948	1,015
Total	84.1	78.5	49.5	72.0	83.7	78.6	54.5	72.7	1,005	998	909	990
Meerut												
Slum	75.4	66.1	39.4	63.5	77.1	73.6	44.2	68.3	978	898	890	931
Non-slum	79.4	73.1	56.5	71.6	77.5	77.8	54.9	71.6	1,025	940	1,028	1,000
Total	77.4	69.6	48.1	67.6	77.3	75.7	50.0	70.0	1,002	920	961	966
Mumbai												
Slum	98.3	88.4	43.8	82.0	94.7	90.2	52.7	81.5	1,038	980	830	1,006
Non-slum	98.3	92.2	60.8	86.3	97.2	96.2	67.8	88.1	1,011	958	897	979
Total	98.3	89.9	51.1	83.7	95.6	92.6	58.8	84.1	1,028	971	868	995
Nagpur												
Slum	97.8	83.9	48.8	79.2	93.7	88.2	44.7	78.5	1,044	951	1,093	1,009
Non-slum	96.0	91.7	65.6	85.9	94.2	87.4	69.6	84.8	1,019	1,048	942	1,012
Total	96.7	88.7	58.9	83.2	94.0	87.7	60.4	82.4	1,029	1,011	974	1,010

Appendix 3C Percentage and sex ratio of women and men age 15-49 who are literate and percentage and sex ratio of women and men age 20-49 who have at least 10 years of education by type of residence, NFHS-3, selected cities, India

	Percentage literate		Women per 1,000 men literate	Percentage age 20-49 who have 10+ years of education		Women per 1,000 men who have 10+ years of education
	Women	Men		Women	Men	
Chennai						
Slum	75.7	86.2	878	23.0	31.4	732
Non-slum	86.5	93.7	923	46.9	56.3	832
Total	84.4	92.3	915	42.4	51.6	821
Delhi						
Slum	54.0	82.8	652	22.7	31.4	724
Non-slum	83.3	92.3	902	62.5	69.4	902
Total	77.9	90.3	863	55.4	61.5	901
Hyderabad						
Slum	74.5	85.3	874	44.0	54.3	811
Non-slum	82.3	87.7	939	56.3	63.3	889
Total	81.0	87.3	928	54.2	61.8	877
Indore						
Slum	77.8	92.2	844	33.4	47.5	704
Non-slum	83.2	91.6	908	51.6	62.1	831
Total	82.1	91.7	895	48.0	59.1	812
Kolkata						
Slum	66.0	81.7	809	26.7	36.4	734
Non-slum	87.2	90.5	964	51.6	56.9	907
Total	79.9	87.2	916	43.4	49.5	878
Meerut						
Slum	65.1	84.4	772	32.1	40.7	790
Non-slum	78.9	89.1	886	58.5	55.1	1,063
Total	72.8	87.0	838	47.2	48.5	974
Mumbai						
Slum	79.5	93.0	855	30.6	46.5	657
Non-slum	88.9	94.9	937	53.1	62.8	846
Total	83.6	93.8	892	40.5	53.2	761
Nagpur						
Slum	82.0	90.6	905	31.2	36.1	864
Non-slum	89.8	93.7	959	60.6	61.5	986
Total	86.9	92.6	939	50.0	52.3	955

4. MARRIAGE AND SPOUSAL AGE DIFFERENTIALS

Summary and Key Findings

- *The median age at marriage for women age 25-49 is only 16.8 years, about six years lower than the median age at marriage for men (22.7) in the same age group.*

- *In the 13 years since NFHS-1, the median age at marriage among women age 25-49 has risen by less than one year. Nonetheless, among women age 20-24, there has been a one-third decline in the same time period in the proportion married before age 15.*

- *Age at marriage for women and men increases with education and wealth. However, age at marriage increases more with education for women than it does for men, and it increases more with wealth for men than it does for women.*

- *Sixteen percent of ever-married women age 15-49 are married to men who are 10 or more years older than them.*

- *Spousal age difference decreases as age at marriage increases and this relationship is evident in all three NFHS surveys.*

NFHS-3 shows that the vast majority of Indian women and men age 15-49 are married. Only 20% of women and 36% of men in this age group have never been married. Further, divorce, separation, and desertion is relatively uncommon in India: in this age group, only 1.5% of women and 0.6% of men are currently divorced, separated, or deserted. Widowhood is the more common form of marital disruption: 3% of women age 15-49 are widows and 1% of men in this age group are widowers. Among ever-married women, only 2% have had more than one marriage; among ever-married men, by contrast, the proportion married more than once is almost three times as high, at 6%. Thus, in India, marriage is virtually universal and for most adults, particularly women, marriage takes place only once in their lifetime. Men are less likely to be currently divorced, separated, deserted, or widowed than women. This is in part because even though they marry later than women, men are more likely than women to remarry after a marital disruption.

An early age at marriage of women is an indicator of the low status of women in society; at the individual level too, an early age at marriage for a woman is related to lower empowerment and increased risk of adverse reproductive and other health consequences (Mason, 1986; International Center for Research on Women, 2007). An early age at marriage typically curtails women's access to education and cuts short the time needed to develop and mature unhampered by responsibilities of marriage and children. Young brides also tend to be among the youngest members of their husbands' families and, by virtue of their young age and relationship, are unlikely to be accorded much power or independence.

An early age at marriage also has many negative health consequences for women. For one, early ages at marriage typically lead to early childbearing. Having a child when the body is still maturing increases the risk of maternal and child mortality. Further, women married very early are typically sexually immature and inexperienced, but are often married to much older sexually experienced men. This combination of early ages at marriage and large spousal age differences can put women at a higher risk of sexually transmitted infections including HIV (Bruce and Clark, 2004). Specifically, young women married early may be subject to a higher risk of infection because of prior sexual experiences of their older partners combined with their inability to negotiate safe sex due to their own young age and immaturity and, often, the large spousal age difference. This chapter presents the levels of and trends in the age at marriage for women and men and in spousal age difference.

Age at Marriage

Levels and trends in age at marriage The median age at first marriage for women in India has been very slow to increase over time from its low level. For women age 25-49, the median age at marriage was 16.1 in NFHS-1; in NFHS-2 it was 16.4 and in NFHS-3 it is 16.8. Thus, in over a decade, the median age at marriage has risen by less than one year. In NFHS-3, the

median age at marriage for men age 25-49 is 22.7 years, almost six years higher than for women. However, the median ages at marriage for women and men and the average age difference mask great variation in the age pattern of marriage for both sexes and the decline in marriage at very early ages. Some of this variation is shown in Table 4.1.

Marriage before age 15 continues to be common among women in India: even in the age-group 25-29, one in four women were married before age 15. This proportion has declined from its high of 33% among women age 40-49, but still continues to be significant. Men, however, are less likely to be married at young ages. For example, only 13% of men age 25-29 are married before they are age 18, compared with more than half of women in the same age group. Further, most women 25 and older—at least 9 out of 10—are already married in India by age 25,

Table 4.1 Percentage of women and men age 25-49 first married by specific exact ages, according to current age, NFHS-3, India

		Married by exact age:			
		15	18	21	25
Age					
25-29	Female	25.4	55.4	78.6	91.3
	Male	4.1	13.4	32.3	58.5
30-39	Female	29.7	62.3	83.1	93.5
	Male	6.2	18.3	39.9	64.9
40-49	Female	32.6	64.4	85.3	94.6
	Male	7.4	19.3	42.5	67.7
Total	**Female**	**29.4**	**61.1**	**82.5**	**93.2**
	Male	**6.1**	**17.4**	**38.9**	**64.3**

irrespective of their age cohort. By contrast, only about 6 out of 10 men are married by exact age 25. Further, the proportion of men married by age 25 has declined by 14% between the 40-49 and 25-29 age cohorts, whereas, the corresponding decline for women is only 3%.

Figure 4.1 focuses attention on an even younger age group—women age 20-24—to examine the trends in the age at marriage over time. NFHS-3 data shows that even in this age group, 18% of women are married before age 15 and 47% are married before age 18. However, in NFHS-1, 26% of women in this age group had been married before age 15. Thus, in the 13-year period between NFHS-1 and NFHS-3, marriage before age 15 in the 20-24 age group has declined by almost one-third. Much smaller declines are observed in marriage before age 18 and before age 20, however. It is notable that there is virtually no change in the

Figure 4.1 Trends in the percentage of women age 20-24 years married before exact age 15, 18, and 20 years, India

percentage of women, age 20-24 who were married between the ages of 15 and 20: 45% in NFHS-1, 44% in NFHS-2, and 46% in NFHS-3.
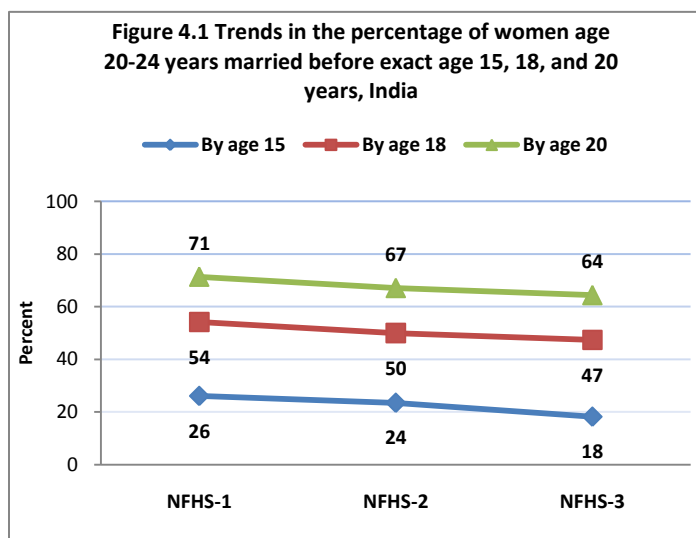
Age at marriage by education and wealth Table 4.2 shows that the percentage not married among women and men age 15-49 generally increases with the number of years of education. Further, as expected, the percentages married before age 15 and age 18 tend to decrease

sharply with the number of years of education. Among women with 12 or more years of education, only 8% have been married before age 18, compared with 76% of women with no education. Notably, even among women with only 5-9 completed years of education, the proportion married before age 18 is much less, at 43%, than among women with no education. However, age at marriage for women continues to be much earlier than for men at every level of education. Even among the most educated women, i.e., those with 12 or more completed years of education, 51% are married before age 25, compared with only 28% of men.

Table 4.2 Percent distribution of women and men age 15-49 by age at first marriage, according to educational attainment and wealth quintile, NFHS-3, India

	Age at first marriage: Women							Age at first marriage: Men						
	<15	15-17	18-20	21-24	25+	Not married	Total percent	<15	15-17	18-20	21-24	25+	Not married	Total percent
Education														
None	41.6	34.8	14.7	2.6	0.7	5.6	100.0	8.9	16.2	29.3	20.2	10.7	14.7	100.0
0-4 years	26.8	35.0	18.0	4.4	1.5	14.3	100.0	5.4	11.5	23.9	24.3	12.9	22.1	100.0
5-9 years	14.3	28.3	20.9	7.4	1.8	27.3	100.0	4.7	8.6	16.0	17.7	12.9	40.2	100.0
10-11 years	4.7	17.8	23.5	12.4	4.0	37.7	100.0	2.5	5.2	9.4	15.3	18.1	49.5	100.0
12+ years	1.6	6.5	19.0	23.5	11.3	38.1	100.0	1.9	4.0	7.6	14.9	28.8	42.9	100.0
Wealth quintile														
Lowest	38.5	33.3	12.9	2.1	0.7	12.5	100.0	8.2	15.6	26.1	17.0	8.8	24.4	100.0
Second	33.8	32.7	14.2	3.2	0.9	15.3	100.0	7.1	12.2	21.6	18.8	10.2	30.2	100.0
Middle	26.1	30.3	17.7	5.0	1.5	19.6	100.0	5.3	9.6	17.9	19.0	12.8	35.5	100.0
Fourth	17.2	27.2	21.9	8.4	2.7	22.6	100.0	3.1	6.6	13.6	18.6	17.8	40.2	100.0
Highest	8.3	17.7	22.7	17.5	6.9	26.9	100.0	1.1	3.1	7.8	16.3	28.2	43.4	100.0
Total	**23.9**	**27.8**	**18.2**	**7.7**	**2.7**	**19.8**	**100.0**	**4.6**	**8.8**	**16.6**	**17.9**	**16.4**	**35.7**	**100.0**

As for education, age at marriage varies greatly with household wealth. However, before examining the effect of wealth on age at marriage, it is important to note that for this comparison, what would be most valid is information on wealth for married women and men at the time they were married. This information is not available in NFHS-3, which only has data on the wealth status of households that women and men are currently in. Thus, for those already married, the information is on wealth of their marital families. This may be less of a problem for men who often live with their natal families even after marriage. Even for women however, if it can be justifiably assumed that women largely marry into families that are similar in economic circumstances to their own natal families, then the variation by wealth will not be too misleading. Nonetheless, the discussion of the relationship of age at marriage with wealth needs to be considered keeping this caveat in mind.

Table 4.2 shows that in the lowest wealth quintile, 72% of women and 24% of men are married before age 18; by contrast, 26% of women and 4% of men are married before age 18 in the highest wealth quintile. Notably, age at marriage varies less by wealth for women than for men. For example, the proportion of women married before age 25 is 87% for women in the lowest wealth quintile, only about one-third higher than for women in the highest wealth quintile (66%). Among men, by contrast, the proportion married before age 25 in the lowest wealth quintile is 67%, more than twice those married before age 25 in the highest wealth quintile (28%).

**Percentage of women age 20-24 who were married
by exact age 18 years, NFHS-3, India**

Jammu & Kashmir
Himachal Pradesh
Punjab
Uttarakhand
Haryana
Delhi
Arunachal Pradesh
Rajasthan
Uttar Pradesh
Sikkim
Assam Nagaland
Bihar
Meghalaya
Manipur
Tripura
Mizoram
Jharkhand
West Bengal
Gujarat
Madhya Pradesh
Chhattisgarh
Orissa
Maharashtra
Andhra Pradesh
Goa
Karnataka
Tamil Nadu
Kerala

<20%
20-29%
30-39%
40-49%
50-59%
60% or more

Age at marriage by state

The percentage of women married before age 18 ranges in India from 12% in Himachal Pradesh and Goa to 69% in Bihar. In all, there are only five states—Himachal Pradesh and Jammu and Kashmir in the north, Goa and Kerala in the south, and Manipur in the Northeast—where less than 20% of women are married before age 18 and eight states where more than half of women are married before age 18, including Jharkhand, Rajasthan, and Bihar where more than 60% are married before their 18th birthday.

Net effects of education and wealth on age at marriage

Wealth, education, and residence are all highly correlated with each other, and their effects on age at marriage could be direct or indirect. Hence, ordinary least squares regressions were run to see if these variables have an independent association with age at first marriage separately for ever-married women and men. The dependent variable in each case is the age at marriage in years. Table 4.3 gives the coefficient estimates for each of these variables. A positive coefficient implies a positive association. The coefficient for any variable can be interpreted as the average increase in age at marriage if a woman/man is in the specified category, compared with a woman/man in the reference category.

The regression analysis shows that for both women and men, age at marriage is directly and positively associated with education and wealth, even when residence is being controlled for. Notably, however, the coefficients for each level of education for women are much higher than they are for men, suggesting that age at marriage increases more with education for women than it does for men. Con-

Table 4.3 Linear regression results for age at first marriage for women and men age 15-49 regressed on education, wealth quintile, and residence, NFHS-3, India

	Women β	Men β
Education		
Ref. cat.: None		
0-4 years	0.98***	0.76***
5-7 years	1.13***	0.21*
8-9 years	2.44***	1.03***
10-11 years	4.27***	1.73***
12+ years	6.35***	3.21***
Wealth quintile		
Ref. cat.: Lowest		
Second	0.05	0.28***
Middle	0.40***	0.82***
Fourth	0.73***	1.65***
Highest	1.08***	2.91***
Residence		
Ref. cat.: Rural		
Urban	0.50***	1.00***

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

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trolling for wealth and residence, women with 12 or more years of education are, on average, married 6.35 years later than women with no education. For men, this coefficient is half the coefficient for women, at 3.21 years.

By contrast, the regression coefficient for each wealth quintile is lower for women than for men. This generally implies that controlling for education and residence, men's age at marriage increases more with wealth than does women's age at marriage. This effect of wealth on age at marriage needs to be interpreted keeping in mind the caveat noted above.

Even residence has a significant net positive association with age at marriage. On average, men in urban areas have an age at marriage which is one year higher than the age at marriage for men in rural areas; this differential for women is only half a year, however.

Spousal Age Difference

In NFHS-3, spousal age difference can only be estimated for women married once, since information on the age of the husband is available only for the most current husband.

Table 4.4 Trends in spousal age difference by age at first marriage for ever-married women age 15-49 married only once, India

		Husband younger	Husband older by:				Total percent
			0-4 years	5-9 years	10-14 years	15+ years	
Age at first marriage							
<15 years	NFHS-3	1.7	36.7	42.5	14.5	4.6	100.0
	NFHS-2	1.8	27.4	44.7	18.7	7.4	100.0
	NFHS-1	1.1	28.3	44.3	18.5	7.8	100.0
15-17 years	NFHS-3	1.7	40.2	41.7	12.8	3.7	100.0
	NFHS-2	1.9	35.8	43.7	14.0	4.6	100.0
	NFHS-1	1.6	38.5	42.5	13.0	4.4	100.0
18-20 years	NFHS-3	2.2	44.0	39.5	11.6	2.7	100.0
	NFHS-2	2.4	41.6	41.4	11.2	3.5	100.0
	NFHS-1	2.2	44.4	39.6	10.5	3.3	100.0
21-24 years	NFHS-3	3.1	49.8	36.2	8.9	1.9	100.0
	NFHS-2	3.2	49.5	36.7	8.2	2.5	100.0
	NFHS-1	3.0	49.7	35.5	8.2	3.7	100.0
25+ years	NFHS-3	6.3	54.6	29.9	6.5	2.6	100.0
	NFHS-2	4.6	53.0	31.5	8.5	2.4	100.0
	NFHS-1	5.6	49.5	29.5	9.1	6.3	100.0
Total	NFHS-3	2.1	41.4	40.5	12.4	3.5	100.0
	NFHS-2	2.2	37.1	42.4	13.7	4.7	100.0
	NFHS-1	1.8	38.7	41.3	13.2	4.9	100.0

Note: Percentages may not add to 100.0 due to rounding

Table 4.4 shows that in NFHS-3, 94% of ever-married women had a husband who is 0-14 years older than them, including 12% that are married to men who are 10-14 years older than them. Only 4% had husbands who are 15 or more years older and 2% had husbands who are

younger than them. Examining trends in spousal age difference over time shows that there is remarkably little change in the spousal age difference across the three NFHS surveys.

Spousal age differences are of particular concern when women are married early. Hence, Table 4.4 also shows the levels and trends in spousal age differences by age at first marriage.

Among ever-married women, the proportion married to men 10 or more years older than them is higher, the lower the age at marriage, varying from 19% among women married at ages below 15 years and 17% among women married at age 15-17, to 9% among women married at age 25 or older. Thus, the earlier the age at marriage, the more likely women are to be married to men who are at least 10 years older than them.

Figure 4.2 Trends in the percentage of women age 15-49 whose husbands are at least 10 years older than them by their age at first marriage, India
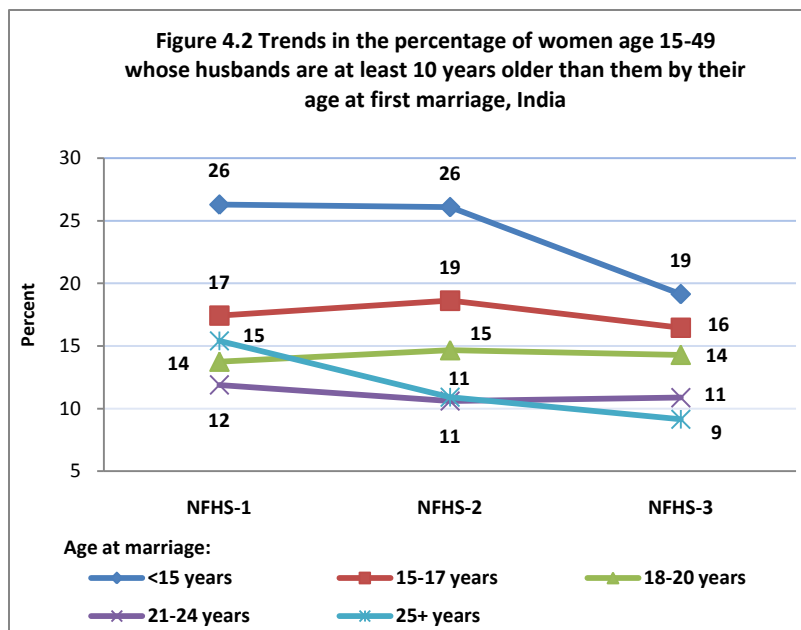
Trends in spousal age difference of 10 or more years Figure 4.2 shows trends in the percentage of women married to men at least 10 years older than them by age at marriage.

In NFHS-2 and NFHS-3, the higher the age at marriage, the lower the percentage of women married to men 10 or more years older than them. This is also true for ages at marriage below 25 years in NFHS-1. But, women married at age 25 or later in NFHS-1 were much more likely than women married at age 18-24 to have a husband 10 or more years older than them.

Figure 4.2 also shows that there has been virtually no change in the proportions married to men more than 10 years older than them among women married at ages 15 to 24. However, the proportion married to men 10 or more years older among women married at ages below 15 years fell from 26% in NFHS-1 and NFHS-2, to 19% in NFHS-3; this proportion also fell for women married at ages 25 or older from 15% in NFHS-1 to 11% in NFHS-2 to 9% in NFHS-3. Thus, a substantial change over time in large spousal age differences is observed only among women married at very young ages and at relatively older ages.

Net determinants of spousal age difference In order to examine whether age at marriage has a direct association with spousal age difference and whether the strength or nature of the association has changed over time, three ordinary least squares regressions were run for age difference between spouses, one each for data from the three NFHS surveys. The dependent

variable in each regression is the difference in years between the husband's and the wife's age. The regressions control for education and residence. The regression coefficients are shown in Table 4.5. A positive coefficient implies a positive association and a negative one, a negative association.

Table 4.5 Linear regression results of spousal age difference for ever-married women age 15-49 married only once regressed on age at first marriage, education, and residence, NFHS-1, NFHS-2 and NFHS-3, India

	NFHS-1 β	NFHS-2 β	NFHS-3 β
Age at marriage _Ref. cat.: <15_			
15-17	-1.30***	-0.94***	-0.49***
18-20	-1.98***	-1.59***	-1.09***
21-24	-2.50***	-2.25***	-1.83***
25+	-2.83***	-2.64***	-2.65***
Education _Ref. cat.: None_			
0-4 years	0.74***	0.33***	0.62***
5-9 years	0.30***	0.11*	0.29***
10-11 years	0.14*	0.06	0.38***
12+ years	-0.21**	-0.21**	0.07
Residence _Ref. cat.: Rural_			
Urban	0.31***	0.19***	0.26***

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

The negative regression coefficients for age at marriage show that the later the age at marriage, the lower the spousal age difference. For example, in NFHS-3, on average, the spousal age difference is 2.65 years lower for women married at age 25 or higher, compared with women married before age 15.

A comparison of the results for data from the three surveys shows that the relationship of spousal age difference and age at marriage is significant and negative in all three surveys, but has tended to weaken somewhat over time. For example, the spousal age difference for women married at age 18-20 was on average 1.98 years less in NFHS-1, compared with women married at ages less than 15. In NFHS-2, this differential had fallen to 1.59 and then it fell further to 1.09 in NFHS-3.

In all three surveys, low levels of education are associated with a higher spousal age difference. Women with 12 or more years of education had a spousal age difference which was 0.21 years less than for women with no education in both NFHS-1 and NFHS-2. In NFHS-3, by contrast, women in the highest educational category are no different from those with no education in terms of spousal age difference. Finally, spousal age differences controlling for education and age at marriage, are higher, on average, in urban than in rural areas.

Spousal age difference by state The proportion of women married to men at least 10 years older than them ranges from 7% in Delhi to 35% in Assam. Spousal age differences are lower in most of the central and northern parts of India and higher in the south and east of the country. Of the seven states where less than 10% of women are married to men at least 10 years older than them, all but Gujarat are in the north of the country. Notably, there is no northern or central state where the proportion of women who are at least 10 years younger than their husbands is greater than 17%.

Percentage of currently married women age 15-49 married only once who have husbands who are at least 10 years older than them, NFHS-3, India

<10%
10-19%
20-24%
25% or more
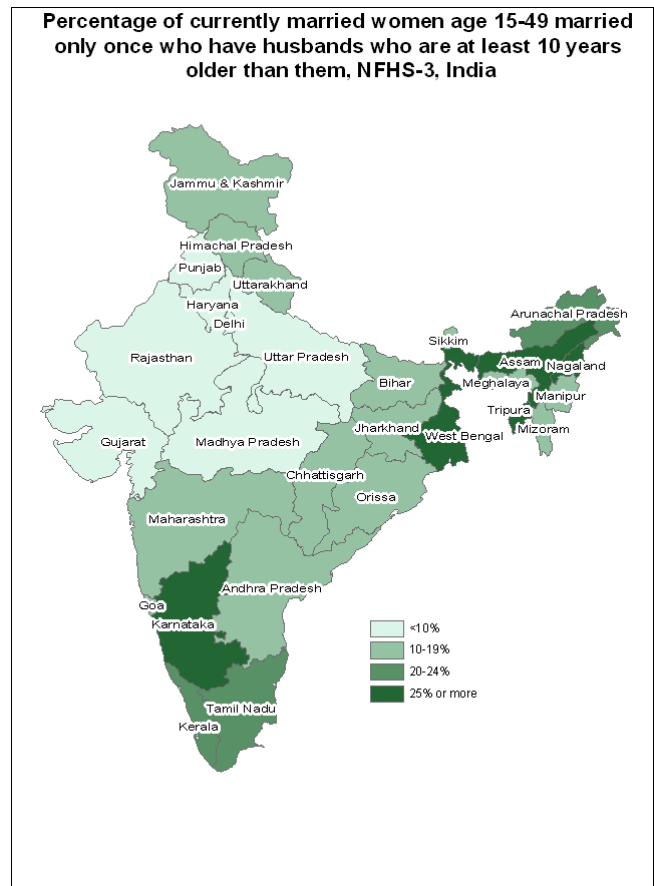
Appendix 4A Trends in the percentage of women age 20-24 years married by exact age 18 and percentage of currently married women married only once who are married to men at least 10 years older than them, by state, India

	Percentage of women married by exact age 18 among women age 20-24 years			Percentage of currently married women married to men at least 10 years older		
	NFHS-1	NFHS-2	NFHS-3	NFHS-1	NFHS-2	NFHS-3
North						
Delhi	35.8	32.3	21.6	9.1	6.4	6.8
Haryana	59.2	48.4	41.3	13.0	10.7	7.6
Himachal Pradesh	30.1	16.2	11.6	17.2	13.6	10.6
Jammu & Kashmir	31.9	42.6	13.6	17.8	17.4	13.3
Punjab	22.1	19.8	20.2	10.6	8.8	7.5
Rajasthan	69.6	68.7	63.5	10.4	8.8	8.5
Uttarakhand	na	30.2	22.2	na	11.9	10.6
Central						
Chhattisgarh	na	76.1	53.0	na	17.9	11.5
Madhya Pradesh*	72.6	73.0	56.7	11.4	14.9	8.2
Uttar Pradesh*	60.8	66.9	57.8	9.7	11.4	8.9
East						
Bihar*	67.2	67.3	68.9	12.0	18.2	13.5
Jharkhand	na	66.0	62.8	na	12.2	16.6
Orissa	62.7	56.6	38.4	21.1	24.1	19.6
West Bengal	68.9	57.7	53.9	31.5	29.2	27.3
Northeast						
Arunachal Pradesh	57.1	42.9	40.9	27.7	22.5	24.1
Assam	68.1	59.0	39.1	41.3	37.4	34.7
Manipur	34.9	26.8	13.1	16.6	15.3	14.9
Meghalaya	43.0	47.6	26.3	20.4	22.0	18.4
Mizoram	28.1	21.9	21.5	16.1	16.6	15.9
Nagaland	26.8	42.6	22.4	26.6	26.0	25.8
Sikkim	na	36.6	30.7	na	21.4	17.0
Tripura	62.2	59.2	43.1	33.6	33.8	29.5
West						
Goa	24.5	30.7	12.2	19.0	16.0	16.3
Gujarat	36.7	48.7	36.9	7.3	7.4	6.8
Maharashtra	65.4	59.6	38.9	22.1	19.2	19.7
South						
Andhra Pradesh	77.6	73.2	55.4	24.1	21.4	18.0
Karnataka	67.0	59.7	42.0	31.6	31.9	28.1
Kerala	37.9	30.2	15.6	23.0	21.0	21.8
Tamil Nadu	49.0	37.1	22.2	24.8	21.0	21.9
India	56.8	55.6	39.5	17.9	17.9	16.4

* For NFHS-1, Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh, and Uttar Pradesh includes Uttarakhand.

na: Not available for NFHS-1

Appendix 4B Percentage of women age 15-49 years married before exact age 18 and men age 15-49 years married before exact age 21 by type of residence, NFHS-3, selected cities, India

	Percentage of women married by exact age 18	Percentage of men married by exact age 21		Percentage of women married by exact age 18	Percentage of men married by exact age 21
Chennai			**Kolkata**		
Slum	39.1	10.9	Slum	44.1	16.3
Non-slum	27.7	7.2	Non-slum	27.8	11.1
Total	29.8	7.9	Total	33.1	13.0
Delhi			**Meerut**		
Slum	55.9	35.9	Slum	46.2	31.6
Non-slum	31.0	19.4	Non-slum	27.2	20.4
Total	35.3	22.7	Total	35.3	25.5
Hyderabad			**Mumbai**		
Slum	48.9	15.9	Slum	40.1	24.8
Non-slum	39.5	13.3	Non-slum	23.4	12.3
Total	41.1	13.8	Total	32.7	19.7
Indore			**Nagpur**		
Slum	48.0	22.4	Slum	42.2	16.5
Non-slum	39.4	21.4	Non-slum	24.8	9.9
Total	41.1	21.6	Total	31.0	12.3

5. EMPLOYMENT

Summary and Key Findings

- *Women age 15-49 are about half as likely as men in the same age group to be employed: 43% vs. 87%.*

- *Controlling for wealth and education, women in rural areas are more likely than women in urban areas to be employed; but the reverse is true for men.*

- *Although uneducated women are more likely to be employed than educated women, some of this effect is due to the positive association of no education with poverty. Once wealth is controlled for, women who have 12 or more years of education have higher odds of being employed than women with no education. For men, with or without controls for wealth, education is negatively associated with employment.*

- *The relationship of employment and wealth for women suggests that, for many women, employment is largely a result of economic necessity.*

- *Even with controls for education, age, and wealth, marriage is negatively associated with a woman's likelihood of being employed and is positively associated with a man's likelihood of being employed.*

- *Most employed women work for someone else, away from home, and continuously throughout the year; about one in three women do not receive monetary compensation for their work or receive at least part of their payment in kind.*

- *Most employed women work in agriculture; only 7% work in professional, technical, or managerial occupations.*

In addition to education, employment can also be an important source of empowerment for women. Employment, particularly for cash and in the formal sector, can empower women by providing financial independence, alternative sources of social identity, and exposure to power structures independent of kin networks (Dixon-Mueller, 1993). Nonetheless, early ages at marriage and child bearing and limited access to education limit women's ability to participate in the labour market, particularly in the formal sectors. By contrast, male gender roles are compatible with employment and men are typically expected to be employed and be breadwinners for their families. Not surprisingly, men dominate most formal labour markets.

This chapter describes women's and men's labour force participation in order to highlight gender inequalities in access to employment and types of employment. NFHS-3 found that, among all women age 15-49, 43% had been employed at any time in the past 12 months with the majority of them being currently employed. By contrast, 87% of men in the same age group have been employed in the past 12 months. In the rest of this chapter and report, men and women referred to as 'employed' are those who have been employed at any time in the past 12 months.

Women's and Men's Employment Status

Employment according to marital status Since women are much more likely to be constrained by marriage and child bearing and rearing than men, Table 5.1 provides information on women's and men's employment within each marital category.

Among women, employment varies greatly by marital status. Women who are divorced, separated, deserted, or widowed are much more likely to be employed than currently married women; never married women are least likely to be employed. For men, employment varies little between those who are currently married and those who were formerly married; however, never married men are, as expected, less likely than ever-married men to be employed. Nonetheless, the proportion of never married men who are employed is almost twice as high, at 66%, as the proportion of never married women who are employed, at 37%.

Employment by residence Women's employment is likely to be affected by residence, since agricultural work, which accounts for most employment in rural areas, is typically more compatible with women's other responsibilities as well as with low levels of education and skill development. In fact, NFHS-3 finds that women are about two-thirds more likely to be employed in rural than in urban areas. Table 5.1 shows that employment is higher in rural than in urban areas in every marital category, although the differential by residence is greatest, at 23 percentage points, among currently married and never married women. Among men, the differential by residence in employment is negligible across marital categories, with the highest variation, at only 4 percentage points, being among the never married.

Table 5.1 Percentage of women and men age 15-49 employed in the past 12 months by marital status, according to background characteristics, NFHS-3, India

	Women					Men				
	Married	Divorced/ separated/ deserted	Widowed	Never married	Total	Married	Divorced/ separated/ deserted	Widowed	Never married	Total
Residence										
Urban	27.1	66.4	63.4	29.0	29.3	98.8	94.8	97.7	63.9	84.0
Rural	49.8	71.5	70.9	42.1	49.4	98.8	94.2	98.5	68.1	88.7
Age										
15-19	31.4	60.4	56.8	34.0	33.4	87.6	100.0	0.0	49.3	50.4
20-29	37.0	64.4	68.6	42.2	38.5	98.5	98.8	100.0	82.0	90.3
30-39	48.8	76.0	75.8	58.7	50.6	99.3	93.8	98.7	95.6	99.0
40-49	47.7	70.0	64.0	58.3	49.7	98.8	91.2	97.7	85.3	98.5
Education										
None	55.4	77.5	75.2	58.6	57.0	99.2	94.2	98.7	95.5	98.6
0-4 years	45.7	68.6	71.5	55.7	48.8	99.2	88.2	97.5	92.6	97.6
5-9 years	30.9	61.9	51.8	37.3	33.6	99.0	96.6	97.4	70.4	87.2
10-11 years	21.5	44.1	47.1	22.3	22.3	99.1	99.8	100.0	50.2	74.7
12+ years	29.8	60.4	67.8	31.3	31.0	97.5	92.8	100.0	56.3	79.7
Wealth quintile										
Lowest	61.5	83.8	82.3	58.4	62.4	99.1	89.1	99.9	78.3	93.8
Second	53.8	70.7	76.2	50.6	54.4	98.9	93.9	96.5	74.5	91.2
Middle	47.0	71.8	69.8	42.2	47.3	98.8	96.6	98.3	70.4	88.5
Fourth	32.7	60.9	60.9	30.8	33.5	98.8	96.7	97.3	67.1	85.9
Highest	21.5	52.1	44.1	22.4	22.5	98.6	99.5	99.4	53.2	78.8
Total	42.8	69.7	68.6	36.8	42.8	98.8	94.4	98.3	66.3	87.0

Employment by age Among women, employment peaks in the age-group 30-39 years in each marital category and is highest, at 76%, in this age group for women who have had a marital disruption. Notably, the majority of never married women age 30 and over are employed. Among men there is very little variation in employment by age beyond the age-group 15-19, and even this variation is mainly due to the variation in employment among the never married.

Employment by education Women who have no education are much more likely to be employed than women with education, irrespective of education level. However, it is notable that employment, after first declining with years of education, increases in every marital category for women with the highest level of education (12+ years). This suggests that while low levels of education do little to enable women's employment, higher levels contribute to women's increased labour force participation. By contrast, most ever-married men are employed irrespective of education and marital status. Even among the never married, virtually all men with no or early primary education are employed. However, the limited data on never married men with higher levels of education suggests that employment is much less common in these groups, perhaps because, at these young ages, many men are still engaged in the process of acquiring education.

Employment by wealth Employment declines sharply by wealth for women, irrespective of marital status. For example, among currently married women, the percentage employed

declines from 62% for women in the lowest wealth quintile to 22% for women in the highest wealth quintile. Employment also declines by wealth for men, but only from 94% for those in the lowest wealth quintile to 79% for those in the highest wealth quintile. Among ever-married men, virtually all men are employed in most wealth and marital categories. For never married men, the proportion employed falls from 78% in the lowest wealth quintile to 53% in the highest wealth quintile. The relationship of employment and wealth for women suggests that women's employment continues to be linked closely to economic necessity, rather than being an expression of choice and self-fulfillment.

Net determinants of employment Since women's employment varies by several different variables that are also related to each other (for example, education and wealth and age and marital status), two logistic regressions, one for women and one for men, were run to evaluate whether these variables have a direct net effect on employment. The dependent variable in each case was employment at any time in the past 12 months, with women/men coded as 1 if employed and 0 if not employed.

Table 5.2 shows the adjusted odds ratios (OR) for women's and men's employment for the different explanatory variables of interest. Each odds ratio gives the increase (OR>1.00) or decrease (OR<1.00) in the odds of employment occurring for a given value of the explanatory variable as compared with the reference category. For example, in the regression for women, an odds ratio of 1.23 for the category 12+ years of education implies that the odds of women who have 12+ years of education being employed are 23% higher than for women with no education (the reference category, OR=1.00). The conclusions from Table 5.2 regarding each explanatory variable are:

Age: Among both women and men, the odds of employment are lower for the younger two age groups, compared with the oldest age group. For men only, the odds of employment for men age 30-39 are two and a half times as high as for men age 40-49.

Table 5.2 Logistic regression results for women's and men's employment in the past 12 months, NFHS-3, India: Odds ratios (OR)

	Women OR	Men OR
Age		
15-19	0.36***	0.07***
20-29	0.60***	0.72***
30-39	1.03	2.54***
40-49 *(Ref. cat.)*	1.00	1.00
Education		
None (Ref. cat)	1.00	1.00
0-4 years	0.87***	0.96
5-9 years	0.59***	0.21***
10-11 years	0.61***	0.08***
12+ years	1.23***	0.06***
Wealth quintile		
Lowest	4.70***	2.95***
Second	3.62***	2.55***
Middle	2.91***	2.03***
Fourth	1.81***	1.63***
Highest *(Ref. cat.)*	1.00	1.00
Residence		
Rural *(Ref.cat.)*	1.00	1.00
Urban	0.74***	1.26***
Marital status		
Never married *(Ref. cat.)*	1.00	1.00
Currently married	0.52***	8.17***
Widowed	1.21***	2.96**
Divorced/sep./des.	1.57***	1.03

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

Education: Employment among women with less than 12 completed years of education is significantly lower than among uneducated women; however, controlling for wealth, the odds of women with 12 or more years of education being employed are 23% higher than for women

with no education. For men, however, the odds of employment decline sharply with education.

Wealth: For both women and men, employment declines with wealth quintile; however, the decline is much sharper for women than for men.

Residence: Compared with women living in rural areas, the odds of being employed are lower for women in urban areas; for men, however, the odds of being employed are higher if they live in urban areas than if they live in rural areas.

Marital status: The odds of employment are lower for currently married women, compared with never married women. By contrast, the odds that currently married men will be employed are much higher than the odds that never married men will be employed. Thus, even when education, age, and wealth are being controlled for, marriage is associated with a significantly lower likelihood of women being employed and continues to have a substantially positive association with men's likelihood of being employed.
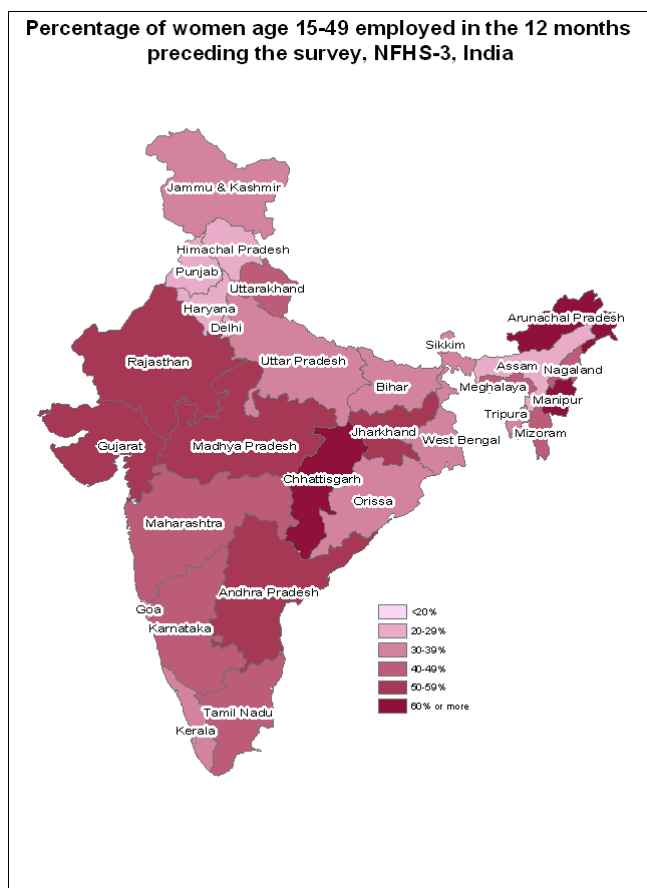
This analysis shows that age, education, residence, and marital status do not have the same relationship with the likelihood of women's employment and the likelihood of men's employment. Wealth is the only variable considered that has a similar relationship with employment for both women and men.

Women's employment by state The proportion of women age 15-49 who have been employed at any time in the 12 months preceding NFHS-3, ranges from a low of 23% in Delhi, 25% in Punjab, and 28% in Haryana, to a high of 64% in Manipur, 69% in Chhattisgarh, and 73% in Arunachal Pradesh. With a few exceptions, women's employment is lower in the northern and eastern states than in the central and southern states. Notably, Kerala, despite a very high level of female literacy, has much lower levels of women's employment than its neighbours in the south.

Percentage of women age 15-49 employed in the 12 months preceding the survey, NFHS-3, India

Women's Employment by Type of Employment

Currently married women are more likely to be working for other family members than women who are not currently married but have been married (Table 5.3). Never married women are about equally likely to be working for a family member as for someone else. Few women are self-employed in India, irrespective of marital status. The vast majority of employed women work away from home.

Table 5.3   Percentage of employed women by type of employment, according to marital status, NFHS-3, India

| | Marital status | | | | |
	Married	Divorced/ separated/ deserted	Widowed	Never married	Total
For whom work is done					
Works for a family member	46.8	26.4	31.9	40.5	44.4
Works for someone else	38.7	59.8	50.9	43.6	40.7
Self-employed	14.5	13.9	16.9	15.8	14.8
Where work is done					
Home	19.7	17.1	16.7	27.5	20.8
Away from home	80.2	82.9	83.0	72.3	79.0
Continuity of work					
Work throughout the year	58.5	72.4	70.1	58.5	59.5
Work seasonally/part of the year	37.0	24.8	26.5	32.5	35.4
Work only once in a while	4.4	2.8	3.2	8.9	5.1
Type of payment received					
Cash only	51.0	77.5	68.9	62.6	54.6
Cash and in kind	13.2	11.9	15.7	7.4	12.3
In kind only	11.7	3.1	5.8	8.6	10.6
Not paid	24.1	7.5	9.5	21.2	22.4
Total	100	100	100	100	100

Note: Percentages may not add to 100 due to rounding and missing values.

For most women who work, employment is not intermittent but continuous and throughout the year. Only about one-third of women who report being employed at any time in the past 12 months say that they are seasonally employed or that they work only part of the year.

While the majority of employed women earn cash for the work they do, about one in ten are paid only in kind and more than two in ten receive no payment. Overall, almost one in three employed women in the age-group 15-49 do not receive any payment for the work they do or receive payment only in kind. The proportion receiving no payment for their work is highest for currently married women, followed by never married women.

Women's Occupational Distribution

In keeping with the predominantly rural nature of the Indian economy and the low average educational level of women, most women who work are employed in agriculture. There is, however, great variation by marital status in the proportions of employed women age 15-49 employed in agriculture: 64% of currently married employed women work in agriculture,

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compared with 41% of divorced, separated, and deserted employed women and 44% of never married employed women.

The proportion of employed women working in professional, technical, or managerial occupations is highest, at 12%, for never married women and is about 5% for all categories of ever-married women. The second highest occupational category for women is skilled and unskilled labour, which accounts for 20% of currently married women's employment and 31% of never-married women's employment.

Table 5.4 Occupational distribution of employed women by marital status, NFHS-3, India

| | Marital status | | | | |
	Married	Divorced/ separated/ deserted	Widowed	Never married	Total
Professional/technical/ managerial	5.3	4.7	4.5	12.2	6.5
Clerical	1.4	2.3	2.4	3.5	1.8
Sales	3.7	5.4	5.2	3.2	3.7
Services	6.3	17.8	14.5	5.4	6.8
Skilled and unskilled labour	19.7	29.0	25.2	30.8	22.1
Agriculture	63.5	40.7	48.0	44.3	58.8
Total	100	100	100	100	100

Note: Percentages may not add to 100 due to rounding and missing values.

Trends in Employment for Ever-Married Women

There has been a slow but steady increase in ever-married women's employment over time from NFHS-1 to NFHS-3 (Figure 5.1).

Figure 5.1 Trends in the percentage of ever-married women age 15-49 who have been employed in the 12 months preceding the survey by characteristics of employment, India
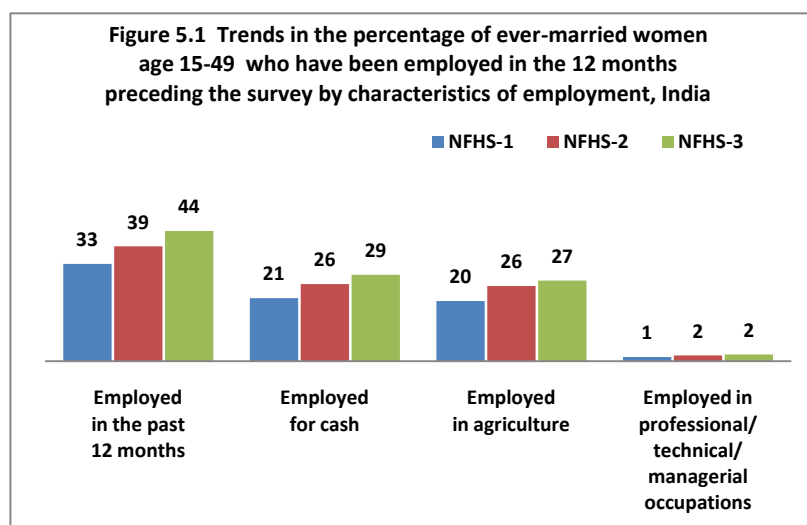
In the 13 years between these two surveys, ever-married women's employment has risen from 33% to 44%—an increase of less than one percentage point per annum.

There has also been a slow increase in the proportion employed for cash (including those getting only part payment in cash) and an even slower increase in the proportion employed in agriculture. Employment of ever-married women in professional, technical. or managerial occupations has also risen, but only marginally from 1% in NFHS-1 to 2% in NFHS-3.

Appendix 5A Percentage of women age 15-49 employed in the past 12 months, earning cash, and employed in professional/technical/managerial occupations, by state, NFHS-3, India

	Percentage employed in the past 12 months	Percentage earning cash	Percentage in professional/ technical/ managerial occupations
North			
Delhi	22.9	22.0	28.8
Haryana	28.3	15.5	9.3
Himachal Pradesh	29.7	10.6	11.1
Jammu & Kashmir	38.7	16.9	7.6
Punjab	24.8	20.2	15.1
Rajasthan	55.4	27.2	4.0
Uttarakhand	44.8	15.6	8.2
Central			
Chhattisgarh	69.1	33.8	2.5
Madhya Pradesh	54.0	32.8	4.0
Uttar Pradesh	34.2	16.0	4.1
East			
Bihar	34.0	17.2	3.0
Jharkhand	56.8	27.8	2.9
Orissa	36.9	27.9	4.9
West Bengal	35.1	30.1	9.4
Northeast			
Arunachal Pradesh	72.7	27.5	5.8
Assam	29.7	25.8	16.2
Manipur	64.1	49.7	9.5
Meghalaya	41.1	22.7	10.4
Mizoram	45.6	28.7	13.2
Nagaland	45.9	21.5	13.9
Sikkim	31.3	22.0	17.7
Tripura	32.1	24.9	17.2
West			
Goa	38.6	33.2	15.8
Gujarat	53.0	33.3	5.4
Maharashtra	48.3	35.2	7.7
South			
Andhra Pradesh	52.1	44.3	5.0
Karnataka	46.3	34.7	6.9
Kerala	30.3	28.0	20.4
Tamil Nadu	49.8	45.7	7.9
India	43.1	28.5	8.0

Appendix 5B Percentage employed, earning cash and employed in professional/technical/managerial occupations by type of residence: women and men age 15-49, NFHS-3, selected cities

	Women age 15-49			Men age 15-49		
	Percentage employed in the past 12 months	Percentage earning cash	Percentage in professional/ technical/ managerial occupations	Percentage employed in the past 12 months	Percentage earning cash	Percentage in professional/ technical/ managerial occupations
Chennai						
Slum	44.3	43.0	9.1	89.6	89.1	7.5
Non-slum	37.7	36.5	20.5	84.5	83.7	20.6
Total	38.9	37.7	18.1	85.4	84.8	18.0
Delhi						
Slum	25.3	24.4	9.5	87.3	86.7	4.9
Non-slum	22.3	21.6	35.4	79.7	79.4	15.2
Total	22.8	22.1	30.1	81.4	80.9	12.8
Hyderabad						
Slum	31.8	31.2	19.1	81.9	81.6	15.2
Non-slum	24.4	23.0	28.4	77.5	77.3	18.0
Total	25.7	24.4	26.4	78.3	78.0	17.5
Indore						
Slum	36.0	33.7	19.5	85.6	85.6	13.2
Non-slum	32.5	29.4	28.6	83.7	82.2	19.2
Total	33.2	30.3	26.6	84.1	82.9	17.9
Kolkata						
Slum	31.1	30.4	19.6	86.5	86.3	7.6
Non-slum	32.0	30.6	32.4	83.1	82.8	14.5
Total	31.7	30.5	28.1	84.3	84.1	11.9
Meerut						
Slum	33.5	28.7	14.8	86.6	84.6	5.7
Non-slum	24.2	23.0	31.5	82.4	81.0	9.2
Total	28.3	25.5	22.8	84.4	82.6	7.6
Mumbai						
Slum	34.3	32.7	13.4	86.8	86.4	8.3
Non-slum	35.7	35.2	22.1	77.6	76.9	17.2
Total	35.0	33.8	17.3	83.0	82.5	11.8
Nagpur						
Slum	35.7	33.3	8.7	89.0	87.5	7.1
Non-slum	26.3	25.4	29.3	79.1	78.6	17.2
Total	29.8	28.4	20.2	82.7	81.8	13.2

6. FEMALE HOUSEHOLD HEADSHIP

Summary and Key Findings

- *In the 13 years between NFHS-1 and NFHS-3, the proportion of households with a woman designated as the household head has risen by more than half, from 9% to 14%.*

- *Female household heads are, on average, older than male household heads.*

- *Female household heads not only have less education than male household heads, but also have less education than the average woman in the population.*

- *Female-headed households are over-represented in the lower wealth quintiles and under-represented in the highest wealth quintiles.*

- *Together these findings suggest that female-headed households are more likely to be economically vulnerable than male-headed households.*

It is frequently assumed that household heads will all be male. However, women are often household heads, either in their own right as the main breadwinner, or because the male breadwinner is working elsewhere or has died, or for some other economic or cultural reason. Other than requiring that a household head be a usual resident of the household, NFHS does not define household headship in any other way. Consequently, the reason why someone is designated by the respondent of the household questionnaire as the household head is not known. Nonetheless, over time, the proportion of households for which a female was designated as the head has been growing in India. In this chapter, levels and trends in female household headship are examined and data on the characteristics of households and their heads are presented.

Female Household Headship: Levels and Trends

Figure 6.1 Trends in the percentage of households headed by females, India
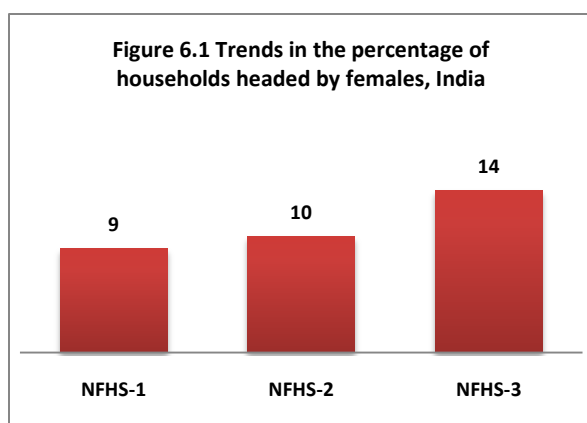
Information on the household head is collected in the household schedule of the household questionnaire. Any usual member of the household can be the respondent for the household questionnaire and it is she or he who specifies which usual member of the household should be designated as the household head. Figure 6.1 shows that the proportion of females designated as household heads has been rising over time. In the 13 years between NFHS-1 and NFHS-3, the proportion of households with a woman designated as the head has risen by more than half, from 9% to 14%.

Age and Educational Profile of Female and Male Household Heads

Female household heads are older, on average, than male household heads as the age distribution of household heads by sex shows (Table 6.1). In particular, 29% of female household heads are at least 60 years old, compared with 20% of male household heads. This suggests that a substantial proportion of household heads may be so designated due to social or cultural reasons (for example, the oldest household member is reported as the household head out of respect) rather than because they are the main breadwinners. Nonetheless, it is notable that the proportion of female heads of household who are less than 40 years of age is quite similar to the

Table 6.1 Percent distribution of male and female heads of household by age and education, NFHS-3, India

	Sex of household head	
	Female	Male
Age		
<20	0.8	0.5
20-29	9.7	10.4
30-39	21.6	25.3
40-49	19.9	25.6
50-59	18.7	17.9
60+	29.2	20.2
Education		
None	67.0	32.6
0-4 years	8.7	11.7
5-9 years	15.6	29.1
10-11 years	3.9	11.7
12+ years	4.6	14.7
Don't know/missing	0.2	0.2
Total	**100.0**	**100.0**

Note: Percentages may not sum to 100.0 due to rounding.

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proportion of male heads of household in that age group—32% of female heads of household vs. 36% of male heads of household.

The proportion of female household heads who have no education, in keeping with gender inequality in access to education in the population as a whole, is about twice the proportion of male household heads who have no education. Also, the proportion of female household heads with no education, at 67%, is much higher than the national average of 42% for uneducated women age 6 or older (IIPS and Macro International, 2007).

Figure 6.2 Percent distribution of households headed by males and households headed by females, by wealth quintile, NFHS-3, India
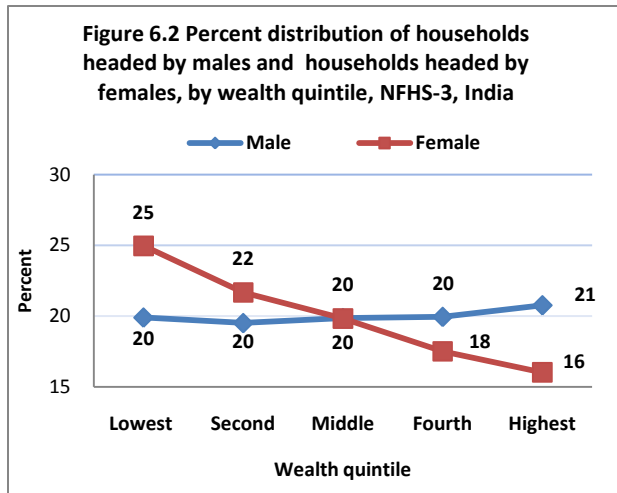
Only 9% of female household heads have at least 10 years of education, compared with the national average for all women age 6 years or older of 14%. By contrast, the proportion of male household heads with 10 or more years of education, at 26%, is slightly higher than the proportion of all men age 6 and over with 10 or more years of education (24%).

Wealth Profile of Households by Sex of Household Head

One-fourth of households headed by females are in the lowest wealth quintile, compared with one-fifth of households headed by males (Figure 6.2). Female-headed households are also under-represented in the higher two quintiles. Whereas 41% of male-headed households belong to the top two quintiles, these quintiles account for only 34% of female-headed households.

Percentage of households that are headed by females, NFHS-3, India

Female Household Headship by State

Female household headship ranges from a low of 8% in Madhya Pradesh, Jammu and Kashmir, Gujarat, and Rajasthan, to a high of 25% in Kerala, Bihar, and Goa. Notably, most of the states where female household headship is very low are in the north, west, or central parts of the country and most of the states where female household headship is
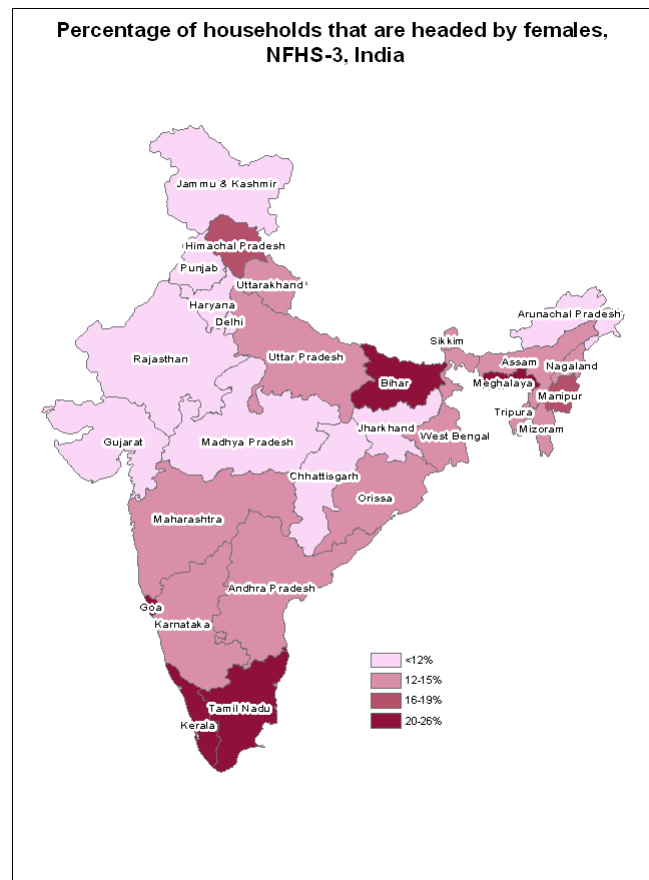
relatively high are either in the south or northeast. Nonetheless, there is great variation even between adjoining states in the percentage of households headed by females.

Trends in the Age and Educational Profile of Female Household Heads

An examination of data on women who were designated household heads in NFHS-1, NFHS-2, and NFHS-3 provides some evidence that, on average, female heads of household are younger in NFHS-3 than they were in NFHS-1 (Table 6.2). Female heads of household age 39 or less accounted for 27% of all female household heads in NFHS-1—this proportion fell to 25% in NFHS-2, but then rose to 32% in NFHS-3.

In keeping with the spread of education in India over time, the proportion of female household heads with no education has fallen slightly from 71% in NFHS-1 to 67% in NFHS-3. There has also been an increase in the proportions who have 10 or more years of

Table 6.2 Trends in percent distribution of female heads of household by age and education, India

	NFHS-1	NFHS-2	NFHS-3
Age			
< 20	1.0	0.7	0.8
20-29	7.0	5.8	9.7
30-39	19.4	18.5	21.6
40-49	23.5	22.6	19.9
50-59	20.6	19.5	18.7
60+	28.4	32.9	29.2
Don't know/missing	0.1	0.0	0.0
Education			
None	70.8	66.4	67.0
0-4 years	9.5	11.9	8.7
5-9 years	12.7	14.8	15.6
10-11 years	3.4	3.7	3.9
12+ years	2.9	3.2	4.6
Don't know/missing	0.7	0.1	0.2
Total	**100.0**	**100.0**	**100.0**

Note: Percentages may not sum to 100.0 due to rounding.

education over the same time period, from 6% in NFHS-1 to 7% in NFHS-2 to 9% in NFHS-3. Nonetheless, all three surveys show that uneducated females are substantially over-represented among female heads of household, compared with uneducated females in the population as a whole.

Appendix 6A Percentage of households that are headed by females , NFHS-3, India

	Percentage of households that are headed by females
North	
Delhi	9.5
Haryana	11.1
Himachal Pradesh	18.6
Jammu & Kashmir	8.2
Punjab	10.9
Rajasthan	8.7
Uttarakhand	15.7
Central	
Chhattisgarh	11.6
Madhya Pradesh	7.5
Uttar Pradesh	13.9
East	
Bihar	25.0
Jharkhand	11.2
Orissa	13.0
West Bengal	15.0
Northeast	
Arunachal Pradesh	11.2
Assam	13.4
Manipur	17.3
Meghalaya	22.1
Mizoram	15.9
Nagaland	14.9
Sikkim	14.3
Tripura	13.4
West	
Goa	25.3
Gujarat	8.4
Maharashtra	12.4
South	
Andhra Pradesh	14.9
Karnataka	15.8
Kerala	24.6
Tamil Nadu	20.2

Appendix 6B Percentage of households headed by females, and percent distribution of female household heads by age and education, by type of residence, NFHS-3, selected cities, India

	Percentage of households headed by females	Female-headed households by age of household head						Female-headed households by education of household head					Don't know/ missing	Total
		<20	20-29	30-39	40-49	50+	Total	None	0-4	5-9	10-11	12+		
Chennai														
Slum	17.1	0.0	8.1	14.3	29.8	47.8	100.0	46.0	15.5	32.3	3.7	2.5	0.0	100.0
Non-slum	14.6	0.0	9.4	14.4	26.9	49.4	100.0	33.8	13.1	29.4	8.8	15.0	0.0	100.0
Total	15.1	0.0	9.1	14.4	27.5	49.1	100.0	36.3	13.6	30.0	7.7	12.4	0.0	100.0
Delhi														
Slum	10.0	0.0	3.4	16.8	27.7	52.1	100.0	66.4	2.5	20.2	5.0	5.0	0.8	100.0
Non-slum	9.6	0.5	5.4	15.2	15.8	63.0	100.0	32.6	3.3	21.2	14.7	28.3	0.0	100.0
Total	9.7	0.4	5.0	15.6	18.3	60.8	100.0	39.7	3.1	21.0	12.7	23.4	0.2	100.0
Hyderabad														
Slum	14.3	0.0	6.3	19.5	26.8	47.4	100.0	52.6	4.7	22.1	9.5	11.1	0.0	100.0
Non-slum	13.9	0.0	6.1	17.9	17.9	58.2	100.0	42.9	5.1	21.9	11.2	18.4	0.5	100.0
Total	13.9	0.0	6.2	18.2	19.5	56.2	100.0	44.7	5.0	22.0	10.9	17.0	0.4	100.0
Indore														
Slum	8.2	0.0	5.0	21.3	26.3	47.5	100.0	48.8	8.8	15.0	7.5	20.0	0.0	100.0
Non-slum	9.1	0.0	11.0	11.0	23.2	54.9	100.0	30.5	15.9	19.5	6.1	28.1	0.0	100.0
Total	8.9	0.0	9.9	12.9	23.7	53.5	100.0	33.8	14.6	18.7	6.4	26.6	0.0	100.0
Kolkata							100.0							100.0
Slum	17.9	0.0	4.6	13.6	16.2	65.7	100.0	61.1	12.1	15.2	4.6	7.1	0.0	100.0
Non-slum	17.4	0.0	2.9	7.8	15.1	74.3	100.0	26.2	15.1	24.3	11.7	22.8	0.0	100.0
Total	17.5	0.0	3.5	9.7	15.4	71.4	100.0	37.9	14.1	21.2	9.3	17.6	0.0	100.0
Meerut							100.0							100.0
Slum	10.2	0.0	3.9	23.1	27.9	45.2	100.0	57.7	1.0	23.1	6.7	11.5	0.0	100.0
Non-slum	12.3	1.5	4.4	18.3	28.5	47.5	100.0	45.3	0.7	14.6	11.7	26.3	1.5	100.0
Total	11.4	0.9	4.2	20.1	28.2	46.6	100.0	50.1	0.8	17.9	9.8	20.6	0.9	100.0
Mumbai														
Slum	14.0	0.0	4.6	13.0	18.8	63.6	100.0	42.9	14.9	25.3	9.1	7.8	0.0	100.0
Non-slum	15.0	0.0	0.6	6.8	19.8	72.8	100.0	30.9	17.3	22.2	17.3	12.4	0.0	100.0
Total	14.4	0.0	2.8	10.2	19.3	67.8	100.0	37.4	16.0	23.9	12.8	9.9	0.0	100.0
Nagpur														
Slum	15.9	0.0	4.4	7.6	33.3	54.7	100.0	43.4	27.7	19.5	2.5	6.3	0.6	100.0
Non-slum	10.7	0.0	0.8	8.5	25.6	65.1	100.0	24.8	13.2	19.4	17.1	24.8	0.8	100.0
Total	12.5	0.0	2.3	8.1	28.9	60.6	100.0	32.8	19.4	19.4	10.8	16.8	0.7	100.0

Note: Percentages may not add to 100.0 due to rounding.

7. ACCESS TO RESOURCES

Summary and Key Findings

- *Women have, on average, lower per capita resource access than men, since they are over-represented in the lower wealth quintiles and under-represented in the higher wealth quintiles.*
- *Among children too, an examination of sex ratios shows that boys are more likely than girls to be growing up in wealthier households.*
- *Women have lower access to media than men in every age group.*
- *Women's freedom of movement is severely curtailed: only one in three are allowed to go alone to the market, the health centre, and outside the community.*
- *Women face a large number of hurdles in accessing health care: of the eight specified hurdles, one in four among all women and 47% of women in the lowest wealth quintile face three or more hurdles.*
- *A majority of women do not have any money of their own that they can use as they wish; this proportion is lowest at about one in four for women in the highest wealth quintile who are working for cash.*
- *Less than one in six women have a bank or savings account that they use.*
- *Kerala, Delhi, and Goa are the only states where more than one in four women have a bank or savings account that they use.*

Gender inequalities in access to the key resources of education and employment have already been discussed. In this chapter, indicators that capture women's access to other resources, including financial, health, and media resources, and women's access to spaces outside their homes are presented. These indicators all highlight significant constraints on women's access to all types of resources. For several of the indicators, data were not collected for men; those indicators should be interpreted as providing information on the situation of women, irrespective of men's corresponding level of access.

Sex Ratios by Age and Wealth Quintile

A general indicator that provides information on women's relative resource access is the sex ratio (females per 1,000 males) of the defacto household population in each of the wealth quintiles. Figure 7.1 shows that the sex ratio which is 1,000 females per 1,000 males in NFHS-3 for the population as a whole, declines with wealth. This shows that women are over-represented in the lower wealth quintiles and under-represented in the higher wealth quintiles, implying that women have lower per capita resource access than men.

Figure 7.1 Sex ratio (females per 1,000 males) of the defacto household population by wealth quintile, NFHS-3, India
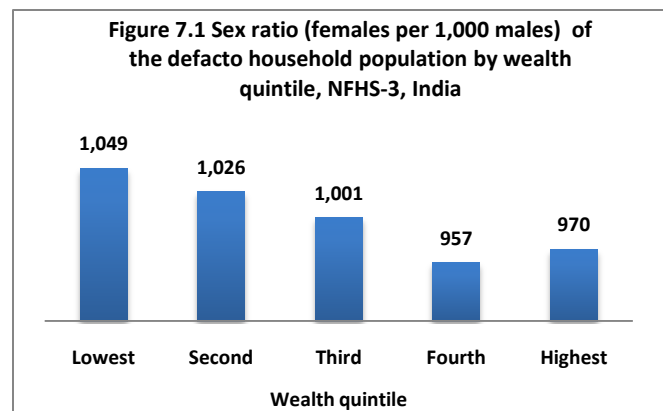
Of particular interest is the sex ratio of the younger age groups, since growing up in impoverished circumstances can have long term negative effects on health, resource access, and educational and other opportunities in life.

Figure 7.2 Sex ratio of the defacto household population by age, according to wealth quintile, NFHS-3, India

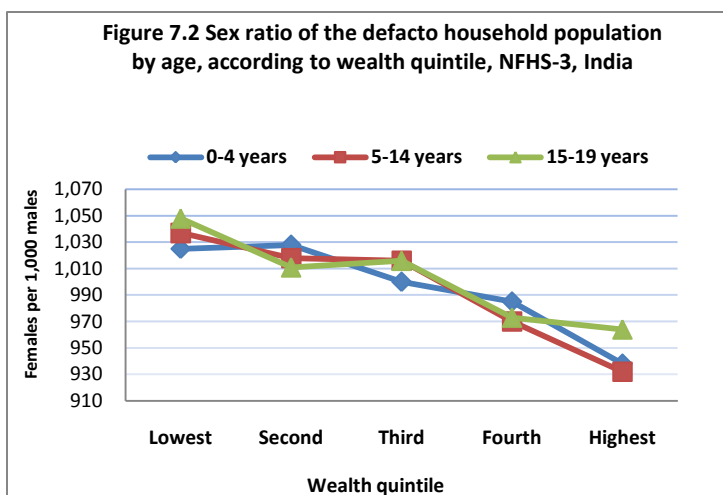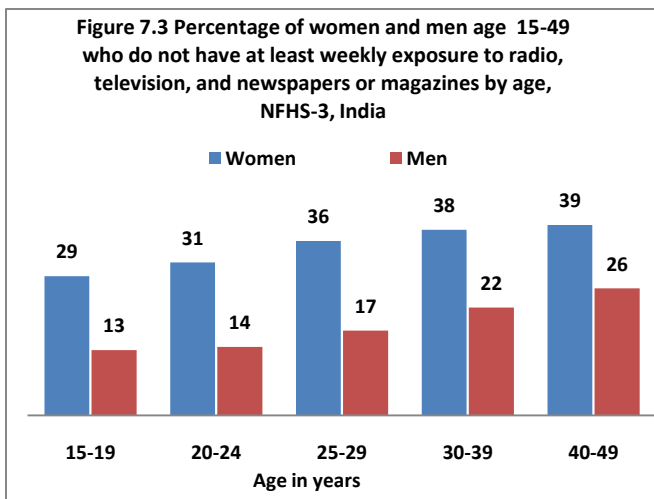Figure 7.2 shows that the sex ratio for children in all three age groups—0-4 years, 5-14 years, and 15-19 years—is predominantly female in the lower wealth quintiles and favors males in the higher wealth quintiles. Thus, on average, girls are more likely than boys to be growing up in impoverished circumstances; in other words, a higher proportion of boys than girls have the benefit of a childhood spent in a wealthier household.

Access to Media

The media is an important source of information and exposure to new ways of thinking and doing things. In addition, radio listening, television viewing, and reading newspapers or magazines are important leisure activities. Both of these characteristics of the media make access to media an important indicator of women's empowerment—by providing information and exposure to worlds outside the home, media exposure has the potential for enabling empowerment; further, time spent enjoying the media reflects access to leisure time, typically available to the more empowered who have greater control over their own time use (Basu and Koolwal, 2005).

Figure 7.3 Percentage of women and men age 15-49 who do not have at least weekly exposure to radio, television, and newspapers or magazines by age, NFHS-3, India

The majority of women and men in India have some exposure to the media; nonetheless, as NFHS-3 shows, women are less likely than men to have at least weekly exposure to television (55% vs. 63%), radio (29% vs. 44%), newspapers or magazines (23% vs. 53%) and at least monthly exposure to the cinema (6% vs. 20%). Overall, 35% of women have no regular exposure to these forms of media, compared with 18% of men.

Figure 7.3 shows that the proportion of adults with no regular exposure to the media increases with age for both women and men. However, the proportion who do not have regular exposure to radio, television, or the print media is greater for women than for men in every age group. Notably, the gender differential in media access is greater for younger than older age groups.

Access to Spaces Outside the Home

Freedom of movement is severely curtailed for a large proportion of women in India. Only one-third of women age 15-49 are allowed to go alone to the market, to the health centre, and outside the community (Table 7.1).

Table 7.1 Percentage of women age 15-49 allowed to go alone to the market, health center, and outside the community by background characteristics, NFHS-3, India

	Women allowed to go alone:			
	To the market	To the health center	Outside the community	To all three places
Age				
15-19	29.7	23.1	16.8	12.8
20-29	46.2	42.7	32.3	28.0
30-39	62.9	60.3	48.1	43.6
40-49	68.2	65.2	55.6	51.2
Marital Status				
Never Married	40.7	32.3	25.0	20.3
Currently Married	52.8	50.2	39.3	35.0
Divorced/separated/ deserted/widowed	76.1	73.5	68.6	65.6
Education				
None	49.0	45.9	36.3	32.0
0-4 years	47.2	45.9	37.3	32.1
5-9 years	47.1	43.2	33.7	29.5
10-11 years	55.0	49.2	38.5	34.1
12+ years	70.2	64.3	51.9	48.2
Wealth quintile				
Lowest	41.9	39.1	29.8	25.6
Second	42.7	40.5	33.0	27.9
Middle	48.1	44.6	36.2	31.3
Fourth	53.4	49.0	38.9	34.8
Highest	67.6	61.9	48.2	44.8
Total	51.5	47.7	37.7	33.4

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Freedom to go alone varies most by age and marital status. The young and the never married have the least freedom of movement. Nonetheless, even among women in their 40s only about half are allowed to go alone to all three of these places. Access to spaces outside the home increases with both education and wealth; however, the variation is quite limited. Less than half of women have the freedom to go alone to these places in every education and wealth category.

Access to Health Care

Factors that limit women's access to health care at the household level can be gender-related, purely economic, or supply driven. For example, the need for permission and concern that there may not be a female provider are both hurdles to seeking health care that women face because they are women. Others, such as getting money needed for treatment, having to take transport, or distance to the health facility, can be hurdles for both men or women because they are likely to be related, at least in part, to the household's economic condition and to the supply of health care. However, these hurdles are also likely to have a gender component, because, being female, women have limited freedom of movement and access to income. Finally, others such as unavailability of health-care providers or drugs are supply driven, but likely to be more of a problem for women than for men since it may be more difficult for women, largely for gendered reasons, to revisit the health facility if services are not received the first time.

Table 7.2 Percentage of women age 15-49 who say that the specified hurdle is a big problem for them in accessing health care for themselves, by wealth quintile, NFHS-3, India

| | Wealth quintile | | | | | All women |
	Lowest	Second	Middle	Fourth	Highest	
Hurdles to health care:						
Getting permission to go	10.9	8.6	7.5	5.5	2.3	6.7
Getting money needed for treatment	34.8	24.3	18.5	10.4	3.0	17.3
Distance to the health facility	47.4	36.1	26.3	16.6	5.9	25.3
Having to take transport	45.4	33.1	23.3	13.9	4.5	22.9
Finding someone to go with you	21.4	15.9	12.2	8.2	3.3	11.7
Concern that there may not be a female health provider	30.1	24.0	19.4	14.9	8.2	18.7
Concern that there may not be any health provider	35.4	28.7	23.8	18.6	10.8	22.7
Concern that there may be no drugs available	36.8	29.7	23.5	18.3	9.9	22.9
Women who face:						
0 hurdles	28.5	40.0	50.3	61.5	79.5	53.4
1-2 hurdles	24.8	24.9	23.4	20.9	13.0	21.1
3-4 hurdles	23.3	19.2	15.1	11.4	5.7	14.4
5+ hurdles	23.4	15.9	11.3	6.2	2.8	11.1

Table 7.2 shows that women face a number of hurdles in accessing health care for themselves. The most common hurdle among the eight asked about is the distance to a health facility and the least common is getting permission to go. Notably, almost one-fifth of women report that not having a female provider is a concern and for one-tenth of women, finding someone to go with them is a problem.

Each potential hurdle is much more common among poorer women than among the wealthier ones. Further, poorer women face many more hurdles than do richer women: about one in four women belonging to the lowest wealth quintile face five or more of the listed hurdles, compared with 6% of women in the fourth quintile and 3% in the highest quintile. Notably, however, even in the highest wealth quintile, over one-fifth of women face one or more hurdles in accessing health care for themselves.

Access to Money That Women Can Decide How to Use

Less than half, 45%, of women age 15-49 have some money of their own that they alone can decide how to use. The proportion having money varies from 39% among the never married and 45% among the currently married, to 66% among the divorced, separated, deserted, or widowed women.

Table 7.3 Percentage of women age 15-49 who have access to money of their own that they can decide how to use by marital status, according to wealth quintile, NFHS-3, India

| | Wealth quintile | | | | | |
	Lowest	Second	Middle	Fourth	Highest	Total
Marital status						
Never married	27.8	31.5	33.5	39.3	49.2	38.6
Currently married	38.9	40.4	41.5	45.7	57.1	44.9
Divorced/separated/ deserted/widowed	63.3	63.4	64.3	65.4	74.6	65.5
Total	38.9	40.2	41.0	45.1	55.5	44.6

Since having money will depend at least in part on the wealth of the household, Table 7.3 shows the percentage of women who have some money they alone control, by wealth quintile. Notably, among all women, the differential by wealth in whether women have some money they control is relatively limited, ranging from 39% among women in the lowest wealth quintile to 56% in the highest wealth quintile. Thus, having money that women control is not exclusively related to wealth.

Variation by wealth quintile in the proportion of women with some money they control is least for women who are divorced, separated, deserted, or widowed and most for never married women.

One possible source of money that women could have control over is own earnings. Figure 7.4 shows that, indeed, women who earn cash are more likely, in each wealth quintile, to have money that they control. Even women who are employed but do not earn cash are somewhat more likely than women who are not employed to have some money that they control. Nevertheless, even among women who earn cash, less than half of those in the

Figure 7.4 Percentage of women age 15-49 who have access to money of their own that they can decide how to use by employment status, according to wealth quintile, NFHS-3, India

65
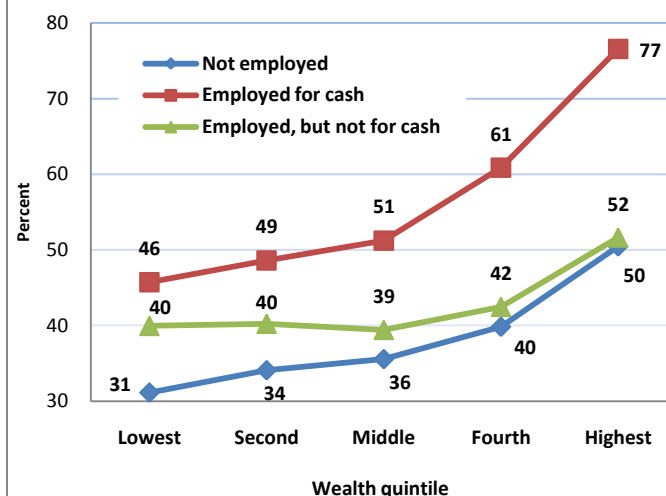
poorest two wealth quintiles have any money that they alone can decide how to use. Further, even among women who earn and belong to the highest wealth quintile, almost one in four do not have any money that they alone can decide how to use. From these data it is clear that although earnings provide women with some financial freedom, the benefit is far from universal.

Access to a Bank or Savings Account that Women Themselves Use

While having a bank or savings account can be thought of as the privilege of wealth, having and using a bank or savings account, irrespective of wealth, is an indicator of women's ability to manage money, as well as interact successfully with modern institutions.

Table 7.6 Percentage of women age 15-49 who have a bank or savings account of their own that they use by background characteristics, according to wealth quintile, NFHS-3, India

	Wealth quintile					
	Lowest	Second	Middle	Fourth	Highest	Total
Age						
15-19	2.0	3.4	5.4	9.2	15.8	7.2
20-29	3.4	6.5	9.1	13.6	29.5	13.1
30-39	4.6	9.2	14.4	21.6	43.0	19.4
40-49	5.0	9.4	13.6	21.7	42.4	20.8
Education						
None	3.4	6.6	9.3	13.1	17.3	7.5
0-4 years	4.1	7.0	10.4	17.0	23.9	11.0
5-9 years	4.8	7.0	10.5	14.4	24.0	13.6
10-11 years	8.1	12.0	12.7	18.9	29.5	22.3
12+ years	16.7	18.2	20.7	26.6	47.3	40.9
Employment						
Not employed	3.0	5.3	8.1	12.5	28.1	14.2
Employed for cash	4.7	9.8	15.0	26.8	56.9	19.7
Employed, but not for cash	3.3	6.8	9.9	16.7	27.9	9.0
Total	3.7	7.1	10.5	16.3	33.6	15.1

Despite India's rapid modernization, few women have a bank or savings account that they themselves use. As Table 7.6 shows, only 15% of women age 15-49 have a bank or savings account that they use. As expected, this proportion increases sharply with wealth. Nonetheless, even in the highest wealth quintile, only about one in three women have a bank or savings account they themselves use.

Whether women have a bank or savings account varies substantially by wealth for women in all age groups, educational categories, and employment statuses—being consistently low for women in the lowest wealth quintile and relatively high in the highest wealth quintile. Nevertheless, even in the highest wealth quintile, less than one in three women have a bank or savings account in all age, education, and employment categories, except for women employed for cash, women with 12 or more years of education, and women who are 30 years or older. Women most likely to have a bank or savings account are the women in the highest

Percentage of women age 15-49 with a bank or savings account they themselves use, NFHS-3, India
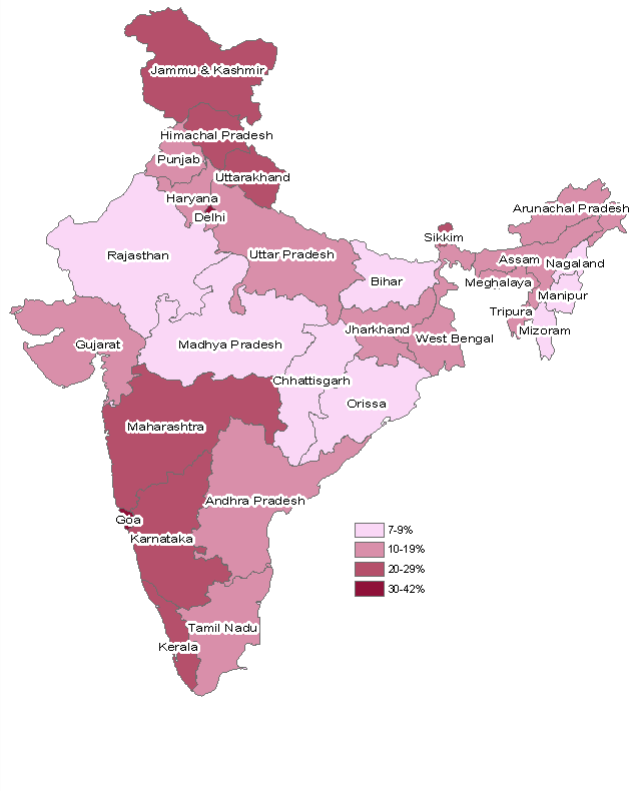
wealth quintile who are employed for cash, followed by women with 12 or more years of education. Also notable is that women in the lowest wealth quintile who have 12 or more years of education are more than four times as likely as the average woman in the lowest wealth quintile to have a bank or savings account that she uses (17% vs. 4%).

Percentage of women who have a bank or savings account they use by state The percentage of women who have a bank or savings account in India ranges from 7% in Nagaland to 27% in Kerala, 30% in Delhi, and 42% in Goa. With the exception of the latter three states, in no other state do more than one in four women have a bank or savings account that they use. In 14 of the 29 states in India, 15% or fewer women have a bank or savings account that they themselves use.

Appendix 7A Percentage of women age 15-49 who are allowed to go alone to three places (market, health facility, and outside the community) and percentage with a bank or savings account that they themselves use, by state, NFHS-3, India

	Percentage allowed to go alone to all three places	Percentage with a bank or savings account they themselves use
North		
Delhi	36.6	30.4
Haryana	40.7	12.4
Himachal Pradesh	64.0	22.2
Jammu & Kashmir	51.0	21.9
Punjab	39.0	14.6
Rajasthan	31.6	7.6
Uttarakhand	42.8	20.1
Central		
Chhattisgarh	17.9	8.1
Madhya Pradesh	25.7	8.9
Uttar Pradesh	23.4	13.2
East		
Bihar	25.2	8.2
Jharkhand	36.6	14.4
Orissa	18.7	9.8
West Bengal	32.3	14.1
Northeast		
Arunachal Pradesh	40.2	19.0
Assam	35.3	11.7
Manipur	53.5	8.0
Meghalaya	28.1	16.9
Mizoram	75.4	8.1
Nagaland	25.4	7.4
Sikkim	50.9	20.9
Tripura	36.8	18.7
West		
Goa	56.8	42.4
Gujarat	47.3	19.9
Maharashtra	40.2	20.3
South		
Andhra Pradesh	37.3	18.0
Karnataka	30.6	22.1
Kerala	34.7	27.0
Tamil Nadu	54.2	15.9
India	**36.8**	**16.2**

Appendix 7B Percentage of women age 15-49 who are allowed to go alone to three places (market, health facility, and outside the community) and percentage with a bank or savings account that they themselves use, by type of residence, NFHS-3, selected cities, India

	Percentage allowed to go alone to all three places	Percentage with a bank or savings account they themselves use		Percentage allowed to go alone to all three places	Percentage with a bank or savings account they themselves use
Chennai			**Kolkata**		
Slum	48.6	15.4	Slum	56.1	21.9
Non-slum	47.5	29.8	Non-slum	59.9	38.3
Total	47.7	27.1	Total	58.6	32.7
Delhi			**Meerut**		
Slum	28.7	11.8	Slum	25.4	13.6
Non-slum	39.4	35.6	Non-slum	46.8	32.2
Total	37.5	31.2	Total	37.4	24.0
Hyderabad			**Mumbai**		
Slum	39.2	19.2	Slum	39.1	44.6
Non-slum	34.1	20.7	Non-slum	51.5	24.9
Total	35.0	20.5	Total	44.6	33.6
Indore			**Nagpur**		
Slum	50.6	18.6	Slum	40.9	30.2
Non-slum	41.0	32.0	Non-slum	56.0	21.0
Total	43.0	29.4	Total	50.4	35.6

8. GENDER RELATIONS: NORMS AND ATTITUDES

Summary and Key Findings

- *Although most men age 15-49 believe that husbands and wives should make decisions jointly, the proportion who believe that it should be the husband who has the major say in most decisions asked about also remains significant.*

- *More than half of women and men agree with one or more reasons that justify wife beating. Both are most likely to agree that wife beating is justified if a woman disrespects her in-laws and if she neglects the house or children.*

- *More than half of women agree with one or more reasons for wife beating in 19 states and more than half of men do so in 15 states. In all but five states, women are about equally or more likely than men to agree with wife beating.*

- *Urban residence, higher education, and wealth, are associated with lower odds of women and men agreeing with wife beating. Age is important, but has opposite net effects for women's (+) and men's agreement (-) with wife beating.*

- *The majority of women and men in India reject the norm that a wife should not refuse her husband sex for any reason. More than three in four agree that a wife is justified in refusing her husband sex if she is tired or not in the mood.*

- *Agreement with a wife's right to refuse her husband sex for all specified reasons increases significantly with age and wealth, but does not vary between urban and rural areas. For men, agreement also increases with education, but for women, only education beyond the primary level is positively associated with agreement.*

An important element of empowerment is the outright rejection of unequal rights and privileges that derive from and are assigned based solely on a person's sex. Examples of common normatively ascribed rights of husbands include the right to be the key decision maker on major household decisions, the right to control their wives' behaviour and bodies, even through violence if necessary; and the right to have sex with their wives' when they want.

Agreement with these normatively prescribed powers of men *over* women reflects an acceptance of unequal gender roles, on the one hand, and a lack of awareness about women's entitlement to bodily security and integrity, on the other. Hence, women who perceive as justified the control of husbands *over* their wives can be considered to be less empowered than women who think otherwise (Correa and Petchesky, 1994; Sen and Batliwala, 2000; United Nations, 1995a; 1995b). Although such attitudes do not necessarily imply approval of these rights for men, they do signify passive acceptance of norms that give men these rights. Further, widespread acceptance perpetuates such norms and contributes to the low status of women and the girl child. This chapter presents data on attitudes toward three sets of normatively ascribed gender roles.

Men's Attitudes Regarding Gender Roles in Household Decisionmaking

In NFHS-3, men were asked their opinion about the relative weight that should be given to husbands' and wives' say in making specific household decisions. Specifically, they were asked whether a wife should have a greater say, an equal say, or a lesser say than the husband when specific decisions are made. The decisions asked about are given in Table 8.1.

Table 8.1 Percent distribution of men age 15-49 by current marital status, according to their opinion on whether, in a couple, a wife should have a greater, equal, or lesser say than her husband on specified decisions, according to decision, NFHS-3, India

		Wife should have a:				
		Greater say	Equal say	Lesser say	Missing	Total
Decision						
Making major household purchases	Ever married	5.4	67.5	26.5	0.6	100.0
	Never married	4.7	69.8	23.1	2.4	100.0
	Total	5.2	68.3	25.2	1.3	100.0
Making purchases for daily household needs	Ever married	36.9	39.6	22.9	0.7	100.0
	Never married	35.1	41.4	21.0	2.5	100.0
	Total	36.2	40.2	22.2	1.4	100.0
Visits to her family or relatives	Ever married	12.1	60.7	26.5	0.8	100.0
	Never married	11.8	61.0	24.2	3.0	100.0
	Total	12.0	60.8	25.6	1.6	100.0
What to do with the money the wife earns	Ever married	20.1	63.9	14.6	1.4	100.0
	Never married	24.6	60.2	12.2	3.1	100.0
	Total	21.7	62.5	13.8	2.0	100.0
How many children to have	Ever married	1.4	88.5	9.5	0.6	100.0
	Never married	1.5	88.1	8.3	2.2	100.0
	Total	1.5	88.3	9.1	1.2	100.0

Note: Percentages may not add to 100.0 due to rounding.

For all decisions, most men say that a wife should have at least an equal say. Nonetheless, the share of men who say that women should have a greater say or an equal say differs by decision, as also the proportion who say that a wife should have a lesser say. What is remarkable is that there is virtually no variation in opinions between never married and ever-married men.

The two decisions in which men are most likely to say that a wife should have a lesser say are decisions regarding making major household purchases and visits to her family or relatives. In the case of these decisions, about one in four of all men say that a wife should have the lesser say. Further, the proportion saying that women should have the greater say is only 5% for the decision about major purchases and 12% for the decision about visits to her family or relatives.

Men say that women should have the greater say in decisions about purchases for daily needs more often than for any other decision; however, even for this decision, more than one in five say that a wife should have a lesser say.

Few men, only 22%, agree that a wife should have the greater say in what she does with the money she earns. Most say that a husband and wife should have an equal say, and 14% say that the husband should have the greater say. Almost 9 out of 10 men say that wives and husbands should have an equal say in the decision about how many children to have. This proportion is higher than for any other decision.

Table 8.2 Percentage of currently married men age 15-49 who say that in a couple, the wife should have at least an equal say, compared with her husband on specific decisions, according to education, NFHS-3, India

	Men's education			
	No education	0-4 years	5-11 years	12+ years
Decision				
Making major household purchases	67.6	68.6	73.4	82.7
Making purchases for daily household needs	72.9	70.3	77.2	84.2
Visits to her family or relatives	67.8	67.5	73.6	81.8
What to do with the money the wife earns	80.1	78.1	84.8	91.6
How many children to have	86.7	87.8	90.4	94.9

Men's agreement with a wife's equal or greater say in various household decisions varies only somewhat by education (Table 8.2). For example, for the two decisions for which most men said that a husband should have the greater say (major household purchases and visits), the proportion who agree that a wife should have at least an equal say varies from 68% for men with no education to 82%-83% for men with 12 or more years of education. Variation in men's opinions by education is least for decisions about the number of children to have: almost 9 out of 10 men even with no education agree that a wife should have an equal or greater say.

Despite relatively high levels of agreement with a wife's equal or greater participation in specific decisions, agreement for all decisions remains relatively low as is shown in Figure 8.1.

Half or less than half of currently married men with less than 12 complete years of education and 62% of men with 12 or more complete years of education agree that a wife should have at least an equal say in all five decisions.

Nonetheless, 95-97% of men with little or no education, and 99% of men with 12 or more years of education agree that a wife should have an equal or greater say in one or more decisions asked about.

Figure 8.1 Percentage of currently married men age 15-49 who say that, in a couple, a wife should have at least an equal say as her husband on specific decisions, according to education, NFHS-3, India

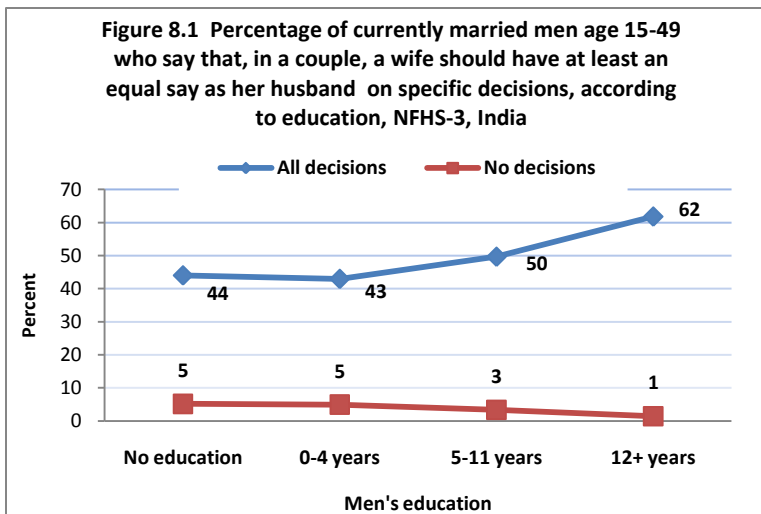## Acceptance of Norms about Men's 'Right' to Beat Their Wives

In order to assess acceptance of norms regarding wife beating, women and men were asked whether a husband is justified in beating his wife for each of the seven reasons—if the wife goes out without telling her husband, if the wife neglects the house or children, if the wife argues with her husband, if the wife refuses to have sex with her husband, if she does not cook food properly, if he suspects her of being unfaithful, and if she shows disrespect for in-laws.

Agreement by reason Figure 8.2 compares the percentages of women and men who agree with each reason for wife beating. For every reason, women are slightly more likely than men to agree that wife beating is justified. However, the gender differential in agreement for almost all reasons is small, suggesting that the level of socialization regarding this norm is similar for women and men. Overall, 54% of women age 15-49 and 51% of men age 15-49 agree with one or more reasons for wife beating.

An examination of the level of agreement by reason provides an understanding of what roles are perceived by women and men as key women's roles.


Figure 8.2 Percentage of women and men age 15-49 who agree with wife beating by reason, NFHS-3, India

The assumption here is that violence is more likely to be justified if the described behaviour

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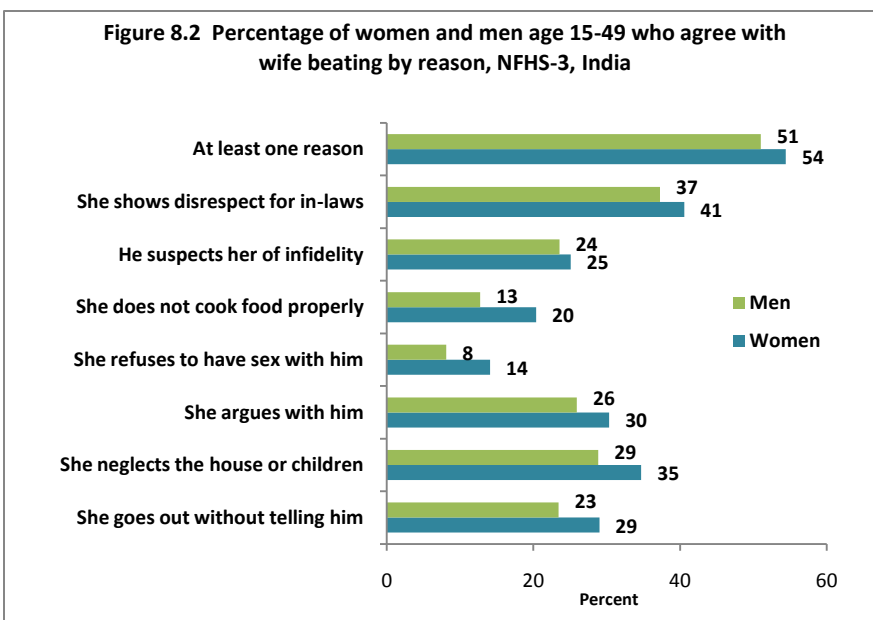
violates what is perceived as acceptable behaviour for women in their gendered roles as wives, mothers, and daughters-in-law. Data from both women and men suggest that being a respectful daughter-in-law and properly looking after the house and children are perhaps essential roles that, when not properly fulfilled, are most deserving of beatings.

Agreement by education It is expected that women's and men's opinions about gender roles will be strongly affected by their level of education. Indeed, agreement with wife beating falls with education for women and men: almost two-thirds of both women and men with no education agree with wife beating, compared with about one-third of women and men with 12 or more years of education (Figure 8.3). Notably, there is very little difference between women's and men's agreement with at least one reason for wife beating at each level of education.

Figure 8.3 Percentage of women and men age 15-49 who agree with wife beating for at least one reason by education, NFHS-3, India
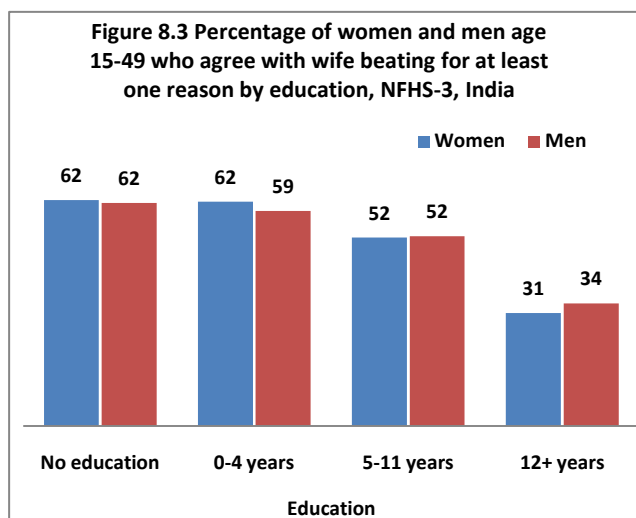
Agreement with wife beating among couples Table 8.3 provides information on the extent to which couples, women and men currently married to each other, have similar opinions regarding wife beating.

Table 8.3 Among couples, percentage where both agree, both disagree, only wife agrees, and only husband agrees with each reason for wife beating, by reason, NFHS-3, India

	Agreement among couples				
	Both agree	**Both disagree**	**Wife only agrees**	**Husband only agrees**	**Total**
Justification for wife beating					
She goes out without telling him	10.0	52.8	23.2	14.0	100.0
She neglects the house or children	14.6	44.7	25.0	15.7	100.0
She argues with him	10.2	51.8	22.8	15.2	100.0
She refuses to have sex with him	2.0	77.9	14.8	5.3	100.0
She doesn't cook the food properly	4.0	69.0	18.9	8.2	100.0
He suspects her of infidelity	8.8	57.8	18.7	14.7	100.0
She shows disrespect for in-laws	18.6	38.4	25.9	17.2	100.0

Note: Table excludes couples where information is missing or the response was 'don't know' for either the husband or the wife or both. Percentages may not add to 100.0 due to rounding.

The proportion of couples in which both husband and wife have the same opinion about wife beating—either both agree or both disagree—ranges from 57% for the reason that she shows disrespect for in-laws and 59% for the reason that she neglects the house or children, to a high of 80% for the reason she refuses to have sex with her husband and 73% for the reason she does not cook food properly. Thus, for each reason, about three out of five or more couples have the same opinion. Notably, when couples have the same opinion, they are much more likely to both disagree than to both agree with wife beating. In fact, the proportion of couples

where both agree with wife beating is relatively small (one in ten or less) for all reasons except the two that were identified above as roles that are perceived by both women and men to be the most essential of roles for married women. In particular, among couples, 19% of both husbands and wives agree that wife beating is justified if women are disrespectful toward in-laws, and 15% of both agree that wife beating is justified if a wife neglects her house or children.

The proportion of couples where one or both agree with wife beating ranges from 22% for the reason if she does not cook food properly to 62% for the reason if she shows disrespect for in-laws. Among couples in which husbands and wives do not both have the same opinion, the proportion of couples where the wife alone is more likely to agree is much higher than the proportion of couples where the husband alone agrees.

Women's and men's agreement with wife beating by state Agreement with wife beating for women ranges from 28% in Himachal Pradesh to 90% in Manipur; for men it ranges from 23% in Uttarakhand to 85% in Manipur. One-third or fewer women and men see wife beating as justified in Himachal Pradesh, Delhi, and Chhattisgarh, and among men, this group also includes Assam. However, in 19 states, more than half of women, and in 15 states more than half of men, see wife beating as justified for one or more reasons. In five states—Gujarat, Meghalaya, Madhya Pradesh, Rajasthan, Chhattisgarh—men are more likely than women to
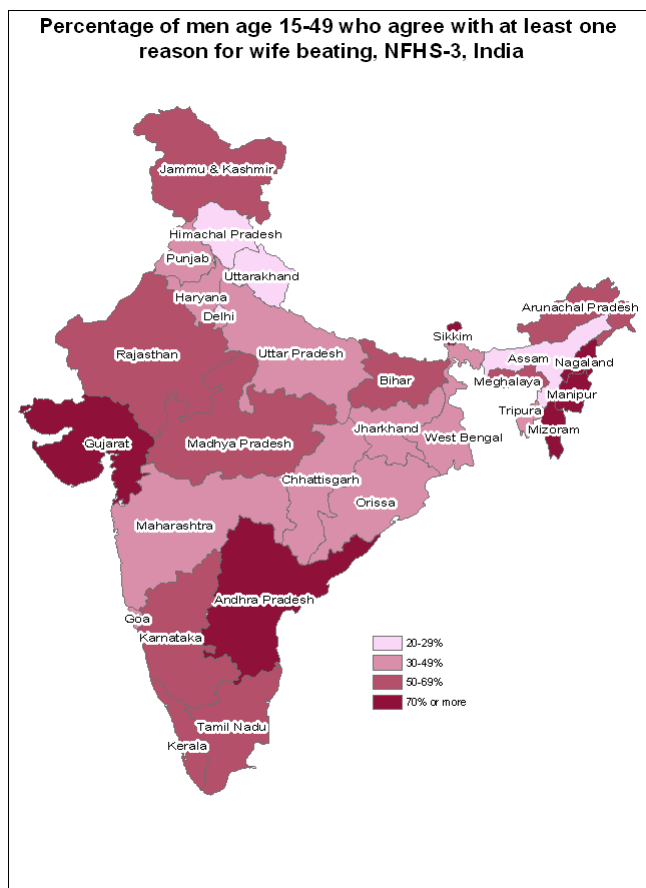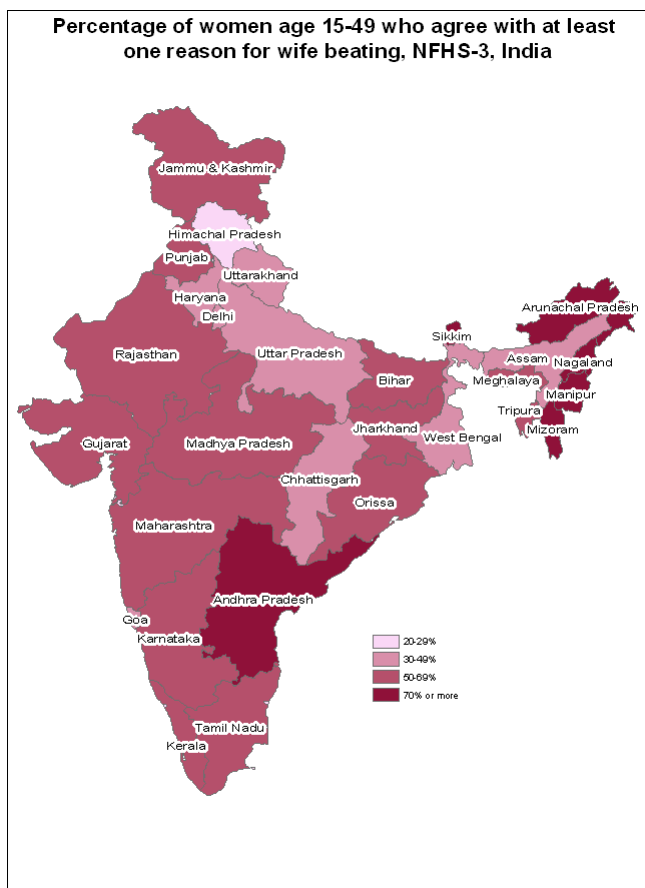
agree with one or more reasons for wife beating (percentage point differences more than 2) and in Himachal Pradesh, Mizoram, Jammu and Kashmir, Bihar, and Sikkim, similar proportions of men and women agree (+/-2 percentage points). In the remaining 19 states women are more likely to agree than men with one or more reasons for wife beating and the differential in agreement is greatest at 26 percentage points in Uttarakhand, and is also above 15 percentage points in Jharkhand, Orissa, Arunachal Pradesh, Assam, and Tripura.

Net determinants of opinions about wife beating There are likely to be many different factors that affect married persons' opinions about whether wife beating is ever justified. Several of these factors will both directly and indirectly, through other variables, affect these opinions. Thus, logistic regressions were run separately for men and women to identify factors that have a direct association with opinions about wife beating. The dependent variable is agreement with at least one of the eight reasons for wife beating and is defined thus: agreement with one or more reasons coded as 1 and agreement with no reason coded as 0.

Table 8.4 gives the adjusted odds ratios for women's and men's agreement with at least one reason for wife beating for different explanatory variables of interest. Each odds ratio (OR) gives the increase (OR>1.00) or decrease (OR<1.00) in the odds of agreement for a given value of the explanatory variable, compared with the reference category (OR=1.00). For example, in the regression for women's agreement, an odds ratio of 1.11 for the age-group 40-49 years implies that the odds of women in this age group agreeing with at least one reason are 11% higher (OR=1.11 vs. OR=1.00) than if they were only 15-19 years old (the reference category) controlling for all the other variables in the regression. Similarly, the odds ratio for urban women

Table 8.4 Logistic regression results for agreement with at least one reason for wife beating among women and men age 15-49, NFHS-3, India: Odds ratios (OR)

	Agreement with one or more reasons for wife beating	
	Women OR	Men OR
Age		
15-19 *(Ref. cat.)*	1.00	1.00
20- 29	1.05	0.89***
30- 39	1.07*	0.68***
40- 49	1.11***	0.61***
Education		
None *(Ref. cat.)*	1.00	1.00
0-4 years	1.03	0.91*
5-9 years	0.83***	0.76***
10-11 years	0.69***	0.59***
12+ years	0.43***	0.41***
Residence		
Rural *(Ref. cat.)*	1.00	1.00
Urban	0.79***	0.83***
Wealth quintile		
Lowest *(Ref. cat.)*	1.00	1.00
Second	1.01	1.03
Middle	1.05	1.06
Fourth	0.94	0.89*
Highest	0.62***	0.62***

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

implies that women in urban areas are less likely (OR=0.79) to agree with wife beating than women in rural areas (OR=1.00).

The following are the key findings of the regression analysis regarding the relationship of agreement with wife beating with each explanatory variable:

Age: Agreement with wife beating increases with age for women, but declines for men. In other words, controlling for education, wealth, and residence, women in the age-group 30-49 are more likely than younger women to agree; among men, by contrast, the likelihood of agreement is much higher for men age 15-19 than men in any other age group.

Education: The more education a person has, the less likely he or she is to agree with wife beating. The net effect of education is fairly similar for both women and men.

Residence: Women and men in urban areas are less likely than women and men in rural areas to agree with wife beating even when factors such as wealth and education are controlled for.

Wealth: Among women, the odds of agreement are significantly lower only for women in the highest wealth quintile; women in other quintiles are no different from women in the lowest wealth quintile in terms of their agreement with wife beating. The results are similar for men, although for men, it is those in the highest two wealth quintiles who are less likely to agree with wife beating than those in the lowest wealth quintile.

Overall, the regression exercise reveals that urban residence, education, and belonging to richer households are all significantly associated with lower odds of agreeing with wife beating for both women and men. Age is important, but has opposite net effects for women's and men's agreement with wife beating.

Acceptance of Norms about Women's Refusal of Sex

In order to assess norms about women's sexual rights in a marriage, women and men were asked if a woman was justified in refusing her husband sex for each of three reasons—when she knows that her husband has a sexually transmitted disease (STD), when she knows that her husband has sex with other women, and when she is tired or not in the mood.

Overall, agreement with a woman's right to refuse her husband sex is high: 67% of women and 70% of men agree with all three reasons for women refusing their husbands sex.

Further, as Figure 8.4, shows, there is very little variation in agreement by reason and between women and men for any reason. Notably, agreement even with the reason that the wife is

Figure 8.4 Percentage of women and men age 15-49 who agree with specified reasons for a wife to refuse her husband sex, NFHS-3, India

■ Women ■ Men

	He has an STD	He has sex with other women	She is tired or not in the mood	All reasons
Women	78	79	77	67
Men	82	79	84	70
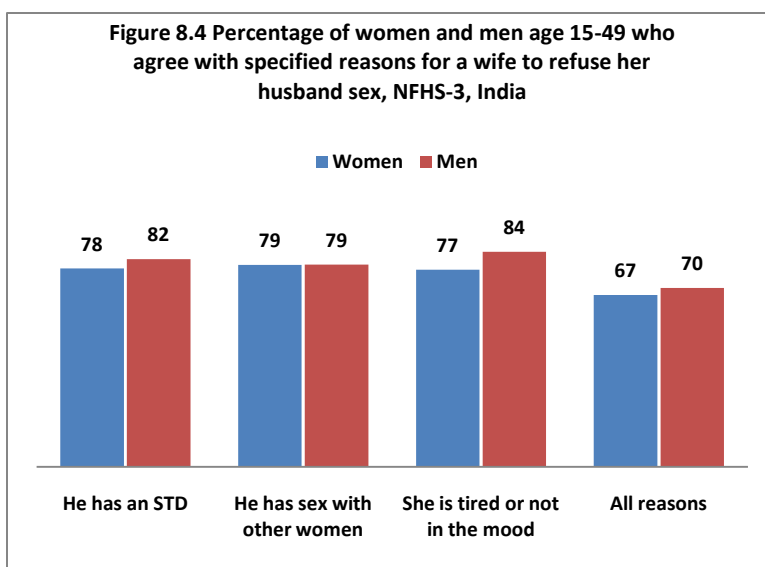
tired or not in the mood is very high, at 77% for women and 84% for men.

These data suggest that the majority of women and men in India do reject norms that say that a wife should not refuse her husband sex and that a husband has a right to expect his wife to always say yes when he wants to have sex.

Figure 8.5 shows that agreement with all three reasons for a wife refusing her husband sex is high for both women and men even among those who have no education. However, the

Figure 8.5 Percentage of women and men age 15-49 who agree with all three reasons for a wife to refuse her husband sex, by education, NFHS-3, India

■ Women   ■ Men

Education	Women	Men
No education	64	57
0-4 years	62	62
5-11 years	69	72
12+ years	78	82

variation by education is somewhat greater for men than for women. Among those with no education, women are more likely than men to agree with all three reasons (64% vs. 57%); whereas, among those with the highest level of education, men are somewhat more likely to agree with all three reasons than women (82% vs. 78%).
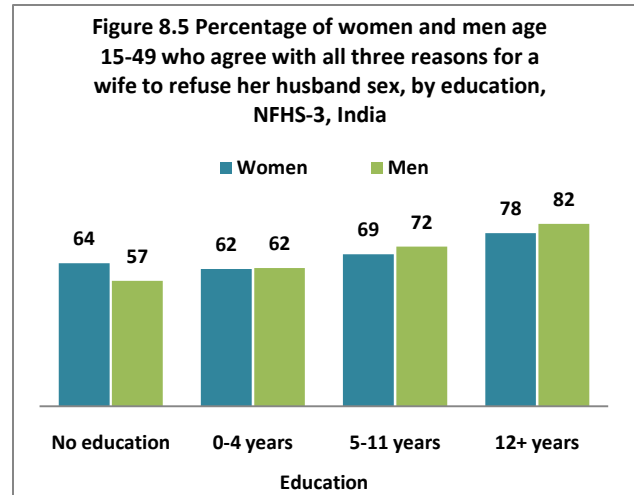
Agreement among couples with a wife refusing her husband sex Given the high level of agreement of women and men with all three reasons for a wife refusing her husband sex, it is not surprising that among the majority of couples, both husband and wife agree with each reason for a wife refusing her husband sex (70-77%).

Table 8.5 Among couples, percentage where both agree, both disagree, only wife agrees, and only husband agrees with each reason for a wife to refuse her husband sex by reason, NFHS-3, India

	Among couples				
	Both Agree	Both Disagree	Wife Agrees	Husband Agrees	Total
Reasons for wife to refuse husband sex					
He has an STD	76.8	2.0	8.2	13.1	100.0
He has sex with other women	70.4	3.3	13.0	13.3	100.0
She is tired or not in the mood	74.1	2.6	8.8	14.5	100.0
All reasons	52.4	0.6	2.7	6.0	100.0

Note: Table excludes couples with missing information and couples for whom the response was 'don't know' for the husband, the wife, or both. Percentages may not add to 100.0 due to rounding.

Among the couples where both husband and wife do not have the same opinion, the proportion of couples where the wife only agrees is lower than the proportion where the husband only agrees. Thus, among couples also, husbands are somewhat more likely to agree with all three reasons for a wife refusing her husband sex than are wives.

Net determinants of opinions about a wife's refusal of sex to her husband As in the case of opinions about wife beating, women's and men's opinions about a wife refusing her husband sex are also likely to be affected by several factors that may be correlated with each other. Thus Table 8.6 shows the adjusted odds ratios for women's and men's agreement with all three reasons for a wife being able to refuse her husband sex for the explanatory variables age, education, residence, and wealth. The dependent variable for the regression is defined

thus: Women/men agreeing with all three reasons for a wife refusing her husband sex are coded 1 and those not agreeing with one or more reasons are coded 0. The net relationship of each of these variables with agreement is as follows:

Age: Age has a similar positive but non-linear net association with both women's and men's agreement with a wife's right to refuse her husband sex. The likelihood of agreement increases with age till the age-group 30-39 and then falls for the highest age group. Nonetheless, in the highest age group also the odds are higher than for the age-group 15-19.

Education: The association of education with agreement differs somewhat for women and men. For men, the higher the level of education, the higher the odds of agreeing, compared with men who have no education. For women, however, the odds of agreement increase with education only if women have completed at least five years of education. Women with less than four years of education have lower odds of agreeing than even those who have no education. Thus for women, education has a positive association only if women receive more than primary education.

Table 8.6 Logistic regression results for agreement with all three reasons for a wife refusing sex to her husband among women and men age 15-49 , NFHS-3, India: Odds ratios (OR)

	Agrees with all three reasons for a wife to refuse her husband sex	
	Women	Men
	OR	OR
Age		
15–19 *(Ref. cat.)*	1.00	1.00
20-29	1.58***	1.42***
30-39	1.67***	1.61***
40-49	1.49***	1.46***
Education		
None *(Ref. cat.)*	1.00	1.00
0-4 years	0.89**	1.25***
5-9 years	1.13***	1.77***
10-11 years	1.27***	2.30***
12+ years	1.54***	2.77***
Residence		
Rural *(Ref. cat.)*	1.00	1.00
Urban	1.11	1.01
Wealth quintile		
Lowest *(Ref. cat.)*	1.00	1.00
Second	1.08*	1.17**
Middle	1.10*	1.16*
Fourth	1.17**	1.29***
Highest	1.44***	1.70***

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

Residence: Controlling for wealth and education, urban residence does not have a significant net association with agreement with a wife's right to refuse her husband sex for women or men.

Wealth: The higher the wealth quintile, the higher the odds of both women and men agreeing with a wife's right to refuse her husband sex. Notably, however, the odds increase by wealth quintile for men more than they do for women.

Thus, attitudes toward a wife having the right to refuse her husband sex are more positive the older men and women are and the wealthier they are. For both men and women, higher levels of education also have a positive effect.

Appendix 8A Percentage of women and men age 15-49 who agree with at least one reason for wife beating and who agree with all reasons for wives' refusing sex to their husbands, by state, NFHS-3, India

	Percentage who say that a husband is justified in hitting or beating his wife for at least one specified reason		Percentage who agree that a wife is justified in refusing her husband sex for all specified reasons	
	Women	Men	Women	Men
North				
Delhi	32.3	27.7	76.9	89.5
Haryana	46.1	32.7	75.7	82.6
Himachal Pradesh	28.3	28.3	82.8	81.7
Jammu & Kashmir	64.0	65.7	53.8	70.7
Punjab	51.3	41.1	71.2	78.4
Rajasthan	57.6	63.9	78.3	66.3
Uttarakhand	49.8	23.4	77.7	78.0
Central				
Chhattisgarh	33.0	37.0	78.1	80.7
Madhya Pradesh	51.4	59.1	81.8	73.9
Uttar Pradesh	47.0	44.2	74.9	82.5
East				
Bihar	56.9	57.4	67.6	72.6
Jharkhand	50.5	33.0	82.2	83.7
Orissa	61.2	41.6	47.6	62.9
West Bengal	42.2	38.8	57.7	47.9
Northeast				
Arunachal Pradesh	71.7	54.6	66.3	55.2
Assam	44.6	25.4	66.2	73.3
Manipur	89.7	85.0	77.7	75.0
Meghalaya	53.2	63.5	54.1	53.4
Mizoram	83.0	82.6	64.3	74.0
Nagaland	78.9	71.2	63.9	70.6
Sikkim	75.7	76.2	87.1	65.5
Tripura	53.1	35.1	41.7	41.3
West				
Goa	38.9	34.7	66.5	48.0
Gujarat	57.2	74.1	62.6	65.8
Maharashtra	50.9	48.4	63.4	66.0
South				
Andhra Pradesh	75.3	72.9	58.8	65.3
Karnataka	65.7	62.7	67.1	67.6
Kerala	65.7	54.2	59.2	65.8
Tamil Nadu	65.5	52.0	62.8	73.2
India	**55.8**	**54.0**	**68.0**	**71.0**

Appendix 8B Percentage of women and men age 15-49 who agree with at least one reason for wife beating and who agree with all reasons for wives' refusing sex to their husbands, by type of residence, NFHS-3, selected cities, India

	Percentage who that a husband is justified in hitting or beating his wife for at least one specified reason		Percentage who agree that a wife is justified in refusing her husband sex for all specified reasons	
	Women	Men	Women	Men
Chennai				
Slum	72.3	64.9	58.7	71.1
Non-slum	63.2	48.8	64.3	75.4
Total	64.9	51.8	63.2	74.6
Delhi				
Slum	41.3	31.3	72.3	82.4
Non-slum	28.5	26.2	79.1	91.4
Total	30.9	27.3	77.8	89.5
Hyderabad				
Slum	50.4	69.1	64.5	66.5
Non-slum	46.6	72.1	66.9	59.9
Total	47.3	71.6	66.5	61
Indore				
Slum	25.4	39.6	84.1	79.5
Non-slum	18.2	36.6	91	90.8
Total	19.6	37.2	89.6	88.4
Kolkata				
Slum	21.9	23.8	80.2	60.4
Non-slum	14.9	13.7	79.4	74.5
Total	17.3	17.4	79.6	69.3
Meerut				
Slum	31.3	25.3	87.2	86.9
Non-slum	22.4	14	88.3	90.9
Total	26.4	19.2	87.8	89
Mumbai				
Slum	40.7	32.1	77.2	80.5
Non-slum	21.8	20.3	85.7	88.1
Total	32.3	27.3	80.9	83.7
Nagpur				
Slum	59.8	57.5	58.7	63.4
Non-slum	30.5	43.7	65.3	83.5
Total	41.3	48.7	62.9	76.1

9. MARRIED WOMEN AND DECISIONMAKING

Summary and Key Findings

- *Among those who have earnings, more women (1 in 5) than men (1 in 18) do not have a major say in how their own earnings are used and fewer women (about 7 in 10) than men (about 9 in 10 men) have a major say in how their spouses' earnings are used.*
- *Women's control over own earnings increases with education and wealth, but men's control remains consistently high in all educational and wealth categories.*
- *Participation in decisions about the use of spouses' earnings increases with education and wealth for women; for men, by contrast, it does not vary by education and declines with wealth.*
- *About one in five currently married women who earn, earn at least as much as their husbands.*
- *Women who earn about the same as their husbands are more likely to have a major say in the use of their husbands' earnings than both women who earn less than their husbands and who earn more than their husbands.*
- *Less than two in three currently married women participate, alone or jointly, in decisions about their own health care, large household purchases, purchases for daily need, and visits to her family and relatives. The regression analysis shows:*
  - *The number of decisions women make alone varies nonlinearly with education and does not vary with wealth;*
  - *The number of decisions women make jointly varies positively with education and nonlinearly with wealth; and*
  - *For women, having earnings that they control is associated with greater participation in decisions; however, having earnings without a major say in their use is negatively associated with the number of decisions made jointly and, unexpectedly, positively associated with the number of decisions made mainly alone.*

Empowerment literally means "to invest with power". However, in the context of women's empowerment the term has come to denote women's increased control over their own lives, bodies, and environments. Further, the concept of empowerment encompasses "a growing intrinsic capability—greater self-confidence and an inner transformation of one's consciousness that enables one to overcome external barriers…" (Sen and Batliwala, 2000). Greater control and increased capabilities to overcome barriers all translate into increased agency or the ability to make and implement choices. An important indicator of agency is decisionmaking power.

In this chapter, indicators of married women's participation in various types of decisions typically made in households are examined. Decisions asked about are decisions about the use of women's own earnings and husbands' earnings, decisions regarding small and large purchases, and other types of personal or household decisions.

Decisions about Use of Own Earnings

As noted in Chapter 5, women are less likely than men to be employed, and when employed, they are also less likely to be receiving cash earnings. NFHS-3 shows that among currently married women, 43% are employed and 28% are employed for cash. In contrast, 99% of currently married men are employed and 90% are employed for cash.

One important focus of this chapter is to examine the control women and men have over their own earnings. The specific question in NFHS-3 asked women and men about the main person making decisions (mainly the respondent, mainly the spouse, or mainly the respondent and spouse jointly) regarding the use of earnings. Whereas the level of participation in making decisions measures the extent of control over the use of own earnings, differences between women and men in such participation point to gender inequalities in the control of own earnings.

Figure 9.1 Percentage of currently married women and men age 15-49 employed for cash by whether they have the main say in the use of their earnings, NFHS-3, India

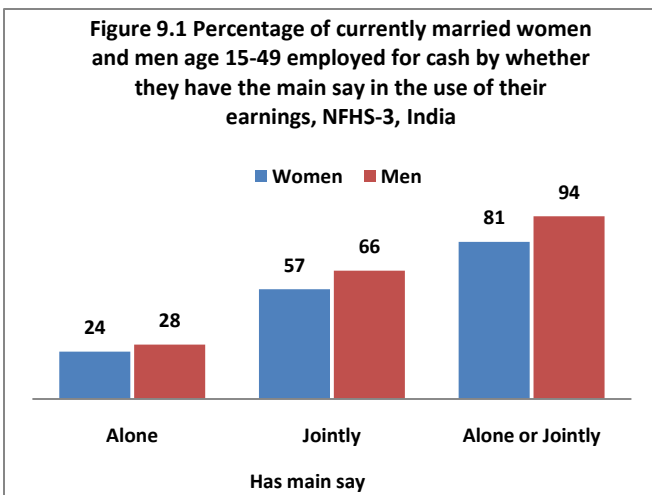Figure 9.1 shows that 81% of currently married women age 15-49 who have earnings are involved mainly alone or jointly in decisions about the use of their earnings. While this proportion is high, it still shows that about one in five women with earnings do not have a major say in decisions about the use of their own earnings.

There are notable gender differences in control over own earnings. Married men are more

likely than married women to be involved in decisions about use of their own earnings (94% vs. 81%) and men are also more likely to have the main say alone in these decisions than women (28% vs. 24%).

Control over own earnings by education and wealth Table 9.1 shows that for men, having the main say alone or jointly in the use of their own earnings does not vary by education; for women, by contrast, the higher their level of education the more likely they are to have a main say in the use of their own earnings.

Interestingly, for men, having the main say alone in decisions about own earnings declines with education, and having a joint say increases with education; for women, by contrast, both tend to increase with education.

Table 9.1 Percentage of currently married women and currently married men age 15-49 employed for cash by whether they have the main say alone, jointly, or alone or jointly, in the use of their earnings, according to wealth and education, NFHS-3, India

	Percentage of women with earnings, who make decisions about use of earnings:			Percentage of men with earnings, who make decisions about use of earnings:		
	Alone	Jointly	Alone or jointly	Alone	Jointly	Alone or Jointly
Education						
None	22.8	54.9	77.6	32.7	62.4	95.1
0-4 years	24.0	58.0	82.0	31.4	62.8	94.2
5-9 years	26.8	56.5	83.4	28.1	65.1	93.2
10-11 years	28.2	59.4	87.5	24.7	69.1	93.8
12+ years	28.6	63.7	92.2	22.0	72.9	95.0
Wealth quintile						
Lowest	20.1	58.0	78.1	31.4	63.3	94.6
Second	21.4	54.9	76.3	31.0	63.1	94.1
Middle	25.1	55.6	80.7	30.4	63.3	93.7
Fourth	28.9	55.6	84.5	28.1	65.9	94.0
Highest	31.4	59.0	90.3	20.7	73.6	94.4
Total	24.4	56.5	80.9	28.1	66.1	94.2

The relationship of control over own earnings and wealth also varies between women and men. For men, the likelihood of making these decisions jointly increases with wealth and the likelihood of making them alone decreases. For women, however, having a say mainly alone increases from 20% for those in the lowest wealth quintile to 31% for those in the highest wealth quintile, but there is little change by wealth in the proportions who participate jointly in decisions about the use of their own earnings.
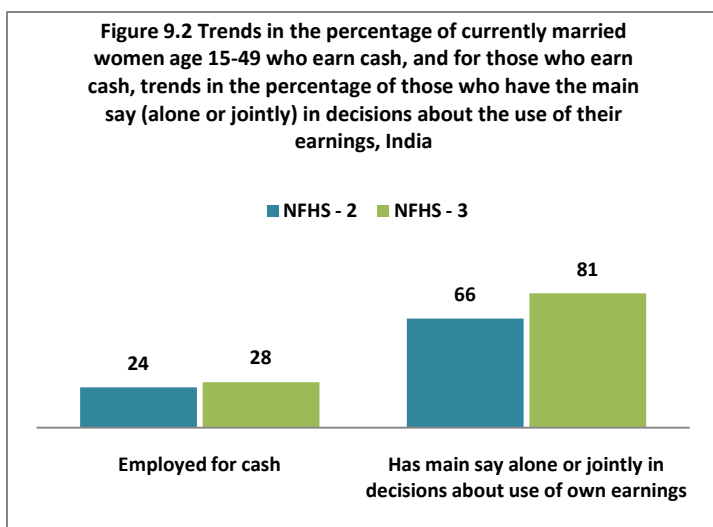
Trends in married women's control over their own earnings The proportion of currently married women who earn cash has been growing slowly over time. At the time of NFHS-1, only 20% of currently married women earned cash; in NFHS-2, this proportion had risen to 24%, and seven years later in NFHS-3, it is 28% (Figure 9.2).

No data on control of decisions about

Figure 9.2 Trends in the percentage of currently married women age 15-49 who earn cash, and for those who earn cash, trends in the percentage of those who have the main say (alone or jointly) in decisions about the use of their earnings, India

■ NFHS - 2   ■ NFHS - 3

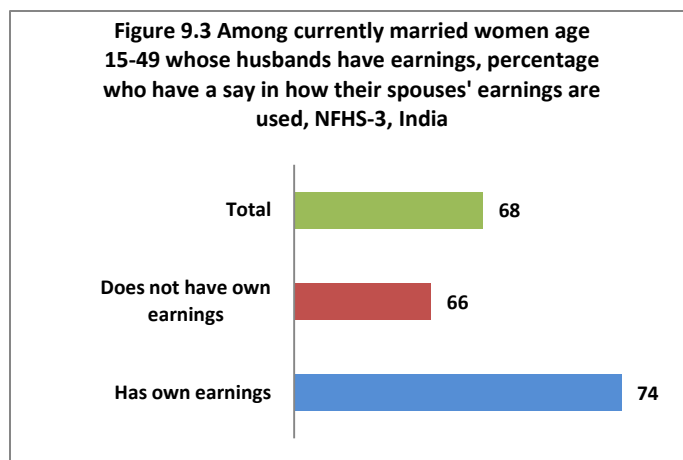Employed for cash: 24, 28

Has main say alone or jointly in decisions about use of own earnings: 66, 81

earnings are available in NFHS-1 and the wording of the question regarding decisionmaking about the use of women's earnings was different in NFHS-2 and NFHS-3. Nonetheless, the data in Figure 9.2 suggest that women's participation in decisions about the use of their own earnings is likely to have risen sharply between the two surveys.

Decisions about Use of Spouses' Earnings

Although several women have earnings and some may earn as much or more than their husbands (see below), most women are not employed and do not have earnings. Thus, for a majority of married women, how husbands' earnings are used is likely to be important for their own and their children's welfare. An examination of women's and men's participation in decisions about the use of their spouses' earnings provides insight into power relations within the home and is also an indirect measure of women's control over their own welfare.

Sixty-eight percent of currently married women whose husbands have earnings have the main say (jointly or alone) in the use of their husbands' earnings (Figure 9.3 and Table 9.2). This proportion is much lower than the proportion of currently married men whose wives have earnings who have a main say in the use of their wives' earnings (87%). Thus, overall, about one in three married women whose husbands have earnings have little control over how their husbands' earnings are used; by contrast, only about one in eight married men whose wives earn do not have a major say in how their wives earnings are used.

Figure 9.3 Among currently married women age 15-49 whose husbands have earnings, percentage who have a say in how their spouses' earnings are used, NFHS-3, India

Total	68
Does not have own earnings	66
Has own earnings	74

The proportion of women who have a main say in the use of their husbands' earnings varies somewhat between women who earn and women who do not: two-thirds of women with no earnings have a say in the use of their husbands' earnings, compared with almost three-fourths of women with earnings.

Control over spouses' earnings by education and wealth Table 9.2 shows that, for currently married men, having a main say, alone or jointly, in the use of their wives' earnings varies little by education; for currently married women, by contrast, the proportion with a main say, alone or jointly, in the use of their husbands' earnings increases with higher levels of education and varies little at lower levels. At each education level, a higher proportion of women with earnings have a say in the use of their spouses' earnings than women with no earnings.

Table 9.2 Among women and men age 15-49 whose spouses have earnings, percentage who have a say in how their spouses' earnings are used, according to education and wealth quintile, NFHS-3, India
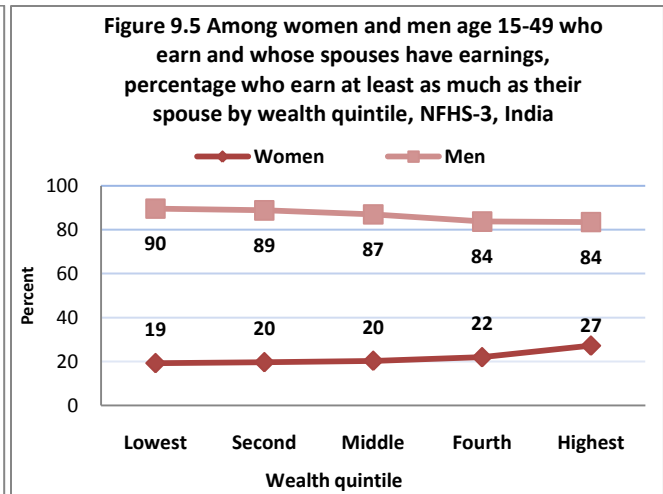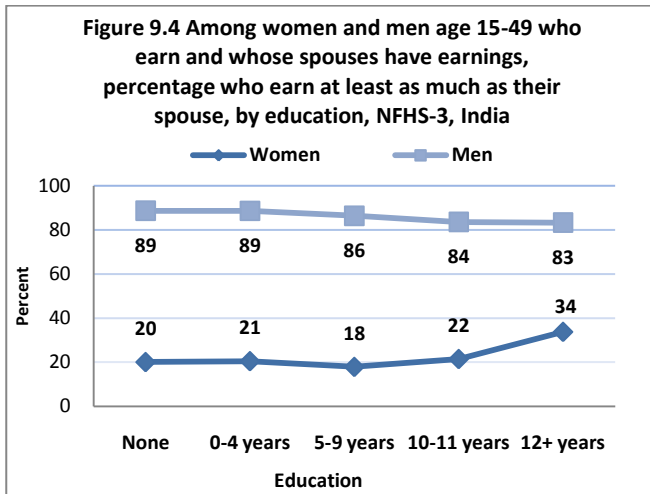
	Percentage of women with husbands who have earnings who have a say in how his earnings are used			Percentage of men with wives who have earnings who have a say in how their wives' earnings are used
	Has own earnings	Does not have own earnings	Total	
Education				
None	72.3	64.6	67.1	88.8
0-4 years	73.9	62.4	65.9	86.3
5-9 years	75.3	65.9	67.7	84.4
10-11 years	78.2	68.9	70.4	87.0
12+ years	83.0	72.9	75.6	86.2
Wealth quintile				
Lowest	74.0	65.6	68.7	90.6
Second	71.0	63.2	65.6	88.8
Middle	72.3	63.1	65.8	86.0
Fourth	76.1	64.5	67.0	82.6
Highest	81.7	72.2	73.9	82.0
Total	**74.3**	**66.0**	**68.3**	**86.6**

The pattern of variation in participation in decisions about the use of spousal earnings by wealth is not the same for women and men. For men, the proportions who have the main say, alone or jointly, in decisions about the use of their wives' earnings declines consistently with wealth from 91% for those in the lowest wealth quintile to 82% for those in the highest wealth quintile. Among women, by contrast, the proportion of women who have a main say, alone or jointly, in the use of their husbands' earnings is highest for women in the highest wealth quintile, followed by women in the lowest wealth quintile. A non-linear relationship of the participation in decisions about the use of husbands' earnings and wealth is evident both for women with and without earnings.

Women's Earnings Relative to Their Husbands' Earnings

Another factor which might affect women's control over their own, as well as their husbands' earnings, is the importance of women's earnings for the economic survival of the household. If women's earnings are seen as critical to the functioning of the household, women may have greater power in ensuring that their views and needs are taken into account. Information is not available in NFHS-3 on women's relative contribution to household income or on perceptions about the importance of women's earnings. This type of information can, nonetheless, be indirectly inferred from the question included in NFHS-3 on the size of own earnings relative to the earnings of the spouse. This question is asked of both women and men who earn and whose spouses also have earnings. In NFHS-3, 10% of currently married women with earnings earn more than their husbands and 11% earn about the same. Thus, in all, 21% of married women who have earnings earn at least as much as their spouses, compared with 87% of married men whose wives have earnings.

Figure 9.4 shows that the proportion of women who earn as much or more than their husbands generally increases with education. Notably, among women who earn and have 12

Figure 9.4 Among women and men age 15-49 who earn and whose spouses have earnings, percentage who earn at least as much as their spouse, by education, NFHS-3, India

Figure 9.5 Among women and men age 15-49 who earn and whose spouses have earnings, percentage who earn at least as much as their spouse by wealth quintile, NFHS-3, India


or more years of education, more than one in three earn as much as their husbands, compared with one in five among women with no education. For men, by contrast, the proportion who earn at least as much as their wives declines slightly with education. Nonetheless, even among the most educated employed persons, men are much more likely than women to be earning as much or more than their spouses.

Wealth also has a similar effect on the relative earnings of women and men as education: women who earn cash are more likely to earn at least as much as their husbands in wealthier households than in poorer households; whereas, the proportion of men earning at least as much as their wives declines with wealth (Figure 9.5).

Women's participation in decisions about earnings by their relative earnings Figure 9.6

shows that women who earn less than their husbands are less likely to participate in decisions about the use of their own and their husbands' earnings than do women who earn more or about the same as their husbands.
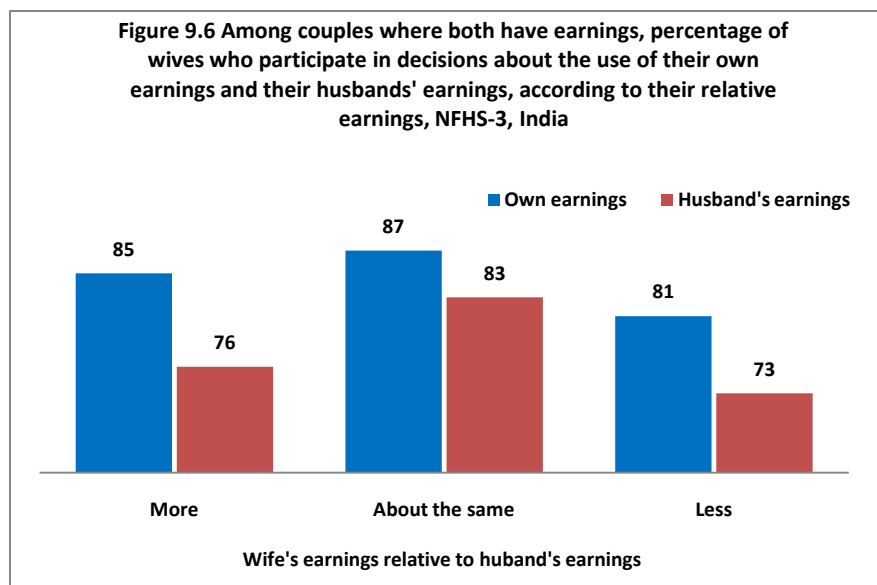
Interestingly, it is not women who have more earnings who are substantially more likely to participate in these decisions; instead, it is women who earn about the same as their husbands. Thus equality in earn-

Figure 9.6 Among couples where both have earnings, percentage of wives who participate in decisions about the use of their own earnings and their husbands' earnings, according to their relative earnings, NFHS-3, India

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ings appears to have a greater effect on women having a main say in decisions about earnings use than variations away from this equality.

Women's Participation in Specific Household Decisions

In addition to questions about decisions on the use of earnings, currently married women were also asked about several other decisions and who usually makes them. The specific decisions asked about were decisions on own health care, large household purchases, purchases for daily needs, and visits to her family and relatives.

NFHS-3 shows that women are most likely to participate in decisions about their own health care (62%), followed closely by decisions about visits to own family or relatives (61%) and decisions about purchases for daily needs (60%). Women are least likely to participate in decisions about large household purchases (53%).

Figure 9.7 Percentage of currently married women age 15-49 who usually make specified decisions alone or jointly, NFHS-3, India

■ Decision made alone   ■ Decision made jointly

	Own health care	Large household purchases	Purchases for daily needs	Visits to her family and relatives
Decision made alone	27	8	32	11
Decision made jointly	35	44	28	50
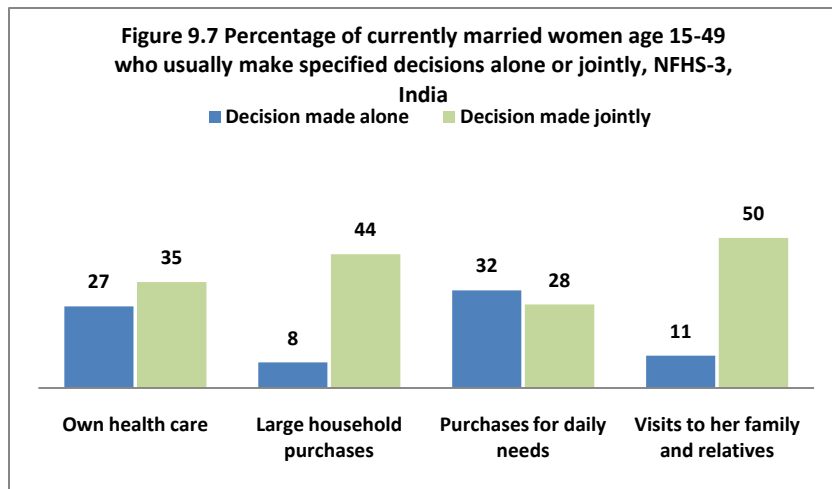
Despite fairly similar levels of overall participation in these decisions, whether women make the decisions alone or jointly with their husbands or someone else varies greatly by decision. About 3 in 10 women make decisions mainly alone regarding purchases for daily needs and their own health care, but only about 1 in 10 make each of the other two decisions alone (Figure 9.7). The reverse is true for joint decisionmaking: decisions about visits and about large household purchases are more likely to be made jointly than the other two decisions.

Decisionmaking alone and jointly vary differently by earnings control, education, and wealth (Table 9.3). Decisionmaking mainly alone varies only minimally with education, irrespective of decision; whereas, joint decisionmaking and education have a consistently positive association for all decisions except decisions about purchases for daily needs. Decisionmaking alone tends to increase with wealth only for decisions about own health care and purchases for daily

Table 9.3 Percentage of currently married women age 15-49 who usually make specified decisions alone and who usually make them jointly by selected background characteristics, NFHS-3, India

| | Type of decision | | | | | | | |
| | Own health care | | Large household purchases | | Purchases for daily needs | | Visits to her family or relatives | |
	Decision made alone	Decision made jointly	Decision made alone	Decision made jointly	Decision made alone	Decision made jointly	Decision made alone	Decision made jointly
Education								
None	27.0	32.4	8.8	42.7	32.0	27.5	10.5	47.0
0-4 years	27.1	34.1	9.4	42.0	33.7	26.5	12.4	48.0
5-9 years	26.5	35.6	8.2	43.1	32.3	26.1	10.6	49.6
10-11 years	26.6	40.6	7.7	48.6	32.3	29.3	10.2	55.7
12+ years	29.7	43.5	7.5	55.2	33.7	32.6	10.9	60.7
Wealth quintile								
Lowest	25.6	32.9	8.1	43.1	28.9	29.8	9.4	46.3
Second	25.7	32.4	8.2	41.0	29.5	26.8	10.1	45.5
Middle	26.3	33.9	9.2	40.5	32.2	25.4	11.7	45.7
Fourth	28.2	35.4	9.2	43.8	34.3	26.2	10.8	51.1
Highest	29.6	40.6	7.7	53.2	36.7	30.2	11.5	59.6
Employment and earnings control								
Employed for cash and has main say alone or jointly in earnings use	32.5	43.4	12.6	59.2	42.6	36.2	14.2	63.0
Employed for cash and does not have main say in earnings use	30.0	16.3	12.8	20.4	33.0	12.5	15.5	28.7
Employed, but not for cash	22.7	31.8	5.9	39.2	28.8	24.5	8.8	44.9
Not employed	26.1	35.6	7.2	43.9	29.8	27.6	9.4	49.3
Total	27.1	35.1	8.5	44.4	32.4	27.7	10.7	49.8

needs; whereas, joint decisionmaking tends to bear a non-linear, but generally positive association with wealth for most decisions.

Employment with earnings control is associated with greater participation in joint decisionmaking for all decisions; by contrast, decisionmaking alone is higher among women who are employed for cash, irrespective of whether they do or do not have the main say in the use of own earnings. Notably, women who are not employed make most decisions jointly more often than women who are employed without earnings and women who have earnings but do not have a say in their use.

Net determinants of participation in decisionmaking Since education, wealth, and employment and earnings control can have a direct and an indirect effect on women's participation in household decisions, ordinary least squares (OLS) regressions were run separately for the number of decisions that currently married women make alone and the number they make jointly. The decisions included were the four decisions in Table 9.3 and decisions about the use of husbands' earnings. Thus the minimum score for each of the two dependent variables, number of decisions made alone and number made jointly, is 0 decisions and the maximum is 5 decisions.

Table 9.4 shows the percent distribution of currently married women by the number of decisions they make

Table 9.4 Percent distribution of currently married women age 15-49 by number of decisions they make alone and number they make jointly, NFHS-3, India

Number of decisions	Made alone (%)	Made jointly (%)
0	53.4	25.2
1	24.7	18.6
2	12.3	13.5
3	4.5	14.6
4	3.2	12.7
5	1.9	15.4

alone and the number they make jointly. The percentage of women making no decisions alone is 53% and the percentage making all five decisions alone is only 2%; the corresponding proportions for women making none and all decisions jointly are 25% and 15%, respectively.

Table 9.5 shows the coefficient estimates for two separate linear regressions, the first for the number of decisions made mainly alone (0-5) and the second for the number of decisions made mainly jointly (0-5). In addition to education, wealth, and employment with earnings control, other control variables included in the regression are relative earnings, residence, and age. Note that a positive OLS coefficient implies a positive relationship and a negative coefficient implies a negative relationship. For example, the coefficient for the category 'employed for cash and does not have a say' in the joint decisionmaking column implies that such women, on average, make 1.3 fewer decisions jointly than women who are not employed. The results by explanatory variable are as follows:

Table 9.5 Linear regression coefficients for number of decisions made alone and number of decisions made jointly for currently married women age 15-49 regressed on selected characteristics, NFHS-3, India

	Number of decisions made alone (0-5) β	Number of decisions made jointly (0-5) β
Education		
Ref. cat.: None		
0-4 years	0.05*	0.03
5-9 years	0.04*	0.13***
10-11 years	-0.01	0.29***
12+ years	-0.04	0.38***
Wealth quintile		
Ref. cat: Lowest		
Second	0.01	-0.10***
Middle	0.04	-0.17***
Fourth	0.02	-0.17***
Highest	-0.04	-0.05
Employment and earnings control		
Ref. cat.: Not employed		
Employed for cash and has a say in earnings use	0.27***	0.72***
Employed for cash, no main say in earnings use	0.11***	-1.32***
Employed, but not for cash	-0.06**	-0.10**
Relative Earnings		
Ref. cat.: Less or no earnings		
Same or more than husband	0.10**	-0.01
Residence		
Ref. cat.: Rural		
Urban	0.19***	0.16***
Age		
Ref. cat.: 15-19		
20-29	0.28***	0.56***
30-39	0.56***	0.88***
40-49	0.69***	0.90***

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

Education: Education has a non-linear association with the number of decisions women make alone: women with 0-9 complete years of education make slightly more decisions on average than women with no education, but women with a higher level of education are no different from women with no education. By contrast, education has a positive association with the number of decisions made jointly.

Wealth: The number of decisions made alone is unrelated to wealth. However, the number of decisions made jointly varies nonlinearly with wealth: women in the second, middle, or fourth wealth quintile make significantly fewer decisions jointly, on average, than women in the lowest wealth quintile and women in the highest wealth quintile are no different from those in the lowest quintile.

Employment and earnings control: As expected, women who earn cash and have a say in their earnings use are significantly more likely to participate in decisionmaking alone and jointly, than women who are not employed. Women who do not earn cash but are employed are significantly less likely than unemployed women to make decisions alone and jointly. However, belonging to the category of women who are employed but do not have a major say in how their earnings are used does not have the same relationship with the number of decisions women make alone and the number they make jointly: these women are considerably less likely than unemployed women to make decisions jointly, but are more likely to do so alone. This finding is contrary to expectations and needs further exploration.

Relative earnings: Compared with other women, having earnings that are at least as much as husbands' earnings is associated with a greater number of decisions being made alone, but is unrelated to the number being made jointly.

Residence: Compared with rural living, urban residence is positively associated with both the number of decisions made alone and decisions made jointly.

Age: Age is positively associated with both the number of decisions made alone and the number made jointly.

In summary, the regression for the number of decisions made alone shows that the number is higher, on average, for women with earnings, women earning at least as much as their husbands, women who are older, and women living in urban areas. Education and wealth do not have a direct positive association with the number of decisions women make alone. By contrast, joint decisionmaking does increase with education, but does not vary positively with wealth and does not vary at all with women's relative earnings. Finally, being employed but not having a major say in the use of own earnings does have the expected negative association with joint decisionmaking, but it has an unexpected positive association with the number of decisions made alone.

Appendix 9A Currently married women and men age 15-49 who are employed for cash and who have the main say alone or jointly, in how their earnings are used, by state, India

	Women	Men
North		
Delhi	93.0	96.7
Haryana	82.3	96.0
Himachal Pradesh	86.0	94.3
Jammu & Kashmir	84.4	88.6
Punjab	90.7	93.9
Rajasthan	75.3	94.1
Uttarakhand	86.4	93.9
Central		
Chhattisgarh	84.6	94.2
Madhya Pradesh	77.1	94.9
Uttar Pradesh	90.1	92.9
East		
Bihar	84.0	93.0
Jharkhand	88.1	97.0
Orissa	82.7	95.7
West Bengal	84.6	94.7
Northeast		
Arunachal Pradesh	91.7	92.9
Assam	90.3	94.4
Manipur	95.7	96.6
Meghalaya	87.9	96.9
Mizoram	91.5	96.9
Nagaland	95.2	92.3
Sikkim	94.8	94.3
Tripura	75.3	96.2
West		
Goa	92.1	89.9
Gujarat	81.1	87.9
Maharashtra	79.6	95.5
South		
Andhra Pradesh	68.8	95.8
Karnataka	71.5	95.5
Kerala	89.7	97.8
Tamil Nadu	87.5	91.8
India	**83.1**	**94.3**

Appendix 9B Selected indicators of women's participation, alone or jointly, in different types of decisions, by type of residence, NFHS-3, selected cities, India

| | Who have earnings and who have the main say in decisions about the use of their earnings | Whose husbands have earnings and who have the main say in how their husbands' earnings are used | | Who usually make decisions about own health care: | | Who usually make decisions about making large household purchases: | | Who usually make decisions about making purchases for daily needs: | | Who usually make decisions about visits to her family or relatives: | |
		Woman does not have own earnings	Woman has own earnings	Alone	Jointly	Alone	Jointly	Alone	Jointly	Alone	Jointly
Chennai											
Slum	91.1	80.9	83.3	39.0	35.2	31.5	44.3	71.4	15.5	25.0	53.6
Non-slum	95.1	78.1	84.8	35.6	43.4	32.1	39.4	65.5	17.8	24.2	55.8
Total	94.2	78.6	84.4	36.2	41.8	32.0	40.4	66.6	17.4	24.4	55.4
Delhi											
Slum	93.1	76.5	86.1	27.9	45.4	7.1	62.4	43.1	34.6	7.9	67.4
Non-slum	93.0	84.5	88.4	37.8	36.5	6.0	61.8	48.7	26.7	10.5	64.3
Total	93.0	83.1	87.9	36.0	38.2	6.2	61.9	47.7	28.2	10.0	64.9
Hyderabad											
Slum	85.0	47.1	72.6	35.5	39.3	20.2	41.2	31.7	34.3	14.8	57.2
Non-slum	82.7	47.4	70.5	31.9	42.2	15.4	42.6	30.7	33.9	12.4	54.4
Total	83.2	47.3	70.9	32.5	41.7	16.3	42.4	30.9	34.0	12.8	54.9
Indore											
Slum	91.7	74.9	83.2	29.3	43.9	7.6	61.9	34.5	38.4	10.3	59.5
Non-slum	87.1	75.5	83.1	31.3	31.5	6.9	56.5	46.4	24.6	10.2	55.9
Total	88.2	75.4	83.1	30.9	33.9	7.0	57.6	44.1	27.3	10.2	56.6
Kolkata											
Slum	92.3	59.0	67.2	29.5	33.2	15.8	36.0	29.9	24.0	17.4	41.1
Non-slum	95.7	61.0	72.6	35.1	37.8	15.5	44.6	30.5	29.4	23.4	47.7
Total	94.6	60.3	70.9	33.3	36.3	15.6	41.7	30.3	27.6	21.4	45.5
Meerut											
Slum	95.2	77.9	78.7	29.6	50.3	5.9	66.3	53.6	25.2	13.5	66.6
Non-slum	95.6	79.3	92.1	28.2	50.0	3.1	74.0	34.6	44.4	14.3	61.9
Total	95.4	78.7	85.3	28.8	50.1	4.3	70.6	43.0	35.9	14.0	64.0
Mumbai											
Slum	86.2	78.7	90.0	43.6	32.7	6.3	65.6	62.4	21.4	8.0	73.6
Non-slum	93.3	87.9	94.5	34.7	37.7	5.0	71.9	64.8	17.5	6.7	79.2
Total	89.6	82.5	92.2	39.8	34.9	5.7	68.3	63.4	19.8	7.5	76.0
Nagpur											
Slum	92.5	72.2	77.3	44.0	30.4	12.3	53.1	57.1	19.9	24.5	52.8
Non-slum	93.0	85.2	85.1	37.2	48.0	6.2	72.2	54.4	26.0	13.5	75.0
Total	92.8	80.9	82.0	39.6	41.8	8.3	65.5	55.3	23.8	17.4	67.3

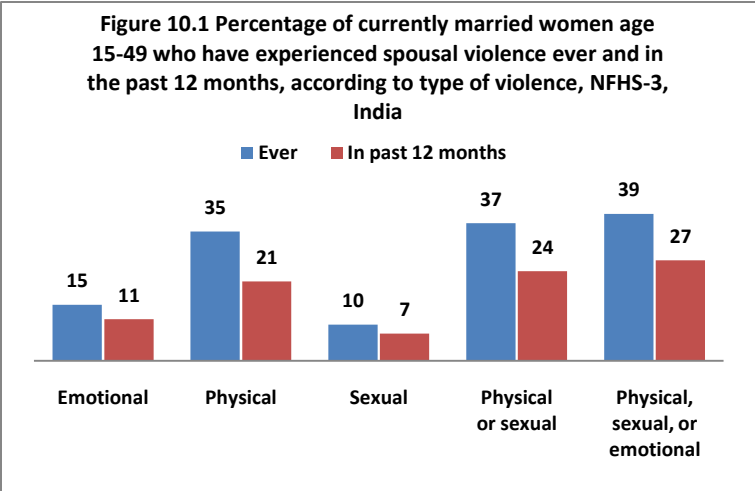# 10. SPOUSAL VIOLENCE

Summary and Key Findings

- *About two in five currently married women age 15-49 have experienced spousal violence in their current marriage, and among women who have ever experienced such violence, more than two in three have experienced violence in the past year.*
- *Slapping is the most common form of spousal physical violence.*
- *Recent experience of spousal violence varies little by marital duration, but, as expected, ever experience of spousal violence increases with marital duration.*
- *Women who report both physical and sexual violence are more likely to have injuries and are subject to more severe forms of physical violence than women who have experienced physical but no sexual violence.*
- *Women who make household decisions jointly with their husbands, including decisions about the use of their own earnings, are less likely to experience spousal violence than women who do not have a major say in these decisions or who make the decisions mainly alone.*
- *Although women who agree that wife beating is justified have a higher prevalence of violence, one out of three women who do not agree that wife beating is justified have also experienced violence.*
- *Higher education and wealth consistently lower women's risk of spousal violence; and husbands' consumption of alcohol and having a mother who was beaten by her spouse significantly increase the risk.*
- *The prevalence of violence is higher for women whose mothers' experienced spousal violence than for women who have husbands whose mothers experienced spousal violence.*
- *Prevalence of spousal violence is higher for women who are employed than women who are not; however, controlling for wealth and education, employment for cash is related positively only to emotional violence; it is unrelated to physical violence and is associated with lower odds of sexual violence (OR=0.85).*

Violence by husbands against their wives, commonly called domestic or spousal violence, is one of the most common forms of gender-based violence experienced by women across the world (United Nations, 2006). Domestic violence is not just a violation of the human rights of women, but has significant economic costs. These include the loss of women's labour hours, as well as an increased need for health-care investments at both the household and societal levels. Further, increasing amounts of research points to both short and long-term detrimental effects of domestic violence on the health and welfare of women and their children (Garcia-Moreno et al., 2006; Hindin, Kishor, and Ansara, 2007; Kishor and Johnson 2006; 2004). In addition to other costs, experiencing and living with the constant threat of domestic violence is a source of disempowerment for women.

This chapter provides information on the level, types, and frequency of spousal violence and the extent of resulting injuries experienced by currently married women age 15-49. In addition, it examines the characteristics of women who suffer domestic violence to help identify risk factors for spousal violence.

Prevalence of Spousal Violence against Wives

In India, significant proportions of currently married women age 15-49 experience emotional, physical, and sexual violence by their current husband. Figure 10.1, shows not only the high prevalence of different forms of violence, particularly physical violence, but also suggests that the majority of currently married women who have ever been abused by their husbands are also currently being abused. Overall, 39% of currently married women age 15-49 have ever experienced any physical or sexual or emotional violence in their current marriage and 27% have experienced the violence in the past 12 months. Thus, among all currently married women who have experienced physical, sexual, or emotional violence, more than two-thirds (68%) have experienced the violence in the past 12 months and are likely to be still at risk.
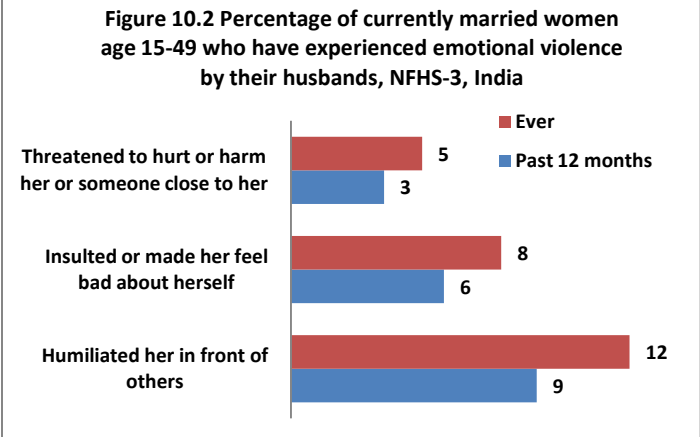

Figure 10.1 Percentage of currently married women age 15-49 who have experienced spousal violence ever and in the past 12 months, according to type of violence, NFHS-3, India

■ Ever   ■ In past 12 months

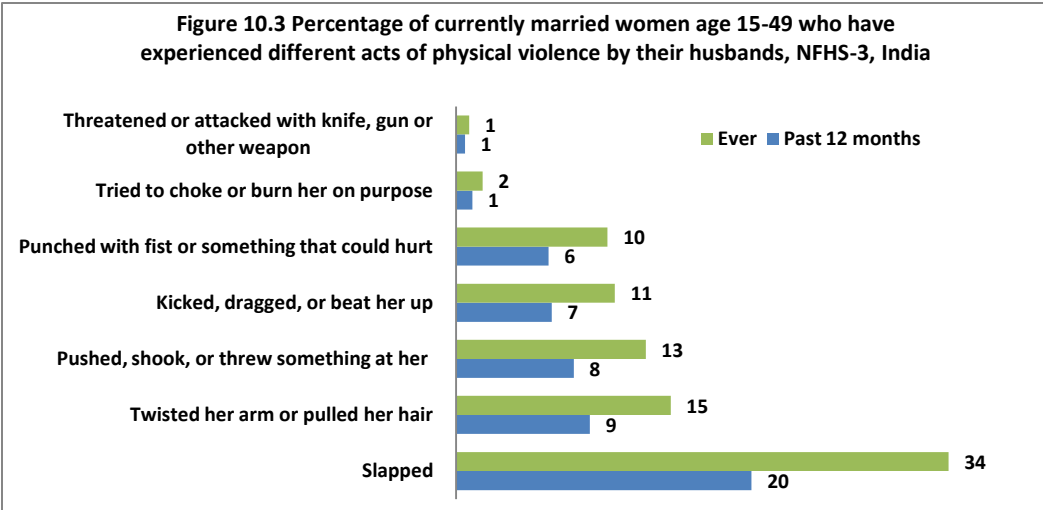|	Emotional	Physical	Sexual	Physical or sexual	Physical, sexual, or emotional
Ever	15	35	10	37	39
In past 12 months	11	21	7	24	27

Experience of Specific Acts of Violence

Information on the proportion of women who have experienced physical, sexual, or emotional violence tells us how common each of these categories of violence is. However, for advocacy

and educational purposes, it is also important to know which acts of violence are most common. Such information can be used to raise awareness that these and similar acts constitute violence and are not acceptable. This is particularly important in light of attitudes which see spousal violence against a wife as justified (Chapter 8) under at least some circumstances. In fact, some acts may be more acceptable than others or may not even be perceived as violence. For example, both women and men may be more accepting of slapping than they are of other acts such as inflicting burns or kicking. Hence, understanding which acts of violence are more common will help to better target program messages.

Acts of emotional violence Figure 10.2 shows that, of the three acts of emotional violence asked about, the most common is being humiliated by the husband in front of others and the least common is being threatened with harm. Almost three out of four currently married women age 15-49 who have ever experienced each of these acts of emotional violence have experienced them in the past year.

Figure 10.2 Percentage of currently married women age 15-49 who have experienced emotional violence by their husbands, NFHS-3, India

Legend: Ever, Past 12 months

- Threatened to hurt or harm her or someone close to her: Ever 5, Past 12 months 3
- Insulted or made her feel bad about herself: Ever 8, Past 12 months 6
- Humiliated her in front of others: Ever 12, Past 12 months 9

Acts of physical violence Being slapped is the most common form of spousal physical violence that currently married women experience. Of the 35% of currently married women age 15-49 who have ever experienced any physical spousal violence, 97% have been slapped. However, as Figure 10.3 shows, slapping is not the only form of physical violence women experience. Further, at least three-fifths of women who have ever experienced any of the acts of physical violence, have also experienced the act in the past 12 months. Notably, about 1% of women have experienced life-threatening violence in the form of being choked or burned or being threatened or attacked with a weapon in the 12 months preceding the survey.

Figure 10.3 Percentage of currently married women age 15-49 who have experienced different acts of physical violence by their husbands, NFHS-3, India

Legend: Ever, Past 12 months

- Threatened or attacked with knife, gun or other weapon: Ever 1, Past 12 months 1
- Tried to choke or burn her on purpose: Ever 2, Past 12 months 1
- Punched with fist or something that could hurt: Ever 10, Past 12 months 6
- Kicked, dragged, or beat her up: Ever 11, Past 12 months 7
- Pushed, shook, or threw something at her: Ever 13, Past 12 months 8
- Twisted her arm or pulled her hair: Ever 15, Past 12 months 9
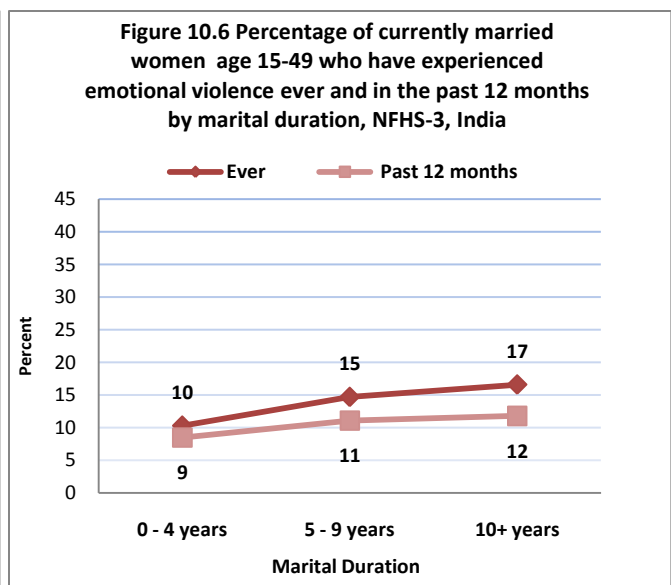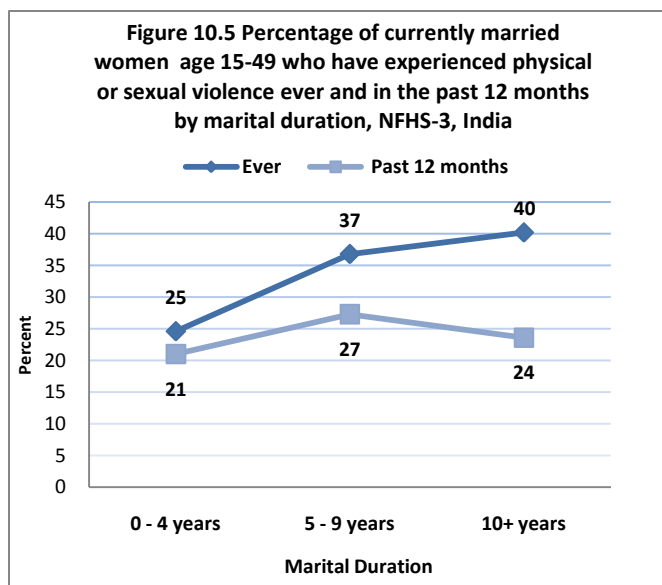- Slapped: Ever 34, Past 12 months 20

Acts of sexual violence About one out of ten currently married women have been forced by their husbands to have sex against their will and 4% have been forced to perform sexual acts that they did not want to perform (Figure 10.4). Most women who report having to perform unwanted sexual acts have also been forced to have sexual intercourse against their will. Three out of four women who have experienced either type of sexually violent act by their husbands have also experienced it in the past 12 months.

Figure 10.4 Percentage of currently married women age 15-49 who have experienced sexual violence by their husbands, NFHS-3, India
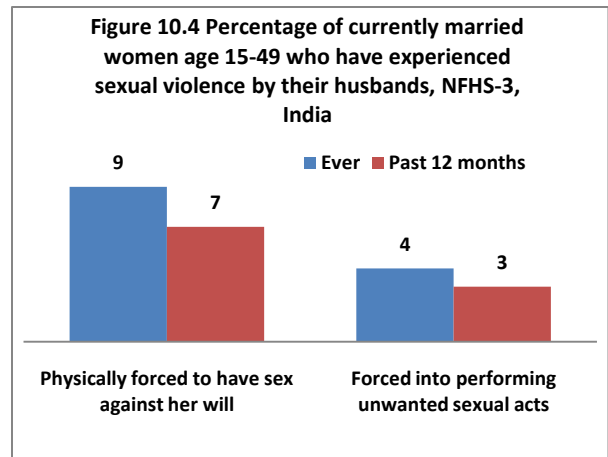
Spousal Violence by Marital Duration

Although spousal violence can occur at any time in a marriage, the first time it occurs tends to be in the early years of the marriage. In fact, as shown by NFHS-3, for 81% of currently married women age 15-49 who have ever experienced physical or sexual violence by their current husbands, the first time was within five years of marriage.

Figure 10.5 Percentage of currently married women age 15-49 who have experienced physical or sexual violence ever and in the past 12 months by marital duration, NFHS-3, India

Figure 10.6 Percentage of currently married women age 15-49 who have experienced emotional violence ever and in the past 12 months by marital duration, NFHS-3, India

Twenty-five percent of currently married women age 15-49 who have been married for 0-4 years have experienced physical or sexual violence and 10% have experienced emotional violence; the corresponding proportions for women who have been married 10 or more years are 40% and 17% (Figures 10.5 and 10.6). Thus violence is more common among women who have been married longer. This is to be expected since the risk of spousal violence continues throughout the years of marriage. Women with greater exposure to the possibility of spousal violence (i.e., women with longer marital durations) will have a higher prevalence of violence.

The lower line in each of the Figures 10.5 and 10.6 shows how violence in the past 12 months, i.e., recent violence, varies by marital duration. The figures show that there is much less variation by marital duration in recent violence than in ever experience of violence. This suggests a much weaker association of recent experience of violence with marital duration. Further, the figures also show that the gap between the prevalence of any violence and prevalence of recent violence widens with marital duration for both categories of violence. This implies that among women who have ever experienced violence, the risk of current violence falls with marital duration.

Spousal Violence and Injuries

One of the immediate consequences of violence is injury. The costs of injury include the physical and mental suffering and incapacitation of women, loss of women's labour hours, increased health-care costs for the household, and an increased health-care burden for society, among others. Table 10.1 shows that 37% of currently married women age 15-49 who have ever experienced physical or sexual violence, or one in seven of all currently married women, have suffered an injury due to violence by their husbands. The most common injures are cuts, bruises, and aches. However, significant proportions of women also report having been more severely injured (Table 10.1).

It is expected that injuries are more likely to occur if women experience physical violence. In NFHS-3, 10% of all currently married women have experienced sexual violence and 27% have experienced no sexual violence but have experienced physical violence.

Table 10.1 shows that women are much more likely to report injury when they experience both physical and sexual violence. One possibility that could explain this finding is that women who experience sexual violence also experience more severe forms of physical violence than women who experience only physical violence.

To examine this possibility, a comparison of the experience of different acts of physical violence for women who have experienced physical violence but no sexual violence and women who have experienced sexual violence (with or without any reported physical violence) is provided in Table 10.2.

Table 10.1 Percentage of women who have experienced injuries among currently married women age 15-49 who have experienced different combinations of physical or sexual spousal violence by type of injuries, NFHS-3, India

	Type of spousal violence experienced		
	Physical only	Physical and sexual	Physical or sexual
Injury received			
Cuts, bruises, or aches	37.0	51.8	35.1
Severe burns	1.5	3.0	1.4
Eye injuries, sprains, dislocations, or urns	8.5	18.5	8.0
Deep wounds, broken bones, broken teeth, or any other serious injury	6.0	13.5	5.6
Any type of injury	38.6	54.8	36.6

This comparison shows that women who experience sexual violence are at much greater risk of each of the acts of physical violence with the exception of slapping, compared with women

Table 10.2 Percentage of currently married women age 15-49 who have experienced specified acts of physical violence and experienced any emotional violence by whether they have experienced physical violence without any sexual violence or have experienced sexual violence, NFHS-3, India

	Has experienced:	
	Physical violence, no sexual violence	Sexual violence
Acts of physical violence		
Slapped	96.7	76.9
Twisted her arm or pulled her hair	37.5	46.0
Pushed, shook, or threw something at her	32.5	42.0
Kicked, dragged, or beat her up	26.2	38.0
Punched with fist or something that could hurt	24.8	36.5
Tried to choke or burn her on purpose	2.9	10.2
Threatened or attacked with knife, gun or other weapon	1.4	5.4
Any emotional violence ever	30.6	43.6

who have experienced physical violence but no sexual violence. Further, even emotional violence is more common for women who have experienced sexual violence than for women who have experienced physical violence only.

This analysis shows that women who experience sexual violence are indeed particularly vulnerable: compared with women who experience physical violence and not sexual violence, women who experience sexual violence are subject to more emotional violence, suffer more severe forms of physical violence, and are much more prone to injury.

Spousal Violence and Indicators of Women's Empowerment

In chapter 9, three sets of indicators of married women's decisionmaking and empowerment were discussed. In this section, the variation of women's experience of spousal physical or sexual violence by these indicators is examined.

Spousal violence and women's employment Table 10.3 shows how women's experience of spousal physical or sexual violence varies with women's employment status, earnings, and earnings control. From these data it is evident that women who are employed have a higher prevalence of violence than women who are not employed. Further, among women who are employed, having earnings is also not protective of women.

Among women who are employed and have earnings, the prevalence of violence varies by the extent of women's control over the use of their earnings. Women who make decisions alone about the use of their earnings have the highest prevalence of violence, followed by those who do not have a main say in the use of their earnings. Prevalence of violence is least for women who make decisions about the use of their earnings jointly with their husbands.
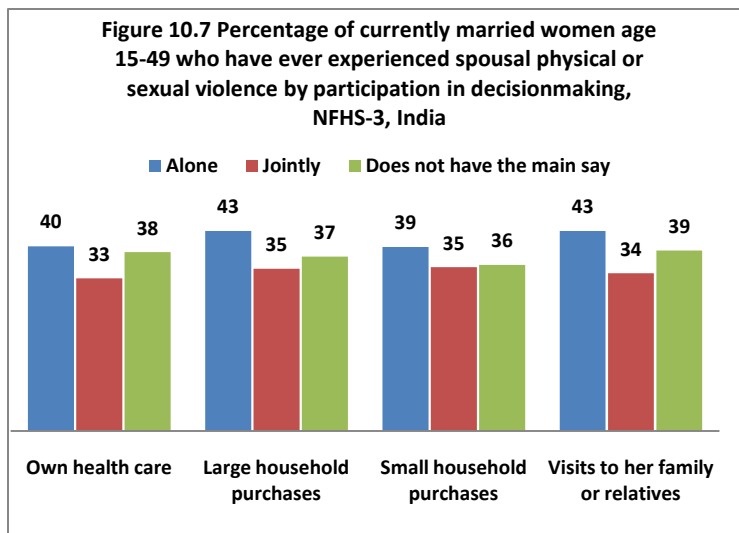
Table 10.3 Percentage of currently married women age 15-49 who have experienced spousal physical or sexual violence by employment status, earnings control ,and relative earnings, NFHS-3, India

	Has ever experienced spousal violence
Mother's employment and main say in earnings use	
Earns cash, has main say alone in earnings use	48.5
Earns cash and has joint say in earnings use	39.8
Earns cash, no main say in earnings use	44.4
Does not earn cash	43.1
Not been employed	32.0
Among women who earn and whose husbands have earnings	
Woman earns more than husband	46.0
Earnings of both are about equal	36.4
Woman earns less than her husband	42.8

Further, Table 10.3 also shows that among women who have earnings (and have husbands who also have earnings), women who earn more than their husbands have the highest prevalence of violence and women who earn the same as their husbands have the lowest prevalence.

Overall, these data show that women who are employed and have earnings have a much higher prevalence of violence, especially if they decide mainly alone about the use of their earnings or if they earn more than their husbands.

Spousal violence and women's participation in household decisionmaking Since women's participation in household decisions is an indicator of women's agency and empowerment, it is expected that it will have a negative association with women's experience of violence. However, Figure 10.7 shows that this expectation is only partially met. Women who make decisions jointly are, indeed, less likely to have experienced violence, but women who make decisions alone have a higher prevalence of violence than even women who do not have the main say alone or jointly.

Figure 10.7 Percentage of currently married women age 15-49 who have ever experienced spousal physical or sexual violence by participation in decisionmaking, NFHS-3, India

■ Alone ■ Jointly ■ Does not have the main say

	Own health care	Large household purchases	Small household purchases	Visits to her family or relatives
Alone	40	43	39	43
Jointly	33	35	35	34
Does not have the main say	38	37	36	39

Spousal violence by women's acceptance of wife beating The relationship of attitudes toward wife beating and experience of spousal violence can be negative or positive—the direction of association is not obvious. Women who experience spousal violence may be more likely to accept and live with such violence if they perceive it as a husband's 'right' and therefore justified; or their own experience of violence may make them see such violence as never justified.

Table 10.4 shows that women who see wife beating as justified do, indeed, have a higher prevalence of violence than women who do not agree, irrespective of the reason for justifying wife beating. Notably, the prevalence of violence for women who do not agree with each reason is never below 33%, implying that women experience violence irrespective

Table 10.4 Percentage of currently married women age 15-49 who have ever experienced spousal physical or sexual violence by whether they agree that wife beating is justified for specific reasons, NFHS-3, India

	Does not agree	Agrees
Wife beating justified if:		
She goes out without telling him	34.0	42.8
She neglects the house or children	34.0	41.4
She argues with him	33.5	43.5
She refuses to have sex with him	35.6	42.7
She doesn't cook the food properly	34.9	43.3
He suspects her of infidelity	34.4	42.8
She shows disrespect for in-laws	33.2	41.5

of whether they accept it as justified and a husband's right or whether they reject it.

Percentage of currently married women age 15-49 who have ever experienced spousal physical or sexual violence in their current marriage, NFHS-3, India
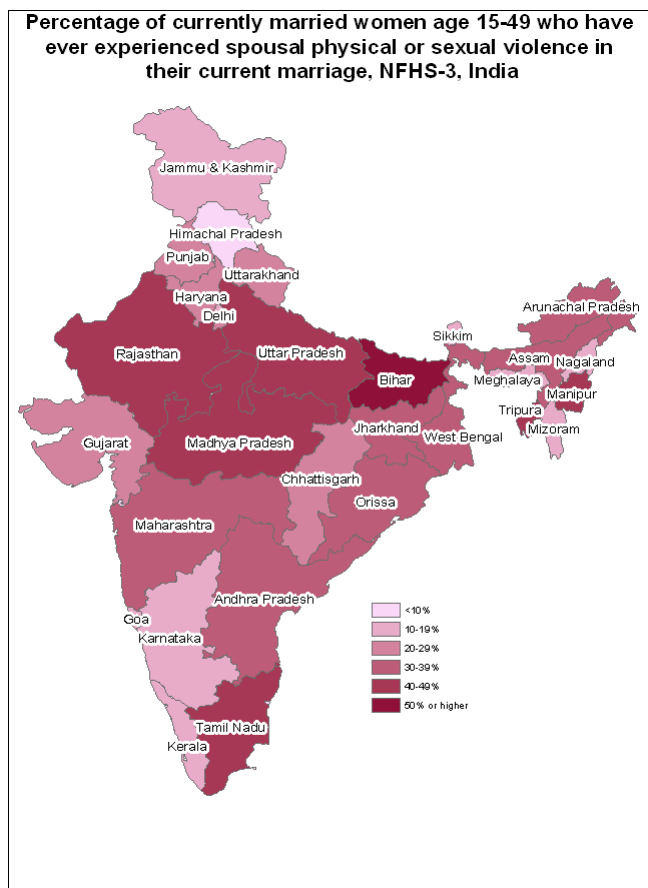
Spousal violence by state Himachal Pradesh is the only state in India where the prevalence of spousal physical or sexual violence, at 6%, is less than 10% and Bihar is the only state where, at 59%, the prevalence is above 50%. In the majority of states, 19 of the 29, prevalence is between 20% and 49%, including 12 states where more than one in three women have experienced such violence.

Spousal Violence and Intergenerational Effects

Research shows that women's experience of violence is affected by early exposure to violence in the home, such as violence by their father against their mother. Research on men also suggests that men's exposure to violence within the home at an early age increases their risk of becoming abusers. Among couples in NFHS-3, 21% of the wives had mothers who were beaten by their fathers and 26% of the husbands had fathers who beat their mothers. Six percent of wives and 9% of husbands did not know whether their fathers beat their mothers.

Table 10.5 Among couples, percentage of women who have experienced physical, sexual, or emotional violence by whether their own mother was beaten by their father and whether the husband's mother was beaten by his father, NFHS-3, India

	Type of violence ever experienced				
	Physical	Sexual	Emotional	Physical or sexual	Physical, sexual or emotional
Wife's mother beaten by father					
Yes	56.5	12.0	25.5	57.7	60.0
No	28.5	5.9	11.1	29.7	32.2
Husband's mother beaten by father					
Yes	43.3	8.2	16.6	44.4	46.5
No	31.7	6.9	13.0	33.1	35.5

Table 10.5 shows that women's own experience of all types of violence is substantially higher if a woman's mother was beaten by her father. Women whose husbands have fathers who beat their mothers are also more likely to be beaten than women whose husbands have fathers who did not beat their mothers.

Surprisingly, a woman's experience of spousal violence varies less with her husbands' early exposure to violence in his parental home than with her own early exposure to violence in her parental home. The percentage of women who have experienced spousal physical or sexual violence if their mother also experienced spousal violence, at 58%, is much higher than the percentage who

have experienced such violence among women whose mothers were not beaten by their fathers (30%), and is also much higher than the percentage among women whose husbands' mothers were beaten by their fathers (44%).

Net Determinants of the Experience of Spousal Violence

In order to examine the different individual, household, couple, and husband characteristics that are significantly associated with women's risk of experiencing violence, logistic regressions were run for women's experience of each of the three categories of violence. Table 10.6 presents the odds ratios from six logistic regressions, one each for currently married women age 15-49 having *ever* in the current marriage experienced spousal physical violence, spousal sexual violence, and spousal emotional violence, and one each for having experienced spousal physical violence, spousal sexual violence, and spousal emotional violence in the 12 months preceding the survey. The dependent variable is experience of the specific type of violence with women who have experienced the violence coded as 1, and those who have not experienced such violence coded as 0. Each odds ratio (OR) gives the increase (OR>1.00) or decrease (OR<1.00) in the odds of women experiencing the specific form of violence for a given value of the independent variable, compared with the reference category (OR=1.00). For example, in the regression for ever experience of physical violence, an odds ratio of 1.56 for the age-group 20-29 years implies that the odds of women in this age group having ever experienced physical violence are 56% higher (OR=1.56 vs. OR=1.00) than if they were only 15-19 years old (the reference category) controlling for all the other variables in the regression.

Women's age: The odds of a woman having ever experienced physical violence as also emotional violence increase significantly with a woman's age. However, the likelihood that she has ever experienced sexual violence declines for the 30-39 and 40-49 age groups, compared with the youngest age group. Emotional violence in the past 12 months is not associated with age; but, both recent physical and sexual violence decline significantly with age.

Women's number of children ever born: Even controlling for women's age, the more children a woman has the higher her odds of ever and recently experiencing physical violence. A woman's odds of ever experiencing sexual violence are higher only if she has five or more children, however. A woman's recent experience of sexual violence has no significant association with her number of children. Also, a woman's experience of emotional violence has a positive association with her number of children, but her likelihood of having recently experienced such violence has no association with her number of children.

Women's age at first marriage: Age at first marriage has a significantly negative association with women's ever and current experience of physical and emotional violence. However, it has a non-linear association with her experience of sexual violence. Women married when they were age 15-24 years have lower odds of experiencing sexual violence ever and those married when

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Table 10.6 Logistic regression results for different categories of violence experienced by currently married women age 15-49 in their current marriage, ever and in the past 12 months, NFHS-3, India: Odds ratios (OR)

	Ever violence			Violence in the past 12 months		
	Physical violence	Sexual violence	Emotional violence	Physical violence	Sexual violence	Emotional violence
	OR	OR	OR	OR	OR	OR
Age						
15-19 *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
20-29	1.56***	0.90	1.27*	1.15	0.79*	1.17
30-39	1.42***	0.78*	1.28*	0.82*	0.61***	1.09
40-49	1.31***	0.62***	1.32*	0.58***	0.35***	1.00
Number of children ever born						
0 *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
1-2	1.37***	1.04	1.20*	1.23**	1.00	1.10
3-4	1.65***	1.16	1.28**	1.37***	1.13	1.17
5+	2.18***	1.41***	1.35**	1.52***	1.23	1.22
Age at first marriage						
<15 *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
15-19	0.84***	0.85**	0.86***	0.92*	0.88*	0.84***
20-24	0.64***	0.76**	0.80***	0.83**	0.86	0.86*
25+	0.47***	0.76	0.63***	0.66***	1.03	0.58***
Education						
None *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
0-4 years	0.93	0.95	1.09	0.94	1.05	1.13
5-9 years	0.80***	0.84*	0.93	0.81**	0.95	0.94
10-11 years	0.64***	0.57***	0.79*	0.59***	0.62**	0.81
12+ years	0.45***	0.39***	0.58***	0.40***	0.45***	0.60***
Employment						
Not employed *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
Employed for cash	1.07	0.85**	1.24***	1.04	0.87*	1.24***
Employed not for cash	1.07	0.95	1.16*	0.98	0.96	1.09
Husband's occupation						
Non-agricultural *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
Agricultural	1.03	0.84**	0.97	1.05	0.84**	0.98
Husband drinks						
Does not drink *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
Never drunk	1.86***	1.95***	1.48***	1.40***	1.88***	1.37***
Drunk sometimes	1.91***	1.33***	1.58***	2.05***	1.31***	1.72***
Drunk often	3.90***	2.74***	3.07***	4.41***	2.91***	3.50***
Spousal education difference Husband has more education *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
Both have no education	0.94	0.95	1.03	1.06	0.98	1.01
Equal education	0.95	1.05	1.01	1.01	0.98	1.05
Wife has more	1.11	1.18	1.06	1.21**	1.05	1.06

Continued…

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Table 10.6 *Continued*

	Ever violence			Violence in the past 12 months		
	Physical violence	**Sexual violence**	**Emotional violence**	**Physical violence**	**Sexual violence**	**Emotional violence**
	OR	**OR**	**OR**	**OR**	**OR**	**OR**
Spousal age difference						
0-4 years *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
5-9 years	0.92**	1.03	0.99	1.03	1.09	1.03
10-14 years	0.86***	0.85*	0.95	0.94	0.89	0.99
15+ years	0.92	1.08	1.12	0.98	0.96	1.20
Husband younger	1.04	0.90	1.17	1.06	1.08	1.35*
Type of family						
Nuclear *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
Non-nuclear	0.88***	1.06	1.00	0.89***	1.06	0.98
Residence						
Rural *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
Urban	1.22***	0.89	1.09	1.20**	0.88	1.14
Wealth quintile						
Lowest *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
Second	0.97	0.88*	1.03	0.98	0.94	1.07
Middle	0.81***	0.77***	0.89	0.80***	0.81*	0.89
Fourth	0.68***	0.68***	0.72***	0.64***	0.69***	0.69***
Highest	0.46***	0.55***	0.62***	0.46***	0.50***	0.55***
Mother beaten by father						
No *(Ref.cat.)*	1.00	1.00	1.00	1.00	1.00	1.00
Yes	2.89***	2.03***	2.37***	2.49***	1.96***	2.15***
Don't Know	1.81***	1.59***	1.31***	1.43***	1.37***	1.21**

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

they were age 15-19 years have lower odds of recent sexual violence. Thus, both very early and later marriage appear to lower the risks for physical and emotional violence, but are associated with a higher risk of sexual violence.

Women's education: Even with a large number of relevant controls, education, most consistently 10 or more years of education, continues to be strongly and negatively associated with all types of violence, ever and in the past 12 months.

Women's employment: Controlling for wealth and education, women's employment status has no direct association with physical violence. The odds of sexual violence ever and in the recent past are lower for women who are employed for cash only. By contrast, any employment increases the odds of emotional violence ever, and employment for cash increases the odds of emotional violence in the past 12 months.

Husbands' occupation: The odds of experiencing physical or emotional violence are unrelated to the husbands' type of occupation. However, women whose husbands are in an agricultural occupation have lower odds of having experienced sexual violence ever and in the past 12 months than women whose husbands have a non-agricultural occupation.

Husbands' drinking habits: If a woman's husband drinks alcohol and gets drunk often, then her odds of ever experiencing each category of violence are two to three times higher than the odds for women whose husbands never drink; and the odds of having recently experienced all three types of violence are even higher. Further, even if the husband drinks but does not get drunk, the odds that women will experience the different categories of violence are significantly and substantially increased. Thus, women whose husbands drink are at a much greater risk of all types of spousal violence than women whose husbands never drink.

Despite this greatly elevated risk of violence associated with husbands' alcohol consumption, it is important to note that alcohol cannot be used to entirely explain the high prevalence of spousal violence. NFHS-3 shows that even among women whose husbands do not consume alcohol, one in three have experienced spousal physical or sexual violence.

Spousal educational difference: Women's risk of violence does not vary significantly with the difference between their husbands' educational attainment and their own educational attainment. The only exception is the higher odds of recent physical violence for women who have more education than their husbands.

Spousal age difference: Having a husband who is younger or having a very large spousal age difference (15 or more years) are, as expected, not protective of women. However, contrary to expectations, neither is having a relatively small spousal age difference (0-4 years): in fact it is women who are 5-9 years or 10-14 years younger than their husbands who have lower odds of experiencing physical violence ever. The latter group also has lower odds of ever having experienced sexual violence.

Type of family: Women in non-nuclear households have lower odds of experiencing physical violence ever and in the recent past than women in nuclear households. This suggests that living in nuclear families tends to increase women's risk of physical violence. Notably, the risks of experiencing other categories of violence are unrelated to the type of families women reside in.

Residence: Living in urban areas, compared with living in rural areas increases the odds of physical violence, while leaving unaffected the odds of emotional and sexual violence.

Wealth quintile: The higher the wealth quintile, in general, the lower the odds of experiencing any category of violence ever and in the past 12 months.

Mother beaten by father: Despite controls for many individual, spousal, household, and couple characteristics, the effect of having a mother who was beaten by the father on a woman's own risk of violence remains strong, positive, and significant. The odds that a woman will experience physical, sexual, and emotional violence ever and in the past 12 months if her mother was beaten are about twice or more higher than if her mother did not experience spousal violence.

Thus, among all the variables examined, only four have a consistent effect on all three categories of violence, both ever and in the past 12 months; these are education, particularly education beyond 10 years (-), husbands' drinking of alcohol (+), wealth (-), and mother's experience of spousal violence (+). Other variables that can be influenced by policy, such as age at marriage and women's employment, have only mixed effects on women's risk of experiencing different forms of violence.

Appendix 10A Percentage of currently married women age 15-49 who have ever experienced physical, sexual, or emotional spousal violence, by state, India

	Percentage who have ever experienced:		
	Physical violence	Sexual violence	Emotional violence
North			
Delhi	15.7	1.9	4.3
Haryana	25.6	7.2	8.4
Himachal Pradesh	5.3	1.6	3.2
Jammu & Kashmir	10.9	3.6	8.3
Punjab	23.7	6.8	10.1
Rajasthan	40.1	20.0	22.3
Uttarakhand	27.0	5.9	8.6
Central			
Chhattisgarh	28.3	6.5	11.3
Madhya Pradesh	43.4	10.7	21.3
Uttar Pradesh	41.4	9.2	16.0
East			
Bihar	56.0	19.3	19.8
Jharkhand	34.6	12.4	17.6
Orissa	33.0	14.7	19.2
West Bengal	31.6	21.1	11.2
Northeast			
Arunachal Pradesh	37.6	9.0	16.2
Assam	35.5	14.0	14.4
Manipur	39.2	13.8	12.8
Meghalaya	11.7	1.0	5.6
Mizoram	19.7	1.4	8.1
Nagaland	13.3	2.9	12.2
Sikkim	13.3	4.2	9.0
Tripura	39.0	17.6	21.2
West			
Goa	15.0	2.0	10.9
Gujarat	25.1	6.8	18.0
Maharashtra	29.9	1.8	16.3
South			
Andhra Pradesh	33.9	3.3	11.9
Karnataka	18.2	3.2	6.9
Kerala	13.6	4.3	9.1
Tamil Nadu	40.2	2.8	15.3
India	30.4	8.2	13.6

Appendix 10B Percentage of currently married women age 15-49 who have ever experienced different types of spousal violence, and among those who have experienced spousal physical or sexual violence, percentage who have experienced any injury by type of residence, NFHS-3, selected cities, India

	Percentage who have experienced			Among women who have experienced physical or sexual violence, percentage who had injuries
	Emotional violence	Physical violence	Sexual violence	
Chennai				
Slum	26.0	61.3	7.0	43.3
Non-slum	14.3	34.4	2.3	41.3
Total	16.5	39.4	3.2	41.8
Delhi				
Slum	4.7	27.9	2.9	23.5
Non-slum	3.7	11.8	1.6	22.8
Total	3.9	14.8	1.9	23.0
Hyderabad				
Slum	9.5	28.4	2.6	44.4
Non-slum	7.7	24.3	3.4	35.0
Total	8.0	25.0	3.2	36.8
Indore				
Slum	18.5	33.1	7.3	25.3
Non-slum	26.9	35.1	10.2	33.1
Total	25.1	34.7	9.6	31.6
Kolkata				
Slum	10.0	27.4	16.8	36.6
Non-slum	5.4	14.2	9.5	22.4
Total	7.0	18.6	12.0	28.9
Meerut				
Slum	9.0	49.5	5.0	24.2
Non-slum	9.6	25.3	6.2	18.3
Total	9.4	36.4	5.6	21.9
Mumbai				
Slum	8.0	21.5	1.6	19.9
Non-slum	5.4	13.4	0.4	11.0
Total	6.9	18.0	1.1	17.0
Nagpur				
Slum	15.0	31.1	3.7	31.1
Non-slum	7.1	14.5	2.8	40.0
Total	9.9	20.4	3.1	35.3

11. GENDER, WOMEN'S EMPOWERMENT, AND SELECTED HEALTH, NUTRITION, AND DEMOGRAPHIC OUTCOMES

Summary and Key Findings

Child vaccination and nutritional status
- *Girls are less likely to be fully immunized than boys and this differential is evident even when mothers' education and household wealth are controlled for.*
- *Children's likelihood of being fully immunized increases with mothers' education; but girls benefit more than boys from having a mother who is highly educated.*
- *Having mothers who mainly alone decide the use of their husbands' earnings increases a girls' but not a boys' likelihood of being fully immunized.*
- *Two out of five children age 0-35 months are underweight, with boys and girls about equally likely to be underweight.*
- *A higher proportion of children are underweight if their mother*
  - *is employed than if she is not; however, this association is explained away by poverty which affects both underweight and women's employment.*
  - *has experienced spousal violence than if she has not. Controlling for wealth, this association is explained away for girls, but remains significant for boys.*

Adult nutritional status
- *More than one in three women and men age 15-49 are too thin. Among couples, wives are more likely than husbands to be too thin.*
- *Controlling for wealth and education, employment, not having a main say in decisions about large household purchases, and experiencing spousal physical or sexual violence are all negatively associated with women's nutritional status. However, women who have the main say alone on the use of their earnings are less likely to be too thin than other employed women.*

*Modern contraceptive use among currently married women*
- *Controlling for number of children ever born and other relevant factors, the likelihood of women using a modern contraceptive method is*
  - *higher for women who are employed, particularly for cash, and for women who make decisions mainly alone about large household purchases; and*
  - *lower for women who experience both spousal physical and sexual violence.*

In this chapter gender differentials in child immunization, and child and adult nutrition are examined and their variation according to selected women's empowerment and spousal violence indicators discussed. In addition, the relationship of one demographic indicator--modern contraceptive use—with women's empowerment and experience of violence is also explored. For some indicators, variation by background characteristics, such as education and wealth, according to sex is also examined.

Gender Differentials in Children's Full Immunization

To be considered as fully immunized, children should have received the following vaccinations before their first birthday: one BCG vaccine, three each of DPT and polio vaccines, and one measles vaccine. In NFHS-3, 42% of female children and 45% of male children age 12-23 months had received all of these vaccines.

Full immunization rates have been rising over time for both boys and girls (Figure 11.1). However, the increase in full immunization rates between NFHS-1 and NFHS-3 was less for girls, at 7 percentage points, than for boys (9 percentage points). Further, the proportion of male children who are fully immunized in NFHS-3 is 9% higher than the corresponding proportion of female children; this differential was 8% in NFHS-1 and 6% in NFHS-2. This suggests that the gender gap in full immunization not only persists, but may be growing.

Figure 11.1 Trends in the percentage of female and male children age 12-23 months who are fully immunized, India
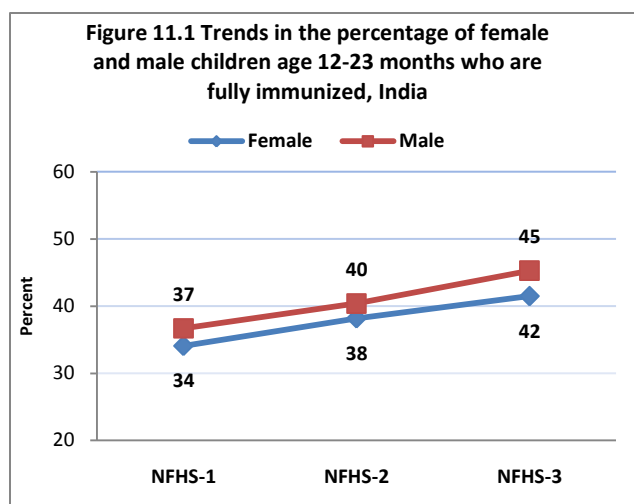
Women's Empowerment and Children's Full Immunization

Table 11.1 shows children's full immunization rates by selected indicators of women's empowerment.

Employment and child immunization Children whose mothers are employed have lower full immunization rates (32%-42%), than children whose mothers are not employed (47%). Among children whose mothers are employed, the full immunization rate of children and the gender differential in full immunization vary by whether the mother earns cash and whether she controls her earnings. Children whose mothers earn cash and have the main say alone in the use of their earnings have a higher full immunization rate, at 42%, than children whose mothers belong to any other group of employed women; and they also have the highest gender differential in favour of boys among children whose mothers have earnings. By

contrast, the gender differential favours girls if the mother earns cash and has a joint say in its use.

Participation in decisions and child immunization According to mothers' participation in decisions, the children who have the highest immunization rate are those whose mothers make decisions jointly about their husbands' earnings, their own health care, and visits to their family and relatives, and make decisions alone about large purchases and purchases for daily needs. For most decisions, children of mothers who have no main say are the ones least likely to be fully immunized.

Gender differentials in immunization also vary by mothers' participation in household decision-making. Gender differentials tend to be lower when the mother makes most decisions asked about jointly, with one notable exception. The gender differential in immunization favours girls if the mother alone has the main say in how her husband's earnings are used, although this is the same group for whom the immunization rates are less than for any other group of children.

Table 11.1 Percentage of female and male children age 12-24 months who are fully immunized by mother's employment status and earnings control and participation in different types of decisions, NFHS-3, India

	Percentage of children 12-24 months fully immunized		
	Female	Male	Total
Mother's employment and main say in earnings use			
Earns cash, has main say alone in earnings use	38.8	45.1	42.4
Earns cash and has joint say in earnings use	40.4	37.9	39.2
Earns cash, no main say in earnings use	32.3	31.7	32.0
Does not earn cash	30.0	36.7	33.6
Not been employed	45.2	49.4	47.4
Mother has a say in husband's earnings			
Mainly alone	38.6	34.7	36.7
Jointly	42.9	47.6	45.5
No main say	40.0	43.5	41.8
Mother's say in own health care			
Mainly alone	42.6	44.9	43.8
Jointly	45.9	47.7	46.8
No main say	37.6	44.1	41.0
Mother's say in making large household purchases			
Mainly alone	46.6	46.4	46.5
Jointly	42.1	46.3	44.3
No main say	40.7	44.8	42.9
Mother's say in making purchases for daily needs			
Mainly alone	43.8	48.2	46.1
Jointly	41.9	43.6	42.8
No main say	40.1	45.1	42.7
Mother's say in making visits to own family or relatives			
Mainly alone	42.8	45.8	44.4
Jointly	46.1	47.2	46.7
No main say	37.5	43.8	40.7

Women's experience of spousal violence and child immunization Children of mothers who are free from spousal violence have a higher full immunization rate (46% if the mother has not experienced any emotional violence and 50% if the mother has not experienced any physical or sexual violence) than children whose mothers have experienced violence (34-35%).

A mother's experience of violence has a much stronger negative association with a girl's likelihood of being fully immunized than with a boy's likelihood of being fully immunized (Figure 11.2). Daughters of mothers who have experienced emotional violence are only 61% as likely as daughters of mothers who have not experienced emotional violence to be fully immunized. The corresponding differential for boys is 82%.

Figure 11.2 Percentage of children age 12-23 months who are fully immunized by mother's experience of spousal emotional and physical or sexual violence, NFHS-3, India

■ Female ■ Male

	Emotional violence		Phyiscal or sexual violence	
	Yes	No	Yes	No
Female	28	46	33	50
Male	38	46	36	51
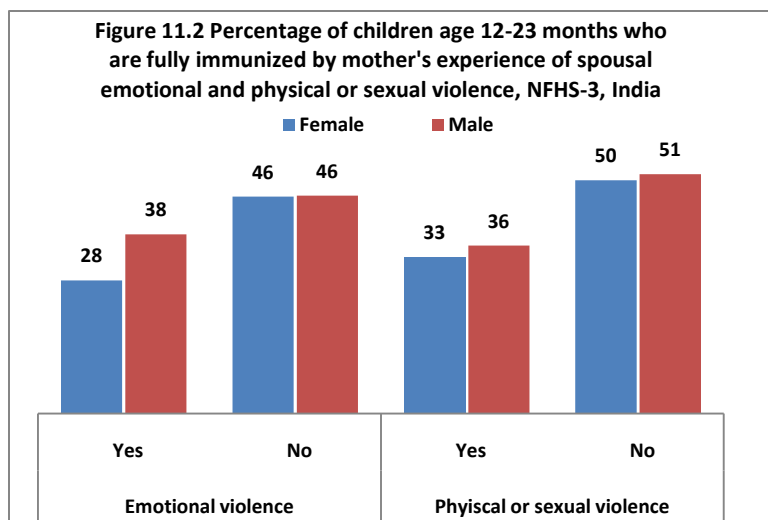
Similarly, the relative disadvantage by mothers' experience of spousal physical or sexual violence for daughters is also greater than for sons (67% vs. 70%).

Net effects of women's empowerment indicators on child immunization A logistic regression was run for all children age 12-23 months to see whether, controlling for education, wealth, and residence, the odds of children being fully immunized varied by their sex. The regression analysis (data not shown) shows that the odds that a girl will be fully immunized are 66% as high as the odds that a boy will be fully immunized. As expected, full immunization increases for all children with wealth and with mothers' education.

Logistic regressions were also run separately for girls and boys age 12-23 months to determine whether mothers' empowerment and experience of spousal violence have a direct and differential association with their likelihood of being fully immunized. The regressions controlled for mother's education, residence, household wealth, birth order, and presence of older same sex sibling.

The regression analysis found that none of the indicators of employment, decisionmaking, and experience of violence had a significant direct effect, except for the mother having a say in the use of her husband's earnings. This women's empowerment indicator was significant for girls but not for boys. Girls whose mothers made decisions jointly on the use of their husbands' earnings were only 36% as likely (OR=0.36) to be fully immunized as those whose mothers made these decisions mainly alone (OR=1.00). The odds ratio was also significantly lower for girls whose mothers' did not have a main say, alone or jointly, in these decisions (OR=0.30). Additionally, the odds ratios for full immunization if the mother has 12 or more years of education are higher for girls than for boys (OR for girls=9.73 vs. OR for boys=6.68). (Detailed results not shown.)

This analysis shows that girls are indeed disadvantaged relative to boys in their access to full immunization. Having a mother who is educated increases the likelihood of children being immunized; it also has additional benefits for girls relative to boys if the mother is highly educated. Girls are also benefited, net of the effects of mothers' education and household wealth, when their mothers' have a major say in their husbands' earnings.

Gender Differentials in Children's Likelihood of Being Underweight

Using the 2006 World Health Organization (WHO) Child Growth Standards, NFHS-3 found that 40% of children age 0-35 months are underweight, with girls and boys being about equally likely to be underweight. In this section, the relationship of children under the age of 3 years being underweight with mothers' empowerment and experience of spousal violence is examined.

Women's employment, earnings control, and children's underweight Children of mothers who are not employed are less likely to be underweight than children of mothers who are employed. If the mother is employed, underweight is least common among children whose mothers earn cash and alone have the main say on the use of their earnings (Table 11.2).

Among children whose mothers are not employed, boys and girls are equally likely to be underweight; by contrast, among children whose mothers are employed, the only group for which boys and girls are about equally likely to be underweight is children whose mothers earn cash and decide jointly with their husbands about the use of their earnings. In all other groups of children whose mothers are employed, girls are less likely than boys to be underweight.

Table 11.2 Percentage of female and male children age 0-35 months who are underweight, by indicators of mothers' empowerment status, NFHS-3, India

	Percentage of children age 0-35 months who are underweight	
	Female	Male
Mother's employment and main say in earnings use		
Earns cash, has main say alone in earnings use	41.7	44.2
Earns cash and has joint say in earnings use	46.7	46.2
Earns cash, no main say in earnings use	47.7	54.7
Does not earn cash	48.8	50.3
Not been employed	36.0	36.2
Mother has a say in husband's earnings		
Mainly alone	44.3	42.9
Jointly	40.2	40.5
No main say	38.9	40.0
Mother's say in own health care		
Mainly alone	39.7	40.9
Jointly	38.3	39.2
No main say	41.1	41.2
Mother's say in making large household purchases		
Mainly alone	39.3	38.8
Jointly	40.3	39.6
No main say	39.5	41.2
Mother's say in making purchases for daily needs		
Mainly alone	39.4	40.3
Jointly	41.5	41.7
No main say	39.1	39.9
Mother's say in making visits to own family or relatives		
Mainly alone	37.6	40.0
Jointly	39.5	40.4
No main say	40.4	40.5
Total	**39.9**	**40.5**

Women's participation in decisionmaking and children's underweight Children's likelihood of being underweight does not vary much by mothers' participation in different types of decisions listed in Table 11.2. With a few exceptions, boys are slightly more likely than girls to be underweight, irrespective of the nature of mothers' decisionmaking participation.
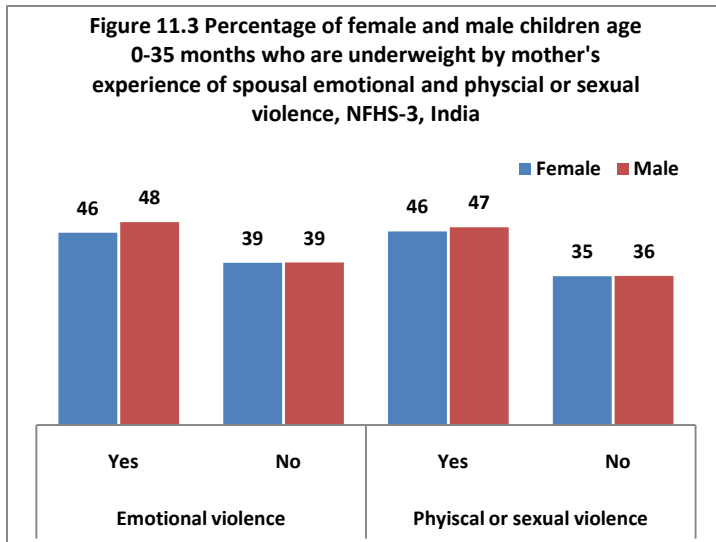
Women's experience of spousal violence and children's underweight Children of mothers who have experienced spousal violence have a higher prevalence of underweight than children of mothers who have not experienced any spousal emotional and sexual or physical violence (Figure 11.3).

Further, there is no gender differential in underweight for children of women who have not experienced violence; and boys are only very marginally more likely to be underweight than girls if the mother has experienced spousal violence, particularly in the form of emotional violence.

Figure 11.3 Percentage of female and male children age 0-35 months who are underweight by mother's experience of spousal emotional and physcial or sexual violence, NFHS-3, India

■ Female ■ Male

Emotional violence		Phyiscal or sexual violence	
Yes	No	Yes	No
Female 46, Male 48	Female 39, Male 39	Female 46, Male 47	Female 35, Male 36

Net effects of empowerment indicators on children's underweight Separate logistic regressions were run for girls and boys age 0-35 months to determine whether mothers' empowerment has a direct effect on children's likelihood of being underweight. The regressions controlled for mother's education, residence, household wealth, birth order, and presence of older same sex siblings. Controlling for wealth, none of the indicators of employment and decisionmaking had a significant direct association with children's likelihood of being underweight. However, if a mother has experienced physical or sexual violence, male children have significantly higher odds (OR=1.17) of being underweight than children whose mothers have not experienced such violence. Daughters' likelihood of being underweight does not, however, vary significantly by mother's experience of physical or sexual violence. (Detailed results not shown)

Gender Differentials in the Likelihood of Adults Being Too Thin

The body mass index (BMI), a measure derived from the ratio of the weight and height of in-dividuals, is a widely accepted indica-tor of the nutritional status of adults. A BMI of less than 18.5 indicates chronic energy deficiency associated with being too thin. NFHS-3 shows that 36% of all women age 15-49 in India have a BMI of <18.5, only somewhat more than men in the same age group (34%).

Figure 11.4 Percentage of women and men age 15-49 who have a BMI <18.5, by age, NFHS-3, India

Women: 15-19: 47, 20-29: 38, 30-39: 31, 40-49: 26
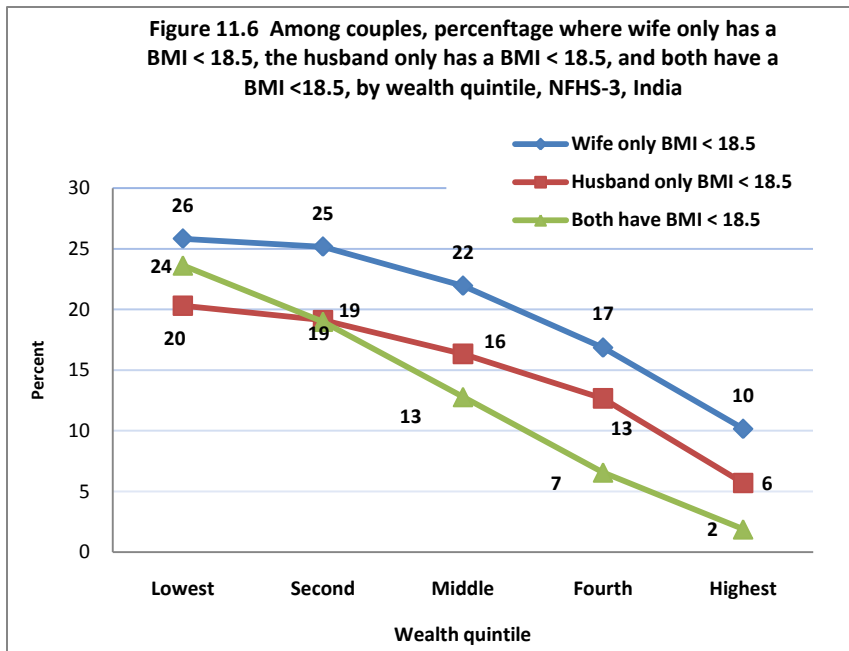Men: 15-19: 58, 20-29: 33, 30-39: 26, 40-49: 26

Percent / Age in years
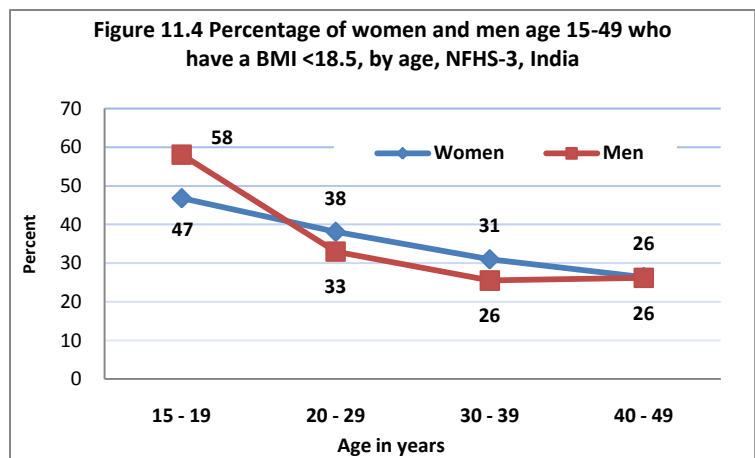
Differentials in low BMI by age Chronic energy deficiency is much more common among the age-group 15-19 than it is among older adults. However, in this younger age group, men are much more likely than women to be too thin (Figure 11.4). By contrast, in the age-groups 20-29 and 30-39, when most women are bearing children, women are much more likely than men to have chronic energy deficiency. Gender differentials are virtually non-existent in the oldest age group in which more than one out of four women and men are too thin.

Gender differentials in low BMI by wealth quintile The likelihood of being too thin declines sharply with wealth for both women and men. Gender differentials in the likelihood of being too thin are not very marked in any wealth quintile (Figure 11.5). Nonetheless, the greatest differential is in the lowest two wealth quintiles: in these quintiles, women are more likely to be too thin than men.

Figure 11.5 Percentage of women and men age 15-49 who have a BMI < 18.5, by wealth quintile, NFHS-3, India
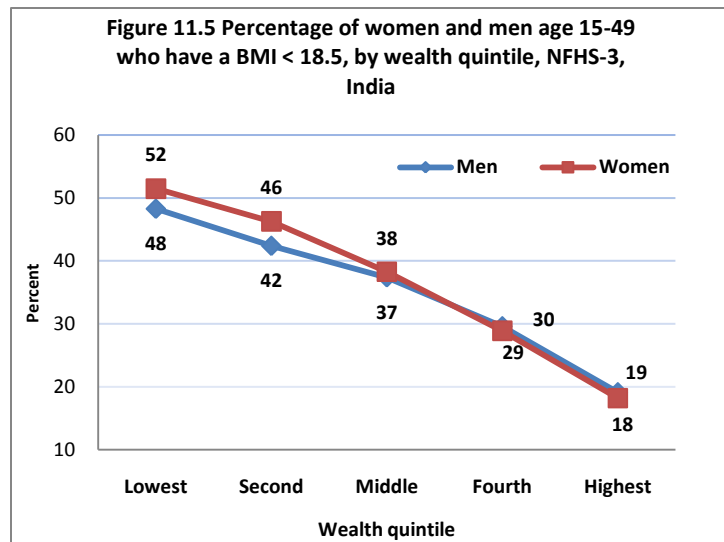
Gender differentials in low BMI among couples Among couples (i.e., women and men married to each other), wives are more likely to have chronic energy deficiency than husbands. Data on couples show that 31% of wives have a BMI which is less than 18.5, compared with 25% of husbands. Further, in 19% of the couples only the wife is too thin, in 14% only the husband is too thin, and in 12% both are too thin. Among the remaining 56% of couples, neither husbands nor wives are too thin.

Figure 11.6 Among couples, percenftage where wife only has a BMI < 18.5, the husband only has a BMI < 18.5, and both have a BMI <18.5, by wealth quintile, NFHS-3, India

Figure 11.6 shows that the proportions who are too thin among both husbands and wives decline sharply with wealth. Among couples in the lowest wealth quintile, 50% of wives and 44% of husbands have a BMI<18.5; by contrast, among those in the highest wealth quintile

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only 12% of wives and 8% of husbands are too thin. Although the gender differential in low BMI does not vary substantially with wealth, it is notable that wives are consistently more likely to be too thin than husbands in each wealth quintile.
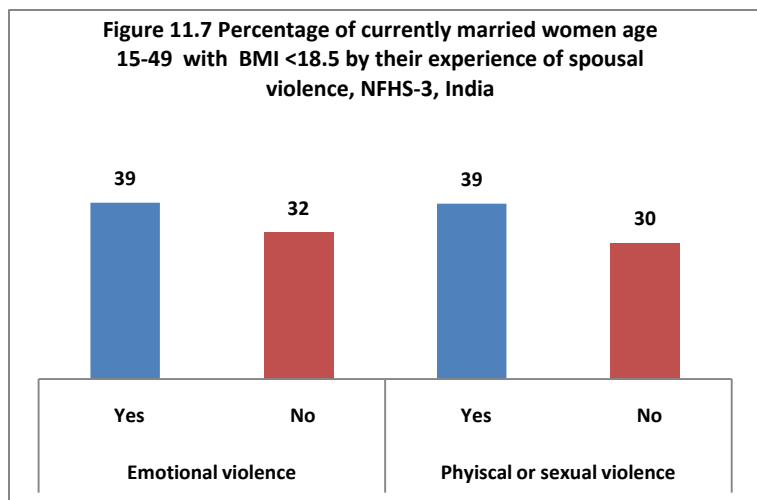
Women's empowerment and low BMI for women Employed women are much more likely than unemployed women to have chronic energy deficiency (Table 11.3). However, among employed women, the proportion of women with a BMI <18.5 is lowest for women who earn cash and have the main say alone in the use of their earnings (34%), followed closely by those who have a joint say in the use of their earnings (37%). A BMI of less than 18.5 is most common for women who earn cash but have no significant say in its use.

Table 11.3 also shows that women who have a main say in making various household decisions are less likely than women who do not, to be too thin. The differential is highest for women who participate in decisions about visits to their family and relatives: 30-31% of women who have a main say in these decisions, alone or jointly, are too thin, compared with 37% of women who do not have a main say. Thus, having a main say in various decisions is consistently associated with a lower likelihood of currently married women being too thin and suffering from chronic energy deficiency.

Table 11.3 Percentage of currently married women age 15-49 who have a BMI<18.5 by selected indicators of women's empowerment, NFHS-3, India

	Percentage of currently married women with BMI <18.5
Employment and main say in earnings use	
Earns cash, has main say alone in earnings use	33.6
Earns cash and has joint say in earnings use	36.9
Earns cash, no main say in earnings use	44.2
Does not earn cash	41.6
Not been employed	28.3
Say in husband's earnings	
Mainly alone	32.6
Jointly	31.7
No main say	35.3
Say in own health care	
Mainly alone	31.1
Jointly	31.2
No main say	36.0
Say in making large household purchases	
Mainly alone	30.3
Jointly	32.2
No main say	35.9
Say in making purchases for daily needs	
Mainly alone	30.3
Jointly	32.2
No main say	35.9
Say in making visits to own family or elatives	
Mainly alone	30.0
Jointly	30.9
No main say	36.5
Total	**33.0**

Figure 11.7 Percentage of currently married women age 15-49 with BMI <18.5 by their experience of spousal violence, NFHS-3, India

Spousal violence and low BMI for women Currently married women who experience spousal emotional violence or spousal physical or sexual violence have a higher likelihood of being too thin than women who are violence free (Figure 11.7). For example, 30% of currently married women who have not experienced spousal physical or sexual violence have a BMI <18.5,

compared with 39% of women who have ever experienced such violence.

Net effects of selected background characteristics on women's and men's BMI Ordinary least squares regressions were run separately for currently married women and currently married men age 15-49 to examine the direct associations of BMI with age, education, wealth, and residence, and whether these associations vary by sex. The dependent variable for each regression is the BMI value for each individual. The regression coefficients for all variables in the regression are provided in Table 11.4. Positive coefficients show a positive association and negative coefficients show a negative association. The absolute size of the coefficient can be interpreted as the size of the effect.

Table 11.4 Linear regression results of BMI for currently married women and men age 15-49 regressed on age, education, wealth and residence, NFHS-3, India: Regression coefficients

	Women β	Men β
Age		
Ref. cat.: 15-19		
20-29	-0.03	0.63***
30-39	1.06***	1.30***
40-49	1.86***	1.48***
Education		
Ref. cat.: None		
0-4 years	0.33***	0.13
5-9 years	0.60***	0.24***
10-11 years	0.76***	0.77***
12+ years	0.77***	0.89***
Wealth		
Ref. cat.: Lowest		
Second	0.37***	0.38***
Middle	1.05***	1.01***
Fourth	2.06***	1.96***
Highest	3.88***	3.77***
Residence		
Ref. cat.: Rural		
Urban	0.78***	0.29***

Note: Women who were pregnant and had a birth in the previous two months are excluded.

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

Age: BMI for women and men increases significantly with age; however, for women significant improvements in BMI begin when women are in their 30s and 40s, whereas for men they begin in their 20s.

Education: Even controlling for age and wealth, BMI and education are positively associated for both women and men. The strength of the association with education beyond 10 or more years is fairly similar for women and men. Lower levels of education, however, have a more significant positive association with women's BMI than with men's BMI. Any education (compared with no education) tends to be associated with a higher BMI for women; but, for men, having less than five years of education is not associated with any gains in BMI.

Wealth quintile: BMI increases sharply with wealth for both women and men. Although the difference in coefficients is small, an increase in the wealth quintile tends to have a somewhat more positive effect for women than for men.

Residence: The net increase in BMI associated with living in an urban rather than a rural area is much higher for women than for men.

Net effects of women's empowerment indicators on women's BMI In addition to the regression above, the BMI of currently married women age 15-49 was also regressed on selected women's empowerment indicators. This was done to determine whether women who are empowered, have a higher BMI, on average, than women who are not. The regression

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controlled for women's age, education, residence, and household wealth. Only coefficients for empowerment indicators that were significant are shown in Table 11.5.

Employment: Women who are not employed have a significantly higher BMI than women who are employed and have the main say alone in the use of their own earnings. Also, women who are employed but do not earn cash have a significantly lower BMI than women who are employed and have the main say alone in the use of their earnings. Finally, BMI does not vary by earnings control among women who have earnings. Thus, women who are employed have, on average, a lower BMI than women who are not em-

Table 11.5 Linear regression results for the BMI of currently married women age 15-49 regressed on indicators of women's empowerment and spousal violence, NFHS-3, India: Selected coefficients

	Women
	β
Women's employment and main say in earnings use *Ref. cat: Earns cash and has main say alone*	
Earns cash and has joint say in earnings use	-0.11
Earns cash, no main say in earnings use	0.10
Does not earn cash	-0.21*
Not been employed	0.30**
Women's say in making large household purchases *Ref. cat.: Mainly alone*	
Jointly	-0.17
No main say	-0.27**
Experience of spousal physical or sexual violence *Ref. cat.: No*	
Yes	-0.20***

Note: Women who were pregnant and had a birth in the previous two months are excluded. Regression controls for women's age, education, wealth, and residence. Coefficients for empowerment indicators that were not significant are not shown. Empowerment indicators included in the regression but not found to be significant are: women's say in decisions about use of husbands' earnings, decisions about own health care, about purchases for daily needs, and about visits to own family or relatives, and experience of spousal emotional violence.

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

ployed even when wealth is controlled for; nonetheless, among those who are employed, having earnings is associated with better nutritional status.

Decisionmaking: In general, women who do not have a say in different household decisions shown in Table 11.3, tend to have a somewhat lower BMI than women who make the decision mainly alone; however, the difference is significant only in the case of decisions about making large household purchases. The regression shows that women who do not have a main say, neither alone nor jointly, in decisions about large household purchases have a BMI which is, on average, 0.27 points lower than the BMI for women who make these decisions mainly alone, even when wealth and other factors are controlled for.

Spousal violence: Any experience of spousal physical or sexual violence has a significant negative effect on women's BMI. This association is particularly notable since it is net of factors such as wealth, which has a strong positive association with women's BMI.

Women's Empowerment and Current Contraceptive Use

In this final section, the association of indicators of women's empowerment with the likelihood of a woman using a modern method of contraception is examined. In NFHS-3, 49% of currently married women were using a modern method of contraception. As Table 11.6 shows, there is great variation in modern method use by selected indicators of women's empowerment.

Employment and modern contraceptive use

Women who are employed are much more likely to be currently using a modern contraceptive method than women who are not employed.

Among employed women, those who earn cash are more likely than women who do not, to be using a modern method of contraception. Further, contraceptive use is highest among women who earn cash and have a main say in its use. Specifically, 45% of women who are not employed use a modern method, compared with 57-59% of women who earn and have the main say alone or jointly with their husbands in the use of their earnings.

Participation in decisionmaking and contraceptive use

Modern contraceptive use is higher for women who have the main say, particularly alone, in each of the decisions in Table 11.6. For example, 58% of currently married women who make decisions mainly alone about making large household purchases use a modern method of contraception, compared with 53% of women who have a joint say in these decisions and only 43% of women who do not have the main say at all.

Table 11.6 Percentage of currently married women age 15-49 who use a modern method of contraception by selected indicators of women's empowerment, NFHS-3, India

	Percentage using a modern contraceptive method
Women's employment and main say in earnings use	
Earns cash, has main say alone in earnings use	56.7
Earns cash and has joint say in earnings use	59.1
Earns cash, no main say in earnings use	53.2
Does not earn cash	46.2
Not been employed	44.9
Women have a say in husbands' earnings	
Mainly alone	52.5
Jointly	52.0
No main say	41.6
Women's say in own health care	
Mainly alone	52.8
Jointly	50.4
No main say	43.7
Women's say in making large household purchases	
Mainly alone	57.5
Jointly	52.5
No main say	43.1
Women's say in making purchases for daily needs	
Mainly alone	55.7
Jointly	51.4
No main say	40.7
Women's say in making visits to own family or relatives	
Mainly alone	55.8
Jointly	53.0
No main say	40.9

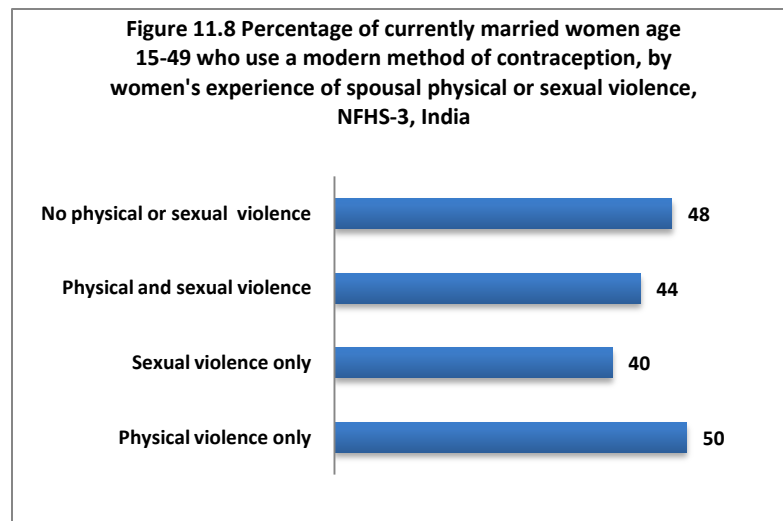## Spousal violence and contraceptive use

Figure 11.8 shows that currently married women who experience spousal physical violence only are not very different regarding modern contraceptive use from those who have not experienced spousal physical or sexual violence. However, the proportion of currently married women who have experienced only spousal sexual violence and those who have experienced both sexual and physical violence are less likely to

Figure 11.8 Percentage of currently married women age 15-49 who use a modern method of contraception, by women's experience of spousal physical or sexual violence, NFHS-3, India

Category	Value
No physical or sexual violence	48
Physical and sexual violence	44
Sexual violence only	40
Physical violence only	50

be using modern contraception than women who have experienced no spousal physical or sexual violence.

Net effects of women's empowerment on modern contraceptive use A logistic regression was run for modern contraceptive use by currently married women age 15-49 to evaluate the direct effects of women's empowerment indicators on women's likelihood of using a modern method of contraception. For the dependent variable, currently married women who are currently using any modern method of contraception are coded 1 and those not using a modern method are coded 0. The regression controls for women's education, number of children ever born, household wealth, and residence. Table 11.7 shows only the odds ratios for women's empowerment indicators that are significant. An odds ratio above 1 (OR>1.00) shows an increased likelihood of modern contraceptive use, and an odds ratio below 1 (OR<1.00) shows a lowered likelihood of modern contraceptive use.

Employment: The odds that a currently married woman is using a modern method of contraception are lower if she is not employed than if she is employed and decides the use of her earnings mainly alone. Compared with women who are employed and make decisions mainly alone, the odds of using contraception are higher for women who make earnings-use decisions jointly with their husbands and also 42% higher for women who do not have a main say in the use of their earnings alone or jointly. Thus, odds of using contraception are higher for women who are employed and earn cash particularly if they are disempowered in terms of control over earnings. Notably, women who are employed but do not earn cash have lower odds of using a modern contraceptive method than those who earn cash and have the main say in its use.

Participation in decisionmaking: There is no significant association of women's participation in various decisions and contraceptive use, with the exception of their participation in decisions about large household purchases. Women who have only a joint say or no say in decisions about large household purchases have significantly lower odds (OR=0.90 and OR=0.86,

Table 11.7 Logistic regression results for current use of modern contraception by currently married women age 15-49, NFHS-3, India: Selected odds ratios (OR)

	Modern method use OR
Women's employment and main say in earnings use	
Earns cash, has main say alone in earnings use *(Ref. cat.)*	1.00
Earns cash and has joint say in earnings use	1.17*
Earns cash, no main say in earnings use	1.42***
Does not earn cash	0.81**
Not been employed	0.61***
Women's say in decisions about large household purchases	
Mainly alone *(Ref. cat.)*	1.00
Joint	0.90*
No main say	0.86**
Spousal physical or sexual violence	
No physical or sexual violence *(Ref. cat.)*	1.00
Physical violence only	1.06
Sexual violence only	0.95
Physical and sexual violence	0.88*

Note: The regression controls for women's education, children ever born, wealth, and residence. Coefficients for empowerment indicators that were not significant are not shown. Empowerment indicators included in the regression but not found to be significant are: women's say in decisions about use of husband's earnings, decisions about own health care, about purchases for daily needs, and about visits to own family or relatives, and experience of emotional violence.

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

respectively) of using a modern method of contraception than do women who mainly decide alone about large household purchases.

Spousal violence: The odds of women using a modern method of contraception are not significantly different between women who have experienced spousal physical violence only or spousal sexual violence only and women who have not experienced physical or sexual violence. However, women who have experienced both physical and sexual violence have lower odds of using a modern method of contraception (OR=0.88) than women who have not experienced physical or sexual violence.

In conclusion, the regression shows that, controlling for education, wealth, residence, and children ever born, women who have earnings and women who make decisions alone about large household purchases are more likely to be using modern contraception. The regression also shows that women who have experienced only physical or only sexual violence are no different in terms of their contraceptive use from women who have not experienced any spousal physical or sexual violence. However, modern contraceptive use is significantly less likely among women who have experienced both physical and sexual violence than among women who have not experienced either form of violence.

12. Conclusions

The primary objective of this report was to assess progress in India toward the twin goals of gender equality and women's empowerment using data from the 2005-06 National Family Health Survey (NFHS-3) and its two predecessor surveys, NFHS-1 (1992-93) and NFHS-2 (1998-99). The specific areas investigated included son preference, education, age at marriage, spousal age differentials, employment, female household headship, women's access to resources, gender relations in the household, women's participation in decisionmaking, and spousal violence. In general, the report finds that gender inequality is persistent in every domain examined, and women are disempowered both absolutely and relative to men. Further, an examination of indicators for which trend data are available shows that the progress toward gender equality and women's empowerment remains very slow.

In addition to examining progress toward achieving gender equality and women's empowerment, the report also examined gender differentials in selected health and nutritional outcomes and evaluated differences by sex in the relationship of women's empowerment and experience of spousal violence with indicators of these selected health and nutrition outcomes. Finally, the variation in current use of modern contraception by indicators of women's empowerment and experience of spousal violence was also explored.

Some of the key findings in the areas of interest are:

- **Son preference** There is strong evidence of continued son preference in India. Girls are under-represented in births and over-represented in child deaths. The sex ratio at birth is much lower in NFHS-3 than it was in NFHS-1. Although, most ultrasound tests are for diagnostic purposes, there is clear evidence that the tests are also being used by women for sex selection of births in all wealth quintiles; nonetheless sex selection of births is more evident among births to women in the highest wealth quintile than among births to women in the other wealth quintiles, particularly the lowest quintile.

- **Education** There is gender equality in children's school attendance in urban areas; but, in rural areas, the female disadvantage in education is marked and increases with age. School dropout beyond primary school is a major problem, not just for girls, but also for boys. A consequence of high dropout beyond the primary school level is the low educational attainment of adults. Even among the population age 20-29 years, only 27% of women and 39% of men have 10 or more years of education.

- **Age at marriage** Age at first marriage continues to be very low in India. The median age at first marriage in NFHS-3 among women age 25-49 is only 16.8 years. In the 13 years since NFHS-1, the median age at first marriage has risen by less than one year. Nonetheless, it is encouraging that in the same time period, there has been a significant decline in the proportions married before age 15 years.

- **Spousal age difference** Sixteen percent of ever-married women age 15-49 are married to men who are 10 or more years older than them, and for 4% the age difference is 15 years or more. Importantly, controlling for education, spousal age difference decreases as age at marriage increases, and this relationship is evident in all three NFHS surveys.

- **Employment** Only 43% of women and 87% of men age 15-49 have been employed in the past 12 months. Thus, men are twice as likely as women to be employed. The trend in ever-married women's employment shows only a very small per annum increase from 33% in NFHS-1 to 44% 13 years later in NFHS-3. Most employed women work in agriculture; and only 7% are in professional, technical, or managerial occupations. Further, most employed women are working full time and away from home. Almost one in three employed women are not paid in cash for their work. Although the poorest women are most likely to be employed, controlling for wealth, women with high levels of education are more likely to be employed than those with less education. Nonetheless, the relationship of employment and wealth for women suggests that, for many women, employment is largely a result of economic necessity.

- **Female household headship** Fourteen percent of all households in India are headed by a female, up from 9% in NFHS-1, 13 years earlier. Female household heads are less educated and older, on average, than male household heads. Further, households headed by females are over-represented in the lowest wealth quintiles and under-represented in the highest wealth quintiles. These data suggest that female-headed households are more likely to be economically vulnerable than male-headed households.

- **Access to resources** Women's access to resources including media, health care, and money that they control is greatly circumscribed. In addition, only a minority of women are allowed to go alone to various places outside the home. Since women are over-represented in poorer households and under-represented in wealthier ones, their per capita resource access is lower than for men. This also means that boys are more likely than girls to be growing up in wealthier households with all the related benefits.

- **Gender relations** Although a majority of men say that husbands and wives should make decisions jointly, a significant proportion feels that husbands should have the major say in most decisions, particularly in decisions related to large household purchases and visits to the wife's family and relatives. More than half of women and men agree with one or more reasons that justify wife beating. Both are most likely to agree that wife beating is justified if a woman disrespects her in-laws and if she neglects the house or children. Few women and men, however, agree with norms that do not allow women to refuse sex to their husbands.

- **Decisionmaking** Among women who are employed and have earnings, only one-fifth have a major say in how their own earnings are used; and only 7 in 10 have a say in how their husbands' earnings are used. In about one-fifth of couples where both husband and

wife have earnings, women earn at least as much as their husbands. However, it is women who earn about the same as their husbands, rather than those who earn less or more, who are more likely to have a major say in the use of their husbands' earnings. Less than two in three currently married women participate, alone or jointly, in decisions about their own health care, large household purchases, purchases for daily needs, and visits to their own family and relatives. Having earnings that women control increases their participation in household decisions. Notably, education is consistently and positively associated with joint decisionmaking and not with decisionmaking alone.

- **Spousal violence** About two in five currently married women have ever experienced spousal violence in their current marriage, and among them, at least two-thirds experienced violence in the past year. Women who report both physical and sexual violence are more likely to have injuries and be subject to more severe forms of physical violence than women who report experiencing physical but no sexual violence. Joint decisionmaking, rather than decisionmaking alone, is more protective of women with respect to violence. There are few household, couple, or individual characteristics that are consistently related to women's risk of all forms of spousal violence. Despite the large number of potential risk factors examined, only higher education and wealth were found to be consistently related to a lower risk of all three forms—physical, sexual, and emotional— of spousal violence; and husbands' consumption of alcohol and having a mother who was beaten by her spouse were the only ones that were found to consistently and significantly increase the risk of all these forms of violence. Although women who are employed suffer all forms of violence more than women who are not, a large part of this effect is due to the fact that more employed than unemployed women are poor and less educated. Controlling for wealth and education, women's employment is unrelated to physical violence and remains positively associated with spousal emotional violence; notably, however, employment appears to protect women against spousal sexual violence.

- **Gender and health and nutritional outcomes for children** There is a persistent, if small, gender differential in favour of boys in full immunization coverage. Having a mother who is empowered in terms of having higher education or having a major say alone in the use of her husband's earnings benefits a girl child in terms of her full immunization status more than it benefits a boy child. Thus, these forms of women's empowerment are likely to help reduce the gender differential in full immunization. Gender differentials are not significant in the proportion of children age 0-35 months who are underweight. Notably, controlling for wealth, if a mother experiences spousal physical or sexual violence, the likelihood of a child being underweight is significantly higher for boys but not girls. Thus mothers' experience of violence is likely to increase gender differentials in underweight by increasing the likelihood that boys will be underweight.

- **Gender and nutritional status of adults** Women are more likely than men, and among couples, wives are more likely than husbands, to be too thin. Risk factors for women being too thin include two of the indicators of women's disempowerment, namely, not having a

main say in decisions about large household purchases and experiencing spousal physical or sexual violence. Even controlling for wealth, employed women are more likely than unemployed women to be too thin. However, among employed women, having no earnings or not have a main say over own earnings is associated with an increased likelihood of being too thin.

- **Gender and current use of modern contraception** Controlling for number of children ever born and other relevant factors, employment, particularly employment for cash, and making decisions mainly alone about large household purchases increase the likelihood that currently married women will be using a modern method of contraception. Most forms of spousal violence—only physical violence, only sexual violence, or emotional violence—are unrelated to a woman's likelihood of using modern contraception. However, women who have experienced both physical and sexual violence are less likely than women who have not experienced physical or sexual violence to be using modern contraception.

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