7

Health and Medical Care

Throughout the preceding chapters, this report has noted the disparities in different indicators of human development. These inequalities are arrayed against two axes: one reflects household background, such as caste, religion, education, and income, and the other reflects the characteristics of the area the respondents live in, as characterized by urban or rural residence, level of infrastructure development, and state of residence. While both sets of inequalities are reflected in most indicators of human development, their relative importance varies. As this chapter discusses a variety of health outcomes and health care, it is striking how regional inequalities dwarf inequalities in the household background. A poor, illiterate Dalit labourer in Cochi or Chennai is less likely to suffer from short- and long-term illnesses, and has greater access to medical care than a college graduate, forward caste, or large landowner in rural Uttar Pradesh. Social inequalities matter, but their importance is overwhelmed by state and rural–urban differences.

Another theme to emerge from the IHDS data is the dominant position of the private sector in medical care. In the early years following independence, discourse on health policy was dominated by three major themes: providing curative and preventive services delivered by highly trained doctors, integrating Indian systems of medicine (for example, Ayurvedic, homeopathic, *unani*) with allopathic medicine, and serving hard to reach populations through grassroots organization and use of community health care workers.[1] This discourse implicitly and often explicitly envisioned a health care system dominated by the public sector. Public policies have tried to live up to these expectations. A vast network of Primary Health Centres (PHCs) and sub-centres, as well as larger government hospitals has been put in place, along with medical colleges to train providers. Programmes for malaria, tuberculosis control, and immunization are but a few of the vertically integrated programmes initiated by the government. A substantial investment has been made in developing community-based programmes, such as Integrated Child Development Services, and networks of village-level health workers. In spite of these efforts, growth in government services has failed to keep pace with the private sector, particularly in the past two decades.[2]

The results presented in this chapter show that Indian families, even poor families, receive most of their medical care from private practitioners. Maternity care is a partial exception here. For most other forms of care, however, the public sector is dwarfed by the reliance on the private sector, even though the quality of private sector providers and services remains highly variable.

MEASURING HEALTH OUTCOMES AND EXPENDITURES

This chapter reviews health outcomes and expenditures in four main sections:

[1] These themes were emphasized in reports from three major committees around independence: the *Bhore Committee Report* of 1946, the *Chopra Committee Report* of 1946, and the *Sokhey Committee Report* of 1948.

[2] For a description of Indian health services and debates surrounding the role of government, see Gangolli et al. (2005).

1. Prevalence of various types of illnesses, days lost from work or other usual activity, disabilities, pregnancy problems, and self-reported health
2. Medical care for illnesses and maternity
3. Expenditures for medical care
4. Health beliefs and knowledge

Information for many of these topics is collected in other surveys, such as the *National Family Health Surveys* (*NFHS*) and NSS. Each of these surveys occupies a unique niche. The *NFHS* tends to focus on child health and circumstances surrounding delivery, and the NSS focuses on the prevalence of ailments and the cost of treatment, particularly hospitalization. The IHDS was developed using a combination of these two approaches and collected some additional information for assessing health status, including data on the ability to perform activities of daily living for all household members. The questions were asked separately for short- and long-term illnesses. The reference period for short-term illnesses such as cough, cold, fever, diarrhoea was 30 days, and that for long-term illnesses such as diabetes, heart disease, and accidents was one year. The questions for maternal care focused on all births in the preceding five years. For all illnesses, information on the source of treatment/advice and the cost of treatment was collected.

ILLNESS

The IHDS inquired about four types of medical issues:

1. Short-term morbidity from coughs, fevers, and diarrhoea
2. Long-term morbidity from chronic diseases ranging from asthma to cancer
3. Disabilities that prevent normal daily functioning, and,
4. Maternal medical care as well as self-reported overall health for women.

Survey responses can assess some of these issues better than others. For example, self-reports of fevers during the past month are undoubtedly more accurate than survey assessments of diabetes and other long-term illnesses. In other countries, economic development was associated with a health transition toward the more chronic but less easily assessed diseases. Thus, it seems likely that long-term illnesses will become an increasingly important topic—but also more challenging to measure—in future surveys in India. For the moment, there is much to be learned about household responses to all medical problems. The IHDS investigation of chronic illnesses was limited to what had been diagnosed by a doctor. Of course, getting a physician's diagnosis is itself economically and socially structured, so the responses reported here should not be interpreted as a proxy measure of the prevalence of chronic illnesses. Since diagnosis for some of the ailments such as coughs and diarrhoea, and blindness and immobility is easier, there can be more confidence in studying both the household responses and the rates at which they vary across different segments of the society.[3]

It is important to note that at the start of health transition, much progress can be made by addressing communicable diseases. However, as easy gains to the eradication of communicable diseases are achieved, attention must shift to the role of unhealthy lifestyles in causing illness (see Box 7.1). In this chapter, we discuss both communicable and endogenous illnesses but do not focus on lifestyles.

Short-Term Morbidity

As Table 7.1 indicates, about 124 of every 1,000 individuals reported having a fever (107), cough (86), or diarrhoea (41) in the past month.[4] Almost half (45 per cent) of all Indian households had someone who suffered from one of these minor illnesses.

Short-term morbidity accounts for substantial lost time from usual activities. The typical sick person was sick for seven days in the previous month and was incapacitated, or unable to perform his or her usual activities for four-and-a-half of those days. Based on the illness prevalence rate and days incapacitated, if sick, the average person was sick almost ten days per year with fever, cough, or diarrhoea, of which seven days were spent out of school, work, or other usual routine. Although these illnesses are more common for children, days lost per illness increases with age, somewhat counterbalancing the lower prevalence at younger ages. The result is that working age adults (that is, those aged 15–59) lose about 5.5 days per year because of fevers, coughs, and diarrhoea, school-age children lose 7; and the elderly lose 10 days per year respectively.

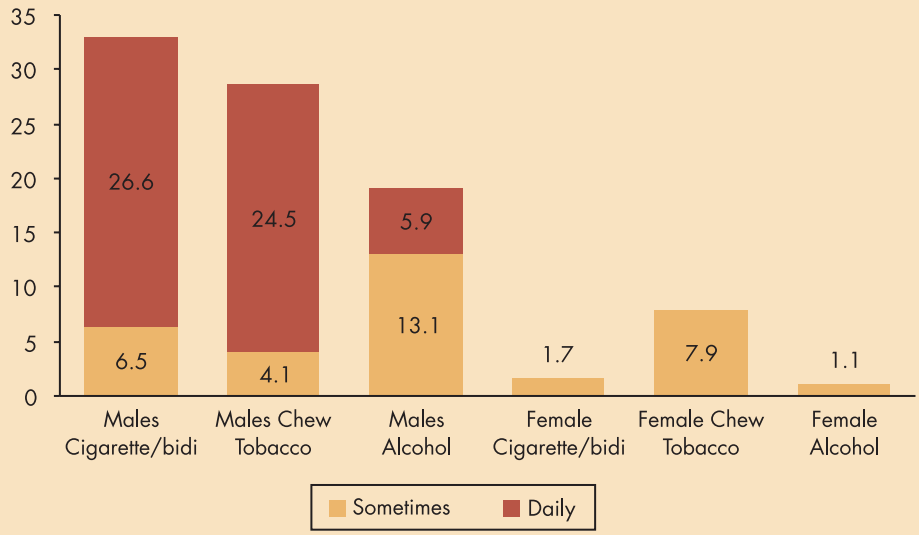
As Figure 7.1 indicates, fevers, coughs, and diarrhoea are especially young children's illnesses. They peak in the first two years of life and steadily decline until adolescence. Their reported incidence increases again in old age. Gender

[3] However, both short- and long-term illness are reported more for household members who were physically present at the interview than for household members who were not present. Because the health questions were usually asked of a married woman in the household, the reporting bias affects age and sex relationships, and caution should be exercised in interpreting these relationships.

[4] While strictly comparable data for morbidity prevalence are not available from other sources, the *NFHS-III* figures for children under five provide a reasonable comparison (IIPS 2007). *National Family Health Survey-III* was conducted with a reference period of 15 days, whereas the IHDS reference period is 30 days. The *NFHS-III* reported prevalence rates of 149, 58, and 98, respectively, for fever, cough/cold, and diarrhoea for the preceding 15 days for children under five. The IHDS-reported prevalence rates for a 30 day period for children under five are 245 for fever, 214 for cough/cold, and 94 for diarrhoea.

Box 7.1 Alcohol and Tobacco Use

The IHDS asked households about the use, and frequency of use, of alcohol and tobacco by household members. Because this involved reports by one member of the household for others, the figures reported in this survey are likely to be underestimates of actual tobacco and alcohol use. Even so, the figures are startling. Among males aged 25–59, 6 per cent smoke occasionally and 27 per cent smoke daily. A substantial proportion also chew tobacco; 24 per cent chew tobacco daily, and 4 per cent do so occasionally. Alcohol is consumed daily by 6 per cent of the male population and occasionally by 13 per cent.



Tobacco and Alcohol Use by Males and Females Aged 25–9 Years

Note: Sometimes and daily combined for women.

Source: IHDS 2004–5 data.

differences in reported illness are quite small. Among infants under one, boys (357) reported sick more often than girls (319), but this trend reverses for adults.

Economic and social disadvantages bring with them health disadvantages as well (see Table A.7.1a). Dalits are somewhat more likely to experience short-term illnesses (139) than forward caste Hindus (116). Individuals living in households in the highest income quintile are less likely to be ill with short-term maladies (91) than those in lowest income quintile (159), and respondent's high educational attainment is strongly associated with lower morbidity (52 for college graduates versus, 171 for uneducated individuals). In results not shown here, we find that children, however, do not benefit this much from educational levels of parents. It is the working age adults and, especially, the elderly whose morbidity rates decline with household education.

Part of the income effect is due to home characteristics and amenities. The use of biomass fuels (discussed in Chapter 5) spreads particulates and carbon monoxide, thus, increasing morbidity (133) among households using these fuels relative to households using only clean fuels (88). Morbidity is lower in homes with piped indoor water (92)

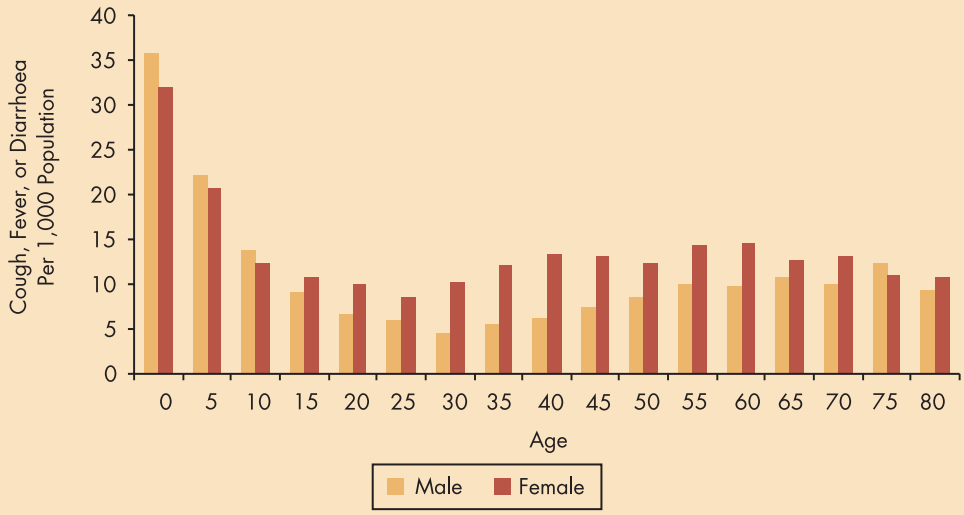


Figure 7.1 Short-term Morbidity by Age and Sex

Source: IHDS 2004–5 data.

Table 7.1 Illness Types and Source of Treatment

	Prevalence			Treatment			
	Morbidity per 1000	Days Unable To Do Usual Activity (if sick)*	Days Lost Per Year Entire Population+	In Hospital (Per cent)	Treated in Government Centre (Per cent)	Treated Outside Local Area (Per cent)	Medical Expenses If Sick (Rs)
Any Short-term Illness	124	4.7	7.0	3	17	42	120
Fever	107	4.9	6.2	3	18	44	130
Cough	86	4.6	4.8	3	17	43	120
Diarrhoea	41	5.3	2.6	5	13	46	150
Any Long-term Illness	64	58.8	3.8	25	23	62	1,900
Cataract	6	58.5	0.4	35	29	61	1,000
Tuberculosis	4	72.8	0.3	24	26	69	2,450
High BP	14	50.1	0.7	14	24	51	1,500
Heart Diseases	5	56.2	0.3	35	24	65	3,100
Diabetes	8	48.4	0.4	21	27	54	2,400
Leprosy	1	80.2	0.1	17	20	73	1,250
Cancer	1	93.9	0.1	36	27	79	3,800
Asthama	7	68.5	0.5	21	26	65	2,000
Polio	1	77.8	0.1	18	13	44	500
Paralysis	2	148.0	0.3	38	20	61	3,600
Epilepsy	1	84.2	0.1	27	17	71	1,800
Mental Illness	2	101.1	0.2	22	20	62	2,000
STD/AIDS	1	127.5	0.1	18	28	66	1,750
Others	23	54.6	1.3	32	20	69	2,200

Notes: *Reference period is one month for short-term illness, one year for long-term illness.
+ Calculated from prevalence and days sick. Henceforth, STD refers to Sexually Transmitted Diseases and AIDS is Acquired Immune Deficiency Syndrome.

Source: IHDS 2004–5 data.

than in homes without it (134). Flush toilets are also associated with reduced illness (100) compared with households without toilets (131). Unfortunately, the majority of Indian homes (62 per cent) have none of these amenities, and only 7 per cent have all three. These amenities are not just proxies for overall household wealth, they have their own direct health advantages.

Regional differences in reported short-term morbidity are striking (see Table A.7.1b). These regional differences should be treated with caution because interviews were conducted in different seasons across different parts of the country, and short-term morbidity is very sensitive to seasonality. Bihar has especially high morbidity (209); the next highest rate is West Bengal, at 173. The state with lowest reported short-term morbidity is Karnataka (73), but most states are in the range of 80 to 140. The prevalence of short-term morbidity in metro cities is low, at about 81. Other urban areas have morbidity rates that are higher (110), and villages have highest morbidity (131–3). Much of this difference is probably attributable to the greater prevalence of clean fuels, indoor piped water, and flush toilets in towns and cities. Some of the differences may also be due to differential climate patterns as well as the season during which the interviews were conducted.

Strong regional clustering of illnesses is likely to be associated with two factors. First, illnesses like diarrhoea and cough are often caused by environmental conditions such as the severity of rainfall and moisture in the air, risks shared by all residents of an area regardless of the their wealth or education. Second, many of these illnesses are spread through contact, and once some individuals get sick, the sickness can easily spread.

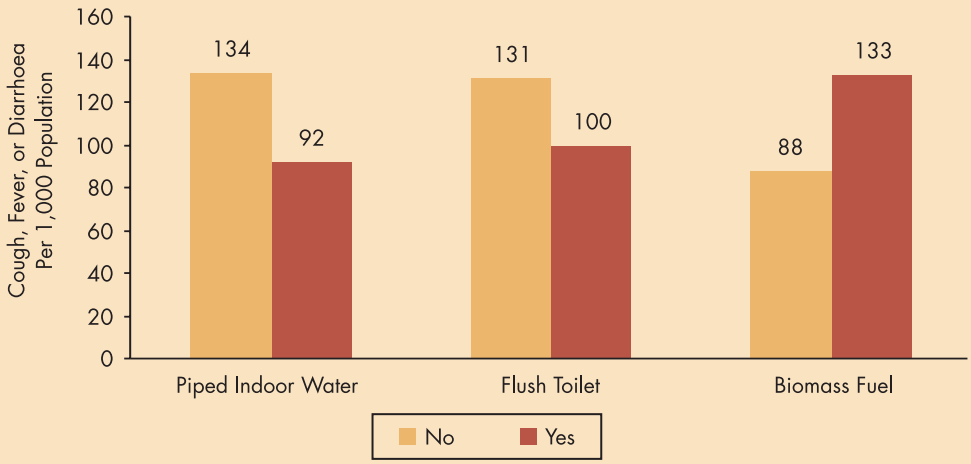


Figure 7.2 Short-term Morbidity by Housing Characteristics

Source: IHDS 2004–5 data.

Long-term Morbidity

The survey also asked whether anybody in the household had ever been diagnosed by a physician for any of the 14 long-term illnesses. A small fraction reported that they had once had some long-term illness but had been cured (see Figure 7.3).

The only noticeable cure rates were reported for cataracts (25 per cent) and tuberculosis (21 per cent). These cured cases are included with the positive reports in this chapter.

As shown in Table 7.1, the most frequently reported long-term illness was the last, unspecified 'other' category (23 per 1,000). Retrospective inquiries revealed that most of

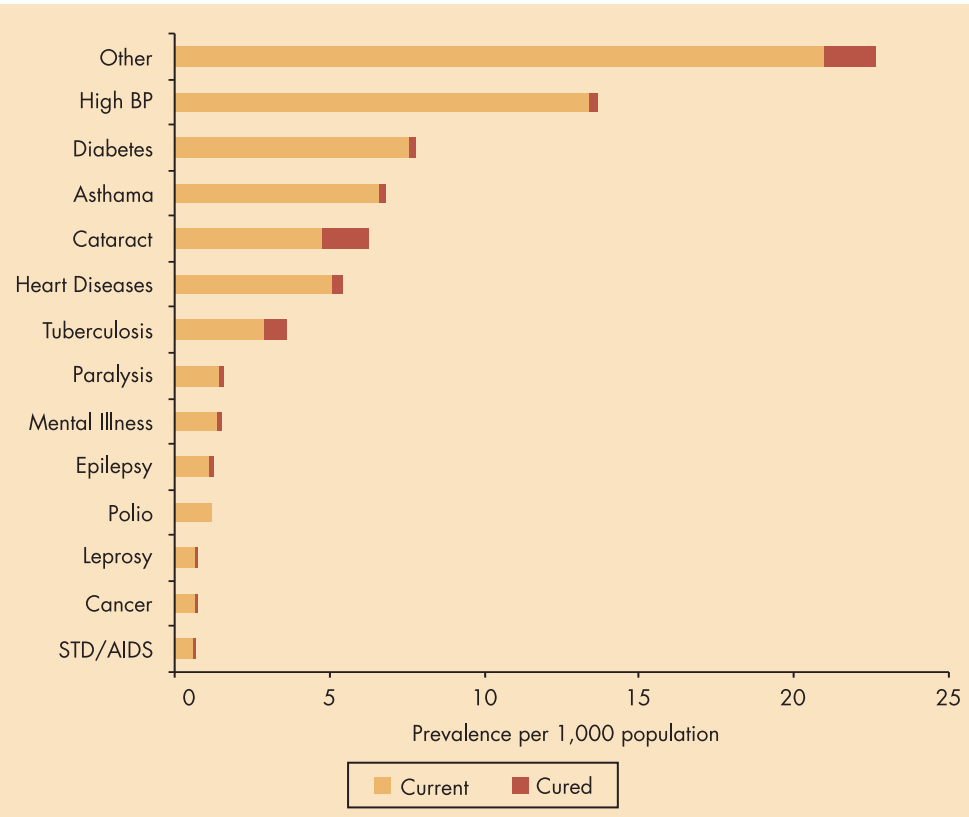


Figure 7.3 Diagnosed Long-term Illnesses

Source: IHDS 2004–5 data.

these people had been accident victims. Hypertension (14) was the next most widely reported disease. Cataracts (6), tuberculosis (4), heart disease (5), diabetes (8), and asthma (7), also were widely reported. Less often noted were the remaining seven categories: leprosy, cancer, polio, paralysis, epilepsy, mental illness, and STDs/AIDS, each reported for about 1or 2 persons per 1,000.

A total of 6 per cent of all individuals in the survey were reported to suffer from at least one of these illnesses. Of these, few (14 per cent) reported more than one illness. Slightly over a quarter of all households (27 per cent) had a member who had been diagnosed with one of these illnesses. These rates are, of course, lower bounds of true prevalence rates in the population. Prevalence estimates of these diseases would require more sophisticated testing than the IHDS could attempt. But analyses of how households used the medical care system to respond to these diseases depend on first identifying who was aware that they suffered from them.

The risk of being diagnosed with one of these illnesses increases dramatically with age. About 21 per cent of the elderly (aged 60 or older) have one of these illnesses. Only 6 per cent of the working age population and only 1 per cent of children have a diagnosed long-term illness (see Figure 7.4 for gender disaggregated figures). Of course, the elderly are only a small part of the Indian population, so most people (64 per cent) who report one of these diseases are between 15 and 59 years.

Although long-term illnesses are less prevalent, such an illness is more likely to incapacitate a person for many more days than does a short-term illness. A person who was ill with a long-term disease was, on an average, unable to perform his or her normal activities for almost 60 days during the previous year. The elderly were more affected than others. They lost 71 days of normal activity if sick with one of these diseases (see Table A.7.1a). Across the entire population, long-term illnesses accounted for about four days of lost activity, compared with seven days for short-term illnesses. This difference is due to the lower prevalence of long-term than short-term morbidity. Among the elderly, the consequences were worse (15.2 days incapacitated for long-term illnesses versus 10.1 days for short-term illnesses).

The requirement of a physician's diagnosis limited these assessments to small fractions of the population and tilted reporting to those who had the best access to diagnostic medical care. For example, urban residents are more likely to report higher long-term morbidity than rural residents, and those in the south have higher reported morbidity than those in the central plains. This is quite different from the reporting pattern for short-term morbidity.

Disability

Being blind, deaf, or unable to walk imposes enormous burdens on some individuals. How widespread are these disabilities? The survey asked if any household member, eight years old or older, had to cope with any of seven problems (for example, walking one kilometre) that created difficulty for daily activity. If there was some difficulty with a particular activity, respondents were asked whether the person was unable to do that activity or whether the person could do it with some difficulty. As shown in Figure 7.5, total disabilities were recorded around 3–4 per cent for each of the activity of daily living.

Activities that could be done only with some difficulty varied more, so overall disability/difficulty ranged between 7 persons per 1,000 (for example, speaking) to 15 persons per 1,000 (seeing from far distances).

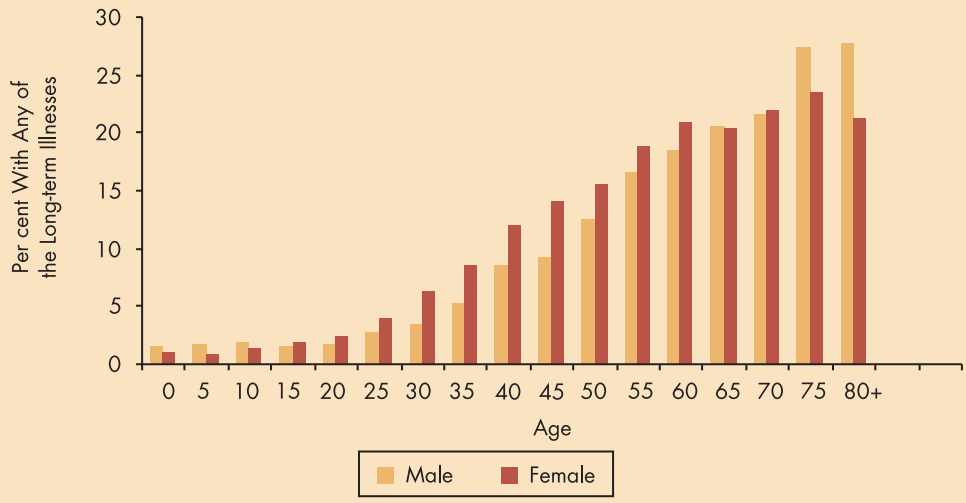


Figure 7.4 Long-term Morbidity by Age and Sex

Source: IHDS 2004–5 data.

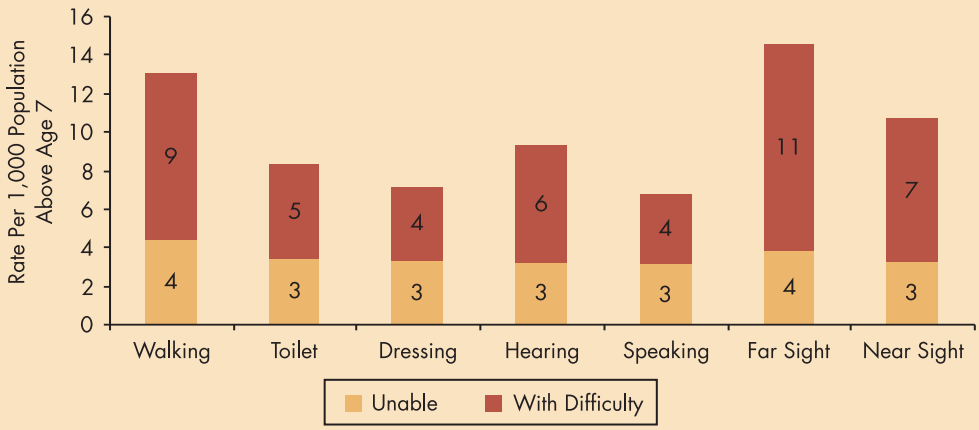


Figure 7.5 Disabilities in Activities of Daily Living

Source: IHDS 2004–5 data.

When all activities are considered together, about 24 people per 1,000 have difficulty doing at least one of these activities. Of these, nine have total disability. Four percent of households have a totally disabled person. Ten per cent have a person who has difficulty doing one of these seven activities. Disabilities increase with age (Figure 7.6).

Of a thousand elderly, 39 have complete disability in one of the seven activities of daily living. This is more than six times the rate for working-age adults (six), or for children between ages 8–14 (four). Nevertheless, because the elderly are now such a small proportion of the Indian population, the majority of Indians with a disability (58 per cent) are below the age of 60.

Disabilities are quite equally distributed across class and caste (see Table A.7.1a). The disabled are slightly more concentrated among the poor and less educated, but the differences are small. There are also few differences across caste and religion. State differences again exceed social inequalities (see Table A.7.1b). The high disability rates in Kerala and Tamil Nadu are the result of their older age structure, an ironic consequence of the generally better health and medical care in the South. Among 15–59 year olds, Bihar's disability rate (15 per 1,000) is more than twice the national rate (six) and well above Kerala and Tamil Nadu's (eight).

Maternal Health

Maternal mortality rates have been declining, but complications before and after birth are common. The IHDS asked about whether recent mothers had experienced any of the

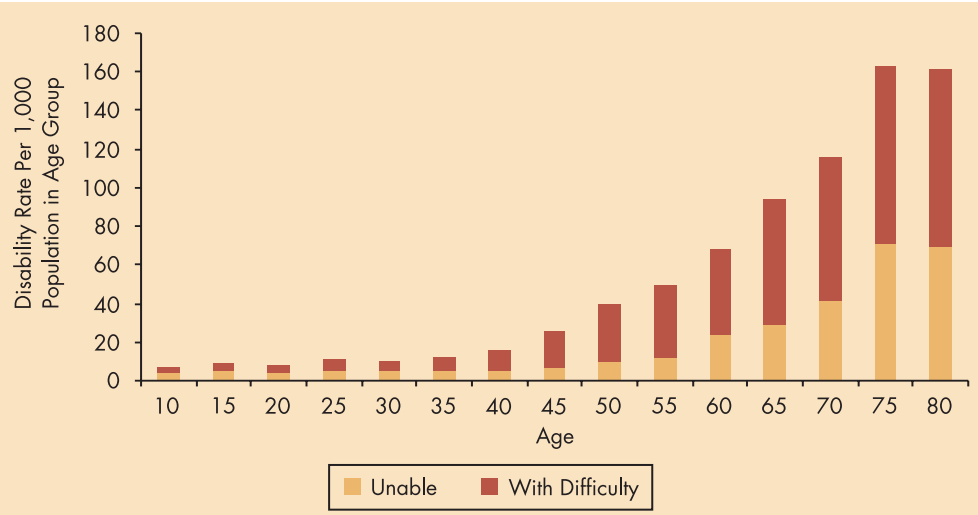


Figure 7.6 Disabilities in Activities of Daily Living by Age

Source: IHDS 2004–5 data.

eight medical problems during, or shortly after their pregnancies as listed in Figure 7.7.

Fatigue during pregnancy was most common (36 per cent), but more serious medical risks were also apparent. Eighteen per cent of recent mothers reported they had been anaemic, and 14 per cent had had convulsions. Excluding fatigue, 40 per cent of recent Indian mothers reported having at least one of the more serious maternity problems.

Poor and illiterate mothers are more likely to have a serious maternal medical problem, but the important variation is again more geographic than social (see Table A.7.1a). Rural women—particularly those living in the least developed villages—reported a problem more often (45 per cent) than those in metro cities (30 per cent), and the statewise differences are enormous. About four out of five women in Jammu and Kashmir and in Assam reported a medical problem surrounding their last pregnancy. Less than one out of six suffered any of these problems in Tamil Nadu (see Table A.7.1b).

Self-reported Health

Surveys around the world have shown that a simple question, asking respondents for their own evaluation of their health, is a good indicator of overall health status and a good predictor of future outcomes. The IHDS asked one ever-married woman between ages 15–49 in each household to rate her own health. The majority reported either very good (15 per cent) or good (50 per cent) health, but that leaves a substantial minority who reported their health as only okay (*thik-thak,* 30 per cent) or poor (5 per cent).

Throughout this report, we have noted disparities in various indicators of human development by income and health indicators are no exception. The affluent and the educated not only enjoy more extrinsic rewards, but their self-reports of health were also higher: 77 per cent of college or secondary school graduates reported good health and only 59 per cent of illiterate women managed that (see Table A.7.1a).

Self-reported good health also declines with age and frequently seems to be associated with childbearing. The more children a woman has had, the worse her self-reported health (see Figure 7.8).

A health decline is modest up to three births, but becomes more dramatic after that. This strong relationship is partly explained by the lower education and greater poverty of women with high fertility.

As with many aspects of health in India, social class and age are less important than geographical location (Tables A.7.1a and 7.1b). Urban women reported that they are healthier (71 per cent) than rural women (62 per cent). The south has especially good self reported health: women in Karnataka (96 per cent) and Tamil Nadu (88 per cent) were most likely to say that their health is good or very good; at the opposite extreme, less than half of women in Jammu and Kashmir (36 per cent), Jharkhand (39 per cent), and Assam (37 per cent) reported good health. However, it is important to exercise caution in interpreting these responses because of cultural and linguistic variation in the propensity of individuals to respond that their health is good. For example, many fewer women in Punjab reported good health

Figure 7.7 Pregnancy Problems for Last Birth between the Period 2000–5

Source: IHDS 2004–5 data.

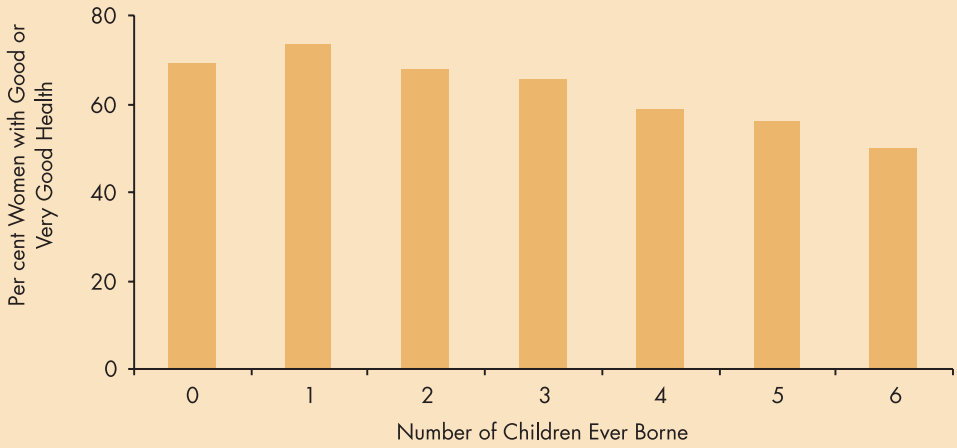


Figure 7.8 Self-reported Health Being Good or Very Good for Women Aged 15–49 by Number of Children

Source: IHDS 2004–5 data.

(48 per cent) than in Orissa (72 per cent). That Orissa is one of the poorest states in India and documented higher self-reported short-term illnesses than Punjab (137 versus 117 per 1,000) suggests the need for caution in interpreting these reports.

In summary, looking across various dimensions of self-reported health status discussed in this section, poor health is a consequence of biology, behaviour, and aging, but those outcomes also appear to be socially structured. While education and income play some role in the prevalence of illnesses, rural–urban and state differences are particularly important. Although not all health problems show the same statewise patterns, the south is noticeably healthier along several dimensions, while the poorer Hindi heartland (that is, Uttar Pradesh, Bihar, and Madhya Pradesh) reports more illness and disability. In Chapter 8, we note similar differences in infant and child mortality, with Kerala's infant mortality at nine per 1,000 births (rivalling that of developed countries) and infant mortality for Uttar Pradesh at 80 per 1,000. This suggests that the regional differences in morbidity are not simply due to differences in reporting.

Next, we will see that similar geographic differences are found for medical care. Unfortunately, the areas with the most need because of the high prevalence of illnesses are the areas with the worst medical care.

MEDICAL CARE

A massive expansion of government health facilities occurred under the 6th and 7th Five Year Plans in the 1980s with a goal of providing one health sub-centre per 5,000 population and a PHC per 30,000 population. In 2005, access to some sort of government medical facilities was almost universal in urban areas. Even for the rural population, a substantial proportion lived in villages with at least a sub-centre, and a vast majority had a sub-centre in a neighbouring village. The IHDS documents that about 86 per cent of the households at least have a government sub-centre within three kilometres. However, most individuals seem to seek medical care from private providers. This is true for both short-term and long-term illnesses, although slightly less so for long-term illness. Maternity care is the one exception. More women rely on government doctors and midwives for pregnancy and births than go to private clinics (although the majority still have births at home). The poor, the elderly, and women make somewhat more use of the government services, in general, but the majority of all groups use private sector care for most illnesses. Government-provided medical care is more common in some parts of India, but only in a few areas is it the most common choice for medical care.

It is important to keep in mind the diversity of medical facilities in India. Government facilities range from places like the All India Institute of Medical Sciences, capable of performing complex surgeries, to poorly equipped village sub-centres. The private sector is even more diverse. It consists of facilities ranging from dispensaries run by untrained and unlicensed individuals to high technology, for-profit hospitals catering to medical tourists from abroad. The IHDS surveyed one predominant private facility and one government medical facility in each village/urban block. This is a nationwide sample, but should not be seen as being representative of health facilities in India because the sampling frame did not consist of all possible facilities. Nonetheless, the results presented in Box 7.2 provide an interesting snapshot of the private and public health facilities in India and are important in informing the results on the source and cost of medical care discussed below.

Box 7.2 Government and Private Health Facilities

The IHDS documents that households rely overwhelmingly on private providers. The IHDS visited one private and one government health facility for each sample village/urban block. In each sample area, facilities that were the most frequently used by residents for treatment of minor illnesses were selected. The resulting sample of 3,777 facilities is nationwide but not nationally representative; thus, results should be treated with caution.

These data present a mixed picture. Government facilities are far better equipped than private facilities, with better-trained doctors and greater availability of medicines, greater ability to conduct routine blood and urine tests, and advanced equipment. However, they also seem to suffer from neglect. Walls and floors are more often unclean, and the facilities are open slightly fewer hours than the private ones. Most importantly, only 76 per cent of the doctors/directors were present at the time of a visit, compared with 87 per cent in private facilities.

(*in percentage*)

	Government	*Private*
Type of Practice (not mutually exclusive)		
Allopathic	96	89
Ayurvedic	12	31
Homeopathy	4	10
Unani	1	2
Other	2	1
Hours open weekly	62	66
Infrastructure		
Electricity	83	90
Toilet	80	46
Examination table	85	81
Floors not clean	15	8
Walls not clean	18	9
Medical Facilities		
Any antibiotics available	95	35
Stethoscope	95	98
Sterilization equipment/Autoclave	81	54
Thermometer	97	97
Haemoglobin test done (internally or externally)	61	29
Routine urinalysis done (internally or externally)	52	26
Doctor/Director		
Has MBBS	86	60
Has ayurvedic degree/diploma	3	16
No medical training	11	24
Present at the time of the interviewer visit	76	87

Notes: IHDS selected one predominant private and one government health facility typically used for treating minor illnesses in the village/urban block. The provider sample is nationwide but not nationally representative.

Source: IHDS 2004–5 data.

Medical Care for Short-term Illnesses

The survey households reported that they almost always (94 per cent of the time) sought medical treatment when someone became sick with a cough, fever, or diarrhoea. This high rate suggests that most respondents equated illness with medical treatment. If they didn't seek some help, then they assumed they weren't really sick.

When sick, only 17 per cent of the time did respondents go to a government dispensary. Most often (71 per cent) people went to a doctor, nurse, or untrained practitioner in private practice. Of these visits, sometimes (5 per cent) it was to a government doctor or nurse who was practising part-time in private practice. Another 8 per cent of the sick went to the local pharmacist (chemist) for treatment, and 2 per cent went to someone else, such as a traditional healer. Note that the distinction between private doctors and traditional healers is somewhat fuzzy, and most patients do not really know the qualifications of their service providers. Thus, while there is strong credential control for government service providers, that for private providers is quite weak. Quality of treatment in government health centres can also be variable. Government doctors and nurses often engage in private practice during their free time. Ostensibly, this is done to allow patients who prefer to pay for individualized care or greater flexibility of timing to do so. However, in practice, it results in a conflict of interest, encouraging providers to remain absent or unavailable during official working hours and to provide poor quality care in order to build up a private practice. On the other hand, the ability to engage in private practice supplements their government incomes and increases service availability in hard-to-reach areas.

The local availability of government services affects where the sick go for treatment. While urban residents generally have a choice of public or private providers, rural residents face far fewer choices. The IHDS finds that 57 per cent of villages do not have a government health centre. Of the 43 per cent that do have a government centre, 28 per cent have only a health sub-centre, and only 15 per cent have a full PHC or Community Health Centre (CHC). Usually villages without any government health facility are smaller and often have access to a sub-centre in easy reach.

About 80 per cent of the rural IHDS households live within three kilometres of a sub-centre. However, access to a sub-centre is not enough to encourage the use of a government facility for short-term care, particularly if a private facility is also present. When the village does not have a health centre, about 16 per cent go outside the village (see Figure 7.9) to get public health care and 69 per cent go outside the village for private health care.

If only a sub-centre is present without any private facility, about 30 per cent use public facilities. However, if both private facility and sub-centre are present, only 13 per cent use the public facility. When a PHC or CHC is present in the village, more people are likely to go there for treatment, but still about 63 per cent of the villagers go to a private clinic in these villages.

The availability of private services in the village also affects how the sick choose treatment. Forty six per cent of rural residents live in a village without any private practitioner. They are more likely to go to a government centre, especially if one is in the village. But even in villages with a PHC or CHC and no private alternative, only 35 per cent of the sick go to the public dispensaries or hospitals and 53 per cent leave the village for private treatment (Figure 7.9).

One would generally expect the use of private health care to be concentrated among privileged groups, the rich, the educated, and working age men. However, these

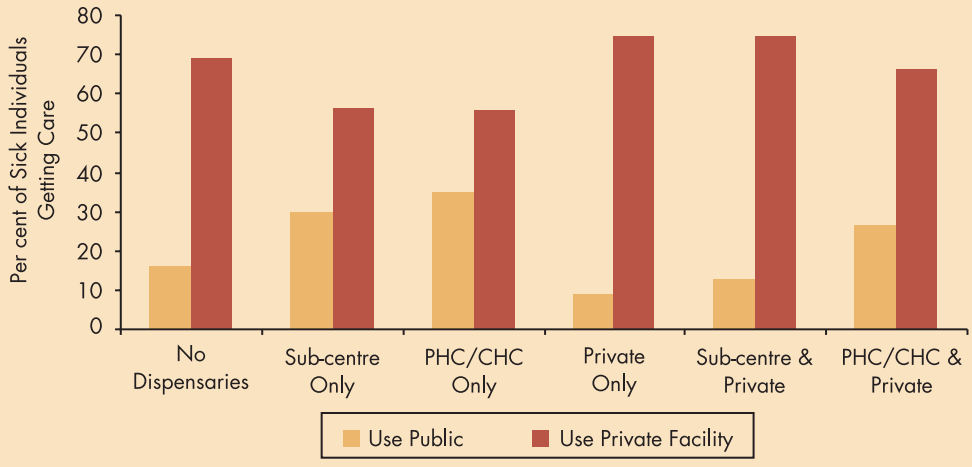


Figure 7.9 Use of Public and Private Care by Availability in Village

Source: IHDS 2004–5 data.

relationships do not appear to be strong in the IHDS data. When any short-term care is obtained, we see virtually no difference in the use of public versus private care between men and women, elderly, adults, and children, and educated and uneducated families (see Table A.7.2a). Arguably, the most surprising absence of difference exists between the rich and the poor. When seeking care for short-term maladies, about 18 per cent of the individuals from the highest income quintile use public care, and 17 per cent of those from the lowest income quintile do so. This small income difference becomes less surprising when we consider that treatment costs don't differ very much between public and private services—a topic addressed in greater detail in the following section. Among social groups, Adivasis and Christians use government services more often than other groups (24 and 29 per cent, respectively), probably because of their concentration in Kerala and the North-East, where government services are widely used.

The state differences in the use of government services are large. In Himachal Pradesh, government services are preferred over private practitioners (56 per cent), as they are in Jammu and Kashmir (49 per cent) and the North-East (43 per cent). However, almost nobody goes to a government facility in Bihar (2 per cent), Uttar Pradesh (7 per cent), or Punjab (8 per cent). These state differences are not associated with state wealth or development because both rich and poor states have low usage of government services. Himachal, Kashmir, and the North-East have a high usage of public services because about one-third of their villages have a PHC or CHC, not just a health sub-centre (Figure 7.10).

In the south, Kerala, Tamil Nadu, and Karnataka also have many PHCs but somewhat lower rates of public usage because there are also many private clinics there, unlike in the hill states.[5]

Surprisingly, urban and rural areas have similar rates of usage of public health centres (Table A.7.2a). However, rural residents in less developed villages are more than three times as likely (53 per cent) to leave their villages for treatment as metro city dwellers are to leave their neighbourhoods (13 per cent). Where treatment happens is important because the cost of treatment in one's own village or neighbourhood is typically half that of outside treatment (a median of Rs 100 versus Rs 200). Rural residents' greater need to leave their home areas for medical care is almost entirely a result of the lack of adequate local medical facilities, especially private practitioners. In a village that has a private medical practice, a pharmacy, and a PHC, a sick person is no more likely to leave the village for treatment than urban residents are to leave their neighbourhood for medical care.

Only 3 per cent of patients with short-term illnesses were hospitalized, and only 1 per cent were hospitalized for more than a week. Hospitalization was highest among the elderly, followed by working age adults. Hospitalization was very low among children aged 6–14. Males of all age groups were hospitalized slightly more than females.

Medical Care for Long-term Illnesses

Of the 6 per cent of individuals diagnosed with a major long-term illness, private medical care was again the preferred method of treatment, as it was for short-term morbidity.

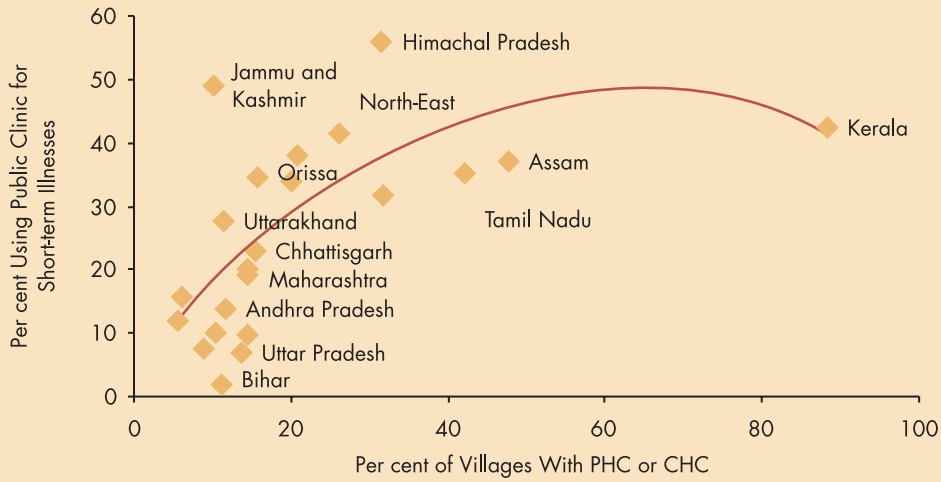


Figure 7.10 Statewise Availability and Use of Public Health Centres

Source: IHDS 2004–5 data.

[5] While the IHDS surveyed a large number of households, it surveyed 1,503 villages. Data for village infrastructure is based on a small number of villages per state, ranging from seventeen in Uttarakhand to 134 in Uttar Pradesh. Thus, data for villages is subject to greater sampling error than data for households and should be treated with caution.

Sixty nine per cent of the long-term ill went to private practitioners (similar to the 71 per cent of the short-term ill), 23 per cent went to government facilities (somewhat higher than the 17 per cent of the short-term ill), only 5 per cent went to pharmacists or some other medical care (only half of the 10 per cent for those with a short-term illness), and 9 per cent reported not seeking any medical treatment. The proportion seeking no treatment in the past year may be an underestimate resulting from our focus on diagnosed illnesses. Polio (58 per cent), mental illness (76 per cent), and cataracts (79 per cent) have especially low rates of medical treatment.

The pattern of private and public service usage for long-term illnesses is much the same as that discussed above for short-term illnesses. There are only small differences between men and women, and between the elderly and the working age population (see Table A.7.2a). Educational and social group differences in treatment options are also minor.

Again, the major determinants of public and private medical care are regional. More than half the long-term patients were treated at public health facilities in Himachal Pradesh and Delhi (see Table A.7.2b). On the other hand, the same states with low rates of public medical service usage for coughs, fevers, and diarrhoea, also have low usage of public services for more serious diseases. Bihar, at 4 per cent, is again the lowest. Metropolitan cities show the greatest usage of government services (27 per cent), while less developed villages document the lowest usage (20 per cent), reflecting the greater availability of high quality training hospitals in metropolitan areas.

Treatments occur outside the village or neighbourhood more often for major illnesses (62 per cent) than for minor illnesses (42 per cent). Among major illnesses, chronic conditions like hypertension (51 per cent) and diabetes (54 per cent) are less often treated outside the area than other major illnesses (see Table 7.1).

The young, although less likely to suffer from a major illness, travel farther for treatment (Table A.7.2a). But genders, income levels, and social groups differ little in where they are treated. Residential location is the primary determinant of local treatment of long-term illnesses, as it is for short-term illnesses. The sick in metropolitan cities are far more likely to be treated locally (71 per cent) than are those in the least developed villages (25 per cent). States also differ in how often long-term illnesses are treated locally; travelling for treatment of major illnesses is much more likely in Himachal Pradesh (81 per cent), Uttar Pradesh (77 per cent), or Bihar (77 per cent), than in West Bengal (44 per cent) or Kerala (52 per cent).

Patients with major illnesses were hospitalized more often (25 per cent) and for longer periods than were those with short-term illnesses (3 per cent). The average hospital stay was seven days, although 10 per cent of the patients stayed for a month or more. Hospitalization stays were the shortest for cataracts, with a median of four days, but were typically 7–12 days for each of the other diseases. Because of the 'Others' (Table 7.1) category's high prevalence, about half of the hospital days are accounted for by the 'Others' category, which is composed primarily of accidents.

Hospitalization rates vary little by income, education, or social group (Table A.7.2a). However, states differ substantially in their hospitalization rates (Table A.7.2b). Himachal, Haryana, Gujarat, and Maharashtra had high rates of hospitalization. Punjab, Delhi, West Bengal, and Orissa had low rates, as did Andhra Pradesh and Chhattisgarh.

Maternal Medical Care

About half of all recent births were attended by trained medical personnel. As shown in Figure 7.11, 43 per cent of babies were delivered by a physician. Another 11 per cent were delivered by a nurse or other trained medical personnel.

Major social, geographic, and demographic differences, separate the half of babies delivered by medical personnel from the other half who were attended only by traditional midwives, family, or friends. Poor, illiterate mothers having their sixth child in rural Bihar are almost never attended by medical personnel. Affluent, college educated mothers having their first child in Chennai almost always are.

Deliveries are the most visible part of a larger system of maternal care, whose parts are closely related. Prenatal checkups, blood and urine tests, sonograms, tetanus injections, iron supplements, and postnatal checkups have widely varying levels of acceptance across India (Figure 7.11), but a mother who has any one of these is more likely to have the others as well. For example, 82 per cent of mothers who had a physician-assisted birth had had a prenatal blood test. Only 34 per cent of other mothers had that test. Moreover, the personal, social, and geographic factors, that affect any one of these, are the same as the factors that affect the others. To avoid repetition, this report will concentrate on physician assisted deliveries, but the reader should realize that what is found for deliveries applies as well to the other elements of the maternal health complex.

The mother's education and her household's income are strong determinants of what kind of medical care she receives during delivery (Table A.7.2a). Ninety-one per cent of college graduated women delivered their babies with a physician attending. Only 24 per cent of uneducated women received that level of attention. Similarly, only 27 per cent of women in the poorest income quintile had a physician attended delivery, compared to 69 per cent of women in the most affluent quintile. This suggests that delivery care for women is far more dependent on the household socioeconomic status than is care for illnesses that afflict both men and women.

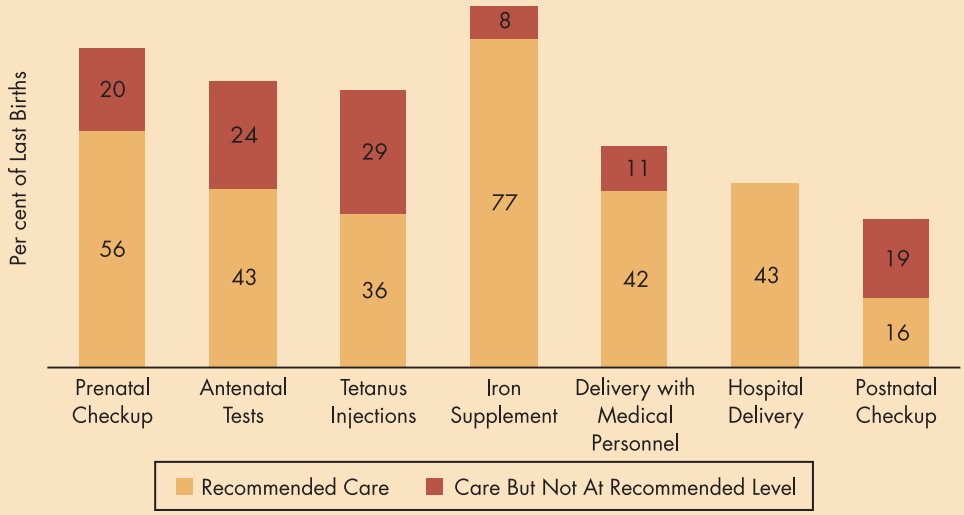


Figure 7.11 Prenatal and Postnatal Care

Notes: Recommended levels are physician examination for antenatal check-up; five of the following antenatal tests: blood pressure, blood sample, urine sample, weight, abdominal examination, internal examination and sonogram; physician-assisted delivery; iron supplement for 60 days; two tetanus toxoid injections; and a postnatal check-up within two days of delivery.

Source: IHDS 2004–5 data.

Medical care varies across a woman's own fertility history, regardless of the education and wealth she begins with. The majority (59 per cent) of first births are attended by a physician. A small minority (14 per cent) of births, after the fifth birth, have a physician attending (Figure 7.12).

This relationship is partly due to the relationship between birth order and mother's education and income. Poor, less educated women are more likely to have a larger number of children and poverty may also lead to lack of attendance at delivery. But regardless of mother's characteristics such as age, education, and income later births are less likely to be attended by a physician. The birth order effect has been partially offset by the general increase over time in medical assistance for deliveries. The *NFHS* reports an increase from 26 per cent of institutional deliveries in their first wave (1992–3) to 41 per cent in 2005–6. Thus, women who have had two recent births benefit from the general trend towards more medical care (of the 64 per cent of women without physician care in their next to last birth, 6 per cent improved to physician care in their most recent birth) but are deterred by the birth order effect (of the 36 per cent of women who did use medical care on the next to last birth, 8 per cent dropped physician care in their next birth). Because the birth order decline is slightly greater than the over the time

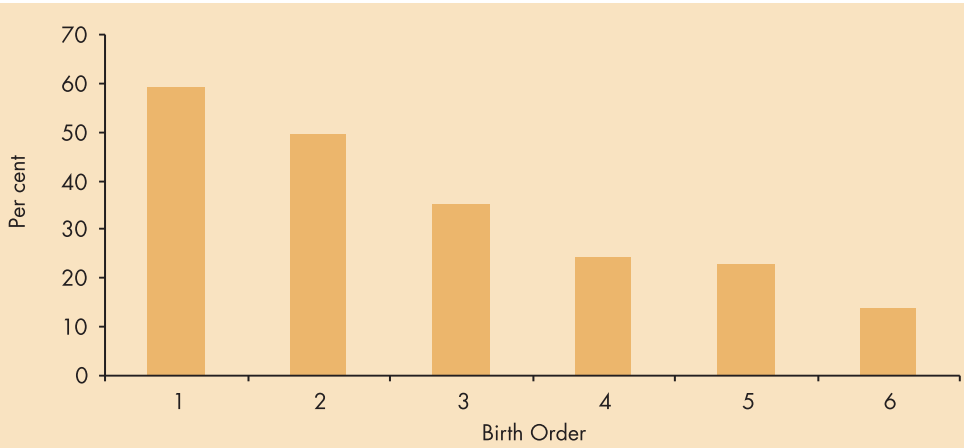


Figure 7.12 Physician-assisted Births by Birth Order

Source: IHDS 2004–5 data.

increase in medical care, mothers are less likely to receive physician assistance as they have more children.

In addition to these strong class and birth order effects, geography is again associated with much of a mother's medical care during delivery (Table A.7.2b). Almost all births (98 per cent) in Kerala are physician attended. The rest of the South also has high rates of physician assistance. Andhra Pradesh (82 per cent) and Tamil Nadu (79 per cent) are notably high. Even Karnataka, at 57 per cent and the lowest in the south, is still well above the national average. At the opposite extreme, only 15 per cent of births in Uttar Pradesh and only 16 per cent in Madhya Pradesh are assisted by physicians. Mothers in the Hindi belt appear to inhabit a different medical world than mothers in the south. Even within the states, where people live makes a major difference in medical care. The majority (75 per cent) of metropolitan area births are assisted by physicians. Rural mothers in less developed villages enjoy only one-third that rate (25 per cent).

Finally, government services play a somewhat greater role in maternal medical care than they do for minor or major illnesses. For both long- and short-term illnesses, among individuals who receive any care, only one in four gets it from public providers, with the other three are using private care. In contrast, for deliveries, about half occur at home, and the remaining are evenly split, at about 22 per cent each, between public and private maternity homes. Government services also play an important role in antenatal care, with 39 per cent women receiving care in government health centres and another 11 per cent being visited by a public health worker. Most importantly, public hospitals provide delivery to the most vulnerable sections of the population, the poor, the less educated, Dalits, Adivasis, and Muslims (Table A.7.2a).

EXPENDITURES ON MEDICAL CARE

Indian households spend a surprisingly large proportion of their incomes on medical care. Medical expenses are an important reason why households fall into the debt trap, with nearly 16 per cent of households reporting that their largest loan in the preceding five years was taken for medical expenses. The typical minor illnesses (cough, fever, and diarrhoea) cost Rs 120, although 10 per cent of these illnesses cost more than Rs 500. Because of this skewed distribution, the mean expense was Rs 294, more than twice the expense for the typical household with an illness. There was little difference in expenditures among the three minor illnesses (see Table 7.1 and Figure 7.13).

Major illnesses were considerably more costly. A major illness cost the average sick person Rs 1,900 during the year, although 10 per cent spent Rs 11,000 or more. Mean expenditures for persons with a major illness were Rs 5,053. Cancer treatments were especially expensive (Rs 3,800), while cataracts were treated for Rs 1,000.

When we combine expenditures on all household members, on an average, each Indian household spent Rs 190 on minor illnesses during the year (even though three-quarters spent nothing) and even more, Rs 1,680, on major illnesses during the year. The relationship between household income and illness expenditures presented in Figure 7.14 is interesting.

For minor illnesses, the expenditures do not vary by household income. For major illnesses, the expenditures vary substantially by household income, with a range of Rs 1,274 in the lowest income quintile to Rs 2,571 in the highest income quintile, and a sharp increase between the fourth and fifth quintile. This is not surprising. For minor illnesses, the costs are mostly medicine related and are

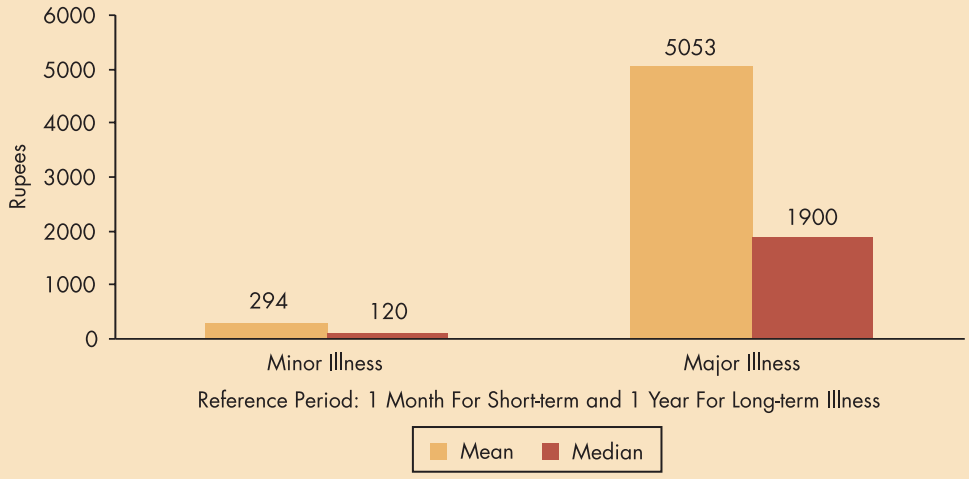


Figure 7.13 Medical Spending for Short-term and Long-term Illness

Source: IHDS 2004–5 data.

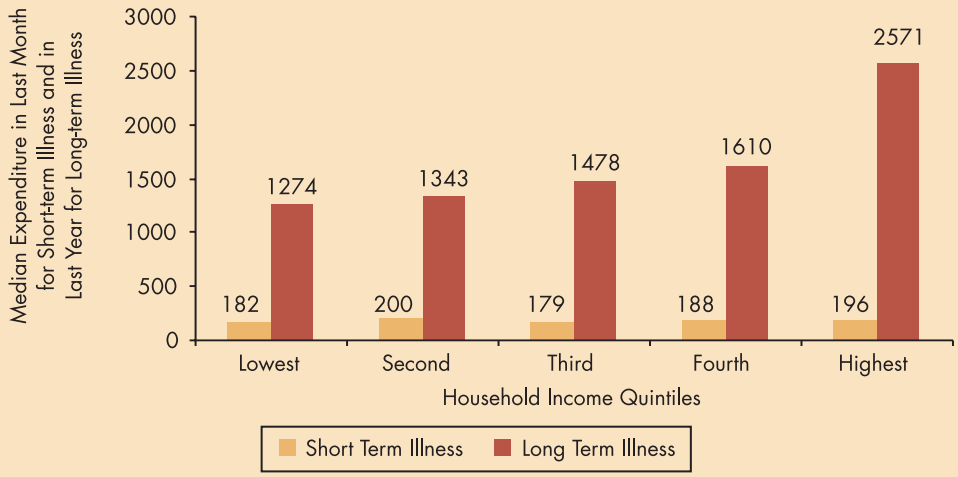


Figure 7.14 Medical Spending by Household Income (for all members)

Source: IHDS 2004–5 data.

unlikely to vary by household income. However, major illnesses require more expensive tests and treatment options, which physicians may hesitate to recommend to poor patients, and poor households may be less likely to undertake, even if recommended.

Despite these striking income differences, relative to urban households, rural households spend more on minor illnesses and almost as much for major illnesses (Table A.7.2a). Medical care is least expensive in the major metropolitan areas despite the higher concentration of affluent households there. Part of the reason for their higher expenses is that villagers, more often, have to leave their local areas for treatment and are slightly more likely to be hospitalized (Table A.7.2a), both of which raise costs. Leaving the village or neighbourhood raises the median expense from Rs 95 to Rs 200 for minor illnesses and from Rs 650 to Rs 2,700 for major illnesses. Hospitalization, of course, results in major expenses. The rare cough, fever, or diarrhoea that requires hospitalization, typically costs Rs 1,000 compared to Rs 110 for outpatient costs. Major illnesses cost Rs 5,400 with hospitalization and only Rs 1,200 without hospitalization.

Overall, going to a public provider costs less than going to a private provider, but these savings are frequently small. For minor illnesses, going to a public health centre results in a median expenditure of Rs 100 as compared with Rs 150 for the private healthcare provider, but going to a pharmacist costs only Rs 50 (Figure 7.15).

For major illnesses, the median public provider expense is Rs 1,970, which is Rs 580 less than the median private care expense (Figure 7.16).

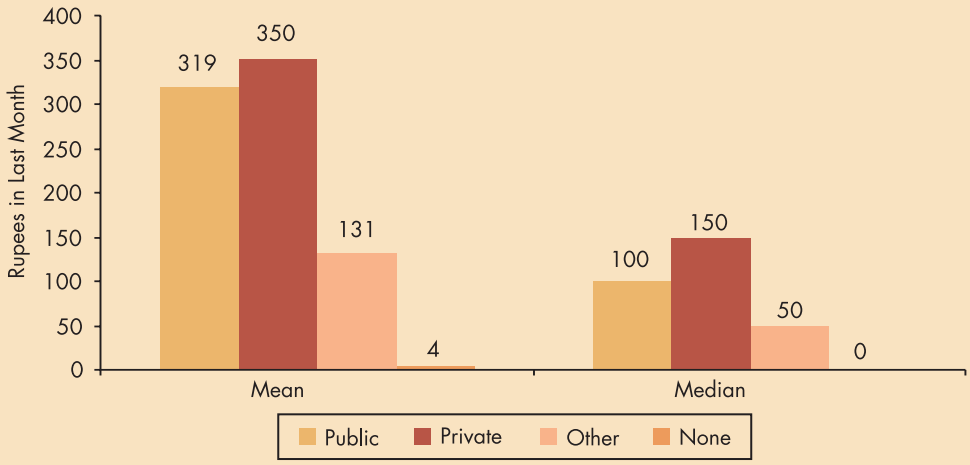


Figure 7.15 Minor Ilness Expenses by Source of Treatment

Source: IHDS 2004–5 data.

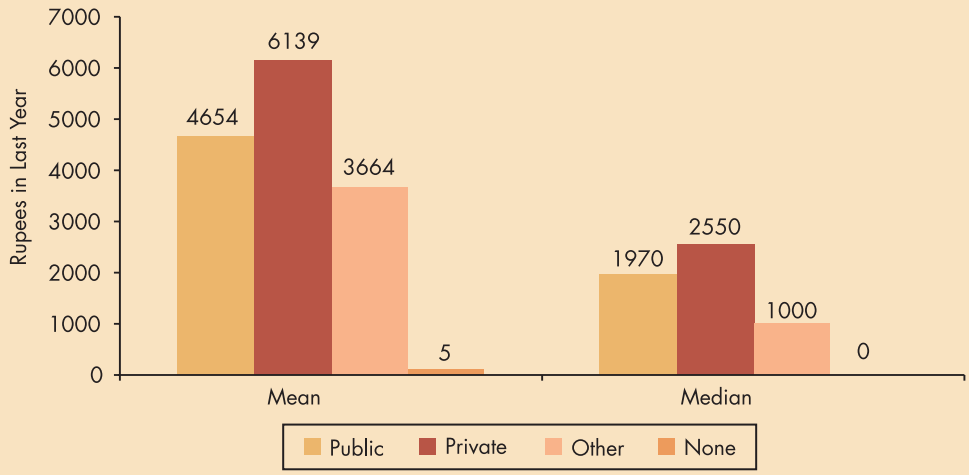


Figure 7.16 Major Medical Expenses by Source of Treatment

Source: IHDS 2004–5 data.

The difference in mean expenses is higher because of some extreme values, but the comparison is not much different, Rs 6,139 versus Rs 4,654. The real cost savings are realized by going to some other provider, such as a pharmacist, for which the median expense is only Rs 1,000.

This small difference in cost between public and private healthcare in short-term morbidity is surprising.[6] Healthcare costs include a variety of expenditures. doctor or nurse's fees, medicines, costs of diagnostic tests, travel and lodging, and gratuity or tips. Public healthcare providers charge minimal fees, but the costs of medicine, transportation, and lodging remain large, and tips may be even more prevalent in public health centres. Of these, doctor's fees in public centres are free or minimal, and diagnostic costs could be small. However, for short-term illnesses, the main expenses appear to be medicines and other treatments (Figure 7.17), which are higher, rather than lower, for patients visiting government providers (Rs 112 versus Rs 87). Indirect expenses, such as tips, transportation, and lodging are also higher when using public facilities (Rs 33 versus Rs 19). This balances out the benefit of lower doctor's fees (Rs 21 versus Rs 28).

The finding of a minor difference between government and private healthcare is partly due to our lack of distinction between various sources of private healthcare. As mentioned earlier, the Indian medical sector is extremely heterogeneous. For minor illnesses, it is not at all unusual to go to local *vaid*, with somewhat ambiguous training, who prescribes relatively cheap ayurvedic or homeopathic medicines. However, when it comes to major illnesses, the difference in doctors' costs between public and private providers is greater, possibly because this is where patients visit more qualified and expensive private doctors.

HEALTH KNOWLEDGE AND BEHAVIOUR

General Health Awareness

Households with more-educated persons tend to have fewer illnesses, perhaps because they know more about good health

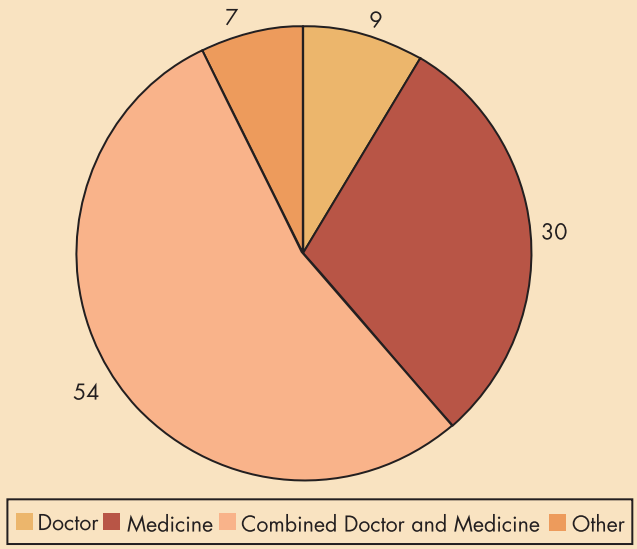


Figure 7.17 Distribution of Short-term Medical Expenses by Category (in per cent)

Source: IHDS 2004–5 data.

[6] This a major point of difference between medical expenditure data collected by the NSS 60th Round and IHDS. NSS finds that for non-hospitalized treatments, when healthcare if obtained from the government sources, the expenditure is negligible (NSSO 2004).

practices. The IHDS asked women aged 15–49 in each household about five common health beliefs (Figure 7.18).

Most women were able to identify that *chulha* smoke is bad for health (79 per cent), that it's not harmful to drink milk during pregnancy (77 per cent), and that the colostrum from the mother's breast is good for the newborn baby (74 per cent). However, only 59 per cent were aware that children should be given more to drink when they have diarrhoea, and surprisingly, only 41 per cent denied that sterilization weakens men for a long while.

These five items are combined to form a scale that ranges from 0 to 100, where 0 means that the respondent was unable to answer any of the five items correctly and 100 means that all five items were answered correctly. The average score from these five items was 62 per cent. Forty percent of the women reported correct answers on at least four of the questions. Only 11 per cent responded correctly on all five. Not surprisingly, these scores were closely related to woman's education. College graduates averaged 78 per cent, whereas, women without any education scored only a 57 per cent (Table A.7.3). Women in states with widespread education also did well (that is, 82 per cent in Kerala) compared with those in states with less education (that is, 51 per cent in Bihar), and even uneducated women from states with higher levels of education were better informed than those in states with lower levels of education. More unexpectedly, young women, especially those under 20, although better educated than their elders, scored lower on this health knowledge scale. And within each educational level, scores improved regularly with age. Apparently, women learn about health from experience as well as from schools.

HIV/AIDS Awareness

Only 55 per cent of ever-married women aged 15–49 had heard about AIDS. Those women who reported they had heard about AIDS were asked about five possible ways that the disease might spread. Three of these were correct ways (via sex, infected needles, and transfusions), and two were incorrect (via mosquito bites and sharing food). Many women simply agreed that all five vectors were ways in which AIDS spreads, so the two incorrect methods were the principal items that tested true AIDS knowledge. Of the respondents who had heard of AIDS, 94 per cent identified sex with an infected person as a way of becoming infected. Transmission through infected needles was recognized by 92 per cent, and through blood transfusion by 91 per cent. However, 24 per cent of the women believed incorrectly that AIDS could be spread by sharing food with an infected person, and another 12 per cent were unsure. Even more, 41 per cent believed that it could spread by being bitten by an infected mosquito, and 12 per cent were unsure.

Like the health beliefs scale, a woman's education is the main determinant of whether she has heard of AIDS, and how much she knows about how it is spread (Table A.7.3a). The educational level of the state again matters. Kerala and Tamil Nadu show widespread AIDS awareness. Most women in Uttar Pradesh, Bihar, and Assam have not heard of AIDS, and if they have, they don't have a good understanding of how it is spread.

DISCUSSION

Regional inequalities in reported morbidity and medical care may be even greater than regional inequalities in wealth and

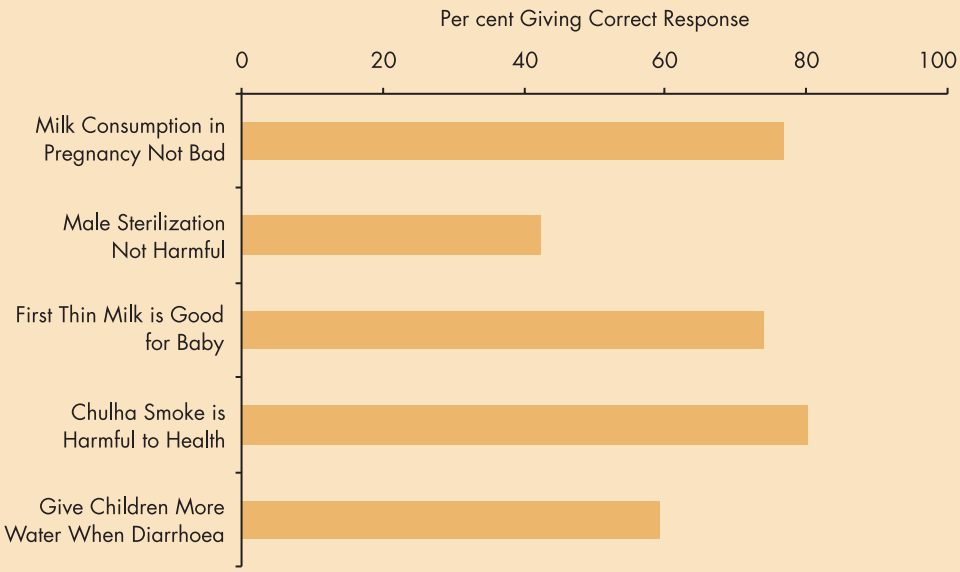


Figure 7.18 Health Knowledge Ever-married Women Aged 15–49 Years

Source: IHDS 2004–5 data.

Box 7.3 Television and HIV/AIDS Education

Television (TV) has played an important role in disseminating information about HIV/AIDS. The *NFHS* found that nearly 80 per cent of the individuals who have heard of AIDS have done so through television. This is not surprising, given that television has emerged as one of the most powerful forces for the transmission of information in the modern world. The proportion of women with any awareness of AIDS is barely 28 per cent among those who rarely or never watch TV, and 76 per cent among those who regularly watch TV.

Thus, the data support the notion that television programming is an important cornerstone of the AIDS prevention strategy. However, there are two major problems on relying solely on TV to obtain information about HIV/AIDS. Although television appears to be a fine medium for providing basic information, its educational value remains unknown. For example, with urban residence, state of residence, education, and household consumption held constant, women who watch TV are 2.5 times more likely to know that that HIV/AIDS is spread through sexual contact. On the other hand, there is little difference between TV watchers and non-watchers regarding beliefs that AIDS is spread through mosquito bites, or by sharing food and utensils with an infected person. Thus, it appears that while sound bites focusing on warnings about sexual contact or blood transfusions are easily conveyed, the more complex understanding needed to prevent the stigmatization of an HIV-infected individual is difficult to convey through TV programmes.

Another problem in relying largely on TV is that TV watching for women is more common in some parts of the country than in others, and among some social groups compared to others. Only about 45 per cent women in Bihar, Uttar Pradesh, Jharkhand, and Rajasthan watch TV, even occasionally, compared with 75–80 per cent in Maharashtra, Kerala, Tamil Nadu, and Punjab. Similarly, only 60 per cent of Dalit women and 42 per cent of Adivasi women watch TV, compared to more than 80 per cent of forward caste women. Not surprisingly, these figures regarding differences in TV watching are reflected in AIDS awareness. Only 30–45 per cent women in Bihar, Uttar Pradesh, Jharkhand, and Rajasthan have AIDS awareness, compared with 80–95 per cent for Maharashtra, Kerala, and Tamil Nadu. Similarly, while 77 per cent of the forward caste women have heard of AIDS, only 31 per cent of Adivasi women know anything about it.

These statistics strongly suggest that television programming for increasing AIDS awareness was an effective strategy in the early stages of AIDS prevention, but that the strategy now needs to be broadened. Education must be increased both among individuals who have never heard of HIV/AIDS, and among men and women who have some awareness. Developing these strategies will require strengthening the community based initiatives being organized by the National AIDS Control Organization and greater involvement of health services personnel than has been the case so far. Although TV will continue to play a role in AIDS education, it is clear that the easy fruit has already been plucked and that much hard work remains to be done.

Source: IHDS 2004–5 data.

education. The south consistently leads the country in reporting low levels of short-term morbidity and higher levels of health care. More southerners report themselves to be in good or very good health, fewer report short-term illnesses, and expectant mothers there report fewer medical problems than elsewhere in the country. Disabilities don't show the same southern advantage, but these are themselves the result of better health and longer life expectancy in the south. Better health means older people and, thus, more disabilities and greater mortality risks. Higher long-term morbidity rates in the south also result from this older age structure (and from the IHDS' emphasis on physician diagnoses as evidence of long-term morbidity). Chapter 8 carries this theme further. Southern states have lower infant and child mortality, and greater levels of vaccination than the central plains. Better medical care undoubtedly contributes to the south's health advantage. The south outperforms the rest of the country on every indicator of maternal medical care. More physician assisted deliveries in recognized medical facilities, more complete antenatal testing, and more common ante and postnatal physician examinations. All of these may also combine to reduce infant and child mortality.

The consistent urban bias in Indian health also deserves closer attention. City- and town-dwellers more often perceive themselves to be healthy, less often report suffering from minor illnesses, and are incapacitated for shorter periods when sick. Medical care is more accessible to them when they get sick and, perhaps more surprisingly, they spend somewhat less money on a typical minor illness than a villager. Urban mothers have fewer pregnancy problems and get much better antenatal, delivery, and postnatal care. The urban–rural differences are not as great as the state differences, but the consistency of the urban advantage across so many indicators testifies to the pervasive inequality rural residents suffer.

Only a small part of these regional inequalities result from differences in population composition. To some extent, individuals in the south and cities report lower morbidity and have better medical care because the people living there are better educated and have higher incomes. But most of the regional inequalities would remain even if we looked only at equivalent people, for instance, at primary school graduates in households with median incomes. Most of the regional differences are contextual. Everybody benefits from living in Kerala, regardless of his or her social position. Nevertheless, social inequalities matter. The poor, the illiterate, and the socially discriminated are disadvantaged in health and medical care, as they are in all aspects of life. The differences are smaller than the regional differences, but they are real.

Finally, the survey results also confirm the obvious fact that aging brings more health problems. Coughs, fevers, and diarrhoea may be especially common among children, but even short-term morbidity increases after middle age. Because of India's current youthful age structure, most illnesses and disabilities occur among the non-elderly, so the strong relationships with age may not be as obvious to the casual observer (or the policy maker) as they are in more developed

countries. However, as India develops, its population will age, so many of the health problems analysed here may actually increase despite improved medical care, more education, cleaner cooking fuels, and better sanitation.

However, the greatest challenges to health policy are posed by high levels of household health expenditures combined with high use of private health care. While some private providers may be highly qualified, the data presented in Box 7.2 suggest considerable heterogeneity in private health care. Although the medical facility data in the IHDS are not nationally representative, they highlight the differences in qualification between government and private doctors. Whereas 86 per cent of government doctors had an MBBS (Bachelor of Medicine and Bachelor of Surgery) only 60 per cent of the private doctors are so qualified. Similarly, on an average, government facilities are better equipped and more likely to offer diagnostic testing. Why do most people rely on private health care providers? We have no definitive answer to this question, but a comparison of private and public facilities provides some clues. In spite of better equipment and training of providers, government facilities show signs of neglect and dereliction. The IHDS interviewers found that 15–18 per cent of government facilities had dirty walls or floors, compared with 5–8 per cent for the private facilities. Most importantly, nearly 24 per cent of the government doctors were not present at the time of this visit, compared to 13 per cent doctors in private facilities. These subtle differences may be amplified in direct experiences of patients, resulting in a preference for private providers.

Maternal care is one area in which government continues to play an important role. Fifty-one perce nt of hospital deliveries take place in government hospitals. Moreover, maternal care seems highly sensitive to household income. The importance of the public sector in providing maternal health care has been recognised in recent years, and programmes such as Janani Suraksha Yojana have been put in place to encourage greater maternal care. This is a promising beginning, and the coming decade may see substantial improvement in maternal health care.

HIGHLIGHTS

- There are substantial urban-rural and regional differences in morbidity. Reported short-term morbidity follows an expected pattern of lower morbidity in south than in the east and central plains.
- About four out of five individuals reported using a private health care provider for both short- and long-term illnesses; maternity care is a partial exception.
- Only 42 per cent women deliver in a hospital, and barely 35 per cent get a post-natal checkup.
- Household expenditures on long-term illnesses vary considerably by household economic status but there is little social class variation for expenditures on short-term illnesses.

Table A.7.1a Prevalence Rates and Days Lost Due to Different Types of Ilnesses

	Cough, Fever, Diarrhoea			*Long-term Illness*			*Disability*		*Maternity*	*Per cent of*
	Morbidity Per 1,000	*Days Incapa-citated in Last Month (if sick)*	*Days Lost Per Year for Whole Population*	*Morbidity per 1,000*	*Days Incapa-citated in Last Year (if sick)*	*Days Lost Per Year for Whole Population*	*Difficulty Per 1,000*	*Inability Per 1,000*	*Problems Last Birth (in Last 5 Years)* Per cent	*Self-reported Health Good or Very Good*
All India	124	4.7	7.0	64	59	3.8	24	9	40	65
Sex										
Male	113	4.7	6.4	58	62	3.6	23	9	0	
Female	136	4.6	7.5	70	56	3.9	25	9	40	65
Age										
0–5	286	3.6	12.4	13	50	0.6				
6–14	136	4.1	6.7	17	53	0.9	8	4		
15–59	89	5.2	5.5	69	55	3.8	17	6	40	65
60+	118	7.1	10.1	215	71	15.2	106	39		
Own Education										
None	171	4.8	9.8	74	68	5.0	37	17	41	59
1–4 Std	130	4.8	7.5	46	59	2.7	21	6	41	65
5–9 Std	91	4.7	5.1	61	56	3.4	18	5	41	67
10–11 Std	75	4.1	3.7	65	43	2.8	18	4	38	72
12 Std/Some college	66	4.2	3.4	45	33	1.5	12	2	35	77
Graduate/Diploma	52	3.1	1.9	70	31	2.2	16	5	31	78
Place of Residence										
Metro	81	3.5	3.4	69	42	2.9	16	3	30	78
Other urban	110	3.9	5.1	70	51	3.6	24	8	33	69
More developed village	131	4.8	7.6	72	65	4.7	31	11	40	66
Less developed village	133	5.0	8.0	52	60	3.1	20	8	45	58
Income										
Lowest Quintile	159	5.4	10.3	70	66	4.6	33	14	42	61
2nd Quintile	143	4.8	8.3	60	69	4.2	23	9	42	62
3rd Quintile	128	4.7	7.3	60	58	3.5	21	8	40	63
4th Quintile	111	4.2	5.6	61	53	3.2	22	8	37	66
Top Quintile	91	3.9	4.3	65	49	3.2	22	6	38	70
Social Groups										
High Caste Hindu	116	4.2	5.8	72	58	4.2	26	8	39	66
OBC	125	4.9	7.3	68	59	4.0	24	10	38	68
Dalit	139	4.8	8.0	59	68	4.0	21	9	39	63
Adivasi	107	4.7	6.1	35	48	1.7	19	8	34	62
Muslim	123	4.7	7.0	55	51	2.8	21	7	51	56
Other religion	113	4.2	5.7	109	52	5.7	68	11	36	71

Source: IHDS 2004–5 data.

Table A.7.1b Statewise Prevalence Rates and Days Lost Due to Different Types of Illnesses

	Cough, Fever, Diarrhoea			*Long-term Illness*			*Disability*		*Maternity*	*Per cent of*
	Morbidity Per 1,000	*Days Incapa-citated in Last Month (if sick)*	*Days lost Per Year for Whole Population*	*Morbidity Per 1,000*	*Days Incapa-citated in Last Year (if sick)*	*Days lost Per Year for Whole Population*	*Difficulty Per 1,000*	*Inability Per 1,000*	*Problems Last Birth (in Last 5 Years)* Per cent	*Self-reported Health Good or Very Good*
All India	124	4.7	7.0	64	59	3.8	24	9	40	65
Jammu and Kashmir	123	6.0	8.8	80	35	2.8	42	6	79	36
Himachal Pradesh	145	2.8	4.8	54	37	2.0	35	7	37	56
Uttarakhand	158	3.4	6.5	33	24	0.8	10	3	58	62
Punjab	119	4.4	6.2	66	93	6.1	24	7	49	48
Haryana	104	3.7	4.6	26	119	3.1	15	6	21	52
Delhi	83	2.9	2.9	43	52	2.2	3	0	54	60
Uttar Pradesh	139	4.9	8.2	50	72	3.6	10	6	49	48
Bihar	209	5.8	14.6	92	55	5.1	18	14	45	69
Jharkhand	108	3.7	4.8	44	20	0.9	12	4	58	39
Rajasthan	90	4.5	4.9	43	33	1.4	28	9	31	61
Chhattisgarh	148	5.7	10.1	51	61	3.1	41	12	24	60
Madhya Pradesh	134	3.8	6.1	46	44	2.0	23	13	27	70
North-East	107	4.5	5.7	19	44	0.8	6	1	24	43
Assam	76	2.9	2.6	20	49	1.0	2	2	76	37
West Bengal	173	3.8	7.9	85	38	3.2	39	11	44	53
Orissa	137	6.0	9.9	54	32	1.7	6	5	48	72
Gujarat	86	4.1	4.2	70	47	3.3	29	13	30	85
Maharashtra, Goa	107	4.4	5.7	54	78	4.2	31	8	36	76
Andhra Pradesh	108	6.1	7.9	85	120	10.2	7	5	33	59
Karnataka	73	4.5	3.9	57	65	3.7	23	10	31	96
Kerala	119	4.5	6.4	120	44	5.3	114	16	41	78
Tamil Nadu	97	3.9	4.5	106	31	3.2	29	16	15	88

Source: IHDS 2004–5 data.

Table A.7.2a Utilization of Medical Care and Expenditure for Illnesses and Delivery

	Cough, Fever, Diarrhoea			Long-term Illness				Maternity		
	Treated in Government Centre (per cent)	Treated Outside Local Area (per cent)	Median Expenses If Sick (Rs)	No Treatment (per cent)	Hospital-ized (per cent)	Treated in Government Facility (per cent)	Treated Outside Local Area (per cent)	Median Expenses If Sick (Rs)	Doctor Delivery (per cent)	Per cent in Public Hospital if Hospital Delivery
All India	17	42	120	9	25	23	62	1,900	42	51
Sex										
Male	17	44	126	10	27	25	63	2,100		
Female	18	41	105	8	24	22	62	1,700	42	51
Age										
0–6	15	44	115	9	33	19	75	2,030		
6–14	17	40	100	21	26	15	59	1,250		
15–59	19	42	140	8	24	23	64	2,000	42	51
60+	22	47	140	8	27	26	59	2,000		
Education										
None	16	45	120	10	26	24	66	1,700	24	61
1–4 Std	18	41	100	7	25	23	66	1,800	37	65
5–9 Std	20	40	110	10	27	24	58	2,000	52	57
10–11 Std	22	35	150	5	24	19	60	2,200	68	42
12 Std/Some college	21	37	150	5	25	23	59	2,050	78	36
Graduate/Diploma	15	32	120	4	20	20	51	2,550	91	25
Place of Residence										
Metro	15	13	100	3	21	27	29	1,710	75	51
Other urban	18	27	110	6	25	23	46	2,000	66	46
More developed village	21	41	130	9	27	25	67	2,000	43	50
Less developed village	15	53	110	12	25	20	75	1,632	25	61
Income										
Lowest Quintile	17	48	100	12	23	22	69	1,460	27	60
2nd Quintile	18	44	110	14	27	22	66	1,500	28	63
3rd Quintile	17	42	116	10	26	23	64	1,750	41	59
4th Quintile	18	38	120	6	28	27	59	2,000	51	51
Top Quintile	18	39	130	5	23	23	56	2,450	69	36
Social Groups										
High Caste Hindu	16	39	115	6	23	20	58	2,250	58	44
OBC	17	46	150	9	26	21	65	1,800	44	47
Dalit	17	39	100	11	26	27	63	1,500	35	65
Adivasi	24	50	80	20	32	28	64	600	18	68
Muslim	17	40	120	7	24	27	64	2,025	36	60
Other religion	22	37	150	5	24	22	58	2,400	84	24

Source: IHDS 2004–5 data.

Table A.7.2b Statewise Utilization of Medical Care and Expenditure for Ilnesses and Delivery

	Cough, Fever, Diarrhoea			*Long Term Illness*					*Maternity*	
	Treated in Government Centre (per cent)	*Treated Outside Local Area (per cent)*	*Median Expenses If Sick (Rs)*	*No Treatment (per cent)*	*Hospital-ized (per cent)*	*Treated in Government Facility (per cent)*	*Treated Outside Local Area (per cent)*	*Median Expenses If Sick (Rs)*	*Doctor Delivery (per cent)*	*Pe cent in Public Hospital if Hospital Delivery*
All India	17	42	120	9	25	23	62	1,900	42	51
Jammu and Kashmir	49	55	282	6	20	49	73	2,500	66	89
Himachal Pradesh	56	61	131	5	38	65	81	3,700	37	82
Uttarakhand	28	43	100	NA	NA	NA	NA	NA	20	NA
Punjab	8	29	100	2	17	19	61	2,900	47	19
Haryana	20	49	160	4	37	34	76	5,200	36	47
Delhi	34	11	100	3	12	76	23	510	62	67
Uttar Pradesh	7	43	100	8	29	20	77	3,000	15	49
Bihar	2	44	170	8	22	4	77	1,360	29	25
Jharkhand	10	47	100	27	20	9	60	700	33	37
Rajasthan	38	51	130	11	26	44	61	3,000	25	72
Chhattisgarh	23	39	80	21	18	22	62	850	21	NA
Madhya Pradesh	12	49	120	11	31	16	69	2,200	16	75
North-East	42	36	112	NA	NA	NA	NA	NA	66	76
Assam	37	32	40	NA	NA	NA	NA	NA	24	NA
West Bengal	10	27	50	12	15	20	44	900	40	81
Orissa	35	50	100	18	16	44	56	700	36	88
Gujarat	16	50	100	17	34	19	65	1,800	57	40
Maharashtra, Goa	19	37	100	3	37	20	56	1,500	68	45
Andhra Pradesh	14	42	250	5	17	13	58	2,200	82	39
Karnataka	32	60	200	8	31	25	68	3,080	57	53
Kerala	43	36	150	6	24	33	52	2,050	98	41
Tamil Nadu	35	54	157	7	33	37	58	1,700	79	49

Note: NA—not available due to small sample sizes.

Source: IHDS 2004–5 data.

Table A.7.3a Health Knowledge: Ever-married Women Aged 15–49 Years

(in percentage)

	Health Knowledge	*AIDS Awareness*	*AIDS Spread Knowledge*
All India	62	55	76
Age			
15–19	57	47	73
20–9	62	59	77
30–9	63	55	77
40–9	63	47	75
Education			
None	57	30	67
1–4 Std	61	51	70
5–9 Std	65	74	76
10–11 Std	70	93	83
12 Std/Some college	75	96	87
Graduate/Diploma	78	99	90
Place of Residence			
Metro	74	87	86
Other urban	65	78	79
More developed village	62	56	74
Less developed village	60	35	72
Income			
Lowest Quintile	58	36	71
2nd Quintile	58	42	70
3rd Quintile	61	49	73
4th Quintile	64	61	77
Top Quintile	69	78	82
Social Groups			
High Caste Hindu	68	73	81
OBC	62	54	76
Dalit	60	48	71
Adivasi	58	33	68
Muslim	59	44	75
Other religion	75	87	85

Source: IHDS 2004–5 data.

Table A.7.3b Health Knowledge: Ever-married Women Aged 15–49 Years by State

(in percentage)

	Health Knowledge	*AIDS Awareness*	*AIDS Spread Knowledge*
All India	62	55	76
Jammu and Kashmir	67	37	76
Himachal Pradesh	73	84	76
Uttarakhand	63	61	75
Punjab	69	60	77
Haryana	71	59	79
Delhi	74	80	78
Uttar Pradesh	66	31	76
Bihar	51	25	73
Jharkhand	60	48	62
Rajasthan	69	37	69
Chhattisgarh	68	35	73
Madhya Pradesh	64	44	76
North-East	61	81	79
Assam	26	32	62
West Bengal	64	44	72
Orissa	69	61	72
Gujarat	69	55	82
Maharashtra, Goa	62	78	80
Andhra Pradesh	50	72	74
Karnataka	57	53	84
Kerala	82	98	87
Tamil Nadu	61	93	73

Source: IHDS 2004–5 data.