

# Health of the Poor and their Subgroups in Urban Areas

**LAVEESH BHANDARI**

**SHRUTI SHRESTH**

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## INDICUS ANALYTICS

B - 17 GREATER KAILASH ENCLAVE 2

NEW DELHI 110048, INDIA

91-11-29222838, 29222863

[HTTP://WWW.INDICUS.NET](http://www.indicus.net)

[INDIC@INDICUS.NET](mailto:INDIC@INDICUS.NET)

### 1. Background

Since independence, in over 50 years India has developed an extensive public delivery system for the provision of health care. This was preceded in 1946 by the Bore Commission that recommended basic health services be provided for all through Primary Health Centres (PHCs). PHCs were set up so as to serve a population of about 30,000 each. At the time the urban population of India was less than 18%. Since then, the urban population of India has grown over four-fold and now constitutes 285 million of the more than 1 billion population of the country.

The World Bank has undertaken analytical studies that describe the health situation of the urban poor (and their subgroups) in India. Several studies have been commissioned to examine a range of issues within this larger framework including the delivery of public health functions, structure and financing of urban health care, health seeking behavior of the urban poor and role of private providers. This study is one among these; it aims at contributing to

a better understanding of the urban health situation in India, especially with reference to the poor.

Few studies have been conducted specifically on issues related to Urban Health Care in India. The notable exceptions that do exist find that accessibility, availability, acceptability, and affordability all are lacking in health care for the poor in urban areas (see ASCI, 2003, for a literature review). They find that (central, state or local) government health services require significant improvements. Moreover, as will also be discussed later, the private sector plays an important role in the supply of health services.

Our objective is to concentrate on the health care related issues of the urban poor; we however study not merely the poorest of the poor (lowest 20 percent of the urban economic class) but also the rural poor and the rich so as to obtain a comparative picture.

Many international studies on location divide and place effects on health have been conducted. These tend to find that such area effects are highly heterogeneous. That is, there tend to be “*some* area effects on *some* health outcomes on *some* population groups and in *some* types of areas” (Macintyre, 2002). For India as well this would be likely. However, given the high poverty levels, it is also likely that economic criteria dominate all other effects. Whether that is true, and how true, is another aspect of this study.

## 2. Poverty in Urban India

According to the Asian Development Bank India's urban population is expected to reach 550 million (up from 285 million in 2001), or over 40 percent of the total population by 2020.<sup>1</sup> The Planning Commission's figures indicate that in 1999-00 about 23.4 per cent of the urban population was below the poverty line (as against 76.3 million - 32.4 per cent - in 1993-94). However, variations between and within class, caste, and states are high. Many disenfranchised segments' suffer from high levels of deprivation not revealed by aggregate numbers. This also affects their health indicators.

**Table 2.1: Characteristics of Urban Population in India**

Urban Conditions	Urban population in mill.		% of Urban population below poverty line		% of Pop. in slums
Source	Census of India		NSSO		Census
Year	1991	2001	1993-94	1999-00	2001
	217	285	32.4	23.6	22.59

The Food Insecurity Atlas of Urban India, 2002, suggests approximately 38 per cent of children under the age of three in urban India underweight and more than 35 per cent of

<sup>1</sup> <http://www.adb.org>

children are shorter than they should be for their age.<sup>2</sup> The Indian Council of Medical Research (ICMR) nutrition norms are also not met by a high proportion of the urban poor.

Living conditions of the urban poor are also quite dismal. A fifth to a fourth of the urban households live in slums, squatter settlements, etc. Basic services such as sanitation, sewage, water supply, and garbage removal are not present, further contributing to the poor health conditions. According to the same source, 23 per cent of urban households do not have access to toilet facilities and nearly 8 per cent of urban households are unable to find safe drinking water.<sup>3</sup>

It is not clear whether the urban poor are generally better off than the rural poor. On the one hand, aggregate figures such as wages, poverty levels, expenditures, all show better performance of urban areas. It is also believed that access to schools and health facilities is better in urban areas. On the other, urban poor appear to be more vulnerable in many areas. Take for instance, average calorie intake; according to published figures from NSSO the average urban calorie intake is *lower* than average rural calorie intake. Casual employment, daily wages, high level of competition for the few unskilled jobs, all contribute.

Another aspect of urban poverty is rarely captured by published data – that related to conditions of footpath dwellers, street-children, and the homeless. Most surveys depend upon data for deriving their sampling structure. The homeless are rarely accounted for. Consequently, there are no scientifically derived estimates on the extent of urban homelessness and the conditions of the homeless. Data sources such the National Family Health Survey or the National Sample Surveys, consequently, do not contain information through which this segment of the urban poor can be studied.

In other words, we find that some studies have documented the poor living and lifestyle conditions faced by the urban poor. These range from poverty to nutritional status to living conditions. However, not much is known *specifically* about health and health related issues being faced by the urban poor. Moreover, we find that there is even greater sparseness of information on poor women and children's conditions. Following sections and sub-sections will reflect upon these aspects.

### 3. Sources & Characteristics of Information

As briefly mentioned above, the objective of this study is to examine the existing data on health issues related to the urban poor. In doing so, we draw primarily from four data sources – the National Family Health Surveys Rounds 1 and 2, and National Sample Survey Rounds 42<sup>nd</sup> and 52<sup>nd</sup>.

These sources of raw data contain information on (i) various measures of health outcomes, and (ii) utilization of health services and health seeking behavior, and (iii) personal and

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<sup>2</sup> Food Insecurity Atlas of Urban India, M.S. Swaminathan Research Foundation and the World Food Programme, 2002.

<sup>3</sup> Also see Bajpai and Bhandari, “Ensuring Access to Water in Urban Households”, Economic and Political Weekly, Vol. XXXVI No. 39, 2001.

household characteristics of the individuals sampled. This allows us to study the health related aspects across rural-urban areas, economic class, as well as age and sex. The data sets span the period 1985-86 through 1998-99; this also allows us to study the differences across time.

### 3.1 Key Data Sources

#### *The National Family Health Surveys Round 1 and 2 (NFHS)*

The two rounds of the National Family Health Surveys (NFHS) were conducted in 1992-93 and 1998-99 with the objective of collecting up-to-date information on conditions faced by households, women and children across the country. The two NFHS rounds contain responses to queries from women aged 15 to 49 years on the nutrition and health issues. They also contain some responses on education levels and attainment as well as responses on household conditions. Both the NFHS 1 and 2 have similar queries, though NFHS 2 has somewhat more detailed questions.

Year	NFHS 1 1992-93	NFHS 2 1998-99
Sample Size:	89,777 ever-married women	91,196 households; 89,199 women
Conducted by:	International Institute for Population Sciences, Mumbai	International Institute for Population Sciences, Mumbai
Survey of:	Ever married women in age group 15 to 49	Ever married women in age group 15 to 49
Raw Data at what level:	Household, woman	Household, woman
Queries on:	Education, health, nutrition, reproductive care	Education, health, nutrition, reproductive care
Focus Area:	Women's health related factors	Women's health related factors
Strengths:	Data on women's and children's health related factors	Data on women's and children's health related factors

#### *Key Data Sources – The National Sample Survey Rounds 42 and 52 (NSS)*

The National Sample Survey Organization, Government of India, conducted two rounds of the health surveys in 1986-87 and 1995-96. These two surveys have large differences between them and only a few comparable variables are present in both the data sources. The surveys themselves were oriented towards prevalence of ailments, utilization of health care, and associated expenditures. The two NSS rounds contain responses to queries on all individuals, their characteristics such as age, sex, whether any ailment was suffered in the past 15 days and their health care utilization. Household level data lists the characteristics of

the households such as location, per capita monthly expenditures, etc. No health related survey has been conducted by the NSSO since the mid nineties, and the data are somewhat dated.

**Table 3.2: NSSO Data**

Year	NSSO 42 <sup>nd</sup> Round (health) 1986-87	NSSO 52 <sup>nd</sup> Round (health) 1995-96
Sample Size:	~75,000 households	121,249 households
Conducted by:	National Sample Survey Organization	National Sample Survey Organization
Survey of:	Morbidity and treatment of ailments	Morbidity and treatment of ailments (greater details)
Raw Data at what level:	Households and Individuals	Households and Individuals
Queries on:	Utilization of health care and facilities by household	Utilization of health care and facilities by household
Strengths:	Many details on health	Many details on health
Weaknesses:	*Not focused on women and child's issues *Dated, lack of comparable figures for recent years *Pregnancy, and childbirth related information not collected	* Not focused on women and child's health * Dated, lack of comparable figures for recent years * Pregnancy, and childbirth related information not collected

The key problem associated with the NSSO data is its dated character as well as the fact that it does not contain comparable information on pregnancy and childbirth. These are not typically treated as ailments and therefore the focus was lacking.

Depending upon the issue at hand, either NFHS or NSSO data are used. Some data from outside sources also supplements the discussion throughout the paper. These are referred to at the appropriate place.

### 3.2 Characteristics of Large Sample Survey Data

The four data sources are large representatively sampled surveys. They allow us to study in a comparative manner a wide range of issues related to urban poor and their health. These data sources have certain characteristics; an appreciation of these will better enable the discussion that follows.

**Economic Status:** Poverty, as defined by the Planning Commission, is based on detailed information on the consumption basket of households. Poverty estimates therefore require information on quantities and prices. In both the NSSO 42<sup>nd</sup> and 52<sup>nd</sup> rounds, though some aggregate information is available on the overall monthly expenditures incurred, it is not adequate to decipher whether a particular household is below or above the poverty line. The NFHS data do not contain any information on expenditures,

however they do have detailed information on the usage of certain facilities, as well as asset use by households.

We therefore follow the *quintile approach*. In the case of NFHS data, an index of economic status was created. See **Appendix 2** for details on the creation of this index. Based on each households value of this economic index (conducted separately for rural and urban households), the individuals were divided into five quintiles for rural and urban areas respectively.

In the case of NSSO data, the per capita monthly expenditure of each household was the basis of the creation of the quintiles. As in the case of NFHS data, the quintiles were created separately for rural and urban areas.

The discussion is based on the quintiles – 20 per cent of the estimated population in each of five categories within rural and urban areas respectively. Henceforth the term ‘urban poor’ is used to refer to the bottom 20 per cent as per capita monthly expenditures (PCME) and asset index (NFHS). The term ‘urban rich’ is used to refer to the topmost 20 per cent. Similar reference is made for the ‘rural rich’ and ‘rural poor’. In the tables the quintiles are labeled as UQ1 to UQ5 and RQ1 to RQ5; where ‘R’ and ‘U’ refer to rural and urban respectively, and ‘Q1’ and ‘Q5’ refer to the lowest and highest economic class respectively.

**Comparison of Rural and Urban residents:** Though the focus of the study is on the urban poor, it also sometimes compares across rural and urban poor. This is done so as to have another basis of comparison and to analyze the relative conditions faced by the urban poor.

Generally, it is difficult to compare across rural and urban areas as the price levels, occupations, incomes, and living conditions are all highly different and a common frame for comparison is difficult to derive given the nature of the data. The following table shows a comparison of the PCMEs for the quintiles in urban and rural areas. As is evident from the table, the average urban poor household has significantly *higher* expenditure levels than an average rural poor household. This poses a problem in the comparison of the poorest rural and urban residents – *we are unable to compare similar entities*. In all likelihood, we are comparing the relatively worse off economically (rural poor) to those somewhat better off (urban poor). Given this bias in our comparison, we would expect that conditions related to economic lifestyle would be better for urban poor households than the rural poor.

**Table 3.3: Ranges of Per Capita Monthly Expenditure (PCME) across Quintiles**

	Rural		Urban	
	Minimum	Maximum	Minimum	Maximum
<b>Quintile 1</b>		204.71		295.80
<b>Quintile 2</b>	204.72	253.80	295.83	389.28
<b>Quintile 3</b>	253.83	307.66	389.33	499.83
<b>Quintile 4</b>	307.69	394.30	499.85	677.40
<b>Quintile 5</b>	394.33	4536.00	677.50	9662.00

Source: NSSO 52<sup>nd</sup> Round, 1995-96

**Absence of qualitative insights:** For all their advantages large sample survey data used here do not contain information that allows us to have qualitative insights into the conditions faced by the respondents. Issues such as effort required for certain actions, degree of discomfort faced, the severity of ailments, can rarely be captured adequately by quantitative data of this type. Though some indications can be gauged, qualitative insights are difficult to decipher from such data.

## **4. Conditions of the Urban Poor**

### **4.1 Prevalence of Ailments**

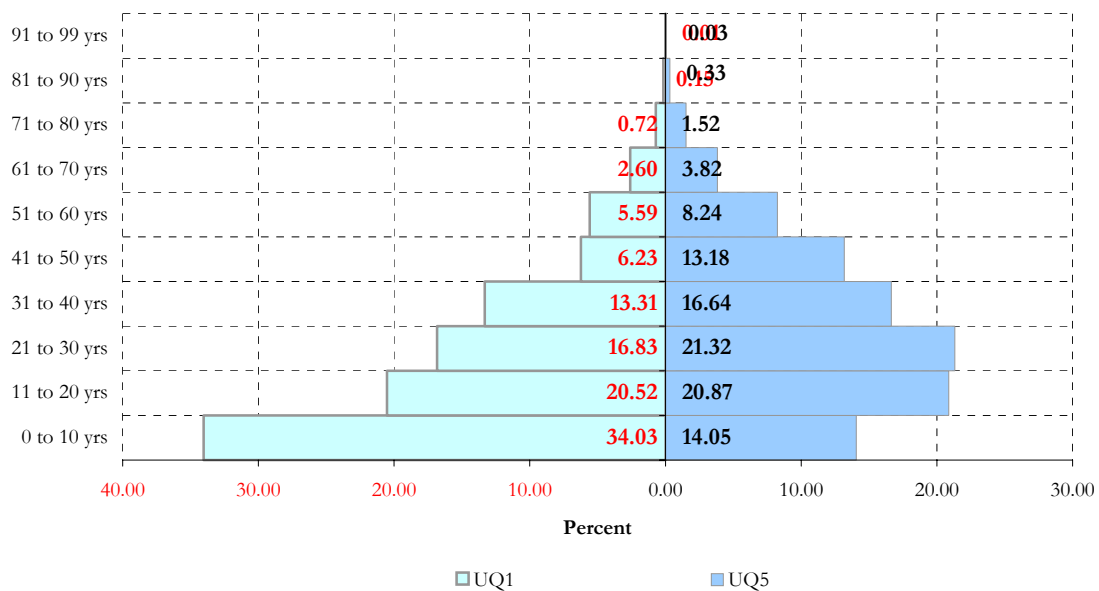
As discussed in the previous sections about a quarter of urban residents live in slums, these are likely to be predominantly the urban poor. Slums are characterized by open drains, lack of adequate sewerage, poor overall living conditions, lack of municipal facilities, etc. Combined with a high concentration of people, conditions are likely to favor a greater incidence of communicable diseases. At the same time lifestyle associated diseases such as coronary ailments, may be less likely to impact the urban poor.

**Table 4.1: Distribution of Ailments – NSS52**

Type of ailments	UQ1	UQ5
Fever of short duration	<b>41.29</b>	<b>28.68</b>
Respiratory Infection	8.87	8.13
Communicable Diseases	4.53	2.97
Water borne diseases	7.83	5.45
Related to age and lifestyle	<b>5.99</b>	<b>19.07</b>
Affecting sense organs	3.93	4.27
Jaundice	0.23	0.47
Leprosy	0.12	0.00

Note: Respiratory infections- Cough and acute bronchitis, acute respiratory infection. Communicable diseases -Whooping cough, TB, Chicken pox, Measles, Mumps etc. Water borne - Diarrhea, Gastroenteritis dysentery, and gastrointestinal diseases. Related to age and lifestyle - Diabetes, Heart diseases, Blood Pressure etc.

The table above shows the type of ailment suffered of those who report suffering from any type of ailment. Data here shows that fever of short duration (less than 15 days) have a high reporting in the urban poor as compared to the urban rich. The distribution of ailments across economic classes shows that communicable diseases are much more likely to impact the urban poor than the urban rich. The urban poor live in unhealthy environments and are likely to be prone to such diseases. However diseases such as diabetes, cataract and problems related to blood pressure is found more amongst the urban rich. These occur mainly due to the lifestyle prevalent amongst richer sections and also their higher age profile.



Though to a lesser extent as compared to rural poor, the chances of acquiring water borne diseases are significant amongst urban poor. One reason for this may be lack of availability of healthy drinking water in the rural areas.

Interestingly, however, survey data reveal that the urban poor are less likely to report having suffered from ailments in the past 15 days than the richer quintiles. (See Table A2 in the Appendix). This lower reported morbidity for the lower quintiles might be the result of differing age distribution across economic classes.

The urban poor tend to be younger than the richer sections. The table below compares the distribution of 0 to 14, 15 to 59 and 60 plus year olds among urban poorest and richest quintiles. It shows that for every single urban poor in the 60 plus age group there is 1.5 among the urban rich. At the same time, for every 1 urban poor in the 0 to 14 year age group, there are 0.5 rich.

**Table 4.2: Age-wise distribution of urban population**

Age Category	UQ1	UQ5
0 to 14 yrs	43.5	21.2
15 to 59 yrs	52.4	72.5
60 plus yrs	4.1	6.3
Total	100.0	100.0

Source: NSSO 52<sup>nd</sup> Round, 1995-96  
See Table A1 of appendix

The lower age profile of the poor is also likely to contribute both to the distribution of ailments as well as lower likelihood of an ailment. We find that if we look at age-specific reported ailments, the urban poor have higher reported morbidity levels across all age groups.

**Table 4.3: Urban Morbidity - Percentage ailing in a 15 days span –NSS52**

Age Group	UQ1	UQ5
0 to 14 years	5.0	4.2
15 to 59 years	5.1	4.3
60+ years	20.3	11.7

Note: Definition: Percent who have had any ailment in the past 15 days  
See Table A31 in Appendix.

As age increases, not only does the likelihood of ailment go up, but also it increases much more among the poorer sections than the better off.

In sum, therefore, the poorer have a different profile of ailments than the richer sections. This could be due to many factors. Living conditions may be one. Age distribution is likely to be another.

## 4.2 Accessibility

The term ‘accessibility’ here broadly refers to the ability of a person to avail health services. Accessibility is affected by factors such as prices, distance, the opportunity cost of obtaining treatment, etc. The data sources used do not have in-depth information from which we can gauge the levels of accessibility. However, some inferences can be made, albeit indirectly.

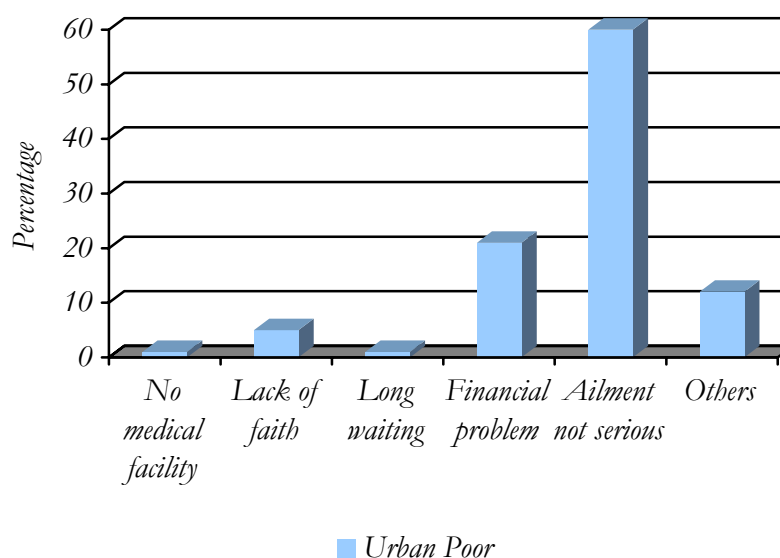
Out of every 100 people falling ill amongst the urban poor, about 13 do not receive any kind of treatment. The survey contained queries related to cause of not obtaining treatment. The options given to the respondents were not mutually exclusive or exhaustive. The pre-identified options listed for the respondent were:

- No medical facility
- Financial problem
- Ailment not serious
- Lack of faith
- Long waiting
- Others

Take for instance the option ‘ailment not serious’. In many cases those who have lower ability to access treatment (for reasons such as lack of funds) may consider some ailments to be ‘not serious enough’. In other words, the poor populations responses are likely to be biased *upwards*. This implies that appropriate care has to be taken in interpreting these results. Despite this gap in the data, some interesting insights do emerge from the responses.

The main reason for receiving no treatment as quoted by the respondents is “Ailment not serious”. About 72 per cent of the urban rich ascribe this to be the key cause, whereas only 48 percent of the poor identify the same reason. Lack of facilities also does not show up as a significant cause of no treatment for the urban poor. Most important – among the poor not getting any treatment, almost a third ascribe lack of funds to be a key factor – compared to only a tenth of the richer sections. In other words, the data indicate that facilities are not inaccessible for the urban poor, ailment levels are higher, but treatment cannot be availed by a large proportion due to a lack of funds.

**Figure 4.1: Causes of Non-Treatment**



**Table 4.4: Percentage Distribution of Causes of Non-treatment – NSS-52**

	RQ1	UQ1	UQ5
No medical facility	12.2	<b>1.3</b>	0.0
Financial problem	32.8	<b>29.6</b>	9.1
Ailment not serious	42.5	<b>48.4</b>	72.0
Lack of faith	4.2	<b>7.1</b>	1.4
Long waiting	0.6	<b>0.5</b>	1.9
Others	7.8	<b>13.1</b>	15.7
All	100.0	100.0	100.0

Refer to Table A24 & Table A25 of Appendix

Other studies have found that paucity of health care providers in the vicinity play a strong role in utilization. Bali (1987) in her study on health care found the need for urban health care centers to be in close proximity to the population. This has a strong impact on the utilization of health care services. Combined with the results above, this would indicate that even though facilities are present, the paucity of public facilities (that tend to be cheaper) affects accessibility.

According to ASCI (2003) on Urban Health Care Management public health care centers, which have been made mostly to provide curative treatment to the patients, suffer from many drawbacks. The quality of service provided by these centers is very low. Many do not prefer going to public centers for treatment for lack of faith. The data above provide some support to this argument.

In sum, this discussion has identified three issues for further study. The first is related to quality, second related to price, and third related to the public-private choice. All three

are likely to affect utilization as also the type of facility accessed. These are discussed in the next sub-section.

### 4.3 Utilization

This section finds that private health providers as a source of hospital and non-hospital treatment across all segments have been growing rapidly during the period under consideration.

First consider non-hospitalized (outpatient) treatment. Both the urban rich and poor are increasingly shifting to non-government facilities for treatment. More than three quarters (78.6%) of the urban poor prefer to avail treatment by non-government sources; up from two thirds in 1985-86. The shift is also observed in the richer sections though to a lesser extent. Overall, the usage of public facilities is declining.

**Table 4.5: Distribution of non-hospitalized treatments by source in the last 15 days**

Urban	Q1			Q5		
	NSS 42	NSS 52	Change	NSS 42	NSS 52	Change
Government sources	32.7	21.4	-11.3	20.4	13.1	-7.3
Non-govt. sources	67.3	78.6		79.6	86.9	
Total	100.0	100.0		100.0	100.0	

Refer to Table A19 of Appendix

There are many different types of public facilities; of these public hospitals are the key sources of treatment. Among private sources, private doctors are the key sources. The table below shows the distribution of population going to various types of government and non-government sources for treatment as outpatients.

**Table 4.6: Distribution of non-hospitalized treatments by source in the last 15 days**

	NSS 52	
	UQ1	RQ1
Public Hospital	19.02	10.52
PHC/ CHC	0.83	10.08
Public Dispensary	1.51	1.31
<b>All government sources</b>	<b>21.36</b>	<b>21.91</b>
Private Hospitals	14.15	9.17
Nursing Home	3.96	4.63
Charitable Institution	1.18	0.30
ESI doctor, etc.	0.58	0.28
Private Doctor	50.21	50.86
Others	8.51	12.83
<b>All non-govt. sources</b>	<b>78.60</b>	<b>78.07</b>
Total	100.0	100.0

Refer to Table A19 of Appendix

About 65% of the urban poor availing treatments prefer to get it from private sources (private doctors or hospitals). This is a very significant result. Despite the proximity to government sources of health care the poor people opt for out of pocket expenditure on health care. This applies to the rural poor as well.

As mentioned before, quality, affordability or some combination of the two may be playing an important role behind the shift in usage towards greater private sources. Consider the table below that shows the cost per ailment by the facility used for treatment. The data are for two points in time and are corrected for inflation.

**Table 4.7: Expenses per ailment related to non-hospitalized treatment by major sources (in constant Rs)**

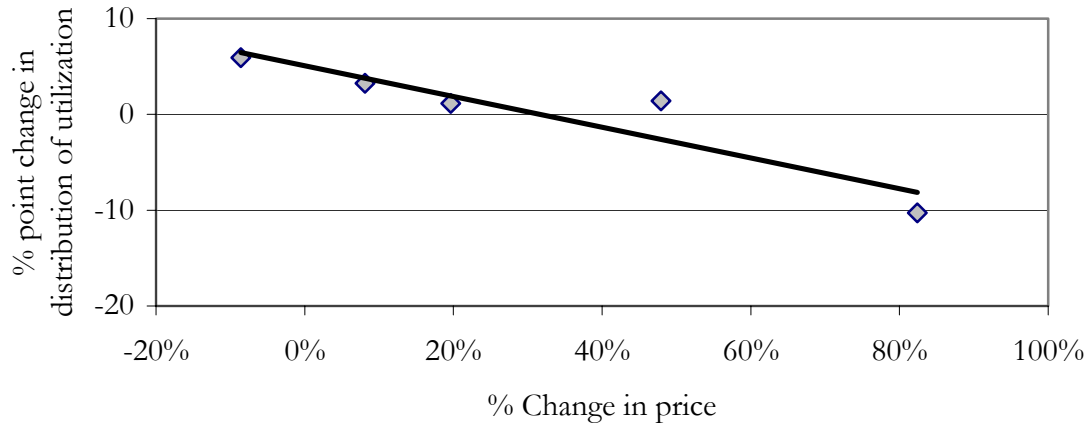
	NSS-42	NSS-52
Urban	Q1	Q1
Public Hospital	38.1	69.5
Private Hospital	52.9	63.3
Nursing Home	97.2	105.1
Private Doctor	40.7	60.2
<b>Total</b>	<b>43.1</b>	<b>61.5</b>

Note: The reported figures for the NSS52 are in 1986-87 rupees (Inflation correction between the two points in time was 0.446 which was calculated on the basis of WPI all commodities for the two years). Data for other facilities is also reported in the appendix. See Table A20 of Appendix.

The above table shows expenses per ailment for NSS42 and NSS52; the figures are adjusted and are given in 1985-86 Rupees. It shows that overall there has been a 50 percent increase in the real cost of treatment per ailment (not including cost of medicines). However, the increase has been the *least* for private hospitals and nursing homes. The expenses have increased to a great extent especially in public hospitals – the increase in real terms is of the order of approximately 80%.

Overall, we find that prices faced by the poor at all key facilities have increased during the period. The following graph shows the percentage point change in the distribution of utilization and the percentage change in rupee costs in real terms. The sources of treatment included are the five major ones: public hospitals, private hospitals, private doctors, nursing homes, and ‘others’. As is evident from the graph, a large part of the fall in utilization of public facilities could simply be explained by the price effect.

**Figure 4.2: Change in price and utilization of non-hospitalized care  
(b/w 1986-87 & 1995-96)**



The increase in expenditures associated with public facilities, combined with perceived poor quality or lack of faith, may have contributed to the abovementioned shift towards private health providers. A more in-depth study with data collected precisely for this purpose would however be required to identify the precise interaction between increase in prices, quality of services, and utilization of various modes of health care delivery by the urban poor.

Garg (1995) studied the poor in Dharavi, Mumbai. The study reveals that many prefer availing treatment from private sources for minor ailments. Daily wage earners prefer private practitioners to urban health centers. The study also found unavailability of medicines and inconvenient timings also contributed to low utilization of UHCs. Similar considerations may be applying to public hospitals as well.

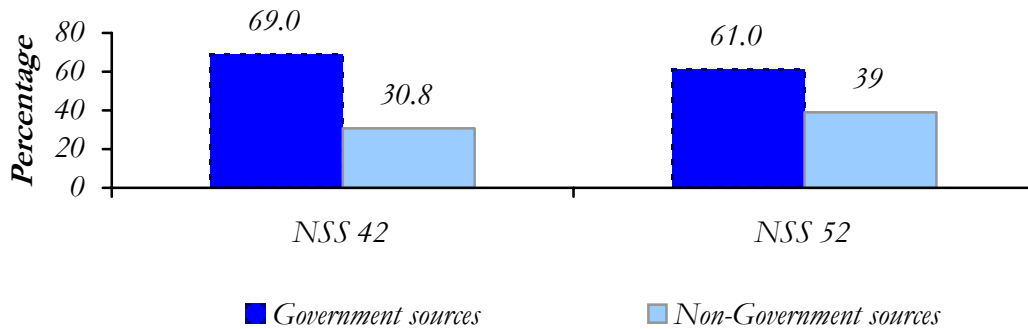
Chadha (1987) in his study on primary health care for urban poor has mentioned that urban health care services lack the “right focus”, mostly concentrating on curative care rather than preventive. Though it is not possible to verify this claim with our data, the results here show that even curative care is increasingly being provided by private entities.

To summarize, therefore, it can be argued that the poor increasingly prefer private sources if they have enough finances; public facilities are more likely to be utilized when there are fewer, or lack of, options.

Next consider hospitalized treatment. The data on hospitalization and the utilization of facilities show similar trends as in the case of outpatient treatment. That is, the dependence on public hospitals has gone down during the period. From 69% in 1986-97

the percentage has reduced to 61% in 1995-96. This shift of poor to private treatment may be due to poor quality available to them or that the poor are being priced out of government sources.

**Figure 4.3: Hospitalised Treatment of Urban Poor by source-  
NSS 52**



The quality issue is the likely cause. Consider the utilization of government sources by the richest quintiles. About half the hospitalized care of the richest quintile took place in public hospitals in 1986-87. However by 1995-96 this had fallen to slightly more than a quarter. Since price is not likely to be a significant issue for the richer quintiles (and quality is) the figures suggest that there has been a relative decline in the quality of care of care available to all. Note the emphasis on the term quality – quality may have fallen, stayed the same, or even improved – but compared to that available from private hospitals it appears to have fallen. Whatever may be the actual change in quality, it has not been a positive development and needs to be corrected.

**Table 4.7a: Percentage Distribution of Hospitalized treatment by source (in the last 365 days)**

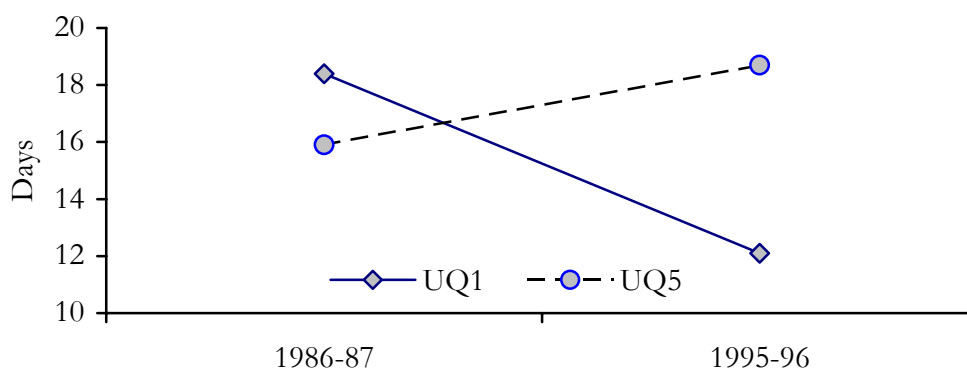
	NSS 42		NSS 52	
	Urban Q1	Urban Q5	Urban Q1	Urban Q5
<b>Public Hospital</b>	68.3	46.5	58.8	26.3
PHC	0.7	0.5	1.8	0.6
Public dispensary	-	-	0.4	0.1
<b>All Government sources</b>	<b>69.0</b>	<b>46.9</b>	<b>61.0</b>	<b>27.0</b>
Private Hospital	23.5	36.8	28.2	52.2
Nursing Home	4.4	12.2	7.2	15.6
<b>Charitable Institution</b>	2.0	2.5	2.9	4.6
Others	0.9	1.2	0.7	0.5
<b>All Non-government sources</b>	<b>30.8</b>	<b>52.6</b>	<b>39.0</b>	<b>73.0</b>
Missing	0.2	0.5	-	-
Total	100.0	100.0	100.0	100.0

Refer Table A21 in Appendix

Another interesting issue is that related to the number of days hospitalized. The graph below shows the duration of stay in hospitals for inpatient treatment.

We find that duration of stay in hospitals has gone down significantly for the urban poor. This is not likely due to change in medical practices – as the richer sections had a higher duration in the later period. This is also not likely due to a change in ailment patterns during the period. One factor may be related to the pressure of cost of care – whether borne by the government, or by the family of the ailing.

**Figure 4.4: Average Duration of Stay in Public Hospitals**



Refer to Table A22 & A23 in Appendix

The following table shows the various sources of finance available to all the segments. The households were asked to identify among pre-identified options the amounts accessed from various sources. Most respondents use multiple sources. However, we find that among the urban poor three sources predominate.

**Table 4.8: Source of Finance –NSS-52<sup>nd</sup>**

Source of Finance NSS 52	Urban		Rural	
	Q1	Q5	Q1	Q5
Current Income	<b>18.1</b>	9.9	14.1	10.4
Past savings	<b>26.1</b>	41.5	20.2	25.5
Sale of Assets*	<b>4.8</b>	5.2	8.7	13.1
Borrowings	<b>33.0</b>	17.0	34.3	31.0
Reimbursement by employer	<b>1.0</b>	8.1	0.4	0.8
Other sources	<b>5.4</b>	11.2	6.9	8.4
Not specified	<b>11.6</b>	7.1	15.4	10.8

\*Include draught animals, ornaments, and other physical assets

Dependence on current income is higher for the urban poor than the urban rich. Nandraj (2000) also finds that households spend inordinately large shares of their incomes on health care services. A large part of expenditures for treatment comes from the

borrowings for the poorer sections. The richer sections in the urban areas utilize their savings for getting treated. There is a lack of reimbursement schemes for poor urban people, many of whom are daily wage earners.

Another source of finance for the rural, not so prevalent in the urban areas is the sale of assets that includes land holdings, accessories and animals in possession. This is so as the urban poor tend to have fewer valuable assets such as land and draught animals. Reliance on the current income is a sure way of limiting the utilization levels for the poor. The poor therefore resort to borrowings; here as well there is no formal institutional arrangement. Borrowings tend to be informal, from family and friends. Since friends and family are also likely to belong to lower economic classes, the levels of borrowings are also constrained.

In sum, therefore, health and utilization of health care services show that the condition of urban poor is no better than their rural counterparts, and much worse than the richer sections.

## **5 Women and Reproductive health**

The previous sections reported the general conditions related to health and utilization of health care. However, the nature of the data prevents us from having a more in depth understanding of the specific issues of health and health care for the most vulnerable segments – women and children. It can be strongly argued that good health and adequate access to care has strong implications on factors such as population growth, children's development, as well as overall well-being. Some related aspects are factors such as:

- Fertility and family planning
- Child mortality and women's conditions
- Child and childbirth
- Morbidity and hospitalization

These are discussed in greater detail in this section.

The key data source(s) used for the purposes of this section will be the two rounds of the NFHS that have been discussed before. Unlike data from NSSO, NFHS data does not contain any information on monthly expenditures, consequently the quintiles used for the comparison across economic classes uses an index of asset ownership/use. The details of how this index was derived are provided in the appendix. Suffice to say, that the index allows us to create asset based quintiles that reflect the economic character of the households studied.

### **5.1 Women's health**

To assess the health condition of women we will take up the prevalence rates of ailments among women. The data below show this.

**Table 5.1: Distribution of ailments – NSS52**

	Females		Males + Females	
	UQ1	UQ5	UQ1	UQ5
Fever of short duration	39.49	24.78	41.29	28.68
Respiratory Infection	9.68	8.94	8.87	8.13
Communicable diseases	4.93	2.09	4.53	2.97
Water Borne diseases	7.56	5.82	7.83	5.45
Related to age and lifestyle	7.53	21.74	5.99	19.07
Affecting sense organs	4.17	4.44	3.93	4.27
Relating to pregnancy	1.19	1.08	-	-

Note: Respiratory infections- Cough and acute bronchitis, acute respiratory infection. Communicable diseases -Whooping cough, TB, Chicken pox, Measles, Mumps etc. Water borne - Diarrhea, Gastroenteritis dysentery, and gastrointestinal diseases. Related to age and lifestyle - Diabetes, Heart diseases, Blood Pressure etc.

The distribution of ailments amongst females shows some, though not large, differences from overall urban poor population. Ailing females are relatively more likely to suffer from short duration fevers and infections. They are also somewhat more susceptible to lifestyle and age related disorders.

The NFHS data (see table A6 in appendix) also show that the percentage of women who are anemic (55%) is marginally lower than those in the poorest rural quintile (60%). Low overall nutrition in the poor urban households or biased intra-household allocation of nutrition could be contributory factors.

Overall females in poor urban households *do not* show significantly higher morbidity levels than males. However, there is some indication that morbidity levels are higher in the sexually active years. Urban poor women in potentially sexually active years (contained predominantly in the 15 to 59 age group) show somewhat higher morbidity levels than males.

**Table 5.2: Morbidity - Percentage ailing in a 15 days span–NSS52**

Age Group	15 to 59 years	
	Q1	Q5
Urban Male	4.3	4.3
Urban Female	<b>5.8</b>	4.3

**Note:** Definition: Percent who have had any ailment in the past 15 days.  
Table A31 in Appendix

Health in sexually active years is intimately associated with issues related to reproductive health, to which we now turn. The key characteristics of a healthy mother are related to age and fertility, conditions at childbirth etc. These issues are discussed next.

## 5.2 Reproductive health

Awareness towards family planning methods and use of contraceptives also affects the mentioned characteristics. Amongst the urban poor the most prevalent method used for family planning is female sterilization. Awareness or usage of other methods amongst the urban poor is low. Use of condoms is prevalent only among the rich. Affordability may be one of the reasons for this differential. Data also shows that overall there has been an increase in the awareness and use of family planning methods significantly in case of urban poor (35.2% to 43.3%) between 1992-93 and 1998-99.

**Table 5.3: Approval of Family Planning**

Percentage Using	NFHS-1 Q1	NFHS-2 Q1
<b>Urban</b>		
Pill	1.5	2.1
IUD	1.3	1.0
<b>Condom</b>	0.7	1.6
Female Sterilization	<b>25.7</b>	<b>34.6</b>
<b>Male Sterilization</b>	3.4	1.4
Rhythm/Safe Period (Periodic Abstinence)	2.2	2.3
Others	0.4	0.3
Total (using some form of family planning)	35.2	43.3

Table A12 in Appendix

Early marriage is still prevalent amongst the urban poor population. Age of marriage on an average is 16. Untimely responsibilities and burden of a family at such a young age has a negative impact on the physiological development of females. However, there has been a marginal decline in fertility between 1986-87 and 1995-96 (from 13.1 to 12.2 live births per 100 urban poor women). (See table A7 & A8 in appendix)

Childbirth for the urban poor women largely occurs in the presence of untrained attendants (51.1%). One factor behind the high figures for untrained attendants is related to home deliveries.

**Table 5.4: Medical Attendance at Childbirth- NFHS-2**

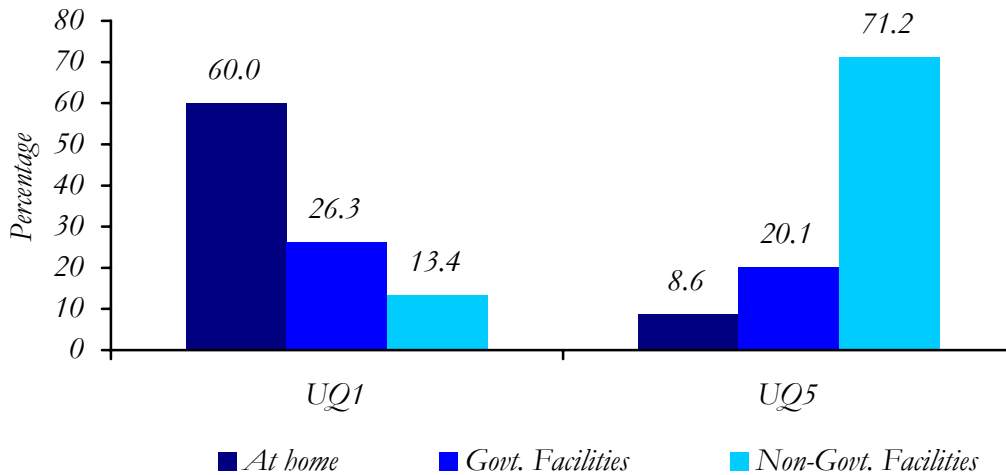
	UQ1
Doctor	<b>28.8</b>
Nurse/Midwife	<b>19.3</b>
Traditional birth attendant	<b>34.2</b>
Relative	<b>16.9</b>
Others	<b>0.6</b>
None	<b>0.3</b>
Total	<b>100.0</b>

Note: Others include Auxiliary midwife, Ayurvedic doctor/vaid and others

Table A11 in Appendix

The figure below shows that the percentage of deliveries taking place at home is very high (about 60%). This also indicates the lack of adequate facilities and hygienic surroundings at the time of birth. Combined with the high presence of untrained personnel, this strongly reflects the inadequate care available during childbirth. On the positive side however, births assisted by trained personnel have been increasing over time.

**Figure 5.1: Location of Childbirth-NFHS 2**



Refer Table A14 in Appendix

The figure above also indicates the inequity in childbirth. Poorer urban women, who are likely to have been relatively undernourished, require better levels of care at childbirth and at lower costs. These can best be achieved in public facilities. However, their utilization levels of public facilities are similar to that by richer urban quintiles. Since private facilities being expensive are largely out of reach, the poor are 'crowded out' of the better-endowed facilities and are limited to delivery at home.

This has also been found by other studies. Lal (1987) for instance also finds that though there are a number of facilities available in the urban areas, but are not within easy reach of the poor. And for this reason deliveries in the urban areas take place at home.

Living conditions of women and conditions at birth have a direct impact on the health of children. Both infant and child mortality are significantly higher for the urban poor than the urban rich. However, conditions are improving as seen in Table 5.5 below. As a consequence, on an average the number of children born and living in an urban poor household has increased from 2.7 to 3.0 between 1992-93 and 1998-99 (See Table A9 in Appendix).

**Table 5.5: Child Mortality and Births**

	NFHS-1		NFHS-2	
	Q1	Q5	Q1	Q5
<b>Urban</b>				
Infant Mortality	83	32	<b>66</b>	19
Under 3 Mortality	24	4	<b>5</b>	0

Infant Mortality: (Number of infant (less than 1 year olds) deaths in the past four years)/(Number of live births during the period)\*1000. Under 3 Mortality: (Number of deaths before 3 years age)/(Number of children up to but not including 3 year olds)\*1000. Table A33 of appendix.

17.6 percent of the children among the urban poor are underweight for age. Compare this to 8.1 percent among the richest urban quintile. A difference of 9.5 percentage points is observed. Another aspect of child's health is the rate of immunization. As compared to the richest urban quintile the urban poor have significantly lower immunization rates (62.5 % as against 91.8% in the richest segment). (See Table 5.6)

Unhealthy living conditions and unhygienic environment also leads to high rates of prevalence for other diseases such as fever, cough and diarrhea among children. The occurrence of these diseases has gone up drastically from mid 80's to mid 90's.

**Table 5.6: Child Health and Vaccination- NFHS**

<b>Urban</b>	NFHS-1		NFHS-2	
	Q1	Q5	Q1	Q5
Complete Immunization	58.6	89.8	62.5	91.8
Underweight for age	23.9	13.4	17.6	8.1
<b>Prevalence rate of fever</b>	21.6	16.7	27.9	21.4
Prevalence rate of cough	11.5	9.0	36.3	30.8
Prevalence rate of Diarrhoea	5.2	4.1	21.0	13.1

Prevalence Rate: The total number of all individuals who have an attribute or disease at a particular time (or during a particular period) divided by the population Note-->> Data for children born since January 1988 for NFHS1 and since January 1995 for NFHS2. Refer Table A32 of Appendix

However on comparing the health status of poor urban population with their rural counterparts, it can be said that the poor urban are somewhat better off. However, both in an absolute sense, as well as compared to the better-off sections great improvements are required.

In the above section we set out to investigate health related conditions specifically of the urban poor women and children. As in the case of overall conditions, here as well we find that the urban poor are much worse off than the rich.

Overall, we find that age at marriage, continues to be low. At the same time there has been some (though marginal) fall in fertility. This has likely been due to the increase in family

planning amongst poor women. Female sterilization continues to be the key form, and its importance appears to be only increasing. Overall health conditions of the woman and child have also improved, which shows up in greater number of living children per woman.

In general, there has been improvement. Moreover, (and in a general/approximate sense) this improvement has been somewhat greater than the *overall* conditions of health studied in section 4. Even more importantly, we find that the divergence between the urban poor and urban rich is not as high in this area of health policy, as in the overall conditions studied in the previous section.

This improvement is likely to have come about due to the macro forces generated by strong economic growth and that has filtered down among the urban poor first; the communications revolution (as also reflected in greater access to television among the poor); and government policy. Which of these is the key cause is difficult to identify. However, the analysis does show that the improvements are only marginal compared to what is required. At this rate it will take many decades before one can expect universal basic health care for all.

## **6. The Determinants of Public facility Utilization**

The previous sections reveal that the questions for health policy are not only related to the higher allocation of funds. They also have to do with better targeting, increased efficiencies in provision, public awareness, etc. This to a very large extent will depend upon the improvements in the administrative system of health care in India. These questions are being dealt by other components of the study and will not be duplicated here.

A better health care system will necessary have to be based on a better understanding of the causalities behind utilization or non-utilization of health care. Though we have been able to identify the differences, we have not as yet undertaken a robust analysis. This section undertakes precisely that. It seeks to answer the following the question: What factors are responsible for utilization of public health care?

Answers to these questions will help in better targeting, and focus of public health policy. They will also be able to provide us with some idea of what factors are relatively more important than others. Moreover, we also aim at an even better understanding of the differences that exist between different economic classes, social groups, age and gender related factors.

The data used are from the NSSO's 52<sup>nd</sup> round that provides information on all of these issues and has previously been discussed in section 2.

**Table 6.1: Description of variables**

Variable	Explanation
Dummy for females	<p>This variable takes a value 1 for females.</p> <p>Females are less likely to be healthy if lower nutrition and overall care is taken. They are also less likely to be treated if the society is male biased.</p>
Rural dummy	<p>This is a dummy variable that equals 1 if the individual resides in a rural area.</p> <p>The rural person less likely to receive care and also from public facilities. This is because rural areas have lower access to transport and public health facilities are difficult to access.</p>
Age in 10 year unit	Age is expected to have a non-linear relationship between
Square of age in 10 year unit	This is the square of above variable.
<p>Dummy=1 if edu. level is Literate without formal schooling</p> <p>Dummy=1 if edu. level is Below primary</p> <p>Dummy=1 if edu. level is Primary</p> <p>Dummy=1 if edu. level is Middle</p> <p>Dummy=1 if edu. level is Secondary</p> <p>Dummy=1 if edu. level is Higher secondary</p> <p>Dummy=1 if edu. level is Graduate</p>	<p>These are dummy variables created for various education levels. It represents the highest level of education attained by the individual. These are compared against those individuals who are illiterate.</p> <p>It is expected that with higher level of education likelihood of remaining healthy should also be high. The likelihood of obtaining treatment should also be higher for individuals who are more educated.</p>
<p>ST Dummy</p> <p>SC Dummy</p>	<p>These are dummy variables for the castes. They take the value 1 if the person belongs to the lower caste and 0 otherwise. They have been compared with population belonging to the general (higher) castes.</p> <p>Lower castes are expected to have a lower likelihood of being treated and therefore are expected to have a negative relationship.</p>
<p>Dummy for RQ2</p> <p>Dummy for RQ3</p> <p>Dummy for RQ4</p>	<p>These are dummy variables that take the value 1 if the individual belongs to the particular rural or urban quintile, and 0 otherwise. Comparison is done with the lowest rural quintile.</p>

Variable	Explanation
Dummy for RQ5 Dummy for UQ1 Dummy for UQ2 Dummy for UQ3 Dummy for UQ4 Dummy for UQ5	It is expected that with increasing economic class, the likelihood of remaining healthy, or obtaining treatment, should be higher. The urban quintiles are expected to have better outcomes as compared to rural quintiles because of better standard of living and accessibility.
Number of Adults	This is the variable for number of adults (18 & above) in the household. The higher the number of adults, the less dependent is the household on the individual for its requirements (wage or house related work).  A positive relationship is therefore expected between the likelihood of obtaining treatment and the health outcomes studied.
Number of Children	This is the variable for number of children (below 18 years) in the household. The higher the numbers of children, the more are the household members functions.  A negative relationship is therefore expected between the numbers of children and likelihood of obtaining treatment.
State dummies...	State dummy variables. State of Arunachal Pradesh has been dropped for comparison.

The following demographic sub-groups were studied separately:

1. Overall population
2. Males
3. Females
4. Children (0 to 14 years)
5. Those in the lowest poor and urban quintiles (RQ1 and UQ1)
6. Urban poor (UQ1)

The two types of facilities considered are the public and the private. Those who utilized a public facility for the treatment of ailment were assigned a value of ‘one’ and those who accessed a private facility were assigned a value ‘zero’. The results discussed below are predominantly being driven by non-hospitalized care. The data was not adequate to allow separate analysis for hospitalized treatments.

The results show that females are generally less likely to choose a public facility than males; this effect is also observed among the lowest urban quintiles. A possible reason to this may be related to issues of confidentiality. Public facilities and treatment is currently not set up to ensure privacy of the patient. There is some evidence that private health

care providers are better set up to respond for this component of care for women. Curative care in public facilities may also be oriented towards an average individual; the absence of quality care emphasis required may be another reason why we find a lower likelihood for females to access public facilities.

The results also do not show significant impact of economic status across rural and urban quintiles. They indicate that only the topmost rural and urban quintiles are significantly less likely to use public facilities than the lower quintiles. This result requires further discussion.

Recall that our results in previous sections show that the utilization was greater for non-hospitalized treatment by the poorest quintiles than the higher ones. However, the difference in utilization rates has been falling (32-20 = 12 percent in 1986-87, and 21-13 = 8 percent in 1995-96). That was considered to be a 'poor' outcome in terms of the equity criteria. In this section as well it is found that the poorest quintiles continue to have greater utilization of public facilities than the topmost quintiles. This is true for both urban and rural quintiles. The two results therefore are in agreement.

*More importantly, the lowest 4 quintiles are not dissimilar in terms of their usage of public facilities. In other words, the topmost quintile individuals are significantly less likely to use public facilities than the poorest (UQ1). However the middle quintiles (UQ2, UQ3 and UQ4) are not significantly different from UQ1. Since the economic power of the middle quintiles is higher, they may be crowding out the poorest quintiles. This 'crowding out' is further discussed later.*

## 6.1 The state effect

It is likely that there are significant state-level effects that affect health outcomes. A tabular exercise to study state-effects would also be affected by inter-state variations in education, age, economic status, and so forth. However what is of most interest is: *What is the pure effect of living in a particular state in terms of health outcomes?* In other words, many factors affect the propensity of an individual to access a public facility. After taking into consideration factors such as age, sex etc., we now turn to the likelihood of accessing public facilities by the urban poor living in particular states.

The econometric analysis discussed in the previous sub-sections, also included 'dummy variables' for each state. The *coefficients* of these dummy variables allow us to study these inter-state differences. The next table reports the rankings for all the large states as per the coefficients. A higher ranking indicates higher likelihood of residents to avail of public facilities in that state.

The value of the coefficient of the dummy variables is *relative* in nature; it reveals the greater or lower likelihood of accessing public facilities in a state *ceteris paribus*. The states have been sorted such that the urban poor in the topmost state (J&K) have the *greatest* likelihood of accessing a public facility. Conversely, the urban poor in the

bottom-most state (UP) have the *lowest* likelihood of accessing a public facility. (The data are reported in the Appendix that reports the regression results.)

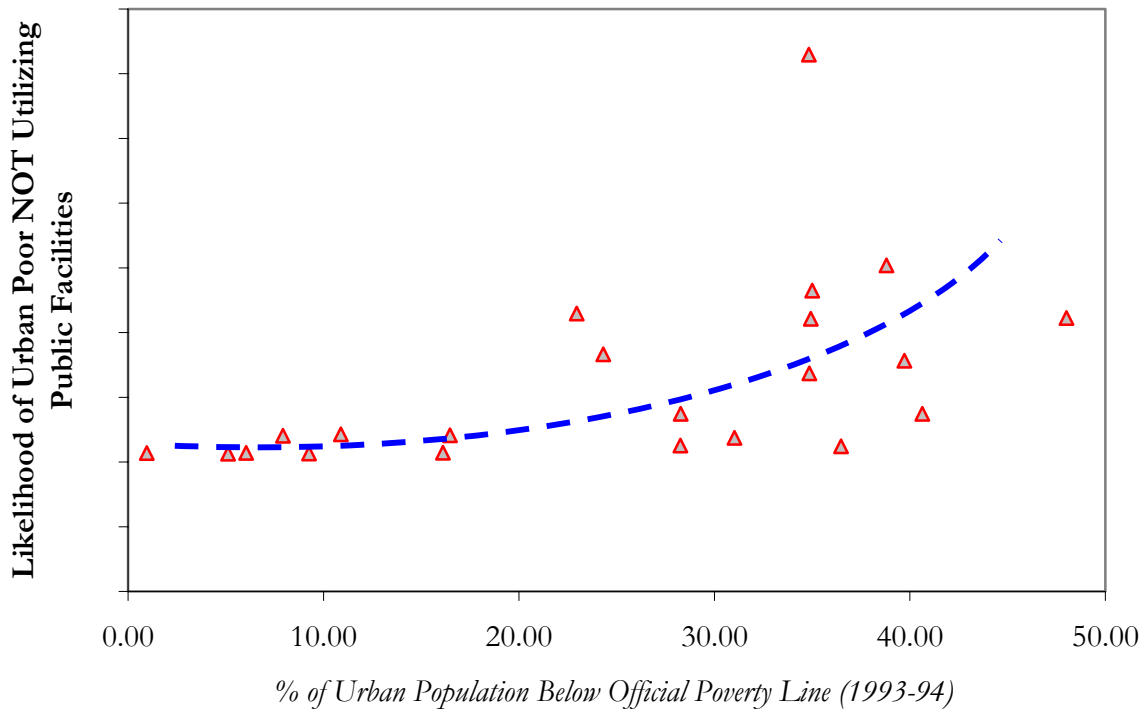
**Table 6.2: State Specific Effects for Urban Poor: Likelihood of Utilizing Public Facilities**

State
1. Jammu & Kashmir
2. HP
3. Sikkim
4. Tripura
5. Delhi
6. Pondicherry
7. Goa
8. Rajasthan
9. Assam
10. Haryana
11. Punjab
12. Orissa
13. Gujarat
14. Bihar
15. Karnataka
16. Kerala
17. Maharashtra
18. MP
19. West Bengal
20. Tamil Nadu
21. Andhra Pradesh
22. UP

Note that the top three states are states where urban poverty levels are relatively low. It is therefore likely that public facilities are more ‘within reach’ of the poor. Contrast this with the bottom ten states – Gujarat to UP. All these states have relatively higher levels of urban poverty levels. In other words, the above table indicates that there is some association between urban poverty levels and state-specific likelihood of accessing public health facilities by the urban poor.

To investigate this further we graph the coefficient values (representing the likelihood of *not utilizing public facilities*) at the state-level with urban poverty levels in the respective states. The urban poverty data used is that of the head count ratio based on the Official Poverty Line calculated by the Planning Commission, Government of India, for the year 1993-94 (recall that our data are for the year 1995-96). These are graphed below.

Figure 6.1: Are the Urban Poor Being Crowded Out?



The above figure indicates that in states where urban poverty is high, the likelihood of the urban poor *not* utilizing public facilities is high. It also shows that this effect increases at an increasing rate. This would be true when there is overcrowding in public facilities. That is, when the numbers of the poor are larger, some are ‘crowded out’ of public facilities. In light of previous results, where we found that the middle quintiles (UQ2, UQ3, and UQ4) are no less likely to access public facilities, this overcrowding is a cause of serious concern.

In sum, we find that there are significant inter-state differences in the likelihood of obtaining treatment, and the likelihood of utilizing public facilities. These inter-state differences in utilization of public health facilities by the urban poor appear to be strongly linked to levels of urban poverty, and not to overall economic performance and governance.



## 7. Conclusion and Key Insights

The above analysis shows that the urban poor are underserved by public health facilities. This is so in many respects.

- First, quality levels tend to be low and this is reflected in many ways.
- Second, higher prices at public hospitals for non-hospitalized care may have contributed to a reduction their utilization by the urban poor between by the mid nineties.
- Third, the poorest quintiles are increasingly utilizing private facilities even in the case of more serious ailments that require hospitalizations.
- Fourth, the fall in utilization of public facilities by the poor has been less than that by the richest quintiles – indicating that public facilities are providing relatively lower quality care.
- Fifth, intervening economic classes (Quintiles 2 to 4) are no less likely to utilize public facilities than the poorest quintiles.
- Sixth, the poorest quintiles are being ‘crowded out’ of public facilities. This crowding out is on account of (i) pressure on public facilities from other urban poor and (ii) utilization of these facilities by the relatively better off (middle quintiles)

However, there have been significant improvements as well. These are predominantly related to maternal and children’s care. Reproductive health services have seen significant improvements through the nineties. That may be one factor behind the falling fertility rate in the nineties.

The improvements are related to greater use of family planning methods, lower infant and child mortality rates, an increase in professional care during delivery, fall in home-based deliveries, healthier babies (as measured by weight at birth), and greater levels of immunizations.

There are some other causes of concern. One such is related to the age at marriage. We find that between 1992-93 and 1998-99 there has been no significant increase in marriage age for the urban poor. It has remained stagnant at 16 years of age. Public awareness campaigns will have to focus towards this aspect of public health.

Moreover, many of the reported improvements have been slow. Translated in percentage point terms, coverage for the bulk of the measures discussed above has increased by approximately 1 to 2 percentage points per year in the six year period. At this rate, it will be many decades before universal coverage is achieved.

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## Appendix 1: Regression Tables

**Table R1: Likelihood of utilizing public facilities**

	(1)	(2)	(3)	(4)	(5)	(6)
	Overall	Lower Quintiles	Females	Males	Children(0-14yrs)	Urban poor
Dummy for females	-0.0104 [2.13]**	-0.0146 [1.11]			-0.0075 [1.00]	-0.0319 [1.87]*
Rural dummy		-0.0058 [0.30]				
Age in 10 year unit	0.0286 [5.96]***	0.0251 [1.99]**	0.0321 [5.23]***	0.0237 [4.37]***	0.0234 [0.61]	0.0255 [2.55]**
Square of age in 10 year unit	-0.0029 [4.92]***	-0.0025 [1.57]	-0.0035 [4.40]***	-0.0023 [3.36]***	0.0242 [0.88]	-0.0029 [1.75]*
Dummy if edu. level is Literate without formal schooling	-0.0043 [0.15]	-0.0478 [0.76]	-0.0129 [0.47]	0.0066 [0.18]	0.0102 [0.24]	-0.0865 [1.35]
Dummy if edu. level is Below primary	0.0169 [1.80]*	0.0370 [1.32]	0.0032 [0.24]	0.0309 [2.87]***	0.0096 [0.74]	-0.0128 [0.44]
Dummy if edu. level is Primary	0.0030 [0.33]	-0.0063 [0.37]	-0.0135 [1.22]	0.0215 [1.97]**	-0.0092 [0.57]	-0.0144 [0.37]
Dummy if edu. level is Middle	-0.0169 [1.39]	-0.0247 [0.89]	-0.0268 [1.82]*	-0.0047 [0.32]	-0.0147 [0.53]	-0.0446 [1.28]
Dummy if edu. level is Secondary	0.0012 [0.08]	-0.0174 [0.36]	-0.0089 [0.45]	0.0130 [0.85]	-0.0063 [0.08]	-0.0653 [1.34]
Dummy if edu. level is Higher secondary	0.0127 [0.51]	-0.1658 [1.83]*	-0.0050 [0.14]	0.0287 [1.25]	-0.0531 [0.41]	-0.1692 [1.79]*
Dummy if edu. level is Graduate	-0.0150 [0.75]		-0.0306 [0.95]	-0.0033 [0.19]	-0.0517 [0.36]	
ST Dummy	0.0369 [1.71]*	-0.0009 [0.02]	0.0416 [1.71]*	0.0330 [1.49]	0.0367 [1.43]	-0.0260 [0.45]
SC Dummy	0.0136 [1.05]	0.0082 [0.28]	0.0065 [0.47]	0.0201 [1.23]	0.0184 [1.22]	0.0431 [1.20]
Dummy for RQ2	-0.0100 [0.68]		-0.0138 [1.10]	-0.0064 [0.26]	0.0051 [0.28]	
Dummy for RQ3	-0.0135 [0.83]		-0.0005 [0.03]	-0.0261 [1.21]	-0.0076 [0.26]	
Dummy for RQ4	-0.0175		-0.0202	-0.0156	0.0000	

	(1)	(2)	(3)	(4)	(5)	(6)
	Overall	Lower Quintiles	Females	Males	Children(0-14yrs)	Urban poor
	[0.89]		[0.87]	[0.67]	[0.00]	
Dummy for RQ5	-0.0506 [2.24]**		-0.0518 [1.81]*	-0.0494 [2.14]**	-0.0285 [0.82]	
Dummy for UQ1	0.0167 [0.90]		0.0092 [0.44]	0.0248 [1.01]	0.0371 [1.23]	
Dummy for UQ2	-0.0038 [0.17]		-0.0113 [0.44]	0.0037 [0.14]	0.0015 [0.04]	
Dummy for UQ3	-0.0446 [1.76]*		-0.0416 [1.33]	-0.0471 [1.76]*	-0.0504 [1.49]	
Dummy for UQ4	-0.0414 [1.45]		-0.0453 [1.35]	-0.0374 [1.27]	-0.0425 [0.97]	
Dummy for UQ5	-0.0918 [4.18]***		-0.0986 [3.49]***	-0.0845 [3.98]***	-0.1047 [2.95]***	
Number of Adults	-0.0048 [2.28]**	-0.0083 [1.71]*	-0.0043 [1.41]	-0.0054 [2.51]**	-0.0050 [1.44]	-0.0108 [1.93]*
Number of Children	-0.0024 [1.18]	0.0027 [0.64]	-0.0014 [0.67]	-0.0034 [1.06]	0.0016 [0.44]	0.0020 [0.30]
Andhra Pradesh	-0.2190 [29.56]** *	-0.4667 [58.55]** *	-0.2193 [23.72]** *	-0.2184 [28.08]** *	-0.1956 [24.98]** *	-0.5040 [84.16]** *
Assam	-0.1403 [13.37]** *	-0.2809 [46.44]** *	-0.1497 [10.64]** *	-0.1314 [13.36]** *	-0.1515 [13.60]** *	-0.2406 [83.03]** *
Bihar	-0.2109 [29.67]** *	-0.4203 [55.67]** *	-0.2109 [24.38]** *	-0.2105 [29.80]** *	-0.1994 [26.50]** *	-0.3369 [75.84]** *
Goa	-0.1816 [26.40]** *	-0.2104 [52.50]** *	-0.1851 [22.73]** *	-0.1739 [23.44]** *	-0.1625 [23.11]** *	-0.2256 [68.66]** *
Gujarat	-0.1895 [27.90]** *	-0.2493 [58.79]** *	-0.1888 [21.82]** *	-0.1898 [27.24]** *	-0.1727 [25.91]** *	-0.2745 [90.59]** *
Haryana	-0.1920 [30.49]** *	-0.2181 [62.64]** *	-0.1919 [23.70]** *	-0.1920 [30.28]** *	-0.1751 [28.51]** *	-0.2414 [80.56]** *
HP	-0.1490 [14.29]** *	-0.2158 [45.09]** *	-0.1578 [11.98]** *	-0.1400 [13.16]** *	-0.1495 [13.91]** *	-0.2132 [75.20]** *
Jammu & Kashmir	-0.1315 [12.13]** *	-0.2106 [48.52]** *	-0.1349 [9.53]***	-0.1299 [12.25]** *	-0.1561 [16.02]** *	-0.2129 [35.07]** *
Karnataka	-0.1926 [26.24]**	-0.3228 [52.95]**	-0.1960 [21.07]**	-0.1884 [25.28]**	-0.1711 [20.53]**	-0.3566 [83.77]**

	(1)	(2)	(3)	(4)	(5)	(6)
	Overall	Lower Quintiles	Females	Males	Children(0-14yrs)	Urban poor
	*	*	*	*	*	*
Kerala	-0.1891 [19.90]** *	-0.2898 [48.02]** *	-0.1921 [15.19]** *	-0.1866 [20.34]** *	-0.1827 [20.02]** *	-0.3664 [72.07]** *
MP	-0.1970 [29.75]** *	-0.4208 [69.01]** *	-0.1998 [23.40]** *	-0.1940 [29.70]** *	-0.1846 [25.45]** *	-0.4225 [76.34]** *
Maharashtra	-0.2229 [34.53]** *	-0.3686 [63.62]** *	-0.2246 [26.25]** *	-0.2215 [34.51]** *	-0.2024 [29.14]** *	-0.4212 [74.08]** *
Manipur	-0.1679 [24.54]** *		-0.1711 [15.91]** *	-0.1665 [29.31]** *	-0.1465 [16.85]** *	
Meghalaya	-0.1183 [39.71]** *		-0.1268 [26.28]** *	-0.1086 [27.08]** *	-0.1495 [40.03]** *	
Mizoram	-0.1095 [21.35]** *		-0.1300 [24.11]** *	-0.0838 [13.41]** *	-0.1418 [33.17]** *	
Nagaland	-0.1744 [59.55]** *		-0.1732 [50.55]** *	-0.1767 [38.61]** *	-0.1608 [31.44]** *	
Orissa	-0.1424 [13.67]** *	-0.3392 [67.67]** *	-0.1512 [11.51]** *	-0.1341 [12.85]** *	-0.1543 [14.41]** *	-0.2744 [73.60]** *
Punjab	-0.2180 [34.36]** *	-0.2288 [52.52]** *	-0.2187 [27.33]** *	-0.2171 [32.67]** *	-0.1996 [31.32]** *	-0.2428 [104.57]** **
Rajasthan	-0.1359 [15.35]** *	-0.2309 [53.00]** *	-0.1482 [13.17]** *	-0.1237 [14.37]** *	-0.1633 [22.42]** *	-0.2373 [57.03]** *
Sikkim	-0.0688 [6.31]***	-0.2129 [43.09]** *	-0.0803 [5.38]***	-0.0619 [6.08]***	-0.0763 [5.67]***	-0.2138 [71.17]** *
Tamil Nadu	-0.1917 [21.03]** *	-0.3826 [52.55]** *	-0.1950 [16.95]** *	-0.1887 [19.63]** *	-0.1776 [16.96]** *	-0.4648 [82.69]** *
Tripura	-0.1803 [28.75]** *	-0.2240 [115.57]** **	-0.1792 [20.23]** *	-0.1816 [29.94]** *	-0.1678 [29.80]** *	-0.2141 [51.62]** *
UP	-0.2812 [31.97]** *	-0.8830 [54.76]** *	-0.2806 [24.92]** *	-0.2822 [33.15]** *	-0.2983 [28.22]** *	-0.8296 [79.74]** *

	(1)	(2)	(3)	(4)	(5)	(6)
	Overall	Lower Quintiles	Females	Males	Children(0-14yrs)	Urban poor
West Bengal	-0.2155 [27.32]** *	-0.4277 [53.59]** *	-0.2166 [21.93]** *	-0.2140 [25.70]** *	-0.2042 [23.19]** *	-0.4294 [82.64]** *
A & N Islands	-0.0528 [4.18]***		-0.1238 [9.05]***	0.0295 [2.06]**	-0.1084 [8.68]***	
Chandigarh	-0.1194 [9.71]***		-0.1215 [8.47]***	-0.1201 [9.03]***	-0.1426 [11.77]** *	
Dadra & Nagar Haveli	-0.1525 [54.55]** *	-0.2038 [.]	-0.1444 [21.84]** *	-0.1550 [46.39]** *	-0.1522 [34.22]** *	
Daman & diu	-0.1613 [22.61]** *		-0.1550 [16.56]** *	-0.1698 [23.12]** *	-0.1596 [22.91]** *	
Delhi	-0.1625 [17.39]** *	-0.2052 [38.12]** *	-0.1676 [16.42]** *	-0.1571 [14.89]** *	-0.1544 [16.23]** *	-0.2144 [.]
Lakshadweep	0.0543 [5.26]***		0.0461 [4.29]***	0.0585 [4.70]***	-0.0927 [8.95]***	
Pondicherry	-0.1158 [7.77]***	-0.2139 [48.42]** *	-0.1304 [7.43]***	-0.0983 [6.07]***	-0.0779 [3.58]***	-0.2243 [67.81]** *
Observations	26987	3456	13458	13529	9042	1606

Robust z statistics in brackets

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

## Appendix 2: Creating Quintiles in NFHS 1 & 2

*The quintiles for Rural, Urban, and overall (or total) were created on an index that was using Principal Components Analysis; this is discussed below. Principal Components Analysis develops a composite index by defining a real valued function over the relevant variables, which would permit defining the performance of Cities objectively. A set of assumptions behind our method of construction of a composite index is given below:*

1. The condition of weak Pareto rule demands that when a City registers values of indicators uniformly higher than those of the other Cities - the former should have a higher ranking than the latter ones;
2. The condition of non-dictatorship implies that no single indicator should be considered so significant as to determine the final ordering all by itself;
3. The condition of unrestricted domain implies that the method should be capable of giving the final ranking for all possible data matrices;
4. The final condition is that of independence from irrelevant alternatives, which demands that while ranking two Cities, the decision must be guided by the values of the indicators for these units under study alone and not by any other irrelevant phenomenon.

With these general assumptions, the composite index is defined as,

$$C_i = W_1x_{i1} + W_2x_{i2} + W_3x_{i3} + \dots + W_nx_{in}$$

or,  $C_i = \sum W_j x_{ij}$ , where  $C_i$  is the composite index for the  $i^{\text{th}}$  observation,  $W_j$  is the weight assigned to the  $j^{\text{th}}$  indicator and  $x_{ij}$  is the observation value after elimination of the scale bias.

From the above formula of the composite index, it is evident that to compute the composite index, two major components need to be known, - the weights assigned to the indicators and the observation values after elimination of the scale bias for available indicators. These two issues are now discussed.

Variables chosen for any analysis are usually measured in different units and are generally not additive. Hence, it is necessary to convert them into some standard comparable units such that the initial scales chosen for measuring them do not bias the results. The method that was adopted to achieve this is standardizing the variables in the following way:

$$x_{ij} = (X_{ij} - X_m) / \sigma$$

where  $x_{ij}$  is the scale free observation,  $X_{ij}$  is the original observation and  $X_m$  is the mean of the series and  $\sigma$  is the standard deviation.

The transformed series will now be scale free and will have a mean of zero and a standard deviation of unity.

Once the bias of measurements is removed from the observations, the crucial problem that remains is that of assigning appropriate weights to the selected indicators or variables. If one has sufficient insight into the nature and magnitude of interrelationships among the variables and their implications, one might choose to determine the weights on the basis of independent judgment. This way of constructing an index stands exposed to subjectivity. Assigning equal weights (or no weight) would imply assumption of equal correlation of each indicator with the composite index of performance, which would hardly be a realistic approach in this case. Therefore, in this analysis, the weights for individual variables or indicators have been assigned on the basis of the factor analytic model.

Factor analysis is a tool used to construct a composite index in such a way that the weights given maximize the sum of the squares of correlation (of the indicators with the composite index). This method enables one to determine a vector known as the first Principal Component or Factor, which is linearly dependent on the variables, and also has the maximum sum of squared correlation with the variables.

The weights to the indicators are chosen in a way such that the Principal Components satisfy two conditions:

- a) The number of principal components is equal to the number of indicators and these are un-correlated or orthogonal in nature.
- b). The first principal component or  $P_1$  absorbs or accounts for the maximum possible proportion of variation in the set of indicators. This is the reason why principal components serve as the ideal measure for constructing a composite index.

Accordingly, here are the steps followed.

**Step 1** We start by taking the simple correlation coefficients of the k number of indicators. These correlation coefficients may be arranged in a table which is called the correlation table. The elements of the diagonal would be unity, as they are the self-correlation, that is, the correlation of each  $X_i$  with itself ( $r_{xi xi} = 1$  for all the i's). The correlation matrix is symmetrical, that is, the elements of each row are identical to the elements of the corresponding columns, since  $r_{xi xj} = r_{xj xi}$ .

**Correlation Table of the set of K Variables**

	$X_1$	$X_2$	$X_3$	$X_k$	$\sum_i^k r_{xi xj}$
$X_1$	$r_{x1 x1}$	$r_{x1 x2}$	..	$r_{x1 xk}$	$\sum_i^k r_{x1 xi}$
$X_2$	$r_{x2 x1}$	$r_{x2 x2}$	..	$r_{x2 xk}$	

“	..	..	..	..	
“	..	..	..	..	
$X_k$	..	..	..	..	
“	$r_{xkx1}$	..	..	$r_{xkxk}$	
$\sum_i^k r_{xi xj}$	$\sum_j^k r_{xi x1}$	$\sum_i^k r_{xi x2}$	$\sum_i^k r_{xi x3}$	$\sum_i^k r_{xi xk}$	$\sum_i^k \sum_i^k r_{xi xj}$

**Step 2** Sum of each column (or row) of the correlation table is computed, obtaining k number of sums of simple correlation coefficients.

$$\sum_i^k r_{xi xj} = \sum_i^k r_{xi xj}$$

**Step 3** We compute the sum total of the column (or row) sums

$$\sum_i^k \sum_j^k r_{xi xj}$$

and we take its square root.

**Step 4** Finally, we obtain the factor loadings for the first Principal Component  $P_1$  by dividing each column (or row) sum by the square root of the grand total.

$$a_{ij} = (\sum_i^k r_{xi xj}) / (\sqrt{\sum_i^k \sum_i^k r_{xi xj}})$$

It should be clear that the loadings thus obtained are the correlation coefficients of the respective indicator with the composite index.

**Step 5** The  $P_1$  or the first Principal Component is constructed in the following way.

$$P_1 = a_{11} x_1 + a_{12} x_2 + \dots + a_{1k} x_k$$

**Step 6** The sum of the squares of the loading of the Principal Component is called the latent root (or eigen value) of this component and is denoted by the Greek letter  $\lambda$  with the subscript of the Principal Component to which it refers. For example, the latent root of the first Principal Component  $P_1$  is

$$\begin{aligned} \lambda_1 &= [\text{latent root of } P_1] \\ &= \sum_i^k \lambda_{1i}^2 \\ &= \lambda_{11}^2 + \lambda_{12}^2 + \dots + \lambda_{1k}^2 \end{aligned}$$

The sum of the latent roots of all the Principal Components will be equal to the number of indicators -

$$\sum_i^k \lambda_i = k$$

The importance of the latent root or the eigen value lies in the fact that it expresses the percentage of variation in the set of indicators that the Principal Component explains. If for example,  $\lambda_1 = 2.797$  and the number of variables are 8, then  $P_1$  expresses -

$$\lambda_1 / k = (2.797/8) * 100 = 35 \% \text{ of the variation in the set of 8 variables.}$$

Tests of significance of the loadings: the loadings in our study have been tested, based on the levels of significance of Pearson Correlation coefficients.

To recapitulate briefly, three sets of PCA ratings were generated- (1) **Overall** – all the households taken together that generated one index, (2) **Rural** households only, and (3) **Urban** households only. This was done both for NFHS 1 and NFHS 2. The following steps were under undertaken:

1. First qualitative variables that reflect economic profile were assigned values. The values assigned were such that higher number reflected a higher economic profile. These are shown below for NFHS 1 and 2.

**Table PA1: Value assigned for NFHS 1**

Variable Name	Variable Description	Values assigned(Higher value for greater economic profile)
Zh0 42a	Sewing machine	Value I assigned if yes and 0 if no.
Zh042b	Clocklabel var watch	Value I assigned if yes and 0 if no.
Zh0 42c	Sofa set	Value I assigned if yes and 0 if no.
Zh0 42d	Fan	Value I assigned if yes and 0 if no.
Zh042e	Radio	Value I assigned if yes and 0 if no.
Zh042f	Refrigerator	Value I assigned if yes and 0 if no.
Zh042g	Television	Value I assigned if yes and 0 if no.
Zh042h	VCR/VCP	Value I assigned if yes and 0 if no.
Zh042i	Bicycle	Value I assigned if yes and 0 if no.
Zh042j	Motorcycle/scooter	Value I assigned if yes and 0 if no.
Zh042k	Car	Value I assigned if yes and 0 if no.
Zh029	Separate room used as kitchen?	Value I assigned if yes and 0 if no.
Zh022		Value 4 assigned if “Piped into residence”. Value 3 assigned if “Public tap”. Value 2 assigned if “Ground handpump yard”. Value 2 assigned if “Public handpump”. Value 3 assigned if “Well in residence”. Value 1 assigned if “Public well”. Value 0 assigned if “Surface spring”. Value 0 assigned if “Pond/lake”. Value 0 assigned if “Rain water”. Value 3 assigned if “Tanker truck”.
Zh026	Type of toilet facility	Value 4 assigned if “Own flush toilet”. Value 3 assigned if “Shared flush toilet”. Value 3 assigned if “Public flush toilet”. Value 2 assigned if “Own pit toilet/latrín”. Value 1 assigned if

		“Share pit toilet”. Value 1 assigned if “Pub pit toilet/latrin”. Value 0 assigned if “No facility/bush/fld”. Value 0 assigned if “Other”.
Zh027	Main source lighting in HH	Value 3 assigned if “Electricity”. Value 2 assigned if “Kerosene. Value 2 assigned if “gas”, Value 1 assigned if “Oil”, Value 0 assigned if “Other”
Zh030	Type of fuel used for cooking	Value 1 assigned if “Wood” Value 1 if assigned if “Cow dung Cakes”, Value 2 assigned if “Coal/Lignite”, Value 2 assigned if “Charcoal”, Value 3 assigned if “Kerosene”, Value 4 assigned if “Electricity”, Value 4 Assigned if “LPG”, Value 4 assigned if “BioGas”, Value 0 assigned if “Other”
Zh031	Type of House	Value 2 assigned if “Pucca”, Value 0 assigned if “Kucha”, Value 1 assigned if “SemiPucca”
H028	Rooms in Household	Value assigned according to number of rooms in the household.

**Table PA2: Values assigned for NFHS2**

Zhv201	Source of Drinking Water	Value 4 assigned if “Piped into residence/yard/plot ”Value 3 assigned if “Public tap”, Value 2 assigned if “hand pump” in residence/yard/plot”, Value 2 assigned if public hand pump, Value 2 assigned if well in “Residence/yard/ plot”, Value 2 assigned if “Open well”, Value 2 assigned if “public covered well”, Value 2 assigned if “public open well”, Value 1 assigned if “Surface water”, Value 1 assigned if “Spring water”, Value 1 assigned if “River, stream”. Value 1 assigned if “Pond, Lake” Value 1 assigned if “Dam” Value 1 assigned if “Rainwater, Value 0 assigned if “missing”.
Zhv205	Type of Toilet facility	Value 3 assigned if “Own flush toilet”, value 2 assigned if “Shared flush toilet”, value 2 assigned if “Public flush toilet”, value 2 assigned if “Own pit toilet/latrine”, value 1 assigned if “shared pit toilet/latrine”, value 1

		assigned if public pit toilet/latrine”, value 0 assigned if “No facility”, value 0 assigned if “Other”.
Zhv206	Has electricity	Value 1 assigned if yes and 0 if not
Zhv207	Has radio	Value 1 assigned if yes and 0 if not
Zhv208	Has television	Value 1 assigned if yes and 0 if not
Zhv209	Has refrigerator	Value 1 assigned if yes and 0 if not
Zhv210	Has bicycle	Value 1 assigned if yes and 0 if not
Zhv211	Has motorcycle	Value 1 assigned if yes and 0 if not
Zhv212	Has car	Value 1 assigned if yes and 0 if not
Zhv221	Has telephone	Value 1 assigned if yes and 0 if not
ZSH29	Where do household members go for treatment	Lower values assigned to public/government/NGO provider, and higher to private ones
ZSH34	Main source of Light	Value 3 assigned if electricity, Value 2 assigned if Kerosene”, Value 2 assigned if “Gas”, Value 1 assigned if “Oil”, Value 0 assigned if “Other”.
ZSH35	Number of rooms	Value according to number of rooms
ZSH36	Separate room used as a kitchen	Value 1 assigned if yes and 0 if not
ZSH37	Main cooking fuel	Value 1 assigned if “Wood” Value 1 if assigned if “Crop residues or Cow dung Cakes”, Value 2 assigned if “Coal/Lignite”, Value 2 assigned if “Charcoal”, Value 2 assigned if “Kerosene”, Value 3 assigned if “Electricity”, Value 3 assigned if “LPG”, Value 3 assigned if “Bio-Gas”, Value 0 assigned if “Other”
ZSH32	How water is purified	Value 1 assigned if strain by cloth to purify water, Value 1 assigned if “Alum”, value 3 assigned if used “Water filter”, Value 2 assigned if “Boiled water” Value 4 assigned if used “Electronic Purifier”, Value 0 assigned if used “Nothing” to purify water, Value 1 assigned if used “Other Methods” to purify water.

2. Next the analysis involved standardization of data in question. This is done for many reasons. One reason is that standardization ( that involves subtraction of the mean value and division by the standard deviation) eliminates unnecessary weights given to some measures on account of their high unit values.

3. Following the standardization, PCA involves finding that relationship between the variables that explain the maximum possible variation in the total data. This is done by generating various factors.

4. Each factor is nothing but a linear weighted combination of the various variables used. The factors are ranked according to their ability to explain the maximum possible variation among all the variables. The factors are ranked according to their ability to explain the total variance. In all the indices calculated, we used the first factor only. The first factor in all the cases, explained more than 50 per cent of the variation, in 5 out of six cases, it explained greater than 60% of the variation. The details of the first factor are as below:

**Table PA3: The first factors of different PCA undertaken**

Household Coverage	Eigen value	Proportion of Variations explained
	NFHS1	
Rural	4.17	0.92
Urban	5.52	0.88
	NFHS 2	
Rural	3.51	0.75
Urban	4.11	0.73

5. Such analysis sometimes involves giving negative weights to some of variables. However, no negative weights (loading) are observed in any of the indices generated by our exercise. The loadings are given below along with the variable descriptions.

**Table PA4: Description of variables – NFHS 1 Data**

Variable Name	Variable Description
Zh042a	Sewing machine
Zh042b	Clocklabel var watch
Zh042c	Sofa set
Zh042d	Fan
Zho42e	Radio
Zh042f	Refrigerator
Zho42g	Television
Zh042h	VCR/VCP
Zh042i	Bicycle
Zh042j	Motorcycle/scooter
Zh042k	Car
Zh029	Seperate room used as kitchen?

Zh022	Source of non drinking water
Zh026	Type of toilet facility
Zh027	Main source lighting in HH
Zh030	Type of fuel used for cooking
Zh031	Type of house
H028	Rooms in household

**Table PA5: Loadings – NFHS 1 Data**

<b>Rural</b>	<b>Factor loadings</b>	<b>Scorings</b>
zh042a	0.52285	0.08991
zh042b	0.5546	0.12276
zh042c	0.52915	0.10598
zh042d	0.72096	0.20294
zh042e	0.50807	0.10015
zh042f	0.49588	0.10899
zh042g	0.67752	0.15926
zh042h	0.23779	0.0396
zh042i	0.26391	0.03773
zh042j	0.48223	0.08686
zh042k	0.22144	0.03781
zh029	0.34293	0.05722
zh022	0.33822	0.05246
zh026	0.47023	0.09002
zh027	0.55128	0.10374
zh030	0.49391	0.09203
zh031	0.57823	0.11372
h028	0.28406	0.04852
<b>Urban</b>	<b>Factor loadings</b>	<b>Scorings</b>
zh042a	0.55566	0.07163
zh042b	0.55749	0.08541
zh042c	0.6263	0.10873
zh042d	0.697	0.14548
zh042e	0.50577	0.06815
zh042f	0.65717	0.13263
zh042g	0.72636	0.14066
zh042h	0.39873	0.0571
zh042i	0.24418	0.02693
zh042j	0.55003	0.07689
zh042k	0.32582	0.04467

zh029	0.44395	0.05903
zh022	0.51597	0.06559
zh026	0.64154	0.10413
zh027	0.55756	0.08266
zh030	0.70059	0.12565
zh031	0.6314	0.09797
h028	0.32849	0.04347

**Table PA6: Description of variables – NFHS 2 Data**

Variable Name	Variable description
Zhv201	Source of drinking water
Zhv205	Type of toilet
Zhv206	Has Electricity
Zhv207	Has radio
Zhv208	Has television
Zhv209	Has refrigerator
Zhv210	Has bicycle
Zhv211	Has motorcycle
Zhv212	Has car
Zhv221	Has telephone
ZSH34	Main source of lighting
ZSH35	Number of rooms
ZSH36	Separate room used as a kitchen
ZSH37	Main cooking fuel
ZSH32	How water is purified

**Table PA7: Loadings – NFHS 2 Data**

<b>Rural</b>		
Variable	Factor loadings	Scorings
Zhv201	0.35358	0.0364
Zhv205	0.51718	0.12727
Zhv206	0.78464	0.33702
Zhv207	0.39601	0.06946
Zhv208	0.63515	0.12462
Zhv209	0.49034	0.11711
Zhv210	0.16649	0.03041
Zhv211	0.46315	0.10132

Zhv212	0.23968	0.04684
Zhv221	0.4276	0.10056
Zsh34	0.77658	0.2043
Zsh35	0.24458	0.05103
Zsh36	0.39811	0.06805
Zsh37	0.53679	0.12535
Zsh32	0.32632	0.05536
<b>Urban</b>		
<b>Variable</b>	<b>Factor loadings</b>	<b>Scorings</b>
Zhv201	0.42546	0.05506
Zhv205	0.61634	0.1192
Zhv206	0.62502	0.22558
Zhv207	0.41616	0.06463
Zhv208	0.59939	0.09667
Zhv209	0.65874	0.16651
Zhv210	0.16891	0.02776
Zhv211	0.54835	0.10898
Zhv212	0.34481	0.05682
Zhv221	0.61547	0.15548
Zsh34	0.61973	0.14065
Zsh35	0.33993	0.05952
Zsh36	0.48575	0.08881
Zsh37	0.68097	0.15665
Zsh32	0.40616	0.06569

6. Once the weights for each measures are obtained (also sometimes referred to as factor loading), then the composite index was calculated as the weighed average.

7. For each of the 6 such indices calculated (NFHS1- Overall, Rural, Urban; NFHS 2- Overall, Rural, Urban) household quintiles were generated (RQ1 to RQ5, UQ1 to UQ5); NFHS 2- Q1 to Q5, RQ1 to RQ5, UQ1 to UQ5)

## Appendix 3: Tables

**Table S1: Summary Household Characteristics NSS 52**

NSS 52 Household Characteristics	Rural		Urban	
	Q1	Q5	Q1	Q5
Number of Households	20,709,436	31,926,559	6,813,220	12,404,821
Average household size	6.2	4.0	6.0	3.3
Average number of children (5 & below)	1.3	0.4	1.1	0.2
Average number of Elders (60 & above)	0.3	0.4	0.3	0.3
Average Household Expenditure (in Rs)	1,069.2	2,154.2	1,416.4	3,290.9

**Table S2: Summary Household Characteristics NSS 52**

NSS 42 Household Characteristics	Rural		Urban	
	Q1	Q5	Q1	Q5
Number of Households	21,010,243	27,692,372	6,784,074	9,531,308
Average household size	6.1	3.9	6.0	3.5
Average number of children (5 & below)	1.2	0.4	1.1	0.3
Average number of Elders (60 & above)	0.3	0.3	1.1	0.3
Average Household Expenditure (in Rs)	386.0	764.1	498.4	1,224.2

<b>Table A1: Age Pyramid – NSS52</b>						
	<b>UQ1</b>			<b>UQ5</b>		
	Male	Female	Total	Male	Female	Total
0 to 5 yrs	3646637	3508645	7155283	1479978	1270575	2750553
6 to 10 yrs	3267170	3420574	6687744	1616984	1347295	2964279
11 to 15 yrs	2382165	2366311	4748476	2055820	1650173	3705993
16 to 20 yrs	1828014	1770783	3598796	2744057	2036598	4780655
21 to 25 yrs	1500063	1724050	3224113	2697530	1941301	4638830
26 to 30 yrs	1661728	1962625	3624353	2209231	1819401	4028632
31 to 35 yrs	1571626	1448026	3019653	1723401	1522020	3245421
36 to 40 yrs	1358516	1037455	2395971	1703556	1815251	3518806
41 to 45 yrs	832178	637619	1469797	1603298	1367713	2971012
46 to 50 yrs	598314	467653	1065966	1398335	990008	2388343
51 to 55 yrs	512717	836645	1349363	1089915	913961	2003877
56 to 60 yrs	431698	492704	924403	772895	574777	1347672
61 to 65 yrs	299336	353923	653259	513578	444296	957874
66 to 70 yrs	211309	191288	402597	300236	295133	595369
71 to 75 yrs	87054	106696	193750	201141	204822	405963
76 to 80 yrs	52666	46494	99160	102324	109213	211537
81 to 85 yrs	17084	32718	49802	52590	41597	94186
86 to 90 yrs	4670	8487	13157	21037	18597	39634
91 to 95 yrs	73	2233	2306	1773	8821	10595
96 to 99 yrs	166	2101	2267	147	1370	1517
	<b>RQ1</b>			<b>RQ5</b>		
	Male	Female	Total	Male	Female	Total
0 to 5 yrs	13818230	13470642	27288872	6829217	5803413	12632630
6 to 10 yrs	11885154	10677676	22562830	6999420	5611965	12611385
11 to 15 yrs	6472666	5803343	12276009	8002556	6100191	14102747
16 to 20 yrs	4667508	4624559	9292068	7884831	6683717	14568548
21 to 25 yrs	4154328	5046931	9201259	6519677	5764537	12284214
26 to 30 yrs	5003481	6592615	11596095	5621937	5026710	10648647
31 to 35 yrs	4860231	3980699	8840930	4235633	4406875	8642508
36 to 40 yrs	3916516	3231615	7148131	4396666	4884273	9280939
41 to 45 yrs	2480000	1841009	4321009	3786563	3696365	7482929
46 to 50 yrs	1846850	1482688	3329538	3433629	2780583	6214212
51 to 55 yrs	1649788	2542237	4192025	2845863	3705541	6551404
56 to 60 yrs	1531728	1387617	2919345	2383912	1896148	4280060
61 to 65 yrs	1060771	1164840	2225610	1868243	1827753	3695996
66 to 70 yrs	607543	682556	1290099	1008601	982141	1990742
71 to 75 yrs	271466	223453	494919	551812	533620	1085432
76 to 80 yrs	143411	151900	295312	381749	325491	707239
81 to 85 yrs	24372	51612	75984	210089	118412	328501
86 to 90 yrs	27248	36209	63457	98512	54292	152804
91 to 95 yrs	7239	3514	10753	20455	36638	57092
96 to 99 yrs	5871	1381	7251	6114	28474	34589

**Table A2: Morbidity-Prevalence of ailments during the last 15 days**

	Q1			Q5		
	Male	Female	Total	Male	Female	Total
<b>Rural Proportion</b>	4.1	3.8	4.0	7.2	7.9	7.6
<b>Urban Proportion</b>	4.1	4.3	4.2	6.3	7.2	6.7

**Table A3: Percentage of ailing persons treated (by sex)-NSS 52**

	Q1		Q5	
	Male	Female	Male	Female
<b>Rural</b>				
Not treated	22.1	22.4	8.1	10.1
Treated	77.9	77.6	91.9	89.9
Total	100.0	100.0	100.0	100.0
<b>Urban</b>				
Not treated	12.0	14.03	8.2	4.69
Treated	88.0	85.97	91.8	95.31
Total	100.0	100.0	100.0	100.0

**Table A4: Average Birth Interval in Months**

	NFHS-1		NFHS-2	
	Q1	Q5	Q1	Q5
<b>Urban</b>	32	36	32	39
<b>Rural</b>	35	31	36	33

**Table A5: Exposure of Women to Mass Media**

	NFHS-1		NFHS-2	
	Q1	Q5	Q1	Q5
<b>Urban</b>				
Reads newspaper at least once a week	-	-	9.6	81.2
Listens to radio at least once a week	38.0	82.1	28.3	60.8
Watches TV at least once a week	<b>25.2</b>	97.0	<b>43.7</b>	97.5
Visits cinema hall at least once a month	23.7	28.2	15.1	26.7
<b>Rural</b>				
Reads newspaper at least once a week	-	-	2.0	38.1
Listens to radio at least once a week	17.1	64.5	10.1	56.5
Watches TV at least once a week	5.3	56.3	7.9	81.4
Visits cinema hall at least once a month	6.2	17.5	4.2	12.4

**Note:** The above figures are the % of mothers claiming exposure to various forms of mass media and do not add up to 100.

**Table A6: Proportion of Women Suffering from Anemia**

	NFHS-2	
	Q1	Q5
<b>Urban</b>	<b>55.2</b>	37.4
<b>Rural</b>	60.1	43.7

Anemia: All pregnant women having hemoglobin level<10.9g/dl, non-pregnant women having hemoglobin level<11.9g/dl. These figures are for India, but not including the state of Tripura)

**Table A7: Average age at First Marriage**

	NFHS-1		NFHS-2	
	Q1	Q5	Q1	Q5
<b>Urban</b>	16.3	19.9	16.4	20.3
<b>Rural</b>	15.6	17.4	15.6	17.8

**Table A8: Total Fertility Rate (TFR)**

	NFHS-1		NFHS-2	
	Q1	Q5	Q1	Q5
<b>Urban</b>	<b>13.1</b>	6.8	<b>12.2</b>	8.3
<b>Rural</b>	14.1	10.1	14.6	10.1

Note: TFR has been presented as live births per 100 women.

**Table A9: Average Number of Children Born and Living**

	NFHS-1		NFHS-2	
	Q1	Q5	Q1	Q5
<b>Urban</b>	2.7	2.3	3.0	2.3
<b>Rural</b>	2.6	2.7	3.2	2.7

Note: This table reports the number of children born and living at the time of interview for each married woman respondent.

**Table A10: Medical Attendance at Childbirth- NSS**

	NSS 42				NSS 52			
	Urban		Rural		Urban		Rural	
	Q1	Q5	Q1	Q5	Q1	Q5	Q1	Q5
<b>No attendance</b>	19.0	2.4	32.6	18.9	28.3	5.4	48.4	24.0
Govt. Appointed Doctor	17.4	24.7	5.9	10.1	17.8	20.1	3.2	13.4
Other Doctor	11.0	36.8	4.0	14.1	11.6	54.4	3.0	17.7
Govt. Appointed Nurse/Midwife	10.5	12.5	5.1	10.0	9.5	6.5	8.5	9.4
Other Nurse/Midwife	20.6	17.5	21.7	25.1	18.7	11.3	17.3	21.8
Others	18.7	2.1	28.1	19.3	14.1	2.5	19.7	13.7
Missing	2.9	4.0	2.7	2.5	-	-	-	-
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Table A11: Medical Attendance at Childbirth- NFHS**

	NFHS 1				NFHS 2			
	Urban		Rural		Urban		Rural	
	Q1	Q5	Q1	Q5	Q1	Q5	Q1	Q5
Doctor	22.1	76.6	5.8	33.9	28.8	86.2	55.9	9.6
Nurse/midwife	33.0	66.3	8.3	38.1	40.1	73.8	58.7	10.5
Other health professional	-	-	-	-	2.3	6.5	3.5	1.4
Relative or friend	48.5	21.7	71.4	47.0	40.7	9.9	24.4	69.5
Other (un coded)	0.3	0.1	0.4	0.3	0.6	0.1	0.3	0.7
Traditional birth attendant	29.8	5.3	37.3	26.9	37.7	6.8	23.0	51.3
None	0.7	0.1	1.0	0.3	0.4	0.0	0.1	0.8

Note: These figures indicate whether *any* of the mentioned assisted child-birth; therefore if a doctor and a nurse both assisted in a delivery, then they are both recorded above. Consequently the figures do not add up to 100%.

**Table A12: Approval of family planning- NFHS-1**

<b>Rural</b>	<b>Q1</b>	<b>Q5</b>	<b>Total</b>
Pill	0.6	1.6	0.9
IUD	0.3	3.0	1.2
Condom	0.4	3.3	1.2
Female Sterilization	21.0	33.5	26.3
Male Sterilization	3.3	3.9	3.5
Rhythm/Safe Period (Periodic Abstinence)	2.0	3.5	2.3
Others	0.2	0.2	0.2
<b>Urban</b>			
Pill	1.52	2.50	1.92
IUD	1.27	7.79	3.92
Condom	0.71	14.05	5.78
Female Sterilization	25.68	25.80	30.37
Male Sterilization	3.41	3.20	3.24
Rhythm/Safe Period (Periodic Abstinence)	2.20	5.22	3.50
Others	0.35	0.25	0.20

**NFHS-2**

<b>Rural</b>	<b>Q1</b>	<b>Q5</b>	<b>Total</b>
<b>Pill</b>	1.37	2.90	1.90
IUD	0.35	2.63	0.98
Condom	0.59	4.33	1.60
Female Sterilization	23.17	41.11	33.48
Male Sterilization	1.28	2.20	1.93
Rhythm/Safe Period (Periodic Abstinence)	2.61	3.52	2.74
Others	0.50	0.27	0.37
<b>Urban</b>			
Pill	2.12	2.62	2.71
IUD	1.01	7.13	3.49
Condom	1.64	15.21	7.19
Female Sterilization	34.55	28.98	36.00
Male Sterilization	1.36	2.35	1.82
Rhythm/Safe Period (Periodic Abstinence)	2.34	5.84	3.90
Others	0.27	0.40	0.29

**Table A13: Location of Child birth- NSS**

	NSS 42				NSS 52			
	Urban		Rural		Urban		Rural	
	Q1	Q5	Q1	Q5	Q1	Q5	Q1	Q5
<b>At home</b>	<b>60.7</b>	<b>17.2</b>	<b>86.0</b>	<b>67.3</b>	<b>58.8</b>	<b>14.2</b>	<b>88.8</b>	<b>63.5</b>
Public Hospital	21.4	24.6	4.7	11.7	21.2	20.3	2.7	10.7
PHC	2.1	4.1	0.9	2.7	3.9	2.2	1.7	4.5
Public Disp.	0.1	0.3	-	-	0.2	0.5	0.1	0.4
<b>All Government Locations</b>	<b>23.6</b>	<b>29.0</b>	<b>5.6</b>	<b>14.4</b>	<b>25.3</b>	<b>23.0</b>	<b>4.5</b>	<b>15.6</b>
Pvt. Hospital	7.3	30.2	1.9	9.5	6.7	28.8	1.5	10.9
Nursing Home	1.6	13.4	0.1	1.7	4.0	27.3	0.4	5.3
Charitable Ins.	0.7	1.2	-	0.1	0.6	1.7	0.0	0.2
ESI Doctor	-	0.9	-	-	0.1	0.3	-	0.0
Pvt. Doctor	-	-	-	0.4	0.5	0.7	0.0	0.4
<b>All Non-government Locations</b>	<b>9.6</b>	<b>45.7</b>	<b>2.0</b>	<b>11.7</b>	<b>11.9</b>	<b>58.8</b>	<b>1.9</b>	<b>16.8</b>
Others	0.4	2.2	0.2	-	0.5	0.9	0.0	0.2
Other place	5.2	5.0	5.9	6.3	0.7	0.4	1.0	0.9
Don't Know	0.4	0.8	0.4	0.3	2.8	2.6	3.6	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Table A14: Location of Child birth- NFHS2**

<b>Rural</b>	<b>Q1</b>	<b>Q5</b>	<b>Total</b>	
At home		89.7	45.4	74.9
Government facilities		6.31	21.28	12.67
Non-government facilities		3.78	33.23	12.17
<b>Urban</b>				
At home		60.0	8.6	34.5
Government facilities		26.25	89.62	29.19
Non-government facilities		13.38	1.73	36.06

**Table A15: Percentage distribution of non-hospitalized treatment by source in the last 30 days – NSS42**

	Q1			Q5		
	Male	Female	Total	Male	Female	Total
<b>Urban</b>						
public hospital	27.6	30.9	29.3	19.3	16.6	18.0
primary health centre	1.5	1.9	1.7	1.2	1.1	1.2
Public dispensary	1.6	2.1	1.9	1.0	1.8	1.4
<b>Government sources</b>	<b>30.7</b>	<b>34.9</b>	<b>32.8</b>	<b>21.5</b>	<b>19.6</b>	<b>20.6</b>
Private hospital	12.7	13.2	13.0	17.2	17.0	17.1
Nursing home	0.8	0.6	0.7	2.1	2.0	2.1
Charitable institution run by public trust	1.5	1.4	1.5	0.4	0.7	0.6
ESI doctor,AMA etc	0.9	0.5	0.7	3.1	1.8	2.5
Private doctor	50.5	47.0	48.8	52.6	55.8	54.2
<b>Non-Govt. sources</b>	<b>66.4</b>	<b>62.8</b>	<b>64.6</b>	<b>75.4</b>	<b>77.3</b>	<b>76.4</b>
others	2.8	2.3	2.6	3.0	3.1	3.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>						
public hospital	18.5	17.6	18.1	17.1	16.1	16.6
primary health centre	5.5	6.6	6.0	2.9	4.7	3.8
Public dispensary	2.2	3.0	2.6	3.1	3.2	3.1
<b>Government sources</b>	<b>26.2</b>	<b>27.1</b>	<b>26.6</b>	<b>23.0</b>	<b>24.0</b>	<b>23.5</b>
Private hospital	12.9	12.4	12.7	17.5	18.0	17.8
Nursing home	0.6	0.4	0.5	1.2	1.4	1.3
Charitable institution run by public trust	0.3	0.2	0.3	0.2	0.6	0.4
ESI doctor,AMA etc	0.1	0.3	0.2	0.8	0.8	0.8
Private doctor	52.8	53.7	53.2	53.4	52.0	52.7
<b>Non-Govt. sources</b>	<b>66.7</b>	<b>67.0</b>	<b>66.8</b>	<b>73.1</b>	<b>72.8</b>	<b>73.0</b>
others	7.1	5.9	6.6	3.8	3.2	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

**Table A16: Morbidity-Prevalence of ailments during the last 15 days – NSS52**

	Q1			Q5		
	Male	Female	Total	Male	Female	Total
<b>Rural Proportion</b>	4.1	3.8	4.0	7.2	7.9	7.6
<b>Urban Proportion</b>	4.1	4.3	4.2	6.3	7.2	6.7

**Table A17: Rural Morbidity-Percentage ailing in a 15 day span by sex and age – NSS52**

	0 to 14 yrs	0 to 14 yrs	15 to 59 yrs	15 to 59 yrs	60plus yrs	60plus yrs
	RQ1	RQ5	RQ1	RQ5	RQ1	RQ5
Male	4.6	5.3	4.4	5.0	21.5	16.4
Female	4.0	4.5	4.6	6.3	19.5	14.7
Total	4.3	5.0	4.5	5.6	20.4	15.6

**Table A18: Percentage of ailing persons treated – NSS52**

	Q1			Q5			
	Rural	Male	Female	Total	Male	Female	Total
Not treated		22.4	21.4	17.1	16.6	10.1	17.2
Treated (not-hospitalised)		77.6	78.6	83.0	83.2	89.9	82.8
Total		100.0	100.0	100.0	100.0	100.0	100.0
<b>Urban</b>							
Not treated		12.0	8.1	6.8	4.4	8.2	7.9
Treated (not-hospitalised)		88.0	91.9	93.3	95.6	91.8	92.1
Total		100.0	100.0	100.0	100.0	100.0	100.0

**Table A19: Percentage distribution of non-hospitalized treatment by source in the last 15 days – NSS52**

	RQ1			RQ5		
	Male	Female	Total	Male	Female	Total
Public Hospital	9.5	11.6	10.5	10.4	13.4	11.9
PHC	9.7	10.5	10.1	3.6	1.9	2.8
Public dispensary	1.7	0.8	1.3	0.5	2.5	1.5
<b>All government sources</b>	<b>21.0</b>	<b>22.9</b>	<b>21.9</b>	<b>14.5</b>	<b>17.7</b>	<b>16.1</b>
Private Hospital	10.0	8.3	9.2	18.2	17.1	17.7
Nursing Home	3.7	5.6	4.6	2.3	1.6	1.9
Charitable Institution	0.4	0.2	0.3	1.1	0.3	0.7
ESI Doctor, AMA etc	0.1	0.5	0.3	0.3	0.3	0.3
Private Doctor	52.3	49.3	50.9	56.1	56.8	56.4
Others	12.6	13.1	12.8	7.5	6.1	6.8
<b>All non-government sources</b>	<b>79.0</b>	<b>77.1</b>	<b>78.1</b>	<b>85.5</b>	<b>82.3</b>	<b>83.9</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0
	UQ1			UQ5		
	Male	Female	Total	Male	Female	Total
Public Hospital	19.7	18.4	19.0	12.9	10.4	11.7
PHC	1.1	0.6	0.8	0.4	0.0	0.2
Public dispensary	2.0	1.1	1.5	1.0	1.4	1.2
<b>All government sources</b>	<b>22.8</b>	<b>20.0</b>	<b>21.4</b>	<b>14.3</b>	<b>11.7</b>	<b>13.1</b>
Private Hospital	13.9	14.4	14.2	16.8	14.3	15.6
Nursing Home	3.4	4.5	4.0	2.1	2.3	2.2
Charitable Institution	1.3	1.1	1.2	0.4	0.5	0.4
ESI Doctor, AMA etc	0.5	0.6	0.6	0.6	1.2	0.9
Private Doctor	49.4	50.9	50.2	58.1	65.3	61.5
Others	8.6	8.4	8.5	7.6	4.7	6.3
<b>All non-government sources</b>	<b>77.2</b>	<b>79.9</b>	<b>78.6</b>	<b>85.7</b>	<b>88.3</b>	<b>86.9</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0

**Table A20: Expenditure per ailment related to non-hospitalized treatment- NSS  
52**

<b>Rural</b>	<b>RQ1</b>	<b>RQ5</b>	<b>Total</b>
Public Hospital	137.55	196.40	167.92
PHC	92.03	283.54	127.58
Public dispensary	94.45	105.75	135.44
Private Hospital	178.10	280.34	215.36
Nursing Home	172.01	282.04	209.75
Charitable Institution	69.69	1,904.42	655.11
ESI Doctor, AMA etc	14.01	163.22	88.55
Private Doctor	119.19	219.44	165.38
Others	100.86	268.95	151.98
Missing	20.00		30.35
<b>Total</b>	<b>123.94</b>	<b>236.44</b>	<b>171.07</b>
<b>Urban</b>	<b>UQ1</b>	<b>UQ5</b>	<b>Total</b>
Public Hospital	155.90	358.48	232.16
PHC	139.08	435.05	210.78
Public dispensary	97.93	146.61	124.26
Private Hospital	141.97	435.95	244.42
Nursing Home	235.74	599.75	328.84
Charitable Institution	65.40	373.54	123.65
ESI Doctor, AMA etc	42.07	65.26	64.32
Private Doctor	134.89	214.21	173.96
Others	66.74	198.89	141.04
Missing			160.00
<b>Total</b>	<b>137.90</b>	<b>271.61</b>	<b>193.36</b>

**Table A21: Percentage distribution of hospitalized treatment by source (in the last 365 days)- NSS52**

<b>Rural</b>	<b>RQ1</b>	<b>RQ5</b>
Public Hospital	51.6	30.9
PHC	8.6	1.7
Public dispensary	0.7	0.4
Private Hospital	26.9	55.7
Nursing Home	6.6	7.8
Charitable Institution	5.0	3.1
Others	0.6	0.3
Missing	-	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Urban</b>	<b>UQ1</b>	<b>UQ5</b>
Public Hospital	58.8	26.3
PHC	1.8	0.6
Public dispensary	0.4	0.1
Private Hospital	28.2	52.2
Nursing Home	7.2	15.6
Charitable Institution	2.9	4.6
Others	0.7	0.5
Missing	-	-
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

**NSS 42**

<b>Rural</b>	<b>RQ1</b>	<b>RQ5</b>
Public Hospital	61.4	49.0
PHC	5.8	2.6
Private Hospital	25.6	37.6
Nursing Home	3.9	6.8
Charitable institution	1.2	2.1
Others	1.6	1.7
Missing	0.5	0.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Urban</b>	<b>UQ1</b>	<b>UQ5</b>
Public Hospital	68.3	46.4
PHC	0.7	0.5
Private Hospital	23.5	36.8
Nursing Home	4.4	12.2
Charitable institution	2.0	2.4
Others	0.8	1.2

Missing	0.2	0.5
Total	100.0	100.0

**Table A22: Average duration of stay in the hospital by type of hospital (in days)- NSS 52**

	UQ1	UQ5	Total
Public Hospital	12.1	18.7	13.1
Private Hospital	7.1	12.3	9.2
Others	6.5	10.4	13.1
Total	10.1	14.0	11.1
	RQ1	RQ5	Total
Public Hospital	10.6	20.7	14.2
Private Hospital	11.2	13.4	11.2
Others	7.7	42.4	15.3
Total	10.7	16.8	12.8

**Table A23: Average duration of stay by type of hospital- NSS 42**

	RQ1	RQ5	Total
Public Hospital	17.9	18.9	17.5
Private Hospital	11.7	13.0	12.3
Others	14.7	12.6	13.2
Total	16.0	16.0	15.4
	UQ1	UQ5	Total
Public Hospital	18.4	15.9	16.8
Private Hospital	11.1	12.3	11.5
Others	13.2	13.2	16.0
Total	16.2	14.0	14.8



**Table A24: Percentage distribution of causes of no treatment- NSS 52**

	<b>RQ1</b>	<b>RQ5</b>	<b>Total</b>
No medical facility	12.2	4.7	9.0
Financial Problem	4.2	3.0	3.7
Ailment not serious	0.6	0.4	0.5
Lack of Faith	32.8	17.1	24.7
Long waiting	42.5	59.0	51.8
Others	7.8	15.9	10.3
Total	100.0	100.0	100.0
	<b>UQ1</b>	<b>UQ5</b>	<b>Total</b>
No medical facility	1.3	-	0.8
Financial Problem	7.1	1.4	5.3
Ailment not serious	0.5	1.9	1.1
Lack of Faith	29.6	9.1	19.8
Long waiting	48.4	72.0	59.7
Others	13.1	15.7	13.4
Total	100.0	100.0	100.0

**Table A25: Percentage Distribution of Causes of Non-Treatment- NSS 42**

<b>Rural</b>	<b>Q1</b>	<b>Q5</b>	<b>Total</b>
No medical facility	6.4	5.6	5.6
Lack of faith	4.2	4.1	3.8
Long Waiting	0.6	1.0	0.6
Financial problem	40.0	23.6	29.7
Ailment not serious	39.5	52.4	47.8
Others	7.1	9.3	9.7
Missing	2.2	4.0	2.9
Total	100.0	100.0	100.0
<b>Urban</b>			
No medical facility	0.2	0.6	0.2
Lack of faith	3.7	6.8	3.4
Long Waiting	3.1	2.9	2.0
Financial problem	31.3	2.3	18.1
Ailment not serious	48.8	68.9	58.6
Others	9.0	12.5	11.8
Missing	3.9	6.0	5.8
Total	100.0	100.0	100.0

**Table A26: Percentage distribution of hospitalized treatment by source (in the last 365 days) – NSS52**

	RQ1			RQ5		
	Male	Female	Total	Male	Female	Total
Public Hospital	52.1	50.9	51.6	31.3	30.4	30.9
PHC	6.8	10.6	8.6	1.7	1.6	1.7
Public dispensary	1.0	0.5	0.7	0.3	0.6	0.4
<b>All Government sources</b>	<b>59.9</b>	<b>62.0</b>	<b>60.9</b>	<b>33.3</b>	<b>32.7</b>	<b>33.0</b>
Private Hospital	28.4	25.3	26.9	54.1	58.0	55.7
Nursing Home	6.5	6.6	6.6	8.5	6.8	7.8
Charitable Institution	4.4	5.6	5.0	3.8	2.1	3.1
Others	0.7	0.5	0.6	0.3	0.3	0.3
<b>All Non-government sources</b>	<b>40.1</b>	<b>38.0</b>	<b>39.1</b>	<b>66.7</b>	<b>67.3</b>	<b>67.0</b>
Missing	-	-	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0
	UQ1			UQ5		
Public Hospital	59.6	58.0	58.8	27.5	24.7	26.3
PHC	0.9	2.8	1.8	1.0	0.2	0.6
Public dispensary	0.2	0.5	0.4	0.1	0.1	0.1
<b>All Government sources</b>	<b>60.7</b>	<b>61.3</b>	<b>61.0</b>	<b>28.6</b>	<b>25.0</b>	<b>27.0</b>
Private Hospital	28.1	28.4	28.2	51.7	52.9	52.2
Nursing Home	6.7	7.7	7.2	13.6	18.1	15.6
Charitable Institution	3.4	2.4	2.9	5.6	3.4	4.6
Others	1.1	0.2	0.7	0.5	0.6	0.5
<b>All Non-government sources</b>	<b>39.3</b>	<b>38.7</b>	<b>39.0</b>	<b>71.4</b>	<b>75.0</b>	<b>73.0</b>
Missing	-	-	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0

**TableA27: Percentage distribution of hospitalized treatment by source in the last 365 days- NSS42**

	Q1			Q5			
	Male	Female	Total	Male	Female	Total	
<b>Urban</b>							
Public Hospital		67.1	70.2	68.3	48.0	44.6	46.4
PHC		0.8	0.6	0.7	0.3	0.6	0.5
<b>Government sources</b>		<b>67.9</b>	<b>70.8</b>	<b>69.0</b>	<b>48.3</b>	<b>45.2</b>	<b>46.9</b>
Private Hospital		22.9	24.5	23.5	36.5	37.2	36.8
Nursing Home		5.4	2.9	4.4	11.3	13.2	12.2
Charitable institution run by public trust		2.7	0.9	2.0	1.8	3.2	2.4
Others		1.0	0.6	0.8	1.6	0.7	1.2
<b>Non-Govt. sources</b>		<b>31.9</b>	<b>28.9</b>	<b>30.8</b>	<b>51.2</b>	<b>54.3</b>	<b>52.6</b>
Missing		0.1	0.3	0.2	0.5	0.5	0.5
<b>Total</b>		<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Rural</b>							
Public Hospital		62.4	60.2	61.4	50.3	47.2	49.0
PHC		5.4	6.3	5.8	2.5	2.8	2.6
<b>Government sources</b>		<b>67.7</b>	<b>66.5</b>	<b>67.2</b>	<b>52.7</b>	<b>50.0</b>	<b>51.6</b>
Private Hospital		24.7	26.9	25.6	36.6	38.9	37.6
Nursing Home		4.3	3.2	3.9	6.6	7.0	6.8
Charitable institution run by public trust		1.4	0.8	1.2	2.1	2.1	2.1
Others		1.5	1.8	1.6	1.6	1.9	1.7
<b>Non-Govt. sources</b>		<b>31.9</b>	<b>32.8</b>	<b>32.3</b>	<b>46.9</b>	<b>49.9</b>	<b>48.2</b>
Missing		0.4	0.7	0.5	0.3	0.1	0.2
<b>Total</b>		<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table A28: Physical Impairments- NSS52**

	Q1	Q5	Total
Urban	0.3	0.1	0.2
Rural	0.6	0.5	0.5

**Table A29: Percentage ailing in last 15 days by education- NSS52**

Ailing	Q1					Q5				
	Primary	Middle	Secondary	Higher Secondary	Total	Primary	Middle	Secondary	Higher Secondary	Total
Rural	4.4	2.8	2.1	2.0	3.5	7.4	6.7	6.0	5.6	6.7
Urban	3.3	3.6	1.9	2.9	3.2	7.9	6.8	6.4	4.6	6.4

Table A30: Percentage ailing in last 15 days by education and sex- NSS52										
ailing	RQ1					RQ5				
	Primary	Middle	Secondary	Higher Secondary	Total	Primary	Middle	Secondary	Higher Secondary	Total
Male	5.0	2.7	1.8	1.2	3.6	7.3	6.2	6.0	6.2	6.5
Female	3.1	3.0	3.6	5.0	3.2	7.5	7.6	6.0	4.6	7.1
ailing	UQ1					UQ5				
	Primary	Middle	Secondary	Higher Secondary	Total	Primary	Middle	Secondary	Higher Secondary	Total
Male	3.2	3.6	1.5	3.4	3.1	7.7	6.8	6.0	4.5	6.1
Female	3.5	3.6	2.6	1.8	3.4	8.1	6.9	6.9	4.9	6.7

**Table A31: Urban Morbidity-Percentage ailing in a 15 day span by sex and age- NSS52**

	0 to 14 yrs		15 to 59 yrs		60plus yrs	
	UQ1	UQ5	UQ1	UQ5	UQ1	UQ5
Male	5.79	4.17	4.30	4.26	20.40	11.00
Female	4.19	4.21	5.84	4.34	20.28	12.45
Total	4.99	4.19	5.07	4.29	20.34	11.71

**Table A32: Child Health and Vaccination**

	NFHS-1		NFHS-2	
	Q1	Q5	Q1	Q5
Rural				
Complete Immunisation	40.35	81.43	36.53	81.86
Underweight	24.3	16.8	23.0	12.3
Prevalence rate of fever	21.36	19.65	28.20	28.68
Prevalence rate of cough	11.03	9.93	34.02	33.86
Prevalence rate of Diarrhoea	5.63	5.78	18.51	16.64
			<b>Q1</b>	<b>Q5</b>
Complete Immunisation	58.60	89.84	62.46	91.83
Underweight	23.9	13.4	17.6	8.1
Prevalence rate of fever	21.60	16.68	27.92	21.42
Prevalence rate of cough	11.46	8.97	36.34	30.81
Prevalence rate of Diarrhoea	5.24	4.09	21.00	13.08

**Table A33: Infant mortality and Under 3 mortality rates (per 1000 births)**

<b>Infant Mortality Rate</b>						
	NFHS-1			NFHS-2		
	Q1	Q5	Total	Q1	Q5	Total
Urban	83	32	53	66	19	44
Rural	93	50	80	79	37	64
<b>Under 3 Mortality Rate</b>						
	Q1	Q5	Total	Q1	Q5	Total
Urban	24	4	10	5	-	2
Rural	19	6	14	12	3	7

**Table A34: Distribution of ailments among women**

<b>Ailment</b>	<b>RQ1</b>	<b>RQ5</b>	<b>UQ1</b>	<b>UQ5</b>
Chicken Pox	1.14	0.59	0.93	0.85
Cholera	0.61	0.32	0.2	0.01
Dengue, Influenza	8.87	6.18	7.57	5.27
Diphtheria	0.08	0.19	0.22	0.08
Encephalitis	0.08	0.09	0.05	0.08
Filariasis	0.48	0.22	0.47	0.04
Leprosy	0.24	1.23	0.09	0.21
Malaria	10.92	9.8	8.29	5.05
Measles and German Measles	0.86	0.52	0.63	0.82
Mumps	0.13	0.22	0	0.16
Polio	0.28	0.28	0.31	0.08
Rheumatic fever	8.41	3.41	4.08	2.69
Tetanus	0.07	0.28	0.12	0.11
Typhoid	2.92	2.4	1.54	1.15
Whooping cough	2.02	1.44	1.79	1.67
Rtuberculosis	1.78	1.43	1.47	1.17
STD	0.51	0.18	0.1	0.36
Asthma	4.63	3.77	4.66	3.03
Pleurisy	0.22	0.11	0	0.26
Pneumonia	1.34	0.53	0.71	0.18
Epilepsy	0.03	0.11	0.31	0.03
Other Mental disease	0.21	0.46	0.24	0.39
Cancer	0.3	0.54	0.27	0.58
Diarrhea and Gastroenteritis	2.56	1.15	1.39	0.7
Dysentery	3.9	4.04	3.47	3.13
Food poisoning	0.74	0.17	0	0.17
Gastritis, ulcer	2.72	3.72	3.03	4.44

<b>Ailment</b>	<b>RQ1</b>	<b>RQ5</b>	<b>UQ1</b>	<b>UQ5</b>
Jaundice	0.54	0.94	0.84	1.3
Disease of kidney	0.12	0.37	0.13	0.58
Arthritis, rheumatism	2.95	2.43	2.51	2.38
Diabetes	0.05	0.73	0.52	2.27
Goiter, thyroid gland disease	0.16	0.2	0.35	0.47
Cerebral hemorrhage	0	0.06	0.2	0.05
High BP	0.55	2.16	0.92	5.28
Low BP	0.37	1.32	0.51	2.48
Heart Disease	1.31	1.39	1.86	3.88
Nervous and general debility	1.08	1.64	1.77	0.94
Anaemia	0.28	0.61	0.52	0.44
Beri Beri	0.2	0	0	0
Epidemic dropsy	0.03	0.22	0.11	0.08
Rickets	0.11	0	0.04	0.04
Scurvy	0.1	0.06	0.09	0.26
Other malnutrition disease	0.23	0.32	0.45	1.22
Mouth, teeth and gum	0.95	1.09	3.7	3.54
Eye disease	2.23	3.75	2.68	5.56
Ear, nose and throat	1.43	1.93	1.2	1.35
Disease relating to pregnancy	1.1	2.49	3.99	1.03
Skin disease	3.55	2	0.09	0.3
Piles	0.27	0.28	1.28	3.91
Accident	1.05	1.6	0	0
Other diagnosed ailment	20.62	26.25	30.27	24.81
Not diagnosed	4.64	4.74	4.05	5.09
Total	100	100	100	100

**Table A35: Distribution of ailments**

<b>Ailment</b>	<b>RQ1</b>	<b>RQ5</b>	<b>UQ1</b>	<b>UQ5</b>
Chicken Pox	1.16	0.64	1.14	0.95
Cholera	0.68	0.42	0.19	0.04
Dengue, Influenza	8.07	6.04	7.74	5.67
Diphtheria	0.1	0.1	0.13	0.06
Encephalitis	0.09	0.14	0.14	0.09
Filariasis	0.36	0.18	0.41	0.07
Leprosy	0.37	1.18	0.39	0.2
Malaria	11.13	10.85	8.43	6.29
Measles and German Measles	1.18	0.67	0.6	0.95
Mumps	0.19	0.24	0.09	0.24
Polio	0.35	0.36	0.56	0.08
Rheumatic fever	8.91	4.26	3.39	2.54
Tetanus	0.08	0.23	0.07	0.1

<b>Ailment</b>	<b>RQ1</b>	<b>RQ5</b>	<b>UQ1</b>	<b>UQ5</b>
Typhoid	3.07	2.46	2.05	1.61
Whooping cough	2.1	1.52	1.76	1.38
Rtuberculosis	2.51	2.42	2.08	1.05
STD	0.26	0.13	0.05	0.44
Asthma	4.05	3.97	4.38	2.93
Pleurisy	0.12	0.1	0.01	0.17
Pneumonia	1.24	0.68	1.39	0.24
Epilepsy	0.16	0.11	0.2	0.09
Other Mental disease	0.35	0.45	0.35	0.44
Cancer	0.2	0.39	0.27	0.35
Diarrhea and gastroenteritis	2.47	1.72	1.94	1.41
Dysentery	5.37	4.48	2.98	3.78
Food poisoning	0.42	0.2	0.02	0.27
Gastritis, ulcer	2.83	3.69	2.39	3.47
Jaundice	0.85	0.98	1.13	1.29
Disease of kidney	0.22	0.8	0.53	0.58
Arthritis, rheumatism	1.77	1.87	1.73	1.68
Diabetes	0.17	0.69	0.42	2.15
Goiter, thyroid gland disease	0.19	0.16	0.31	0.43
Cerebral hemorrhage	0.02	0.09	0.23	0.14
High BP	0.48	1.71	0.97	3.94
Low BP	0.25	0.83	0.31	1.5
Heart Disease	0.97	1.55	3.04	3.64
Nervous and general debility	0.9	1.34	1.52	1.05
Anaemia	0.19	0.38	0.35	0.25
Beri Beri	0.1	0	0	0.04
Epidemic dropsy	0.03	0.13	0.14	0.01
Rickets	0.05	0.05	0.09	0.04
Scurvy	0.2	0.06	0.02	0.1
Other malnutrition disease	0.27	0.2	0.13	0.27
Mouth, teeth and gum	0.63	0.8	0.8	1.07
Eye disease	2.09	3.4	3.67	3.89
Ear, nose and throat	1.28	1.95	3.27	5.28
Disease relating to pregnancy	0.55	1.24	0.63	0.8
Skin disease	3.5	2.8	4.22	1.36
Piles	0.36	0.53	0.11	0.42
Accident	2.59	2.81	2.53	4.42
Other diagnosed ailment	20.78	23.94	27.81	26.95
Not diagnosed	3.62	4.09	2.93	3.77
Total	100	100	100	100

**Table A36: Percentage ailing in last 15 days by education**

Quintile	Ailing	Rural	Urban
Q1	Primary	4.4	3.3
	Middle	2.8	3.6
	Secondary	2.1	1.9
	Higher Secondary	2.0	2.9
	Total	3.5	3.2
Q5	Primary	7.4	7.9
	Middle	6.7	6.8
	Secondary	6.0	6.4
	Higher Secondary	5.6	4.6
	Total	6.7	6.4

**Table A37: Percentage ailing in last 15 days by education and sex**

Quintile	Ailing	Male	Female
RQ1	Primary	5.0	3.1
	Middle	2.7	3.0
	Secondary	1.8	3.6
	Higher Secondary	1.2	5.0
	Total	3.6	3.2
RQ5	Primary	7.3	7.5
	Middle	6.2	7.6
	Secondary	6.0	6.0
	Higher Secondary	6.2	4.6
	Total	6.5	7.1
UQ1	Primary	3.2	3.5
	Middle	3.6	3.6
	Secondary	1.5	2.6
	Higher Secondary	3.4	1.8
	Total	3.1	3.4
UQ5	Primary	7.7	8.1
	Middle	6.8	6.9
	Secondary	6.0	6.9
	Higher Secondary	4.5	4.9
	Total	6.1	6.7

**Table A38: Physical Impairments**

Quintile	Urban	Rural
Q1	0.3	0.6
Q5	0.1	0.5
Total	0.2	0.5

**Table A39: Distribution of ailments among female (NSS 52)**

Ailment	UQ1	UQ5	RQ1	RQ5
Diarrhea and gastroenteritis dysentery	6.63	3.96	7.98	4.87
Tetanus	0	0	0.22	0.16
Diphtheria	0.21	0	0.05	0.02
Whooping Cough	1.93	1.32	1.26	1.03
Meningitis and viral encephalitis	0.24	0.07	0.52	0.08
Fever of short duration	39.49	24.78	42.05	29.61
Chicken Pox	0.46	0.46	1.42	0.54
Measles	0.69	0	0.4	0.1
Mumps	0.32	0	0.53	0.12
Diseases of the eye	1	1.45	0.69	0.67
Acute disease of ear	0.29	0.34	0.31	0.5
Heart Failure	0.18	0.21	0	0.06
Cerebral Stoke	0.05	0.31	0.2	0.04
Cough and acute bronchitis	7.5	7.64	8.14	6.37
acute respiratory infection (include pneumonia)	2.18	1.3	0.94	1.71
Mouth, Teeth and gum	1.57	1.61	0.74	1.38
Relating to pregnancy	1.19	1.08	1.22	0.96
Accident	1.14	2.87	0.84	1.55
Ailment of less than 30 days	14.47	12.07	11.86	12.73
Undiagnosed ailments	2.92	3.3	4.67	3.26
Chronic	0.02	0.18	0.61	0.18
Pulmonary tuberculosis	1.32	0.31	0.39	1.44
Leprosy	0.1	0	0.01	0.08
STD	0.05	0	0.01	0.02
Jaundice	0.32	0.33	0.2	0.09
Guinea worm	0	0	0.03	0
Elephantiasis	0.1	0	0.31	0.05
Cancer	0.15	0.66	0.02	0.96
Other Tumors	0.05	0.3	0.05	0.56
Anemia	0.37	0.48	0.15	0.66
Goiter and thyroid disorders	0.19	0.68	0	1.12
Diabetes	0.54	5.3	1.94	1.63

Ailment	UQ1	UQ5	RQ1	RQ5
Rickets	0.1	0	0.23	0
Other malnutrition disease	0.07	0.03	0.07	0.37
Mental and behavioral disorders	0.24	1.03	0.36	1.35
Epilepsy	0.43	0.21	0.32	0.27
Other diseases of nerves	0.37	0.4	0.53	0.59
Cataract	0.1	0.4	0.36	0.43
Other diseases of eye	0.64	0.48	1.26	0.51
Other diseases of ear	0.1	0	0.1	0.05
Diseases of heart	1.11	2.95	0.24	2.15
High/low BP	1.8	6.66	0.37	3.77
Piles	0.17	0.56	0	0.35
Diseases of mouth, gum and teeth	0.34	0.36	0.17	0.14
Gastrointestinal diseases	0.93	1.86	1.17	2.64
Diseases of kidney/urinary	0.31	1.16	0.17	1.07
Joint pain	2.7	5.27	2.58	4.82
Other disorders of bone	1.1	0.95	0.36	1.02
Congenital deformities (excluding disability)	0.23	0.2	0	0.02
Diagnosed diseases of more than 30 days	3.15	5.58	2.64	6.31
Undiagnosed ailments of more than 30 days	0.39	0.88	1.29	1.59
Total	100	100	100	100

**Table A40: Distribution of ailments (NSS 52)**

Ailment	UQ1	UQ5	RQ1	RQ5
Diarrhea and gastroenteritis dysentery	6.79	4.08	6.92	4.69
Tetanus	0.01	0	0.11	0.08
Diphtheria	0.11	0.08	0.03	0.07
Whooping Cough	1.64	1.1	1.43	1.47
Meningitis and viral encephalitis	0.28	0.07	0.41	0.1
Fever of short duration	41.29	28.68	42.99	32.17
Chicken Pox	0.72	0.52	1.15	0.62
Measles	0.62	0.05	0.81	0.17
Mumps	0.23	0.11	0.35	0.09
Diseases of the eye	1.12	1.48	0.82	0.73
Acute disease of ear	0.37	0.6	0.43	0.57
Heart Failure	0.2	0.4	0	0.17
Cerebral Stoke	0.03	0.19	0.15	0.25
Cough and acute bronchitis	7.18	7.35	7.21	6.04
acute respiratory infection (include pneumonia)	1.69	0.78	1.17	1.43
Mouth, Teeth and gum	1.23	1.51	0.71	1.07
Relating to pregnancy	0.61	0.5	0.59	0.48
Accident	2.12	3.83	1.69	2.96
Ailment of less than 30 days	13.32	11.77	11.06	11.38

<b>Ailment</b>	<b>UQ1</b>	<b>UQ5</b>	<b>RQ1</b>	<b>RQ5</b>
Undiagnosed ailments	3.45	2.55	4.75	3.19
Chronic	0.01	0.11	0.69	0.18
Pulmonary tuberculosis	1.21	1.11	0.68	2.06
Leprosy	0.12	0	0.24	0.28
STD	0.04	0	0	0.01
Jaundice	0.23	0.47	0.31	0.3
Guinea worm	0	0.08	0.01	0
Elephantiasis	0.1	0	0.21	0.12
Cancer	0.08	0.38	0.25	0.65
Other Tumors	0.07	0.17	0.09	0.4
Anaemia	0.29	0.24	0.12	0.35
Goiter and thyroid disorders	0.1	0.63	0	0.61
Diabetes	0.32	5	0.99	1.62
Beri Beri	0	0	0	0
Rickets	0.05	0	0.18	0.13
Other malnutrition disease	0.12	0.02	0.17	0.21
Mental and behavioral disorders	0.6	1.04	0.26	0.97
Epilepsy	0.54	0.3	0.4	0.32
Other diseases of nerves	0.53	0.61	0.48	0.69
Cataract	0.29	0.22	0.21	0.41
Other diseases of eye	0.55	0.26	1.16	0.4
Other diseases of ear	0.13	0.07	0.09	0.06
Diseases of heart	1.07	3.55	0.67	2.03
High/low BP	1.24	5.43	0.28	3.18
Piles	0.34	0.88	0.12	0.26
Diseases of mouth, gum and teeth	0.34	0.26	0.09	0.11
Gastrointestinal diseases	1.04	1.37	1.25	2.26
Diseases of kidney/urinary	0.6	1	0.29	1.59
Prostrate disorder	0	0.19	0	0
Hydrocele	0	0	0.6	0.15
Joint pain	2.07	3.64	2.2	3.88
Other disorders of bone	0.8	0.83	0.39	0.93
Congenital deformities (excluding disability)	0.19	0.09	0	0.04
Diagnosed diseases of more than 30 days	3.51	5.76	3.7	6.78
Undiagnosed ailments of more than 30 days	0.39	0.61	0.97	1.31
Total	100	100	100	100

### Age Distribution Among Urban Poor

