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Rural Health Services at Cross-Roads: Insights from Gujarat

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Abstract

Gujarat is economically one of the most developed states. However, it has registered limited success in the health status of its population, especially of women and children, and in rural areas. With the allocation of resources gradually tapering in the health sector at the national and the state level in the post economic reform period, the impact is likely to be more adverse in the rural areas. The outcome would be poor and perhaps deteriorating health status in rural areas. In this paper an attempt has been made to present the health status of the rural population from a study carried out in ten villages of Bharuch district in South Gujarat. The objective is to i) understand and document the morbidity profile, ii) examine utilisation of health services, and iii) estimate approximate expenses on health care by the rural households.

The findings indicate relatively poor health status among rural population. The study finds significant incidence of morbidity among the households. Public health facilities appear inadequate to provide reasonable health care and because of it reliance is more on the private health services. Cost of treatment was perceived to be high by the people. Significant proportion of household reported incurring debt to manage the expenses for the treatment of major health problems. It deters people to seek appropriate treatment. Women are the worst affected and they tend to downplay or neglect their health problems for long. Thus there is an urgent need to reorient the state's priorities towards health with better manpower, infrastructure and commitment to improve the quality of life of the rural mass.

: **I1**, **I12**, **I18**

JEL Classification Key Words

Rural health services, Primary Health Centre, Sub Centres, Morbidity, Major illness, Minor illness, Out of pocket expenditure on health, Mobilisation of finance.

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Rural Health Services at Cross-Roads: Insights from Gujarat Ratnawali*

Introduction

India is emerging as a global economic power with relatively low health status among its population. With 17 per cent global population, it has disproportionate burden of 23 per cent child deaths, 20 per cent maternal deaths, 26 per cent childhood vaccine preventable diseases, 30 per cent TB cases and 68 per cent leprosy cases (Chowdhary, 2004). Wide stratification in its population in terms of social groups, income and spatial location leads to differential access to rural-urban and public and private health services. Though the situation appears to have improved over a period of time, as is reflected in some health indicators, the country still ranks below many of its neighbours (UNDP, 2007). Government of India had accepted revolutionary recommendations of the Bhore Committee(Government of India, 1946) on health care in the early years after independence. If these recommendations had been implemented in letter and spirit, the country's health index would have been fairly good. Unfortunately, we appear lost as facilities in the rural areas and commitment of functionaries lag far behind the expectations. The Bhore Committee had strongly argued for public spending in the health infrastructure and its concern was expressed thus. "No individual should fail to secure adequate medical care because of inability to pay for it". The Committee had recommended setting up of primary health care units with active cooperation by the people and establishment of health committees in every village. However, the progress in this respect remained tardy despite recommendations made by Mudaliar committee(Government of India, 1962) and Kartar Singh Committee (Government of India, 1972).

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A substantial allocation to public sector was made during the sixth plan period to achieve the objective of Alma Atta Declaration (1978) which envisaged 'Health for All' by AD 2000 by improving the access and strengthening the primary health care services. The major achievement in health infrastructure was reflected in three tier provisioning of health care. Presently, there is one Sub Centres for a population of 5000, a Primary Health Centres (PHC) for a population of 30,000 and a Community Health Centre (CHC) for a population of 1,00,000. At present the country has 1,42,655 Sub Centres, 23,109 PHCs and 3,222 CHCs (Government of India, 2005). The performance in terms of developing health infrastructure is moderately good. However, people access these facilities to a limited extent and delivery of health services through these facilities is yet to help in achieving optimum health standards.

Though some of the health parameters like life expectancy at birth, infant mortality, death rate etc. have improved over the years; burden of diseases even today appears very high compared to other low and middle income economies. The DALY's lost per 1000 population is 274 in India which is much higher when compared to low and middle income countries (Misra, Chatterjee and Sujatha Rao, 2003). A little over half of the diseases still belong to communicable disease category which can be effectively cured with a proper health care system. An increasing trend of morbidity including acute as well as chronic illness among rural (55%) and urban (54%) population has been reported by NSSO (52nd round, 1998). It is important to note that 16 per cent among the rural population does not take any treatment because of financial reasons. Ironically four fifth of the service seekers take treatment from private health services while public services are disproportionately utilised by the better offs (ibid). However, Srinivas & Mohanty (2004) while examining the NFHS II (IIPS, 2001) data on the basis of the deprivation level of the population, found that public services are utilised more by the most deprived section of the society though its use varies with the quality and management of the service. But it too, finds an increasing use of private health services across all income groups in the country. Studies have shown that a third of in-patient and three fourths of outpatients utilise private health facilities (Duggal and Amin, 1989; NSSO, 1986-87). Out of pocket expenditure is thus single largest component of health expenditure entailing highest proportion to be spent on drugs (Garg and Karan, 2005).

The rural population suffers great disadvantage as the health infrastructure is markedly poor in these areas. The ministry of Health and Family Welfare (Annual Report, 2001), has reported a shortfall of 13.84 per cent Sub Centres, 17.04 per cent PHCs and a whopping 51.3 per cent CHCs in the country. Out of the existing Sub centres just 50 per cent have their own building while for PHCs and CHCs the proportion is 84 and 85 per cent respectively. Rural urban differential in access and availability of health facilities is evidenced by the fact that urban areas have 4.48 hospitals, 6.16 dispensaries and 308 beds per lakh population whereas rural areas have 0.77 hospitals, 1.37 dispensaries, 3.2 PHCs and 44 beds per lakh population (Gangolli, Duggal and Shukla, 2005). A shortfall in the requirement of personnel further impoverishes the existing facilities.

One of the reasons for the inadequacy of health infrastructure in rural areas is low public expenditure in relation to the country's GDP. During most of the times less than 1 per cent of GDP has been spent on public health sector which is lower to low- income countries (1%) and even to sub-Saharan Africa (1.7%) (World Bank, 2000) In India a declining trend is observed from 1991-2002 in the pattern of public health expenditure for the states which reflects the decreasing priority given to public health. The private health expenditure during the same period rose to 10.88 per cent per annum in real terms whereas per capita income registered a growth of 3.76 per cent revealing a much higher growth for private health spending (Bhat and Jain, 2006). Thus low public health spending and poor infrastructure seems to have turned away a number of potential users and pushed them to seek services from private providers, considerably increasing

the cost on health. Moreover, the hospitalisation cost which in the private sector of a rural area is 2.5 times higher to public sector, leave rural poor to spend higher portion of their income on health, bearing high financial burden (Gumber, 1994; Gumber and Berman, 1995).

The health status of people in Gujarat is not very different compared to other economically poor states. Hirway and Mahadevia (2004) report that compared to the growth in its economy, the state has not recorded good health status. Gujarat has good health infrastructure compared to the country as a whole. But it lacks provision of appropriate health delivery service making little material difference to the quality of life of the people (Rajaram, Kotecha, Kanani, Joshi, Mani, Shah, Sengupta, Palkar, Joshi, Ghanekar, and Zararia 1999). As the growth of private sector health facilities is higher than the public sectors in the state, sizable proportion of people depend on them incurring substantial expenditure on their treatment (Visaria and Gumber, 1992; FRSH, 1997; Duggal, 2000). The consequences have far reaching implications for the rural population as out of pocket expenditure on health drives 647,264 rural people to go down the poverty line (Garg and Karan, 2005).

In the above context this paper aims to review the rural public health care system in Gujarat and report findings on morbidity, treatment seeking behaviour and expenses on health by the rural households. It is based on a study conducted in some of the selected villages of Bharuch district during 2006-07. In section I, an attempt has been made to describe in some detail rural health infrastructure in Gujarat. In this section, major health indicators for Gujarat and changes over a period of time have also been observed. In Section II, methodology, study area and details about socio economic profile of the selected villages are presented. In section III, health problems, health service seeking behaviour and expenses on treatment among sample households are analysed. In section IV issues relating to public health services delivery systems and private cost of health services incurred by the people are analysed.

Health situation in Gujarat

Gujarat has recorded very good economic growth especially after 1990, but has lagged behind in attaining proportionate development in health. In Human Development Measure (HDM-1) index it stands at sixth position in income ranking but slides down to the ninth position in health status among major states of India (Hirway and Mahadevia, 2004). From the fourth plan onwards the state has shown greater zeal for population control measure hence allocation of resources to public health measures like control of communicable diseases took a secondary position (lyengar and Bhargava, 1987). Studies have found that public expenditure on health as percentage of GSDP has also declined over the years (Bhat and Jain, 2006; Shah 2000). Budgetary allocation to health sector from eighth to tenth plan period shows little change in percentage allocation to health sector in general; however, proportion allocated to the total social sector has reduced during these plan periods (Table 1). Focus of social development therefore seems to have moved further away from the health issues.

Table 1

Budget Allocation to Health in Different Plan Periods (Gujarat)

Allocation	8 th Plan(1992-97)	9 th Plan (1997-02)	10 th Plan (2002-07)
Total Budget	1150000	2800000	4700000
Outlay (in lakhs			
Rs.)			
Social sector	225540	960885	1772700
As % to total	19.6	34.3	37.7
budget			
Health	24200	83225	116616*
As % to total	2.1	3.0	2.5
budget	10.7	8.6	6.5
As % to social			
sector			

Source: Statistical Abstract of Gujarat State-2006. *Health Information of India-2005

The data on the growth of health infrastructure is presented in Table 2. As is obvious from the table, the infrastructure continued to register growth with a major improvement during the 7th plan period. Phenomenal growth of CHCs during this period reflects that more attention was paid to improve the referral services hence CHC grew by 5.5 times. It should be worthwhile to mention that more than 50 per cent of the sub centres during the 6th plan were Family Welfare centres expected to cater to the needs of family planning services (Iyengar and Bhargava, 1987). The Sub centres though ceased to grow after eighth plan, yet except for CHCs, they remained within the population norms¹ expected to be catered by them. However, considering the norms laid for tribal areas, the facilities in the rural areas are less than sufficient as the provisional figures for the short falls in the tribal areas are to the tune of 79, 15 and 15 for SCs, PHCs and CHCs respectively (Government of India, 2005).

Table-2

Growth of Health Infrastructure in Gujarat during Different Plan Periods

Infrastructure	6 th plan	7 th plan	8 th plan	9 th plan	2004
No. of CHCs	22	143	185	252	271
*Pop.per CHC	-	-	-	1,28,496.03	1,22,258.3
No. of PHCs	310	842	960	1032	1070
*Pop.per PHC	-	-	-	31,376.9	30,964.4
No. of SCs	4869	6834	7274	7274	7274
*Pop. per SC	-	-	-	4,451.6	4,554.8

Source: Health Information of India 2005. Figures as reported for the end of the plan period.

^{*} computed from the rural population for the respective year.

¹ Population norm for SC, PHC and CHC in general area are 5000, 30,000 and 1,20,000 respectively but in tribal/hilly areas it is 3000, 20,000 and 80,000 respectively.

It can be said that the health infrastructure has increased over a period of time but not enough to cover the tribal population adequately as per the norms. If more allocation was made in the sector during IX and X Plans, perhaps the shortfalls could have been covered reasonably.

Table 3 illustrates the distribution of public health facilities in Gujarat. Unlike the all India situation, the rural areas of Gujarat, project better health infrastructure as 70 per cent of the facilities are located in rural areas. It should be noted that the number of allopathic institutions mentioned in the table is inclusive of PHCs which in itself makes for 1070 (Table 2) and offer only primary health care. Thus in actuality the proportion of secondary and tertiary health care facilities is fewer in the rural areas. Distribution of beds in rural and urban areas further vindicates this view. Availability of beds in the rural areas is a mere fifty percent of the urban area though the rural population constitutes a little over 62 per cent of the state's population. Considering the overall health facilities (public and private) the disparities between rural and urban areas are far more pronounced (FRHS, 1997; Mahadevia, 2002) and have registered a declining trend in the rural areas over the years (Gangolli, Duggal and Shukla, 2005).

Table 3
Health Infrastructure in Rural and Urban Gujarat

Infrastructure	Location	Year			
		2002-03	2003-04	2004-05	2005-06
Allopathic institutions	Rural	1368	1385	1387	1390
inclusive of hospitals,		(77.0)	(79.2)	(78.8)	(79.2)
PHCs, Dispensaries and	Urban	387	362	371	363
other)F		(33.0)	(20.7)	(21.1)	(20.7)
Population served	Rural	23740	22918	24093	24093
/institution.	Urban	50807	52294	55649	55649
Availability of beds	Rural	17728	18373	18421	18600
		(43.26)	(45.45)	(45.46)	(45.38)
	Urban	23211	22046	22096	22376
		(56.6)	(54.54)	(54.53)	(54.59)
Distribution of bed per lakh	Rural	54.0	55.4	55.0	54.9
population*	Urban	115	106.6	104.5	103.4

Note: Figures in the parentheses reflect percentage. **Source:** Statistical Abstract of Gujarat State 2006.

^{*} Population as mentioned in Socio Economic Review, Gujarat State 2006-07.

Since village infrastructure in general and health facilities in particular, significantly influences the prevalence of morbidity and choice of health care services (Duraisamy, 2001), location bias in the establishment of high order health facilities in the urban areas makes it difficult for people in rural areas to have access to specialists and quality public health services nearer to their habitation. Such limitations besides impacting the utilisation pattern negatively, also affect the health status.

Apart from the physical access to facilities, the availability of health personnel and quality of health service too plays a decisive role in the utilisation of these facilities (Visaria and Gumber, 1992). The requirement of skilled health personnel in rural Gujarat suffers from severe limitations even when compared with the nation as a whole (Table-4). At all position of health functionaries there is a shortage of skilled personnel which is as high as 88 per cent for the specialists and nearly 70 per cent for the Male Health Workers. Besides a stark shortage of lab technicians and pharmacists it also lags behind in position of doctors at PHCs which is a basic requirement for functioning of PHCs.

Table 4
Status of Health Personnel in India and Gujarat

Manpower		India#							
	Required (R)	Sanctioned (S)	In position (P)	Vacant (S-P)	Shortfall (R-P) *				
Doctors a PHCs	23109	24549	21974	2679	1135 (4.9)				
Specialists a CHC	12888	7061	3953	2621	8935 (69.3)				
ANM	165764	146852	138906	7982	26852 (16.2)				
MHW	142655	83339	60756	22618	81899 (57.4)				
Lab technicians	26331	14755	12553	2208	13778 (52.3)				
Pharmacists	26331	19930	17741	2198	8590 (32.6)				

continued....

Manpower		Gujarat							
	Required (R)	Sanctioned (S)	In position (P)	Vacant (S-P)	Shortfall (R-P) *				
Doctors at PHCs	1070	1070	912	158	158 (14.7)				
Specialists at CHC	1084	324	122	202	962 (88.7)				
ANM	8344	7274	6650	624	1694 (20.30)				
MHW	7274	5405	2389	3016	4885 (67.15)				
Lab technicians	1341	1357	1025	332	316 (23.56)				
Pharmacists	1341	1413	1022	391	391 (29.1)				

Note: # Figures are provisional as many states have not provided data under specific heads. It is also perhaps the reason that data in the column(S-P) do not match with actual figures given in the respective column.

Source: Health Information of India-2005(tables 7.12 and 7.13)

The situation worsens when it is met with unequal distribution and absenteeism of personnel coupled with the shortage of consumables and drugs at times. The likely impact is high morbidity and mortality in the rural areas which are reflected in the overall poor health status of the population. From Table 5, one can assess the differentials between rural and urban health. It can be seen that figures are generally poor on all the health parameters in the rural areas but are particularly bad for the infant and maternal mortality rates which are important indicators for public health measures.

^{*} computed as actual differences. Figures in brackets are percentages.

Table 5
Selected Health Indicators for Rural and Urban Gujarat

Health indicators	Total	Rural	Urban
Infant mortality rate (SRS-2001)	60	67	42
Maternal mortality rate (2000-based on Civil	0.49	0.58	0.40
Registration System-Directorate of Economics			
and Statistics, Gujarat)			
Crude death rate (SRS-2001)	7.8	8.8	5.6
Prevalence of serious communicable diseases	-	21.0	18.8
(Sundar 1995			
Morbidity rate per '000 population (Sundar 1995)	-	75.8	84.3
Severly underweight children (NFHS 3 2005-06)	16.3	18.5	12.6
% of Women with BMI below 18.5kg/m2 (IIPS	37.0	47.7	22.8
&MEASSURES-2001)			
Anaemia among women NFHS 2 (1998-1999)	46.3	51.3	39.5
NFHS 3 (2005-06)	55.5	58.7	50.9
Malaria/1,00,000 NFHS 1 (1993)	2640	3540	2640
NFHS 2 (1998-99)	4449	5199	3378
Tuberculosis /1,00,000 NFHS 1 (1993)	310	390	150
NFHS 2 (1998-99)	438	550	279
NFHS 3 (2005-06)	538	566	497

Comparing data from NFHS-I (IIPS 1995) and NFHS-2 (IIPS 2001), Hirway and Mahadevia (2004) have observed a sharp decline in urban IMR(Infant Mortality Rate) because of deceleration in Neo Natal Mortality (NNM) and Post Neonatal Mortality (PNNM) where as the opposite trend is observed for rural areas during the same time period. An increasing trend in the prevalence of anaemia, Malaria and Tuberculosis in general and in the rural areas in particular is again evident in all the three NFHS surveys. The state thus needs to show strong commitment to purge it off the spatial and economic disparity to provide equitable access to health care for its entire population alike.

Methodology and the Study Area:

Bharuch is one of the leading industrial districts of Gujarat and is located in the southern part of the state. A hub of industrial establishments like Videocon, Gujarat Narmada Fertiliser Corporation (GNFC), ABC Ball Bearings Ltd, Gujarat Paguthan Energy Corporation Pvt. Ltd. (GPEC) and other establishments pertaining to chemicals, dyes, metal and machinery dots the landscape of the city. While the industries have boosted the growth and development of the city, it has also contributed to the pollution, making it one of the heavily polluted (air and water) regions of the country. The villages under study fall within the Bharuch taluka and were close to the Bharuch city.

2.1 Methodology:

All the ten villages selected for the study were within a distance of 9-25 km. from Bharuch city. Selection of villages was purposive as villages were assigned to us by the sponsoring agency which was their proposed area of operation. After enumerating all the households in the villages, a random sample for each village was drawn from the following five strata

- 1. No land holdings
- 2. Land holders with 0.1 to 2.49 Acres of land
- 3. Land holders with 2.5 to 4.99 Acres of land
- 4. Land holders with 5.0 to 9.99 Acres of land
- Land holders with 10 acres or more land.

From each stratum 10 per cent of the households were randomly selected for each of the villages for detailed study. However, due to various strata and the rounding up of the decimal figures, the proportion of the selected households went a little higher (13.3%). Thus altogether 404 households were selected from a universe of 3030 households. A structured schedule was administered to the

selected households where questions were asked to the head of the family but were requested to consult with the woman member of the household when the inquiry pertained to morbidity status of the household. For the questions on reproductive health women in the age group of 15- 49 years were interviewed separately.

Though, sample was drawn on the basis of land holdings, its use in further analysis was found to be limited because the incomes of the households within each of the stratum were not comparable. Thus even under 'no land holding' category the monthly income ranged from no income to more than Rs.15,000. Hence caste and income groups were chosen as categories to reflect on the social and economic status while analysing morbidity pattern, expenditure on health and treatment seeking behaviour.

Reporting of Morbidity:

Data on morbidity was collected by recording illness as perceived by the people. Accordingly, illnesses were categorised as Major and Minor depending upon the duration of illness, expenditure and functional disability experienced by the people (details are discussed in section III). Though, such categorisation is likely to give subjective view of illness, nonetheless, they are significant in understanding the severity of illness as conceived by people and the remedial measures sought thereafter.

2.2 Socio Economic profile of the study area:

As mentioned earlier all the villages were close to Bharuch city within a distance of 9 to 25 kilometres. Area, population and household sizes of the studied villages are given below (Table 6).

Table 6
Area and population by Village

Name of the		Population		*Number of	Household
village	Male	Female	Total	Households	size
Aldar	982	985	1967	440 (53)	4.47
Bori	375	325	700	144 (22)	4.86
Hingalla	839	796	1635	306 (42)	5.34
Kasad	529	479	1008	210 (32)	4.80
Kothi	1245	1304	2549	447 (53)	5.70
Kuvadar	421	413	834	182 (32)	4.58
Mahudhala	524	513	1037	200 (30)	5.18
Paguthan	817	814	1631	318 (42)	5.12
Tralsa	1422	1388	2810	623 (70)	4.51
Tralsi	373	357	730	160 (28)	4.56
Total villages	7527	7374	14901	3030 (404)	4.91

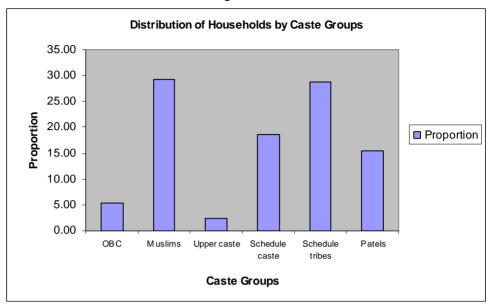
Note: * figures in the bracket are number of sampled households.

In accordance to the methodology discussed earlier, a total of 404 households were sampled out from a universe of 3030 households for the detailed study. The composition of caste groups as per their proportion across the villages is presented in the figure 1. Among the six caste groups, around one third of all households were shared by Muslims and Scheduled Tribes each, followed by Schedule Castes, Patels², OBCs and other upper castes.

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² Patels being the predominant caste group with distinct socioeconomic status among the upper castes across the villages, are therefore, preferred to be treated as a separate group in the study.

Figure 1



The literacy rate across the villages was high. It was 79.39 per cent. Male and female literacy rates were 85.9 and 70.66 respectively. Scheduled castes (SC) and Scheduled Tribes (ST) lagged behind in literacy as more than 40 per cent of them were illiterates.

Land distribution pattern revealed that nearly 65 per cent of the households did not posses any land. Among them Scheduled Tribes (91%), Scheduled Caste (70%), and Muslims (67%) comprised a major proportion. Patels were the biggest land holding caste as little over 57 per cent of them owned more than 5 acres of land across the villages. Table 7 contains detail.

Table 7
Land holding pattern by Caste Groups

Caste	Total		L	and Holdi	ings in A	cre	Total Households
Groups	Population	No land (No. of HH)	.01– 2.49 (No. of HH)	2.5- 4.99 (No. of HH)	5.0- 9.99 (No. of HH)	10 and above (No. of HH)	(100.0 %)
SC	369	53	12	4	2	4	75
		(70.6)	(16.0)	(5.3)	(2.6)	(5.3)	
ST	531	105 (90.5)	8 (6.8)	3 (2.5)	0	0	116
OBC	101	12 (54.5)	4 (18.18)	2 (9.09)	3 (13.6)	1 (4.50)	22
Upper Caste	50	5 (50.0)	0	4 (40.0)	1 (10.0)	0	10
Muslims	604	81 (68.6)	11 (9.32)	12 (10.16)	8 (6.7)	6 (5.08)	118
Patel	286	10 (15.9)	7 (11.1)	10 (15.9)	15 (23.8)	21 (33.3)	63
Total	1941	266 (65.8)	42 (10.3)	35 (8.6)	29 (7.2)	32 (7.9)	404

Figures in the parentheses are percentage.

A variety of economic activities were pursued by the people, which included cultivation, shop keeping, servicing and other business activities. However, nearly half (51%) of the households were earning their livelihood by working as agricultural or daily wage labourers. Corroborating the land holding structure, a sizeable proportion among them belonged to Schedule Caste and ST population. Cultivators constituted 20 per cent of the total households. They predominantly comprised of Patels, followed by Muslims (Table 8).

Table -8
Distribution of Households across the Village by Occupation

Occupation	Overall	Caste wise proportion across the village				
Category	proportion	SC	ST	Muslims	Patel	
	across the village					
Cultivators	21.58	16.28	2.5	27.6	62.2	
Agriculture Labour +	51.92	65.6	87.6	26.8	10.7	
Daily Wage						
Petty Trade	12.92	4.3	3.9	30.6	4.0	
Job	5.85	3.0	2.3	9.5	10.7	
Other *	3.88	5.95	3.2	1.6	6.6	
Combined occupation	3.85	4.67	2.1	2.9	4.9	
Total	100.0	100.0	100.0	100.0	100.0	

^{*} Others include pensioners, unemployed, physically and mentally challenged people and persons with no definite occupation and highly irregular income.

Trade and service sector, again show greater presence of Muslims and Patels in comparison to other caste groups. Less than five per cent of the population depends upon more than one occupation (combined) and it appears to find little favour among all caste groups across the villages.

The occupational structure seems to be closely associated with inter and intra caste differential in monthly income. A vast majority (70%) of the households subsist on income less than or equal to Rs. 3000/per month. Castewise, nearly 80 per cent STs and Muslims and 66 per cent SCs belong to this group, whereas Patels with greater landholdings are also, better off in terms of average monthly income. Thus a little over 30 per cent Patels belong to the category of monthly income of more than Rs.6000 (Table 9).

Table 9

Monthly Household Income by Caste Groups

Caste	Report ed no Income	Up to Rs.1500 (Mean- 1056.22 SD- 376.6	Rs.1501- 3000 (Mean- 2387.7 SD- 452.8)	Rs.3001- 6000 (Mean- 4450.7 SD- 770.7)	Rs.6001- 10000 (Mean- 8587.1 SD- 1366.2)	More than 10000 (Mean18092.4, SD- 6292.41)	Total house holds
SC	1	16	33	14	6	5	75
	(1.4)	(21.6)	(44.0)	(18.9)	(8.1)	(6.6)	(100)
OBC	_	7	8	2	2	3	22
		(31.8)	(36.4)	(9.1)	(9.1)	(13.6)	(100)
Upper	_	2	5	3	_	_	10
Caste		(20.0)	(50.0)	(30.0)			(100)
ST	2	33	56	19	6	_	116
	(1.7)	(28.7)	(48.7)	(16.5)	(5.0)		(100)
Muslim	13*	47	28	19	7	4	118
	(11.0)	(39.8)	(23.7)	(16.1)	(5.9)	(3.4)	(100)
Patel	1	15	13	14	11	9	63
	(1.6)	(23.8)	(20.6)	(22.2)	(17.5)	(14.2)	(100)
	17	120	142	71	31	21	404
Total	(4.2)	(29.9)	(35.3)	(17.7)	(7.7)	(5.2)	(100)

^{*} Data should be seen with caution as most Muslim households with pensions or those living on bank savings did not disclose their income and reported themselves as not having any income.

Though data on income in general, suffers with some limitations, some general observations about the economic status of the population were made on the basis of our field observation and interaction with the people. It was observed that more than half of the population was reportedly engaged as wage labour. Their income levels suggest that most of them belong to low income groups. This was more pronounced in the case of socially disadvantaged communities belonging to Scheduled Castes and Scheduled Tribes.

Morbidity and their Management:

Estimation of morbidity in this section is based on perceived illness as reported by respondents. Though this measure is arguably difficult to render comparison for their subjectivity and cultural conditioning that varies over time and space (Johannson, 1991; Vaidyanathan, 1995), nevertheless, they provide useful insight into the state of health as experienced by the population. Health being a complete social, physical and mental well being (WHO), perception of illness thus does reflect the morbid status and has been extensively used in the surveys (NSSO, NCAER).

The morbidity status was ascertained through the perception of people in the study area which was duly categorized into *Moti Mandgi* (Major illness) and *Nani Mandgi* (Minor illness) depending upon the duration of illness, expenditure and disruption in the normal work routine of the people (functional disability). Such categorization restricts the use of the terms like acute, chronic or catastrophic illness to identify the severity or seriousness of the problem from the people's perspective. Notwithstanding the objectivity in the former approach, the criteria for the morbidity in this study preferred to adopt the classification of illness as understood by the people³. The health problems thus were referred and defined as follows.

Major illness – Those problems that continued for longer periods (normally perceived as more than 6 days), entailed considerable expenditure and had substantially disrupted the work routine of the individual.

³ Though categorized into major and minor health problems, we observed that health problems like scabies, leucoderma and mental disorders were not at all reported by the people even if their presence were noted in the population. It thus appears that illnesses that do not bring in much physical discomfort do not warrant people's attention and is accepted as normal.

Minor illness – These were the illnesses that were lower in magnitude on all the parameters mentioned above. Thus they did not cause much discomfort in the routine life, continued for a shorter duration (1-4 days) and the amount of expenditure on illness was very less compared to major illness.

3.1 Status of Morbidity: *Major illness:*

As per the above definition the major health problems were identified as long drawn illnesses that continued for considerable period and had incurred sizeable expenditure. Recall period for major illness was one year⁴. Altogether 185 persons or 9.5 per cent of the total population experienced at least one major health problem during the reference period. Around 40 per cent of the households reported incidence of one major illness whereas nearly 4 per cent reported recurrence of such an illness in the year prior to the survey. However, for analyzing the details like treatment and expenditure, only the recently occurred episodes of illness have been taken into account to ensure greater accuracy in recalling by the people. Table 10 presents some of the major illnesses that were reported by more than 5 per cent of the households across the villages. Arthritis (10.5%) and respiratory problems (9.9%) such as Asthma, Bronchitis, shortness of breath and difficulty in breathing were reported in highest proportion. Nearly 9 per cent have undergone surgeries related with eye, appendix and stone in Kidney. Cough and fever⁵ as well as sepsis in wound, too did find mention in major illness category as they staved longer and led to reasonable expenditure.

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⁴ To facilitate the recall, festival of Holi was taken as the reference period which coincided with the one year time as the survey was conducted during March-june 2006

⁵ According to my conversation with the doctors practicing in the area, these fevers could have been due to malaria since it was frequent in those localities. However, none of the respondents identified it as such.

Table 10

Major Illnesses across Various Caste Groups

Major Iliness (self	Major Caste Groups							T	otal			
reported)	sc		ST		Mu	Muslims		Patels		Others#		
	No. of HH (75)	No. of people (369)	No. of HH (116)	No. of people (531)	No. of HH (118)	No. of people (604)	No. of HH (63)	No. of people (286)	No. of HH (32)	No. of people (151)	No. of HH (404)	No. of people (1941)
Surgery	5	5	2	2	5	6	4	6	0	0	16	19
Cough and Fever	4	5	3	3	3	4	0	0	3	3	13	15
Diabetes	1	1	1	1	7	9	2	3	0	0	11	14
Tuberculosis	1	1	2	2	6	6	3	3	0	0	12	12
Respirator-y problems	2	3	6	6	1	1	5	5	2	4	16	19
Heart problem	2	2	0	0	5	6	2	3	1	1	10	12
Arthritis	2	4	4	6	6	7	4	5	1	1	17	23
Abdominal Problem	3	3	2	2	3	3	0	0	3	3	11	11
Sepsis	3	3	3	4	3	4	0	0	2	2	12	14
Other problems*	7	8	14	14	10	13	6	6	6	6	43	46
Total reported problem	30	35	37	40	50	60	26	31	18	20	161	185
column% of total reported prob.	40.0	9.5	31.9	7.5	42.4	9.9	41.3	10.8	56.3	13.2	39.8	9.5
Row % of total reported prob.	18.6	18.9	23.0	21.6	31.0	32.4	16.1	16.7	11.2	13.2	100.0	100.0

[#] It includes OBC and Upper caste groups.

The overall status of the reported cases in the major illness category reveals that there is a likelihood of high morbidity in the population as only 38 per cent reported to be cured of disease whereas around 19 per cent reported the recurrence of the problem after discontinuation of the medicine. Nearly 44 per cent were continuing with the problem at the time of survey. The life style diseases like Diabetes was more prevalent (nearly 64 per cent) among upper income group (>= Rs.6000), while Tuberculosis, an infectious disease was high (83%) in the lower income group earning Rs. 3000/- or less per month. It thus corroborate the findings of NCAER (Shariff, 1999) and NFHS-III

^{*} Other problems include Blood pressure, Migraine, Jaundice, Accident, Fracture, ENT problems, Cancer, Convulsion, Typhoid, Pneumonia and severe weakness (anaemia).

(IIPS, 2007) which have also recorded a high prevalence of diabetes in highest wealth quintile while tuberculosis was found high in the lowest wealth quintile and households using solid fuel⁶ which is a common feature in the low income households.

Minor Illness

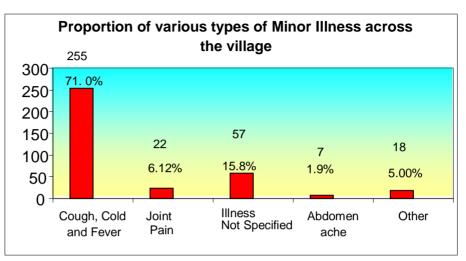
The category of minor illness comprised of those problems that were experienced frequently but did not cripple the routine working of the people. Almost 90 per cent households reported some type of minor health problem in six months⁷ preceding the survey. High prevalence of communicable diseases could be discerned by the fact that coughs, cold and fever were mentioned in 71 per cent of all reported cases across the village (figure 2). Reporting of the problem was not very good as around 16 per cent of the respondents could not specify the illness but loosely used the term 'common problems' for the incidence like dysentery, headache, vomiting and body ache; signifying frequent occurrence of such problems in the population. Pain in knee and joints figured in 6 per cent of the reported cases. Twelve per cent of the total households had not experienced any illness in the last six months. However, as we have observed that some of the problems like scabies, leucoderma and mental disorders were not even mentioned despite their presence in the population; one can assume that illnesses were of much higher occurrence than was reported in the population.

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⁶ Solid fuel includes coal, charcoal, wood, straw/shrub/grass, crop waste and dung cake (NFHS-III).

⁷ We found that people were more forthcoming and comfortable in answering the frequency of minor illness when asked in a longer time perspective i.e six month rather than one month time period. Therefore the festival of Diwali which had been celebrated six months prior to the survey was considered the set off point for people to recall the frequency of illness since then. Though there is a likelihood of under and over reporting in the longer recall period, it does project the health status prevailing in the population.

Figure 2



Note: Others include pain in teeth and ear, boils and swellings in tonsils, hand and leg.

Data on morbidity thus reflect a higher proportion (9.5%) of major illness among the studied population than is reported by NCAER (Shariff, 1999) and NSSO (1998) survey for the state of Gujarat. While the NCAER recorded 2.5 per cent prevalence in case of major illness and 5.7 per cent for short duration illness for Gujarat as a whole, the NSSO figures reported 4.2 per cent for acute illness and 1.3 per cent for chronic illness with an aggregate of 5.5 per cent in rural Gujarat. Though differing in the reference period from the above surveys, the prevalence of morbidity seems to be relatively higher in the population.

3.2 Average Sick Days in Major and Minor Illness:

Average sick days per incidence was 6.8 for major illness and 3.8 days for minor illness. Occurrence of minor illness being high in the study area, it was found that households were exposed to such incidence for more than five times in six months. Thus overall sick days for minor illness came to about forty three days in a year⁸. It therefore appears that the high morbidity, besides affecting mental

⁸ Average sick day per minor illness was calculated as 3.8 and total incidence of sickness was 5.59 in six months.

and physical well-being of the people, also tends to result in the loss of income due to absence at work. The impact is likely to be felt more by the wage earners across the village.

3.3 Provision of Health Facilities:

The public as well as private health services were available to people, though they differed in their access. Visibility of private health service providers were more pronounced compared to public health facility.

Public Health Care Facilities

The public health facilities in the area included one Primary Health Centre (PHC) and three Sub Centers. One of the Sub Centres (SC) was found to function from a vacant quarter located within the PHC campus. Thus for all practical purposes the SC and PHC were identified as single entity by the people and the importance of SC as an outreach post was severely compromised. The other two Sub Centers opened only on immunization day and remained closed for all other services.

The PHC served the health requirements of 40,525 people in 20 villages and has well-maintained staff quarters. PHC had its own building and was equipped with labour room and adequate facilities for conducting deliveries. It was mentioned by an ANM that the complicated cases were referred to Bharuch Civil Hospital. We however, did not collect specific information on the role of CHC in this regard. There was no ambulance⁹ and patients had to make their own arrangement for transportation if condition was critical. At times, during emergency it became difficult for the people to look for a private vehicle, especially those belonging to low income group.

For the past one year there had not been a regular Medical Officer¹⁰ (MO) at the PHC but the MO of another PHC was given the charge of

⁹ The emergency service '108' was not introduced in Gujarat during the survey period.

¹⁰ Lately, a woman medical officer was appointed at the PHC.

this PHC as well. Hence, visit of doctor was irregular and often people had to return after waiting for the doctor for a considerable time. The other staff members included six FHWs, six MHWs, Pharmacist, lab technician, Ayah and Driver. The post of supervisor was lying vacant and pharmacist and lab technician had to undertake deputation work at other PHCs also, for two and four days respectively. It not only burdened the staff but was also a hindrance to the smooth functioning of the PHC.

The medicines and other laboratory materials like reagent and equipments were well in place. Sputum, hemoglobin and urine tests were done in the PHC. Blood slides were collected by MHWs and FHWs for suspected cases of malaria. However, diagnostic facilities for RTI/STI and MTP were not available. On every Monday, Ante natal checkup was taken up and Wednesday was earmarked for vaccination. Once a month, women desiring to undergo sterilization operation were taken to the civil hospital as PHC did not conduct this operation. The absence of a regular doctor constrained the functioning of the PHC and a nurse or a pharmacist had to dispense medicine on their own. The situation had led to a drop in the visits of the patients as many a times doctor was not available to attend to them. According to the PHC staff, the PHC was more utilized during and after the monsoon as cases of dysentery, vomiting and fever increased during that time. It was at the lowest during summer. On an average 2-3 deliveries were conducted in a month in the PHC, though we failed to register supporting evidence from the surveyed households.

The visit of male and female health workers was reported from all the villages with varying frequency. Visit of FHW appeared to be regular as around 80 per cent of the households confirmed her visit. Again, half of the total households also reported the frequency of her visits at least once in a month whereas others in varying proportion reported her visit for more than once in a month. In sharp contrast to the above

observation, visit by the male health worker received a very low response (28%).

Private Health Facilities:

In three of the ten villages, private doctors were running their clinics and also residing in the same village. Their services were also available to other villages on call. All these practitioners were from allopathic stream but we could not collect detailed information about their qualification and experience. A trust run Mobile dispensary too visits some of the villages once a week. However, some of the interior villages like Bori, Kuvadar, Kasad and Tralsi had limited access to these services. As the township of Bharuch was close by, people from across the villages preferred visiting Bharuch to see a doctor.

3.4 Treatment Seeking Behaviour:

As mentioned earlier, out of a total of 185 cases reported by 161 households, fourteen households reported the frequency of major illness more than once in the reference period. From these households only the recent cases were taken for further analysis to ensure better detailing about the treatment and expenditure incurred by the people. Thus altogether 161 cases, one each from the reported households has been analysed in this section.

The treatment seeking behaviour varied in their preference to health facility with the type of illness, as perceived by the people. In case of a major illness, lower proportion of population accessed government health facility. People preferred and relied more on private doctors and hospitals. Across the village only 19.2 per cent households sought treatment from the nurse and the PHC. More than 70 per cent of them visited private doctors. Nearly 6 per cent went to NGO or Trust operated organization. The finding comes closer to the NFHS-III which also reported that 72.5 per cent households in the state generally do not access public service. A little higher preference for public health facility was found in case of minor illness. Overall, around 80 percent of public service users belonged to lower income

group (<= Rs.3000/-). However, utilization of public health facility remained low in major as well as in minor illness (Table 11)

Table 11
Utilization of Health Service in Major and Minor Illness

Service Providers	Major illness	Minor Illness
Nurse + PHC	31(19.25)	104 (28.9)
Private	115 (71.4)	197 (54.8)
Private + Public.	3 (1.8)	13 (3.60)
Indigenous	2 (1.2)	22 (6.13)
Others*	10 (6.2)	23 (6.40)
Total (HH that reported the problem)	161 (100)	359 (100)

^{*} Includes services provided by the Trusts or NGOs.

The greater dependence on private health facility in the case of major illness implies that public health facilities either lack in specialised treatment required for such illness or people have lost their faith because of poor functioning of the same. It is further affirmed by the responses which revealed the reasons for accessing or not accessing public services (Table 12). A little over 55 per cent of total households did not visit public service for the treatment of any type of ailment. Those who utilised pubic services, (nearly 43 per cent) did so only for minor ailments including immunisation. Around 40 per cent went to them because of availability of free medicine and proximity of the facility to their residence whereas just 18 per cent households felt satisfied with the quality of service and preferred visiting them for their health problems. A large number of households appeared never to have given thought to utilise public services as they could not cite any reason for not visiting them or it would be more correct to infer that public services may not be satisfactory enough to merit their attention. Poor quality, prescribing medicine without adequate checkup, closed PHC and perception about better quality of services in private health facilities were other deterrents.

Table- 12

Reason for Accessing or Not Accessing Public Health Services

Reasons for accessing Public	Total no. of responses	Reasons for not accessing Public	Total no. of responses	
Health Service	and their	Health Service	and their	
	proportion		proportion	
1. Service is good for	76	No reason cited	86	
minor ailments	(42.6)		(38.05)	
2. Access and	58	2. Poor quality of	34	
availability of cost free	(32.6)	medicine	(15.04)	
service including				
medicine				
3. Proximity to home	12	3. Improper health care	37	
	(6.70)	service (Medicine is	(16.37)	
		dispensed without		
		check up)		
4. Services are good	32	4. Closed PHC at the	27	
and effective for all	(17.90)	time of visit.	(11.90)	
kind of problems.				
		5. Quality of service at	42	
		private facility is	(18.58)	
		perceived better.		
Total	178	Total	226	
	(100.0)		(100.0)	

3.5 Expenditure on Treatment:

Illness in the household led to considerable amount of expenditure on the treatment and it varied with the nature and type of service accessed for. Here we are dealing with the expenditure inclusive of direct and indirect cost of treatment. Notwithstanding heavy expenditure for availing private service even the use of public services required certain expenditure that constraint the households. The overall expenditure varied with the nature of illness, being major or minor one.

In case of major illness, the range of expenditure varied from as low as Rs.100/- to as high as Rs. 1,10,000/-. Nearly 10 per cent households had not incurred any expenditure on their illness. Among them, 4.8 percent did not take any treatment whereas rest had

received free treatment either from public service or had been helped by philanthropic organizations or individuals. Around 60 per cent households incurred an expenditure of Rs.100 to 3000 on major illness whereas one-fifth or little over 20 per cent spent more than Rs.10, 000 over the treatment.

The expenditure pattern by castes (Table 13) show that more than half (59.4%) of the STs and around one third (30.3%) of scheduled castes spent around Rs.3000/- over major illness in the last one year, which appears quite high in the light of their low income. A significant proportion of these groups (16% and 36% respectively) had to spend more than Rs.5,000 on major illness. About half of the Muslim and Patel households had incurred the same amount on their major health problem.

Table 13

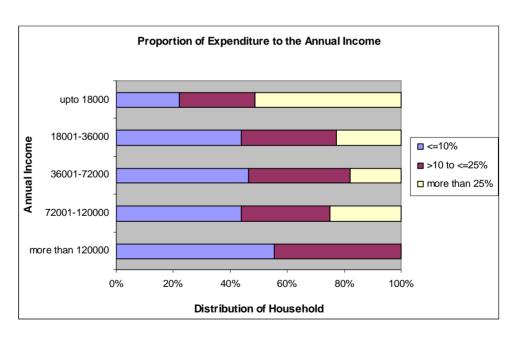
Pattern of Expenditure on Major Illness by Caste

Castes	Expenditure in Rs.							
	No	100-	1501-	3001-	5001-	10001		
	expenditure	1500	3000	5000	10000	&		
						above		
SC	4	5	4	6	5	6	30	
N=75	(13.3)	(16.6)	(13.3)	(20.0)	(16.6)	(20.0)	(100.0)	
ST	4	12	10	5	2	4	37	
N=116	(10.8)	(32.4)	(27.0)	(13.5)	(5.4)	(10.8)	(100.0)	
Muslim	3	6	8	8	10	15	50	
N=118	(6.0)	(12.0)	(16.0)	(16.0)	(20.0)	(30.0)	(100.0)	
Patel	2	4	6	2	5	7	26	
N=63	(7.6)	(15.3)	(23.07)	(7.6)	(19.23)	(26.9)	(100.0)	
Other	2	4	4	2	1	5	18	
castes*	(11.1)	(22.2)	(22.2)	(11.1)	(5.5)	(27.7)	(100.0)	
N=32								
Total	15	31	32	23	23	37	161	
N=404	(9.3)	(19.25)	(19.87)	(14.2)	(14.2)	(22.9)	(100)	

^{*} Other castes include OBC and Upper castes.

Expenditure on health also revealed an inverse relationship with the income groups (figure 3). It was disproportionately high among the households with low income base. Thus a little over half (51%) of the households with annual income less than or equal to Rs.18,000/- had to spend more than 25 per cent of their annual income on major illness whereas the proportional expenditure gradually diminished with the subsequent higher income groups. Thus among the highest income group more than half or 55.5 per cent spent less than or equal to 10 per cent of their annual income on major health problem whereas just 22 per cent from the lowest income group had proportionately similar expenditure. Burden of health therefore seems to be much higher for the lower income group.

Figure-3



Expenditure on minor ailments was much lower compared to major illness and it varied between Rs.100 and Rs.15000/- (Table 14). Just 2 per cent had incurred expenditure above Rs.3000/-. It was found that 21.4 per cent or one in five households did not incur any expenditure. Either they received treatment from public service or had tried indigenous methods. Around 50 per cent spent up to Rs.500/- whereas nearly one third had incurred more than Rs.500/- to Rs. 3000/- in the last 6 months.

Nearly one-third of ST households did not spend any amount on illness, and by proportion they were twice in number as compared to other castes in this category. Similarly, their proportion is lowest or half of the other caste groups in expenditure beyond Rs.500/- making them the lowest paying group, which also reflects their limited ability to spend money on illness.

Table 14
Expenditure in Minor Illness

Castes	Expenditure in Rs.							
	No	1-100	101-500	501-	1001-	3001&	Total	
	expenditure			1000	3000	above		
SC	9	10	23	18	6	1	67	
(NR=3)	(13.4)	(14.9)	(34.3)	(26.8)	(8.9)	(1.49)	(100)	
N=75								
ST	26	8	35	10	3	1	83	
(NR=6)	(31.3)	(9.6)	(42.1)	(12.0)	(3.6)	(1.20)	(100)	
N=116								
Muslim	19	12	40	17	20	4	112	
(NR=5)	(16.9)	(10.7)	(35.7)	(15.17)	(17.8)	(3.57)	(100)	
N=118								
Patel	10	13	15	7	4	2	51	
(NR=1)	(15.8)	(25.4)	(29.4)	(13.7)	(7.8)	(3.92)	(100)	
N=63								
Other	8	5	7	3	4	0	27	
castes	(29.65)	(18.5)	(25.9)	(11.1)	(14.8)		(100)	
(NR=2)								
N=32								
Total	72	48	120	55	37	8	340	
(NR=19)	(21.1)	(14.1)	(35.3)	(16.1)	(10.8)	(2.3)	(100)	
N=404								

Note: N= Total Households, NR= No response (did not respond to the question on expenditure incurred)

3.6 Mobilising Finance for Expenditure on Health:

As expenditure in major illness was high in proportion to the income, it often led people to borrow money to meet health needs. Relatives and neighbours were the main support group to lend money during the crisis but sometimes assets were also mortgaged to mobilise adequate finance to meet the expenses on health. Nearly 3 per cent households had mortgaged their land to raise money while around 40 per cent had resorted to borrowing to meet the health expenditure on a major illness (Table14). It is thus evident that with the rise in health expenditure, an increasing proportion of households slipped into debt.

Table 15
Mobilizing Finance for Expenditure on Major Illness

Expenses on major illness (Rs)	Self	Borrowed	Total
100-1500	24	7	31
	(77.4)	(22.5)	(100)
1501-3000	20	12	32
	(62.5)	(37.5)	(100)
3001-5000	13	10	23
	(56.52)	(43.47)	(100)
5001-10000	13	10	23
	(56.52)	(43.47)	(100)
10001and above	18	19	37
	(48.6)	(51.35)	(100)
All	88	58	146*
	(60.27)	(39.7)	(100)

Source: Field data.

Data on finance mobilization castewise (Table16) shows that borrowing was prevalent among all caste groups with a little higher percentage among STs. Borrowing among them was around 46 per cent as against 40 per cent in other caste groups.

^{*} figure is reported for HHs who have incurred expenditure

Table 16

Mobilization of Finance to Meet Health Expenditure on Major Illness by Caste

Caste	Self	Borrowed	Total
SC	15	11	26
	(57.6)	(42.30)	(100)
ST	18	15	33
	(54.5)	(45.45)	(100)
Muslim	28	19	47
	(59.5)	(40.42)	(100)
Patel	17	7	24
	(70.83)	(29.16)	(100)
Other castes	10	6	16
	(62.5)	(37.5)	(100)
Total	88	58	146
	(60.27)	(39.72)	(100)

Interestingly, services from public facilities too, did not give much respite from borrowing when compared with private facilities for treatment of major illness. Figures from Table 17 reflect that nearly equal proportion of households borrowed money for accessing service either at public or private facilities. One reason could be the low income base of the public service users who, except for the doctor's fee, had to bear the expenditure on drugs and consumables, transportation and related expenses. The NSS 52nd round data too reported that 40.3 % who sought treatment in public sector resorted to borrowing as against 48.5% seeking treatment in private sector. These findings suggest that the purpose of the public health facilities is not served adequately. For people living below poverty line or even above it a single major illness in the family is enough to get them into the debt trap. It would be relevant to recall here that initially the poverty line was drawn assuming that the private and public health expenditure on health and education was nil.

Table 17

Management of Expenses by Visit of Different Health Facilities

Health Facility	Self Managed	Borrowed	Total
Public	18 (62.06)	11 (37.93)	29 (100.0)
Private	68 (60.17)	45 (39.83)	113 (100.0)
NGO/Trust	1 (50.0)	1 (50.0)	2 (100.0)
Public+Private	1 (50.0)	1 (50.0)	2 (100.0)
All	88 (60.27)	58 (39.72)	146 (100.0)

3.7 Health status of women

Morbidity among women is generally found to be higher than men and it is more so among the rural women (NSSO, 1998). Apart from acute and chronic illness, women also suffer from sex specific health problems. In this section the gynecological morbidity among women in the surveyed households are dealt with. From each of the selected households one married woman was separately interviewed. All these women were in the age group of 20- 49 years. In addition, unmarried girls from these households were also interviewed for sex related problems. Thus altogether 404 ever married women and 61 unmarried women in the age group 15-22 years were interviewed for the purpose.

Leucorrhoea, irregular, painful and unusual menstruation, reproductive tract infections, infertility, etc were identified as reproductive health related problems. In the reproductive age group of 15-49 years, about 26 per cent of the respondents or about one in four reported one or other type of problem in the month preceding the survey. Most of the problems were reported in the age group of 25-40 years. Around 12 per cent of unmarried girls between the ages of 15-22 also suffered from menstrual disorders.

Leucorrhoea appeared to be the most common problem as more than 15 per cent women reported this problem. Around 5 and 2 per cent of the respondents mentioned menstrual problems and uterus related problems respectively. Nearly 1 per cent women suffered from other problems which included pain in lower abdomen, breast abscess and

pain around navel. Proportion wise though infertility had little presence, nonetheless its prevalence was noticeable. Based on the present data it is estimated that five in every 1000 women suffers from this disability (Table18).

Table – 18
Status of Gynaecological Morbidity among Women

Reproductive health problem	Number of reported cases	% to total respondents surveyed	% of respondents seeking treatment	% of respondents reporting continuation of problem
Menstrual problem (n=404)	24	5.7	48.0	83.96
Leucorrhoea (n=404)	61	15.09	46.91	55.7
RTI/Uterus related problem (n=404)	7	1.7	28.57	71.42
Infertility (n=404)	2	0.50	100.0	100.0
Other problem (n=404)	4	0.90	25.0	100.0
Problems in unmarried girls (n=61)	7	11.4	28.5	-

The reporting of RTI related problems was significantly low compared with DLHS-II (IIPS, 2006) district level estimates for Gujarat (37.6%) and Bharuch (25.3%). It should be noted that though, such illness is less likely to be reported, nevertheless their prevalence remains high even among the women who have not reported any problem (Bang, Bang, Baitule, Choudhary, Sammarikaddam and Tule, 1989; Bhatia, Cleland, Bhagvan and Rao, 1997). Further, the incidence of RTI or Pelvic Inflammatory Disease was found three times more among women who had reported menstrual problems (Bhatia et al, 1997). The gynaecological morbidity thus could be higher than was reported by the women in the study area.

As regards treatment, medical help was mainly sought for infertility, leucorrhoea and menstrual disorders. Problems like RTI and health needs of unmarried girls received less attention as just one in four women had gone for the treatment. The above table also shows that nearly 54 per cent of married women and a little over 70 per cent of unmarried girls did not take any treatment for their ailments. Overall, four fifth of the total women continued to suffer as recovery was reported in only less than 20 per cent of the women.

In 7-8 per cent of cases, women relied on home remedy. Again, public health facilities were less sought after (15%), as dependence on private heath service providers was almost double. Yet in case of infertility, services of nurse were also sought along with the visit to other providers. Treatment for infertility was most expensive. In two cases average cost of treatment was Rs.1800. Treatment for menstrual disorder was less expensive as the average cost was Rs.80/- only.

The Quality of health service in public facility was also examined. Women generally viewed it as less satisfactory than that of private facilities. Only 21 per cent rated the services of ANM and government doctor as good, whereas private facilities though expensive were rated better. The private service providers were favoured for providing proper attention to the patient. Primary health Centre and health workers were mainly identified with immunization and ANC services. Even in ANC service, the problems or any complications was preferred to be treated by private service providers. Poor women preferred to visit Bharuch civil hospital.

V

Conclusion:

The poor public health care facilities in the country is attributed to a number of reasons which include among others, low priority to sanitation, lack of decentralised planning, over emphasis upon western model of health care neglecting indigenous health care systems and top down policy formulation influenced by foreign donors (Srinivasan). Further low expenditure on preventive health service and higher allocation to secondary and tertiary services diminishes the effectiveness of the primary health care (World Bank, 1995). On the other hand subsidised medical education, easy loans and tax concessions have facilitated the faster growth of private health sector (Baru, 1997).

In the study area high morbidity and higher expenses on health is evident. As more than 50 per cent people earn their livelihood through wage labour and around 66 per cent population subsists on income less than or equal to Rs. 36,000/- per annum, the health related expenditure add an extra burden to their income. The rural population, which was already struggling to meet the cost of food, clothing, and shelter, found it hard to spend on health. Women were worst affected. Besides having general problems, the reproductive health specific problems are no less. More than half of the women with gynecological problems generally avoid visiting doctors. With the poor quality of public health service and high cost of private health care, most of the illnesses remain untreated. Health care system not only entails the curative medical care but covers preventive and promotional services as well. The study clearly points out that occurrence of communicable diseases are higher which also reflect less than satisfactory sanitary condition of habitation. Visits by ANMs were generally confirmed but Male Health Workers were not so regular.

The rural population thus appears to be at the cross-roads. While treatment is unavoidable, for major health problem the cost component of health care exceeds beyond their paying capacity. The options are few. One has to choose between the cost intensive private health care services and get into the debt trap or suffer for want of credible and accessible public service. People choose to spend money at the private clinics rather than remain sick and lose

work and wages. The debt due to health care cost increases stress among the poor. With the neoliberal economic reforms and casualisation of labour, it is feared that the gap between the poor and the rich has widened. Reduction in the share of investment in public health during successive years after 1991, and promotion of private health sector has turned the health service into a commodity available only to those who can pay for it. Its implications are more serious for the rural population.

Health being a public good, it is the government's responsibility to provide adequate facilities. The National Rural Health Mission-2005 is a comprehensive programme which, besides having other objectives, has focus on decentralised planning, integration of vertical and horizontal programmes, appointment of ASHA (Accredited Social Health Activist), strengthening the existing services of PHCs by providing 24 hours service, and public private partnership in achieving Millennium Development Goals. Apart from substantial manpower it also requires additional resources to provide qualitative services. However, if we look into the existing deficit of personnel and resources, and its working at the grassroots it is difficult to believe that the commitments would be translated into reality. While public facilities need to be toned up, the private sector also needs to be regulated. Studies have found that services provided in the private sector do not always improve the standards set for quality care (Baru, 1997). Incorporation of private sector under public private partnership in providing health care should not lead to dilution of state's responsibility. Commenting upon the issue, Srinivasan has argued that NGOs and registered societies can provide support but they may not be a long term alternative for public system as it is likely to weaken the government commitment and obligation. It is further to be that in the Tenth Plan document, government has noted acknowledged the 'Right's perspective' in providing health care. The state's role in making public health available and accessible to its people thus becomes mandatory and obligatory.

References

Bang, R. A., Bang A.T., Baitule M.Y., Chaudhary, Y., Samarikaddam, S. and Tule,O. (1989). High prevalence of gynaecological diseases in rural Indian women. *The Lancet*, *8*,629,1(Jan 14). 85-88.

Baru, V. R. (1997). *Private health sector in India. Social characteristics and trend.* New Delhi: Sage Publication.

Bhat, R. and Jain, N. (2006). Analysis of public and private healthcare expenditure. *Economic and Political Weekly*, XLI (1), 57-67.

Bhatia, J.C, Cleland, J., Bhagvan, L. and Rao, N.S.N. (1997). Level and determinants of gynaecological morbidity in a district of south India. *Studies in Family Planning*, 2 & 3, 95-103.

Chowdhary, J.A., (2004). Health for all in the new millennium. *Health For The Millions*, 30(4 &5), 32-36.

Duggal, R. (2000). *The private health sector in India: Nature, trends, and a critique*. New Delhi: Voluntary Health Association of India.

Duggal, Ravi and Amin, S. (1989). Cost of health care: A household survey in an Indian district, Mumbai: Foundation for Research in Community Health.

Duraisamy, P. (2001). *Health status and curative health care in rural India*. New Delhi: National Council of Applied Economic Research, Working Paper Series No. 78.

Gangolli, L., Duggal, R. and Shukla, A. (2005). *Review of health care in India*, Mumbai: CEHAT.

Garg, C. Charu and Karan, A. K. (2005) Health and millennium development goal 1: Reducing out of pocket expenditures to reduce income poverty – Evidence from India, EQUITAP Project, Working paper #15.

Government of Gujarat (2006). Statistical Abstract of Gujarat State 2006. Directorate of Economics and Statistics, Gandhinagar:Government of Gujarat.

Government of India (GOI). (1946). Report of the health survey and development committee (Chairman: Bhure), Delhi: GOI.

Government of India (GOI). (1961). Report of the health survey and planning committee (Chairman: Mudaliar). New Delhi: Ministry of Health.

Government of India (GOI) (1971). *Committee on multipurpose worker under health and family planning* (Chairman: Kartar Singh). New Delhi: Ministry of Health and Family Welfare.

Government of India (GOI) (2005). *Health Information of India 2005*, New Delhi: GOI.

Gumber, A. (1994). Burden of injury in India: Utilisation and expenditure pattern, Working paper no. 64, Ahmedabad: Gujarat Institute of Development Research.

Gumber, A. and Berman, P. (1995). *Measurement and pattern of morbidity and utilization of health services*. Working Paper No. 65, Ahmedabad: Gurarat Institute of Development Research.

Hirway, I. and Mahadevia, D. (2004). *Gujarat human development report 2004*, Ahmedabad : Mahatma Gandhi Labour Institute.

International Institute for Population Sciences (IIPS). (1995): *National family health survey (NFHS-1) 1993*. Mumbai: IIPS

International Institute for Population Sciences (IIPS). (2001). *National family health survey (NFHS-2) 1998-1992*, Mumbai: IIPS

International Institute for Population Science (IIPS). (2006). *DLHS-2, Gujarat, reproductive & child health, District level household survey 2002-2004.* International Institute for Population Science, Ministry of Health and Family Welfare and Centre for Operational Research and Training. www.rchiips.org/pdf/state/Gujarat.pdf.

International Institute for Population Sciences (IIPS). (2007). *National family health survey (NFHS-3) 2005-2006*, Ministry of Health and Family Welfare, Government of India, Mumbai: IIPS.

Iyengar, S., Bhargava, A. (1987). Primary health care and family welfare programme in rural Gujarat. *Economic and Political Weekly*, XXII (27), 1087-1092.

Johannson, S. R. (1991). The health transition: The cultural inflation of morbidity during the decline of mortality. *Health Transition Review*, 1(1), 39-68.

Mahadevia, D. (2002). Health for all in Gujarat, is it achievable? In Indira Hirway, S.P. Kashyap and Amita Shah (Eds.), *Dynamics of Development in Gujarat*. (pp.340-371), Ahmedabad: Centre for Development Alternatives.

Ministry of Health and Family Welfare (2001). *Annual report* (2001). New Delhi: Government of India

Misra, R, Chatterjee, R., Rao, S. (2003). The current health scenario. *India health report*, New Delhi: Oxford University Press.

National Sample Survey Organisation, 42nd Round (86-87). *Morbidity and utilisation of medical services* (Report No. 384). Department of Statistics, New Delhi: Government of India.

National Sample Survey Organisation, 52nd Round (1998). *Morbidity and treatment of ailments.* Department of Statistics (Report No. 441). New Delhi: Government of India.

Rajaram, N., Kotecha, P.V., Kanani, S., Joshi, S., Mani,U.V., Shah,S., Sengupta,K., Palkar,A., Joshi, U., Ghanekar, J., Zararia, V. (1999). *Health situation of women in Gujarat*. Vadodara, Gujarat: Women's Health Training Research and Advocacy Centre, M.S. Univ. Baroda.

Shah, K. R. (2000). Economic growth and human development in Gujarat. Lessons for long- term sustainable growth, Occasional Paper Series, Dr. D. T.Lakadawala memorial Trust, Gota, Ahmedabad: Gujarat Institute of Development Research.

Shariff, A. (1999). *India Human Development Report*, National Council of Applied Economic Research (NCAER). New Delhi: Oxford University Press.

Srinivasan, K and S. K. Mohanty (2004). Health care utilisation by source and levels of deprivation in major states of India: Findings from NFHS-2. International Institute for Population Sciences. www.sasnet.lu.se/panelabstracts

Srinivasan, R. *Health care in India-2025, Issues and prospects.* http://planningcommission.nic.in/report

The Foundation for Research in Health Systems (FRHS). (1997). *Health monitor 1997*, Ahmedabad: FRHS.

United Nation Development Programme (UNDP). (2007). *Human development report 2007/2008*, New York, USA: Palgrane Macmillam Press.

Vaidyanathan, A. (1995). *An assesment of nutritional and health status*, Discussion Paper No.3, UNDP Research Project, CDS.

Visaria, P and Gamber, A. (1992): *Utilization of primary health care in western India,1980-81 to 1986-87*, Working Paper No.45, Ahmedabad: Gujarat Institute of Development Research.

World Bank (2000). *World development report 2000-2001*, Washington, USA: Oxford University Press.