PUBLIC HEALTH RESEARCH

A Disaggregated Analysis of Change in Household Out-Of-Pocket Expenditure on Healthcare in India, 1995-2004

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ABSTRACT

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Introduction No study has yet attempted to measure mean out-of-pocket expenditure on health care at household level, separately for government and private health facilities in India. Therefore, this study analyses the change in the out-of-pocket expenditure between 1995-96 and 2004 for fifteen major states of India, separately for rural/urban sector and inpatient/outpatient care.

Methods Using data from the 52nd and 60th rounds of the National Sample Survey, we present a disaggregated analysis of the trends and patterns of inflation adjusted household expenditure on health care.

Results The analysis of average household expenditure on health care demonstrated that the mean outpatient care expenditure in government health sector decreased marginally at the aggregate level in both rural and urban sector, whereas it showed a significant increase in private facilities. A substantial rural-urban differential was also observed regarding households' mean hospitalization expenditure in private hospitals while the same was not true for government hospitals. Almost all states observed a very high growth in households' mean hospitalization expenditure in the private sector, while it was quite low in the government sector and even negative in rural areas of some states. The same pattern was observed in the growth pattern of households' outpatient care expenditure.

Conclusions The analyses indicated a little improvement in the performance of government health sector in terms of out-of pocket expenditure. The improvement was more visible in developed and less developed states than in least developed states. Similarly, the improvement was more visible in rural areas than in urban areas.

Keywords Out-of-pocket - Healthcare - India.

INTRODUCTION

Historically, the commitment of Indian government to health development has been guided by two principles-health care constitutionally State's responsibility and free medical care for all (not merely to those unable to pay)[1]. Retrospectively, from this point of time when 71% of the health budget is contributed by private sector of which households alone spend 69%, one can remark that Indian state has failed badly in its aim that was reiterated in the forms of 'health for all' in 1980's. The frail political commitment of the country is also revealed by the fact that the draft of *Right to Health Bill, 2009*, prepared by the Ministry of Health and Family Welfare (MOHFW) four years ago, is still in the pipeline. This delay only reveals government's lax attitude toward public health, whereas affordable and accessible health care is still a mirage for a major chunk of the population in the country.

India stands at 119th position in the world in terms of human development and it is a harsh reality that the health situation in the country is worse than many developing nations in the sub-continent. Although, a baby born in present India can expect to live two times more than his great-grandfather did and the infant mortality rate has been halved[2]. It is still a very high rate and "*in 2001, people continue to die for the same reasons they did when India became independent in 1947: infectious diseases*"[2-3]. Health outcomes in any settings are directly linked to quality health care services available to the population and these are not in good condition in India, particularly for the poor and deprived masses.

The Constitution of India enlists healthcare as a state subject and state governments play major roles in financing and executing plans, whereas union government plays certain roles at policy level and financing a few important national level health programs. Local governments also play some limited roles in financing and execution of health policies and programs. However, India has a giant private sector which constitutes a major share in healthcare services; both inpatient and outpatient. In 1995, 68% of total 15,097 hospitals and 37% of total 623,819 beds available in the country were in private health sector[4].

There has been a significant debate on whether states should strengthen government healthcare services or support private health care services to flourish[5]. However, it is generally conceded that the initiation of economic reforms in the year 1991 brought about an era of mass privatization of healthcare services in the country[6-8]. It is worth mentioning here that by the year 1995, the private sector contributed about 81% of all outpatient and 46% of inpatient care expenditures[9]. Although the coverage of government and private health care services remained more or less similar in the post-reform period (1995-2004), the proportion of untreated ailment episodes has increased during the same period[10]. The major reason for these untreated ailment episodes was financial constraints[11]. It is not surprising because the cost of health care in any privatized health care system is inherently higher than publically funded health care system and India is no exception[12].

A number of studies based on data from the National Sample Survey (NSS) in the past have attempted to measure the magnitude of out-of-pocket (OOP) expenditure on healthcare in India[12-15]. However, no study has yet attempted to measure the mean OOP expenditure on healthcare at household level separately in both government and private sector health facilities. This gap is not surprising since the NSS provided information for utilization of and expenditure on outpatient and inpatient care in separate categories where in many households utilized and spent in both government and private healthcare services. This study attempts to solve the problem by dividing the households who availed healthcare services into three categories -a) Government (households who used only government health facilities in the reference period), b) Private (households who used only private health facilities in the reference period), and c) Both (households who used both government and private health facilities). Since only a small proportion of households are found to have used both government and private health facilities in the reference period, we keep them out of this study. The proportion of households falling in both categories was 4.3% and 5.4% respectively in rural and urban areas in 1995-96 and 15.1% and 13.4% for the same in 2004[9,11].

In this paper, we aim to analyze the change in the out-of-pocket expenditure between 1995-96 and 2004 in India and its states. The average expenditure of households on healthcare availing inpatient or outpatient care in government or private facilities has been calculated at constant prices (1999-00) for both periods. The analysis was conducted for fifteen major states of India separately for both rural and urban sector and inpatient and outpatient care. It is worth mentioning at this stage that all the states included in this analysis have been arranged in an order following their development ranking, aiming at brevity in comparative analysis. The states in the analysis have been ranked according to the development level based on National Human Development Report 2001[16].

DATA AND METHODS

The data for the study comes from the 25th schedule of the 52nd (July 1995–June 1996) and 60th (January-June 2004) rounds of NSS done by National Sample Survey Organization (NSSO). In both rounds of the survey, NSS followed a

stratified two-stage design with sampling of census villages in the rural areas and the NSS urban frame survey blocks in the urban areas in the first stage, followed by sampling of households in the second stage. Both the surveys covered entire country except a few interior parts. The survey covered 120,942 households (71,284 rural and 49,658 urban) in 52nd round and 73,868 households (47,302 rural and 26,566 urban) in 60th round. A number of aspects were covered related to morbidity and treatment. The recall periods in both rounds of the survey for inpatient and outpatient care were same, 365 and 15 days, respectively.

This study analyses data for inpatient and outpatient care separately. In the case of inpatient care, only those households, who have taken treatment on medical advice, are included in the study. The source of treatment for inpatient and outpatient care varies in the two categories, therefore rearranged as government and private. The NSS provides data for institutional and non-institutional health care expenditure further disaggregated in several heads. However, in this study, we define 'health care expenditure' as an aggregate of institutional and non-institutional health care expenditure. Another major adjustment is that both inpatient and outpatient care expenditure were converted into a monthly figure to assess the total health expenditure of a household. The study includes only 15 major states from the data sets of both periods. It is remarkable that 52nd round data for the states of Uttar Pradesh, Bihar and Madhya Pradesh has been used in combination with their divided parts, i.e. Uttarakhand, Jharkhand and Chhattisgarh. We analyze trends and patterns using simple disaggregated bivariate tables and bar graphs. It is important to mention here that the household expenditures of two periods cannot be simply compared unless we adjust them for the inflation. To resolve the problem, we have used deflators provided by the Reserve Bank of India for the base period of 1999-2000 that falls between the two years of analysis in this paper, i.e. 1995-96 and 2004.

RESULTS

Utilization of government and private health care services at household level

It is clear from Table 1 that both type of health care services, i.e. inpatient and outpatient care, were dominated by the private sector. In both periods, private health care services had an edge over government services, at least in terms of coverage in both rural and urban areas in all states, except a few like Rajasthan, Orissa and Assam. For the period of 1995-96, the highest proportion of rural households who availed private health care services were in Punjab, Maharashtra, Uttar Pradesh, and Bihar, while lowest was seen in Orissa, Assam and Rajasthan. Moreover, a small chunk of households (less than 5%) visited both government and private facilities for healthcare. For the same period, a more or less similar pattern was observed in urban areas. However, a uniform increase in the share of households visiting private health facilities for any type of health care services was also seen. An overall growth was observed in the share of households in the categories of 'Public' and 'Both' in urban as well as rural areas in 2004. In a few states like Rajasthan and Orissa, a significant growth in the coverage of the urban government health services is clearly visible, while the coverage shrank considerably in states like Kerala, Punjab and Bihar. The share of households availing health care services in government facilities in rural areas of Punjab, Tamil Nadu, Karnataka, Madhya Pradesh, West Bengal, and Uttar Pradesh has increased.

Average outpatient care expenditure of households

The utilization pattern of either government or private health care service by households, including many other factors, depends largely on the cost involved in availing these services. The average household expenditure on health care service is very much associated with the type of services utilized by such households. The fact that the utilization of government and private services varies from state to state and between rural and urban areas provides stimuli for an inquiry into average household expenditures with changing patterns of utilization of government and private health care services for inpatient and outpatient care in two different periods. Figure 1 and 2 display households' mean expenditure on outpatient care at constant rates (1999-00) under different types of health services in rural and urban sectors of different states. In aggregate terms, the average outpatient care in rural areas were higher in the private sector and it had demonstrated a positive growth in the two periods, while average expenditure under government facilities has been almost unchanged in real terms. However, the picture at the state level is quite different. Although average outpatient care expenditure of households in states like Kerala, West Bengal, Uttar Pradesh, Assam and Bihar came down, all other states recorded a positive but small growth. The expenditure in private facilities showed a more regular pattern compared to the expenditure in government facilities. It increased in all states except the states of Gujarat and Bihar. Average expenditure in the private sector had been higher as compared to average expenditure in the government sector in most of the states during both the periods. The states like Punjab, West Bengal, Orissa, Uttar Pradesh and Bihar showed a high expenditure in the government sector for one or both periods. It is noticeable that the average

expenditure under the government sector in all least developed states was observed to be higher than other states, if Punjab and Rajasthan are taken as exceptions. On the other hand, mean expenditure of households in the private sector varied little across states.

In urban areas, variations in the average outpatient expenditure in real terms under government and private sector were more conspicuous within and across states. At the aggregate level, urban households' average expenditure reduced in the government sector while it increased in the private sector between two periods. Average expenditure under government sector evinced a mixed pattern. It was lower than that of private sector in most of the states. However, in comparison to previous periods, it registered an increase in most states. Average expenditure in the private sector showed a constant increase between two periods in all states except Haryana, Madhya Pradesh and Orissa. It is remarkable that Haryana and Madhya Pradesh were two such states where mean expenditure for outpatient care was lower than the previous period in all categories, i.e. public, private and total.

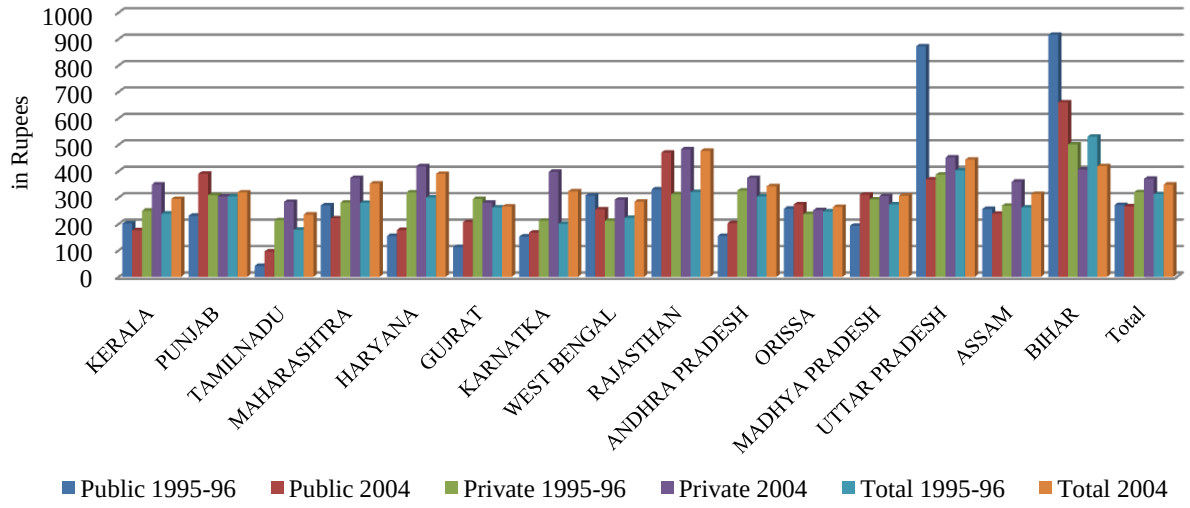

Figure 1 State wise rural households' mean outpatient expenditure at constant prices (1999-00) by health care sector

Table 1 Utilization (in percent) of healthcare service at household level in states by sector and type of healthcare providers during 1995-96 and 2004

2004	**Rural**				**Urban**			
States	**Public**	**Private**	**Both**	**Total**	**Public**	**Private**	**Both**	**Total**
Kerala	22.9	47.3	29.7	100	18.9	58.1	23.0	100
Punjab	15.6	68.1	16.3	100	18.3	68.8	12.8	100
Tamil Nadu	27.3	59.5	13.2	100	17.5	74.0	8.4	100
Maharashtra	15.7	70.5	13.8	100	12.6	76.9	10.5	100
Haryana	13.4	74.8	11.9	100	16.7	71.5	11.8	100
Gujarat	20.1	71.8	8.1	100	16.8	75.3	7.8	100
Karnataka	32.9	58.7	8.3	100	19.0	75.9	5.1	100
West Bengal	26.4	54.2	19.4	100	26.1	55.1	18.8	100
Rajasthan	42.2	46.4	11.4	100	51.4	35.9	12.8	100
Andhra Pradesh	17.6	69.5	12.9	100	15.4	71.0	13.6	100
Orissa	54.2	32.1	13.7	100	56.3	33.1	10.6	100
Madhya Pradesh	29.8	55.9	14.4	100	27.1	59.6	13.2	100
Uttar Pradesh	10.9	75.4	13.7	100	13.0	69.6	17.4	100
Assam	37.8	44.3	17.9	100	29.7	60.8	9.5	100
Bihar	6.1	82.0	12.0	100	12.4	74.4	13.3	100
Total	22.2	62.8	15.1	100	19.1	67.6	13.4	100

1995-96	Rural				Urban			
States	**Public**	**Private**	**Both**	**Total**	**Public**	**Private**	**Both**	**Total**
Kerala	26.9	61.6	11.5	100	28.7	61.4	9.9	100
Punjab	8.7	87.1	4.1	100	7.8	90.0	2.2	100
Tamil Nadu	23.8	66.9	9.3	100	21.4	71.3	7.3	100
Maharashtra	15.6	80.1	4.3	100	15.6	78.8	5.5	100
Haryana	15.8	77.8	6.4	100	13.1	82.2	4.6	100
Gujarat	19.9	76.4	3.7	100	22.0	72.9	5.1	100
Karnataka	26.0	69.8	4.2	100	16.4	78.7	4.9	100
West Bengal	21.3	72.4	6.4	100	27.3	66.8	5.9	100
Andhra Pradesh	15.6	82.7	1.7	100	15.2	81.6	3.3	100
Assam	58.1	39.5	2.4	100	34.9	56.7	8.4	100
Rajasthan	48.7	47.1	4.2	100	47.8	44.6	7.6	100
Orissa	58.0	38.7	3.3	100	46.3	47.9	5.7	100
Madhya Pradesh	24.9	73.2	1.9	100	23.9	70.9	5.3	100
Uttar Pradesh	8.0	89.6	2.5	100	11.3	84.5	4.2	100
Bihar	9.8	88.5	1.7	100	25.5	70.1	4.3	100
Total	20.5	75.4	4.3	100	20.2	74.4	5.4	100

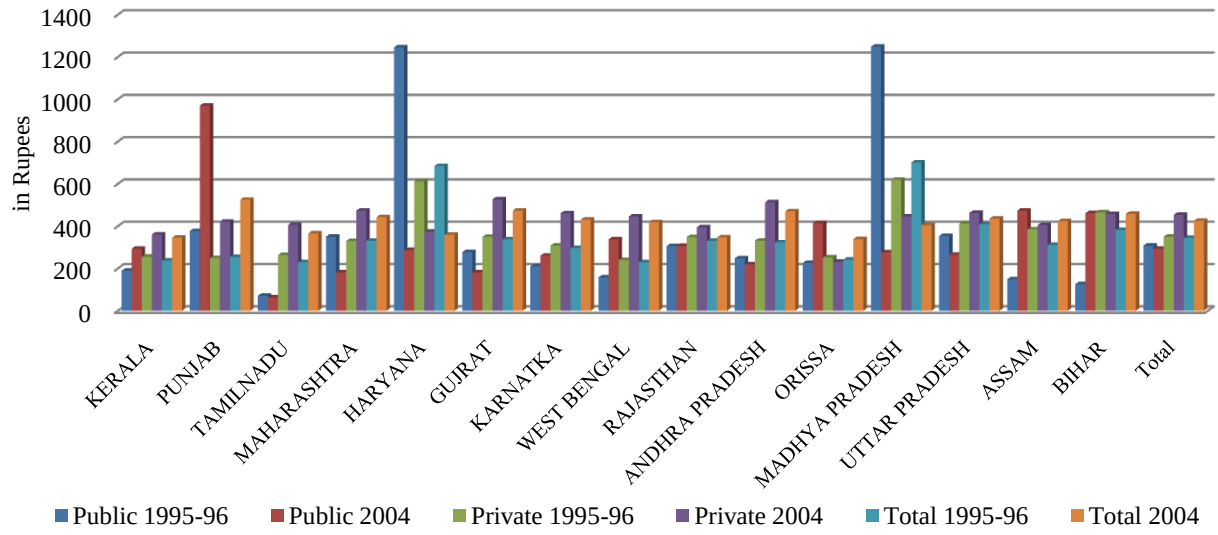

Figure 2 State wise urban households' mean outpatient expenditure at constant prices (1999-00) by health care sector

A comparison of rural and urban sector revealed that there was an insignificant difference in mean outpatient care expenditure of households under government facilities. However, private sector expenditure was found to be higher in urban areas than in rural areas. It is interesting to note that the rural-urban difference in the average expenditure was more conspicuous in the developed and less developed states, while the pattern of mean expenditure was more or less similar in least developed states. Further, the difference between the average expenditure in the private sector in two periods was more evident in the urban areas than in rural areas. The rural-urban difference in mean expenditure in the private sector was less conspicuous in least developed states particularly. The aggregate mean outpatient expenditure in the government sector decreased between two periods in both rural and urban areas, while it increased in the private sector in both rural and urban areas, and the increase was more prominent in the latter.

Average inpatient care expenditure of households

Households' average expenditure on hospitalization in real terms (1999-00) under government and private sector has been calculated for rural and urban areas of fifteen major states of India. This exercise includes only those households that had one or more hospitalization cases in the reference period in government or private hospital, while it excludes those households that had

hospitalization cases in both government and private hospitals. Average expenditure on hospitalization is analyzed separately for rural and urban households. In aggregate terms, average hospitalization expenditure of rural households was higher in 2004 than 1995-96. Moreover, in comparison of government hospitals, it was double in private hospitals for both periods. Mean hospitalization expenditure in government hospitals recorded a marginal increase during the period, while a significant increase in mean expenditure of households was observed in private hospitals.

The highest average hospitalization expenditure of the household in the government hospital was observed in the states of Uttar Pradesh (Rs.6389) and Haryana (Rs.16041) in 1995-96 and 2004, respectively. In all other states, the average hospitalization expenditure was around Rs.3000- lowest in the states of West Bengal (Rs.1698) and Kerala (Rs.2150) in 1995-96 and 2004, respectively. The mean hospitalization expenditure of household in private hospitals recorded a significant positive growth in all states except Andhra Pradesh. The top four states with high average expenditure in 2004 were Punjab (Rs.13237), west Bengal (Rs.10941), Tamil Nadu (Rs.9601), Rajasthan (Rs.9590) and Haryana (Rs.9549). It is interesting to note that Kerala showed very low mean hospitalization expenditure in both government and private hospitals. Tamil Nadu showed the lowest average expenditure in government hospitals for both the periods (Figure 3).

Average hospitalization expenditure of urban households in aggregate terms was higher in private facilities than in government hospitals. Household's mean hospitalization expenditure during 1995-96 was more than two times higher in private hospitals than in government hospitals. On the other hand, the mean hospitalization expenditure in private hospitals in 2004 quadrupled to that of government hospitals. It was also observed that the difference between mean hospitalization expenditure between these two periods was meager in government hospitals, while there was a huge gap of the same in private hospitals. At the state level, urban household mean hospitalization expenditure in government hospitals was in conformity in most of the states for both the periods, while extreme deviations to this pattern were visible in Punjab, Haryana, and Bihar. Moreover, the mean hospitalization expenditure in government hospitals was more or less stagnant during 1995-2004. In contrast to household mean hospitalization expenditure in government hospitals, the pattern of expenditure in private hospitals was not consistent and varied from state to state. The only common thing among states is a significant increase in the mean expenditure between two periods (Figure 4).

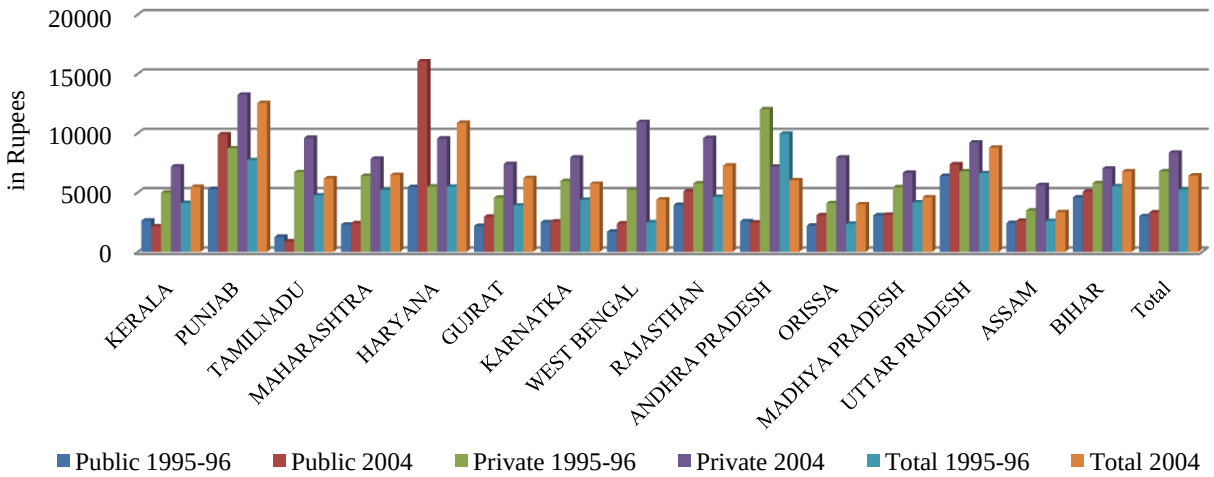

Figure 3 State wise rural households' mean inpatient expenditure at constant prices (1999-00) by health care sector

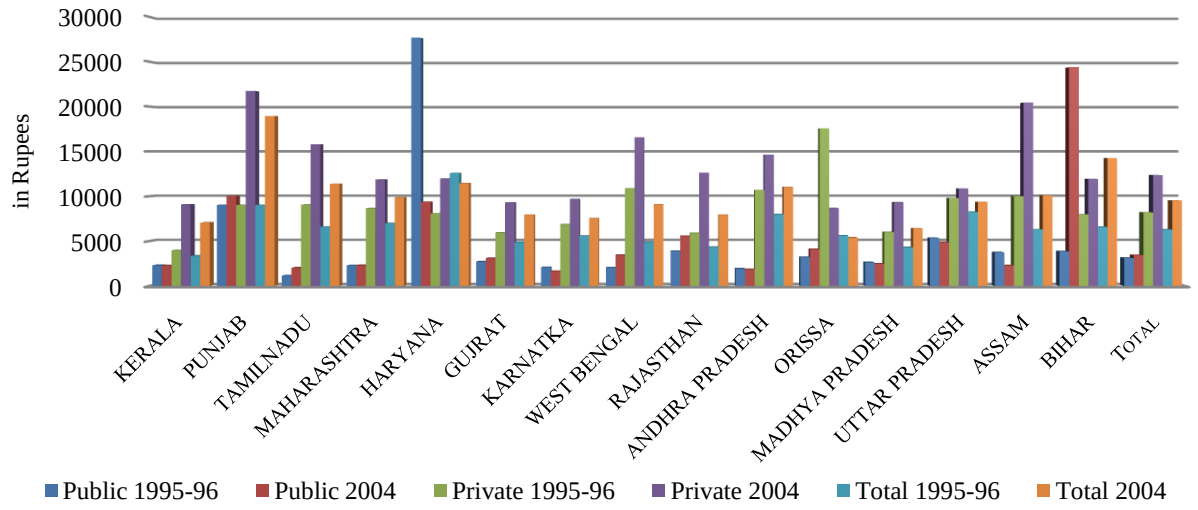

Figure 4 State wise urban households' mean inpatient expenditure at constant prices (1999-00) by health care sector

A comparison of rural and urban sector of states reveals that there existed a huge gap between households' mean hospitalization expenditure in government and private hospitals in the two periods of analysis. In the rural sector, the mean hospitalization expenditure of households in government hospitals for the period of 1995-96 and 2004 was Rs.3004 and Rs.3317, respectively. For private hospitals, the same was recorded as Rs.6776 in 1995-96 and Rs.8358 in 2004. On the other hand, the mean hospitalization expenditure of urban households in government hospitals for the period of 1995-96 and 2004 was Rs.3112 and Rs.3429, respectively and for private hospital, the expenditure was Rs.8198 in 1995-96 and Rs.12349 in 2004. These figures actually indicate towards the quality differential of health services and resultant inequality is attributed to private health care sector, between rural and urban areas. At the state level, this differential was more visible in developed and less developed states in the comparison of least developed states.

Growth pattern of households' average expenditure on health care

Inpatient care expenditure

As has been mentioned in the preceding discussion, average expenditure of households has been derived at constant (1999-00) prices, using these figures, the growth rates of average health expenditure of households have been calculated for inpatient and outpatient care, separately for urban and rural areas of each state. Table 2 displays the growth rate of households' average expenditure on hospitalization in rural areas between the two periods, i.e. 1995-96 and 2004. It is very clear that most of the developed and less developed states observed a higher growth rate in the hospitalization expenditure, primarily in the private sector, except Haryana and Punjab where the growth was more in the government sector. Moreover, the growth of expenditure in Kerala and Tamil Nadu was negative in the government sector, while it was astonishingly negative in both government and private sector in Andhra Pradesh. In all other least developed states, the expenditure growth was low in both government and private sector. On the other side, in urban sector, the growth of average hospitalization expenditure was significant mainly in the private sector.

Table 2 Percentage growths in average household expenditure in states by sector and type of service provider between 1995-96 and 2004

	INPATIENT CARE					
State	**RURAL SECTOR**			**State**	**URBAN SECTOR**	
	Public	**Private**	**Total**		**Public**	**Private**	**Total**
Kerala	-18.3	44.3	33.3	Kerala	-0.8	129.6	109.7
Punjab	87.1	51.8	62.4	Punjab	11.1	140.8	109.9
Tamil Nadu	-30.9	43.2	30.2	Tamil Nadu	76.5	74.3	72.6
Maharashtra	4.6	22.7	24.3	Maharashtra	0.8	36.9	41.1
Haryana	193.7	73.8	98.1	Haryana	-66.1	48.1	-9.0
Gujarat	35.6	62.3	59.5	Gujarat	14	56.7	62.6
Karnataka	2.8	33.3	31	Karnataka	-21.2	41.1	35.0

West Bengal	40.9	109.5	77.1	West Bengal	69.4	52.5	85.1
Rajasthan	29.4	66.4	57.2	Rajasthan	43.9	113.8	81.9
Andhra Pradesh	-4.2	-40.3	-39.4	Andhra Pradesh	-3.5	36.9	37.9
Orissa	40.3	93.9	69.0	Orissa	28.1	-50.7	-4.2
Madhya Pradesh	1.8	22.5	10.2	Madhya Pradesh	-5.9	55.4	48.7
Uttar Pradesh	15.3	35.9	32.5	Uttar Pradesh	-8.6	10.9	13.3
Assam	7.8	61.8	28.7	Assam	-39.2	104.2	60.1
Bihar	10.9	21.3	22.7	Bihar	532.2	49.5	116.4
Total	10.4	23.4	22.6	Total	10.2	50.6	51.4

	OUTPATIENT CARE						
State	**RURAL SECTOR**			**State**	**URBAN SECTOR**		
	Public	**Private**	**Total**		**Public**	**Private**	**Total**
Kerala	-12.5	39.6	23.1	Kerala	54.9	41.2	46.0
Punjab	68.8	-1.6	4.9	Punjab	157.4	69.4	106
Tamil Nadu	132.3	32.5	32.3	Tamil Nadu	-10.2	54.2	59.7
Maharashtra	-18.0	33.3	26.2	Maharashtra	-48.2	43.7	33.5
Haryana	14.3	31.0	29.8	Haryana	-76.9	-38.9	-47.5
Gujarat	83.2	-4.8	1.4	Gujarat	-34.3	50.7	40.2
Karnataka	9.9	87.2	61.3	Karnataka	23.8	49.7	45.2
West Bengal	-17.0	37.6	27.6	West Bengal	113.5	85.7	82.3
Rajasthan	42.2	54.4	48.6	Rajasthan	0.3	13.4	4.7
Andhra Pradesh	30.8	14.6	12.8	Andhra Pradesh	-11.4	54.7	45.4
Orissa	6.4	6.3	6.8	Orissa	83.5	-8.1	39.9
Madhya Pradesh	60.9	4.4	12.0	Madhya Pradesh	-77.9	-28.1	-42.3
Uttar Pradesh	-57.7	16.8	10.2	Uttar Pradesh	-25.1	12.0	6.6
Assam	-7.0	33.8	19.4	Assam	217.6	5.1	36.3
Bihar	-27.9	-19.0	-21.0	Bihar	265.9	-1.6	19.9
Total	-1.8	15.8	11.5	Total	-4.8	29.6	23.5

As compared to rural areas, the growth rates were very high in the private sector, while the opposite was true for the government sector. It is interesting to note that the state of Bihar evinced a fivefold growth in the average household expenditure for hospitalization in the government sector. It is also evident from Table 2 that the state of Haryana experienced a very high positive expenditure growth in rural areas and a negative growth for urban areas. Tamil Nadu, on the contrary, showed a reverse situation with a negative growth in rural areas and a high positive growth in urban areas. As far as the overall growth scenario, all developed and less developed states showed a high growth in urban areas, except Haryana and a low growth in least developed states except Bihar. On the other hand, for the rural areas no clear pattern emerges. It is worth mentioning here that some extreme values as observed in the case of Haryana and Bihar could be largely the articulation of the extreme imbalance in utilization of two different service providers.

Outpatient care expenditure

The growth pattern of average outpatient expenditure of households in government and private sector for rural and urban areas of different states shows a very different pattern from that of inpatient care expenditure (Table 2). On an average, the growth was below 25% in both rural and urban areas. The overall growth of outpatient expenditure in the government sector was negative in both rural and urban areas, while growth percentage in the private sector (29.6%) was double that of rural area (15.8%) in urban areas. It is also evident that the growth in the mean expenditure on outpatient care is much lower than that of inpatient care expenditure.

The growth in the average expenditure for outpatient care in the government sector was observed to be higher than in the private sector in rural areas of many states. However, the growth in the private sector was positive in all states (except Bihar and Gujarat), while in the government sector, at least six states exhibit a negative growth. It is surprising that the state of Bihar displayed a negative growth of expenditure in both government and private categories, while the state of Uttar Pradesh showed a very high negative growth of mean expenditure in government hospitals. The state of Tamil Nadu, on the contrary, showed a very high positive growth (132%) of expenditure on outpatient health care in rural areas. It is also observable that all developed and less developed state exhibited significantly higher growth rate of expenditure, except Punjab (4%) and Gujarat (1%),

whereas in all least developed states, it was relatively lower (Table 2).

Contrary to rural areas, a higher rate of growth was observed in the mean outpatient care expenditure in urban areas; however, it varied among states and by type of sector -government and private sector. Altogether, seven states in the government sector and three states in the private sector showed a negative growth in expenditure. Madhya Pradesh and Haryana were the only states with a negative growth of expenditure in the private as well as government sector. The highest and lowest growth in the private sector was observed in the states of West Bengal and Haryana, respectively. On the other hand, the highest and lowest growth in rural areas was witnessed by the states of Bihar and Madhya Pradesh, respectively. It is also conspicuous that all developed and less developed states exhibited higher growth in average outpatient expenditure, except Rajasthan, while all least developed states showed relatively lower growth in urban areas. An important caveat, regarding the analysis of growth pattern of average expenditure of household on inpatient or outpatient care is that sometimes it is found to be influenced by the change in the utilization pattern of services of a particular sector by the households (Table 2).

DISCUSSION AND CONCLUSIONS

In this paper, the analysis of utilization of health care at household level showed the dominance of private health care providers in outpatient as well as inpatient care in both rural and urban sector for both periods. However, households' utilization of government health care relatively increased in 2004. Apart from that, the shares of those households utilizing both government and private health care services together had also shown an increasing trend in two post-reform periods, i.e. 1995-96 and 2004. Although to call it a regaining of the lost ground by government health-care sector is hasty, there is no doubt that the expansion of private sector, which began after economic reforms in 1991, has stagnated between the periods, i.e. 1995-96 and 2004. It has been seen that the proportion of 'untreated spell of ailments' due to financial reasons increased between these two periods while the 'unavailability of facilities' as a reason for the same registered a decline. Given these findings and the fact that the growth of the cost of health care services in the private sector has been higher than the growth of per capita income[8], it can be inferred that the affordability of health care services has decreased over the period. It is also possible that this unaffordability of private health care could have forced some populations to return to public health care despite its dysfunctional state.

The analysis of average households' expenditure on health care demonstrated that the mean outpatient care expenditure of households in government health facilities decreased marginally at the aggregate level in both rural and urban sector, whereas it showed a significant increase in private facilities. Furthermore, mean hospitalization expenditure of households in real terms had been more or less stagnant with a slight increase in government health facilities and a whopping growth in private health facilities. A substantial rural-urban difference is also observed in the households' mean hospitalization expenditure in private hospitals, while the same was not true for government hospitals. The analyses of growth pattern of the households' mean expenditure on inpatient and outpatient care also endorse the argument of improvement in the performance of government health sector. Almost all the states noted a very high growth in the households' mean hospitalization expenditure in real terms in the private sector, while it was quite low in the government sector. It was even negative in the rural areas of Kerala, Tamil Nadu and Andhra Pradesh and urban areas of Kerala, Haryana, Karnataka, Andhra Pradesh, Uttar Pradesh and Assam. A same pattern is observed in the growth pattern of households' outpatient care expenditure in government facilities.

Observing the pattern of utilization of health care services, mean expenditure and its growth in government and private facilities during 1995-96 and 2004, it can be concluded that an overall performance of the government health care sector between two post-reform periods has improved very little in major fifteen states. It is evident that the utilization of government health services has marginally increased during this period, while average expenditure in these facilities has been more or less stagnant, if not decreased in all cases. It is also remarkable that the improvement is more visible in the developed and less developed states compared to least developed states and in rural areas compared to urban areas.

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