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UTILIZATION OF HEALTH SERVICES AT PUBLIC AND PRIVATE FACILITIES IN INDIA

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Abstract: *Utilization of health services depends on the availability of health care facilities and on the ability of the individual to access the type of resources. A study of the total use of health care services, both in the public and private sectors, would help us to understand the equity of overall access to health care. Further, in response to the United Nations Millennium Development Goals (MDGs) and the newly adopted Sustainable Development Goals (SDGs), there has been a substantial increase in research concerning health inequalities and in particular choice of health care providers. This study mainly focuses on the share of public providers in treatment of ailment with the help of 71st National Sample Survey data. An attempt has been made to study cost of treatment in different types of hospital for each broad ailment category. This paper also deals with place of childbirth and expenditure incurred per childbirth at public and private source. Analysis based on quantitative data reveals that private sector is the most important source of treatment in rural as well as urban areas and medical expenditure from a public hospital is much lower than the private sector hospital. Findings of the study would be useful to design policy initiatives so that barriers of access to health care can be removed.*

Keywords: Health, Public, Private, Expenditure.

Introduction

Utilization of health care services is referred in terms of 'realized access' to health care and it is the resultant process of interaction between supply side and demand side factor. With respect to the demand side, utilization of health care services is identified by the ways in which individuals respond to ill health and disease. On the supply side, the

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health care market is characterized by a mix of public and private health care providers. Indian health sector comprises of public sector that provides promotive, preventive and curative health services and private sector that mostly provides curative services. The public health sector consists of the central government, state government, municipal and local level bodies (Health Sub-Centres / Primary Health Centres). Private sector health care providers include private doctors, nursing homes, private hospitals, charitable institutions, etc. Breakup of total health expenditure between public and private providers show that private providers of health in 2004-05 accounted for about 78 per cent of health expenditure incurred (MoHFW 2011). Moreover, nearly 80 per cent of the registered doctors work in the private sector. All these facts indicate increased dominance of private health care system which in turn, has a bearing on the equitable distribution of health care services in society. To achieve equity in health status, there is a pressing need to allocate more public funds to health care as it has been very low over the last decade or so. Since the public spending is low, it becomes all the more important to maximize the equity of public health expenditure.

A study on total use of health care services, both in the public and private sectors, would help us to understand the equity of overall access to health care. This was followed by an analysis on the cost of treatment in different types of hospital for inpatient and outpatient cases. Medical expenditure for hospitalized and non – hospitalized cases were studied separately, since the pattern of utilization is very different in both the cases. An attempt also has been made to examine utilization of maternal delivery services by analyzing place of childbirth and expenditure on institutional childbirth. This study mainly uses the information on health care utilization provided by 71st National Sample Survey data.

Literature Review

Many researchers have adopted socio-behavioural model of Anderson and Newman (1973) to understand the health seeking behaviour. Andersen and Newman proposed that the interaction of variables of predisposing, enabling and need factors guide the decision of the individual regarding health care utilization and selection of the health care provider. There were very few studies of health care utilization in India. However, in response to the United Nations Millennium Development Goals (MDGs) and the

newly adopted Sustainable Development Goals (SDGs), there has been a substantial increase in research concerning health inequalities and in particular choice of health care providers. A case control analysis was done by Pillai *et al.,* (2003) using data from the 1996 Indian National Family Health Survey (NFHS) to study the choice of healthcare providers among parents in Kerala. The study reported that the gender of the child did not influence whether or not the child was taken for treatment but had an influence on the choice of the health care system, with boys receiving preferential treatment in the alternate care systems. A study by Vaishnavi (2010) has examined the factors influencing health care seeking behaviour as well as about the choice of public provider in Tamil Nadu in India. The database generated by the 60th Round survey of the NSSO (2004) has been used for this analysis. The results indicated that children under 5 years were less likely to use public providers; whereas those above 60 were less likely to do so. Further, illiterates, socially vulnerable groups and those belonging to the poorer sections of the population had higher probability of using public care. Gender and rural residence did not affect choice of public provider.

Visaria and Gumber (1994) have examined the utilization pattern of selected health care services in the states of Maharashtra and Gujarat, with the help of the National Sample Survey data. They found that the proportion of the number of births reported at government hospitals to all hospital-based births declined as the monthly per capita expenditure of the household increased. Thind *et al.,* (2008) have studied the determinants of home, private and public sector utilization for maternal delivery in Maharashtra using the National Family Health Survey (1996) data. In making the choice between home delivery versus public facility ,women with higher birth order and those living in rural areas had greater chances of delivering at home, while increasing maternal age, greater media exposure and more than three antenatal visits were associated with greater odds of delivery in a public facility. The analysis also found that maternal and paternal education, lower social status (belonging to the scheduled caste and tribes) and media exposure were the statistically significant predictors of the choice of public versus private facility delivery. Findings in recent literature related to choice of health care provider are complex in nature and in this context there is a need for a further study on the public choice in health care seeking behaviour.

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Pattern of Utilization of Health Care Services

Health Survey on Key Indicators of Social Consumption conducted by National Sample Survey Organisation (NSSO 71st round) in 2014 provides information on utilization of health care services. The survey covered a sample of about 36,480 households in rural India and 29,452 households in urban India spread. It collected information on Inpatient and outpatient care for a reference period of 365 days and 15 days, respectively. This section deals with the pattern of utilization of health care services by the type of health care providers for the rural and urban areas of the country, for the hospitalized illness episodes. The share of public and private sectors in treating the hospitalized cases of ailments in the rural and urban areas for last three NSS rounds (1995-96, 2004 and 2014) is given in Table - 1.

Table – 1

Percentage of hospitalized cases by type of hospital (Public *vs*. Private)

NSS rounds	Public			Private		
	1995-96 (52nd round)	2004 (60th round)	2014 (71st round)	1995-96 (52nd round)	2004 (60th round)	2014 (71st round)
Rural	43.8	41.7	41.9	56.2	58.3	58.1
Urban	43.1	38.2	32.0	56.9	61.8	68.0

Source: *NSSO 71st Round (January – June 2014)*

The survey results shows that there is a steady decline in the use of public sources and a corresponding increase in the use of private sources are evident in urban India during the period between 1995-96 and 2014 whereas the changes were nominal in rural area for the same period of time. Data from the 71st NSSO study indicates that percentage of hospitalized cases in treating illness episodes from the private health providers works out to be 58 per cent for the rural areas and 68 per cent for the urban areas. Thus the dependence on the private sector is higher among the health seekers (inpatients), both in the rural and urban areas. User's perception could be an important reason for people opting for private health facility and in the case of public hospitals inexpensive or free could be one of the probable reasons. As the private health care system dominates, public intervention in making health care available and affordable is crucial to meet the objectives of universal coverage, affordability and good health care delivery.

Cost of Treatment

The National Health Accounts for the year 2004-05 highlights that household expenditure accounts for 71.13 per cent of the total financing for health care. This particular factor contributes to an environment wherein the poor are more at risk of catastrophic expenditure. The following section deals with the medical expenditure excluding childbirth incurred by the households in different types of hospitals used. Medical expenditure on treatment of inpatient and outpatient cases is analyzed separately. The amount spent for hospitalized treatment (inpatient) would depend on the nature of ailments as well as on the type of treatment received. Table – 2 presents average medical expenditure for hospitalized cases for each broad ailment category. Medical expenses incurred on hospitalized treatment include expenses on cost of medicines, bed charges for hospitalized treatment, charges for diagnostic tests, and fees for doctor/surgeon.

Table – 2

Average medical expenditure (in Rs.) per hospitalization case for each broad ailment category

Broad ailment category	Public	Private	All
Infections	3007	11810	8134
Cancers	24526	78050	56712
Blood diseases	4752	17607	13313
Endocrine, Metabolic / Nutrition	4625	19206	14117
Psychiatric / Neurological	7482	34561	23984
Eye	1778	13374	9307
Ear	6626	19158	15285
Cardio - vascular	11549	43262	31647
Respiratory	4811	18705	12820
Gastro - intestinal	5281	23933	17687
Skin	3142	14664	10438
Musculo - skeletal	8165	28396	21862
Genito - urinary	9295	29608	24525
Obstetric / neonatal	2651	21626	11707
Injuries	6729	36255	23491
Other	14030	35572	28003
All	6120	25850	18268

Source: NSSO 71st Round (January – June 2014)

The table clearly indicates that the medical expenditure for hospitalized cases from a public hospital (Rs. 6120) is much lower than the private sector hospital (Rs. 25850). For all categories of illnesses, the amount spent per case works out to be more for treatment sought by people in the private than in the public. Among the various categories of illnesses, the amount spent on the treatment received from public hospital turned out to be the lowest for 'Eye' (Rs. 1778) and as expected highest expenditure was recorded for 'Cancer' (Rs. 24526) followed by 'Other' type of illnesses (Rs. 14030). In the case of private hospital, expenditure of treatment for 'Infections' (Rs. 11810) found to be the lowest whereas the amount spent is the highest for 'Cancer' (Rs. 78050) followed by 'Cardio - vascular' diseases (Rs. 43262). It is disheartening to note that the difference (ratio) between the expenses incurred by private and public hospital for the treatment of ailments like 'Psychiatric / Neurological', 'Cardio – vascular' and 'Genito – urinary' were substantially higher. At the same time it is interesting to note the difference between the expenses incurred for the treatment of ailments like 'Infections' 'Skin' and 'Eye' were the least.

For non - hospitalized treatment, expenses for the ailing person by level of care irrespective of the number of spells and type of ailment was recorded (Table–3). The table reveals increase in expenditure incurred with respect to rise in level of care and this is understandable, since in the public health facilities, generally no consultation fee is charged and mostly medicines are available for free of cost. Variations in medical expenses are much higher in the urban areas as compared to the rural areas for non hospitalized treatment from private hospital. Moreover, there is no perceptible gender disparity in the amount spent for non-hospitalized treatment in rural and urban areas of public and private sectors except in private health facilities of urban sector. This probably shows that the urban households do discriminate against females in the allocation of resources especially when the treatment has to be meted out from private facilities. In both the inpatient and outpatient cases, the average medical expenditure has worked out to be higher for private health facilities and an important reason for this could be fairly high preference shown towards utilizing private health care services (NCAER 1993).

Table – 3
Average medical expenditure (in Rs.) for non-hospitalized treatment per ailing person by level of care

Level of care		HSC, PHC / others*	Public hospital	Private doctor / clinic	Private hospital
Rural	Male	309	407	560	773
	Female	314	505	600	810
Urban	Male	347	372	672	1131
	Female	386	411	646	785

*** includes ANM/ASHA/AWW/dispensary/CHC/MMU**
Source: NSSO 71st Round (January – June 2014)

Utilization of Maternal Delivery Services

India's maternal mortality rate has been reduced from 212 deaths per 100,000 live births in 2007 to 174 deaths in 2015. The advancement is largely due to government interventions and improvements in the management of health services at all levels. However, there exists variation in utilization of maternal health care services across India between public and private facilities. It is evident from the previous studies on utilization of health care services (NCAER 1993) and therefore, this situation leads us to study utilization of maternal delivery services. Table – 4 shows the percentage distribution of women by place of childbirth. Around 55 per cent of deliveries in rural areas have taken place in public hospitals and 24 per cent in private hospitals. This could be associated with the financial consideration of the rural people. A high percentage of deliveries in rural areas have taken place in homes. The home deliveries account for 20 per cent and 11 per cent respectively of the deliveries in rural and urban areas of the country. Dependence on private sector for childbirth is higher in urban India, around 48 per cent childbirth took place at private hospitals and 42 per cent at public hospitals.

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Table – 4

Percentage of women (aged 15 - 49) by place of childbirth

Place of childbirth	Public hospital	Private clinic / hospital	At home	All
Rural	55.5	24.1	19.9	100
Urban	41.7	47.5	10.5	100

Source: NSSO 71st Round (January – June 2014)

Table – 5 shows the percentage distribution of hospitalization for childbirth by level of care for the rural and urban areas. In rural areas, 70 per cent of hospitalization for childbirth has taken place in government health facilities which include public hospitals, HSC, PHC and others. The same for urban areas was only 47 per cent. On the other hand, share of private hospitals for childbirth hospitalization was 52.5 per cent and 30 per cent respectively for urban and rural areas. Level of living could be an important reason for people opting for private facility in urban areas. However, this will need further investigation into the evidence of interrelation between the distribution and level of living to establish the exact reason, which is beyond the scope of this study.

Table – 5

Percentage distribution of hospitalization for childbirth by level of care

Level of care	HSC, PHC / others*	Public hospital	Private hospital	All
Rural	18.0	52.0	30.0	100
Urban	3.8	43.6	52.5	100

* includes ANM/ASHA/AWW/dispensary/CHC/MMU

Source: NSSO 71st Round (January – June 2014)

While comparing the utilization of health services at public and private facilities in India, it is observed that the difference in average medical expenditure per childbirth between public and private hospital is quite significant (Table – 6). As expected the average medical expenditure (per childbirth) in both rural and urban areas has worked out to be much lower for the maternity services received from public health facilities when compared to the expenses incurred for childbirth from private health facilities. In

the rural areas, average medical expenditure per childbirth works out to be Rs. 1587 and Rs. 14778 respectively for public and private maternity services. In urban areas, these averages turned out to be Rs. 2117 and Rs. 20328 respectively.

Table – 6
Average medical expenditure (in Rs.) per childbirth by type of hospital

Type of hospital	Public hospital	Private clinic / hospital	All
Rural	1587	14778	5544
Urban	2117	20328	11685

Source: NSSO 71st Round (January – June 2014)

6. Major Findings and Conclusion

The study on utilization of health services carried out using NSSO data shows that private sector is the most important source for availing inpatient treatment and for maternity services, private hospitals are preferred over public hospitals especially in urban areas. In terms of medical expenditure, the results exhibit that for inpatient, outpatient and maternity delivery services, the amount spent in a public hospital is much lower than private sector hospital. The major issue that emerges is the lower level of utilization of public inpatient care in spite of its less medical expenses. But suffice to mention here that policy makers should focus more on public health (inpatient) services to address the weaknesses that are responsible for this pattern of behaviour. The reasons for choosing private inpatient care over public are many and it requires more detailed work, which is outside the scope of this study.

In view of high costs of medical care in the private sector there is a need to increase the use of public sector health services. To achieve equity in health care utilization, special efforts need to be taken to improve the quality of functioning of public health care facilities. Conscious effort should be made to improve the reach and access of public health services for those who get excluded because of lack of awareness, low availability and acceptability of health services. The non economic barriers to access of public health care such as long waiting time, unhygienic environment, non- availability

of infrastructure and man power need to be tackled. Exploring the possibilities of public private partnership could go a long way in rectifying the inequities observed in health care utilization.

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