

## **Is Tertiary Care Treatment Affordable to All? – Explore Alternative (s) for Healthcare Financing**

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### **Abstract:**

**Background:** Health indicators such as life expectancy at birth, infant mortality rate etc. are some of the tools to measure the social development of that country. Due to advancement in technology, disease profile etc. expenditure on health care, especially tertiary care treatment is increasing day by day, and is beyond the reach of common people. This is one of the hindrances in the social development. India is a developing country and approx. 35% population is below poverty line. Since many people are below poverty line or in lower income group, people do not have any feeling to save or cannot save the money for future expenditure on health; therefore the tertiary care facility is inaccessible to a major fraction of the society.

**Methods:** A study was conducted at Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS) Lucknow in the month of May-June 2007 with objectives to find out the level of awareness about hospital care financing, analyze the mode and mechanism of Health care financing and to assess the affordability of the tertiary care treatment by the patients undergoing treatment at this centre. A prospective study of 154 patients by floating the structured questionnaire containing 17 questions, covering various issues of HCF was carried out.

**Results:** While observing the HCF pattern of High cost treatment diseases related to ICU, kidney transplant, cardiovascular surgery, Haematology, Surgical Gastroenterology etc. (expenditure limit more than Rupees (Rs) 75000 so far incurred in one patient), the study revealed that the average size of family is 6 members with an income of approx. Rs. 10185 per month per family. Average expenditure so far incurred by one patient is Rs. 219376. The figure shows that majority 115 (75%) patients bear the expenses themselves (out of pocket) It was also observed that approx. 50% out of pocket expenditure was met by taking loan from the bank, relatives, selling of assets and mortgaging the assets. approx. 34 (22%) reported that their expenditure will be reimbursed or got advance payment. Only 40 patients out of pocket had received some sort of assistance from some of the sources like CM, PM Fund and other types of donation. The study further highlights that average treatment expenditure already incurred in one patient i.e. Rupees 219376/- has exceeded the per capita expenditure on health care of individual (Rs. 1500/-), & total expenditure on whole family (Rs. 9000/-) and even total estimated annual income of one member (Rs.20370/-) and whole family (approx. 122220/-). Only 2 (1.2%) respondents had health insurance policy.

**Conclusion:** The present study findings reflect that the tertiary & high cost treatment is beyond the reach of majority and will have great impact on the economy and health profile of society. In view of above, it is the need of the hour to strengthen the mechanism of the HCF by mass awareness with great emphasis is to be given to meet the "out of pocket expenditure" and encourage the "health insurance" mechanism. This may help in providing the tertiary care treatment to many people; otherwise the treatment cost is unaffordable.

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## Introduction

The question of financing medical care and health services merges with the larger issue of financing social services viz economic services. For example education and health often have to compete with sector like agriculture and industry for purposes of public resources allocation in the national budget. Health is a personnel attribute but social or public responsibility of maintaining and permitting health is massive. Although governments have their main role in overall policy making and strategic planning for health but that does not mean that they should also be the major actors in health expenditure and financing. Financing of health care in India as elsewhere in the world is viewed in the context of financing of human capital formation, which is the base of economic and social development of any country. The origin of the idea of human capital is as old as the science of economics itself, beginning with Adam Smith and subsequently coming down to Marshall, Friedman, Schultz and Mushkin. Financing of health care falls under the broad new discipline of economics that is popularly known as "Health Economics" or "Economics of Health and Medical Care". This is of recent origin dating back to be the decade of 1960s. The two alternatives of health care financing and private financing came to be emphasized since the very beginning, viz. public financing and private financing. Public financing of health is taken care of by plan provisions and annual budgetary allocations.<sup>(2)</sup>

According to World Bank Surveys private out of pocket expenditures on health represent almost 43% of all expenditures in health and almost 20% from donors. Strategy to mobilize private and out of pocket resources are a mean for increasing revenues and reducing budgetary resources crunch. This will escalate private financing and will free public resources for other public purposes. When wealthy and the rich would spend more in health it will also promote equity as the government will be able to share some money on health and divert it on to other socially useful goals like old age benefits etc.<sup>(3)</sup> User charges and alternative schemes of health insurance can provide more and feasible avenues for additional resource mobilization for financing health and medical services in India. Both of these are in lesser use in India and a vast potential exists to tap

these resources. The schemes of financial resource mobilization as mentioned above if acted upon will not only equate the need and means, they will make the financing of medical and health care more dependable and in a sense autonomous.<sup>(4)</sup>

In view of above, it was desired to carry out a study on the patients undergoing treatment of SGPGIMS, Lucknow, a tertiary care hospital with following aim & objectives.

The aim is to study of Health care Financing (HCF) amongst the patient undergoing treatment at Sanjay Gandhi PGIMS, Lucknow (a tertiary care hospital) with special reference to high cost treatment. The objectives include: to find out the level of awareness about Health care financing (HCF) among the patients undergoing treatment, to analyze the modest mechanisms of HCF used by the patients undergoing treatment and to assess the affordability of the treatment cost specially by the patients under going high cost treatment .

## Methods

A prospective study of 500 patients (154 high cost treatment: more than Rs. 75000/- incurred so far in one patient ) and 346 low cost treatment) was carried out during May – June 2007 by floating the structured questionnaire containing 17 questions covering various issues of HCF and by personal interaction also.

The high cost treatment patients (154) were selected from Critical Care Medicine, Kidney transplant, Cardiology, Cardiovascular surgery, Gastro surgery, Hematology specialties mainly.

The data regarding level of awareness about HCF, mode and mechanism of financing, average expenditure so far incurred in the treatment, attitude towards the saving for future treatment etc. was collected.

The data was analyzed to gather the information and recommendations were made.

## Observations

Sanjay Gandhi PGIMS (SGPGIMS), a 740 bedded hospital is a tertiary care medical institution owned by U.P. State government with a status of deemed university. The nine super specialties, which have been started by now, are: Neuro Sciences, Cardiac Sciences, Renal Sciences, Gastroenterology, Endocrinology, Genetics and Immunology,

Critical Care Medicine, Hematology, Pediatric Gastroenterology, Endocrinology. The workload and the treatment facility have been continuously increasing every year; which is evident by 46566 new registration, 146355 follow up patients, 25721, discharges, 113 renal transplant, 519 open heart surgery, 1056 PTCA, 6296 surgery, 1426779 investigations carried out in 2006.

The catchments area of the hospital is U.P. – 84%, M.P. – 05%, Bihar – 05%, Uttarakhand – 02%, Nepal – 02%, other state and country – 02% - 55%. These patients belong to rural population where as 45% from urban area.

### Findings of study

(a) Total patients under study: (n) = 154

CVTS	-	36
Hematology	-	26
KTU	-	16
Gastro surgery	-	26
Urology	-	16
Cardiology	-	26
Radiology	-	08

(b) M:F :: 116:38

1. Average family size = 6 members

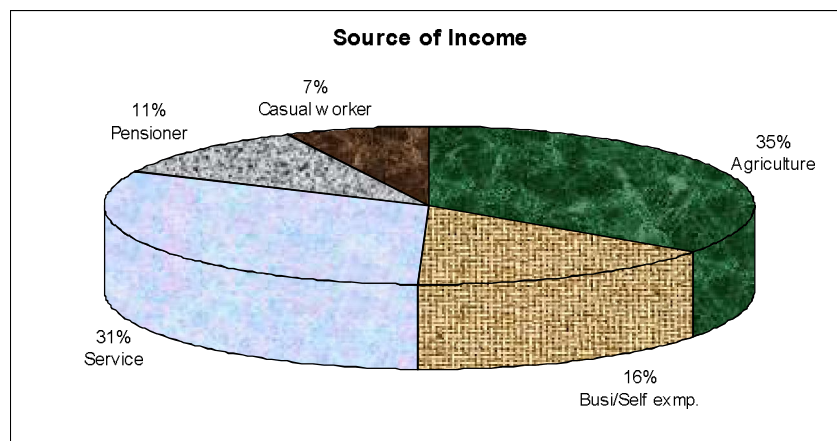
2. Per month per family income = approx.

Rupees 10,185

3. Average expenditure already incurred on treatment of individual patients so far = Rs. 2,19,376

4. Family source of income

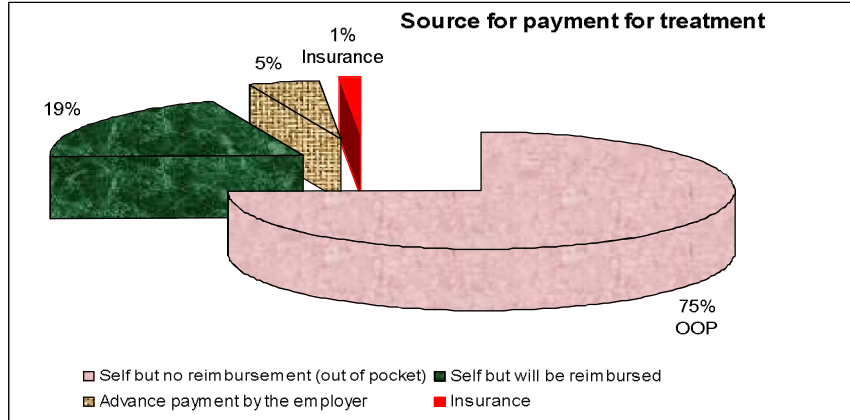
S. No.	Source *	No.	%
1	Agriculture	54	35
2	Business/ self employed	24	16
3	Service	48	31
4	Pensioner	17	11
5	Casual worker	11	07



Source of income was basically divided in 05 groups. Majority of the patients belonged to agriculture and the service class. \* Some of the patients have multiple source of income but for the purpose of study the major source has been reflected.

5. Who paid for this treatment?

S. No.	Source	No.	%
1	Self but no reimbursement (out of pocket)	115	75
2	Self but will be reimbursed	30	19
3	Advance payment by the employer	7	5
4	Health insurance	2	1

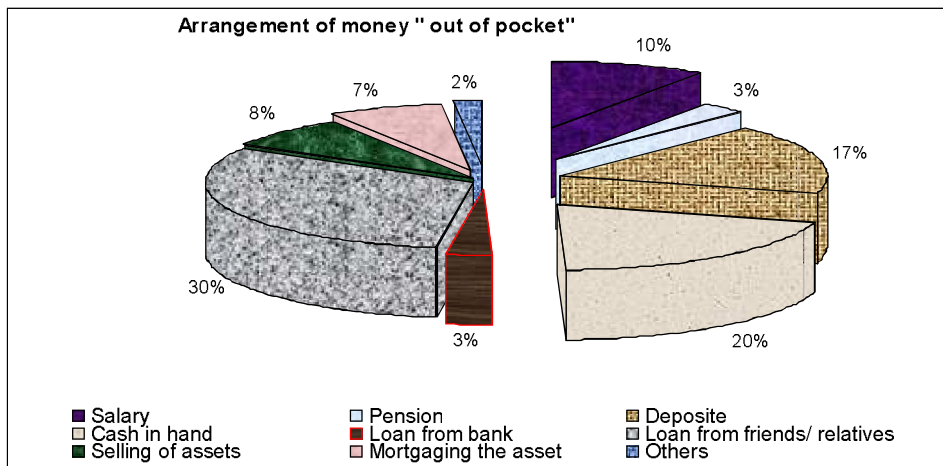


Most of the patients 115 (75%) spent the money for treatment from their pocket (out of pocket) with no provision of reimbursement from any source. It indicates that they have to bear the treatment cost from their income only. Surprisingly only 02 patients (1.2%) had the health insurance provision for bearing the treatment cost.

6. How did you arrange the "out of pocket" expenditure? – 115 numbers

S. No.	Source *	No.	%
1	Salary	11	10
2	Pension	03	3
3	Deposit	20	17
4	Cash in hand	23	20
5	Loan from bank	03	3
6	Loan from friends/ relatives	36	30
7	Selling of assets	09	8
8	Mortgaging the asset	08	7
9	Others	02	2

\* Some of the patients had multiple source arrangement but for the purpose of study major source has been reflected.



The study shows that approx. 50% patients met the out of pocket expenditure from the income received from salary, pension, money deposited and cash money in the hand, where as remaining 50% arranged the money by taking loan, selling the assets, mortgaging etc. It indicates that the treatment is not affordable to at least 50% patients.

#### 7. Financial assistance received from any source – 40

S. No.	Source	No.
1	NGO	0
2	Govt. (PM/ CM)	36
3	Local donation	2
4	Kamdhenu Ati Nirdhan Chikitasa Sahayata Society, Lucknow	2

Forty patients also received the financial assistance from some other sources such as Prime Minister/Chief Minister discretionary fund (36) and from local donation (4) which probably had extended a little bit relief to the patients.

Study further revealed that 42 knew about the insurance and the social security, 68 patients also thought in past to save the money for future for treatment purpose and 64 agreed now to save the money in future (approx 14%), for the medical/ treatment purpose, from their income.

#### Analysis

1. The per capita income of patients (Average Rs. 20370) is less than the estimated per capita income (approx. Rs. 27000) of the country.

2. Average treatment expenditure already incurred in treatment of one person, Rs. 2,19,376 has exceeded the per capita expenditure on health care (approx. Rs. 1500) and even estimated annual expenditure on health of whole family (approx. Rs. 9000). The average expenditure incurred so far by one person Rs. 2,19,376, had also exceeded the total estimated annual income of the whole family (Rs. 20370 x 6 = Rs. 122220).

4. These figures show that the whole income of the family has been exhausted in the treatment of one person; therefore some other sources have been tapped. And if required in future, there will be no money left with the family to treat this or any more person in the family.

5. The majority of patient 115 (75%) bear the expenses themselves "out of pocket". Other are covered by some sources. 50% of the "out of pocket" expenditure was met by salary, pension, deposit and cash in hand and remaining 50% was met by loan from the bank,

friend, sale of asset and mortgaging the assets. This reflects that the treatment is not affordable to at least 50% patients.

6. Only 02 patients (1.2%) had health insurance policy who could meet the expenditure. This indicates poor response of patients to wards the health insurance.

8. Patients had some awareness about the health insurance and they also thought in past to save the money for health/medical care but could not. Now some of them are agree to save the money for future medical expenses.

#### Conclusion

The health care financing is a thrust area of the medical field now a day. Increase cost of the treatment due to high technology innovation, changing profile of disease etc. is beyond the reach of common public. The prospective study carried out on 154 high cost treatment patients at SGPGIMS, the tertiary care institute, revealed that the majority of patients (75%) spent the money from their pocket (out of pocket). About 50% of them could afford the treatment cost as the money was with them while remaining remained distressed as the money was collected by loan, selling/ mortgaging the assets. The average expenditure incurred so far in the treatment of one patient (out of 6 members in family), Rs. 219376 has already exceeded the per capita health expenditure of individual and whole family and even the total annual income of the whole family (Rs.122220). The situation is alarming as more money will be required in the treatment of same patient in future and also in the treatment of other members of the family, if the situation arises and at the same time no money is left with them. Only 2 patients (1.2%) had the health insurance which helped them in the treatment. This shows poor response of the

patients. The study shows that some of the patients had the knowledge about the HCF and thought in past to save the money for future treatment but all could not. Some of them are now willing to go for saving for future in view of high cost of the treatment. In view of above, now we can conclude that the high cost treatment is not affordable to common public. Therefore, this matter should to be given great importance for the discussion to explore the alternative (s) methods of HCF.

Awareness about HCF is must nowadays among the community, patients and the health care providers, so that one can think and meet the expenditure on medical care in future. Therefore the public to be made aware about the treatment facility, its accessibility and un affordability (cost factor).

“Out of pocket” mechanism constitutes the three-fourth (75%) part of HCF, therefore some sources to be tapped to meet the “out of pocket” expenditure on treatment.

Health insurance should be introduced on a large scale for meeting the unforeseen expenditure on treatment. This will not only reduce the out of pocket burden but also will expedite the process of health care.

### Scope for Further Study

- Expenditure so far incurred by individual group of patient
- Average income of individual group
- Follow up of some of the patients to find out further expenditure incurred after June 2007
- Group wise analysis of financial assistance received
- Group analysis for out of pocket expenditure mechanism especially who met the expenditure by taking loan, mortgage/ selling the asset?

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