

GENERAL HOSPITAL PSYCHIATRY : COST OF ONE VISIT

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ABSTRACT

An analysis of patients attending general hospital psychiatry out-patient (OP) showed that cost of one visit was Rs. 201/- Management's contribution of the total expenditure was 68% and patients' 32%. Salaries accounted for the maximum-48%. This was followed by loss of earnings-17%. Drugs accounted for less than 10%. If MCI norms are followed, cost of a visit would increase by 61%, drug supply and number of patient's visits remaining the same.

Key words : Cost, visit, MCI

Various aspects of general hospital psychiatry were dealt with in Indian psychiatric literature, but the cost aspect was not one of them. We are living in a consumer society, where everything is counted in money. The question of costs in treating the most widely spread diseases have appeared in medical literature of west. Modern health economics tries to establish costs-direct and indirect, of various illnesses. This is more relevant to diseases of prolonged duration and with social implications like psychiatric disorders. The aim, generally, is to reduce the costs in these diseases. There were various studies in other countries dealing with psychiatric services and costs. These include cost of illness, cost benefit analysis, cost effectiveness and cost utility. The cost of a visit to a psychiatry department in a general hospital has not been assessed so far in India. While cost was of academic interest earlier, these have become more relevant and practical now in India. This is because of increased participation of private sector, escalating prices of drugs, etc. With the inclusion of health in the WTA gambit, the influx of others into Indian health sector may not be very distant. So far there were no reports about the cost of a visit of a patient to a general hospital psychiatry department. If this basic figure is available, then other aspects of economics like

cost of treatment of individual diseases, breakup of cost of various psychiatric services, comparison of various methods of treatment, etc., can be thought of and attempted.

Hence an exercise was undertaken to compute :

- the actual cost of a visit of a patient to a non-P.G. psychiatry department of a general hospital
- to compute the cost per visit as per MCI norms(MCI, 1999)
- the % contribution of individual components
- impact of graded increase of individual components on total costs.

Method

The data obtained from patients in Psychiatry OP of MGM Hospital, Warangal during the period January 1, to August 31, 1999, was analyzed for the following :

- basic data, including their economic status
- total amount of money spent from the moment of leaving the house to reaching the OP. This was doubled to obtain the total travel expenses (Direct Cost)
- total amount of time taken from the moment of leaving the house to reaching the OP. This was doubled to obtain time lost and consequently wages lost. Wages were calculated at the prevailing rates for agriculture workers. The assumption was that those who are earning more

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than the above will compensate for those who are earning less or not earning (indirect/ hidden Cost). The above was computed for the attendant/ attendants of the new cases also and added to the respective costs.

The expenses incurred by the state in running the department was computed in the following manner:

Salaries :

Direct : the actual amount paid during the index period to the teaching and non teaching staff and proportionate surrender leave

Indirect : commuted @ 20% annual basic for pension & gratuity, adjusted for the period

Space :

• Market rental @ Rs.8.50/ Sq. ft (Rs. 4.50 rent and Rs. 4.00 for Water & Electricity connection)

• Water & Electricity charges

Stores :

Direct: Actual cost of drugs

Indirect: ED, APGST & Handling charges @ 20%

Office :

Furniture, Stationary, etc., and Establishment @ 20% of basic of staff of department.

RESULTS

During the index period, there were 5224 patient visits. New cases were 532-327 male and 195 female. New male cases on an average spent Rs 62.43 on travel and incidental expenses and the corresponding figure for females was Rs.60.97. Old cases spent about half the amount spent by new cases-males Rs.31.25 and females Rs.30.50. Fifty-eight percent of patients were having financial problem. The days lost were 2,988 and 1,658 for men and women respectively. These lost days included that of attendants also. Of all the new cases seen, 30% did not make a second visit.

Table 1 show the computed expenditure according to existing facilities and per MCI requirements.

Table 2 shows the effect of increase of cost of one item on total expenditure.

As shown in table 2, the graded increase in

**TABLE 1
COMPUTED EXPENDITURE OF COST OF ONE VISIT AS PER EXISTING FACILITIES AND MCI REQUIREMENTS**

Item	Actual	MCI
Salaries	5,00,830 (47.7)	10,03,660 (59.5)
Space	51,140 (4.9)	1,50,290 (8.9)
Drugs	85,510 (8.2)	85,510 (5.1)
Patients :	3,33,110(31.8)	3,33,110(19.7)
(Travel 1,54,470 Indirect 1,78,640)		
Establishment	78,360 (7.5)	1,15,550 (6.8)
Cost per visit	201/-	323/-
Salaries	96	192
Space	10	29
Drugs	16	16
Patients :	64	64
(Travel 30 Indirect 34)		
Establishment	15	22

(% in parenthesis)

**TABLE 2
EFFECT OF CHANGE OF COST OF ONE ITEM ON TOTAL EXPENDITURE**

	% Increase/ Decrease		Salary Increase		Stores Increase		Patients Decrease	
	Present	MCI	Present	MCI	Present	MCI	Present	MCI
10	4.8	5.9	0.8	0.5	3.2	2		
20	9.5	11.9	1.6	1	6.4	4		
30	14.3	17.8	2.4	1.5	9.5	5.9		
40	19.1	23.8	3.3	2	12.7	7.9		
50	23.9	29.7	4.1	2.5	15.9	9.9		
60	28.6	35.7	4.9	3	19.1	11.8		
70	33.4	41.6	5.7	3.5	22.2	13.8		
80	38.2	47.6	6.5	4.1	25.4	15.8		
90	43	53.5	7.3	4.6	28.6	17.8		
100	47.7	59.5	8.2	5.1	31.8	19.7		

contribution of expenditure of one item, the change in total expenditure is marginal. For example a 50% increase in salaries at the present staffing level, will increase total expenditure by only 23.9% (29.7% in MCI). Similarly a 50% increase in drug purchase (stores) will lead to a marginal increase of expenditure by 4.1% (2.5% in MCI). A 8.2% increase (5.1% in MCI) in total expenditure will procure double the quantity of drugs. Thus a marginal increase in expenditure can increase the drug supply. On the other hand halving the patients' expenditure, will reduce the cost by

31.8% (19.7% in MCI).

DISCUSSION

Generally cost analysis is undertaken to find out the justification of a particular method of treatment, comparison of various treatment methods, etc. Since there is an explosion of IT and we are in the web of market economy, it is imperative that we know the economics of various methods. It will be a public service to the mentally ill if it is impressed on decision makers that mentally ill will suffer serious consequences if untreated and that other costs will increase if inadequate access to treatment is the result of poor benefit or managed care denials (Sharfstein, 1997.) Only one visit patients in psychiatry ranges from 20% to 57% (Baekeland & Lundwill, 1975.) In Indian psychiatric literature it varied from 24.7% to 45% (Gopala Sarma, 1991.) Hence it is imperative to ascertain a single visit cost to have a comprehensive idea of economics of psychiatric disorders.

The cost will ever be increasing. With the recent hike in diesel prices, the money spent by the patient on journey will increase. With each increase of DA, the management contribution will increase. During the index period there were no admissions and teaching for technical reasons. Hence all the expenditure incurred by the hospital was for outpatients only.

There are no arbitrary or standard rules for cost computation. The different methods used in computing cost can influence results drastically (Sharfstein, 1997.) Three different resource inclusion rules can be used, depending on the perspective of the study- management perspective, accountant perspective and economist perspective (Wolff et al., 1997). In the present one the economic perspective was used. Most of the general hospital psychiatry units are managed by state governments. They are only a part of general hospital attached to a medical college. They do not have an independent budget of their own. This is unlike

mental hospitals that exists exclusively for psychiatric patients, where all the money allotted and spent can be assumed to be for psychiatric services. Hence computing costs for psychiatric care in a mental hospital is easy. The same thing cannot be said about general hospital psychiatry. Estimation of unit cost of mental health services is influenced by several factors. Generally unit cost implies cost per hour of services rendered. In the present analysis it was taken as cost per visit. Generally the expenses incurred by patients are not included in cost computation. In the present analysis that was included. Another important aspect of this analysis is inclusion of evaluation of poverty basing on difficulty in meeting both ends meet. This was done not by any scale but by practical method of questioning about difficulty in meeting bare living expenses and indebtedness. Even though Rs.64/-, spent by patients may not appear to be much, it was a substantial amount for a majority of the patients- 58% reported financial problems. This amount, Rs.64/-, was for a single visit. These patients have to make many more such visits for the Rs. 16/- worth drugs dispensed and other services rendered. Hence opening of smaller units situated at shorter distances will reduce the patient's burden. Alternately, doubling of drugs purchased and dispensing of drugs for longer periods will reduce the financial strain on patients. Either of these methods will have marginal effect on the cost as shown. The same pattern of staffing bare minimum is there in some of the medical colleges. Hence the arrived at figure is the lowest possible. This can be taken as a base line for similar non-PG. Psychiatry units of general hospitals. Since pay structures vary from state to state and the number of patients seen varies, there will be corresponding changes in unit cost.

Since this is a study of computation of expenditure of a single visit, the benefit of the visit leading to increased productivity in the long run, was not included. Though computation of wages lost was done by hours' basis, some lost full day wages, some did not suffer loss of wages

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even though they were not present for a couple of hours. So the method of computation adopted, by hourly wages, will cancel the above discrepancy.

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