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Making Drugs Affordable for the Poor in a Tertiary Care Hospital: A Case Study

Om Prakash Singh and Jawahar S. Bapna*

The public sector health care facilities are expected to provide health care services including medicines at low costs. The costs are escalating and the poor population is unable to afford them. The most important factor for high costs is prescribing of expensive newer drugs irrationally due to the pressure of pharmaceutical companies. An attempt to promote rational prescribing through interventions, such as essential drugs lists, clinical protocols and training has not been very effective. The margin of profit manufacturer to retailers is high. Two attempts to supply medicines at low cost, one through a not-for-profit association, Rajasthan Medicare Relief Society (RMRS) and the other through a public sector undertaking, Rajasthan State Consumer Cooperative Federation (COOPS) are described. Quantitative data was collected using WHO indicators and qualitative information through interviews. The RMRS store stocks only the expensive drugs that are prescribed by the doctors. Although the cost is 30 per cent to 50 per cent below maximum retail price (MRP), only 20 per cent of the drugs are from the Rajasthan state essential drugs list (RSEDL) indicating an irrational use of expensive newer drugs. The benefit of reduction of the costs does not reach the public in the true sense. The COOPS provide medicines at 2 per cent below the MRP, where 30 per cent of the drugs are from the RSEDL. Mostly the government servants buy medicines from these stores to get the reimbursement from their employers. The study suggests that though these two types of outlets provide the medicines at low cost to the public, the actual benefits do not reach them due to irrational prescribing of expensive non-essential medicines.

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Introduction

The public sector health care facilities in India are expected to provide health care to the patients free of charge. However, due to limited resources, they are unable to do so. The patients have to buy most of the prescribed material and medicines from the market at high prices. In India the household out-of-pocket expenditure on health care services is high. (Sharma and Hotchkiss 2001; Sharma et al. 2002). In Rajasthan the out-of-pocket expense for an episode of illness is 71 per cent (Sharma et al. 2000). Most of it is on medicines. With the increasing costs of the medicines the poor population is unable to afford them. The effects of interventions for improving the access to medicines to make them available at affordable costs have been planned through not-for-profit associations and public sector outlets have been evaluated. Other efforts such as Public–Private Partnership and revolving drug fund (RDF) have resulted in limited success (MSH 1977, 2001).

The not-for-profit association in Rajasthan, Life Line Fluid Store, under the Rajasthan Medicare Relief Society (RMRS), was set up in 1996 as a registered society at SMS Hospital, Jaipur, to provide medicines at a low cost by procuring them directly from the manufacturers or their stockist. Initially, IV fluids were stocked in the store that were consumed in large quantities at the hospital. The cost to the patient reduced considerably. For example, ringer lactate 500 ml, that carried a maximum retail price (MRP) of Rs 33.48 was procured at Rs 07.45 and sold at Rs 10.00. Looking at the large amount of financial benefit received by the patient, other expensive medicines were added to the inventory. Currently, it stocks 339 drugs, mostly expensive injectables that are frequently prescribed by doctors. With a 10 per cent mark-up on medicines procured from manufacturers or their agents, it provides 30 per cent to 50 per cent reduction in the cost. However, only 20 per cent of the drugs sold through this mechanism are from the essential drugs list (RSEDL). This means that the majority of drugs are prescribed outside the RSEDL indicating an irrational use of expensive newer medicines and injections due to pressure of the pharmaceutical companies. Thus the benefit of reduction in the costs does not benefit the public in the true sense (Bapna et al. 1999).

Another modality of supply of medicines at low cost introduced at the hospital is through a public sector organisation, the consumer co-operative society (COOPS). The COOPS is a government-supported society under the co-operative societies act of 1965 set up to provide good quality products at reasonable cost (RSCCSL 2000).

Background and Rationale

The COOP procures and supplies medicines to their retail stores. The inventory is as large as 7,000 allopathic and 200 ayurvedic products. The policy of the COOP is to sell all products at 2 per cent below MRP plus taxes. The pharmacist who operates each outlet is paid a salary of Rs 7,000 and an incentive of 1 per cent on sales that exceed Rs 30,000 per month.

It is mandatory for government employees to purchase medicines from these stores for reimbursement. If the drugs are not available a non-availability certificate (NAC) is issued for obtaining medicines from private pharmacy shops and the bill is honoured for reimbursement by the government. The COOP also provides medicines to below the poverty line (BPL) people and pensioners and the cost of these are claimed from the government treasury.

Due to large margins of profits, the medicine business is very lucrative. For this reason COOPS had advised its non-profit organisations to resort to this business (RSCCSL 2000). Keeping this in mind, the effectiveness of COOPS in providing quality medicines at low cost was evaluated.

Methodology

The study was conducted at 10 COOPs outlets located at SMS Hospital, Jaipur. Quantitative data and qualitative information was collected through a pre-tested questionnaire during the exit interviews of 100 patients (WHO 1999). Quantitative data was collected using WHO indicators such as the diagnosis, average number of drugs prescribed, injections used, percentage of prescriptions with antibiotics, vitamins and tonics, drugs prescribed from RSED, prescribed by generic names and the costs of medicines dispensed. The costs of medicines for which NAC was issued were determined. Qualitative information regarding the quality of services provided was collected through observation and in-depth interviews.

Results

The study indicates that the services at these stores were provided primarily to government employees and pensioners. In addition to them, BPL received the medicines from these. Some government organisations also purchased

medicines from them. The services availed by general public were negligible (Table 1), mostly by non-qualified persons who took as much as 45 minutes for dispensing sold medicines. The quality of services was poor and the financial savings to public for medicines was negligible.

Table 1
COOP Customers

	<i>COOP Customers</i>	<i>% of Total</i>
Individuals	Private patients	5%
	Government employees	41%
	Pensioners	38%
	BPL (below poverty line customers)	6%
Government Organisations	Hospitals, jails, etc	10%
	Total	100%

Source: Interviews with COOP management team, sales analysis.

The prescribing indicators are given in Table 2. The average cost of prescription was Rs 380 and for those NAC issued was Rs 552. The qualified pharmacists on contract hired the outlets. However, unqualified salespersons mostly sold the medicines. The qualitative analysis of the perception of the services provided showed that the general attitude of the salespersons was stiff as evidenced by the long time taken (45 minutes) for dispensing. They were reluctant in issuing the NAC for the drugs, which were not available at the COOPs. For increasing the sales for sustainability, the government

Table 2
Prescribing Indicators

<i>S.No.</i>	<i>Indicator</i>	<i>Percentage/Value</i>
1	Average number of drugs prescribed	3.93
2	Drugs prescribed from RSED L	29.77
3	Antibiotic use	48%
4	Vitamins use	52%
5	Injections use	6%
6	Medicines prescribed by brand name	98.95%
7	NAC issued	31%

Note: Indicators 1 and 2 are Values and the rest are percentages.

has made it mandatory that its employees buy medicines from these stores to be eligible for reimbursement. The medicines were sold at 2 per cent below the MRP.

Discussion

The information collected using WHO indicators shows that on an average 3.9 drugs per prescription was high indicating the practice of polypharmacy. The use of antibiotics and vitamin preparations was high. However, injections in 6 per cent patients can be justified for a tertiary hospital of this kind where the patients with serious illnesses seek medical care.

Only 30 per cent of the medicines were prescribed from RSED. The RSED medicines are relatively safe, effective and inexpensive. They cover a majority of the health care problems of the community. Prescribing of drugs outside the list is not only an economic burden on patients but also a health hazard due to unnecessary and irrational use of medicines. Almost all drugs were prescribed by brand names that are more expensive than the generic drugs. The doctors influenced by the pharmaceutical companies prescribed newer drugs that are very expensive. In a study it is reported that some of the brand names were about 5 times more expensive than the generic drugs. Procurement authorities in Mozambique found that for 10 drugs alone, the potential cost savings that could be realised through careful procurement of generic drugs amounted to 25 per cent of the total drug budget (WHO 1988).

The medicines for which NAC was issued were more expensive as indicated by the fact that 45 per cent of the total cost of the medicines prescribed was consumed by 31 per cent of the medicines. This shows that the newer and expensive drugs beyond the large inventory of the store are frequently prescribed causing a financial burden on the government and public. In addition to this if any coalescence among the patient, pharmacist and the private retail shops exists, there can be a huge drainage of government funds.

The services provided by non-qualified salespersons were unsatisfactory. These salespersons were not holding any diploma or degree in pharmacy which is a must to operate a pharmacy. Not only did they take a long time in dispensing the medicines, no information was given to the patient about taking the medicines. The sales outlets located in the renovated garages were

also a factor in diminishing the confidence of the patient in the quality of medicines and services.

The discussion with the customers revealed that they had to wait from half an hour to two hours to get medicines from these stores and around 95 per cent of the customers complained that they were not counselled about the drug use. The customers had no choice as reimbursement was only possible through these stores.

The study suggests that there is a need to make hospitals enforce the policy of prescribing drugs from the Rajasthan's essential drugs list (RSRSEDL) with their generic names. In the past an order No. F.22(15)Med./74 Pt. dated 3 March 2000 (Government of Rajasthan) was issued that 'the doctors of the state working under the government shall prescribe and use medicines out of RSRSEDL only, as far as possible. Deviations in prescriptions outside the RSRSEDL would be subject to scrutiny by an "Authorized Medical Authority" to be constituted by the government.' The doctors have not paid any attention to this order. Their prescriptions continue to be pharmaceutical company driven. If the doctors prescribe from the RSRSEDL and these medicines are stocked at the COOPS stores, the NAC can be eliminated and the patients will get essential medicines at low cost. Even if these are sold with a profit motive by the COOPS stores, patients will save huge amounts of money through rational drug use of essential drugs. The reimbursed cost will also be reduced. The training of prescribers on rational drug use may also be imparted. Such efforts are known to promote rational use of drugs (De Vries et al. 1995). Efforts involving use of essential drugs list and standard treatment schedule have been shown to be an effective method in reducing over-prescriptions and saving as much as 50–70 per cent of expenditures on drugs (WHO 1988).

The study shows that the interventions at SMS hospital in providing medicines at low cost to the patients through Life Line Fluid Store (LLFS) under the Rajasthan Medicare Relief Society (RMRS), as well as through store under COOPS have not been successful.

References

- Bapna, J.S., A.S. Bapna, P.C. Dandiya and Ravi Godhra** (1999). Low cost essential drugs provided by registered society: A variable alternative to procurement through tenders in International experiences. *Rational use of Drugs*, 3, 26–31.

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- De Vries, T.P., R.H. Henning, H.V. Hogerzeil, J.S. Bapna, L. Bero, K.K. Kaffle, K. Kumud, A.F.B. Mabadeje, B. Santoso and A.J. Smith (1995). Impact of a short course in pharmacotherapy for undergraduate medical students: An international multi-centre study. WHO Action Programme on Essential Drugs. Geneva: World Health Organization.
- Government of Rajasthan (2000). Rajasthan Essential Drugs List.
- MSH (1977). Managing drug supply. Revolving drug fund. 688–710.
- (2001) Targeting Improved Access; SEAM Conference 2001.
- Rajasthan State Cooperative Consumer Society Limited (RSCCSL) (2000). Report. Government of Rajasthan, 16th annual general body meeting agenda, 4 November, Jaipur, India.
- Sharma, S., W. McGreevey and R. Hotchkiss (2000). Financing health care and reproductive and child health in Rajasthan. Report prepared by The Policy Project, World Bank.
- Sharma, S. and D.R. Hotchkiss (2001). Developing financial autonomy in public hospitals in India: Rajasthan's model. *Health Policy*, 55(1), 1–18.
- Sharma, S., W. McGreevey, B. Kanjilal and D.R. Hotchkiss (2002). Reproductive and child health accounts: an application to Rajasthan. *Health Policy Plan*, 17(3), 314–21.
- WHO (1988). Financing essential drugs: 1988 Report. WHO Workshop, Harare, Zimbabwe 14–18. WHO/DAP/88.10.
- (1999). How to investigate drug use in health facilities. WHO/DAP, 93(1).

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