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Cost-sharing Drug Scheme (CSDS): an experience from Chyangthapu Health Post

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Abstract

This paper describes a community-organised Cost-Sharing Drug Scheme (CSDS) in a remote Health Post (HP) of eastern Nepal. The inadequate annual supply of drugs from the government was supplemented by an additional supply from Britain Nepal Medical Trust (BNMTa) in 80% of the cost price. The prescribed drugs were dispensed at 40% of the cost price. The local Village Development Committees (VDCs) also made financial contribution. Thus, the government supply, BNMT subsidy, the local VDC contribution and the patient fee helped to generate a revolving fund which was managed by the Local Health Support Committee (LHSC). The District Health Office (DHO) carried out the supervision/monitoring and BNMT staff facilitated the process of Drug Scheme Programme (DSP) implementation. The result showed that single item fee improves the quality of care and the local community can be involved in drug schemes management.

Keywords: Cost-Sharing Drug Scheme; Local Health Support Committee; Essential drugs; Drug prescribing practice; User fees; Revolving fund; Health Post; Nepal.

Introduction

Drugs are essential inputs in preventive, promotive, curative and rehabilitative health care system. In Nepal, although the government health care system embarks to supply free drugs to the people, drugs are not continuously available for dispensing at health institutions.[1,2] Besides, the annual incidence of drug budget has been constant for the last four to five years. Therefore, the government has problems in maintaining the credibility of the health care system.

To improve the access of drugs to the local community, different types of drug scheme programmes have been implemented in Nepal.[3] Britain Nepal Medical Trust (BNMT) introduced Cost-Sharing Drug Scheme (CSDS) in the Eastern Region since 1980.[1,4] At present, CSDS is being operated in 40 health institutions of remote hill districts including Chyangthapu Health Post (HP) of Panchthar district.

Table I: Health care outlets in Panchthar District

S.N.	*Name of Health Institution*	*Number*
1.	Hospital	1
	Primary Health Centres	

2.		2
3.	Health Posts	10
4.	Sub Health Posts	30
	Total	43

Source: District Health Office, Panchthar 1999

The health care outlets providing health service in Panchthar district are shown in Table I. Chyangthapu HP is situated in rural Chyangthapu Village Development Committee (VDC). It takes about three days walking to reach the HP from the district centre, Phidim. The HP provides primary health care to about 12,000 people of Chyangthapu, Falaincha and Oyam VDCs. Falaincha and Oyam VDCs also have sub-Health Posts (SHPs).

Drug Scheme Programme in Chayangthapu HP: a brief history

Before 1989, the government annual drug supply which Chyangthapu HP used to get was not sufficient to meet the local need. Considering the demand of the local people, BNMT Drug Schemes Programme introduced CSDS in the HP in December 1989. A nominal flat fee Rs. 7 was charged for a prescription to a patient visiting the HP. The money obtained from drugs was collected in DSP account, and DSP district office used to supply the unmet drugs for the HP throughout the year. In 1995, the HP staff misused some drugs. BNMT evaluated the case and found that drugs worth about Rs. 35,000 were misused.[5] BNMT tried to recover the money but neither the local nor the district authorities took necessary action. Therefore, BNMT stopped the programme from the beginning of 1996.

Local people from Chyngthapu requested BNMT to restart the Drug Scheme Programme. In December 1996, Panchthar Chief District Officer formally requested BNMT to re-introduce the DSP in Chyangthapu. Again, in July 1997, Chyangthapu VDC chairperson sent a request letter to re-start the programme.

A District Health Co-ordination Committee (DHCC) meeting was held on 26 November 1997. In the meeting, two members of Chyangthapu Local Health Support Committee (LHSC) were also present. The future of the programme in Chyangthapu was discussed. LHSC was requested to develop a plan for running the programme so as to make it locally sustainable.

Implementation of new CSDS: a process approach

A workshop was organized in the district centre in December 1997. The evaluation result of DSP activities of different districts were disseminated in the workshop. Four members from Chynagthapu LHSC participated in the workshop. At the end of the workshop, they agreed to participate actively to run a locally sustainable DSP at Chyangthapu HP and they decided to call a mass meeting in January 1998. Considering the decision of mass meeting, LHSC planned and decided to implement new CSDS at Chyangthapu HP. BNMT staff facilitated the process of planning, implementation and monitoring.

Mass meeting

A mass meeting was held on 24 January 1998. About 50 local people, the representatives from District Health Office (DHO) and District Development Committee (DDC) attended the meeting. BNMT staff facilitated the process. After a long discussion, the meeting decided to restart DSP in the following form:

a. Provide prescribed essential drugs to patients from the HP in about 40% of cost price ie, 60% subsidy to cost price.

b. Purchase drugs for the HP from BNMT district office in about 80% of cost price ie, 20% BNMT subsidy to cost price.

c. Request Chyangthapu and neighbouring VDCs to support the HP by providing Rs. 5,000 from each of them.

d. Organise LHSC meeting monthly to review the HP activities.

e. Supervise/monitor the programme by LHSC members.

LHSC meeting

The LHSC meeting held on 25 January 1998 decided the following:

a. Provide health service to people by charging user fees as follows:

- Rs. 2 for patient registration.
- Rs. 5 for wound cleaning and dressing.
- Rs. 100 for check-up of injuries related to a police-case. From this money, Rs. 50 to be collected in the LHSC fund.
- Rs. 100 for alcoholic check-up (person who creates noise) in the first visit and Rs. 200 for each repeat visit.
- 40% of cost price for dispensed drugs.

b. Open an LHSC bank account and deposit the collected money in the account.

c. Purchase drugs for the HP from BNMT District Office in about 80% of cost price ie, 20% BNMT subsidy to cost price.

d. Request BNMT to provide technical and management support ie, supervision, monitoring, training etc, to run the programme in the HP.

e. Implement the above decisions from 26 January 1998.

The LHSC evaluated the HP store and found drugs worth Rs. 36,700 in the stock. These drugs were recorded as initial fund for re-introducing the programme. A price list of drugs based on 60% subsidy to cost price was developed and implemented. The pattern of cost-sharing was designed as in Figure 1.

Figure 1: Fund management system

Spot training/Monitoring

After re-introduction of DSP at Chyangthapu, LHSC members and HP staff managed the programme. BNMT staff visited the HP quarterly and conducted the following activities:

a. observed the HP activities with LHSC members.

b. provided spot training to HP staff and LHSC members on DSP management.

c. participated and facilitated the LHSC meeting.

Methodology

Data collection

Data collection method included:

a. Documentary method (clinic register, prescription pad, stock record book, consumption register, monthly account reports, field visit reports, meeting minutes).

b. Observation (storage condition and methods, dispensing process, drugs in stock, money collection process).

c. Note taking during the LHSC meetings.

The data were collected quarterly between January to December 1998 by trained DSP field staff. Area Programme Officer and Drug Scheme In-charge monitored the data collection. The types of data collected were:

a. Prescription information (name of drugs, number of items, cost of prescription, patient information, etc.)

b. No. of LHSC meetings held

c. Important decisions made during the LHSC meeting

d. Money deposited in the bank

e. Money remaining to be deposited

f. Name and quantity of drugs purchased

g. Name, quantity and unit price of drugs obtained from the government supply or other sources

h. Drugs available in the stock

i. Type of staff involved in prescribing

j. Type of staff involved in dispensing

k. Type of staff involved in storage

Data analysis

Data were analysed in the district as well as in Biratnagar by using simple tabulation and calculation methods.

Results

Participation of LHSC in management of DSP

The LHSC meeting was held regularly. The LHSC members reviewed the HP activities in the meetings. They were taking proper care of the money collected at the HP. The following example illustrates the active participation of LHSC members in running the programme:

"In November 1998, Department of Health services (DHS) transferred the Incharge of the HP to Kathmandu. The Eastern Regional Health Directorate (RHD) and Panchthar DHO did not
know about his transfer. The Incharge had not regularly deposited the collected money from patients in the bank. He
tried to depart without depositing the money. LHSC members held a meeting and decided to stop his departure. They reported the event to the DHO and BNMT. Later, the DHO took action against the Incharge. Finally, he paid the money he owed to the HP."

Drug supply and consumption

The programme was restarted with the stock of essential drugs present in the HP as the initial capital. Table II shows that, in 1998, drugs worth about Rs. 89,800 were supplied to the HP from different sources. BNMT supply covered about 35% of the total drugs received by the HP. Drugs worth about Rs. 39,300 were consumed and drugs worth about Rs. 5,400 (about 6% of the total stock) were damaged/expired. The damage/expiry was primarily due to the old stock of last years which included the supplies from the government. Thus, at the end of the year, drugs worth about Rs. 43,800 were expected to be in the stock of the HP. However, the stock evaluation showed that drugs worth only Rs. 32,300 were in the stock. This discrepancy could have occurred due to different reasons. According to the LHSC members and the HP staff, the following were the possible reasons.

a. In the beginning of the programme, the local people used to come with a fixed amount of money. The prescriber dispensed the full-course of prescribed drug even if the patient did not pay the total amount.

b. They gave more attention to keep the record of money collection than that of the dispensed drugs.

c. The persons involved in drug dispensing and recording were frequently changed.

The DSP supervisors found that the consumption records were not properly maintained. Besides the frequent transfer of the HP staff, vacant posts and unavailability of trained staff created a problem to maintain a proper records of drugs in the store.

Table II: Drug supply and consumption.

Particulars	*Drugs in (Rupees)*	*Drugs out (Rupees)*	*Balance (Rupees)*
Opening stock	36,701.41		
HMG indent supply	21,885.06		
Drug purchase with BNMT	31,206.14		
Drug sold to patient (value in 100%)		39,334.29	
Drug damage		5,375.50	
Drug return		1,307.00	
Total	89,792.61	46,016.79	*43,775.82
Closing stock			**32,215.81

* theoretical figure ** actual figure

About 82% of indicator drugs were available in the HP at the time of visit.

Patient attendance and money collection

Table III shows that in 1998, 2133 patients attended in the HP. Of the total money collected, about Rs. 22,500 were collected from drugs and other services. The other services included wound cleaning and dressing, police case, injury check-up, etc.

Table III: Patient attendance and money collection

	No. of	*Money collection (Rs.)*	
Quarter	*patients*	*For registration*	*For drugs and other services*
First	358	716	2992
Second	776	1552	8356
Third	680	1360	8144
Fourth	319	638	2965
Total	2,133	4,266	22,457

Table IV shows that average patient per day increased by two fold in 1998 when compared to 1995. In 1998, on average, patients paid about Rs. 10.50 for the dispensed drugs.

Table IV: Comparison of parameters between 1995 and 1998

Parameters	*1995**	*1998*
Average patient per day**	3.60	7.43
Average cost per prescription (Rs.)	34.21	18.44
Average cost paid by a patient (Rs.)	7.00	10.53

* Source: DSP annual report 1994/5 (5)

** Calculated per 365 days.

Drug prescribing practice

Drugs were usually prescribed by Auxiliary Health Worker (AHW). In his absence, Village Health Worker (VHW) was working as prescriber. Sometimes, drugs were also dispensed by *peon* (a helper). Table V shows drug prescribing practice in 1998. A comparison of prescribing practice between 1995 and 1998 showed an improved prescribing practice in 1998 (Table VI). The percentage of antibiotic prescription decreased from 58.81 to 50.70. Item per prescription was decreased from 2.3 to 1.8. But the percentage of injection prescription increased from 6.8 to 13.4.

Table V: Drug prescribing practice.

Quarter	*No. of Prescriptions**	*% of Antibiotics*	*% of Injection*	*Average No. of Item*
First	186	44.62	19.89	2.00
Second	367	55.57	10.63	1.94
Third	173	56.64	16.76	1.72
Fourth	141	46.10	6.38	1.65
Average in year	867	50.7	13.4	1.83

* Prescriptions collected in the last month of each quarter.

Table VI: Comparison of prescribing practice between 1995 & 1998.

Particulars	*Average in*	
	1995	*1998*
% of Antibiotics	58.81	50.7
% of Injection	6.80	13.4
Item per script	2.30	1.83

Revolving fund

A LHSC fund was established. The LHSC bank account was jointly operated by LHSC chairperson and HP Incharge. The money received from different sources was deposited in the account. Table VII shows that at the end of the year, Rs. 13,400 remained deposited in the bank. Therefore, for the beginning of the programme in 1999, the LHSC had Rs. 13,400 as cash and Rs. 32,200 as drugs (Table II). Of the total transaction in 1998, about 44% has remained for 1999. However, the drugs have to be re-evaluated with the new average rate for 1999.

Table VII: Revolving fund.

Particulars	*Cash received (Rupees)*	*Cash expenses (Rupees)*	*Balance (Rupees)*
Chyangthapu VDC contribution	5,000.00		
Falaincha VDC contribution	5,000.00		
Money collection (40% of total drug sold)	22,457.00		
Registration fee	4,266.00		
Interest and other sources*	1,631.32		
Payment to BNMT (80% of total drug purchase)		24,964.91	
Total	38,354.32	24,964.91	13,389.41
Cash in hand**			7,508.00
Bank balance at the end of the year			5,881.41

* other sources included money collected in 1997.

** cash remaining to be deposited in the LHSC account.

Discussion

This pilot project was started on ad-hoc basis. The main aim was to examine whether the local community provides a better level of participation than just getting drugs from the health institutions. The following are some important achievements of this programme.

a. Local people can support drug scheme programme. LHSC is able to manage the programme for the provision of adequate drugs to patients from the health institution.

b. The HP staff should be properly

trained and facilitated to maintain the consumption records. The discrepancy could be reduced by proper facilitation, supervision and monitoring. The untrained helper (*Peon*) who is frequently involved in dispensing maybe trained in record keeping.

c. Although the fee was increased indirectly, it did not affect the patient attendance. This maybe due to the implementation of single item fee. In the new system, people got better value for their money.

d. Drug prescribing practice improved by single item fee system than that of flat fee system. Thus, single item fee system (based on natural price) could be better than flat fee system (fee set for cheap and expensive bands of items, and same flat fee for cheap or expensive items).

Recommendations

a. Local people should be involved to manage drug schemes.

b. The patient fee should be decided by the local community.

c. Single item fee system should be implemented in cost-sharing drug schemes.

d. For the proper resource management, a controlling mechanism should be developed both at the village level and the district level.

e. Training should be organised to improve the capacity of LHSC members and staff.

f. A system should be developed for sharing information of the community people, volunteers, social workers, village authorities and district authorities, which will support the programme.

Conclusion

Cost-sharing drug scheme programme at health institutions can be properly managed by local community people ie, LHSC, if they are supported by concerned authorities.

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