Implementation Status of Self-assessment/Peer-group Discussion Program: A Bottom-up Approach of Monitoring/Supervision in Improving Quality of Health Services

Kafle KK,1,2 Bhuju GB,1,2 Karkee SB,1,4 Prasad RR,1 Shrestha N,1,5 Shrestha AD,1 Das PL,1 Chataut BD,1 Shrestha A,6 Suvedi BK7
1International Network for Rational Use of Drugs, 2College of Medicine, Nepalese Army Institute of Health Sciences, 3Department of Drug Administration, 4CIST College, 5Valley College of Technical Sciences, 6Department of Health Services, 7PHC Revitalization Division, Kathmandu, Nepal.

ABSTRACT

**Background:** Monitoring/supervision is an essential component for improving the quality of health services including rational use of medicines. A new bottom-up approach of monitoring/supervision consisting of self-assessment/peer-group discussion was found to be effective in improving prescribing practices. The new strategy significantly improved the prescribing practices based on standard treatment guidelines. The government has implemented it as a Program in primary health care services of Nepal. This article aims to share the implementation status of the self-assessment/peer-group discussion Program for improving the prescribing practices of common health problems and availability of drugs in the district health system.

**Methods:** Concurrent mixed research design was applied for data collection. The data were collected at different levels of health care system using in-depth interviews, participatory observations and documentary analysis.

**Results:** The Management Division, Department of Health Services implemented the Program in 2009-10 and the PHC Revitalization Division, DoHs is the implementation division since 2010-11. The Program comprised revision of participant’s and trainer’s manuals, training of trainers and prescribers, finalisation of health conditions and indicators, distribution of carbon copy prescription pads, and conduction of peer-group discussions. The Program was implemented in number of districts.

**Conclusions:** The government made the policy decision to implement the Program for monitoring prescribing practices and the availability of free drugs in districts. However, it has covered only few districts and needs escalation to cover all 75 districts of the country.

**Keywords:** bottom-up approach; monitoring/supervision; peer-group discussion; self-assessment; quality of services.
incorporated the new strategy in government’s Three Year Plan (2007-2010) and allocated budget for its implementation as a Program in all PHC health facilities of all 75 districts from the fiscal year 2066/67 (2009/10).

This article aims to share the implementation status of the self-assessment/peer-group discussion Program for improving the prescribing practices of common health problems and availability of drugs in the district health system.

**METHODS**

Concurrent mixed research design was applied for data collection. The data were collected at different levels of health care system.

Different methods were used in collecting the data on the implementation of the new approach (self-monitoring/peer-group discussion) in the health system of all Program implemented districts from the Department of Health Services (DoHS/MOHP). The methods consisted of in-depth interviews with key informants from the Management and PHC Revitalization Divisions and participatory observations in the revision of training manuals for monitoring and supervision of drug use and management used in the pilot test, TOT trainings, review of health conditions and their indicators used in the pilot test.\(^{14,15}\) In-depth interviews were also conducted with key informants from the district health system. Similarly, participatory observations were carried out during self-assessment/peer-group discussion sessions at the district level. Self-assessment refers to the assessment of treatment given to patients by each prescriber from sub-health post/health post/primary health care centre for the five selected health problems, every month using the carbon copy prescriptions. The self-assessment data of each health institution is presented and discussed at Ilaka level peer-group discussion every month followed by the preparation of Ilaka consolidation report to be presented at district level peer-group discussion, held every four months. In addition, published/unpublished documents related to self-assessment/peer-group discussion were collected from DoHS.

For the quantitative data, indicators were calculated and presented in the tabular form. Qualitative data were transcribed and analyzed as per the need of the study.

**RESULTS**

In 2009-10, the Department of Health Services decided to implement the self-assessment/peer-group discussion as a Program based on the successful piloting of the strategy in Chitwan district carried out through the Logistic Management Division (LMD). Initially, the Program was implemented through the Management Division. A senior public health officer from the division was appointed coordinator for this program. The government allocated a budget of Rs. 60 million in the same fiscal year for the implementation of the activities of the Program.

The health conditions and the indicators for self-assessment/peer-group discussion were decided by the chiefs of different centres, divisions and the department including National TB Centre, National Centre for AIDS and STD Control, and Management, Child Health, Epidemiology and Disease Control and Family Health divisions, Department of Drug Administration under the MOHP, and also INRUD, Nepal. In the meeting, the chiefs proposed many health conditions related to various Programs, acute diarrhoea and ARI in children below five years, pregnancy and worm infestation and indicators for the conditions were finalised for the initial stage of the Program implementation. The health conditions were based on targets set by MOHP on goals of MDGs.

The revised indicators for measuring the prescribing practice for acute diarrhoea in children below five years included percentage of acute diarrhoea receiving ORS and zinc only, and antimicrobials.

Similarly, the indicator for measuring the prescribing practice for no pneumonia in children below five years included percentage of no pneumonia receiving antibiotics. The indicator for measuring the prescribing practice for pneumonia in children below five years included percentage of pneumonia receiving co-trimoxazole alone.

The above indicators were similar to those used in the pilot testing. The meeting also added pregnancy and worm infestation to the list of health conditions in the pilot testing and finalised the indicators as well.

The indicator for measuring the prescribing practice for pregnancy cases included percentage of pregnancy cases receiving iron+folic acid only.

The indicator for measuring the prescribing practice for worm infestation included percentage of worm infestation cases receiving albendazole alone.

Likewise, the revised list for assessing the availability included all free drugs in the primary health care centre (PHCC), health post (HP) and sub-health post (SHP) list, unlike the limited number of key drugs availability assessed in the pilot phase. INRUD, Nepal was involved in the selection of health conditions and their indicators. The contents of the participant’s and trainer’s manuals targeted for district hospital, PHCC, HP, SHP and health facility management committee were updated.
The manuals were jointly revised by the Management Division, INRUD, Nepal and the Department of Drug Administration.

The revision of participant’s and trainer’s manuals was followed by trainings. A three days training of trainers (ToT) for four participants from each of 75 districts were organized at different locations. The participants included District Health / Public Health office chief, medical doctor, health assistant/ senior auxiliary health worker and the focal person of free health program in the district. The trainings were also participated by Regional Directors and participants from Regional Health Training Centers. The trainings were organized in all five regions of the country. Table-1 shows the training locations, number of trainings and number of participants. They were organized in seven locations of five regions and 12 trainings were conducted. Out of the total targeted, 281 health workers (87.5 %) were trained in 12 ToTs held at different places in the year 2009-10. At the end of trainings, each district developed work plan for the printing and distribution of carbon copy prescription (CCP), schedules for the training of prescribers and the self-assessment/peer-group discussion in the district. The trainings were supervised by senior officials including the coordinator from the Management Division. In each training location, supervisors also identified the districts that needed support from the division and INRUD, Nepal for conducting district level training. All ToT trainings were conducted by members of INRUD, Nepal.

<table>
<thead>
<tr>
<th>Development Region</th>
<th>Location</th>
<th>Number of training</th>
<th>Number of participants (targeted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>Biratnagar</td>
<td>2</td>
<td>56</td>
</tr>
<tr>
<td>Central</td>
<td>Kathmandu, Hetauda</td>
<td>4</td>
<td>109</td>
</tr>
<tr>
<td>Western</td>
<td>Pokhara, Butwal</td>
<td>2</td>
<td>55</td>
</tr>
<tr>
<td>Mid-western</td>
<td>Surkhet</td>
<td>2</td>
<td>56</td>
</tr>
<tr>
<td>Far-western</td>
<td>Dhangadhi</td>
<td>2</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 1. Training locations and participants.

In the second phase, the ToT participants from each district imparted three days training to prescribers of the district hospital, PHCC and HP. The training contents for these levels included key sessions on self-assessment and peer-group discussion, as they had to perform self-assessment and conduct peer-group discussion. On the other hand, two days training were conducted for SHP level prescribers as they had to perform self-assessment but not the peer-group discussion. The total number of prescribers who were trained in 75 districts was 5913. In addition, each district organized a half-day orientation session for the members of the health facility management committees. The districts where the technical support was provided by the DoHS and INRUD, Nepal included Kavre, Kathmandu, Lalitpur and Bajhang.

The Program has been implemented by the PHC Revitalization Division since 2010-11. A senior public health officer from the division has also been appointed coordinator for this Program.

All the district level trainings and distribution of CCP pads were completed by July 2010. In addition to district level trainings and CCP pads distribution, Kailali district also initiated self-assessment/peer-group discussion in the same year.

Table-2 shows the different activities that took place in different districts since the Program was implemented in the year 2009-10.

Table 2. Program districts and activities.

<table>
<thead>
<tr>
<th>Year</th>
<th>No of districts</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-10</td>
<td>75</td>
<td>ToT and district level training, printing and distribution of carbon copy prescription, and peer-group discussion</td>
</tr>
<tr>
<td>2010-11</td>
<td>10</td>
<td>printing and distribution of carbon copy prescription, and peer-group discussion</td>
</tr>
<tr>
<td>2011-12</td>
<td>23</td>
<td>printing and distribution of carbon copy prescription, and peer-group discussion</td>
</tr>
</tbody>
</table>

In the fiscal year 2010-11, a budget of Rs. 2.5 million was allocated for the activities including self-assessment/peer-group discussions in 10 districts (Morang, Dhankuta, Chitwan, Dhading, Kaski, Rupandehi, Surkhet, Banke, Doti, and Kanchanpur), nine districts except Dhankuta accomplished it.

The MOHP allocated a budget of Rs. 3.5 million for the activities inclusive of self-assessment/peer-group discussions for 23 districts in the fiscal year 2011-12, only nine districts (Ilam, Ramechhap, Dolakha, Dhading, Chitwan, Kaski, Banke, Surkhet, and Darchula) accomplished it.

The first or the second peer-group discussion held in the district was technically supported by the co-ordinator from the division and a member of INRUD, Nepal.

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In the fiscal year 2012-13, though a budget of Rs. 3.5 million was allocated for the activities, self-assessment/peer-group discussions could not be held because the budget was not available for the Program, which was due to quarterly budget approval by National Planning Commission/Ministry of Finance due to political instability and no annual budget approval.
At the end of each peer-group discussion (held quarterly) at the district, the District Consolidation report was generated incorporating data from the Ilaka Consolidation report. The Ilaka Consolidation report was prepared at the Ilaka level peer-group discussion (bi-monthly) including data from all health facilities under the Ilaka. Table 3 represents the District Consolidation reports from the districts to the PHC Revitalization Division in the fiscal year 2012-13. The results on availability of drugs were not available even from a district.

Table 3. Districts Consolidation report.

<table>
<thead>
<tr>
<th>Indicators / District</th>
<th>Banke N=47</th>
<th>Chitwan N=41</th>
<th>Kaski N=49</th>
<th>Dhading N=51</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of acute diarrhea in children below five years receiving ORS and zinc only</td>
<td>93.0</td>
<td>97.2</td>
<td>88.0</td>
<td>86.1</td>
</tr>
<tr>
<td>% of acute diarrhea in children below five years receiving antimicrobials</td>
<td>7.0</td>
<td>2.4</td>
<td>5.5</td>
<td>13.9</td>
</tr>
<tr>
<td>% of no pneumonia in children below five years receiving antibiotics</td>
<td>16.0</td>
<td>2.1</td>
<td>16.0</td>
<td>9.4</td>
</tr>
<tr>
<td>% of pneumonia in children below five years receiving cotrimoxazole alone</td>
<td>97.0</td>
<td>94.4</td>
<td>82.0</td>
<td>75.5</td>
</tr>
<tr>
<td>% of pregnancy cases receiving iron-folic acid only</td>
<td>45.0</td>
<td>94.2</td>
<td>85.0</td>
<td>56.5</td>
</tr>
<tr>
<td>% of worm infestation cases receiving albendazole alone</td>
<td>56.0</td>
<td>95.1</td>
<td>80.0</td>
<td>89.6</td>
</tr>
</tbody>
</table>

Following the decentralization principle, MOHP has allocated a budget of Rs. 4.0 million in the running fiscal year (2013-14) for the Program in 12 districts. The PHC Revitalization Division has already disbursed the budget to all 12 districts for the implementation of the Program.

DISCUSSION

The ToTs and district level trainings could be accomplished for all prescribers from 75 districts as targeted. However, there has not been any training program conducted in any of the districts for the newly recruited prescribers after 2010.

The number of district where the self-assessment/peer-group discussion Program has been targeted is increasing over the period; the implementation has not been achieved as targeted.

The district consolidation results on prescribing practices based on the selected indicators are available to the PHC Revitalization Division only from few districts. It is only available for one or two peer-group discussions from each district. The results on the availability of drugs are not available to the PHC Revitalization Division from any district. In fact, all districts have been instructed by the Division to make available the report of each peer-group discussion.16, 17

We recommend the Division for initiating compilation and comparison of the results of both the prescribing and availability from particular district with its own results as well as results from other districts. It is also recommended that a mechanism be developed for feedback to the district and from the district manager to the health facilities.

Although, the Program has been continued since its implementation except in 2012-13, there have been changes of districts during this period. It causes discontinuity in the previously implemented districts. The Program could not get allocation of the budget in 2012-13 because of administrative reason in the allocation of the budget.

The Program is presently monitoring only the prescribing practices for only five health conditions. It is recommended that the number of health conditions be increased to include other common health conditions as well. In addition, there should be flexibility to the district in choosing the health conditions as per the local disease prevalence.

The self-assessment/peer-group discussion Program has been limited to monitor prescribing practices and drugs availability. It can be applied to monitor different Programs run by different divisions. The divisions can develop indicators related to their Program and incorporate them into the self-assessment/peer-group data collection. Subsequently, the division can give
CONCLUSIONS

The government made the policy decision to implement the Program for monitoring prescribing practices and the availability of free drugs in districts. It also formulated the plan and allocated budget for trainings in all 75 districts. However, the self-assessment/peer-group discussion activity could only be implemented in limited districts.

The results of the discussion from the Program implemented districts have to be routinely available to the central level from all districts after each discussion. It should be monitored at the central level and feedback should also be forwarded to health facilities through the district manager.

The number of districts where the Program has been implemented needs to be increased in greater proportion so that all 75 districts are covered within the next five years.

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REFERENCES