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Improved training in primary health care: field follow-up essential

A strategy is being developed for the evaluation of a management course for medical officers assigned to rural hospitals in the Sudan. A variety of assessment methods are used during the course and the participants are visited in the field three to five months after training. The follow-up visits, involving both conversational interviews and more structured data collection, have helped significantly in efforts to improve the design of the training programme.

The development of strategies for decentralized leadership and management of primary health care programmes in the Third World has lagged far behind that of national plans in this field. The distance between local programmes or projects and national or regional managers is too great and systems of communication are often inadequate for responsive decision-making and support. In the Sudan, the rural hospital and the rural medical officer with a team of health personnel comprise an underdeveloped resource for decentralized programme management and implementation.

As in many other developing countries, the adoption of a strategy for primary health care marked a turning point. Traditionally, the medical service in the Sudan has shown the familiar dichotomy between curative and preventive disciplines, most resources going to the former. The training of doctors has concentrated on hospital care, and very little, if any, attention has been paid to primary care, preventive or social medicine, and programme management. Yet doctors have to play a crucial role in the implementation of the national primary health care programmes.

Training course for rural medical officers

The Faculty of Medicine of the University of Gezira, the Center for Population and Family Health of Columbia University, and the Sudanese Ministry of Health have designed a training programme on primary care and rural hospital management for doctors assigned to rural hospitals. The greater part of the country is served by these hospitals, which are within reach of most of the remote primary care units. Previously, the staff in each of these hospitals provided
limited curative services under the direction of a relatively new medical graduate on assignment for only 6-12 months.

The training objectives were established after the roles of the rural medical officers were expanded to include leadership,

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administration, planning, supervision and training, in accordance with the needs of the primary health care programmes in the areas served by the hospitals.

The three-week training programme was designed to deal with:

- primary care strategy and priority measures such as immunization, oral rehydration, the monitoring of nutrition and growth, antenatal care, the identification and referral of high-risk pregnancies, and child-spacing;

- the planning, implementation and evaluation functions of management, using the community as a learning laboratory;

- selected policies and rules of the Ministry of Health, with emphasis on the control of epidemics and the management of drug supplies and information reporting systems.

An extensive evaluation plan including a variety of assessment tools was introduced during the training for use during field visits to trainees 3-5 months later.

Post-training field assessment

The objectives of post-training field assessment were to:

- provide guidance and support to medical officers implementing primary health care programmes;

- determine how far the training programme helped rural medical officers to implement and expand coverage of the primary care programme and to improve hospital management;

- identify the difficulties and constraints confronting personnel responsible for implementation of primary care programmes, and to discuss ways of overcoming these problems with the medical officers and other health personnel;

- gather information from participants on their experiences in the field, with a view to developing training materials and improving courses;

- consult with regional and provincial Ministry of Health officials in order to promote appropriate selection of participants in future courses and offer support for the medical officers in the rural hospitals.

During field visits made after the first two rounds of training, information was gathered from 26 rural medical officers on:

- locations of hospitals and durations of assignments;

- the areas served by the hospitals;

- hospital and primary care unit personnel, vehicles, petrol allowances, refrigeration, maternal and child health records, immunization equipment and supplies, and drugs;

- road conditions and distances between regional hospitals and outlying units;
— key events since training as perceived by the doctors who had attended the course;

— primary care and hospital problems, assessment of needs and resources, objectives and strategies for the next 12 months;

— 12-month implementation plans and training activities undertaken or planned;

— planning and perception of supervision;

— supervisory visits made to rural hospitals by senior officers of the Ministry of Health;

— use of training materials;

— management audit exercises;

— trainees’ impressions of the course and its effects on their views about the role of the doctor;

— support given by projects of the Ministry of Health or nongovernmental organizations for primary care initiatives taken in rural hospitals since training was provided.

Descriptive data about rural hospital settings were compiled in order to get a better understanding of the sizes of the areas served, the resources available, and the constraints confronting personnel. Interviews were analysed to see if there was evidence of initiation of specific management practices or primary health care activities. New information concerning the responsibilities of medical officers was analysed. Impressions of the course were examined in detail. Evidence of support from the Ministry of Health was analysed separately. Information from the field assessment has been used to promote better support for participants by Ministry of Health programmes at national level, to improve course content, and to sensitize trainers to the circumstances in which the participants work.

The rural hospital setting

The field assessment provided an opportunity for training staff to see the conditions in which the medical officers worked. The faculty was perhaps most familiar with Gezira province, where the number of people served by a rural hospital varied from 20,000 to 80,000 and there were from 20 to 100 primary care units in the area surrounding each hospital. The distances between the rural hospitals and the regional headquarters of the Ministry of Health were relatively short, yet vehicles, scales and refrigerators were not always available. In the Kordofan region the population served by a rural hospital varied from 60,000 to 235,000 and was distributed over a wider area; the number of primary care units ranged from 26 to 75. Sites that were not part of the Ministry’s Rural Health Support Project did not have vehicles, refrigerators or scales. Darfur, the farthest region visited, had 330,000 people served by 51 units scattered over a vast area. Road conditions in all areas were difficult and

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access was sometimes impossible; one hospital used donkey transport. The time required to travel by road from rural to regional hospital varied from one to ten hours.
Education

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**Guidance and support**

Most participants were pleased to find a senior person taking an interest in their work. They had achievements that they wanted to show and discuss, and problems on which they needed advice. Open-ended, conversational interviews helped to convey the message that the training team was there to learn. This would not have been possible if the assessment had been based solely on a structured questionnaire.

**Influence of training on job performance**

The field assessment revealed that 60–80% of participants were using newly learned management practices and initiating new primary care activities. The activities or approaches most commonly observed or discussed in the open-ended interviews included the establishment of hospital administration committees, the drawing up of timetables and rosters, the delegation of authority to paramedical staff in order to make time for primary care activities, the training and supervision of primary care workers, the initiation of efforts to raise money from the community for hospitals and programmes, the activation of the information system for statistical reporting and monitoring of programme status, the introduction of assessments of training needs, and the development of training programmes for both hospital and village-level personnel.

Five of the 26 doctors had not become involved in initiating specific primary care activities. The involvement of the others included planning, training workers, organizing services, and providing care, e.g., for high-risk mothers (see table). The initiation of specific primary care interventions appeared to be linked to the emphasis given in training to immunization, oral rehydration therapy, growth monitoring, maternal health, and birth spacing. Given the many constraints it is remarkable that so many doctors became involved in activities that they had not previously considered to be a part of their jobs.

We learned that success in initiating new primary care activities was linked directly to support for them from projects of nongovernmental organizations or from special projects of the Ministry, as there were no operating funds for special primary care activities in the hospital budgets. In three instances, medical officers who inherited posts from former participants in the course or who found a medical officer already involved in primary care activities continued or became engaged in primary care work. The initiation of primary care activities seemed to be positively correlated with the length of time for which officers remained on site. Failure to initiate new

<table>
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<tr>
<th>Involvement of rural hospital doctors in primary health care</th>
<th>No. of doctors involved (out of 26)</th>
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<tr>
<td>Immunization</td>
<td>10</td>
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<td>Oral rehydration</td>
<td>8</td>
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<td>Growth monitoring</td>
<td>6</td>
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<tr>
<td>Community organization for participation</td>
<td>6</td>
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<tr>
<td>Antenatal care/high-risk identification and referral</td>
<td>5</td>
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<td>General health education in the community</td>
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<td>Promotion of latrines</td>
<td>4</td>
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<td>Child-spacing</td>
<td>3</td>
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<tr>
<td>Essential drug supply for primary care units</td>
<td>2</td>
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primary care activities or hospital management practices appeared to be linked to the following factors.

- Medical officers who attended the course near the end of their rural assignment and/or those planning to take examinations in specialized branches of surgery or medicine did not become involved on returning to their posts.
- Lack of financial or material resources.
- Presence of major hospital-related problems (construction, trade union disputes, need to recruit personnel for a new hospital).

Nearly all doctors reported that the training programme had offered them an opportunity to develop a better attitude towards their work and particularly towards primary care. Those who reported becoming involved in new activities said that they were obtaining better professional satisfaction and fulfilment than formerly.

Selection for training

In the process of field assessment the faculty discussed the training programme with senior Ministry officials and promoted the appropriate selection of participants in future courses. The distance and communications problems related to participant selection and invitation are difficult, and the understanding of the course by senior managers is limited. Personal contact by faculty members continues to be an important way of getting the right participants into the course and of promoting support after training.

Training design and faculty development

The field assessment exercise has helped us to understand training needs and to identify unanticipated ones. We had assumed that management training was the highest priority and that we would have to create innovative methods for teaching management so as to engage participants in new ways of thinking, and the visits to doctors who had attended the course confirmed this to be so. All but two participants reported a significant change in attitude and had adapted important management concepts for a variety of purposes. We thus found it useful to get feedback some months after the course in order to discover what was retained by the participants and enabled them to do a better job.

Identification and control of epidemics were not included in the first course. In the field we found that many medical officers confronted problems in this area and that specific training was needed to deal with them. Drug system management also emerged as an important topic for inclusion.

The members of the training team have increased their understanding of the issues in rural primary health care and hospital management, and are acquiring a wealth of information and anecdotes to enrich the classroom discussions.

* * *

Field follow-up visits to participants, using a combination of structured and nonstructured information-gathering, have helped significantly towards achieving the objectives of the training programme. We believe that
participants are comparatively receptive to this kind of approach, which is a kind of consultation aimed at sharing experiences and solving problems. To summarize, the important lessons we have learned are as follows.

- Participants perceive the follow-up visit as supportive and are motivated by it to continue with their new undertakings in management and primary care.

- Field visits offer faculty members the opportunity to learn about rural hospital programmes and enable them to improve their training schemes.

- Field visits are a step towards strengthening the linkages between rural hospitals and the Ministry of Health. Documentation of the results of training may help to secure increased commitment from the Ministry for activities in rural hospitals.

Our experience suggests that follow-up assessment of and support for trainees is critical for short-term training programmes aiming not only to impart new skills but also to induce new attitudes and perspectives.

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Said at the 41st World Health Assembly

Health and development

The health services play a major role in providing and promoting information concerning the effects of socioeconomic development and environmental conditions on health, and concerning the way that such development also affects equity.