Health Systems Research

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Health systems research – a key to progress

Papua New Guinea has made significant strides towards establishing a capacity in health systems research. This can be expected to strengthen the country’s overall health development programme.

In 1987 two representatives from Papua New Guinea attended a workshop entitled "Health systems research as a management tool" in Malaysia. This enabled them to improve their understanding of the subject and to formulate a draft plan for its development in their country. A follow-up workshop was held in Papua New Guinea in 1988 with the aim of promoting health systems research as a tool for policy- and decision-making. It was attended by senior health managers and researchers. The outcomes were the designation of priority areas for health systems research in Papua New Guinea, the establishment of criteria for the prioritization of studies in this field, a decision on who should be involved in the research, the dissemination of information on the subject and the preparation of a plan of action (see box opposite).

It was decided that an introductory workshop should be organized so that participants could be helped to develop research proposals. The participants were then to spend between three and four months at their job sites for data collection. Finally, a workshop was to be held for data analysis and interpretation and the preparation of reports.

The first workshop, lasting a week, was led by a consultant and had the support of Department of Health staff. It was successful in teaching basic methodology and assisting the participants, who were provincial health managers, to develop research proposals. Data collection followed with technical field support from senior health department staff and the consultant who had run the training workshop. The second workshop has been postponed indefinitely.

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Plan of action for health systems research in Papua New Guinea, 1988

- Development of national policy
- Holding of training workshops
- Development of training materials
- Identification and coordination of sources of funding
- Provision of support for activities in provinces
- Establishment of staff development opportunities
- Dissemination of research information and results

Drawbacks of the workshop approach

Although the workshop format helped to generate enthusiasm at first, this approach proved unsuitable for sustained training. The major problems were as follows.

- The coverage of topics was too limited. The one-week workshop was too short for anything more than a cursory discussion of research methods. The workshop failed to build sufficient confidence in the participants, who, on encountering difficulties in the field, were unable to resolve them.

- The support from advisers was inadequate. The idea of matching the participants with senior headquarters staff for technical assistance in their research projects was sound. In practice, however, severe constraints in respect of time and finance limited the amount of help that senior staff were able to provide. The participants thus found themselves isolated from their sources of assistance.

It was also difficult for the consultant to remain in the country to give field support because of shortage of time.

- The time interval between the first and second workshop was excessive, because the organizers did not arrange the second one until all participants had finished collecting their data. In some instances a lack of technical support in the field made it impossible to solve questions raised about data collection, and, as a consequence, the second workshop did not take place.

- Some research proposals were unrealistic in relation to the time constraints and the technical capabilities of the participants. Closer scrutiny by the facilitators could have reduced this problem.

- Participants were not released from their other professional responsibilities during the period of field work, and consequently their data collection was unsatisfactory.

- There was no designated health systems research coordinator in the Department of Health who might have checked on

The strengthening of individuals’ capacities in health systems research requires training over a prolonged period.

the field studies. This allowed the momentum and motivation of the participants and facilitators to wane considerably. As there was no institutional base for the training programme, follow-up did not occur.
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- There was insufficient linkage with other research institutions in the country. Stronger collaboration with them could have ensured more support in training and field work. Institutions such as the University of Papua New Guinea, the Institute of Medical Research, and the Institute of Applied Economic and Social Research could have provided valuable help.

- The Department of Health did not allocate any money for health systems research studies. Donor agencies are not likely to continue to fund activities in this field indefinitely without some financial commitment from the government.

These shortcomings left health systems research in an unsatisfactory condition. A new approach was clearly needed.

New departures

Although the workshop training methods did not suit the requirements of Papua New Guinea, there was considerable enthusiasm for health systems research among national and provincial health managers. The issue of training and funding was raised at the 1989 and 1990 annual conferences of Assistant Secretaries for Health. The Department of Health was urged to take action to foster a capacity for undertaking and utilizing health systems research. An important step was taken when a policy statement on the subject was included in the national health plan for 1991–95. The Department set up a coordinating committee for health systems research, with members drawn from various national and international bodies. Its terms of reference are to advise the Medical Research Advisory Committee, to be responsible for the overall coordination and dissemination of all health systems research activities and findings, to advise the Department of Health on the allocation of funds for health systems research, to formulate policy, and to promote health systems research as a management tool.

An institutional base has been developed for training activities in the Department of Community Medicine of the University of Papua New Guinea. Even if the workshop training methodology had been successful, its labour-intensive nature would have made this approach impossible. In 1990, for the first time, a pilot training course on health systems research was incorporated into the postgraduate programme in community health, which is being offered to health managers from Papua New Guinea and other Pacific island countries. Each year approximately ten students complete a diploma programme that meets the postgraduate training needs of district managers.

The training programme was adapted from materials developed in Africa (1) and Malaysia (2). The main body of lectures and practical exercises was presented in a one-week block. Two days were allowed subsequently to prepare for fieldwork, which itself lasted three weeks. After returning to the university with the data they had obtained, the students spent a day discussing their plans for analysis with the departmental statistician. Each student was
Projects conducted by students of community health, 1990

- Problems of acceptance of modern family planning methods in Manus Province
- An investigation of case management of diarrhoea by health workers in Central Province
- Health worker productivity in urban clinics in the National Capital District
- Improvement of feedback of health information to district health staff
- An investigation into low immunization coverage in Madang Province
- An investigation into the reporting system on sexually transmitted diseases
- An analysis of the cost of alternative methods of patient referral in Sandaun Province
- A study of health workers' knowledge and skills in diagnosis and treatment of malaria

While the 1990 programme demonstrated that the new approach to training was effective, certain improvements were still desirable. Students had insufficient time to carefully select, study and fully develop their research proposals. Three weeks in the field proved adequate to complete data collection but left no leeway for unforeseen events. The lack of computers in the Department of Community Medicine and the absence of computing skills among the students made analysis difficult and, in some cases, rudimentary.

In 1991 the course was extended to two semesters so that students had ample time to develop their research proposals. The period of field-work was extended to four weeks and two computers were provided. Basic training in computer skills was given during the first semester. The revised training programme is outlined in the box on p. 192.

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Strengthening the health systems research capacity in Papua New Guinea is potentially an effective and sustainable way to promote health and development. Capacity-building is a long-term endeavour and will require lasting national commitment. Particularly important in this field are the development of individual competence and of an institutional infrastructure that supports
Health systems research training programme, University of Papua New Guinea, 1991

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<td>Fieldwork (lasting four weeks)</td>
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Although health systems research is in its infancy in Papua New Guinea, experience so far indicates that its long-term sustainability depends on training opportunities, institutional support, coordination, and a continuing demand from managers. The limitations of present arrangements are that training is only available for those undertaking a 12-month diploma/master's degree course. The possibility of offering training in health systems research as a separate short course should be investigated.

Initially, although interest and awareness were aroused through the national orientation workshop, there were no mechanisms in the Department of Health to support and develop future work. As a result, several components of the plan of action developed at this workshop were not completed. Moreover, the absence of an institutional focus made it impossible to provide field support for the participants in the training workshop.

As managers and policy-makers become more familiar with the benefits of health systems research as a decision-making tool, an increasing demand for studies in this field can be expected.

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**References**

