

How can we improve postgraduate training in community health?

ELVIRA BERACOCHEA¹

Department of Community Medicine, University of Papua New Guinea, Port Moresby

SUMMARY

The Diploma Course in Community Health was developed by the Department of Community Medicine of the University of Papua New Guinea in 1982. This is a one-year course for about 10-12 middle-level managers of the health system. This brief communication reports the first attempt to assess the course. Although most of the content of the diploma course is relevant to the respondents' activities, the emphasis on research methods and community diagnosis seems to leave little time for solving the researched management topics, according to the perceived needs expressed by our small number of respondents. The question that remains unanswered seems to be how much of each of the topics that comprise the multidisciplinary field of community health is necessary to prepare mid-level health managers for their work and to assist them in making informed decisions. The methodology used failed to assess the course due to a low response rate, but some of the issues brought up by the respondents indicate that it may not be fully meeting the participants' needs. The report concludes that the improvement of the Diploma Course in Community Health will rely on the regular use of effective assessment methodology and the joint efforts of the Department of Health and the University.

Introduction

Postgraduate training in community health should prepare students to fulfil their role in the practice of community health activities. The concept of community health reflects the unified practice of community medicine and primary health care requiring clinical and public health skills (1). Community health is a multidisciplinary field and is essential for the comprehensive delivery of primary health care services at district level, which is the front line for planning, organizing and managing health care (2).

The Diploma Course in Community Health (DCCH) was developed by the Department of Community Medicine (DCM) of the University of Papua New Guinea in 1982. This is a one-year course for about 10-12 middle-level managers of the health system. Although complete records are not kept, every year it is

usual, on average, for one student to drop out for personal reasons and for another one to fail the course. The content of the course has changed since its creation and no records have been kept of how the course was first given or how it has developed. At the time of this survey, the first semester covered all aspects of community health diagnosis, i.e. knowledge and skills for the assessment of the health status of the community, usually problem-oriented; and the second semester was focused on the management of the health system, services and interventions. The main objective of the DCCH is to train community health practitioners in the knowledge and skills required to improve community health in Papua New Guinea. This practice-oriented approach of the course indicated the need to assess its relevance in terms of the actual practice of the course graduates.

This paper reports the findings of an

¹ Senior Program Associate, Management Sciences for Health, Drug Management Program, 1515 Wilson Boulevard, Suite 710, Arlington, VA 22209-2402, USA

Formerly Lecturer and Postgraduate Coordinator, Department of Community Medicine, Faculty of Medicine, University of Papua New Guinea

assessment of the DCCH with the following objectives:

- i) to identify the most relevant courses and their content in order to improve the curriculum of the course, and
- ii) to test the methodology for systematic review of postgraduate training.

Methods

A self-administered questionnaire was prepared and mailed in January 1993 to the graduates' addresses recorded in the files of the DCM. Replies were received until June. The questionnaire was completed by 18 (23% response rate) of the 77 graduates between 1985 and 1992. Further unsuccessful attempts to increase the response rate were made by hand-delivering the questionnaire to graduates now working in the Department of Health (DOH). The questionnaire gathered the graduates' demographic characteristics, their basic training and English language proficiency, asked them to list present job activities and included open-ended questions on how the DCCH had improved their ability to fulfil their career requirements.

Results

Respondents were all male and married, had a mean age of 38 years (SD 6.5) and came from 12 different provinces; only two were working in the province of their birth. 14 had grade 10 basic education. 15 were health extension officers (HEOs), 2 were nurses and 1 was a health inspector. 11 graduated between 1990 and 1992.

All respondents spoke at least 3 languages and English was always the second or third language in order of acquisition; 5 spoke 4 languages and 3 spoke 6. In a three-level scale of good, fair or poor, all respondents considered they had good ability to understand lectures, but 4 reported fair ability to read, 6 fair ability to write reports and 3 fair ability to make oral presentations. 3 graduates reported that they had had problems with English in keeping up with assignments in the course.

At the time of the survey, 3 were provincial HEOs, 3 were provincial assistants for health,

2 were information officers and the rest were health service coordinators or were in disease control programs. Only one was in research.

The listed daily and annual activities of the graduates ranged from regular office management to health service and program management (Table 1). The DCCH was considered helpful in enabling graduates to apply epidemiological and health management skills. Lack of training was reported in the areas of financial management and hospital administration (Table 2).

The graduates considered health information systems, statistics, epidemiology, health economics and research methods as the most useful topics. The most difficult ones were statistics, logistics management, health economics and manpower planning.

The graduates suggested topics to be included in the course such as budget preparation, pharmaceutical supplies management, lesson planning and training methods, hospital services administration, report writing and health manpower management, including staff appraisal, discipline and occupational health.

To improve the course in general, graduates suggested that the number of lectures be reduced in favour of more practical sessions, with appropriate handouts and notes provided. Time was always considered short for integrating new concepts and for discriminating between the important issues and the not so important ones. Graduates felt the need of 'real' information and case studies to be used in class exercises.

Assessment of students' background knowledge at the beginning of the course was felt necessary. Two levels of training were suggested in disease control, statistics and computer skills to accommodate those students with some experience and those without. The practical nutrition and malariometric assessments conducted by the students were not appropriate for the level at which the graduates work, and could be reduced or eliminated from the course. Students' previous experience was considered an unused resource.

Examinations were considered adequate by all respondents.

TABLE 1

DESCRIPTION OF REPORTED GRADUATES' DAILY AND ANNUAL TASKS*

Everyday tasks

Correspondence
 Logistics coordination
 Supervision
 Demographic surveillance
 Coordination of different programs
 Planning
 Analyze and interpret monthly disease reports
 Answer and make telephone calls
 Make supplies requisitions
 Provide health education

Important annual tasks

Annual and quarterly activity reports
 Plan and conduct inservice training
 Organize meetings with OIC at health facilities
 Monitoring, control and evaluation of programs
 Staff appraisals
 Attend national meetings
 Liaise with NGOs and other departments
 Prepare annual plans and budget submissions
 Prepare expenditure reports
 Coordinate community projects

* Respondents were asked to list the 5 most common everyday and annual activities; due to the low response rate, all responses are listed but are not quantified

OIC Officer in charge

NGO Non-government organization

TABLE 2

ASSESSMENT OF COURSE CONTENT BY RESPONDENTS*

DCCH training was helpful in:

Annual activity and strategic planning
 Resource management
 Study design and dissemination of results
 Demography and population policy interpretation
 Health statistics and data interpretation
 Investigation of disease outbreaks
 Review objectives and re-prioritize activities
 Resource allocation to cheaper and larger impact interventions
 Supervision visits and staff motivation
 Identify community needs

DCCH training lacked:

Budget of recurrent expenditure and projects
 Writing and filing correspondence effectively
 Staff appraisal and discipline
 Policy writing and decision-makers' behaviour
 Preparation of press releases
 Management of secondary health services
 Food hygiene and water supply standards
 Coordinate and apply for donor or NGO assistance and grants
 Computer skills
 Management information system
 Initiation of research

* Respondents were asked to list the 5 most helpful topics and suggest topics to be included in the course; due to the low response rate, all responses are listed but are not quantified

DCCH Diploma Course in Community Health

NGO Non-government organization

Students felt the need of refresher courses, especially when changes in the curriculum take place, such as the recent inclusion of a computer course. Improvements in accommodation and catering were also suggested.

Discussion

Although most of the content of the diploma course is relevant to the respondents' activities, the emphasis on research seems to leave little time for finding ways to solve management problems identified through research. The activities and the topics reported by our small number of respondents might indicate the need for a more balanced inclusion of basic public health subjects, as well as training in the major management problems of the Papua New Guinea health system. The suggestions of including budgeting, pharmaceutical logistics, the management information system and staff appraisal and discipline point to weak areas in health financing, human resource management and quality in district health care management that have already been identified (3-5) and which the course has not been adequately addressing. It is time for the University and the national Department of Health to consider reviewing jointly the DCCH.

Some changes have been introduced since this survey took place, but these have been unilateral, in the sense that the DOH did not participate, and do not seem to address the major problems of the health system. For instance, a short skills pre-test was given in 1993, which was helpful in identifying individual needs. Training in computers and the use of word processing and statistical packages was also introduced in 1992 and 1993.

On the other hand, improvements also need to be focused on teaching and learning methods (6) based on the use of English as a second language, making the course problem-oriented, giving skills in problem-solving and developing training packages that can be used by graduates to replicate the training received. Graduates had problems in keeping up with the level of reading that is expected from postgraduate students. The orientation block of the course should also provide training in oral and written reports, studying skills and

time-management skills and should also aim at levelling the students' skills in mathematics and computing. Individualized learning sessions and self-taught materials would have to be prepared. This could help overcome difficulties in courses where numeracy is required such as statistics, economics and logistics. Further improvement could be achieved in the health economics block of the course by including the use of government budget procedures and forms.

In spite of the fact that the subjects of the course are appropriate, the question that remains unanswered seems to be how much of each subject is necessary to prepare mid-level health managers for their work and to assist them in making informed decisions. The DCM is the only local training institution in this field, and it has been providing health management training to at least 10 DOH health managers every year for more than a decade. It is reasonable to suggest that the improvement of the DCCH in accordance with the country's needs should be attempted jointly by the DOH and the University.

In order to adapt training and empower graduates to respond to rapid health and socioeconomic changes and constraints, effective course review methodology should be developed. The methodology used was a valuable way to document the views of graduates, to highlight some of the discrepancies of an academic curriculum and the respondents' work, and to guide a future in-depth review (7), but failed to achieve the first objective, i.e. to assess the relevance of the course. Although assessments are very important, especially when there is high turnover of lecturers and changes in the curriculum are consequently frequent, regular assessments would be more fruitful if a higher response could be achieved or if, instead, qualitative methods such as in-depth interviews with graduates in the DOH or focus group discussions with graduates in the provinces were tried. In any case, maintaining communication with the former graduates and the DOH should be an ongoing activity in the DCM. Since nearly all graduates are to return to work for the DOH, its assistance to improve the response rate in this type of assessment should be looked into. In addition, comparison

of pre- and post-course attitudes and skills would be very interesting as part of an internal academic audit and the graduates' examination process.

ACKNOWLEDGEMENTS

I thank Prof. John Biddulph for his assistance in the preparation of the survey questionnaire. The support and comments of my colleagues in the Department of Community Medicine are highly appreciated. Many thanks to Dr Jane Thomason and Dr John Gillespie for their encouragement and comments.

REFERENCES

- 1 **Kark S.** The Practice of Community-oriented Primary Health Care. New York: Appleton-Century-Crofts, 1981.
- 2 **Tarimo E, Fowkes FG.** Strengthening the backbone of primary health care. *World Health Forum* 1989;10:74-79.
- 3 **Beracochea E, Dickson R, Freeman P, Thomason J.** Case management quality assessment in rural areas of Papua New Guinea. *Trop Doct* 1995;25:69-74.
- 4 **Thomason JA, Newbrander WC.** A survey of Papua New Guinea's health sector financing and expenditure. *PNG Med J* 1991;34:129-143.
- 5 **Kolehmainen-Aitken RL, Shipp P.** Indicators of staffing need: assessing health staffing and equity in Papua New Guinea. *Health Policy Plann* 1990;5:167-176.
- 6 **World Health Organization.** Increasing the Relevance of Education for Health Professionals. WHO Technical Report Series No 838. Geneva: World Health Organization, 1993.
- 7 **Kahn K, Tollman SM.** Planning professional education at schools of public health. *Am J Public Health* 1992;82:1653-1657.