

Challenges of the distance modality for postgraduate training in family medicine

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Abstract

In September 2001, the Mona Campus of the University of the West Indies launched postgraduate training in family medicine delivered by distance. This programme was aimed at the working physician and utilised multiple modalities for the teaching-learning transactions. This paper describes an initial evaluation of the programme.

The initial two years of the MSc. In Family Medicine were evaluated by participants as well as stakeholders in the programme. This took the form of focus groups followed by a plenary session where the focus groups made their reports. The groups explored the strengths, weaknesses, opportunities and threats to the programme. This paper addresses the strengths and weaknesses identified by the group.

The main strength of the programme recognized by the groups was the distance modality of teaching. They also commended the instructional design. The chief weakness identified was the cost of the course. It was also felt that support for the learners needed improvement.

The discussions terminated in a number of recommendations. The chief recommendation was to develop a policy proposal for presentation to CARICOM on the postgraduate training of family physicians as a requirement for General/ Family Practice.

INTRODUCTION

Physicians required to staff the public primary health care and private general practitioner services of the Caribbean nations have been trained at the University of the West Indies (UWI) since 1948 (Public Relations Office, Mona, UWI). Traditionally, the primary training leading to the Bachelor of Medicine, Bachelor of Surgery (MB, BS) degree followed by a one year internship allowed doctors full registration for practice as general practitioners. The Conference of Caribbean Ministers responsible for health, at a meeting in 1977 requested the UWI to establish as a matter of priority, a postgraduate training programme in general practice (Caribbean Community Secretariat, 1977). A few years later, a graduate programme in family medicine was established at the UWI with the aid of a Kellogg Foundation grant (Department of Social and Preventive Medicine, 1982). This programme produced Masters and Doctor of Medicine (DM) graduates from fulltime and part-time options. Started in 1980, it was virtually suspended in 1994 because of the lack of establishment of posts for family medicine residents at the University Hospital of the West Indies. Yet interest in and demand for training in general practice remained high. In a small cross-sectional study, a sample of 44 Jamaican general practitioners all expressed interest in additional training (Segree and Thompson, 1991).

A workshop was held in 1997 which brought together stakeholders such as members of the faculty of medical sciences from the three campuses of the UWI, personnel from the Ministries of Health of some Caribbean countries and representatives from the Caribbean College of Family Physicians, General Practitioner organizations, the Pan-American Health Organisation and the Caribbean Public Health Association. They discussed the redevelopment of graduate training in family medicine, and distance education was

proposed as an approach to delivering training. Distance education consists of geographic separation of the learner and the teacher with a high level of educational organisation and use of technology for communication with interactivity (Kekes, 1999). This approach is not new to the University of the West Indies nor is it new in the training of family physicians worldwide (Kamien et al, 1991; Pieterman, 1992). However it has not been previously implemented at the UWI in the context of a graduate degree for physicians. This paper outlines some of the challenges faced in graduate education for family medicine in the Caribbean.

The Programme

Due to their extensive training, family physicians are specialists qualified to treat most illnesses and provide comprehensive health care for people of all ages - from newborns to the elderly. As leaders of the health team, family physicians deliver a range of acute, chronic and preventive medical care services. In addition to diagnosing and treating illness, they also provide preventive care, including routine check ups, immunization and screening tests, and personalized counseling on maintaining a healthy lifestyle (futureoffamily medicine.org, Segree et al. 1985).

A three-year Master of Sciences (MSc) distance programme became available to Caribbean physicians seeking to specialize in Family Medicine in September 2001 (Bain & Williams-Green 2000, Maharaj & Sieunarine 2002). Initially it was offered to practitioners in Jamaica but more recently (September 2004) the programme has been offered at all three campuses (i.e. Cave Hill, Barbados; Mona, Jamaica; and St Augustine, Trinidad and Tobago).

The programme targets General Medical Practitioners. It consists of three components: 1) Distance-taught courses, 2) Clinical practicum and 3) Research project.

Distance Courses

There are 16 independent courses (Table 1). These were initially provided to trainees as printed manuals containing core content and selected readings but more recently have been sent electronically as programme documented files (pdf) or on compact discs. Each course consists of content based on a family practice topic with activities (exercises) which trainees must complete to demonstrate their understanding of the learning objectives. The practitioners are expected to complete assignments and e-mail written responses to course tutors.

Clinical Rotations

The clinical component is a significant feature of the programme. Clinical training involves the rotation of family physician trainees through selected disciplines (Table 2). The physicians participate in ward rounds, assessment and management of patients in the specialist outpatient clinics and on the wards. Each physician devotes half-day per week throughout the three years for clinical training. Their training is guided by specific learning objectives implemented by senior physicians in these specialties.

Research Component

This component is delivered in the third year of postgraduate training. It seeks to apply the knowledge acquired in the epidemiology, evidenced-based medicine and research methodology courses delivered in the second year. Learners participate in audioconferences on writing a research protocol, data collection, analysis and interpretation and writing a research report. This component is delivered via the internet and telephone as learners share their research report with tutors from conceptualization to completion.

Distance Modalities

Modalities used include face to face, audioconference, electronic mail, and print. Teaching-learning transactions through the face to face modality are used extensively throughout the three year programme via workshops that allow interactive discussions such as the Chronic Disease and Emergency Medicine workshops. Workshops are also used for topics which require detailed or extensive explanations or demonstrations, for example research skills methodology, data analysis and interpretation.

At the clinic sessions which comprise 320 hours of structured teaching and learning encounters, the face to face modality is the primary means of delivery. Here the trainees interview, examine, diagnose and manage cases that present in the clinics under the supervision of an experienced physician. These sessions allow for experiential learning and reflection on the part of the trainees.

Audio - conference

Audio-conferences are conducted at distance education centres (UWIDEC) via the satellite network of the University of the West Indies. Individuals can also access these audio-conferences by telephoning the distance education centre. Learners make oral presentations on their assignments and receive immediate feedback from tutors. The conferences exemplify the virtual classroom, since learners and teachers are situated in various locations. These sessions facilitate verbal interactions with course tutors and allow learners to clarify queries or share experiences. Verbal and written feedback from learners indicates that these sessions were highly valued for their interactivity, resulting with greater learner and teacher satisfaction.

Electronic Mail

Electronic mail (e-mail) was used firstly to transfer course content which were downloaded as pdf files sent via email. In the early years, these courses were available as printed manuals using Microsoft publisher but were later made available electronically as (programme documented files) pdf . Secondly email was used for communication between tutors and learners; such as to communicate modifications in the courses, reminders about assignments, teleconferences and workshops and general teacher-learning communications. Thirdly, email was vital for the delivery of completed assignments from learners to teachers. This methodology was extremely satisfying at times because of the asynchronous access, low cost and ease of use. However learners and teachers had to learn how to communicate effectively by this means. Mail was sometimes missed by the intended recipients. Learners and teachers soon realized the importance of acknowledging mails as well as well timed responses.

Print

This modality was initially the major means of course delivery in the first three years of the programme. Conversion to computer disks and later emailed files was achieved in the later years of the programme.

PROGRAMME REVIEW

In July 2003, the initial two years of the programme were evaluated by participants and stakeholders. This took the form of four focus group discussions, two consisting of students only and two groups consisting predominantly of programme coordinators from Jamaica, Barbados and Jamaica; family medicine preceptors, course writers and course tutors, Medical Officers of Health from the Ministry of Health in Jamaica, the curriculum specialist from the Distance Education Centre, government and private health professionals. Each group consisted of six to seven persons. The review was led by a medical education specialist. Each group was asked to identify and discuss the strengths, weaknesses, opportunities and threats to the programme. A plenary session followed where the four groups presented reports which were discussed further. This led to the development of recommendations for the improvement of the programme.

Strengths

The groups considered the distance modality an invaluable addition to post graduate training. Students pointed out that distance education allowed easy access to training, with the flexibility to continue earning while pursuing their professional development. They recognized that this modality facilitated a reduction in the economic and opportunity costs of continuing education. The students, teachers and other stakeholders lauded the flexibility of the programme in time and space. They identified this feature as a significant strength since it facilitated learners, teachers and employers. The opportunity to study at times convenient to each individual was viewed as a boon to continual professional development. The use of the internet further enhanced the flexibility the programme offered since it permitted electronic transfer of courses, written assignments and tutor/student communication.

The students commended highly the instructional design of the courses. They underscored the usefulness of the learning objectives, knowledge of the assignments in advance and the feedback given on learning activities. The students expressed satisfaction with the courses because of their up to date content and relevance. They remarked on the emphasis on doctor/patient communication throughout the programme. They commended this component as significant in developing their clinical skills. They commended highly the inclusion of adjunct staff, consisting of prominent family physicians in the community, to act as preceptors and mentors of the family physician trainees. They felt these family physicians enriched the programme and demonstrated the involvement of the community in the training of the family physicians who would themselves later work in the community.

The groups noted that this programme met the needs and expectations of a developing country for high quality health care while meeting the expectations of the Public for professional health practitioners. They emphasized that the research component made the programme unique among most postgraduate medical programmes.

Weaknesses

The groups identified the cost of the programme to students and to the institution as the chief weakness of the programme. Some students considered that the need to take time off from work which translated as loss of income or time lost to employers was a disadvantage.

Other weaknesses identified were related to weaknesses in learner support. These included lack of feedback or delayed feedback between tutors and students in some courses. The lack of additional resources excluding the course manuals was also considered a weakness.

Students and teachers agreed that the core teaching team was small and often shared teaching with other significant programme duties. This impacted negatively on the programme and resulted in inadequate learner support. Another weakness raised was related to the need for the clinical tutors in the hospitals to be better informed and oriented to the objectives and expectations of the learners and the clinical rotations.

CONCLUSIONS AND RECOMMENDATIONS

The original Family Medicine graduate training programme was curtailed due to funding limitations. DM programmes in surgery and medicine receive indirect support by virtue of being located within a relatively well supported hospital service environment where there is a ready demand for residency services. However there is no interlinking or acceptance of paid residency positions for family medicine in the public sector in Jamaica.

There is a felt need for continued training and upgrading of general practitioners in the many small states of the Caribbean region. Graduate training in family medicine in the region, has for years been stymied by limited resources and the difficulties of having already practicing physicians from centers far removed from the University setting “come in” for training. The revised programme in family medicine offers an approach using predominantly distance education which addresses some of the challenges encountered in the earlier course. The dominant exposure for training is now the general practice setting although exposures in the hospital outpatient department are still being used. DE provides the flexibility needed to allow physicians to access the training programme and to meet specific educational goals within a contemporary training philosophy. Hays and Peterson (1996) have found that advanced training in general practice through distance education and communication technologies can be equivalent to traditional training approaches. The use of the DE medium for delivering specialty training for physicians towards a degree qualification is new to the Caribbean and offers a promising prescription for medical educators faced with traditional challenges (Paul and Williams-Green).

Table 1. Distance Courses

Year 1	Year 2	Year 3
Continuing medical education	Epidemiology and evidence-Based medicine	Health management
The medical consultation	Research methods	Practice management
Health determinants	Gender issues in health	Legal issues in primary care
Principles and practice of health promotion	Health care of the elderly	
Child and adolescent health	Counselling for primary care physicians	
Sexuality and sexually transmitted illnesses	Doctor/patient relationship & ethics	
Chronic diseases in primary care		

Table 2. Clinical rotations

Year 1	Year 2	Year 3
Internal medicine	Obstetrics and gynaecology	Ophthalmology
Child health	Community psychiatry	Children with disabilities
Dermatology	Ear, nose and throat	Elective
General surgery	Family practice	Family practice
Family practice		

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