# Evaluating A Graduate Studies Program

## *A survey of former participants*

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SUMMARY

**To evaluate the outcome of the program for graduate studies in family medicine at the University of Western Ontario, all 45 participants in the program were surveyed. Thirty-six percent of respondents held full-time academic appointments and 42% part-time academic positions. Eighty-four percent indicated a moderate to major effect on their career as a teacher; 67% indicated a moderate to major change in research skills; 42% indicated such a change in administrative skills. Ninety-one percent said they had achieved all or most of their objectives in taking the program.**

RÉSUMÉ

**Les quarante–cinq résidents diplômés du programme d'études supérieures en médecine familiale de l'Université de Western Ontario ont participé à une enquête visant à évaluer les résultats du programme. Trente–six pourcent des répondants détiennent un poste académique de plein–temps et 42 % ont des postes de temps partiel. Quatre–vingt–quatre pourcent ont indiqué une influence allant de modérée à majeure sur leur carrière d'enseignant; 67 % ont indiqué un changement allant de modéré à majeur dans les habiletés de recherche; 42 % attribuent au programme un tel changement au niveau des habiletés administratives. Quatre–vingt–onze pourcent disent que le programme leur a permis d'atteindre tous leurs objectifs ou presque tous.**

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TWENTY-FIVE YEARS AGO, the lack of any specific preparation for family practice spurred the creation of university training programs in family medicine. But how were the faculty prepared for academic careers in family medicine? For too long, practitioners with only clinical experience were drafted into service as teachers. Concern about this lack of preparation was the major stimulus for the development of a Graduate Studies Program (MClSc) in family medicine at the University of Western Ontario.

In the past 10 years, several family medicine faculty development programs have been instituted, primarily in the United States, to increase the number of full-time family physician faculty and improve the teaching skills of new and current faculty.

Bland and Stritter,[1] in 1988, reviewed 30 characteristics of effective faculty development programs in family medicine. They stated that programs should address not only traditional skills, such as teaching, research, and administration, but also academic survival skills, networking, and the content of family medicine. They felt that such programs should emphasize both theory and practice, and should require in-depth projects.[1]

The program at Western began in 1978 with financial support from the Kellogg Foundation. It was designed for experienced family physicians who had completed their certification in family medicine (or its equivalent in other countries) and who were interested in preparing themselves for an academic career in family medicine. Candidates must hold a medical degree with a minimum B standing and must be certified or eligible for certification by the College of Family Physicians of Canada or its equivalent in other countries. As the program at Western is unique in Canada, it has attracted candidates from around the world.

The program consists of specific course requirements, a supervised clinical-teaching experience on one of the clinical teams associated with the Department of Family Medicine, and research activities demonstrated by completing a thesis examining an important question in family medicine. Recently students have been given the option of replacing the thesis with a research project suitable for presentation at a scientific meeting and a major essay on a topic relevant to family medicine.

In 1985, Brennan et al[2] reported on a survey of initial graduates of the program,

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*Table 1.* **CURRENT STATUS OF PARTICIPANTS IN THE PROGRAMS (N = 45)**

| PROGRAM STATUS | N | % |
|---|---|---|
| Completed course work and thesis | 22 | 48 |
| Completed course work and working on thesis | 4 | 9 |
| Completed course work only | 6 | 13 |
| Incomplete course work (inactive) | 11 | 24 |
| Incomplete course work but continuing | 2 | 4 |

which showed that the program was having a broad impact on candidate's careers. In preparation for a 10-year reunion of former participants, a further assessment and reflection on the activities of program participants was undertaken.

## METHODS

I developed a questionnaire in association with faculty members on the Graduate Studies Committee. The questionnaire was pre-tested for clarity and content on faculty members in the Department of Family Medicine and currently enrolled graduate students. Part A covered basic demographics, obtained from admission dossiers of all students. Part B was a 24-item telephone survey. Before receiving the phone call, respondents were sent a letter outlining the intent of the survey and requesting their participation. The telephone survey was estimated to take approximately 20 to 30 minutes of their time.

Survey questions covered current academic activities and associations; publications, presentations, and research grants; and current work distribution in terms of patient care, teaching, research, and administration. Respondents were asked to evaluate the effect of the program on their skills in the four major areas of patient care, teaching, research, and administration. They were asked what their objectives had been in taking the program and whether they felt they had achieved them during the course. Finally, they were asked for suggestions to improve the program. To minimize response bias, the survey was administered by a trained interviewer obtained from the Centre for Studies in Family Medicine who had not been involved with the interviewees.

## RESULTS

The survey has been completed by all the eligible Canadian, American, British, Icelandic, South African, and New Zealand graduate students. There were no refusals from those we were able to contact.

The telephone survey technique thus proved to be very effective in the English-speaking countries, with a 100% response rate. Language barriers prevented us from contacting the eight participants from Mexico and Venezuela by phone. I wrote them but could not obtain information by the data collection deadline.

### Candidate characteristics

Eighty-two percent of the 45 respondents were male, with a mean age of 46 years. Most (60%) had graduated from a Canadian medical school. Seventy-one percent of the candidates had 2 or more years of postgraduate training; of those, 40% were graduates of recognized family medicine residency training programs.

On entry into the graduate studies program, the candidates had a mean number of 5.6 years in private practice and had been teaching part time for a mean number of 2.5 years. Six candidates taught full time. Sixty-five percent of participants were studying full time; 27% studied part time; 9% had other designations. The status of the respondents with respect to degree completion is outlined in *Table 1.* Respondents' major reasons and objectives for entering the program were to consider teaching as a career choice in family medicine; to develop some basic research skills; to enhance their philosophical base in understanding family medicine as a discipline; and, finally, to satisfy their own need for change and career review.

### Effects of program

When asked about the most important effect of the program on their careers, respondents mentioned increased academic credibility; enhanced personal growth, which was associated with the feeling of being renewed and refreshed; and improved

*Table 2.* **ESTIMATED EFFECT OF PROGRAM**

| EFFECT | N | % |
|---|---|---|
| **PARTICIPANTS REPORTING MODERATE TO MAJOR EFFECT ON THE FOLLOWING ASPECTS OF THEIR CAREERS** | | |
| As practising family physician | 27 | 60 |
| As teacher of family medicine | 41 | 91 |
| As researcher in family medicine | 34 | 76 |
| As administrator | 16 | 36 |
| **PARTICIPANTS REPORTING THAT ALL OR MOST PERSONAL OBJECTIVES WERE MET** | 41 | 91 |
| **PARTICIPANTS REPORTING THAT PROGRAM EXPECTATIONS WERE MET** | | |
| Fully | 35 | 78 |
| Somewhat | 9 | 20 |

research, teaching, and patient care skills. Three respondents said they were comfortable in deciding against academic family medicine as a career choice. The specific self-reported effects of the program on their careers are listed in *Table 2.*

In addition to expected effects on teaching and research, had the program affected participants' practice of family medicine? Sixty percent of respondents reported a moderate to major effect, mentioning a different approach to practice, improved charting, better team work, a more patient-centred approach to care, improved skills in the psychosocial areas, enhanced personal growth, and a more positive attitude to family medicine in general.

The primary goal of the program was to enhance physicians' teaching and research skills. In the teaching area, respondents cited enhanced comfort in the small group process, better evaluation skills, enhanced knowledge and awareness of the teacher-student relationship, and expanded variety of teaching skills.

Seventy-six percent of respondents indicated significant changes in research skills, reporting an improvement in basic research skills, increased confidence, enhanced ability to evaluate the research of others, recognition of the importance of research to family medicine as a discipline, and the ability to incorporate research activities into their regular work.

A smaller percentage of respondents indicated significant changes in their administrative skills, citing improved understanding of group dynamics, improved leadership skills, and a better understanding of the organization of systems.

## Factors affecting program completion

The various means by which the respondents financed their study time are summarized in *Table 3.*

*Table 4* summarizes the academic activities of the respondents at the time of the survey. Seventy-eight percent were involved with academic departments of family medicine. The mean for scientific presentations was 5.4 and 3 for publications.

A cross-tabulation between the respondents who completed the degree and those who did not revealed that those completing the degree were more likely to report a moderate to major change in research and administrative skills. They also made significantly more presentations, had more publications, participated in more research

*Table 3.* **PRIMARY SOURCES OF FUNDING**

| SOURCE | N | % |
|---|---|---|
| Personal | 17 | 38 |
| Kellogg Foundation | 24 | 53 |
| Foundation Grant | 1 | 2 |
| Home University Funds | 2 | 4 |
| Other | 8 | 18 |

*Most respondents were funded by personal sources or by the Kellogg Foundation.*

*Table 4.* **CURRENT ACADEMIC ACTIVITIES OF RESPONDENTS**

| ACADEMIC ACTIVITY | N | % |
|---|---|---|
| Full-time academic career | 16 | 36 |
| Part-time academic career | 19 | 42 |
| No current academic activity | 10 | 22 |
| Presented 1 or more paper at scientific session | 32 | 71 |
| Involved in current research project | 29 | 64 |
| Held a research grant | 15 | 33 |
| Published at least 1 paper | 20 | 44 |

*78% of respondents were involved with academic institutions at the time of the survey.*

projects, and had received more research grants than those who had not completed the program. This correlation is not surprising; it suggests that those who completed their degree followed their inclinations and went on to an academic career.

## DISCUSSION

Most participants attended on a full-time basis; most students from other countries belonged to this group. Most of the part-time students lived within driving distance of London, Ont. Several of them had never intended to complete the program, but wished only to take a few specific courses as part of their personal continuing medical education. Full-time faculty were encouraged to take specific courses as part of faculty development within the department but had no intentions of taking the whole program.

This information is important when interpreting the percentage of participants completing the program. Only 48% of all respondents had completed the program; but of the 34 respondents who had enrolled with the intention of completing the program, 22, or 65%, had done so. An additional 6 respondents were continuing their studies part time and still hoped to complete the program. (Six more who had completed their course work were not working on their thesis and thus would not be able to complete the program.) Excluding those who never intended to complete the program, and assuming the six active in the program successfully completed their studies, it can be said that 82% of the participants in the first 10 years of the program will have successfully completed their studies.

Participants who planned to take only certain courses were, like those completing the entire program, happy with the program and its effects on their academic activities of teaching, research, patient care, and administration. Overall the respondents thought well of the program; several made suggestions for the future, not included in this article.

Respondents identified a strong need for financial support for graduate students. This is an acute problem, because funding from the Kellogg Foundation has terminated and no replacement source has been found. While 53% of the students surveyed have received financial support from the Kellogg Foundation, current graduate students are financing their studies themselves, perhaps with some support from their home institutions or countries.

Hitchcock and colleagues[3] conducted a survey of graduates of American development programs for family medicine faculty sponsored by the Robert Wood Johnson Foundation and the Division of Medicine of the U.S. Department of Health and Human Services. They concluded that the retention rate of fellows and full-time faculty positions equalled or exceeded those of

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about subjects in which they are more proficient, they may need help with areas of deficiency and guidance in selecting resources that are pertinent, palatable, and appropriate.

The study was limited by the response rate and the geographic distribution. Despite these apparent and inherent limitations, the information will be useful at a local level as baseline data in the development of a new curriculum for resident clinical experiences and lectures.

Additional work is required to determine whether the findings for the resident population will hold true for physicians in practice. The same instrument, with some refinement, can be used to more specifically identify areas of interest and needs for education in sports medicine. ■

**Requests for reprints to:** *Dr R. Strother, Family Medicine, Holy Cross Hospital, 2202 Second St SW, Calgary, AB T2S 1S5*

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other fellowship programs in the United States. Fifty-three percent of American graduates occupied full-time faculty positions, as compared with 47% of graduates from the University of Western Ontario program.

## CONCLUSION

More family physician faculty will be needed as residency training programs expand to meet new licensing requirements. I hope this survey is helpful to practising family physicians attracted to full- or part-time academic family medicine in considering the resources available for preparing themselves for such a career shift. ■

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