

The impact of interest

How do family medicine interest groups influence medical students?

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ABSTRACT

OBJECTIVE To describe the knowledge of, and experience with, the Interest Group in Family Medicine (IgFM) at the University of Toronto, among undergraduate medical students; to explore the effects of the IgFM on undergraduate medical students; and to help determine future directions for the IgFM and other family medicine interest groups in Canada.

DESIGN Qualitative descriptive design and focus groups.

SETTING The Faculty of Medicine at the University of Toronto in Ontario.

PARTICIPANTS A total of 45 students in the undergraduate medical school program at the University of Toronto participated in this study. Approximately equal numbers of students from each year were represented in the sample.

METHOD Focus groups were conducted to determine students' knowledge of, experiences with, and perspectives on the IgFM. The focus groups were audiotaped and transcribed verbatim. Transcripts were coded and analyzed for themes using qualitative content analysis. Data were collected until saturation of emerging themes was reached.

MAIN FINDINGS The students were generally knowledgeable about the IgFM and many had attended IgFM events. The IgFM had different effects on students depending on their level of interest in family medicine (FM). For those already interested in FM, the IgFM helped to maintain and support that interest. For students still undecided about their career choices, the IgFM helped to support continued interest in FM by dispelling negative myths about the discipline, providing positive peer influences, and supplying information about careers in FM. For students not interested in FM, the IgFM provided helpful information about the discipline. Students also had many useful suggestions regarding the future direction of the IgFM.

CONCLUSION The IgFM has been successful in increasing medical student exposure to FM and in supporting students' interest in this discipline. Information from this study also provides strategies for future direction to the IgFM and other family medicine interest groups in Canada and the United States.

EDITOR'S KEY POINTS

- Over the past decade, there has been a general decline in the number of medical students choosing family medicine as a career.
- Although many factors have been suggested to contribute to this decline, one proposed solution is the
 development of family medicine interest groups in
 medical schools.
- There has been little research, however, into the effectiveness of these groups in promoting family medicine.
- This study found that family medicine interest groups promoted positive family medicine role models, battled negative attitudes toward family medicine, and maximized student exposure to family medicine.

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L'impact de l'intérêt

Quelle est l'influence des groupes d'intérêt en médecine familiale sur les étudiants en médecine?

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RÉSUMÉ

OBJECTIF Décrire notre connaissance et notre expérience des groupes d'intérêt en médecine familiale (GIMF) chez les étudiants en médecine de premier cycle à l'Université de Toronto; examiner les effets des GIMF sur ces étudiants; et aider à déterminer l'évolution future des GIMF et autres groupes d'intérêt en médecine familiale au Canada.

TYPE D'ÉTUDE Étude descriptive qualitative et groupes de discussion.

CONTEXTE La faculté de médecine de l'Université de Toronto, Ontario.

PARTICIPANTS Un total de 45 étudiants du programme de premier cycle de la faculté de médecine de l'Université de Toronto. L'échantillon contenait un nombre à peu près équivalent d'étudiants de chaque années.

MÉTHODE On a tenu des groupes de discussion pour déterminer la connaissance, l'expérience et le point de vue des étudiants sur les GIMF. Les discussions ont été enregistrées et transcrites intégralement. Ces transcrits ont été codés et analysés en fonction des thèmes, à l'aide d'une analyse de contenu qualitative. On a recueilli des données jusqu'à saturation des thèmes émergents.

PRINCIPALES OBSERVATIONS En général, les étudiants connaissaient les GIMF, plusieurs ayant même participé à certaines activités de ces groupes. Les effets des GIMF sur les étudiants différaient selon leur niveau d'intérêt pour la médecine familiale (MF). Chez ceux qui s'intéressaient déjà à la MF, les GIMF ont aidé à maintenir et à renforcer l'intérêt. Chez ceux qui hésitaient encore sur leur choix de carrière, les GIMF ont aidé à maintenir l'intérêt pour la MF en dissipant les mythes négatifs au sujet de cette discipline, en offrant des influences positives de la part des pairs et en fournissant de l'information sur les carrières en MF. À ceux qui n'étaient pas intéressés à la MF, les GIMF ont apporté des informations utiles sur cette discipline. Les étudiants ont aussi fait plusieurs suggestions intéressantes concernant l'orientation future des GIMF.

CONCLUSION Le GIMF a réussi à augmenter l'exposition des étudiants en médecine à la MF et à affermir l'intérêt des étudiants pour cette discipline. Les renseignements obtenus par cette étude suggèrent aussi des

stratégies pour l'orientation future des GIMF et d'autres groupes d'intérêt pour la médecine familiale, au Canada comme aux États-Unis.

POINTS DE REPÈRE DU RÉDACTEUR

- Au cours de la dernière décennie, il y a eu un déclin général du nombre d'étudiants en médecine choisissant de faire carrière en médecine familiale.
- Même si plusieurs facteurs pouvant contribuer à ce phénomène ont été mentionnés, une des solutions proposées était le développement dans les facultés de médecine de groupes d'intérêt en médecine familiale.
- Toutefois, l'efficacité de ces groupes pour promouvoir la médecine familiale n'a pas fait l'objet de beaucoup de recherche.
- Cette étude a constaté que les groupes d'intérêt en médecine familiale présentaient des modèles de rôle positifs en médecine familiale, combattaient les attitudes négatives envers la médecine familiale et maximisaient l'exposition des étudiants en médecine à la médecine familiale.

^{*}Le texte intégral est accessible en anglais à www.cfp.ca. Cet article a fait l'object d'une révision par des pairs. Can Fam Physician 2008;54:78-79

It is now widely accepted that Canada's shortage of FPs is one of the most important challenges currently facing our health care system. From 1992 to 2003, the percentage of Canadian medical students choosing family medicine (FM) careers fell from 44% to 24%.¹ Owing to various factors, there has been a moderate rebound in the years since²; however, declining interest in FM as a career choice has the potential to have a profound effect on the delivery of health care as we know it.

The factors that affect medical student selection of FM as a career have been studied extensively. A summary of these factors is presented in Table $1.^{3-12}$

Of the many factors contributing to the magnitude of the FP shortage, the difficulty in attracting medical students to careers in FM is paramount. In 2003, the Department of Family and Community Medicine at the University of Toronto (U of T) formed a working group to develop strategies to increase students' interest in careers in FM. From this working group, a student-driven initiative was created, the Interest Group in Family Medicine (IgFM). The mission of the IgFM was threefold:

- to increase medical students' exposure to FM during undergraduate medicine;
- to promote postgraduate training in and practice of FM; and
- to improve the overall image of FM within the undergraduate medical school, even among those not planning to become FPs.

The IgFM at the U of T, founded in 2003, is a fully student-run initiative that has focused on 3 primary areas: informing medical students about FM (including hosting FP speakers, distributing periodic newsletters, and providing a clinical skills conference with sessions taught exclusively by FPs); coordinating a mentorship program between FPs and medical students; and advocating increased FM exposure in the curriculum. Through a partnership between the College of Family Physicians of Canada and Health Canada, the IgFM at the U of T was involved in establishing contacts with similar groups across Canada, many of which have been very active. There is currently an active family medicine interest group (FMIG) at each of Canada's 17 medical schools.

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In the United States, FMIGs have existed for many years at a number of schools. However, there have been few research studies evaluating their effectiveness in promoting FM specifically, or their effects on medical students more generally. Two studies found that there was a weak positive association between participation in FMIGs and selection of family practice by graduating seniors.14,15 On the other hand, a more recent study failed to demonstrate an association between FMIG activity and the number of students entering FM. Several respondents in that study, however, expressed a belief that FMIGs preserve existing interest in FM more than they recruit to the specialty.¹⁶ One limitation of these studies is that there was no direct evaluation of medical student opinion on the effectiveness or influence of FMIGs. In addition, their results might not reflect the Canadian experience with FMIGs.

There has been a considerable response from medical students at the U of T to the IgFM's programs. However, at present there is a paucity of knowledge about the effectiveness of Canadian FMIGs in promoting FM and about how these groups influence the career choices of Canadian medical students. In order to assess the effect of IgFM efforts on medical students' understanding of and interest in FM, there is a need to critically examine students' knowledge of the IgFM and their experience with its FM-promoting activities. As well, many stakeholders, including university departments of FM, the College of Family Physicians of Canada, and Health Canada, have been actively supporting FMIGs, which makes exploring the effects of the activities of these groups essential in order to appropriately direct future funding and initiatives.

For these reasons, this exploratory study was designed to investigate undergraduate medical students' knowledge of and experience with the newly formed IgFM at the U of T, to explore the effects of the IgFM on the undergraduate medical students, and to help determine future directions for the IgFM and other FMIGs in Canada.

METHODS

This study employed a qualitative descriptive design, the method of choice when straightforward answers to questions of special relevance to practitioners or policy makers are desired,¹⁷ and recruited undergraduate students from each year of the U of T's 4-year medical program to participate in focus groups. Focus groups are a particularly useful method for conducting exploratory research, given that little is known about the topic of study.¹⁸

Research design and setting

Following ethics approval by the U of T Research Ethics Board, 40 medical students from each year were

FACTORS	POSITIVE INFLUENCES	NEUTRAL INFLUENCES	NEGATIVE INFLUENCES
Demographics	Rural background	Ethnicity	
	Lower socioeconomic status	Academic background	
	Lower parental income		
	Lower parental education		
	Older age		
	Demonstrating a societal orientation		
Medical school	More required FM time in clinical years	Admissions policies	Negative FM role models
	Programs to increase the number of students entering primary care	Legislative mandates	Negative attitudes expressed by lecturers or staff
	Schools with high rates of primary care graduates		Schools with low rates of primary care graduates
	Positive faculty FP role models		
Career plans	Intention to study FM at entry to medical school		Expectations of high income
	Intention to practise in a rural or disadvantaged area		Interest in research
	Placing a high value on the physician-patient relationship		Interest in an academic career
	Placing a high value on intellectual stimulation or challenge		Perception of a lack of prestige
	Placing a high value on workload flexibility and predictability		Perception of low income potential
	Placing a high value on the ability to pursue interests not related to work		Perception of low intellectual content
	Placing a high value on lifestyle		Hospital oriented
	Desiring a varied scope of practice		

randomly selected from the master class lists by an online random number generator. They were sent e-mail invitations to attend focus group meetings with other members of their particular classes. A few additional medical students were recruited for the focus groups using the snowball sampling technique.19

Inclusion criteria for participation in this study were limited to the following: being aged 18 years or older, competency in English, ability to provide informed consent, and status as a student in the U of T undergraduate medical program.

The final sample consisted of 20 male and 25 female undergraduate medical students. Approximately one-third had never attended an IgFM event, another third were members of the IgFM and thus highly involved in its initiatives, and the remaining third had attended at least 1 IgFM event each. Approximately half of the participants expressed interest in FM and were either planning to pursue this discipline or were open to considering it, while the other half reported no special interest in FM and intended to pursue different medical careers. Given this diversity, our sample was likely a good representation of the wider population of undergraduate medical students at the U of T.

The final sample size and total number of focus groups for this project was determined by achievement of saturation, the point at which no new information was emerging from the discussion.

Data collection

In total, 45 medical students participated in 9 focus groups in March and April of 2006. Two focus groups were held with each year class. A third focus group was held with members of the third-year medical class to accommodate the schedule of several study participants. Each focus group lasted approximately 1 hour and included from 3 to 8 participants. The focus groups were all moderated by M.B.S., who is an independent researcher with no connection to the undergraduate medical school program, a fact that was shared with the participants to enhance their perception of confidentiality and to help inspire open, candid discussion.

At each focus group, the participants were asked open-ended questions about their knowledge of, experience with, and perspectives on the IgFM and its activities promoting FM. The questions were previously pilot-tested with 4 medical students to ensure they were

clear and understandable. The questions followed a semistructured interview guide developed specifically for this study, drawn from the literature and based on the objectives of this study. Additional probing questions were asked to elicit discussion and to clarify points raised earlier. Questions included the following: "What do you know about the IgFM?", "What do you believe has been the impact of the IgFM at the U of T?", and "How do you feel that the IgFM could be more informative about a career in FM?"

Data analysis

Audio recordings were made of the proceedings, supplemented with hand-written notes. Recordings were transcribed verbatim and reviewed for accuracy by J.R.K., M.B.S., and 2 focus group participants. No problems with content were identified.

The focus group data from different classes were grouped and analyzed by J.R.K. and M.B.S. using a qualitative content analysis approach¹⁷ to identify common themes and preliminary codes derived from the data. The codes were refined and tested throughout the analysis process as they were attached to the data, and themes and patterns started to emerge. Inconsistencies in the coding of the transcripts between the 2 authors were resolved by consensus, and all themes were agreed upon by the authors. In order to verify the themes, patterns, and regularities emerging in the data, J.R.K. and M.B.S. performed counts of the responses and the number of participants in each response category, and consciously investigated any disconfirming evidence in the data.

RESULTS

General perceptions and knowledge of the IgFM

The focus group participants demonstrated a range of knowledge about the IgFM. Participants agreed that the IgFM promoted FM as a career choice among members of the medical school classes. Many students mentioned that the IgFM attempted to increase awareness of FM as a specialty and provided education about its diverse opportunities and flexibility. Others appreciated the IgFM's efforts to increase direct exposure to different FPs and to provide a greater understanding about what the discipline had to offer. Some students commented that the IgFM also tried to dispel myths about how FM was often perceived.

Other IgFM roles mentioned in the focus groups include the following: providing mentoring opportunities; creating events to get people interested in FM; helping to create more respect for FM as a competitive discipline; acting as a buffer against any negative comments about FM; and creating a community, with the

potential to last beyond graduation, among the students interested in FM.

Students demonstrated less awareness of the IgFM's advocacy initiatives, although some did recognize the IgFM's role in revising the medical school curriculum to increase exposure to FM. This came up in 6 of the 9 focus groups.

Experience with the IgFM

Participants had a range of experiences with the IgFM at the U of T. All of the participants were aware of the IgFM and generally believed that the group had taken appropriate steps to improve the image of FM at the U of T and to provide medical students with opportunities to learn more about the discipline.

The 2 most recognized IgFM activities for the participants were the speaker series and the clinical skills conference. More than half of the study participants had attended speaker series events and approximately one-third had attended the clinical skills conference. The response from students who had attended these events was overwhelmingly positive. As one student commented, "The clinical skills conference last year was great for me. It really opened my eyes to all the things a family doctor does." Having the opportunity to interact with FPs and residents in a more relaxed, social setting was also highly valued.

The IgFM's advocacy initiatives were less well known among the participants. In more than half of the focus groups, however, students mentioned that IgFM members regularly challenged negative comments about FM made by lecturers. This was perceived to have had a positive effect, for as one student explained: "I think if [lecturers] encounter people who defend [FM], then they are less likely the next time to say the same thing."

Approximately one-third of participants had participated in the IgFM mentorship program and reported that this was a very positive experience. Other focus group participants, however, indicated that the mentorship program faced challenges finding enough mentors matching the physician demographics preferred by students. This was highlighted as an area requiring improvement for the IgFM.

Impact of the IgFM

The participants were in agreement that the IgFM was a strong extracurricular committee that has had a positive effect on undergraduate medical students by increasing their knowledge about the career options available in FM and bringing more credibility to the decision to go into FM.

The reported effect of the IgFM varied greatly depending on participants' interest in FM. For students who were already interested in FM, the IgFM seemed to help maintain that interest by being a resource for information, by helping students to feel supported in

their decisions to become FPs, by decreasing feelings of isolation for students contemplating careers in FM, and by providing a counterbalance to the negative comments made about FM by faculty.

Students in this group explained the following:

I actually am one of the people genuinely leaning more towards FM than anything else. So I am kind of looking into whether it is the right fit or not I think with the IgFM bringing in speakers ... [it] actually helps me because I'm able to see the professionals that are out there working right now So that has actually solidified the fact that I do want to get into FM.

Just knowing that your friends and people you respect are also interested in [FM] helps [H]aving a group of people who are interested definitely creates strength in numbers. You don't feel like you're the only one.

Most of us don't know what we want to do yet. And so some people are out there ... [and] want to do FM. Then, again, [the IgFM] keeps me from ruling FM out. It counteracts the negative images and negative messages that I'm getting about it that nobody would want to do it. And yet there is this group of people who do want to do it, and they are interested enough in it to get other people interested.

For students who are considering FM as one of many possible career options, the IgFM is effective in keeping them interested in FM. As one student explained:

When I first started medical school, I didn't really have a clear idea of what I wanted to do. And it just made me curious when there is such a big group of people who were so interested in FM. And so it made me kind of like, oh, maybe I'll attend [IgFM events] in order to learn about this specialty. It does open the door for people considering that this might be a good career choice.

Approximately half of the participants were not considering FM as a career option. These students reported that the IgFM had not had a direct effect on their career aspirations and stated that they did not think the IgFM had influenced them personally. However, students in this group were in agreement that the IgFM's activities were useful in providing them with education about FM, and several indicated that the IgFM had encouraged them to seek out further educational experience in FM. One student stated that, "[I]f there was no IgFM, I probably wouldn't have tried a rural elective in my first year. So it helped me when I decided what is my career choice."

Challenges for the IgFM

Participants recognized 2 major challenges to the level of interest and participation of medical students in IgFM's activities: pre-medical school perceptions of FM and a pro-specialization culture within the medical school. One participant commented: "Often you see articles or editorials where family doctors are complaining because they are not getting paid enough ... and they're isolated in the community. You see a lot of the negative aspects." Another suggested that, "Even if people do say, 'I'm interested [in FM],' they're going to get hit with insults or just demeaning comments about family doctors. And I think that culture is a huge barrier to creating a successful climate where people want to choose FM."

DISCUSSION

Most of the participants in this study were aware of the IgFM's existence and had positive experiences with their various activities. Two of the IgFM's primary goals were known or assumed by the participants: to increase exposure to FM during undergraduate medical school and to promote postgraduate training and practice in FM.

The effect of the IgFM's activities seems to depend on the medical student's interest in FM. For students who were already interested in FM, the IgFM helped foster that interest by acting as a resource and support system and by counterbalancing negative messages about FM. For students who were still undecided about their career choices, the IgFM was effective in keeping them interested in FM by dispelling myths about FM, providing them with positive peer influences, and by supplying information about the discipline.

For students definitely not considering FM as a career, most found that the IgFM had no direct effect on their career aspirations. However, a few of these students did find the IgFM's activities useful in directing them to conduct electives in FM. These findings are consistent with prior research in the area.16

Three major challenges to the IgFM's initiatives were highlighted by participants. First, students reported that they held negative perceptions about FM before entering medical school. The literature supports the view that students are influenced by both positive and negative role modeling before medical school (eg, from their own family doctors).20-²⁵ Second, students cited a pro-specialization culture within the medical school and curriculum. Much evidence from the United States and Britain confirms that it is vital to examine the attitudes of each medical school, as some have not been able to create an educational environment in which generalist clinical practice is both understood and valued.²⁶⁻ ²⁸ Third, the ethos of a medical school can become dominated by "high-tech" medicine with a specialist focus, 5,27,28 yet student characteristics associated with primary care include having less interest in technology.²⁶

More and more, students perceive that FM lacks the prestige of other specialties in academic health centres.²⁹ Interestingly, however, it has also been found that interest in prestige is inversely related to primary care career choice.^{20,24,30,31}

Participants in this study made a number of useful suggestions regarding future directions of the IgFM. These recommendations for FMIGs fall into 3 categories, each of which is supported in the literature as a possibly effective recruitment strategy: positive role modeling; battling negative attitudes about FM; and maximizing student exposure to FM.

Positive role modeling

Senf, Kutob, and Campos-Outcalt found that the most important reasons for choice of specialty relate to congruence between the graduate on the one hand, and the physicians and the process of providing care in that specialty on the other. Having a role model is related to students' understanding of the fit between themselves and the specialty they have chosen. Having a role model in FM might be more important than in other specialties.^{20,32} This differential influence of role models was also seen in a 1997 study that found role models were more important in primary care than in non-primary care specialties, owing to their ability to serve as counterexamples to negative stereotypes.33 The participants in our study suggested the following strategies for FMIGs to increase positive FM role modeling, in keeping with the literature:

- invite enthusiastic, well-spoken FPs to speak to students on a range of interesting topics related to FM;
- establish a mentorship program between medical students and FPs or residents, and match mentors and students according to their interests; and
- organize social activities to bring medical students, FPs, and residents together in informal settings.

Battling negative attitudes toward FM

Much evidence confirms that medical school environments have indeed been found to have antagonistic attitudes toward primary care.34-37 It is difficult to get a sense of the prevalence of "bad-mouthing" (which has become an accepted term in the literature), though Hunt et al report that 76% of students said that bad-mouthing was heard frequently, often in the preclerkship years.35 Specialties that most fall victim to bad-mouthing are FM and surgery.35 Although some studies have concluded that students interested in primary care are not necessarily influenced by this informal curriculum,34 most of the studies suggest that even low levels of bad-mouthing negatively affect the likelihood that students will pursue the specialty in question.35-37 It is hard to quantify how many students change their career choices based on bad-mouthing, but one study states that 17% of students surveyed did so.35 Primary care must be valued, not

looked down upon.²⁶ The participants in our study suggested the following strategies for FMIGs to battle negative attitudes toward FM, in keeping with the literature:

- work to dispel the myths about FM;
- advocate change in the formal and hidden curricula, specifically addressing the negative perceptions and attitudes concerning FM; and
- actively challenge any negative comments made about FM in lectures and seminars or on the wards—always with the utmost professionalism.

Maximizing student exposure to FM

Maximizing student exposure to FM and to FMIGs is another possible strategy to increase recruitment. We know that increased interest in primary care has been demonstrated where there has been more exposure to primary care electives in medical school,38 although studies have not shown that early exposure to family practice faculty or having a high FM faculty-to-student ratio has been helpful in FM recruitment.26 Godkin recommends increased exposure to FPs both in formal and informal activities across all years of training, increased preclerkship exposure through events, mentorship programs, and an increased role by FPs as teachers.39 A more recent Canadian article suggests similarly that students at all medical schools in Ontario should be afforded exposure to FM through lectures and clinical experience within the first year of medical school.⁴⁰ The participants in our study suggested the following strategies for FMIGs to maximize student exposure to FM, in keeping with the literature:

- advertise the IgFM's goals and objectives in order to increase awareness of the group's overall mission and role within the medical school;
- be as visible as possible;
- have dynamic members of the group with direct interaction with colleagues in FM and other specialties;
- encourage first-year students to be involved;
- develop initiatives that specifically target third- and fourth-year medical students (ie, clerks);
- promote FMIG activities to all students, regardless of their interest in FM: and
- schedule events at the most convenient times and places to maximize medical student attendance.

Limitations

Students attended the focus groups on a volunteer basis, so it was possible that this study attracted a larger number of students with direct experience with the IgFM and with more favourable views of FM than are represented in the undergraduate medical student population at large. Nevertheless, the medical students who participated in focus group had a range of experience with the IgFM and a range of interest in FM as both a specialty and a career choice.

In addition, we deliberately did not collect demo-

graphic information on the focus group participants (except for sex, year of study, and involvement with IgFM activities). This was done in order to preserve the confidentiality and anonymity of study participants, and to minimize any reluctance by students to participate. Nevertheless, we do believe that our random sample was a good representation of the undergraduate medical school classes.

Finally, the perspectives of students from other medical schools in Canada were not included in this study.

Conclusion

Overall, this study demonstrated that the IgFM at the U of T had been successful in increasing medical student exposure to FM and in dispelling myths about FM, despite pre-existing perceptions of FM and barriers within the curriculum and culture of the medical school. Still, this study pointed out a number of areas in which the IgFM could be improved. The information from this study also provided direction for other Canadian and American FMIGs as they continue to develop their programs. Finally, this paper should assist university departments of FM, the College of Family Physicians of Canada, and Health Canada by providing meaningful, practical ways in which to support the initiatives of FMIGs in this country.

Future directions

The IgFM will continue to assess its efforts in the hope of improving the profile and image of FM at the U of T. Further research is needed to support our findings and produce knowledge on the effect of FMIGs at other medical schools in Canada and the United States. It would also be desirable to examine participation in FMIGs and its potential effect on ultimate choice of specialization. While medical student career choice is multifactorial, a longitudinal study comparing similar medical schools (in terms of size, location, and curriculum) with and without FMIGs would be helpful in determining whether or not there is a causative relationship between FMIGs and career choice.

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Contributors

Dr Kerr was involved in study design, data analysis, and the writing of the final paper. Ms Seaton was involved in facilitating focus groups, analyzing data, and writing the paper. Dr Zimcik, Dr McCabe, and Dr Feldman were involved in study design and editing, as well as review of the paper.

Competing interests

Drs Kerr and Zimcik cofounded the Interest Group in Family Medicine at the University of Toronto in November *2003.* **Drs McCabe** *and* **Feldman** *serve as faculty advisors* to the Interest Group in Family Medicine.

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References

- 1. Canadian Resident Matching Service. Match report and statistics. Ottawa, ON: CaRMS; 2005. Available from: www.carms.ca/jsp/main.jsp?path=../ content/statistics/report/re_2005#table115. Accessed 2007 April 1.
- 2. Canadian Resident Matching Service. Reports and statistics, 2003–2007. Match reports. Ottawa, ON: Canadian Resident Matching Service; 2007. Available from: www.carms.ca. Accessed 2007 December 18.
- 3. Harvey A, DesCoteaux JG, Banner S. Trends in disciplines selected by applicants in the Canadian resident matches, 1994-2004. CMAJ 2005;172(6):737.
- 4. Sullivan P. FM loses lustre as students "vote with feet" in 2001 residency match. CMAJ 2001;164(8):1194.
- 5. Rosser WW. The decline of family medicine as a career choice. CMAJ 2002:166(11):1419-20.
- 6. Lofsky S. Family medicine in decline? [Comment]. CMAJ 2002;167(8):845.
- 7. Bonisteel P. Family medicine in decline? [Comment]. CMAJ 2002;167(8):845.
- 8. Woodburn BD. Family medicine in decline? [Comment]. CMAJ 002;167(8):845.
- 9. Sullivan P. Family medicine crisis? Field attracts smallest-ever share of residency applicants. CMAJ 2003;168(7):881-2.
- 10. Buske L. Class of '94 results point to family medicine's declining popularity. CMAJ 2002;167(10):1161.
- 11. Stevenson C. Choosing family medicine [Comment]. CMAJ 2001;165(3):272.
- 12. Sibbald B. Canada's new doctors turning backs on family practice. CMAJ 2000;162(9):1347.
- 13. Cadesky E. One year later: starting a family medicine student interest group. Can Fam Physician 2005;51:919.
- 14. Baraka SM, Ebell MH. Family medicine interest groups at US medical schools. Fam Med 1995;27(7):437-9.
- 15. News Staff. Survey: active FMIGs may boost family medicine match rates. Leawood, KS: American Academy of Family Physicians; 2005. Available from: http://www.aafp.org/x40916.xml. Accessed 2006 April 1.
- 16. Rosenthal TC, Feeley T, Green C, Manyon A. New research family medicine interest groups impact student interest [Letter]. Fam Med 2004;36(7):463.
- 17. Sandelowski M. Whatever happened to qualitative description? Res Nurs Health 2000:23:334-40.
- 18. Morgan DL. Focus groups as qualitative research. 2nd ed. Newberry Park, CA: Sage Publications Inc; 1997.
- 19. Miles M, Huberman A. Qualitative data analysis: a sourcebook of new methods. Thousand Oaks, CA: Sage Publications Inc; 1994.
- 20. Senf JH, Campos-Outcalt D, Kutob R. Factors related to the choice of family medicine: a reassessment and literature review. J Am Board Fam Pract 2003;16(6):502-12.
- 21. Hays RB. Choosing a career in general practice—the influence of medical schools. Med Educ 1993:27:254-8
- 22. Martini CJM, Veloski JJ, Barzansky B, Xu G, Fields S. Medical school and student characteristics that influence choosing a generalist career. JAMA 1994;272(9):661-8
- 23. Schafer S, Shore W, French L, Tovar J, Hughes S, Hearst N. Rejecting family practice: why medical students switch to other specialties. Fam Med 2000;32(5):320-5.
- 24. Campos-Outcalt D, Senf J, Kutob R. Comments heard by US medical students about family practice. Fam Med 2003;35(8):573-8.
- 25. Jordan J, Brown JB, Russell G. Choosing family medicine. What influences medical students? Can Fam Physician 2003;49:1131-7.
- 26. Bland CJ, Meurer LN, Maldonado G. Determinants of primary care specialty choice: a non-statistical meta-analysis of the literature. Acad Med 1995;70:620-41.
- 27. Gray DP. Fit for the future-are medical schools going to produce the doctors the Health Service needs? Med Educ 1999;33(12):872-3.
- 28. Petchey R, Williams J, Baker M. "Ending up a GP": a qualitative study of junior doctors' perceptions of general practice as a career. Fam Pract 1997:14(3):194-8.
- 29. Future of Family Medicine Project Leadership Committee. The future of FM: a collaborative project of the FM community. Ann Fam Med 2004;2(Suppl 1):S3-32.
- 30. Newton D, Brayson M, Whitley T. "What predicts medical student career choice?" J Gen Intern Med 1998;13:200-3
- 31. Ramos K, Linscheid R, Schafer S. Real-time information-seeking behavior of residency physicians. Fam Med 2003;35(4):257-60.
- 32. Kutob R, Senf J, Campos-Outcalt D. Declining interest in FM: perspectives of

department heads and faculty. Fam Med 2003:35(7):504-9.

- 33. Burack JH, Irby DM, Carline JD, Ambrozy DM, Ellsbury KE, Stritter FT. A study of medical students' specialty-choice pathways: trying on possible selves. Acad Med 1997;72(6):534-41.
- 34. Schieberl JJ, Covell RM, Berry C, Anderson J. Factors associated with choosing a primary care career. West J Med 1996;164:492-6.
- 35. Hunt DD, Scott C, Zhong S, Goldstein E. Frequency and effect of negative comments ("badmouthing") on medical students' career choices. Acad Med 1996:71:665-9.
- 36. Kamien BA, Bassiri M, Kamien M. Doctors badmouthing each other: does it affect medical students' career choices? Aust Fam Physician 1999;28(6):576-79.
- 37. Goldsmith GA. Interest in FM: 1982 revisited? Fam Med 2004;36(6):447-8.
- 38. Xu G, Hojat M, Brigham TP, Veloski JJ. Factors associated with changing levels of interest in primary care during medical school. Acad Med 1999;74(9):1011-5.
- 39. Godkin M, Quirk M. Why students chose FM: state schools graduating the most family physicians. Fam Med 1991;23:521-6.
- 40. Laughren JJ. Fixing family medicine in Ontario: is increasing the number of residency positions enough? Univ Toronto Med J 2005;82(3):210-1.