

Rural intentions

Factors affecting the career choices of family medicine graduates

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ABSTRACT

OBJECTIVE To investigate the reasons for family medicine graduates' career choices.

DESIGN Qualitative study using focus groups and one-on-one interviews.

SETTING University of Calgary in Alberta.

PARTICIPANTS Seventeen male and female second-year family medicine residents, representing a range of ages and areas of origin, enrolled in the 2004 urban and rural south streams of the family medicine residency program at the University of Calgary.

METHOD During the final month of training, 2 focus groups were conducted to determine graduating students' career choices and the reasons for them. After focus-group data were analyzed, a questionnaire was constructed and subsequently administered to participants during face-to-face or telephone interviews.

MAIN FINDINGS Most residents initially planned to do urban locums in order to gain experience. In the long term, they planned to open practices in urban areas for lifestyle and family reasons. Many residents from the rural stream had no long-term plans to establish rural practices. Most residents said they felt prepared for practice, but many indicated that an optional third year of paid training, with an emphasis on emergency medicine, obstetrics, and pediatrics, would be desirable. Reasons cited for not practising in rural areas were related to workload, lifestyle issues, family obligations, and perceived lack of medical support in the community. Only 4 female graduates and 1 male graduate intended to practise obstetrics. The main reason residents gave for this was inadequate training in obstetrics during residency. Finances were cited as a secondary reason for many choices, and might in fact be more important than at first apparent.

CONCLUSION Despite its intention to recruit family medicine graduates to rural areas and to obstetrics, the University of Calgary residency training program was not successful in recruiting physicians to these areas. The program likely needs to re-examine the effectiveness of current approaches. If other programs are having similar difficulties recruiting graduates to obstetrics and rural practice, perhaps changes in policies should be considered.

EDITOR'S KEY POINTS

- The authors interviewed 17 graduating family medicine residents at the University of Calgary in order to find out what their initial career choices were and why they made those choices.
- None of the graduating students intended to open or work long-term in practices immediately. All except 1 graduate planned to do locums. About 88% intended to practise in urban settings in the long term. Many residents from the rural stream had no long-term plans to establish rural practices.
- Most of the residents felt prepared to practise independently at the time of graduation. Fifteen graduates said the 2-year family medicine residency program had prepared them to practise independently. Thirteen, however, thought that an optional third year of residency training would be desirable.
- Only 5 graduates intended to practise obstetrics; among these, only 1 was male.

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Intentions de pratique rurale

Facteurs influençant le choix de carrière des diplômés de médecine familiale

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RÉSUMÉ

OBJECTIF Déterminer les raisons du choix de carrière des diplômés de médecine familiale.

TYPE D'ÉTUDE Étude qualitative à l'aide de groupes de discussion et d'entrevues individuelles.

CONTEXTE Université de Calgary, Alberta.

PARTICIPANTS Dix-sept hommes et femmes de la deuxième année de résidence en médecine familiale représentant différents âges et régions d'origine, inscrits dans les groupes urbains et ruraux du sud de 2004 du programme de résidence en médecine familiale de l'université de Calgary.

MÉTHODE Durant le dernier mois de formation, on a tenu 2 groupes de discussion pour déterminer le choix de carrière des étudiants et les raisons de ce choix. Une fois les données des séances analysées, on a rédigé un questionnaire pour ensuite l'administrer aux participants au cours d'entrevues téléphoniques individuelles.

PRINCIPALES OBSERVATIONS La plupart des résidents avaient l'intention de faire de la suppléance urbaine initialement pour acquérir de l'expérience. À long terme, ils voulaient ouvrir un bureau en milieu urbain en raison du mode de vie et pour des considérations d'ordre familial. Plusieurs participants du groupe rural ne prévoyaient pas à long terme établir leur pratique en région rurale. La plupart des résidents se sentaient préparés pour pratiquer, mais plusieurs suggéraient qu'une troisième année optionnelle ou un entraînement rémunéré avec emphase sur la médecine d'urgence, l'obstétrique et la pédiatrie serait souhaitable. Les raisons invoquées pour ne pas pratiquer en région rurale avaient rapport à la charge de travail, au mode de vie, aux obligations familiales et au manque perçu de support médical dans la communauté. Seulement 4 femmes et un homme diplômés avaient l'intention de faire de l'obstétrique, la raison principale étant l'insuffisance de formation en obstétrique durant la résidence. L'aspect financier était cité comme une raison secondaire pour plusieurs choix, mais en réalité, il pourrait être plus important qu'il ne semble.

CONCLUSION Malgré son intention de recruter des diplômés de médecine familiale pour les régions rurales et pour l'obstétrique, le programme de résidence en médecine familiale de l'Université de Calgary n'a pas réussi à recruter des médecins pour ces domaines. Le programme devra sans doute réévaluer l'efficacité des façons de faire actuelles. Si d'autres programmes éprouvent des difficultés de recrutement semblables, on devra peut-être envisager des changements de politique.

POINTS DE REPÈRE DU RÉDACTEUR

- Les auteurs ont interviewé 17 diplômés du programme de médecine familiale de l'Université de Calgary afin de connaître leur premier choix de carrière et les raisons de ce choix.
- Aucun des diplômés n'avait l'intention d'ouvrir un bureau ou de pratiquer à temps plein immédiatement. Tous sauf un avaient l'intention de faire de la suppléance. Environ 88% prévoyaient pratiquer en milieu urbain à long terme. Plusieurs participants du groupe rural ne prévoyaient pas, à long terme, s'établir en milieu rural.
- La plupart des résidents se jugeaient préparés pour une pratique indépendante au moment de leur graduation. Quinze d'entre eux disaient que les 2 années du programme de résidence en médecine familiale les avaient bien préparés pour pratiquer seuls. Toutefois, 13 participants croyaient qu'une troisième année optionnelle de résidence serait souhaitable.
- Seulement 5 finissants, dont un seul homme, avaient l'intention de faire de l'obstétrique.

*Le texte intégral est accessible en anglais à www.cfp.ca.

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Canada does not have enough family physicians; as of 2000, there were only 94 family physicians per 100 000 people.¹ To make matters worse, fewer medical students are choosing to enter into family medicine,¹⁻³ and after their training, only 24.2% of family medicine graduates polled in the 2004 National Physician Survey were going to establish their own practices.⁴ Many graduates choose to work as locums⁵ or in walk-in clinics⁶; specialize in areas such as emergency medicine, geriatric care, or sports medicine; or become hospitalists or surgical extenders, thereby restricting their practices even further.⁷ In addition, fewer family physicians are practising obstetrics.⁸ Often, restricting practice to certain areas provides the opportunity to practise part-time—an increasingly popular option for those who want to balance family life with work.

Between 1981 and 2001, the proportion of women in the Canadian physician work force rose from 13% to 29%.⁷ In general, women practise fewer hours than their male counterparts, and fewer practise in rural areas.⁹⁻¹¹ Although the proportion of Canadians living in rural areas increased from 19.9% to 22.2% between 1991 and 1996, the proportion of rural physicians declined from 14.9% to 9.8%.⁷ Many studies have examined why family physicians choose to practise in rural areas¹²⁻¹⁹; rural background, exposure to rural medicine during both medical school and residency, the influence of a spouse, reasonable call with adequate support, educational opportunities, and proximity to extended family have been cited as some of the more important factors.^{12,17-19} Few studies, however, have examined why physicians choose city practice.

The family medicine residency program at the University of Calgary in Alberta is designed to produce graduates who will work in family practice. There is an urban stream and a rural stream, and in recent years, an increasing number of international medical graduates (IMGs) have been retrained in the program for Canadian medical practice. To understand current family medicine and rural practice trends better, we interviewed a graduating class of family medicine residents to ascertain their perceptions and ideas regarding their initial career choices. We wanted to assess whether the established factors that affect practice choices were still important to these graduates and to determine whether there were any different influences at play in our setting now.

Dr Lu was an Assistant Professor in the Department of Family Medicine at the University of Calgary in Alberta at the time of this study. Ms Hakes and Ms Bai were summer students in the Department of Family Medicine at the University of Calgary when this paper was written.

Dr Tolhurst is a Rural and Remote Research Fellow at the University of Newcastle in Australia. Dr Dickinson is a Professor in the Department of Family Medicine at the University of Calgary.

METHODS

From May to July 2004, we conducted a qualitative survey of second-year residents who were completing the program. International medical graduates were included, but residents enlisted with the Department of National Defence were excluded because their careers were pre-determined. This left 32 possible participants.

Initially, 2 focus groups of 4 and 5 doctors doing rural and urban residencies, respectively, were formed. The groups discussed topics from a semistructured interview theme list. Using focus group data, semistructured interview questions were developed further into a series of open-ended questions and probes to be used in one-on-one in-depth interviews with residents. Interviews were conducted face-to-face or by telephone and were audiotaped and transcribed verbatim. Two student research assistants examined and coded the transcripts and developed categories representing dominant themes in the data. The principal investigators also examined the transcripts separately to determine whether new issues or themes had emerged and how consistent or varied the answers were, and to ensure the range of ideas represented would be included in the quotes (researcher triangulation).

Participation in interviews was voluntary, and because of the potential power relationships between the principal investigators and the residents, identifying information was separated from the interview data. The research assistants created an anonymous numbering system to link demographic information with interview responses so that individual names were not linked to the data used for analysis. Participants were informed of these arrangements before the interviews. The University of Calgary Conjoint Health Research Ethics Board approved the study.

RESULTS

The research assistants were able to conduct individual interviews with only 18 of 32 possible participants, 11 men and 7 women. Seven were IMGs (of a possible 7). Information from 1 interview was inadvertently erased before analysis, so data from 17 interviews were analyzed (53% response rate).

Short-term career plans

No participants intended to open or work long-term in a practice right away. One participant planned to travel immediately after graduation, and the remainder planned to do locums. One-quarter of these (4/16) were going to do rural locums (1 after having done a third year in emergency medicine), 5 intended to do a mix of urban and rural locums, and about half (7/16) planned to do only urban locums. In order of frequency,

the reasons graduates gave for choosing locum work were the following: to gain experience, financial motivation, family commitments, and confirmation of practice preferences. A common statement was "I want to have the flexibility to work in different settings and not be tied down immediately." The main reason for choosing to practise in rural areas was to gain work experience in the diversity of medical work available to rural doctors. One participant said rural locums would better prepare him for his long-term plan of opening an urban practice. A graduate from the urban stream was going to do a rural locum partly "to test [her] skill," although her long-term intention was to work in an urban area.

Long-term career plans

Among the 17 graduates, 15 (88%) intended to practise in cities. The other 2 were uncertain of their long-term career plans.

Social issues

Family responsibilities (13/17) and lifestyle issues (12/17) were comparably important influences on choice of long-term urban practice. A resident who had lived in a small town for 16 years had no intention of returning there to work, choosing instead Calgary where his large extended family lived. Five graduates said, "Once a city person, always a city person." Some graduates who had completed the rural stream were unable to remain in rural practice because their spouses had established employment in the city.

Work issues

One graduate from the rural stream thought that rural family medicine would be too demanding, while several others wanted to avoid the burden of being on call. Job satisfaction (4/17) and the ability to interact with other doctors (4/17) were also important. Lack of personal autonomy in rural work worried 1 graduate who said, "You don't have enough of it ... you're attached to where you are ... not free to go about and do whatever." Another said, "It's very demanding to practise on your own. You also have to get the right community." Four graduates wanted to stay in larger urban centres so that they could be involved in both hospital work and office practice. A lack of specialist backup was identified by many who were unwilling to work in rural settings: "I think backup is really important, for example, if I am doing a locum [in] obstetrics." Several expressed discomfort with the idea of working independently: "It's nice to know that if I need [assistance] people will be there ... having backup is a big thing for me ... and available resources from an investigation point of view."

Readiness to practise independently

Most of the residents (15/17) said they felt prepared to practise independently at the time of graduation.

Unexpectedly, the 2 graduates who said they felt unprepared had trained through the rural stream. One woman said, "I have [done] only 15 deliveries during my residency, which is not enough to work independently." A man expressed a similar concern: "I didn't get as much female care as I would have liked ... I am more comfortable with male care." He also thought that he had not received enough emergency training and planned to complete a third year in emergency medicine.

International medical graduates

The IMGs who had practised in another country previously were more confident in their clinical skills and experience than Canadian graduates were. They had more interest in establishing their own practices quickly, rather than doing locums. One commented, "If I hadn't had IMG experience, I would not have been prepared [to practise independently]." Another said, "As IMGs, we have worked as family physicians before, for a long time. We are confident in our skills."

Concerns with training

The main concern about training was the condescending attitude of specialists toward family physicians: "The attitude of [the specialist] faculty toward family medicine is horrible." Family medicine preceptors with a genuine desire to teach well were identified as a crucial factor in raising residents' confidence level: "[If] you have somebody who loves what they do, who is interested in their work, who first of all wants to teach and share that knowledge, [then] you'll have a good program."

Optional third year of residency

Although 15 of the graduates said the 2-year family medicine residency program had prepared them to practise independently, 13 favoured an optional third year of residency training. All but 1, however, thought that the timing of this extra year should be flexible and that the rotations would have to be tailored to individual needs. Several agreed with the suggestion that this third year should focus on skills that would lead to higher pay afterward. In order, the top 3 rotations graduates said they would like were emergency medicine, obstetrics, and outpatient pediatrics. The method and amount of remuneration for an optional third year of training were important concerns; graduates were especially worried about whether such trainees would have to take pay cuts to return to residency from practice. Seven of the graduates would have been willing to accept the usual third-year salary, but others disagreed: "Like an emergency R3, there should be an increase in salary." One participant suggested, "You would almost have to make the R3 a part-time thing or supplement it to make it work." Another said, "I think adding on a third year might influence the prestige of family medicine. Internal medicine is basically 3 years as well." This reinforced

the feeling expressed by many of the graduates that family medicine received little recognition and acknowledgment from specialists.

Work preferences

When asked about their preferences for practice content—acute versus chronic care, care of the young versus care of the elderly, medical versus psychological care, and care of men versus care of women—10 graduates said they preferred acute care, 2 preferred chronic care, and the others had no particular preference. One who preferred acute care said that his time as a rural resident allowed him to “get more exposure to acute care and thus [he] became more comfortable with it than [he] was before.” Eight said they preferred providing only medical care with no psychological counseling. Eleven indicated no strong preference for young or elderly or male or female populations. Only 5 graduates intended to practise obstetrics, and among them, only 1 was male. Reluctance to practise obstetrics reflected concerns about obstetric training and perceived lack of competence: “If I decide to do obstetrics ... I need extra training If you want to do obstetrics, you would need an extra 2 months to feel really comfortable.” They expressed the need to have specialists readily available for assistance if needed.

Financial issues

When asked how much financial considerations affected their choices, all respondents initially said they did not: “Money isn’t a big deal” and “choices do not matter too much since family medicine doctors do not make much money anyway.” In elaborating on this topic, however, it became apparent that financial considerations were important. They sometimes referred to others in the third person rather than speaking for themselves: “Financial concerns for many people is a big thing.” In discussing their choice of practice style, several first gave logical reasons, then secondary financial reasons. For example, some preferred acute and young patient care over chronic or elderly patient care, since the latter “is difficult and pays poorly.” Another said his choice was made for career satisfaction, but that he would start by doing a rural locum “because it is a quick way to make money.” Many graduates seemed altruistic. For example, 1 suggested that, although she would not do rural work because of family reasons, she would like to see more money going to rural incentives. As noted previously, graduates’ ideas about a third year were heavily influenced by potential pay levels.

DISCUSSION

This small qualitative study showed that graduating Canadian family medicine residents generally felt prepared for practice but initially preferred to do locum

work, rather than settling into their own practices as previous studies have found.¹² The main reasons for this were gaining experience, financial motivation, family commitments, and confirmation of practice preferences. In contrast, IMGs planned to work in practices immediately, a decision based on their previous experience and confidence in their clinical skills.

Many graduates were initially attracted to rural locums for the diverse experience, but most wanted to practise in cities long-term despite exposure to rural medicine during training. Even those who had trained through the rural stream felt ill-prepared for working in rural areas. A predictor of rural practice is exposure to rural training at undergraduate or graduate levels, especially if the exposure lasts longer than 6 months.^{13,17,18,20-24} Current rural physicians think trainees should have at least 6 months of rural exposure during residency, and almost half wished that they themselves had had longer training in rural settings.²⁴ Since 1973, Canadian family medicine programs²⁵ have increased the length of residents’ rural medicine experiences to facilitate recruitment to rural practice. The urban stream at the University of Calgary provides a minimum of 8 weeks of rural rotation; rural stream rotations are based in small cities and include at least 6 months in rural practice.

Negative perceptions of family medicine as expressed by specialist teachers have been noted previously.^{26,27} This negative perception appears to undermine new graduates’ confidence; they fear having their decisions criticized by such specialists.

Three-quarters of responding residents were in favour of a third year of training, but they were concerned about income. Canada has the shortest family medicine training program in the world, yet concerns are raised in other countries regarding the adequacy of their longer programs.²⁸ With the decline in the number of family doctors providing obstetric care,⁸ programs are trying to train residents to fill this void. Our findings on the subject of obstetrics were very similar to those of the 2004 National Physician Survey, in which only 35.2% of family medicine residents said they intended to practise obstetrics following graduation.⁴ The primary reason for avoiding obstetric care was inadequate training in that area.^{4,18,29} While our program provides opportunities for training in obstetric care, it is possible for some residents to minimize their time in this area resulting in very limited experience.

The population of Canada is aging, and chronic diseases are more prevalent than they used to be. Counseling, or at least dealing with the psychological aspects of patient care, is a necessary part of family medicine. It is, therefore, disturbing that these graduates mostly preferred to care for younger patients with acute illnesses and to avoid psychological issues.

Residents were reticent about giving financial reasons for choices and always mentioned other reasons

first, such as difficulties or disinterest. Finances came up frequently as secondary reasons, especially in third-person discussions about why other people make their choices. The same applied to debt. While several mentioned their heavy student debts, none said they made any difference to their own choices, but suggested that they might for others. While we admit that the probe question was somewhat leading, how these graduates think was revealed by strong agreement with the idea that a third year should focus on skills that subsequently lead to a higher rate of pay. Clearly money is an important factor, although social norms prevented trainees from openly admitting this to interviewers, or even possibly to themselves.

Limitations of the study

The limitations of our study are its small sample size, its low response rate, and the fact that it involves only 1 residency program. The response rate was low at that time of year partly because many residents were moving or taking holidays at the end of training. Thus, our findings cannot be generalized to the whole graduating class and reflect only 1 year. The numbers were too low for us to undertake subgroup analysis. Information from our open-ended interview questions, however, helped us to understand the range of ideas, perceptions, and reasons behind residents' decisions and, therefore, gave us more depth of understanding than we could have had from a survey.

We had single and married participants of various ages and ethnic backgrounds. Our quotes illustrate the range of ideas presented in the interviews. Nonrespondents might have been less interested in policy on family medicine and in rural careers than respondents were. We asked graduates only about their initial intentions in order to ascertain the range of their plans. As they move to more permanent practice arrangements, we suspect their choices might be affected by their experiences.

In recent years, doctors have been concentrated in cities and have restricted their practices, many moving into niche practices that pay better than undifferentiated, full-range family practices. The attitudes, ideas, and intentions of the family medicine residents in this study correlate well with this observed behaviour.^{5,12}

Limitations of the program


Despite the intention of the University of Calgary program to train community and rural-based physicians, it might not be succeeding. The obligatory 2-month rural exposure for urban-stream residents might not be sufficient to tempt them to rural practice, perhaps because the duration of exposure to rural practice is not long enough. The program might not be giving residents the skills and confidence they need, despite our best efforts. A greater concern is that the rural training stream, largely based in rural areas, might not tempt

physicians to rural practice either. Trying to recruit rural family doctors by exposing trainees to rural medicine at both undergraduate and graduate levels might not be as effective as previously proposed.^{13-18,20,21}

Other research shows that retention of physicians in rural areas depends on favourable conditions, such as opportunities for continuing medical education, decreased call-schedule demands, professional support, spousal support and employment opportunities, and diversity of medical opportunities.^{12,22,30} Residents have indicated that their choices might be influenced by alternative payment plans, time for education, and the availability of locum coverage.²² Given the increasing number of women in family medicine, an Australian study¹⁴ examined the effect on female residents of a 6-month rural block exposure on their future work plans. Women who had lived or previously studied in rural areas were more likely to choose rural work, although they perceived that they had not received sufficient training in procedural skills and obstetrics and gynecology.¹⁴ Child-care facilities and better remuneration were incentives for them to work in rural areas; social isolation and long working hours were disincentives.¹⁴

Conclusion

This qualitative study showed that the attitudes and ideas of Calgary family medicine graduates regarding their initial practice choices were consistent with those found in previously published studies. It appears that our residency program is not successfully recruiting graduates into community practice or to rural areas, and despite the efforts of the program, some residents are not learning the skills they need.

We were concerned that residents reported that specialists had negative perceptions of family medicine residents. Rather than defensively dismissing this criticism, we might have to consider that "The fault, dear Brutus, lies not in the stars, but in ourselves, that we are underlings" (Shakespeare *W. Julius Caesar*: Act 1, scene 2, lines 140-1). It is possible that the specialists are correctly assessing that at least some family medicine residents' skills or subsequent practices are sub-optimal. If so, then we must substantially improve our standards, likely by extending the duration of the residency program³¹ in order to train physicians who are able and willing to provide the comprehensive medical care needed by populations in rural as well as urban locations. An alternative hypothesis is that, although training is adequate, residents are making rational choices under the conditions of current practice. If this is the case, work conditions need to be modified to provide support for the more challenging work of core family medicine. An associated research team is following a cohort of family medicine graduates prospectively over several years to observe the evolution of their choices of practice and location. 

Contributors

Drs Lu and Dickinson contributed to all aspects of the study. **Dr Tolhurst** contributed to the concept and design of the study, interpretation, and preparation of the manuscript. **Ms Hakes and Ms Bai** contributed to data collection, analysis, and interpretation, and preparation of manuscript.

Competing interests

None declared

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