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Location decisions of family physicians in Saskatchewan: What really matters?

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Introduction: Residents of Saskatchewan, particularly those in rural communities, have less access to family physician services than people in other parts of the country. This is partly due to the difficulty of attracting and retaining physicians. The objective of this study was to understand the major factors that influence the location decisions of family physicians in Saskatchewan.
Methods: We employed a mixed-methods approach, including a questionnaire survey of family physicians and interviews with individuals from stakeholder health agencies. We used interpretive description to analyze interview responses.
Results: Neither family physicians nor interviewees from health agencies named compensation as the most influential factor in location decisions. More important factors were family influences, work–life balance and community influences.
Conclusion: We recommend that recruitment of family physicians be regarded as a matching process, in which family physicians and communities are strategically matched. Compensating incentives should be targeted at communities that cannot meet the requirements of family physicians.

Introduction : Les résidents de la Saskatchewan, en particulier ceux qui vivent dans des communautés rurales, ont un accès plus limité aux services d'un médecin de famille que les Canadiens des autres parties du pays. Cela s'explique en partie par la difficulté d'attirer et de retenir les médecins. Le but de cette étude était de comprendre les principaux facteurs qui influencent les médecins de famille de la Saskatchewan quand ils choisissent l'endroit où ils vont exercer.
Méthodes : Nous avons utilisé diverses méthodes, notamment un sondage par questionnaire auprès des médecins de famille et des entretiens avec du personnel des organismes de santé visés. Nous avons analysé les réponses aux entretiens en faisant une description d'interprétation.
Résultats : Ni les médecins de famille ni les représentants des organismes de santé n'ont dit que la rémunération était le principal facteur influençant leur décision. Les facteurs les plus importants sont l'influence de la famille et de la communauté, et l'équilibre vie–travail.
Conclusion : Nous avons recommandé que le recrutement des médecins de famille soit considéré comme un processus de jumelage, selon lequel les médecins et les communautés sont jumelés de façon stratégique. Des mesures incitatives devraient être offertes aux communautés qui ne peuvent pas répondre à la demande de médecins de famille.

INTRODUCTION

A strong workforce of family physicians is important for the health status of citizens.[1] Family physician services are particularly important for rural and small communities, where there is often a shortage of health practitioners and a lack of health care facilities.[2]

There has been an uneven distribution of family physicians among the Canadian provinces.[3] With only 100 family physicians per 100 000 people in 2012, Saskatchewan fell below the national average of 109, and this trend has persisted for many years.[4] The uneven distribution of family physicians also exists between urban and

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rural communities in Saskatchewan (and other provinces). As shown in Table 1, rural and smaller communities, such as Sun Country, have less access to family physicians than urban centres, such as Saskatoon and Regina.

This distribution of family physicians may be explained by myriad factors, including the geographic location, the socioeconomic characteristics of a community, the demand for and supply of family physician services, the practice environment, financial incentives, family ties and culture.[5–10] Many of the existing studies on this issue are quantitative.[11–13] Most of the research is also limited to the views of family physicians and omits the perspectives of health agencies that trained or recruited family physicians. In this study, we aimed to provide a more comprehensive understanding of the location choice of family physicians by using mixed methods to integrate the views of physicians and individuals from stakeholder health agencies.

METHODS

In this study, we employed a mixed-methods approach. The qualitative part of the study involved interviews with representatives of selected health agencies during the fall of 2012. The quantitative part of the study was a questionnaire survey of family physicians conducted during the summer and fall of 2012. Quantitative and qualitative data were integrated during data analysis. The intent of using this mixed-methods approach was to gain a comprehensive understanding of family physicians' location decisions.[14–17]

Table 1: Distribution of family physicians in regional health authorities in Saskatchewan

Health region	Total no. family physicians	No. family physicians/100 000 population
Sun Country	36	65
Five Hills	51	95
Cypress	42	98
Regina Qu'Appelle	278	103
Sunrise	44	81
Saskatoon	377	113
Heartland	25	58
Kelsey Trail	40	101
Prince Albert Parkland	79	99
Prairie North	85	116
Mamawetan Churchill River	14	64
Keewatin Yatthé	17	146
Athabasca	1	40
Saskatchewan	1089	101

Adapted, with permission, from the Canadian Institute for Health Information.[4]

Participants

Stakeholder agencies were invited to be part of the interviews. The agencies were selected based on the roles they play in family physicians' recruitment and retention in the province. One key informant, an individual in a management position with extensive knowledge about the topic under study, was targeted from each agency. All family physicians who were licensed and actively practising in Saskatchewan were invited to take part in an online survey.

Data collection

A semistructured interview guide was used for the interviews with stakeholder agencies. Interviews were conducted either by phone or face-to-face, according to the preference of the key informant. The stakeholder agencies involved in the interviews are referred to by the letters A to F to preserve their confidentiality and anonymity.

For the survey of family physicians, we designed a questionnaire with both open- and close-ended questions. The questionnaire was divided into 4 parts: general information, education and professional background, location and migration information, and information on recruitment and retention. An invitation email for the survey was sent to all family physicians who were licensed to practise in Saskatchewan through the Saskatchewan Medical Association.

Data analysis

Data from stakeholder interviews were transcribed and analyzed using interpretive description. We chose this method because it identifies the common themes observed during data analysis.[18] Results of the analyses of survey data and interview data were then integrated to draw the final common conclusions; the quantitative data were used to validate the responses from the interviews.

Ethics approval

The University of Saskatchewan Research Ethics Board gave ethics approval for this study (Behavioural Research Ethics no. 12–94).

RESULTS

Individuals from 9 stakeholder agencies were invited to be part of the interviews. The response rate for the interview was 67%, with the participation of 6 stakeholder agencies: the Saskatchewan Medical Association; the Physician Recruitment Agency of Saskatchewan; the Division of Continuing Professional Education, College of Medicine, University of Saskatchewan; College of Medicine Alumni Office of the University of Saskatchewan; the Saskatoon Health Region; and the Regina Qu'Appelle Health Region. Of the 6 key informants, 3 were men and 3 were women. Three informants identified that they had medical backgrounds. All 6 informants were in management positions.

A total of 991 physicians were sent the online survey. The survey recorded a low response rate of 6%; 54 of the 991 licensed family physicians responded. Among the 54 respondents, 28 (51.9%) were women and 26 (48.1%) were men.

The largest age group among the responding family physicians was the group between 45 and 55 years of age (17 family physicians, 31.5% of all responding family physicians). Among the 54 respondents, 46 (85.2%) were married and 34 (63.0%) had children.

Overall, 4 themes were identified as the most important influences on location decisions of family physicians in both the interviews and the survey. The themes, drawn from the qualitative data and supported by the quantitative data, were family influences, work–life balance, community influences, and compensation and incentives (Table 2).

Table 2: Major themes influencing the location decisions of family physicians

Theme	% of influence
Family influences	36
Children's education	16
Spouse's employment	10
Family in general	10
Work–life balance*	32
Lifestyle	13
Workload	10
Satisfaction and balance	10
Community influence	19
Compensation and incentives	13
Total	100

*Values under work–life balance do not sum to 32 because of rounding.

Family influences

The theme of family influences was identified as the most influential factor for physicians' location decisions. This was noted in the comments of key informants. For example: "This type of [practice location] decision cannot be made in isolation; it is always the family that has the final say" (key informant from agency B).

As shown in Table 2, 16% of respondents expressed concern about children's education, 10% about spousal employment and 10% about "family in general," including children, spouses, parents and friends. In a separate question, in which participants were asked whether their spouses and children influenced their choice of practice location, 83% responded "yes."

Work–life balance

In the interviews, work–life balance emerged as the second most influential theme. Four of the 6 key informants reported that the major challenge for family physicians was the ability to balance a heavy workload with family life, to maintain quality of life for themselves and their families. The interviews also identified workload and on-call schedule as the issues that affect the work–life balance of family physicians. For example, agency A's key informant stated,

> The number 2 reason, we think, relates fairly closely to that [family] and is the concept of work–life balance, so it's about hours of work and call rotations. ... Call rotations are probably the biggest issue affecting physicians' relationships with their families because they are on call every second day, even every third day; that is very onerous of the time that you have to spend with your family. Family physicians rank lifestyle, type of practice, call rotation, workload much higher [than compensation].

The problem of a heavy workload appears to be particularly acute for rural family physicians. Our results support the idea that rural family physicians tend to work longer hours and have higher on-call frequencies, partially due to the inadequate supply of family physicians. Agency B's key informant explained:

> There's just not enough doctors in rural areas; the work–life equilibrium is heavily weighted toward work. ... Most of the doctors who leave Saskatchewan go to Alberta and British Columbia, and most of them are leaving because they believe they can work less and earn the same amount or more.

To address the issue of heavy workload and work–life balance, key informants suggested family

physicians be recruited in groups of a minimum size. For example, the key informant from Agency F stated,

> The reason they [family physicians] leave rural is because the model of care delivery there is not sustainable. If they are in a group practice with a team support, then they don't leave rural ... but the vast majority of our turnovers in rural are from single physician practice or 2 physician practices where it is impossible to maintain any work–life balance and do a good job of the work, because of the demand. Unless you can have a group of 5 as a minimum together, it is not sustainable.

The key informant from agency C added,

> There need to be more opportunities to practise in larger groups so we are not recruiting into 1-, 2- and 3-physician practices but more into 4- and 5-person practices, so that we can end up with more ... and I think that there needs to be ongoing engagement and dialogue. You can't just hire somebody and leave them there unsupported.

As shown in Table 2, family physicians highly valued work–life balance. The respondents considered lifestyle (13%), workload (10%), and satisfaction and balance (10%) important in their location choices.

Community influences

In the interviews, when key informants were asked about the role of community influences in recruitment and retention of family physicians, agency B's key informant asserted that

> Communities have personalities, so you want to make sure the community's personality and that physician's personality are a match, so we strongly advise people and physicians and communities to do site visits more than once.

In particular, the interview results show that family physicians want to practise in communities where they have access to social and recreational amenities. For example, agency A's key informant mentioned that "being in a community that has the amenities to support what you want to do when you are not working" was important in recruitment and retention of physicians.

As shown in Table 2, 19% of respondents identified community influences as an important factor when they choose a practice location. Various community characteristics were examined in the survey through an open-ended question: "Which community characteristics are important to you and/or your family in choosing your location?" Of the respondents, 44% identified nature, infrastructure and amenities in the community; 25% suggested community support and acceptance; 17% identified safety; 8% mentioned climate; and 6% cited the possibility of being isolated in a practice location due to workload or inability to integrate.

Compensation and incentives

In terms of compensation and incentives, the key informant in agency F stated,

> I believe even the worst-paid doctor is rich, and so there is no doctor who doesn't make enough money to make a living and be happy and healthy in our country. The problem there is that we again have too much disparity; that we say some doctors can take this amount and other doctors can take 5 times as much, and that's the problem.

In the survey, only 13% of the respondents regarded compensation and incentives as an important factor in their location choices. Our results indicate that compensation was not the most important factor for the location decisions of family physicians, and even if it were, location decisions were influenced not only by the average compensation level, but also by the disparity in payments within a province.

Respect and appreciation for family physician services

The survey did not ask physicians about respect and appreciation of family physician services. This theme emerged in the interviews of the key informants, some of whom have previously practised as family physicians. For example, agency E's key informant explained,

> The issue of respect is very important; there's been apathy toward family physicians. Making them feel like a second-best practice. Some people have been told through residency that they are too good to do family medicine.

The key informant from agency B had this to say:

> Family physicians can't have hospital admitting privileges, or if they do have hospital admitting privileges, there are only 5 beds in the whole city that family doctors can put patients into. These kinds of things send a very strong message to family physicians that they are not valued and they are not welcome.

Key informants suggested that family physicians, especially those in rural practice, need to be better appreciated and supported, and also to be given the opportunity to put into practice the full medical knowledge and skills they acquired in school. For example, the key informant from agency E mentioned the following:

> Another of the reasons that we left was that the hospital, the things we were able to do in our hospital was going down, down, down. When we first got there we could do deliveries, minor surgeries, we had an operating room. Nowadays

that isn't possible. The small rural hospitals don't have strong hold to do that. And so you have become office practice physician. I think, support physician skills, encourage them to use them, give them education opportunities wherever they are to make them feel confident in the way that they can practise.

DISCUSSION

Recruitment and retention of family physicians in Saskatchewan, and particularly in its rural communities, has been a daunting policy challenge for the provincial health agencies. To achieve the goal of recruitment and retention of family physicians, various programs and policies have been adopted.

The most common recruitment and retention strategy employed by the provincial government has been directed at compensation and financial incentives. Although compensation and financial incentives may be an effective recruitment strategy in the short term, they are not always cost-effective in the long term because family physicians often leave the practice location after the incentives expire. Our finding about the limited role of compensation in recruitment and retention of family physicians is interesting because many previous studies have identified higher income in the destination province as the major cause for the migration of family physicians.[12,14] Saskatchewan is also increasingly recruiting international medical graduates to offset the net outflow of family physicians to other provinces, but this has only limited success.[5] In the search for more effective recruitment and retention strategies, it is useful to understand what attracts family physicians to a practice location and what motivates them to stay there.

One key finding of this study was the importance of physicians' interactions with their communities in their choice to stay or leave. Although previous studies pointed to the importance of communities in physicians' location decisions,[7,9,10] the results from the interviews and survey suggest that family physicians have expectations of communities, and communities in turn have expectations of the physicians.

The results from this study inform 2 policy recommendations for the recruitment and retention of family physicians, especially in rural communities. The first recommendation is that recruiters ensure communities can match the expectations for income level, workload, opportunities and amenities of family physicians and their families. The matching can be done by assessing the characteristics of the communities against the important factors identified by family physicians and their families. As noted in the interviews, communities have personalities and these personalities should be compatible with the personality of family physicians and their families. Further, the community must have a client base sufficient to support the minimum viable practice size of 4 to 5 family physicians, such that the requirements of family physicians regarding family, workload, quality of life and professional practice can be met. This physician–community matching is particularly necessary in an environment of tightening government budget constraints.

The second recommendation is that financial incentives be provided to ensure access to family physician services in communities that cannot match the requirements of potential family physicians. First, incentives should be provided to encourage cooperation among communities that could jointly provide the required client base and amenities for a group of 4 to 5 family physicians. Second, there should be compensating incentives or programs aimed at improving the attractiveness of a community. For example, there should be programs such as a relocation allowance for family physicians, spousal support programs, a professional development allowance, mentoring and/or supervision, and provision of information about professional networks.

Limitations

Although the online survey was fast and inexpensive, it could not ensure the desired number and type of people who participated in it. The timing of the invitation for the survey, in the summer, also limited the number of participants. As a result, most family physicians in Saskatchewan were unable to participate in the survey. Based on this small sample, the results may be biased and should be interpreted with caution.

CONCLUSION

In this study, we integrated the views of individuals from stakeholder health agencies and family physicians to understand the major factors that influenced the location decisions of family physicians in Saskatchewan. The analysis of the qualitative data and quantitative data revealed that the location decisions of family physicians depend on family influences, work–life balance, various community influences, level and disparity in compensation, and the public's respect and appreciation for family physician services.

Every community is unique, with a particular personality that has an impact on family physicians' location choices. Therefore, a one-size-fits-all approach is not appropriate for recruitment and retention. Further studies are required to develop a deeper understanding of the relationship between family physicians and their practice communities.

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