Possible Causes and Solutions for Canada's Physician Shortage

Sana Gupta, Simon Fraser University

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Canada is currently facing a critical physician shortage (Malko & Huckfeldt, 2017). Statistics Canada reports that over 15% of Canadians aged twelve and older do not have access to a regular family physician (Statistics Canada, 2011). No longer a rarity, it has become the norm to reside in a community that has an insufficient number of family physicians. This situation is worsened by the maldistribution of physicians in Canada. Only about 8% of physicians practice in rural Canada, whereas 19% of Canadians live in rural areas (CMA, 2019). With the unbalanced physician distribution resulting in only 2% of Canadian medical specialists working in rural areas, access to specialists is far worse (CMA, 2019).

This paper will discuss the unbalanced geographic distribution of physicians in rural Canada and its direct correlation with the intersectionality of social determinants (i.e., racial disparities, gender, sexuality, and income status). Furthermore, the paper will argue how investing in health care by increasing medical school enrollment, mandatory rural medical school rotations, and International Medical Graduate (IMG) recruitment could address the physician shortage and fill the gaps in health care equity Canada is facing today.

Causes for Physician Shortages

Policy Changes

Islam (2014) mentions Canada's current physician shortage can be partially credited to policy changes enacted four decades ago (Islam, 2014). In the early 1970s, Canada's ratio of physician to population ranked as one of the highest, relative to other developed countries. This statistic raised concerns about the potential negative effects of a physician surplus. After further examination, the Director-General of Health Insurance concluded that the need for medicine is not unlimited and an influx beyond a specific threshold of physician supply relative to the population would result in the reduction of average workload per physician (Roos et al., 1974).

Consequently, the Barer-Stoddart report suggested decreasing both the threshold of enrolment in medical schools and the recruitment of IMGs (Islam, 2014). Following the implementation of these policies, Canada experienced a significant shortage of physicians. Although medical school enrolment has increased over 60%, the shortage continues to remain widespread (Islam, 2014).

Increased Workload

The shortage of physicians in rural Canada is also attributed to the fact that only approximately 11% of Canadian medical school students have reported an interest in pursuing rural family medicine, whereas the study of urban medicine has higher interest reported (Feldman et al., 2008). The difference between the desire of practicing urban family medicine versus rural family medicine may explain the uneven distribution of physicians.

Malko and Huckfeldt (2017) found that simultaneous to managing their office work, rural family physicians are more involved in hospital work such as anesthesia dosing, assisting in operating rooms, and performing minor surgical procedures. In urban areas, less than 40% of family physicians provide postnatal care, as opposed to 65% in rural communities. Furthermore, a larger ratio of rural family physicians has been detected to be involved in cancer care, home care, geriatric medicine, and cardiology. With the increased workload from the requirement of maintaining the ability to perform a wide range of medical abilities, along with the lack of support from specialized physicians, practicing medicine in rural areas becomes less appealing.

Physician Shortages and Social Determinants of Health

Racial Disparities

Bourassa (2018) reports that Indigenous people in Canada face the poorest health outcomes out of the entire Canadian population. Approximately 50% of the Indigenous population in Canada lives in rural, remote, and northern regions of Canada, and many live on

non-settlement rural land. When living in rural areas, the lack of choice in physicians can pose major implications for Indigenous communities. Indigenous people are more likely to face upsetting or poor experiences with physicians/specialists, such as denial of care due to racism, or poor diagnoses due to underlying biases (Jacklin et al., 2017).

For example, one Indigenous participant of Jacklin and colleagues' (2017) study described his diabetes diagnosis experience. He visited his local hospital due to experiencing flu-like symptoms and bleeding from the mouth but the medical staff presumed he had been smelling nail polish. His threateningly high blood glucose levels later proved that the issue was more serious than the presumptions made.

Indigenous residents of rural communities experience severe difficulties in searching for a new clinic or hospital. The lack of choice for Indigenous patients results in repeated experiences of racism and clinical bias, and it leads individuals to avoid medical help altogether which exacerbates their conditions.

Gender and Sexuality Disparities

Although women in both urban and rural Canada face greater health disparities than men, Lisonkova et al. (2016) highlights the extent of poor pregnancy outcomes in rural Canada are far greater than the outcomes in urban communities. A direct association between severe maternal morbidity rates and women living in rural areas was found. Women in rural areas were more likely to have pre-and post-term birth, spontaneous labour, and labour augmentation, thus resulting in a higher rate of stillbirths as well.

The predominant challenges in rural maternity care arise due to the geographic barriers of long drives to the nearest health care facility (Lisonkova et al., 2016). In women residing an hour from the nearest maternity service, over a 3% incidence of gestational diabetes was found

(Grzybowski et al., 2016). Although Canada offers universal medical care, not everybody receives the care on time.

Gahagan and Subirana-Malaret (2018) discuss a study based in Nova Scotia on LGBTQ health equity showed that at least one-third of LGBTQ patients, and at least half of transgender patients have been involved in a minimum of one disappointing experience with the Canadian health care system. It is worth noting that in rural areas many of these patients do not have the luxury of changing clinics when there may only be one clinic present at a feasible distance from their home. Furthermore, the option of visiting a new physician becomes difficult since many physicians are not accepting new patients. These circumstances result in distrust in the health care system and therefore an avoidant attitude towards physicians. Although poor health outcomes are an obstacle for the Canadian LGBTQ community, those in rural areas face further disadvantages.

Income Status

Rural communities face significantly higher economic difficulties than their urban counterparts (Canadian Institute for Health Information, 2006). Murphy et al. (2019) mention how one of the realities of living in rural areas is geographic isolation and problems with access to care. Rural patients are required to travel greater distances for adequate health care, and this becomes especially important when specialist care is needed. Travelling greater distances is directly correlated with increased travel costs that many rural families are unable to afford.

A 2009 UBC study by Wong and Regan conducted a case study that displayed challenges to timely healthcare access in rural Canada through participants' personal stories. One of the participants of the case study claimed that it was impossible to travel to Vancouver for any kind of care simply due to affordability issues. Another participant claimed that they were not able to

make their physical therapy appointments for the entire winter due to the two-hour drive to Vancouver and back during risky road conditions. Furthermore, the increasing cost of gas and the loss of income from taking time off to attend appointments makes travel infeasible for many.

Evidence shows that many patients in rural Canada are required to make trade-offs between financial stability and health outcomes (Wong & Regan, 2009). Since accessible health care is promised to all Canadians under the Canada Health Act, individuals should not need to face such dilemmas regarding their health.

Intersectionality

It is important to note that different social categories intersect in various ways, and no two people will face the same level of inequities. The interaction of different social constructs such as race, gender, sexuality, and income intersect in dynamic ways and these intersections result in either privilege or oppression. For example, the lived experiences of First Nations men and women may have similarities but simultaneously vary greatly. The First Nations men and women may both face the unearned disadvantage of racism due to their ethnic origins, however, the women may face additional social burdens of sexism. To reduce the negative impacts of intersectionality, the systems in place contributing to them must be reassessed.

Possible Solutions

Increasing Medical School Enrollment

Rural Canada suffers the effects of physician shortage at a greater scope than its urban counterparts. Malko and Huckelfeldt (2017) identified that a leading predictor for increasing rural physicians is the enrollment of medical students that are originally from rural areas.

Malko and Huckelfeldt (2017) also remark that it is difficult to find physicians willing to practice in rural areas for long periods. However, hiring physicians with rural origins to practice

in their hometowns has been correlated with increased job adherence and therefore, better patient-physician relationships and better health outcomes.

It is important to note that increasing medical school enrollment does not come without limitations. If there is a shortage of residency positions, increasing enrollment in medical school would be inefficient since the new graduates would not have the opportunity for further training. Thus, policymakers must consider the ratio of medical school graduates and adjust available residency positions accordingly.

Furthermore, Owens (2018) reports the types of residency positions available must be considered and greater emphasis on availability should be given to positions that are in need. For example, at the University of British Columbia, about 60% of residency positions are for specialties and only 40% are for family medicine. Considering the greater need for family physicians, the number of residencies should be greater for that field of practice. In Canada, the provincial government oversees residency placement, and they must implement a system that is based on linking training positions to the observed need.

Implementation of Mandatory Rural Medical School Rotations

It has also been observed that when students partake in a rural rotation during their time in medical school, they are more likely to apply for jobs in rural areas (Malko & Huckelfeldt, 2017). To support this finding, Tate and Aoki (2012) observed a positive association between the length of rural experience in medical school and eventual rural practice. In quantitative terms, a University of Calgary study displayed a 31% increase of specialty residents in rural practice succeeding a rotation in a rural community (Myhre & Hohman, 2012). These sets of studies provide evidence for the importance of rural training during medical school to facilitate increased physicians in rural medical practices.

It is important to acknowledge that most medical school students are from urban areas, and likely, they are not aware of the scope of reform required in rural communities (Malko & Huckelfeldt, 2017). By providing opportunities to gain knowledge on the day-to-day lifestyles and cultures of rural societies, students will have the chance to not only appreciate, but also help these communities.

Recruitment of International Medical Graduates (IMGs)

Considering the monetary burden on the government from increasing Canadian medical school enrollment, incorporating more doctors trained abroad into the Canadian health care system may be beneficial. In 2021, 96% of Canadian medical graduates matched successfully into a Canadian residency while only 30% of IMGs were able to match (CaRMS, 2021). It is worth noting that Canadians studying medicine abroad are also considered IMGs. In 2011, after noticing a decline in IMG match rate due to increasing applicants, the Canadian government issued a "statement of need" to uncover where Canadian IMGs who did not match were studying and their next steps in their medical careers (Malko & Huckelfeldt, 2017). The results determined an increase in Canadian IMGs applying for visas to the United States since many were able to successfully match through NRMP and most planned to continue their practice in the US (Malko & Huckelfeldt, 2017). Essentially, Canada is losing trained and qualified medical professionals needed in Canada to another country.

From an ethical standpoint, increasing IMG recruitment and providing the opportunity of better lifestyles and career opportunities is another factor to consider. Canada is home to many 'pull' factors such as, a high quality of life and safe working conditions, which many IMGs may not experience in their source countries (Islam, 2014).

Although international medical graduates have a significant role in meeting Canada's physician need by providing relief in areas impacted by physician shortage and filling medical roles that are not captivating to Canadian medical graduates, no policy comes without limitations. It is crucial the retention rates of IMGs in rural job positions be considered and additional strategies are implemented to promote and ensure job retention (Malko & Huckelfeldt, 2017). Equivalency of training and skill must also be carefully monitored to verify all credentials translate well into the Canadian health care system and health care quality be maintained (Malko & Huckelfeldt, 2017).

Conclusion

An extensive physician shortage is affecting Canadians, especially in the fields of family and rural medicine. The effects of this shortage are exemplified in rural regions and are additive to the pre-existing stressors these communities cope with. Furthermore, certain community members such as those facing racism, gender and sexuality disparities, and lower-income status are more susceptible to the deleterious effects of a physician shortage. Policymakers must consider not only the scope of the physician shortage, but also the trends which distinctly indicate prompt change is necessary for the well-being of all Canadians and the upholding of the commitments made by the Canada Health Act.

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