Lessons from 20 years of research on nursing practice in rural and remote Canada

Nurses in rural and remote Canada work in a wide variety of settings and have a broad range of practice responsibilities. This diversity, however, is unified by practice that is connected with the everyday flow of life in their small communities. Experiences like these are common:

- April, a registered nurse (RN) in a small hospital in southern Ontario, has a
 busy evening shift where she assists with a delivery and teaches a client
 how to walk with crutches. Hitting closer to home, she later receives her
 son's best friend as a trauma patient and arranges his medivac and, not
 long afterward, answers a call from a discharged patient, also a
 neighbour, with concerns about pain.
- After her shift in the long-term care wing of a small hospital, Barb, a
 licensed practical nurse (LPN) in Atlantic Canada, comforts a daughter of
 a resident whose son had been in a boating accident and is near death.
 Barb slips away to call her husband to make sure that there was enough
 stacked wood in place at the woman's house for when she returns home.
- Deanna, a registered psychiatric nurse (RPN) in a small prairie community, works with the Métis community and the area's high school to incorporate harm reduction strategies into youth health programs.
- Cam, a northern nurse practitioner (NP), finds that his clients have to travel long distances to reach his community health centre, so he makes sure to address multiple issues during each visit. He also works with the health authority to improve in-home telehealth services.

Over 20 years of research on rural and remote nursing, we have learned:

- Rural and remote nursing is complex, generalist practice that is
 often challenging. As they care for "whoever comes through the
 door," nurses need a broad range of knowledge "at their
 fingertips" to care for people of all ages and with many different
 conditions, many of whom they know as neighbours or friends.
- Rural and remote nurses work to their full scope of practice.
 Within a wide variety of clinical situations, these nurses are required to use sound clinical judgment and take action, often with few resources and limited back-up.
- Rural and remote nurses are key to the health of their communities and inextricably intertwined with them. Nurses in small communities are both nurses and community members in their everyday work and in their lives outside of work. Their multiple roles enable nurses to make important contributions to the health of their patients and clients as well as to their communities.

Where it all began

Twenty years ago, the *We're It* study (MacLeod, 1999) examined RN practice in small hospitals in northern British Columbia. It was the first of its kind in Canada and it described how these nurses' practice was not only multispecialist in nature, but also that they were part and parcel of the daily lives of their communities. The study showed how nurses cared for people of a wide range of ages and with many medical conditions so they needed knowledge that prepared them for any situation. The nurses coined the term "we're it" to describe the frequent situations where they held the burden of responsibility for knowledgeable action despite few resources and little backup.

The study also revealed the need for rural and remote nurses to exercise exceptional professionalism. In addition to having to care for neighbours and family, they must keep private information confidential as they interact with members of the community. It's a recurring theme in later research.

The first national study

The We're It study led to the first national study of rural and remote nurses in Canada, the Nature of Nursing Practice in Rural and Remote Canada (RRNI) (MacLeod, Kulig, Stewart, Pitblado, & Knock, 2004). This RRNI study included a survey of RNs and NPs (Stewart et al., 2005) with data collection from 2001 to 2002. There were 3,933 respondents (69% response rate; 3,766 RNs and 167 NPs) from every province and territory in both official languages. The narrative component consisted of in-depth interviews with 150 RNs from across the country (MacLeod et al., 2008; Martin-Misener et al., 2008). The analysis of policy documents focused on rural nursing and nursing education (Kulig et al., 2003). We also worked with the Canadian Institute for Health Information (CIHI) to complete the first statistical analysis of the supply and distribution of rural nurses in Canada (CIHI, 2002). This first study contributed to policy and organizational practice changes in several provinces. It provided the impetus for a rural nursing certificate program for RNs and a remote certified practice course for RNs. Our findings found their way into nursing textbooks and prompted other studies of rural and remote nursing.

The second national study

The second national study, *Nursing Practice in Rural and Remote Canada (RRNII)* updated and extended the first study. This time we studied all types of regulated nurses: NPs, RNs, licensed/registered practical nurses (LPNs) across the country, and registered psychiatric nurses (RPNs) in the four western provinces. We conducted a nation-wide bilingual survey with data collection from 2014 to 2015 (MacLeod et al., 2017). There were 3,822 nurses who responded (40% response rate; 163 NPs, 2,082 RNs, 1,370 LPNs, 207 RPNs). It was sent out with the help of the provincial and territorial nursing regulators and associations to a multi-level systematic sample of rural and remote nurses in all provinces and all nurses in the three northern territories. At the request of our advisory team of nursing leaders from all provinces and territories, we asked nurses for more details about their role in primary care. The second national study also analyzed CIHI data, this time on all regulated nurses (Pitblado et al., 2013), and the documentary analysis was updated (Kulig, Kilpatrick, Moffitt, & Zimmer, 2013).

Definition of "rural" and "remote"

In the three studies, "rural" was defined as communities outside the commuting zone of urban centres that had populations of 10,000 or more (du Plessis, Beshiri, Bollman, & Clemenson, 2001). Using this definition, in 2015 there were about six million people, or about 17% of the population, who lived in rural Canada, being cared for by approximately 46,000 nurses, that is about 12% of regulated nurses in Canada (MacLeod et al., 2017).

As for the term "remote," we still don't have a common definition. When we asked nurses how they defined such communities, no clear consensus emerged. Their answers related to community characteristics, geographic location, available services and resources, and the characteristics of their practice (Kulig et al., 2008).

Who are rural and remote nurses?

Our second national survey, *RRNII*, revealed that the rural and remote regulated nursing workforce is about 94% female, with almost one-third 55 years or older. LPNs were younger overall, with 22% under 35 years of age, in comparison with NPs (13%), RNs (19%), and RPNs (14%) under the age of 35. RNs, LPNs, and RPNs most often worked in a hospital setting; NPs most often worked in primary healthcare settings. Over half of the nurses were permanent full-time staff; the rest worked permanent part-time and casual. Of the nurses who responded to our survey, 245 (6.4%) self-identified as having First Nations, Inuit, or Métis ancestry.

Health professionals who grow up in rural or remote communities often go to work in such communities but they do not necessarily return to their home communities. We know that it is easier to recruit and retain physicians who have been raised in rural or remote communities; we have learned that the same holds for nurses. The numbers vary across the country, however. While 73% of rural and remote nurses working in the provinces said they grew up in rural or remote communities, only 42% of nurses working in the territories said so. These numbers reflect the challenges of providing appropriate education, including high school sciences, educating nurses in northern communities, and having sufficient amenities in very small communities to attract and retain nurses and their families.

Rural nursing practice – what is it like?

We found that rural and remote nursing practice continues to be generalist in nature with a broad range of responsibilities. Many nurses spoke of the need to be flexible and innovative. They frequently undertook activities normally done by other health care workers, such as unit clerks, laboratory technologists, or pharmacists. Thus, nurses "pitched in" and prepared patients' charts, analyzed laboratory tests, and dispensed medications – because other health-care workers were not available.

The nurses' responsibilities differ primarily by the type of nurse, where they work, and the resources within and demands of their workplaces. Figure 1 [PDF, 123.4 KB] shows the distinctions and overlaps when the four types of nurses identified their responsibilities for promotion, prevention, and population health. The broader scope of practice for NPs is evident here, as are the RNs' generalist responsibilities for all programs, the responsibilities of LPNs for chronic disease management, as well as the responsibilities of psychiatric nurses (RPNs) for mental health programs.

Rural nurses have long been taking leading roles in evolving areas of nursing practice. Primary care is one of these. In the second survey, we asked specifically about primary care and found that in addition to those working in conventional primary care settings (such as physician's offices, family practice centres, NP-led clinics, or multidisciplinary health-care clinics) nurses in other settings (such as hospitals, home care agencies, and public health units) were engaged in primary care as an area of practice. This was especially the case in smaller communities, where nurses often deliver primary care as part of their larger practice. As one RN in the territories noted, "I am the primary health care professional most of the time. I am a patient's access to care. Referrals that can lead to life-changing diagnoses are dependent on my assessments and referral letters, phone calls and faxes."

Perhaps one of the most distinctive features of rural and remote nursing is the important roles nurses take on within their communities. Nurses contribute to communities' everyday functioning and health through their involvement on committees and in events, for example, the creation of walking paths or advocating for bicycle lanes. When specific events arise, such as natural disasters, nurses' actions to help those impacted contributes to the resilience of the communities in which they live.

Enhancing nursing practice in rural and remote communities

One of the biggest factors enhancing rural and remote nursing practice over the past 20 years has been the widespread availability of technology, including ready access to computers for nurses' everyday work, along with access to the most up-to-date information through the internet. In the first (RRNI) survey, RNs said they got most of their information updates through discussion with colleagues. In the second (RRNII) survey, however, nurses said they mostly used online and electronic sources. Nurses in small communities were more likely than nurses in larger communities to use online practice support resources. The internet has also markedly improved the availability of continuing education opportunities.

We found that nurses' competence and confidence depended on the interconnection of nurses' engagement in the community, engagement in the workplace, and keeping well (not burning out). Competence and confidence were further enhanced through interprofessional collaboration and teamwork, a professional support network, and involvement in leadership activities, which could include community leadership.

How communities and nurses' practice interconnect

In both national surveys, we found that rural and remote nurses were highly satisfied with their practice and the community in which they worked. Interestingly, in the second survey, *RRNII*, we found that NPs and RNs were significantly more satisfied with their practice and communities than were LPNs and RPNs. Satisfaction was not related to the size of community, nor did it differ significantly across the country.

The top three recruitment factors for all types of nurses were location of community, interest in the practice setting, and income. Income was more important to LPNs and RPNs, while interest in the practice setting was more important for NPs and RNs. Factors related to retention, as indicated by nurses' intent to leave their current position within a year, included a lack of work flexibility, stress and the requirement to be on call.

In the second (RRNII) survey, we wanted to find out what nurses thought about the communities in which they worked. Overall, we found that there were different patterns among rural and remote nurses. Nurses who thought the communities in which they worked were not cohesive or resilient most often worked in the territories and in community health. These nurses were required to be on-call, had average satisfaction with their practice, were single, and grew up in larger communities. By contrast, nurses who thought their communities were cohesive and resilient most often worked in Atlantic Canada and in long-term care or community-based facilities. They tended to have more than 15 years of nursing experience, were married, and had high levels of satisfaction with the community. This pattern suggests that it may be worthwhile to recruit nurses from smaller communities and to offer welcoming strategies to all newly arrived nurses to help them transition to and become engaged in their new community.

The small size of rural and remote communities and the important roles that nurses play have led to many nurses feeling like, as one put it, they are in a fish bowl. Nurses said there were pros and cons to "being visible." It enhanced their sense of professionalism, but was also stressful. For example, even a trip to the grocery store became more than just routine, as nurses explained especially "when the items in your grocery cart were scrutinized to see if you made healthy food choices." However, this visibility as a nurse helps to build trust with the people who were also patients. Cam adds that living and working in the same northern community "provides understanding and grounding [but] also provides difficulties. For example, on a day off, while in the grocery store, a patient asks me about their test result or recent rash. I always wear two hats: NP and community member."

In the *RRNII* survey, we asked nurses whether they felt comfortable saying "no" when people asked them for advice when they were not at work. We also asked if their privacy was respected in the community and whether it was easy to separate their role as a nurse and their other roles in the community. NPs and RNs found it most difficult to say "no" when asked for advice. As for privacy, close to 60% of nurses said it was respected, although the percentage was lower for NPs. Finally, NPs, more so than the other types of nurses, found it hard to separate their role as a nurse from their other community roles.

What has improved, what needs improvement

The last 20 years have seen some positive changes in how rural and remote nursing is recognized, but there is still much to be done. On the plus side, many of its unique practice characteristics, opportunities and challenges have been formally identified in research, and are beginning to be noted in policy documents. Statistics on rural nursing and rural health services, once not separately identified, are now more routinely collected. Some provinces and territories have addressed basic and continuing education needs for nurses, but gaps remain. Perhaps the biggest challenge ahead is with recruitment and retention, especially of RNs and NPs.

To thrive, rural and remote nurses need recognition for their practice at work and in the community. There is also a critical need for leaders and health organizations to address resource limitations, including the fact that few policies and guidelines are tailored to the realities of rural and remote contexts. Sustained, relevant and responsive supports are needed from governments and health systems. Just as importantly, although rural and remote nurses are overwhelmingly satisfied and proud of their work, they are often underappreciated by employers and rural and remote communities alike. Nurses deserve more recognition not only for the challenging work they do, but also for the demands placed on them as a result of being so visible in the community and caring for friends and neighbours. As one Alberta RN said:

Working in a ... rural community enables one to truly become a part of that community. The sense of belonging and interacting with the members of that community, both professionally and socially, can be both rewarding and heartbreaking.

Conclusion

Nurses in rural and remote communities are generalists within the health-care team, who fully enact their legislated scopes of practice. They make a significant difference in their communities and influence nursing practice and health-care policy. Being a part of the community is integral to who they are as rural and remote nurses; in turn they are key to the health of communities.

Additional Resources:

Canadian Association for Rural and Remote Nursing

University of Northern British Columbia web page on the studies, Nursing Practice in Rural and Remote Canada

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To avoid confusion, the acronym LPN in this paper, includes both Licensed Practical Nurses and Registered Practical Nurses as they are designated in Ontario.

Practice settings Nurse-patient relationship Scope of practice

Martha L.P. MacLeod, PhD, RN, is professor and the Northern Health – University of Northern British Columbia Knowledge Mobilization Research Chair at the University of Northern British Columbia.

Norma Stewart, PhD, is professor emerita, College of Nursing, University of Saskatchewan.

Judith Kulig, PhD, RN, is professor emerita, School of Health Services, University of Lethbridge.

https://www.canadian-nurse.com/en/articles/issues/2019/may-2019/lessons-from-20-years-of-research-on-nursing-practice-in-rural-and-remote-canada