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## The Nature of Nursing

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# The nature of nursing practice in rural and remote Canada: This three-year ongoing study is already revealing that nursing in rural and remote Canada is complex and deserves formal recognition, as well as financial and educational support

MacLeod, Martha L, Kulig, Judith C, Stewart, Norma J, Pitblado, J Roger, Knock, Marian. **The Canadian Nurse**. Jun 2004. Vol. 100, Iss. 6; pg. 27

#### Abstract (Summary)

These approaches complement one another while adding to our overall understanding of rural nursing practice. For example, the RNDB had not previously been analysed with rural nurses in mind. The demographic profile of rural RNs was generated for the first time for Canada as a whole and for the individual provinces and territories.(18) The documentary analysis takes a critical view of the policy context within which rural nurses practise.(19) The national survey has collected an abundance of information about rural nurses' work, quality of work life and degree of work satisfaction. And the experiences that nurses relate in the narrative approach bring to life the challenges and rewards of working in a variety of rural settings.

A national survey of RNs working in rural and remote areas has been completed using a mailed questionnaire and followup based on Dillman's tailored design method.(29) The 3,933 eligible respondents represent all provinces and territories and an overall response rate of 68 per cent after correcting for duplicate registrations, address problems, and ineligibility (e.g., living rural, working urban). Sampling was done in collaboration with the professional nursing associations of each province and territory, using the databases of all RNs with active registration, while maintaining anonymity and confidentiality. The sampling strategy was twofold. First, a stratified random sample was selected from RNs with rural addresses(30) in each of the 10 provinces. Second, the questionnaire was mailed to the total population of Canadian RNs who indicated on their registration forms that their primary workplace was a nursing station or outpost setting and to all RNs registered in the territories (as an attempt to capture "remote" areas). Based on a total population of 229,813 RNs in Canada,(31) with stratification by province and assuming that the ratio of rural/urban nurses was similar to the rural/urban population proportions in the provinces,(32) we determined that 3,500 rural nurses would provide estimates that are statistically significant (p <.05) nationally, with a 90 per cent confidence level provincially.

Rural nurses have many reasons to celebrate: they provide care to individuals and families of all ages, for a variety of conditions, in a range of rural and remote settings. Although they work in environments that are primarily governed by urban-centric policies and in workplaces where the quality of work life is often limited, the nurses reveal their passion and dedication to their communities and to practising in rural and remote areas through their stories and their survey comments. The nature of rural and remote nursing is deceiving; its complexity is seen during the nurses' interactions, first as community members and then as professionals. Rural nurses are often charting new courses in their communities and workplaces. Muriel Strode said, "Do not follow where the path may lead. Go instead where there is no path and leave a trail."(33) Discovering the nature of nursing practice in rural and remote Canada through this national study is the first step on such a path, and hopefully the first of many trails.

Full Text (3645 words)

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Rural nurses and their practice are as diverse as the settings they work in. Anne,(1) a band-employed nurse in southern Ontario, has worked with community members to develop residential workshops on learning to live with diabetes. June, a home care nurse and the only healthcare practitioner in a small southern prairie community, helped a drop-in client to her weekly foot-care clinic to gain a timely referral to an urban specialty clinic. The clinic confirmed June's assessment of advanced congestive heart failure. Barbara, a nurse in a small hospital in a coastal community, tells about travelling by snowmobile to the site of a violent crime and having to attend, in the snow, to victim and perpetrator -- both neighbours of hers. Claire, a nurse in Northern Canada, tells about how she and her colleague, the only nurses in a very small community, handled a cardiac arrest by drawing on the only resources available, including the person's adult children to perform CPR and the "attending" physician, 600 km away on the speakerphone. Challenging personal and professional situations such as these are at the core of nursing practice in rural and remote Canada.

The Nature of Nursing Practice in Rural and Remote Canada began in 2001 to identify the nature of registered nursing practice in all healthcare settings (primary, acute, community health, continuing (home care) and long-term care) within rural and remote Canada. The study is examining what nursing is really like in these communities and how registered nurses (RNs) can best be educated and supported in their work. Although the final report will not be ready until late 2004, initial findings readily identify the complexity of rural nursing, giving recognition to the many nurses across Canada who devote their professional careers to working with residents in a variety of rural and remote areas.

For our study, "rural" has been defined as those communities outside the commuting zone of urban centres with populations greater than 10,000.(2) Using this definition, there are 6.6 million rural Canadians (about 22 per cent of the total population). Currently there is no commonly agreed on definition for the term "remote." During the study, we will be developing, from nurses' perspectives and experiences, definitions of these two terms.

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#### **EXPLORING RURAL PRACTICE**

Rural nursing practice has received limited attention from researchers and policy-makers. Exceptions include articles and books by American authors such as Bushy,(3) who discusses rural nursing practice issues such as alternative models of health delivery; Lee,(4) who discusses key concepts of rural nursing and related educational and professional issues and Stratton et al.(5) who have examined the nursing shortage in the rural areas of the United States. Hegney et al.(6) in Australia and Litchfield and Ross(7) in New Zealand have studied the role and functions of rural nurses.

In Canada, there has been limited study of rural nursing. MacLeod et al.(8) have identified four areas of concern for rural nurses: maintaining excellent practice, carrying major responsibilities, addressing the social determinants of health and fitting within the community. In subsequent studies, MacLeod(9) and Tarlier et al.(10) identified the ways in which rural and northern nurses work and cope with limited resources and infrastructure, as well as a lack of understanding by urban-based professionals about the complexity of their roles. Leipert(11) has studied the challenges facing rural public health nurses, and Henderson-Betkus and MacLeod(12) have examined retention.

Other Canadian research has focused on nursing-care topics such as dementia care within rural communities.(13) Thomlinson et al.(14) have studied the meaning of health among rural peoples and Rogers-Clark,(15) rural residents' experiences with specific illnesses, such as breast cancer. Rural nursing practice issues cannot be viewed in isolation from the larger community context. To that end, work has been done to identify rural health indicators(16) and to identify the resiliency or ways in which communities deal with adversity(17) in order to potentially address the interplay of community variables on nursing practice.

#### CONDUCTING THE STUDY

This study has involved four co-principal investigators (PIs), 13 co-investigators and more than 20 advisory team members from across Canada with funding from over 20 partners. Each PI has been responsible for one of four approaches that were used to answer the question "What is the nature of nursing practice in rural and remote Canada?" Research groups were formed within each approach that included one of the PIs, one or more of the co-investigators and the appropriate advisory team members. The four approaches are:

[Symbol Not Transcribed] [filled square] secondary analysis of the Canadian Institute for Health Information [CIHI] Registered Nurses Database [RNDB] (Pitblado);

[Symbol Not Transcribed] [filled square] systematic analysis of policy-oriented documents dealing with such issues as health status, health care delivery and training and educational standards that impinge on rural nursing (Kulig):

[Symbol Not Transcribed] [filled square] national survey of nurses working in rural and remote areas (Stewart);

[Symbol Not Transcribed] [filled square] collection of narratives from nurses who are currently working or recently have worked in rural or remote areas (MacLeod).

These approaches complement one another while adding to our overall understanding of rural nursing practice. For example, the RNDB had not previously been analysed with rural nurses in mind. The demographic profile of rural RNs was generated for the first time for Canada as a whole and for the individual provinces and territories.(18) The documentary analysis takes a critical view of the policy context within which rural nurses practise.(19) The national survey has collected an abundance of information about rural nurses' work, quality of work life and degree of work satisfaction. And the experiences that nurses relate in the narrative approach bring to life the challenges and rewards of working in a variety of rural settings.

#### REGISTERED NURSES DATABASE

The RNDB is a collation of provincial/territorial nurses' registration data that is maintained by CIHI. Our initial analysis of the RNDB has been published by CIHI(20) (see Table 1). In 2000, only 17.9 per cent (n=41,502) of the total RN workforce was located in rural Canada, where 21.7 per cent of the total population lives. Consequently, the numbers of RNs per capita differ significantly between rural and urban settings, with 62.3 RNs per 10,000 population (rural) versus 78.0 RNs per 10,000 population (urban). These ratios must be treated cautiously, however, as the majority of nurses work in hospital settings, primarily located in urban areas. Still, these figures do illustrate some of the persistent difficulties of accessing and delivering health care in rural Canada.

While there are many demographic similarities between rural and urban nurses, the most notable differences are around basic education, the acquisition of additional qualifications and the proportions who work part time and in multiple employment situations (see Table 1): rural RNs are less likely to have attained a degree in nursing and are more likely to be employed casually and part time; higher proportions of rural RNs are employed in community settings (12.7%) compared to urban RNs (7.8%). The proportion of RNs working in community settings has increased for both groups of nurses since 1994 when the figures were 9.2 and 5.4 per cent for rural and urban RNs respectively.

Through the analysis of the RNDB, 169 rural communities were identified in which there is only one RN in practice. In 22 of these communities, the average age of the RNs was over 60, and 54 of these communities were served by less experienced RNs under 30. The age profiles and employment situations faced by rural RNs, coupled with the lower proportions of rural nurses with advanced education and employed in clinical support roles, lead to questions about the need for adequate provision of professional (and personal) support, as well as recruitment and retention challenges. Questions raised by the analysis of the RNDB are being explored further within the other study approaches.

#### [Table]

Rural Urban Canada

Percentage of all RNs 17.9 80.8 100.0
Percentage of total Canadian 21.7 78.3 100.0 population
Number of RNs per 10,000 62.3 78.0 75.6 population
Gender (%) Male 4.4 4.8 4.8
Female 95.6 95.2 95.2
Initial nursing Diploma 90.8 87.7 88.2 education (%)
Bachelor's 9.2 12.3 11.8
Highest Diploma 81.4 74.3 75.6
education in
nursing (%)
Bachelor's 18.0 23.8 22.8
Master's/ 0.6 1.9 1.6
Doctorate
Employment Full time 49.6 56.1 55.0 status (%)
Part time 50.3 43.8 45.0

[\*] Source: Canadian Institute for Health Information

#### **DOCUMENTARY ANALYSIS**

The documentary analysis portion of the study has been completed. It was based on direct contacts with numerous organizations/institutions throughout Canada and an in-depth analysis of 159 publications that were selected from over 200 documents dating from 1984 to 2003 (e.g., federal and provincial government reports such as the Kirby and Romanow reports, nursing professional association reports on advanced nursing practice, Health Canada reports on band transfer of health services and research reports on topics such as nursing retention in remote Canada), located through Web-based searches and referrals from the study's advisory team. Analytical guidelines

were developed based on Rist's(21) policy cycle framework of policy formulation, policy implementation and policy accountability. The documentary analysis research team reviewed the documents according to each component of the policy cycle through the development of Web-based discussion tools and regular face-to-face meetings.

Five policy areas emerged as influencing rural nursing practice:(22)

[Symbol Not Transcribed] [filled square] Advanced practice: Documents that discuss advanced practice with recent changes to legislation and registration in several provinces reflect an overall move toward a national standard for education and competencies for this role.(23) Despite these forward-thinking changes, interdisciplinary work environments for nurse practitioners (NPs) remain to be addressed, particularly in rural areas.

[Symbol Not Transcribed] [filled square] Nursing practice issues in aboriginal communities: There continues to be a lack of support for aboriginal nurses, although recent reports call for financial, personal and educational assistance to rectify this situation.(24) In addition, the move to band control of health services suggests the need for initiatives to support band-employed nurses.

[Symbol Not Transcribed] [filled square] Educational preparation: Policy documents showed little recognition of the complexity of rural practice and the need for basic education for rural and remote practice. There is no additional infrastructure or financial support for educational institutions that are attempting to prepare nurses for rural nursing.

[Symbol Not Transcribed] [filled square] Physician supply: Key reports have examined rural physician recruitment and retention issues,(25) including the development of rurality indexes(26) and support of NPs.(27) Few reports have sufficiently acknowledged the interprofessional context of rural practice and its impact on rural nursing.

[Symbol Not Transcribed] [filled square] Healthcare delivery: Documents identify alternative models for healthcare delivery(28) that support the full scope of practice, but the current work environment does not provide for the inclusion of such models. In addition, telehealth is emphasized, but the equipment and skills to prepare nurses for this mode of delivery are not available at universities.

The seven recommendations derived from the documentary analysis are summarized in Table 2 and listed in random order.

#### **NARRATIVES**

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Over 150 nurses from all provinces and territories and all areas of practice shared their experiences of what it means to be a nurse in rural and remote Canada. They were interviewed by telephone and asked to relate both ordinary and atypical experiences. As well, they were asked for recollections of incidents that they felt made a difference to clients or where breakdowns occurred. The interviews were transcribed and are currently being examined for themes through the qualitative research perspective of interpretive phenomenology. The narrative research team is also examining what the nurses said they would give as advice to new nurses working in rural and remote settings and to educators and decision-makers concerned with rural nursing.

Early results from the analyses of the narratives point toward the often overlooked complexity of rural nursing practice and how it is shaped and supported by its context. This is particularly evident in the important ways that small communities interact with their nurses and the interconnections between community expectations and nurses' everyday work. In turn, the ways in which nurses come to know their communities is seen in their ongoing practices. The detailed analysis, available later this year, will articulate rural nursing practice and how it is meaningfully situated in the communities of rural and remote Canada.

#### SURVEY

A national survey of RNs working in rural and remote areas has been completed using a mailed questionnaire and followup based on Dillman's tailored design method.(29) The 3,933 eligible respondents represent all provinces and territories and an overall response rate of 68 per cent after correcting for duplicate registrations, address problems,

and ineligibility (e.g., living rural, working urban). Sampling was done in collaboration with the professional nursing associations of each province and territory, using the databases of all RNs with active registration, while maintaining anonymity and confidentiality. The sampling strategy was twofold. First, a stratified random sample was selected from RNs with rural addresses(30) in each of the 10 provinces. Second, the questionnaire was mailed to the total population of Canadian RNs who indicated on their registration forms that their primary workplace was a nursing station or outpost setting and to all RNs registered in the territories (as an attempt to capture "remote" areas). Based on a total population of 229,813 RNs in Canada,(31) with stratification by province and assuming that the ratio of rural/urban nurses was similar to the rural/urban population proportions in the provinces,(32) we determined that 3,500 rural nurses would provide estimates that are statistically significant (p <.05) nationally, with a 90 per cent confidence level provincially.

The questionnaire was developed from the literature and in consultation with content experts. Dimensions of the questionnaire include demographics, employment issues, community context, roles, satisfaction, health, work environment, community context, practice supports and career plans. The survey team is currently conducting quantitative analyses of the structured questionnaire responses and qualitative analyses of the open-ended questions. The qualitative analyses are focused on such topics as the definition of rural and remote from the perspective of the nurses, violence in the workplace and barriers to continuing education.

#### CONCLUSION

The Nature of Nursing Practice in Rural and Remote Canada study is beginning to reveal what nursing practice is really like in rural and remote Canada. Each of the study's approaches -- the analysis of the RNDB, policy documents that influence practice, the national survey and the narratives about rural and remote nurses' everyday experiences -- reveals different aspects of this complex and multifaceted area of practice.

Rural nurses have many reasons to celebrate: they provide care to individuals and families of all ages, for a variety of conditions, in a range of rural and remote settings. Although they work in environments that are primarily governed by urban-centric policies and in workplaces where the quality of work life is often limited, the nurses reveal their passion and dedication to their communities and to practising in rural and remote areas through their stories and their survey comments. The nature of rural and remote nursing is deceiving; its complexity is seen during the nurses' interactions, first as community members and then as professionals. Rural nurses are often charting new courses in their communities and workplaces. Muriel Strode said, "Do not follow where the path may lead. Go instead where there is no path and leave a trail." (33) Discovering the nature of nursing practice in rural and remote Canada through this national study is the first step on such a path, and hopefully the first of many trails.

THE NATIONAL SURVEY HAS COLLECTED AN ABUNDANCE OF INFORMATION ABOUT RURAL NURSES' WORK, QUALITY OF WORK LIFE AND DEGREE OF WORK SATISFACTION

OVER 150 NURSES FROM ALL PROVINCES AND TERRITORIES AND ALL AREAS OF PRACTICE SHARED THEIR EXPERIENCES OF WHAT IT MEANS TO BE A NURSE IN RURAL AND REMOTE CANADA

Table 2: Recommendations arising from analysis of documents

- 1. Develop a national rural health human resource strategy.
- 2. Create alternative payment options for nurses and physicians in rural areas.
- 3. Develop scholarships and bursary programs for rural-based nursing students and nurses.
- 4. Implement initiatives to enable full scope of nursing practice, including advanced practice in rural areas with process and outcome evaluation.
- Implement educational initiatives and complementary supports for nurses working with Aboriginal Peoples.
- 6. Implement financial and technological support for universities with a rural-focused mission.

- 7. Offer continuing education for nurses who work in rural and remote areas.
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