The Nature of Nursing Practice in Rural and Remote Canada - Yukon

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University of Northern British Columbia

Nursing Practice Discussions
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Aim of the Study

To examine and articulate the nature of registered nursing practice in primary care, acute care, community health, continuing care (home care) and long term care settings within rural and remote Canada.
The Study Components

- Survey
- Registered Nurses Data Base (RNDB)
- Narrative Study
- Documentary Analysis
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Funding Partners

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- Nova Scotia Health Research Foundation
- British Columbia Rural and Remote Health Research Institute
- Saskatchewan Industry and Resources
- Provincial and Territorial Nurses Associations
- Government of Nunavut
- Canadian Institute for Health Information
Rural and Remote Nursing

Access to Care
Quality of Care
Sustainability of Care
Access to Care

- Supply and Distribution of Nurses
- Education of Nurses
Supply and Distribution of Registered Nurses in Rural and Small Town Canada

How many Registered Nurses are there in rural and remote Canada?
Nurse to Population Ratios (All RNs), 1988-2002

Source: RNDB/Statistics Canada and CIHI
<table>
<thead>
<tr>
<th>Year</th>
<th>Number of rural (RST) RNs</th>
<th>% of all RNs</th>
<th>Rural (RST) % of total Canadian/YT population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>42,303</td>
<td>18.0</td>
<td>22.3</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>22.2</td>
<td>28.3</td>
</tr>
<tr>
<td>2000</td>
<td>41,502</td>
<td>17.9</td>
<td>21.7</td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>19.4</td>
<td>29.9</td>
</tr>
<tr>
<td>2002</td>
<td>40,648</td>
<td>17.6</td>
<td>20.6</td>
</tr>
</tbody>
</table>

2002 – based on CIHI figure generated without Quebec data
.. an aging workforce

- Rural RNs - Canada/YT
  - 1994 average age: 40.6 years/39.8
  - 2000 average age: 42.9 years/44
- Urban RNs
  - 1994 average age: 41.6 years/41.4
  - 2000 average age: 43.5 years/43.4
- All RNs
  - 1994 average age: 41.5 years/41
  - 1998 average age: 42.6 years
  - 2000 average age: 43.4 years/43.5
  - 2002 average age: 44.2 years
...Place of work
(Source RNDB)

• 64%/57% (YT) of all RNs work in hospitals/nursing stations
• 57%/76% of rural RNs work in hospitals/nursing stations (in 2000)
• More rural (18%/21%) than urban (11%/17%) nurses work in community settings
Access to Care

• Education of Nurses
# Highest Education Level of RNs in Rural Canada/YT, 2000

(Source: RNDB)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Canada</th>
<th>Rural/YT</th>
<th>Urban/YT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>81.4%</td>
<td>47.8%</td>
<td>64.2%</td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>18%</td>
<td>52.2%</td>
<td>34.8%</td>
</tr>
<tr>
<td>Master’s/PhD</td>
<td>0.6%</td>
<td>0%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
Documentary Analysis

Methods

• to achieve a contextual understanding of the policy and practice environment
• systematic collection of 200+ documents and analysis of over 150
• developed a guide to examine the materials using the policy cycle: policy formulation, policy implementation and policy accountability (Rist, 1994)
Educational Preparation of RNs in Rural and Remote Areas

- Little information in available reports

- No government documents located that discuss the need to provide educational opportunities for students in rural sites
• Most nursing associations equate rural with accessibility issues regarding education

• Entry-level competencies focus on generic requirements
• Education for remote practice links it with First Nations health issues

• Education documents discuss programs with rural focus at locations such as UNBC, University of Saskatchewan, First Nations University of Canada
• No indication of education for telehealth occurring within nursing programs

• Nursing programs prepare graduates to be computer-literate but technology not always available or feasible in rural and remote settings
• Extended mentoring or orientation programs need consideration (documentary analysis) but do not replace basic education with employment mentoring (narrative)
Sources of New Information on Nursing Practice

- The three information sources used most frequently by rural and remote nurses (than any other suggested source) are nursing colleagues, inservice, and newsletters.
- Nurses are 32% more likely to use newsletters than the library to inform their practice, and 21% more likely to use inservice than continuing education to obtain new information on nursing practice.

Source: 2001-2002 Nursing in Rural and Remote Canada Survey (N=3440)
Advice for Educators
(Source: Narratives)

- Need for reality-based education
- Part of curriculum offered in rural settings
- Educators who are specialized and experienced in rural practice
Quality of Care
(Source: Narratives)

- Community as Shaping Practice
- Scope of Practice
- Working on the Edges of Practice
Narrative Approach

• 152 Nurses (11 Francophone)
• **Yukon:** 8 Territories: 29
• Areas of Practice: Acute, Long-term Care, Public Health, Home-care, Community, Primary Care
• Telephone Interviews
• Analysis: interpretative phenomenology & thematic analysis
Community Shaping Practice

- Size, distance, demographics
- Expectations of communities
- Knowing the client in the context of community; the community in the context of the client
As I stepped off the ski plane I stepped into a foreign world. My role as a nurse was changed completely and my personal life soon became unfamiliar to me in my unfamiliar surroundings.

We do get a lot of moms with children with various things, but mostly with kids, you know, it’s the head colds, bad ear, sore throat, bit of abdo pain. [...] Our kids are basically a healthy population.

I remember being up in this same community and working 36 hours straight, no sleep, no break, nothing.
I always say it's a double edged sword because they hold you to high respect because you're their own. [...] And because of that you can't be the normal person that you are. You have to always be this person that everybody looks up to. And the clinic is situated on the top of a hill, so that I can look down at all the [community] around me. And most times I feel that way, that people think it's like that. That I'm the person on the hill looking down on everybody else. And there's a lot of pressure to be the perfect person when you're the nurse.
Knowing the Client: Knowing the Community

We are very responsive in our community because we see those people in our churches and in our grocery stores. And so you know we try and be all things to all people, maybe that is kind of bad. But in the end we are the one who see these people outside of our work life too.
Advice: Listen to Learn - Learn to Listen

Number one, do a lot of listening initially, and very little talking

Listen to your nurses! Listen to them and respect their opinions and have an open dialogue

Teach them how to use resources – how to find the answers. Don’t give it to them..., don’t feed it to them....
Quality of Care

• Scope of Practice
Survey Method

• Mailed questionnaire with persistent follow-up (Dillman’s Tailored Design Method)

• Sample (N=3933)(YT=171; Territories=451)
  1) random sample of registered nurses (RNs) living in rural areas in all Canadian provinces
  2) total population of RNs who work in outpost settings or the northern territories
Sample Response Rates by Province and Territory (N=3933)

Source: 2001-2002 Nursing in Rural and Remote Canada Survey
<table>
<thead>
<tr>
<th>Practice Area</th>
<th>YT (%)</th>
<th>NT (%)</th>
<th>NU (%)</th>
<th>All of Canada (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Care</td>
<td>44.2</td>
<td>51.5</td>
<td>40.0</td>
<td>44.4</td>
</tr>
<tr>
<td>Long term Care</td>
<td>8.4</td>
<td>7.3</td>
<td>---</td>
<td>17.7</td>
</tr>
<tr>
<td>Community Health</td>
<td>20.1</td>
<td>17.6</td>
<td>36.9</td>
<td>16.1</td>
</tr>
<tr>
<td>Home Care</td>
<td>5.2</td>
<td>5.5</td>
<td>1.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Primary Care</td>
<td>15.6</td>
<td>11.5</td>
<td>20.0</td>
<td>8.3</td>
</tr>
<tr>
<td>Other</td>
<td>6.5</td>
<td>6.7</td>
<td>1.5</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total n</strong></td>
<td>154</td>
<td>165</td>
<td>65</td>
<td>3493</td>
</tr>
</tbody>
</table>

Survey question: “In which of the above practice areas do you spend most of your time?”  *Excluded here – education, administration, research*
Primary Care as Main Practice

- National – 8.3%
- Territories
  - Yukon – 15.6%  NWT – 11.5%  Nunavut – 20%
- Provinces
  - British Columbia - 10%  Manitoba – 11.4%
  - Ontario – 13.5%  Saskatchewan – 8.4%
  - Newfoundland – 6.1%  New Brunswick – 6.1%
  - Alberta – 5.7%  Nova Scotia – 4.9%
  - Quebec – 4.6%  PEI – 0%
# Character of Practice
(Source: Survey)

<table>
<thead>
<tr>
<th>Scope of Practice</th>
<th>YT (%)</th>
<th>NT (%)</th>
<th>NU (%)</th>
<th>All of Canada (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced nursing practice and decision-making</td>
<td>50.3</td>
<td>43.5</td>
<td>68.9</td>
<td>39.9</td>
</tr>
<tr>
<td>Facilitation of community health promotion activities</td>
<td>53.0</td>
<td>52.5</td>
<td>63.5</td>
<td>47.8</td>
</tr>
<tr>
<td>Nothing in my day is routine</td>
<td>61.7</td>
<td>60.8</td>
<td>80.0</td>
<td>63.3</td>
</tr>
<tr>
<td>I am required to take on other roles depending on demand</td>
<td>59.1</td>
<td>54.2</td>
<td>46.2</td>
<td>58.2</td>
</tr>
<tr>
<td>I use protocols specific to ANP</td>
<td>37.7</td>
<td>44.0</td>
<td>64.6</td>
<td>36.9</td>
</tr>
</tbody>
</table>

Total n: 154, 165, 65, 3493
Advanced Decision-Making or Practice

- Total – 39.1%
- Territories – 47.8%
- Provinces
  - Ontario – 50%
  - BC/AB – 42.7%
  - SK/MB – 38.7%
  - Atlantic – 32.6%
  - Quebec – 31.0%
Health Promotion in Community

• Total – 48.6%
• Territories – 56.3%
• Provinces
  – BC/AB – 54.7%
  – Ontario – 52.7%
  – SK/MB – 49.3%
  – Atlantic – 44.9%
  – Quebec – 36.6%
# Maternity Care
*(Source: Survey)*

<table>
<thead>
<tr>
<th>Scope of Practice</th>
<th>YT (%)</th>
<th>NT (%)</th>
<th>NU (%)</th>
<th>All of Canada (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-natal Care</td>
<td>43.5</td>
<td>45.5</td>
<td>72.3</td>
<td>35.1</td>
</tr>
<tr>
<td>Management of labor</td>
<td>16.9</td>
<td>30.9</td>
<td>60.0</td>
<td>22.8</td>
</tr>
<tr>
<td>Management of delivery</td>
<td>14.9</td>
<td>29.7</td>
<td>60.0</td>
<td>20.8</td>
</tr>
<tr>
<td>Post-natal care</td>
<td>44.2</td>
<td>52.1</td>
<td>78.5</td>
<td>40.5</td>
</tr>
<tr>
<td><strong>Total n</strong></td>
<td>154</td>
<td>165</td>
<td>65</td>
<td>3493</td>
</tr>
</tbody>
</table>
### General Diagnostic Tests
(Source: Survey)

<table>
<thead>
<tr>
<th>Scope of Practice</th>
<th>YT (%)</th>
<th>NT (%)</th>
<th>NU (%)</th>
<th>All of Canada (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordering diagnostic tests</td>
<td>36.4</td>
<td>39.4</td>
<td>63.1</td>
<td>28.5</td>
</tr>
<tr>
<td>Performing diagnostic tests</td>
<td>46.8</td>
<td>40.0</td>
<td>64.6</td>
<td>32.5</td>
</tr>
<tr>
<td>Interpreting diagnostic tests</td>
<td>48.1</td>
<td>42.4</td>
<td>69.2</td>
<td>35.0</td>
</tr>
<tr>
<td>Total n</td>
<td>154</td>
<td>165</td>
<td>65</td>
<td>3493</td>
</tr>
</tbody>
</table>
## Medication and Referrals

(Source: Survey)

<table>
<thead>
<tr>
<th>Scope of Practice</th>
<th>YT (%)</th>
<th>NT (%)</th>
<th>NU (%)</th>
<th>All of Canada (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribing medication</td>
<td>27.3</td>
<td>29.1</td>
<td>66.2</td>
<td>17.8</td>
</tr>
<tr>
<td>Dispensing (not administering) medication</td>
<td>51.9</td>
<td>54.5</td>
<td>81.5</td>
<td>46.7</td>
</tr>
<tr>
<td>Direct referral to an <em>allied health professional</em></td>
<td>52.6</td>
<td>48.5</td>
<td>66.2</td>
<td>49.3</td>
</tr>
<tr>
<td>Direct referral to a <em>medical specialist</em></td>
<td>23.4</td>
<td>22.4</td>
<td>52.3</td>
<td>21.9</td>
</tr>
<tr>
<td>Total n</td>
<td>154</td>
<td>165</td>
<td>65</td>
<td>3493</td>
</tr>
</tbody>
</table>
# Emergency/Acute Care

(Source: Survey)

<table>
<thead>
<tr>
<th>Scope of Practice</th>
<th>YT (%)</th>
<th>NT (%)</th>
<th>NU (%)</th>
<th>All of Canada (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suturing</td>
<td>26.6</td>
<td>26.1</td>
<td>67.7</td>
<td>20.2</td>
</tr>
<tr>
<td>Taking X-rays</td>
<td>24.7</td>
<td>20.6</td>
<td>56.9</td>
<td>8.2</td>
</tr>
<tr>
<td>Casting/Splinting</td>
<td>31.2</td>
<td>32.1</td>
<td>66.2</td>
<td>25.4</td>
</tr>
<tr>
<td>Evacuating patients</td>
<td>45.5</td>
<td>55.2</td>
<td>83.1</td>
<td>37.0</td>
</tr>
<tr>
<td>Pronouncing death</td>
<td>29.9</td>
<td>21.2</td>
<td>55.4</td>
<td>41.8</td>
</tr>
<tr>
<td><strong>Total n</strong></td>
<td>154</td>
<td>165</td>
<td>65</td>
<td>3493</td>
</tr>
</tbody>
</table>
## Specific Diagnostic Tests
(Source: Survey)

<table>
<thead>
<tr>
<th>Scope of Practice</th>
<th>YT (%)</th>
<th>NT (%)</th>
<th>NU (%)</th>
<th>All of Canada (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing pap smears</td>
<td>25.3</td>
<td>27.3</td>
<td>61.5</td>
<td>15.9</td>
</tr>
<tr>
<td>Audiometry</td>
<td>25.3</td>
<td>23.0</td>
<td>49.2</td>
<td>12.6</td>
</tr>
<tr>
<td>Refraction</td>
<td>5.2</td>
<td>7.9</td>
<td>21.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Pulmonary function testing</td>
<td>15.6</td>
<td>20.0</td>
<td>36.9</td>
<td>12.4</td>
</tr>
<tr>
<td>Total n</td>
<td>154</td>
<td>165</td>
<td>65</td>
<td>3493</td>
</tr>
</tbody>
</table>
Quality of Care

• Working on the edges of your practice
“Something just didn’t feel right. I called the doctor but I couldn’t articulate my concerns and she was kind of cranky on the phone, she said, call me when you know what you’re talking about …..when you know. And this was one of the nights that I was on for 17 hours straight with hardly a break. And we’d had a really, really busy time… we were all extremely exhausted …. I don’t remember ever being so exhausted. And I asked one of the nurses who was still up, I sort of ran it over with her, and she said, ….oh, I can’t, I’m too tired, I can’t really talk to you about this … And I was exhausted so I just kind of thought okay, maybe he’ll be okay. He’ll make it to the morning, the nurse will see him then and if he needs to go out he can go out.”
The hardest thing I find is deciding not to do anything with a patient. Deciding that everything is okay. Like if somebody is acutely ill, you can start IVs and give them antibiotics and do chest x-rays. That’s easy. But it is having the confidence to say no I don’t think this is something really serious, and they can go home and come back and see us again in the morning.
Sustainability of Care

- Predictors of Intent To Leave
- Migration of Nurses
Sustainability of Care

• Predictors of Intent To Leave
Predictors of Intent To Leave
(Source: Survey)

• **Individual**
  – Sociodemographic & professional
  – Health (perceived stress)
  – Satisfaction with workplace & community

• **Workplace**
  - On Call
  - Advanced decision making

• **Community**
  - Remote setting
Retaining Rural Nurses
(source: Survey)

RNs who plan to leave their jobs were:

• Unsatisfied with job scheduling, level of autonomy & on call requirements
• More likely to be making advanced decisions & working in remote settings
• Less satisfied with the community where they work
Sustainability of Care

• Migration of Nurses
Major World Region Origins of the International Nursing Graduate RNs of Canada

Source: RNDB/CIHI, 2000
International Nursing Graduates

- In 2000 14,177 international nursing graduates were registered and employed in nursing in Canada (Yukon – 17)
- 5.7% of international nursing graduates worked in rural Canada (Yukon - 2 or 10%)
- But this represented only 1.9% (Yukon - 4%) of rural RNs
- Therefore, our analyses focus on INTERNAL MIGRATION of Canadian-educated, rural RNs
Proportions (by Census Division) of Canadian-Educated, Rural RNs Who Graduated from a Different Province

% Migrants
- (No data)
- <10%
- 10-19%
- 20-29%
- 30-39%
- 40-49%
- 50+%

Source: RNDB 2000
Correlates of Migration
(Source: RNDB)

Similar to Predictors of Intent to Leave (Survey):

• Male
• Graduate Degree
• Employed full time
• Work in a nursing station or teaching position
• Staff position
• Highly rural community
Mobility of Rural Nurses

• By 2006, Canada is projected to lose the equivalent of 13% of the 2001 RN workforce through retirement and death (O’Brien-Pallas et al., 2003)

• BUT, up to 27% of Canada’s rural nurses have moved from their province of graduation (Survey)

• AND 20% of rural nurses plan to retire by 2007 (Survey)
Nature of Nursing Practice

Recognizing nurses and the complexity of rural and remote practice

• Access to Care
• Quality of Care
• Sustainability of Care
Who will be there for rural communities?

- Create a “rural practice lens” for relevant planning, policies and programs
- Partnerships between communities and health authorities are needed to successfully recruit and retain rural nurses
- Workplace supports in health authorities and agencies will enhance the retention of rural nurses
- Better supports for nursing education programs that prepare rural nurses
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