The Nature of Nursing Practice in Rural & Remote Canada

Policy Forum
Third Biennial Rural Health Conference, Rural Health: From Practice to Research
November 19, 2004
AIM
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

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

http://ruralnursing.unbc.ca
Principal Investigators and Decision-maker

- **Martha MacLeod** (Lead PI and Narratives)
  University of Northern British Columbia

- **Judith Kulig** (Co-PI for Documentary Analysis)
  University of Lethbridge

- **Norma Stewart** (Co-PI for Survey)
  University of Saskatchewan

- **Roger Pitblado** (Co-PI for RNDB)
  Laurentian University

- **Marian Knock** (Principal Decision-maker)
  B.C. Ministry of Health Planning
Co-Investigators

- Carl D'Arcy  
  U. Saskatchewan
- Dorothy Forbes  
  U. Saskatchewan
- Debra Morgan  
  U. Saskatchewan
- Gail Remus  
  U. Saskatchewan
- Barbara Smith  
  U. Saskatchewan
- Ruth Martin-Misener  
  Dalhousie University
- Ginette Lazure  
  Université Laval
- Jennifer Medves  
  Queen's University
- Michel Morton  
  Lakehead University
- Carolyn Vogt  
  U. Manitoba
- Elizabeth Thomlinson  
  U. Calgary (to March 2004)
- Kathy Banks  
  BC Women’s Hospital
- Lela Zimmer  
  UNBC
Advisory Team Members

- Anne Ardiel, BC
- Cathy Ulrich, BC
- Debbie Phillipchuk, AB
- Cecile Hunt, SK
- Donna Brunskill, SK
- Marlene Smadu, SK
- Marta Crawford, MB
- Denise Alcock, ON
- Sue Mathews, ON
- Suzanne Michaud, QC
- Roxanne A. Tarjan, NB
- Adele Vukic, NS
- Barbara Oke, NS
- Elizabeth Lundrigan, NF
- Joyce England, PEI
- Barbara Harvey, NU
- Madge Applin, NWT
- Elizabeth Cook, NWT
- Fran Curran, YT
- Jan Horton, YT
- Francine Anne Roy, CIHI
- Kathleen MacMillan, FNIHB – Health Canada
- Maria MacNaughton, FNIHB - Health Canada
- Lisa Dutcher, Aboriginal Nurses Association of Canada
- Lisa Little, CNA
Funding Partners
(Total - $592,000)

• Canadian Health Services Research Foundation
• Canadian Institutes of Health Research
• Nursing Research Fund
• Ontario Ministry of Health and Long-Term Care
• Alberta Heritage Foundation for Medical Research
• Michael Smith Foundation for Health Research
• 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
Registered Nurses Database (RNDB)

- Annual collation of provincial and territorial nurses’ associations registration data
- Analyzed to highlight rural nurses in terms of age, sex, education, and employment characteristics

Report available from CIHI: http://secure.cihi.ca/cihiweb/splash.html
Highlights: National

- 41,502 registered nurses were located in rural and small town Canada in 2000, a 2% decrease since 1994.
- In 2000, 17.9% of the total RN workforce were in rural Canada which comprised 21.7% of the total population.
- 62.3 RNs per capita in rural compared to 78.0 in urban Canada.
- More rural (12.7%) than urban (7.8%) nurses work in community settings.
- Rural nurses predominantly educated at the diploma level at their initial period of work (90.8%) and subsequently during their work life (81.4%).
RNDB: Highlights AB

- In 2000, 22,020 nurses in Alberta with 4,301 in rural areas
- 79.6 RNs per 10,000 population in urban areas and 55.8 RNs per 10,000 population in rural areas
- Majority in rural areas are female (97.6%) working in hospital (58.4%) giving direct care (91.5%)
- Education level: 75.8% of rural nurses are diploma prepared
Documentary Analysis

- Analyses of documents dating from 1983-2003 to determine the nature of the policy context within which rural and remote nurses practice
- Interim and final reports available from web page
Five Policy Areas Emerged

- Advanced practice—an overall move to support this initiative
- Nursing practice issues in Aboriginal Communities—support needed for aboriginal nurses and those who work in aboriginal communities
- Educational preparation—no additional infrastructure to support preparation of rural & remote nurses
- Physician supply—interprofessional context of practice has not been examined
- Health care delivery—support of telehealth but no funds or opportunity to use in educational institutions
Narrative

• Narrative interviews conducted with 152 registered nurses across Canada
• Nurses discussed their experiences in rural and remote settings
Approximate Location of Narratives Respondents Based on Place of Work
They told us…

- Rural nursing is more complex than is given credit for
- Personal and professional roles are inseparable
- Communities shape the practice that nurses provide (demographics or their style)
- Need for extensive knowledge (i.e., nursing, community and other)
Survey Method

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

• Sample (N=3933)
  random sample of registered nurses (RNs) living in rural areas in all Canadian provinces
Survey Response Rate = 68%

- 7065 - questionnaires mailed out
- 153 - explicit refusals
- 1696 – not heard from (implicit refusals)
- 1114 - wrong address, duplicate registration, moved (no forwarding address), deceased
- 169 - completed but ineligible (lived rural but worked urban, retired, long-term disability)
- 5782 - eligible respondents [7065-(1114+169)]

CALCULATION: 3933/5782 = 68%
Approximate Location of Survey Respondents
Sample Response Rates by Province and Territory (N=3933)

Source: 2001-2002 Nursing in Rural and Remote Canada Survey
## Gender and Age of Registered Nurses for Alberta

**Gender (n=420)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>406</td>
<td>96.7%</td>
</tr>
<tr>
<td>Male</td>
<td>14</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

**Age (n=411)**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td>8</td>
<td>1.9%</td>
</tr>
<tr>
<td>25-34</td>
<td>58</td>
<td>14.1%</td>
</tr>
<tr>
<td>35-44</td>
<td>121</td>
<td>29.4%</td>
</tr>
<tr>
<td>45-54</td>
<td>154</td>
<td>37.5%</td>
</tr>
<tr>
<td>55-64</td>
<td>65</td>
<td>15.8%</td>
</tr>
<tr>
<td>&gt;64</td>
<td>5</td>
<td>1.2%</td>
</tr>
</tbody>
</table>
.. an aging workforce

• Rural RNs
  – 1994 average age: 40.6 years
  – 2000 average age: 42.9 years
• Urban RNs
  – 1994 average age: 41.6 years
  – 2000 average age: 43.5 years
• All RNs
  – 1994 average age: 41.5 years
  – 1998 average age: 42.6 years
  – 2000 average age: 43.4 years
  – 2002 average age: 44.2 years
Work Setting (N=3933)

- Other
- Gov’t/Assoc
- Education
- Dr’s Office
- Self Employed
- Integrated Facility
- Private Agency
- Occ. Health/Industry
- Community Health
- Home Care
- Nursing Home/LTC
- Rehab
- General Hospital
- Mental Health
- Nursing Station
## Primary Work Setting of Registered Nurses for Alberta/British Columbia (n=781)

<table>
<thead>
<tr>
<th>Work Setting</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Hospital/air ambulance/dialysis</td>
<td>303</td>
<td>38.8</td>
</tr>
<tr>
<td>Mental health centre/corrections/addictions</td>
<td>14</td>
<td>1.8</td>
</tr>
<tr>
<td>Outpost/nursing station</td>
<td>98</td>
<td>12.5</td>
</tr>
<tr>
<td>Nursing home/long-term care facility</td>
<td>109</td>
<td>14.0</td>
</tr>
<tr>
<td>Home care</td>
<td>71</td>
<td>9.1</td>
</tr>
<tr>
<td>Community health/public health</td>
<td>108</td>
<td>13.8</td>
</tr>
<tr>
<td>Business/private/industry</td>
<td>10</td>
<td>1.3</td>
</tr>
<tr>
<td>Integrated facility (acute and long-term)</td>
<td>26</td>
<td>3.3</td>
</tr>
<tr>
<td>Physician’s office/family practice unit</td>
<td>6</td>
<td>0.8</td>
</tr>
<tr>
<td>Education/association/government</td>
<td>10</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>26</td>
<td>3.3</td>
</tr>
</tbody>
</table>


Access to Care

• Education of Nurses
### Education of Registered Nurses for Alberta and British Columbia (n=784)

<table>
<thead>
<tr>
<th>Nursing</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>683</td>
<td>87.1</td>
</tr>
<tr>
<td>Bachelors</td>
<td>226</td>
<td>28.8</td>
</tr>
<tr>
<td>Masters</td>
<td>7</td>
<td>0.9</td>
</tr>
<tr>
<td>Advanced Nursing Practice*</td>
<td>57</td>
<td>7.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-nursing</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors</td>
<td>26</td>
<td>3.3</td>
</tr>
<tr>
<td>Masters</td>
<td>13</td>
<td>1.7</td>
</tr>
</tbody>
</table>

* Nurse Practitioner, Clinical Nurse, Specialist, and Midwifery
General Comments from Northern Nurses
(Source: Narratives)

- Basic education inadequate for rural and remote practice
- Rural health nursing needs to be part of basic nursing program
Advice for Educators
(Source: Narratives, Northern responses)

• Need for reality-based cases

• Part of curriculum offered in rural settings

• Educators who are specialized in knowledge and experience
<table>
<thead>
<tr>
<th>Year</th>
<th>Number of rural (RST) RNs</th>
<th>% of all RNs</th>
<th>Rural (RST) % of total Canadian population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>42,303</td>
<td>18.0</td>
<td>22.3</td>
</tr>
<tr>
<td>2000</td>
<td>41,502</td>
<td>17.9</td>
<td>21.7</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
Quality of Care
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
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....
Sustainability of Care

- Predictors of Intent to Leave
- Migration
Overall Job Satisfaction and Pay Subscale Scores of Registered Nurses for Alberta (n=411)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Job Satisfaction</strong></td>
<td>M (SD)</td>
</tr>
<tr>
<td>&lt; 20&lt;sup&gt;th&lt;/sup&gt; Percentile</td>
<td>4.93 (0.73)</td>
</tr>
<tr>
<td>&gt; 80&lt;sup&gt;th&lt;/sup&gt; Percentile</td>
<td></td>
</tr>
<tr>
<td><strong>Pay</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.15 (1.35)</td>
</tr>
<tr>
<td>&lt; 20&lt;sup&gt;th&lt;/sup&gt; Percentile</td>
<td>13.6</td>
</tr>
<tr>
<td>&gt; 80&lt;sup&gt;th&lt;/sup&gt; Percentile</td>
<td>32.8</td>
</tr>
</tbody>
</table>
Predictors of Intent To Leave

Registered Nurses were more likely to intend to leave their present nursing position within the next 12 months if they:

- Were male
- Reported higher perceived stress
- Did not have dependent children or relatives
- Had higher education
- Were employed by their primary agency for a shorter time
- Had lower community satisfaction
- Had greater dissatisfaction with job scheduling
- Were required to be on call
- Performed advanced decisions or practice
- Worked in a remote setting
## Correlates of Migration

<table>
<thead>
<tr>
<th>Correlates</th>
<th>% Migrants</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>7.2</td>
<td>1.00</td>
</tr>
<tr>
<td>Female</td>
<td>12.0</td>
<td>1.31*</td>
</tr>
<tr>
<td>Highest Nursing Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>11.0</td>
<td>1.00</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>14.9</td>
<td>0.90</td>
</tr>
<tr>
<td>Graduate Degree (MA/PhD)</td>
<td>24.0</td>
<td>1.55*</td>
</tr>
<tr>
<td>Full-Time/Part-Time Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-Time</td>
<td>10.8</td>
<td>1.00</td>
</tr>
<tr>
<td>Full-Time</td>
<td>12.7</td>
<td>1.07*</td>
</tr>
</tbody>
</table>
## Correlates of Migration (Continued)

<table>
<thead>
<tr>
<th>Correlates</th>
<th>% Migrants</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Place of Work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>10.6</td>
<td>1.00</td>
</tr>
<tr>
<td>Nursing Station</td>
<td>34.4</td>
<td>2.40*</td>
</tr>
<tr>
<td>Nursing Home/Long-Term Care</td>
<td>10.4</td>
<td>0.69*</td>
</tr>
<tr>
<td>Home Care/Community Health Centre</td>
<td>14.1</td>
<td>0.86*</td>
</tr>
<tr>
<td>Education/Association/Government</td>
<td>17.8</td>
<td>1.10</td>
</tr>
<tr>
<td>Other</td>
<td>12.8</td>
<td>0.96</td>
</tr>
<tr>
<td><strong>Primary Responsibility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Care</td>
<td>11.9</td>
<td>1.00</td>
</tr>
<tr>
<td>Administration</td>
<td>10.8</td>
<td>0.68*</td>
</tr>
<tr>
<td>Teaching/Education</td>
<td>18.2</td>
<td>1.41*</td>
</tr>
<tr>
<td>Research</td>
<td>11.1</td>
<td>1.18</td>
</tr>
</tbody>
</table>
It’s Your Turn!

• Do the findings presented here fit your own experience in rural nursing?
Letting other nurses know

• How can we share our findings with other nurses in:
  Chinook Health Region
  Other health regions?
  Other parts of Canada?
Talking with Decision Makers

- What are some ways in which we can share the findings and your ideas with decision makers in:

  This region?
  Across the province?
  Across the country?