Management Education of Nurses-In-Charge in Yukon

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Statement of the Problem

Recruitment and retention of skilled, qualified nurses to northern regions of Canada is an on-going problem. One of many contributing issues may be the lack of management education afforded to the Nurses-In-Charge (NICs) in remote communities. If managers lack adequate education, they cannot properly support the staff with whom they work; the environment of the health centre therefore deteriorates, then retention and recruitment of nurses becomes difficult.

This study investigates the type and frequency of management education given to NICs in the Yukon Territory. It also attempts to identify the type of education these NICs feel would benefit them. Finally, a job satisfaction questionnaire attempts to determine how NICs feel about their work relationships and their job in general.

Background Information

For the past decade, Canada has been experiencing a nursing shortage (Maslove & Fooks, 2004, Office of Nursing Policy, 2005) which is expected to worsen during the next decade (Canadian Nurses Association, 2002). When there is a nursing shortage, outpost nursing stations and remote health centers suffer greatly, especially in First Nations communities; in 2001, there was a reported vacancy rate of at least 40% on reserves, resulting in the closure of some nursing stations for lack of staff (Fletcher, 2001). This kind of shortage results in poor continuity of care to the detriment of patient wellbeing (Minore et al., 2005). Although nurse retention is a complex issue, especially in northern Canada where little research has been done (MacLeod, Kulig, Stewart & Pitblado, 2004), overwork, burnout, and lack of management support and appreciation are some of the top reasons nurses cite for leaving northern areas (Tyler & Riggs, 2000).

First line managers, or Nurses-In-Charge (NICs), are ideally positioned to influence the retention of nurses to northern communities. In the author's experience, NICs are generally familiar with the community in which they work, have been there for an extended period, and

have excellent clinical skills. However, in some cases, NICs in the north are promoted to the position without any prior management training.

The author was unable to find any research pertaining specifically to NICs in northern communities. Although the extensive research project from MacLeod, Kulig, Stewart and Pitblado (2004), *Nursing Practice in Rural and Remote Canada,* is producing some much needed data on the nature of nursing practice in remote Canada, it did not include information regarding NICs as a group. Studies have researched the education staff nurses need to increase their medical expertise (Silverman, Goodine, Ladouceur, & Quinn, 2001) and the challenges of delivering that education to rural nurse practitioners (Tilleczek, Pong, & Caty, 2005). While these studies did an excellent job of examining the clinical practice of expanded-role nurses (such as emergency care, history taking, and physical examination), they failed to investigate the management and leadership domains of the NIC who requires additional knowledge surrounding performance review tactics, quality assurance, team building, and community development, to be effective.

Conceptual Framework

In order to organize information surrounding the Nurse-In Charge's managerial responsibilities to promote retention and recruitment of staff nurses, Donabedian's framework of structure, process and outcome is used (Donabedian & Bashshur, 2003). To further refine the framework so that it specifically applies to nurse managers, the work of Anthony et al. (2005) is also employed. Finally, additional modifications are required to take into account the special circumstances of nurse managers in northern, isolated communities.

"Structure", in the Donabedian framework, refers to conditions under which care is provided; these conditions include: material resources (i.e. facilities, equipment, accommodations), human resources (i.e. number and qualifications of personnel), and organizational characteristics (i.e. organization of nursing staff, type of supervision, and

performance review). Anthony et al. (2005) further specified structure, in the case of nurse managers, as the environment in which care takes place and where the nurse manager facilitates the practice of nursing.

Donabedian defines "process" as the activities that constitute health care. For an NIC in a remote community these activities not only encompass elements of clinical care (such as diagnosis and treatment) or community development and networking, but also include the performance of managerial duties that affect the operation and staffing of the health care center. Specific concerns with regard to the NIC as manager include: the manner with which an NIC interacts with the nurses s/he works with, his/her attitude and attention toward new staff, the frequency and effectiveness of performance reviews, his/her availability for and openness to staff issues and concerns, and his/her ability to perform the day-to-day paperwork and political demands of the NIC position. All of these "process" activities influence retention and recruitment of staff. If a staff member in a northern health center feels that s/he is not being well treated by an NIC, that nurse is not as likely to remain in that community, especially considering aggressive recruitment by southern employers.

"Outcomes" refer to changes in individuals and populations that can be attributed to healthcare. In this researcher's experience an established and long-standing nursing staff provides consistency and stability to a community. Boundaries are set so that, for example, patients are not constantly walking in without appointments and seeking care after hours. Fixed appointment times provide a natural and predictable rhythm to a potentially hectic day, and rules surrounding non-emergent after-hours care cut down on overtime hours for the nurses, thus decreasing the possibility of overwork and burnout. While these matters could be considered "processes" in Donabedian's framework, they are better described as "outcomes" because decreased overtime hours and commonly held expectations among nurses and patients are the results one may reasonably expect of a confident and well-educated NIC. Moreover, clearly

defined responsibilities and expectations combined with manageable working hours are essential to proper employment.

Donabedian's framework is a three part concept where structure influences process and process influences outcome (Donabedian & Bashshur, 2003). The abilities and attitudes of any first line nurse manager are included in Donabedian's "structural" elements. The way in which these abilities and attitudes are displayed are among Donabedian's "process" elements and are crucial to the smooth functioning of a health facility. However, NICs in remote northern communities face many additional challenges compared to their colleagues in more urban areas. A northern NIC is the first and sometimes only support for any new nurse in an isolated, cross-cultural environment. Despite this, the NIC usually performs without immediate access to upper management. Although a physician is always on call for medical emergencies, a senior nurse administrator generally lives in a distant community which means s/he can only help solve the majority of management dilemmas over the phone. Greater management education for NICs would enable sensitive resolution of key issues to be made more quickly on the many occasions when such an administrator is totally inaccessible. In short, an NIC must have a firm grasp on "process" elements which include supervisory and administrative skills, communication aptitude, and problem-solving capabilities.

The more management skills an NIC has, the more effective that NIC will be in her job. If the NIC is more effective, nurses will want to either stay longer in the community or return more frequently, which will bolster continuity of care for local residents. Increases in staff retention under the successful NIC will enable more community health programs to be implemented because, as residents come to know their nurses, they may be more willing to collaborate on community-building initiatives. In the end, stable and skilled NICs result in stable and empowered nurses who can positively affect the health of a population. These positive outcomes must begin by strengthening the "structural" and "process" abilities of northern NICs.

Literature Review

Defining "Rural and Remote"

There is no standard definition for the terms "rural" and "remote" (Hanvey, 2005). Based on the experience of the author and for the purposes of this study, rural and remote communities in Yukon are defined as communities counting fewer than 3000 people, and where the nearest tertiary care centre is more than 1.5 hours away by road.

Nurses in the north

Nurses who work in remote and rural areas have not been extensively studied as a group. Earlier work concentrated on the northern nursing experience: the personal and professional isolation of living in the north, the cultural factors, the stress (Canitz, 1991), and the "otherness" of a southern nurse in a northern community (Tarlier, Johnson, & Whyte, 2003). More recently, with some of the results of the ongoing 3-year study from MacLeod et al. (2004) revealed, northern nurses are being profiled and northern nursing practice is finally being described. The study describes rural and remote nursing practice as variable and complex, requiring "the need for a wide range of knowledge and skills in situations of minimal support and few resources" (p. v).

The demands on northern nurses are indeed varied and sometimes harrowing: often there is only one nurse serving a community (Andrews et al., 2005); on-call schedules often require nurses who have been up half the night with an emergency case to return for a full day of work the next day; weather can prevent a critical patient from leaving a small community for more than 24 hours. Although there is much autonomy as a northern nurse and working with an extended scope of practice can be rewarding, recruitment and retention of nurses to small northern communities is difficult (Tyler & Riggs, 2000). Financial incentives cannot alleviate stress and burnout.

Turnover in nursing stations is a constant concern. It was recently reported that one northern community had 42 nurses in and out over a 1-year period (Minore et al., 2005). Such discontinuity of care not only affects patients who see a new face every time they go to the nursing station and whose therapy plans can be interrupted or forgotten, but it wears out more consistent nurses who must continuously orientate the latest arrival and pick up the slack until he or she can function independently at work and on call (Minore et al., 2005).

In Yukon, Nurses-In-Charge (NICs) are responsible for the day-to-day running of community health centres. Depending on the size of the community, the NIC works with between one and five other nurses, as well as clerical and housecleaning staff. The NIC is often called on to help with clinical patient care, regularly clocks in overtime for emergencies after hours, and is ultimately accountable for patient care outcomes in his or her community. In addition to the direct care duties (such as patient assessment, diagnosis and treatment) which are demanded of nurses in the north, an NIC's responsibilities include scheduling, ordering of supplies, staff cohesiveness, organization and delegation of health center programming, performance reviews, addressing staff and community complaints, and communication with regional nurse managers. Nurse managers require more competencies than staff nurses (Connelly, Yoder, & Miner-Williams, 2000) but it is unclear whether valuable northern NICs have access to the training necessary to keep them up to date as skilled managers.

The role of management in retaining staff

In researching the literature, there are two recurring themes that are intimately related to the retention of staff: workplace quality and leadership characteristics of first line managers.

A healthy workplace is critical for nurses' wellbeing (Baumann, et al., 2001). Baumann et al. (2001), identify issues such as work pressures, job security, workplace safety and control over practice, as well as solutions to these problems within the nursing work environment. Nearly every issue implies a first-line manager role in the resolution of these issues. Flynn

(2005) names work environment as a key issue in the retention and recruitment of nurses, and offers evidence-based recommendations for creating a culture of nurse retention. Flynn's recommendation with the highest importance rating: A supervisory staff that is supportive of nursing. Maslove and Fooks (2004), found that "nurse managers are stretched" (p. 11), but that "despite this, new support for managers has been limited" (p. 11). Manion (2004) discusses a "culture of retention" for nurses, placing the implementation of retention practices squarely on the shoulders of first line nurse managers. However, Manion also identifies an important point: "Assigning titles and responsibilities without adequate assessment of an individual's capacity to accept or carry out that responsibility results in a no-win situation" (p. 52). A properly educated nurse manager is far better prepared to implement workplace changes than many of his or her counterparts.

Boyle et al. (1999) found that "leadership characteristics of nurse-managers affect the work environment of ... nurses, and the environment in turn affects job stress, job satisfaction and staff members' intent to stay in the work unit or hospital"(p. 371). Laschinger, Wong, McMahon, and Kaufmann (1999) found that staff nurses experienced less job stress when group leaders effectively empowered them using tactics of empowerment such as support of team decision-making, providing resources, and creating an environment which encouraged skill enhancement. In a literature review studying characteristics of nurse managers' leadership styles that enhance hospital nurse retention, it was not only found that "effective leadership characteristics appeared to be an essential component of retention of professional nursing staff" (Force, 2005, p. 340), but that "providing leadership education that promotes ... responsiveness to staff should be a key strategy directly affecting nurse turnover" (p. 340).

Anthony et al. (2005) focused on the self-described roles of nurse managers and the characteristics they need to promote retention; although all nurse managers identified certain roles as key to their positions (staffing, retaining and keeping staff happy, ensuring good patient

outcomes), only those who were university prepared identified more leadership and communication centered roles (empowerment, conflict resolution, role-modeling). They also noted that "managers need leadership skills and the ability to foster an environment that effectively guides retention" (p. 153) and that "on-the-job training is insufficient in preparing NMs [nurse managers]" (p. 153).

The education of nurse managers

Levett-Jones (2005) reviewed literature surrounding nurse continuing education and found that—since such instruction results in improved staff satisfaction, staff retention, and quality care—institutions cannot afford to ignore the educational needs of nurses. Nevertheless, the availability of continuing professional development, which will enable nurse managers to effectively oversee increasingly complex tasks and improve retention of nurses, is in question (Gould, Kelly, Goldstone, & Maidwell, 2001). The Gould et al. study, done in the UK, found that the greater the number of activities for which the clinical nurse managers perceived themselves to have received poor or very poor preparation, the more likely they were to report low levels of job satisfaction; further, they found that nurse managers seemed to have similar needs for continuing professional development, regardless of prior experience or education.

A number of recent articles underscore the importance of continuing education for nurse managers and describe programs that could be instituted to improve their skills and multiply the numbers of those willing to become nurse managers (Sherman, 2005; Mills, 2005; Noyes, 2002). This notion is echoed by Parsons and Stonestreet (2003) who have delineated factors such as support, empowerment and education, which contribute to nurse manager retention. Nonetheless, despite escalating demand for a wide range of skills and the ever-increasing time commitments burdening nurse managers, widespread enhancements in support and education have yet to be implemented (Noyes, 2002).

Implementation

In this study, a survey was used to ask NICs about their management education (see Appendix A). The questions were drawn from a survey constructed by Gould et al. (2001) to examine the changing training needs of clinical nurse managers. The questions were adapted slightly to account for the special circumstances of northern nurses and the communities they work in. The survey was then pre-tested by three people who have formerly worked as NICs in Yukon for extended periods. This focus group reviewed the survey for reliability and validity, and made suggestions as to question comprehension. The final survey consisted of three sections. Section 1 was entitled "Personal Information", in which demographic and general education information were collected. Section 2 was "Your Management Preparation", in which 28 questions were to be answered on a Likert scale, three others were multiple choice and two collected qualitative data, all pertaining to training/preparation for management activities. Section 3 was a job satisfaction questionnaire, again drawn from the Gould et al. (2000) study.

Data Collection

Prior to beginning data collection, the primary researcher discussed the survey with the Chief Executive Officer of Yukon Community Nursing, the employer of all of the NICs in the Territory. The senior nurse manager in charge of retention and recruitment was also present at the meeting. Both agreed that this study could provide important information regarding nurses-in-charge. A Scientists and Explorers Act License was acquired prior to data collection through Yukon Heritage Resource Unit of Tourism and Culture prior to sending out surveys.

Each package included a blank survey, a cover letter, consent form, two letter-sized envelopes, and one 8.5 by 11 inch preaddressed envelope for return of the survey and consent form. Approximately two weeks after surveys were sent out, the primary researcher phoned all NICs to remind them of the surveys and to encourage them to fill it out. Two NICs had comprehension questions related to Section 2 (Your Management Preparation) of the survey.

These questions were clarified. Two NICs indicated that they were only acting in the position for a short time and therefore had discarded the survey, feeling that they were not qualified to fill it out.

Ethical Considerations

The survey (see Appendix A), cover letter (see Appendix B) and consent form (see Appendix C) were all approved by the Lakehead Ethics Review Committee. Participants were assured that their data would be treated with the utmost confidentiality and that they would not be identified in any published material. Because there are only 13 health centres potentially participating in the study, and because post marks would identify participants, collection of the surveys was done with the help of the Yukon Registered Nurses Association (YRNA). The following steps ensured every participant's anonymity: 1.) the researcher sent every potential participant a package which contained a survey, a cover letter, and a consent form as well as two letter-sized envelopes respectively labeled "survey" and "consent form" and one 8.5 by 11 inch envelope preaddressed to the YRNA; 2.) the cover letter instructed participants to seal their completed surveys and consent forms in the appropriately labeled envelopes and to then use the larger envelope to send those two to the YRNA; 3.) the YNRA office collected the sealed letter-sized envelopes from each package and mailed those directly to the researcher. By utilizing this method the researcher could not see post marks which might have identified NICs. Confidentiality of participants was thereby assured.

Sample

The researcher is presently working in the Yukon and has primary knowledge of all of the health centres in the Territory. Surveys were sent out to each NIC based on this knowledge. There are 13 rural and remote health centres in the Yukon and all NICs were invited to participate.

Data analysis

Survey and Demographic data

Thirteen surveys were sent out, and nine surveys were returned for a 69% response rate. Data analysis has been guided by the work of Gould et al. (2001). Over three quarters (77.7 %, or n=7/9) of the NICs had been working in their positions for more than two years. Only 55% (n=5) of NICs answered the question pertaining to the number of nurses orientated per year. However, of these, 100% of respondents said that they orientate at least 5 nurses per year, and 60% (n=3/5) reported that they orientate at least 10 per year. Most NICs (77.7% or n=7/9) indicated that they were indeterminate employees, and 66.6% (n=6/9) said that they had been in their communities for five years or more. Most health centres (77.7% or n=7/9) were reported to be fully staffed. Regarding education, 55.5% (n=5/9) of respondents reported having a diploma in nursing and 44.4% (n=4/9) reported having a Bachelor's in nursing. Only 22.2% (n=2) of respondents reported having a management certificate.

Questions related to management education

Under the section "Your Management Preparation", NICs were asked to rate on a 5-point Likert scale (with 5 being "very good preparation" and 1 being "very poor preparation") the extent to which they had received preparation (courses, distance education, workshops, classes, seminars) for each of 28 activities. The summary of the responses for the Likert scale questions is found in Table 1. The number of activities for which respondents indicated they had poor (2) and very poor (1) preparation is indicated in Table 2.

Table 1. Self-rating of management activities by NICs

Management activities	Very good	Good	Adequate	Poor	Very Poor
	N (%)	N (%)	N (%)	N (%)	N (%)
1. Development of Nursing Practice	0	4 (44.4)	3 (33.3)	2 (22.2)	0
2. Maintaining Nursing Standards	2 (22.2)	3 (33.3)	2(22.2)	2 (22.2)	0
3. Developing a quality work environment	2 (22.2)	2 (22.2)	3 (33.3)	1 (11.1)	0
4. Use of audit tools	0	4 (44.4)	3 (33.3)	1 (11.1)	1 (11.1)
5. Clinical decision making	3 (33.3)	5 (55.5)	1 (11.1)	0	0
6. Using research in the workplace	2 (22.2)	1 (11.1)	2 (22.2)	2 (22.2)	2 (22.2)
7. Risk management in the work setting	2 (22.2)	2 (22.2)	4 (44.4)	1 (11.1)	0
8. Creating a safe work environment	2 (22.2)	5 (55.5)	2 (22.2)	0	0
9. Maintain personal competency	3 (33.3)	3 (33.3)	1 (11.1)	2 (22.2)	0
10. Priority setting at work	2 (22.2)	4 (44.4)	2 (22.2)	1 (11.1)	0
11. Providing clinical staff supervision	3 (33.3)	3 (33.3)	1 (11.1)	2 (22.2)	0
12. Budgeting and resource management	2 (22.2)	1 (11.1)	4 (44.4)	2 (22.2)	0
13. Working with information technology	3 (33.3)	4 (44.4)	2 (22.2)	0	0
14. Administration	2 (22.2)	3 (33.3)	3 (33.3)	1 (11.1)	0
15. Leadership	2 (22.2)	4 (44.4)	2 (22.2)	1 (11.1)	0
16. Mentorship	0	4 (44.4)	3 (33.3)	2 (22.2)	0
17. Management of staff	2 (22.2)	4 (44.4)	2 (22.2)	1 (11.1)	0
18. Provide guidance for staff	0	5 (55.5)	2 (22.2)	2 (22.2)	0
19. Liaise with multi-disciplinary team	3 (33.3)	3 (33.3)	3 (33.3)	0	0
20. Recruitment	1 (11.1)	2 (22.2)	3 (33.3)	0	3 (33.3)
21. Teaching	0	5 (55.5)	2 (22.2)	1 (11.1)	1 (11.1)
22. Emotional support of staff	1 (11.1)	4 (44.4)	2 (22.2)	1 (11.1)	1 (11.1)
23. Communication with staff	1 (11.1)	6 (66.6)	1 (11.1)	1 (11.1)	0
24. Dealing with difficult people and situations	1 (11.1)	6 (66.6)	0	2 (22.2)	0
25. Team building	3 (33.3)	2 (22.2)	3 (33.3)	1 (11.1)	0
26. Collaboration with medical staff	3 (33.3)	2 (22.2)	3 (33.3)	0	1 (11.1)
27. Disciplinary procedures	3 (37.5)	1 (12.5)	1 (12.5)	2 (25.0)	1 (12.5)
28. Performance evaluations	3 (37.5)	0	3 (37.5)	2 (25.0)	0

Table 2. Management activities for which Nurses-In-Charge reported poor (2) or very poor preparation (1)

Management activities	N	%
6. Using research in the workplace	4/9	44.4
20. Recruitment	3/9	33.3
27. Disciplinary procedures	3/8	37.5
28. Performance evaluations	2/8	25
1. Development of nursing practice	2/9	22.2
2. Maintaining nursing standards	2/9	22.2
4. Use of audit tools	2/9	22.2
9. Maintain personal competency	2/9	22.2
11. Providing clinical staff supervision	2/9	22.2
12. Budgeting and resource management	2/9	22.2
16. Mentorship	2/9	22.2
18. Provide guidance for staff	2/9	22.2
21. Teaching	2/9	22.2
22. Emotional support of staff	2/9	22.2
24. Dealing with difficult people and situations	2/9	22.2
3. Developing a quality work environment	1/9	11.1
7. Risk management in the work setting	1/9	11.1
10. Priority setting at work	1/9	11.1
14. Administration	1/9	11.1
15. Leadership	1/9	11.1
17. Management of staff	1/9	11.1
23. Communication with staff	1/9	11.1
25. Team building	1/9	11.1
26. Collaboration with medical staff	1/9	11.1

More than one third (33.3%-44.4%) of respondents felt that they had been poorly or very poorly prepared to use research in the workplace, do recruitment or enforce disciplinary procedures. It is interesting to note that more than 20% of NICs felt under prepared for nearly half (42.8% or 12/14) of the activities listed in the survey and felt they were satisfactorily prepared for only 17.8% (n=5) (see Table 3).

Table 3. Management activities for which Nurses-In-Charge reported good or very good preparation

	N	%
5. Clinical decision making	8/9	88.8
8. Creating a safe work environment	7/9	77.7
13. Working with information technology	7/9	77.7
23. Communication with staff	7/9	77.7
24. Dealing with difficult people and situations	7/9	77.7

The overall preparation of NICs for their role was examined by tabulating the number of activities that individual respondents indicated they had poor (2) or very poor (1) preparation (Table 2). Only two respondents (22.2%) had a broader need for more general management education, whereas the other 77.7% had education needs in more specific areas (see Table 4). It is noteworthy that the two respondents in need of more general management education had been in their communities for fewer than three years.

Table 4. Total number of activities for which NICs reported poor or very poor preparation

Number of activities	Number of NICs	%
0-7	7/9	77.7
8-15	2/9	22.2
16+	0/9	0

A majority of NICs (87.5% or 7/8) agreed that they would benefit from formal management education, though there was no clear preference for the modality of this education (part-time course, full-time course, distance learning, workshop, other). The biannual NIC conference, organized by the employer, is where 75% (6/8) of respondents indicated that they had received prior management training. Other venues included workshops and courses offered by the Territorial government, the union, and Health Canada. More than half (62.5% or 5/8) of NICs had received management training on some subject within the last year, and 37.5% (3/8) had received training more than one year previously.

The division of questions and answers under "Your Management Preparation" is based on Donabedian's structure-process-outcome framework; hence, questions 1-14 examine structure elements, while questions 15-28 examine process elements. A 5-point Likert scale was used to generate answers in both of these separate categories. The mean for questions 1-14 was 50.6 (out of 70) and the mean for questions 15-28 was 48.8 (out of 70).

Table 5. Comparison of respondents' answers under "Your Management Preparation" for Segment 1 and Segment 2.

Respondent	Segment 1 (questions 1-14) (out of 70)	Segment 2 (questions15-28) (out of 70)
A	62	52
B	40	36
C	44	57
D	52	54
E	65	46
F	40	39
G	56	56
H	51	61
I	46	38

Job Satisfaction

The job satisfaction questionnaire was drawn from the Gould et al. (2001) study—which, in turn, had based their questionnaire on Ward Organizational Features Scale developed by Adams, Bond and Arber (1995). Although this scale was set for clinical nurse managers on wards in hospitals, the questions seemed appropriate to health centres because they both have similar working conditions within the standardized nursing environment. An extra question involving the respondent's relationship with her/his manager was added to this scale. The job satisfaction questionnaire had eight questions, each with a possibility of five points per question (i.e., a 5-point Likert scale); this would mean a total possible score of 40 points. However, a mistake was discovered after the return of the questionnaires, and two questions (satisfaction with nursing colleagues versus satisfaction with health center nursing colleagues) were found to

be similar. Therefore, question number seven ("I am satisfied with the relationship that I have with nursing colleagues") was omitted from the score, making a score out of the 35.

The mean of the scores for the job satisfaction questionnaire is 32.1, indicating a generally high degree of job satisfaction for NICs. This is not to say that high job satisfaction was universal. Job satisfaction scores ranged from 17 to 33 and 44.4% (4/9) scored less than 25 out of 35.

Table 6. Score totals for management activities and job satisfaction.

Respondent	Score for segment 1 (out of 70)	Score for job satisfaction (out of 35)	Score for segment 2 (out of 70)	Total score for Segments 1+2 (out of 140)
A	62	33	52	114
B	40	23	36	76
C	44	33	57	101
D	52	32	54	106
E	65	35	46	111
F	40	22	39	79
G	56	17	56	112
H	51	24	61	112
I	46	26	38	84

Discussion

As previously noted, questions 1-14 in Segment 1 under "Your Management Preparation" utilize the Likert-scale format and relate to Donabedian's "structure" elements. "Structure" elements include conditions under which care is provided (material and human resources, organizational characteristics, the environment in which care takes place). Questions 15-28 in Segment 2 refer to Donabedian's "process" elements. "Process" elements include activities that constitute health care (clinical care, community development and networking, the performance of managerial duties that affect the operation and staffing of the health care center).

It is of particular interest to note that respondents "B" and "F" each have relatively low scores in both "structure" and "process" segments, while their scores for job satisfaction are among the bottom three. According to their demographic data, these two NICs have vastly

different experiences: one has been a manager for fewer than 3 years, while the other has been managing for more than 10; one has a nursing diploma, while the other has a baccalaureate in nursing. Despite this dichotomy, both of these individuals feel poorly prepared, relative to their contemporaries, for their positions as NICs and their job satisfaction may suffer because of this. Alternately, the job satisfaction scores for respondents "G" and "H" are also among the lowest of the group, yet their "structure" and "process" scores are among the highest of all the respondents.

Based on these scores, there is little indication that management preparation specific to Donabedian's areas of "structure" and "process" elements would guarantee to positively affect the overall job satisfaction of NICs in Yukon. However, all respondents with high job satisfaction scores also accorded high marks to their management preparedness. This evidence clearly suggests that education may have a place in improving job satisfaction for Yukon NICs.

Nurses-in-charge are arguably among the most important members of the health care system, and this may be especially true in northern areas like Yukon. Hughes and Kring (2005) found that "charge nurses are recognized for their communication and organizational skills, as well as their ability to delegate, think critically, troubleshoot, and remain proactive...Having a strong, consistent charge nurse can improve teamwork in nursing departments." (p. 16). Mills (2005) states that the "charge nurse is pivotal to wider organizational achievement, and there is clear evidence of the need for a formalized and structured approach to developing individuals in such roles." (p. 22).

Nearly all of the NICs surveyed indicated that they would benefit from formal management training. Only one person answered negatively: he or she felt that upcoming retirement in the next 12 months made management training personally irrelevant. However, this respondent did add that his or her replacement "would definitely need management training". Many authors agree that NIC continuing education is crucial to organizational efficiency and job satisfaction among staff. Levett-Jones (2005) citing McFadzean (1998) states

that "when staff development is not made an administrative priority the organization will experience an increase in the number of critical incidents and problems that are caused by employees who do not know what to do or how to do it well. When nurses are knowledgeable and flexible in their skill base, they are able to change, adapt, and be proactive in their contributions." (p. 232). She goes on to say that "...environments that are conducive to learning and development will improve staff satisfaction, staff retention, and quality of care..." (Levett-Jones, 2005, p. 232).

There were several qualitative comments made by Yukon NICs which speak to their frustration with the current nursing shortage and their own heavy workloads. One NIC said "because of the workload and--at times--staff shortages, there is little time for management as a lot of time is spent doing clinical work/patient care". This corresponds with the findings of Maslove and Fooks (2004) in their document *Our health, our future: Creating quality workplaces for Canadian nurses* which states "...it was generally acknowledged that nurse managers are stretched and that growing administrative duties are resulting in a reduction of time for clinical duties to a level that is seen as inadequate or problematic." (p. 11). Andrews and Dzigielewski (2005) echo this finding, saying

> "...the workload experienced by nurse managers may ... influence their ability to exercise all of the components of the manager's role fully. This would in turn suggest that in the light of heavy workloads, concerns about employee job satisfaction may not constitute a high priority, as the nurse manager balances multiple job responsibilities." (p. 293).

Despite the relatively high job satisfaction among Yukon NICs and the seemingly good educational support, there are comments that hint at rising frustration. One NIC states that "the majority of what I learned about management, I learned elsewhere, i.e. not from [the employer].

I feel sorry for anyone taking on an NIC position [in Yukon] because orientation, support and training are not valued. There seems to be a 'sink or swim' attitude".

Noyes' (2002) commentary seems to be a direct response to this dissatisfaction:

> "Managers are asked to solve problems and perform management tasks for which they do not have the knowledge, experience, or resources to succeed. Our managers want to be successful and help their organizations but they are set up to fail. Critical to addressing this problem is a comprehensive and ongoing management education and development program." (p. 26).

Turnover in the health centres was also a concern. One nurse states that "Last summer I had 3 relief nurses in a 3 month period. I refused to have a 4th, preferring to work on my own ... the stress of constant orientation, close supervision, last minute staffing changes, dealing with performance issues ... is too much". Another NIC cites "lack of staffing" as a problem, since "you never know if you are going to get your breaks", and the difficulty with the "expectation [of] working alone" in a two-nurse station.

Three quarters of the respondents said that at least some of their management education was as a result of the biannual nurse-in-charge conferences. Despite this, there are a high number of activities for which at least 20% of NICs feel poorly or very poorly prepared (see Table 2), including disciplinary procedures, performance evaluation and emotional support of staff. Clearly, future NIC conferences could add value by providing nurse managers with training in these and other activities. We may further conclude that input from NICs regarding the content of the conferences and/or affording NICs opportunities to voice their lack of knowledge in any particular area(s) would likely facilitate conferences of greater usefulness to attending NICs. However this weighty caveat must be included: such *useful* NIC conferences reasonably hinge on having instructors who are themselves educated in management skills and competent to teach those to others.

Significance

In the short term, educational programs for established NICs should be initiated according to their learning needs. The result of these programs would be better educated and more effective NICs whose increased job confidence would lead toward an improved workplace for both nurses and support staff. This could result in increased nurse retention in the long term and eventually improved health outcomes for patients in northern populations.

A government endowment could be used to set up an ongoing education and training program for current and new NICs in their management roles. Eventually, it must be recognized that northern NICs, in order to be most effective, must concentrate on team building, collaboration with the community, and setting health center priorities among many other management tasks. Since the foremost role of the NIC in many Yukon communities is currently understood to be that of a clinical nurse rather than a manager, the NIC job description would need to change to allow a reduction of one-to-one patient care while increasing the allotment of management-specific hours. Of course numbers of nursing staff may need to increase for redefinition of the NIC role to be truly possible.

Retention of a stable rotating cadre of nurses who know and are known by their communities is achievable if a skilled NIC workforce is in place. This could reduce turnover and improve communication and cooperation between health center and community, which should result in increased collaborative programs and improved overall health for the northern population. Some of the NICs who enjoy this success and recognize the importance of management training would become strong upper-level administrators to advocate for future NICs and the continuation of educational programs.

Limitations

This is a small pilot study and cannot necessarily be generalized to nurse populations outside of Yukon.

"As a general rule, the sample size should be at least twice the number of statements desired in the final scale..."(Neutens & Rubinson, 2002, p. 121). Because of the small sample size, statistical analysis to provide statistically significant results was not attempted.

Summary

This paper provides guidance concerning the training needs of NICs and offers Regional Nursing Managers and the Ministry of Health and Long Term Care Yukon Territorial Government some direction in educational programming. With proper management training, NICs will become more effective in their positions and those augmented skills will potentially improve staff retention.

Nurses have provided health care in remote northern communities in Canada for decades. However, with worldwide nursing shortages, it will become increasingly difficult to attract and retain nurses to these challenging communities. The best hope for ensuring and improving the health of Canada's northern populations is the creation of truly excellent working conditions. A nurse-in-charge is often the crucial factor which divides staff nurses who are content to stay in an isolated location from those who will leave and never return to the north. It is through the nurturing and education of our nurses-in-charge, that we have a chance of improving nurse retention, decreasing turnover, improving continuity of care in northern communities, and enabling those populations to be healthy.

References

Adams, A., Bond, S. & Arber, S. (1995). Development and validation of scales to measure organizational features of acute hospital wards. International Journal of Nursing Studies, 32(6), pp. 612-627.

Andrews, D.R. & Dziegielewski, S.F. (2005). The nurse manager: Job satisfaction, the nursing shortage and retention. *Journal of Nursing Management*, 13, 286-295.

Andrews, M. E., Stewart, N. J., Pitblado, J. R., Morgan, D. G., Forbes, D. & D'Arcy, C. (2005). Registered nurses working alone in rural and remote Canada. *Canadian Journal of Nursing Research, 37*(1), 14-33.

Anthony, M. K., Standing, T. S., Glick, J., Duffy, M., Paschall, F., Sauer, M., et al. (2005, March). Leadership and nurse retention: The pivotal role of nurse managers. *JONA, 35*(3), 146-155.

Baumann, A., O'Brian-Pallas, L., Armstrong-Stassen, M., Blythe, J., Bourbonnais, R., Cameron, S., et al. (2001). *Commitment and care: The benefits of a healthy workplace for nurses, their patients and the system.* Toronto: Canadian Health Services Research Foundation and The Change Foundation.

Boyle, D. Bott, M., Hansen, H., Woods, C. & Taunto, R. (1999, November). Managers' leadership and critical care nurses' intent to stay. *American Journal of Critical Care, 8*(6),361-371.

Canadian Nurses Association. (2002, June). *Planning for the future: Nursing human resource projections.* Ottawa: Canadian Nurses Association.

Canitz, B. (1991). Health care in crisis: Understanding nursing turnover in northern Canada. *Circumpolar Health 90: Proceedings of the 8th International Congress on Circumpolar Health.* Manitoba: The University of Manitoba Press.

Connelly, L. M., Yoder, L. H. & Miner-Williams, D. (2000, May). Hidden charges. *Nursing Management, 31*(5), 27-28.

Donabedian, A. & Bashshur, R. (Ed.). (2003). *An introduction to quality assurance in health care.* New York: Oxford University Press.

Fletcher, M. (2001, August). More shortages: Need acute for nurses in remote, northern communities and on reserves. *The Canadian Nurse, 97*(7), p. 12.

Flynn, L. (2005, June). The importance of work environment: Evidence-based strategies for enhancing nurse retention. *Home Healthcare Nurse, 23*(6), 366-371.

Force, M. (2005, July/August). The relationship between effective nurse managers and nurse retention. *JONA, 35*(7/8), 336-341.

Gould, D., Kelly, D., Goldstone, L. & Maidwell, A. (2001). The changing training needs of clinical nurse managers: Exploring issues for continuing professional development. *Journal of Advanced Nursing,* 34(1), 7-17.

Hanvey, L., (September, 2005). *Rural nursing practice in Canada: A discussion paper (Draft 3).* Retrieved on April 6, 2007 from http://www.carrn.com/files/Rural-Nursing-discussion-paper_Draft3-Sept%2005-1.pdf

Hughes, C. & Kring, D. (2005). Consistent charge nurses improve teamwork. *Nursing Management.* 36(10), p.16.

Laschinger, H. K. S., Wong, C., McMahon, L. & Kaufmann, C. (1999, May). Leader behaviour impact on staff nurse empowerment, job tension, and work effectiveness. *Journal of Nursing Administration, 29*(5), 28-39.

Levett-Jones, T. L. (Sept/Oct 2005). Continuing education for nurses: A necessity or a nicety? *The Journal of Continuing Education in Nursing, 36*(5), 229-233.

MacLeod, M., Kulig, J., Stewart, N. & Pitblado, R. (September 15, 2004). *Nursing practice in rural and remote Canada.* Canadian Health Services Research Foundation.

Manion, J. (2004, April). Supporting nurse managers in creating a culture of retention. *Nurse Leader, 3*(2), 52-6.

Maslove, L. & Fooks, C. (2004, July). A progress report on implementing the final report of the Canadian Nursing Advisory Committee. *Our Health, Our Future: Creating Quality Workplaces for Canadian Nurses.* Ottawa: Canadian Policy Research Networks.

Mills, C. (July 2005). Developing the ability to lead. *Nursing Management, 12*(4), 20-23.

Minore, B., Boone, M., Katt, M., Kinch, P., Birch, S. & Mushquash, C. (2005). The effects of nursing turnover on continuity of care in isolated First Nation communities. *Canadian Journal of Nursing Research, 37*(1), 86-100.

Neutens, J.J. & Rubinson, L. (2002). *Research techniques for the health sciences (3rd Ed.).* San Francisco: Benjamin Cummings.

Noyes, B. J. (2002, January). Midlevel management education. *Journal of Nursing Administration, 32*(1), 25-26.

Office of Nursing Policy. (2005, May). Phase I Final Report. *Building the future: An integrated strategy for nursing human resources in Canada.* Ottawa: Health Canada.

Parsons, M. L. & Stonestreet, J. (2003, May/Jun). Factors that contribute to nurse manager retention. *Nursing Economics, 21*(3), 120-126.

Sherman, R. O. (2005, May/Jun). Don't forget our charge nurses. *Nursing Economics, 23*(3), 125-143.

Silverman, B. E., Goodine, W. M., Ladouceur, M. G. & Quinn, J. (Jan/Feb 2001). Learning needs of nurses working in Canada's First Nations communities and hospitals. *The Journal of Continuing Education in Nursing, 32*(1), 38-47.

Tarlier, D. S., Johnson, J. L. & Whyte, N. B. (2003, May/Jun). Voices from the wilderness: An interpretive study describing the role and practice of outpost nurses. *Canadian Journal of Public Health, 94*(3), 180-184.

Tilleczek, K., Pong, R. & Caty, S. (2005). Innovations and issues in the delivery of continuing education to nurse practitioners in rural and northern communities. *Canadian Journal of Nursing Research, 37*(1), 146-162.

Tyler, L. & Riggs, J. (September 8, 2000). *Survey of nurses in isolated First Nations communities: Recruitment and retention issues.* Ottawa: Aboriginal Nurses Association of Canada.

APPENDIX A

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Survey for Northern Nurses-In-Charge

Section 1: Personal Information

Please respond to each question or circle the answer which most applies.

1. Have you been a Nurse In Charge in the Yukon for more than 2 years?
a. Yes (go on to question 2)
b. No (skip to question 3)

2. You have been a NIC in the Yukon for more than 2 years. How many nurses, on average, do your orientate per year?

3. What is your current employment status:
a. Indeterminate
b. Contract employee
c. Auxiliary on-call

4. How long have you been in your present community?
a. Less than 6 months
b. 6 months – 1 year
c. 1-3 years
d. Number, if more than 3 years: _____

5. What is the approximate population of the community in which you are currently working?
a. Fewer than 499
b. Between 500 and 999
c. Between 1000 and 3000

6. Is the health center/nursing station at which you are working currently staffed with the maximum number of allotted nurses (ie. fully staffed)?
a. Yes
b. No

7. Which of the following do you hold? (Please circle all that apply)
a. Diploma in nursing
b. Management certificate: Please specify: _____
c. Bachelor's degree: Please specify area: _____
d. Masters degree: Please specify area: _____
e. Other: _____

Section 2: Your Management Preparation

Questions 1-33 are activities in which nurse managers say they engage. Please indicate the extent to which you have received preparation (courses, distance education, workshops, classes, seminars) for each of them.

Please circle the answer which most applies:
5: Very good preparation
1: Very poor preparation

1.

Development of Nursing Practice				
5	4	3	2	1

2.

Maintaining Nursing Standards				
5	4	3	2	1

3.

Developing a quality work environment				
5	4	3	2	1

4.

Use of audit tools				
5	4	3	2	1

5.

Clinical decision making				
5	4	3	2	1

6.

Using research in the workplace				
5	4	3	2	1

7.

Risk management in the work setting				
5	4	3	2	1

8.

Creating a safe work environment				
5	4	3	2	1

Please circle the answer which most applies:
5: Very good preparation
1: Very poor preparation

9.

Maintain personal competency				
5	4	3	2	1

10.

Priority setting at work				
5	4	3	2	1

11.

Providing clinical staff supervision				
5	4	3	2	1

12.

Budgeting and resource management				
5	4	3	2	1

13.

Working with information technology, e.g. computing				
5	4	3	2	1

14.

Administration				
5	4	3	2	1

15.

Leadership				
5	4	3	2	1

16.

Mentorship				
5	4	3	2	1

17.

Management of staff				
5	4	3	2	1

Please circle the answer which most applies:
5: Very good preparation
1: Very poor preparation

18.

Provide guidance for staff				
5	4	3	2	1

19.

Liaise with multi-disciplinary team				
5	4	3	2	1

20.

Recruitment				
5	4	3	2	1

21.

Teaching				
5	4	3	2	1

22.

Emotional support of staff				
5	4	3	2	1

23.

Communication with staff				
5	4	3	2	1

24.

Dealing with difficult people and situations				
5	4	3	2	1

25.

Team building				
5	4	3	2	1

26.

Collaboration with medical staff				
5	4	3	2	1

Please circle the answer which most applies:
5: Very good preparation
1: Very poor preparation

27.

Disciplinary procedures				
5	4	3	2	1

28.

Performance evaluations				
5	4	3	2	1

29. Are there any other areas **where *you have* received** formal training/education that are *not* listed?

30. Do you think that you would benefit from formal management training/education?
a. Yes (go on to question 31)
b. No (skip to question 32)

31. What would be the most appropriate method for you to receive this training/preparation?
a. Part-time course
b. Full-time course
c. Distance learning
d. Workshop
e. Other – please specify: _____

32. When did you last receive training/education on any management subject?
a. Within the last 6 months
b. Within the last year
c. More than 1 year ago
d. More than 5 years ago

33. If you have received management training/preparation, where did you receive this training (ie. teleconference session, NIC conference, on-line training, in-service at health center, etc.)?

Section 3 Job Satisfaction

This section is about your current level of satisfaction with your role as nurse-in-charge. Please circle the answer which most applies.

1.

This job has not lived up to my expectations.				
Strongly agree	Agree	Don't know	Disagree	Strongly disagree

2.

Knowing what I do now, I would apply for this job again.				
Strongly agree	Agree	Don't know	Disagree	Strongly disagree

3.

I often feel like resigning.				
Strongly agree	Agree	Don't know	Disagree	Strongly disagree

4.

I know that I am doing a worthwhile job.				
Strongly agree	Agree	Don't know	Disagree	Strongly disagree

5.

I am satisfied with the relationship I have with my health center nursing colleagues.				
Strongly agree	Agree	Don't know	Disagree	Strongly disagree

6.

I worry that this job is undermining my health.				
Strongly agree	Agree	Don't know	Disagree	Strongly disagree

7.

I am satisfied with the relationship I have with nursing colleagues.				
Strongly agree	Agree	Don't know	Disagree	Strongly disagree

8.

I am satisfied with the relationship I have with my supervisor.				
Strongly agree	Agree	Don't know	Disagree	Strongly disagree

9. Is there anything further concerning yourself, your education, job satisfaction or any other subject that you would like to add? If necessary, please use the back of this page.

Thank you for participating! Please seal this questionnaire and the consent form into the separate small envelopes provided, then seal the small envelopes into the large envelope provided and send the large envelope to the YRNA.

Survey adapted from this reference:

Gould, D., Kelly, D., Goldstone, L., & Maidwell, A. (2001). The changing training needs of clinical nurse managers: Exploring issues for continuing professional development. *Journal of Advanced Nursing, 34*(1), 7-17.

APPENDIX B

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January, 2007

Dear Nurse-In-Charge,

I would like to invite you to participate in a pilot study investigating the management education experience and job satisfaction of Nurses-In-Charge (NICs) in the Yukon. This study is being conducted through Lakehead University as part of my Master's of Public Health (MPH) Program with the assistance and guidance of Margaret Boone, BScN, MS, and Karen Poole, RN, Med, MA (Nursing). Although some data has been collected about nurses in the north, very little is known specifically about NICs. I feel that research pertaining specifically to NICs in northern isolated areas is important to best support them.

The title of the study I am conducting is *Management Education of Nurses in Charge in the Yukon*. The intent is to discover what management education you as an NIC have received, what education you would like to receive, and what your current job satisfaction is. In order to do this, a questionnaire has been developed which will take you approximately 15-20 minutes to complete.

Since I know that the Yukon is a small place, and the nursing community is even smaller, steps have been taken to ensure confidentiality. Your signed consent letter and completed survey will be sent to the YRNA office, not directly to me. The YRNA staff will collect the surveys, but not read them. Once all of the surveys have been completed and/or an appropriate amount of time has elapsed, the signed consents and completed surveys will be sent to me so that no cross referencing with regards to location and survey can be done.

Your participation in this research is entirely voluntary and you may decline to answer any question. You may withdraw from this study at any time. Anonymity will be ensured, and any personal quotes will not be attributed to any specific person.

The results of the surveys will hopefully help the Yukon Territorial Government to guide management education and support for Nurses-In-Charge. The final write up and data analysis will be complete by March 2007, and you can contact me at the address below if you wish to receive a copy.

All information collected from individual questionnaires will be shared *only* among the participating researchers and will be securely stored at Lakehead University for 7 years. A final report incorporating the analyzed data will be released, however no individual will be named or identified in any way in material published as a result of this study.

If you have any questions regarding this study, please do not hesitate to contact me or my supervisor, Karen Poole, at the following addresses:

Anne Dietrich Bragg
Box 175
Dawson City, YT Y0B 1G0
2xs@canada.com
867 993 4444 (w)
867 993 5665 (h)

Karen Poole, Director
School of Nursing, Lakehead University
955 Oliver Road, ThunderBay, ON P7B 5E1
karen.poole@lakeheadu.ca
807 343 8439 (w)

Sincerely,

Anne Dietrich Bragg, RN, BScN

APPENDIX C

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Consent form

I have read the cover letter for the study entitled *Management Education of Nurses in Charge in the Yukon* and I agree to participate.

I understand the following:

1. The nature of the study, its purpose and procedures.
2. I am a volunteer and can withdraw from the study without penalty at any time.
3. There is no apparent risk of physical or psychological harm.
4. The data I provide will be securely stored at Lakehead University for seven years.
5. I will receive a summary of the project, upon request, following the completion of the project.
6. I will not be named, or identified in any way in any materials published as a result of this study.

_____ _____

Signature of Participant Date