

WHO STAYS IN RURAL PRACTICE?: AN INTERNATIONAL REVIEW OF THE LITERATURE ON FACTORS INFLUENCING RURAL NURSE RETENTION

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ABSTRACT

This paper explores factors that influence rural nurse retention. A comprehensive literature review was used to highlight, examine and evaluate studies that identify factors, including personal characteristics and experiences, in relation to rural nurse retention and job satisfaction. The findings from the literature review suggest rural nurse retention is influenced by level of job satisfaction. The findings also suggest factors, including personal characteristics and experiences, influence job satisfaction. The literature review findings further indicate factors, including personal characteristics and experiences, affect the duration of rural nurse practice. The current rural nursing retention strategies in British Columbia are explored. Based on the findings from the literature review, detailed recommendations for future research and recommendations for rural nursing retention strategies are made. The concepts identified inform health human resources retention strategies, specifically nursing retention in rural areas.

INTRODUCTION

Understanding health human resources is essential to sustaining health care services. The World Health Organization (WHO) states the need for health care professionals has grown world-wide, and the quality of health care services heavily depends on the ability to meet that need (Poz, Kinfu, Dräger & Kunjumen, 2006). The Health Council of Canada publicly announced the most pressing challenge now facing Canada's health care system is the health human resources requirement (Decter, 2005). The Canadian Institutes of Health Research's Institute of Health Services and Policy Research stated in one of their latest national consultation reports, that one of Canada's top nationwide research priorities is to learn more about the country's health human resources, and to develop effective recruitment and retention strategies (Gagnon & Ménard, 2001). The need to understand health human resources has become increasingly evident at the international, national and provincial levels.

Nurses are the largest health human resource group working in Canada, with over 232,000 registered nurses working throughout the nation (Pong & Russel, 2003). Nurses are often considered the foundation of the Canadian health care system, and understanding nurse retention is necessary to the analysis of health care service quality, efficiency and sustainability. The unequal distribution of the nursing workforce between rural and urban areas is well documented (MacLeod et al., 2004). The WHO states over 60% of the world's nurses work in urban areas, suggesting a significantly unequal distribution of nursing service in rural areas (Poz et al., 2006). Assessments of Canada's nursing workforce show only 18% of registered nurses are serving the

22% of Canadians who live in rural areas (MacLeod et al., 2004). It is also more difficult to recruit nurses in rural regions. A study at the University of Colorado suggests it takes nearly 60% longer to recruit nurses to rural facilities than to urban facilities (MacPhee & Scott, 2002). Despite the importance of rural nurses to the health care system and the evident disparities, there has still been little research that explores the retention of rural nurses (MacLeod et al., 2004).

RESEARCH QUESTION & OBJECTIVES

This paper explores factors that influence rural nurse retention. The current study poses the following research question: *What personal factors, such as personal characteristics and experiences, are related to rural nursing retention and job satisfaction?* This paper hypothesizes rural nurse retention is influenced by level of job satisfaction. This paper also hypothesizes factors, including personal characteristics and experiences, influence job satisfaction. Furthermore, it is hypothesized that factors, including personal characteristics and experiences, affect the duration of rural nurse practice. The current rural nursing retention strategies in British Columbia could be improved by addressing the factors that influence job satisfaction and retention. This paper will highlight, examine and evaluate the literature that identifies factors, including personal characteristics and experiences, in relation to rural nurse retention and job satisfaction. Based on the findings, detailed recommendations for future research and recommendations for rural nursing retention strategies will be made. The concepts identified will inform health human resources retention strategies, specifically nursing retention in rural British Columbia.

METHODS

To explore the hypotheses, a literature search using Google Scholar, Pub Med and Ovid was conducted using the search terms: *rural, nurse*, retention, health, job satisfaction*. A search using the Canadian Nursing Association and Center for Rural and Northern Health Research websites search engines were also completed using similar keywords. Additional relevant studies were identified using the bibliographies of those articles found in the literature searches. The studies included in this review were conducted between 1996 and 2006; the majority of studies are rural with a focus on Canadian research.

CURRENT LITERATURE: RURAL NURSING PRACTICE

Rural nursing practice is characterized by a variety of challenges influencing nurse retention. Researchers, Pong and Russel (2003) at the Centre for Rural and Northern Health Research, found rural health professionals generally have difficulty obtaining full-time, permanent positions because rural areas often do not have the population base to fund full-time employees. Pong and Russel (2003) note nurses experience an increased scope of practice in rural areas because they are sometimes one of the only health care professionals in the area. The researchers note the shortage of other health professionals in rural areas make it hard for nurses to get the tools they need, like diagnostic tests (Pong & Russel, 2003). According to the researchers, nurses can not always deal with the increased variety and responsibility of rural practice, affecting their decision to stay in rural sites (Pong & Russel, 2003). According to Pong and Russel (2003), further pressures on the rural nursing workforce arise with the looming loss of “baby boomer” nurses to retirement, the dwindling number of Canadian nursing graduates, and the increasing educational requirements for registered nurses. The information from this

study suggests nursing practice in rural Canada has added complexities to consider in assessing job satisfaction and duration of practice.

Bushy (2002) assessed rural nursing workforces in Canada, Australia and the United States. Bushy (2002) found similar challenges for rural nursing workforces despite regional differences. Rural nurses in all three countries are concerned about the recruitment, education and retention of rural nurses. They express concerns about the growing population of elderly in rural areas, while the younger generation move away to find work in urban areas (Bushy, 2002). Nurses from all countries are concerned with the growing number of rural nurses retiring. Other global trends, such as the shift to community care and increasing equitable health care access for rural people, also amplify the need for rural nurses (Bushy, 2002).

Bushy notes “rural lifestyle” affects nurses in all three countries. Bushy (2002) explains rural nursing blurs the boundaries between personal and professional life. Rural nurses in each country express concern about decreased anonymity and confidentiality in small towns. Bushy (2002) suggests nurses who work in rural areas are in high public visibility, and this often extends to their family members. For example, many of the study participants feel they are professionally evaluated by the community, based on how their children behave or what their yards look like. Because the boundaries between personal and professional life are broken down in rural nursing, both professional and personal factors need to be addressed when assessing rural nurse retention (MacLeod et al., 2004).

JOB SATISFACTION AND RURAL NURSE RETENTION

The relationship between job satisfaction and the decision to stay in rural nursing is well documented in the literature (Stratton, Dunkin, Juhl, & Geller, 1995). When rural nurses are not satisfied with their job, they are more likely to leave their position. Using the data from a nationwide survey of Canadian rural nurses, Macleod and her colleagues (2004) found higher perceived stress and lower job satisfaction are central in the decision to leave rural practice. Understanding the relationship between job satisfaction and duration of practice is essential to the successful creation of effective rural nurse retention strategies.

Pan, Dunkin, Muus, Harris and Geller (1995) used a logit analysis of international survey data of 2, 509 rural registered nurses. Results suggest job satisfaction is the most influential predictor of staying in rural practice (Pan et al., 1995). Meanwhile, other studies show rural nurses have lower levels of job satisfaction than their urban counterparts. Ndiwane (2003) surveyed 150 rural and urban American nurses. According to the results, rural nurses are less satisfied with their jobs, their pay and their opportunities for promotion. Similarly, Ndiwane (1999) surveyed nurses in Cameroon, Africa and found nurses who are less satisfied with their job are working in rural settings. Overall, the current body of literature suggests features of rural practice influence job satisfaction, while job satisfaction influences duration of rural practice.

FACTORS THAT INFLUENCE JOB SATISFACTION

Researchers compared rural and urban nurses in New York regions, and also found rural nurses have lower job satisfaction (Ingersoll, Olsan, Drew-Cates, DeVinney & Davies, 2002). Ingersoll and his colleagues (2002) used a random-sample survey to ask both rural and urban nurses ($N=1,853$) about job satisfaction, organizational commitment, demographics, and future career plans. When compared to urban nurses, rural nurses were more likely to be planning to leave their practice within the next year, and less satisfied with their job (Ingersoll et al., 2002). However, urban nurses were more likely than rural nurses to be planning to leave their job in five

years, and more likely to have lower organizational commitment (Ingersoll et al., 2002). These findings suggest once nurses have spent a significant amount of time in a rural community, other factors can overcome the influences of job satisfaction on retention.

Ingersoll and colleagues (2002) explored the factors interrelated with job satisfaction and retention by conducting a correlational analysis on the demographic and job satisfaction data. The researchers found nurses' with higher levels of education are more satisfied with their job (Ingersoll et al., 2002). Nurses who are in educator roles or management roles are more satisfied with their job, while part-time and per diem nurses are less satisfied (Ingersoll et al., 2002). There is a strong positive correlation between job satisfaction and professional autonomy, organizational commitment, pay scale and task requirements (Ingersoll et al., 2002). Furthermore, the researchers found nurses who are over 50 years of age reported higher levels of job satisfaction, and intent to stay in comparison to younger nurses (Ingersoll et al., 2002). Ingersoll and colleagues (2002) suggest the reasons for older nurses reporting higher levels of job satisfaction are still unknown. Based on other findings from this study, one may suggest continued education, management roles, educator roles, professional autonomy, higher pay scale and variation in task requirements could be more accessible to experienced nurses, who in turn are more likely to be older.

Ingersoll and colleagues (2002) acknowledged the limitations of a 46% response rate and that the sample only included registered nurses, limiting the generalizability of the study. Future research needs to aim for higher response rates, and use a variety of nursing professions to increase generalizability. Nonetheless, this study lends valuable insight to rural nurse job satisfaction and retention. Based on the findings from this study, retention strategies need to support nurses in professional development, specialty training, and provide opportunities for nurses to take on educator roles. An example of increasing access to professional development or specialty training could be increasing distance education courses in nursing programs. The findings from this study could also suggest retention strategies need to consider supplementing part-time employment, especially in rural areas. For example, if a rural community does not have the population base to support a full-time nurse, salaries need to increase and/or other part-time employment needs to be arranged. An interpretation of the findings could suggest increasing professional autonomy, and giving nurses a variety of tasks would increase job satisfaction and duration of rural practice. Furthermore, although the reasons for older nurses reporting higher rates of job satisfaction are unknown (Ingersoll et al., 2002), the results suggest decision makers need to recognize what retention strategies may be suitable for one age group, may not be as suitable for another (Pan et al., 1995).

Chaboyer and colleagues (1999) surveyed 135 rural nurses in central Australia to ask about influences on job satisfaction. Chaboyer, Williams, Corkill, and Creamer (1999) found higher job satisfaction if nurses have a variety of tasks in their job, peer feedback, and collaborative teamwork. The authors suggest the effects of making nurses part of a health care team are often underestimated (Chaboyer et al., 1999). An interpretation of these findings could suggest retention strategies for rural nurses need to include team building initiatives, and plans for rural peer support networks. Including rural nurses in an interdisciplinary health care team, or creating an on-line support group for rural nurses, could be considered to improve job satisfaction and lengthen duration of rural practice.

An earlier study at the University of Kentucky used a multi-state survey of registered nurses serving three different rural populations (Stratton et al., 1995). Like Ingersoll et al. (2002), the researchers surveyed registered nurses only ($N=1,647$), and had less than half of the target sample respond (40.3%). The analysis shows a positive relationship between tuition reimbursement and job satisfaction (Stratton et al., 1995). Researchers found rural nurses are

more satisfied with their job if daycare facilities are provided by the employer (Stratton et al., 1995). The findings highlight the need for retention strategies to continue tuition reimbursement, and other education incentives for rural nurses. The findings also suggest decision makers need to consider family life when creating retention strategies, and include supports for rural nurses with children.

FACTORS INFLUENCING DURATION OF RURAL PRACTICE

Hegney, McCarthy, Rogers-Clark and Gorman (2002) conducted a cross-sectional survey of 146 registered and enrolled nurses in rural Australia. The survey asked nurses to rank 91 separate items on level of importance in relation to the decision to remain in rural practice. The results suggest job satisfaction and being part of a professional team are the most important predictors of remaining in rural practice (Hegney et al., 2002). The nurses who remain in rural practice generally appreciate “rural lifestyle”, feel a sense of belonging in the community, and work in a family friendly environment (Hegney et al., 2002). Like other past studies, the findings suggest professional support networks, managerial support, professional autonomy, maintenance of clinical skills and peer recognition are very important in the decision to stay (Hegney et al., 2002). This study provides further evidence of specific influences on both job satisfaction and retention already discussed in this paper. The results of this study raise questions about what constitutes “rural lifestyle”, and identifies a significant gap in the literature. In addition, the study introduces the importance of community satisfaction in the decision to stay in rural practice.

Researchers, Henderson-Betkus and MacLeod (2004) recently surveyed 124 public health nurses in rural, northern British Columbia. The survey analysis indicates job satisfaction is most influenced by professional status, professional interactions and autonomy (Henderson-Betkus & MacLeod, 2004). However, the researchers note job satisfaction for rural nurses occurs *within* the context of community satisfaction (see Figure 1). Henderson-Betkus and MacLeod (2004) suggest rural nurses can only be satisfied with their job if they are satisfied with their community. Rural nurses in the study suggest the level of friendliness in the community, number of friends in the community, and level of trust they feel toward the community, all influence community satisfaction (Henderson-Betkus & MacLeod, 2004). Similar to Hegney, McCarthy, Rogers-Clark, and Gorman (2002a), this study indicates having friends living in rural communities, a sense of belonging in the community, and having access to social networks are important predictors of retention. Henderson-Betkus and MacLeod (2004) note rural nurses report social/recreational opportunities, safety, and quality of schools increases community satisfaction as well (Henderson-Betkus & MacLeod, 2004). The findings suggest loss of anonymity, and work-related questions outside of work, decrease community satisfaction (Henderson-Betkus & MacLeod, 2004).

Small sample size and only using public health nurses in the sample limited the generalizability of this study. A similar study using a larger sample and a variety of nursing professions is recommended. However, these findings could have major implications for rural nurse retention strategies, specifically in British Columbia. If job satisfaction occurs within community satisfaction, retention strategies need to pay more attention to community integration. To help nurses become more satisfied with rural communities, retention strategies could promote community events and recreational activities. Getting rural nurses more involved in community activities could help nurses find friends, build trust in the community, and increase their community satisfaction. Furthermore, retention initiatives need to involve community members, especially other health care professionals, to help create both social and professional

support networks. Community development, including quality education opportunities and community safety initiatives, could also have a positive effect on rural nurse retention.

PERSONAL CHARACTERISTICS AND EXPERIENCES

Henderson-Betkus and MacLeod (2004) found the relationship between job satisfaction, community satisfaction, and the decision to leave or stay is interrupted by a number of “filter factors”. The researchers found that even if rural nurses are satisfied with their job and their community, a collection of personal characteristics and experiences, or “filter factors”, still dictate the decision to remain in rural practice (see Figure 1). Personal circumstances act as “filter factors”, and include retirement, financial needs, family needs, family commitments, and professional growth (Henderson-Betkus & MacLeod, 2004). Nearing retirement influences nurses to stay in their current position for security; however, if their spouse is retiring, the nurse is more likely to leave (Henderson-Betkus & MacLeod, 2004). Financial needs influence nurses to stay, but also influences nurses to leave if their spouse cannot find employment (Henderson-Betkus & MacLeod, 2004). Family needs and commitments can influence nurses to stay, but sometimes influence them to leave if their family lives somewhere else (Henderson-Betkus & MacLeod, 2004). Henderson-Betkus and MacLeod (2004) noted nurses who have children or spouses, who wanted post-secondary education not available in the community, are more likely to leave. This has important implications for rural nursing retention strategies. Retention strategies need to increase professional development and educational opportunities for the rural nurses and their families. An example of this could be to improve access to post-secondary education by introducing more distance learning options, or offer scholarships for rural nurses’ family members. Furthermore, if rural nurses have family living somewhere else, retention strategies may include videoconferencing for family visits.

Opportunities, like shifts in the economy, real-estate, job availability for self and spouse, as well as loss of benefits, act as “filter factors” (Henderson-Betkus & MacLeod, 2004). Researchers note rural nurses are more likely to leave the community if there are drops in real-estate prices, or other economic misfortunes. Henderson-Betkus and MacLeod (2004) show rural nurses are more likely to leave a community if the primary industry is suffering. The researchers found spouses’ employment is a major predictor of retention, and suggest retention may be more dependent on spousal employment than on personal job or community satisfaction (Henderson-Betkus & MacLeod, 2004). Based on these findings, future retention strategies should include job match initiatives or professional development programs for spouses.

Loss of benefits, another opportunistic factor, describes the loss of seniority and other employment benefits if a nurse transfers to another community. Henderson-Betkus and MacLeod (2004) found nurses stay in rural communities, even if they are not satisfied with the job or the community, because they do not want to lose employment benefits (Henderson-Betkus & MacLeod, 2004). In British Columbia, the nurses’ union Provincial Collective Agreement (2006) does not allow nurses to carry their seniority or benefits from one community to another, unless they have been displaced or transferred. Although nurses’ pension contributions can usually remain in the same pension plan, each change of employment that incurs triggers a break in service or a change in salary, which can affect the nurses pension in some way (M. Henderson-Betkus, personal communication, March 28, 2007). Changes in pension and loss of benefits deter nurses from moving (M. Henderson-Betkus, personal communication, March 28, 2007). Threatening nurses with loss of benefits for moving from one community to another, may it be an urban facility to a rural facility or vice versa, could create negative feelings and limit experiences. Furthermore, loss of benefits could deter new, young nurses from staying more than

a couple of years in a rural community because of the commitment. Nurses could be more inclined to try rural practice if they knew they could carry their benefits to another community. Based on this interpretation, retention strategies need to address the portability of benefits outlined in the Provincial Collective Agreement (2006). Retention strategies could create an employment network between provincial hospitals, giving nurses the opportunity to transfer their employment status and benefits among communities.

Demographic factors, including place of nursing education, spouses' occupation, and age act as "filter factors" (Henderson-Betkus & MacLeod, 2004). The majority of nurses who participated in this study were married, and were working in a small town because of their spouses' job (Henderson-Betkus & MacLeod, 2004). The findings from the study suggest rural nurses, who are satisfied with their job and community, would leave a rural community if their spouse could not find employment in the area (Henderson-Betkus & MacLeod, 2004). Similar to the Ingersoll et al. (2002) study, Henderson-Betkus and MacLeod (2004) note older nurses are more likely to remain in rural practice, regardless of their level of job satisfaction.

Like the study by Ingersoll and colleagues (2002), the relationship between age and retention was not determined by Henderson-Betkus and MacLeod (2004). However, one may suggest age has indirect influences on other "filter factors" identified in this study. Age could have an effect on the number of family commitments made in a rural community, as older nurses could have more time to find a spouse, settle down, and have children. Age could also have an effect on financial need, as older nurses may have more time to accumulate financial commitments. Furthermore, age could have an influence on loss of benefits, as older nurses may have had more time invested with one employer; therefore, having more seniority and benefits at stake.

Going back to the Australian survey of rural nurses in Queensland, Hegney et al. (2002a) found very specific personal characteristics and experiences that influence the decision to stay in rural practice. According to their survey, the most powerful predictor of retention is previous positive exposure to rural living and/or positive work experiences in rural areas (Hegney et al., 2002a). The majority of participants agreed growing up in a rural community is a predictor of rural practice (Hegney et al., 2002a). This finding is supported in rural physician literature, which suggests physicians are over two times more likely to practice in a rural area if they were raised in a rural community (Easterbrook et al., 1999). However, Henderson-Betkus and MacLeod (2004) found education or training placements in rural areas are unlikely to predict similar long-term practice. The second most powerful predictor of rural practice, according to Henderson-Betkus and MacLeod (2004), is having family living in a rural area. Also, personal feelings about wanting to raise a family in a rural area are considered predictors of rural practice (Henderson-Betkus & MacLeod, 2004).

Revisiting the comparison of Canada, U.S.A. and Australia, Bushy (2002) found rural background and family connection to community are predictors of rural retention in all three countries. Earlier work by Hegney, Pearson & McCarthy (1997) echoed this discovery in an effort to identify the role and function of rural nurses in Australia. Based on this research, Hegney and colleagues (1997) suggest rural nurses are generally from a rural background and trained in urban education facilities. They become rural nurses because go back to work in rural areas for family or lifestyle reasons (Hegney et al., 1997). These findings, along with findings from Henderson-Betkus and MacLeod (2004), go beyond retention strategies into the recruitment phase. These studies suggest, in order to retain nurses in rural areas, recruitment and training initiatives need to focus on people from small communities, and/or who want to raise families in rural areas.

RETENTION STRATEGIES IN BRITISH COLUMBIA

In rural communities, where recruitment is increasingly complex, the first step in surviving the nursing shortage is to prevent existing rural nurses from leaving practice (Muus, Stratton, Dunkin & Juhl, 1993). The Ministry of Health (2006) in B.C. created a variety of rural nursing retention strategies, which address some influences outlined in this paper. Professional development and making nursing education more accessible is one of the major focuses for the Ministry's rural nursing retention strategies (Ministry of Health, 2006). Professional development, up-grading, specialty workshops, Tele-health education and tuition reimbursement for nurses who want to work in rural areas, are all part of the Ministry of Health strategies (2006). The Ministry has also dedicated funding to rural nursing research, and has provided research conference opportunities for nurses in rural communities (Ministry of Health, 2006).

The Ministry of Health (2006) has also funded health authorities to increase management opportunities for nurses, include mentorship programs for new rural nurses, and improve shift scheduling. Additionally, the Ministry (2006) has funded initiatives aimed to increase the number of nurses in the workplace. Special initiatives, including marketing and monetary incentives, have been established to recruit Aboriginal students to nursing programs (Ministry of Health, 2007). More recently, the Interprofessional Rural Program of B.C. was introduced, giving health care students the chance to do their practicum as part of an interdisciplinary team in a rural community (Ministry of Health, 2007). Many of these retention strategies address influential factors identified in the literature, such as the need for professional development, maintenance of clinical skills, resources and professional support. The strategies deal with some of the factors that influence job satisfaction and retention, such as opportunities for management roles, tuition reimbursement, and mentorship. However, there are several factors identified in the literature, especially personal characteristics and experiences, that have not been addressed by these strategies, or that need to be further developed.

RECOMMENDATIONS

Based on the research findings, retention strategies need to include creating a more positive work environment for rural nurses. To improve the work environment, the Ministry of Health, as well as international policy makers, need to promote opportunities for professional interactions, team-based programmes, and professional support (Chaboyer et al., 1999). Work environments should encourage professional autonomy, job variety, counselling to deal with stress, and peer-feedback. Furthermore, international decision-makers and policy-makers need to recognize different groups of rural nurses need different strategies (Pan et al., 1995). For example, retention strategies need to address both younger and older nurses in different ways. Retention strategies for married nurses need to address spousal employment, possibly creating professional development or training opportunities for spouses.

International policies and retention strategies need to consider rural nurses' family lives. If nurses have children, retention strategies should include recreation and education opportunities for children. Retention strategies need to make post-secondary education more accessible to rural families. Strategies should support family-friendly work environments, make work schedules more flexible, and provide daycare facilities (Stratton et al., 1995; Hegney et al., 2002). Furthermore, retention strategies need to incorporate less on-call shifts for rural nurses (Shader, Broome, Broome, West, & Nash, 2001).

International policies and retention strategies need to address both job satisfaction and community satisfaction (Pan et al., 1995; Henderson-Betkus & MacLeod, 2004). The national

and provincial governments need to fund initiatives to help create social support networks for new rural nurses, such as sponsoring community integration activities and getting community members involved in retention strategies. Furthermore, international policies and retention strategies should incorporate community development, making the rural community attractive to health care professionals (Pan et. al., 1995). Making rural communities more attractive could include improving schools, encouraging community events, and increasing community safety programs.

International policies and retention strategies are the first step in dealing with the nursing shortage; however, recruiting nurses who will stay in rural areas is critical. Local recruitment strategies need to target people who already have family and friends in the targeted rural areas, or people who have grown up in similar rural areas (Hegney et al., 2002a). The Ministry of Health (2007) has recognized the need to recruit Aboriginal nursing students, but increasing the number of rural residents who become health care professionals needs to be a focal point, as well. This could include further marketing campaigns, like nurses visiting rural high schools to promote the profession, and increasing the number of rural specific seats in nursing programs. Retention and recruitment strategies should target nurses who have had positive past experiences in rural areas, and expand the Interprofessional Rural Program of B.C. to allow for longer work terms. The Ministry of Health and other provincial governments need to identify nurses who are more likely to stay in rural practice, to inform recruitment. For example, research is needed to identify common characteristics and experiences shared by long term, rural nurses. The findings could inform recruitment initiatives.

GAPS IN THE LITERATURE

Although the research specific to rural nursing is growing, it is still very limited (MacLeod et al., 2004). Research specific to rural nurses, job satisfaction and retention needs to be replicated and elaborated. Further comparative studies between rural and urban nurses need to assess how retention strategies for rural and urban nurses may differ. Meanwhile, more attention should be made to how different types of nurses (for example registered nurses versus public health nurses) differ in terms of job satisfaction, community satisfaction and retention in rural areas. Many of the studies using surveys had poor response rates; therefore recommendations for future research would include larger sample sizes to improve validity. Furthermore, qualitative research is needed to inform concepts identified in the literature, like “rural lifestyle” and how this may differ across regions (Johnson, Fyfe & Snadden, 2006).

CONCLUSION

In summary, this paper explores challenges facing the Canadian rural nursing workforce. This paper describes the relationship between job satisfaction and retention, and briefly assesses the differences in job satisfaction and retention for rural and urban nurses. In addition, this paper discusses how both professional and personal factors influence job satisfaction and retention of rural nurses. The Ministry of Health (2006) retention strategies are examined and specific recommendations to improve British Columbia’s retention strategies and international policies are made. This term paper highlights the need for nursing research to further investigate the inter-relationship between professional and personal factors in both retention and recruitment.

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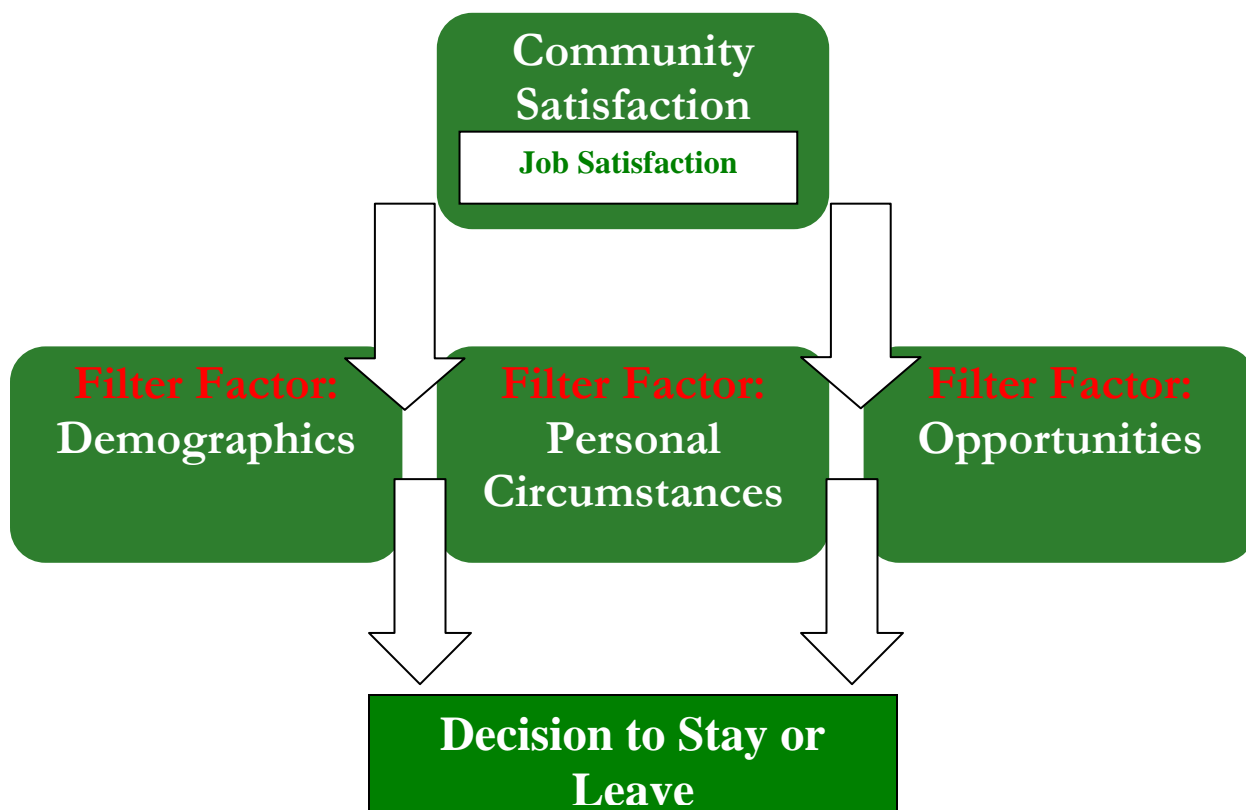
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REFERENCES

- Bushy, A. (2002). International perspectives on rural nursing: Australia, Canada, USA. *The Australian Journal of Rural Health*, 10(2), 104-111. [[MEDLINE](#)]
- Chaboyer, W., Williams, G., Corkill, W. & Creamer, J. (1999). Predictors of job satisfaction in remote hospital nursing. *Canadian Journal of Nursing Leadership*, 12(2), 30-40. [[MEDLINE](#)]
- Decter, M. (2005). Notes from the Chair: Human resources challenges are the priority. Health Council of Canada Taking the Pulse, Retrieved October 4, 2005 from: <http://www.info-hcc-ccs.ca/20050614/story1.html>
- Easterbrook, M., Godwin, M., Wilson, R., Hodgetts, G., Brown, G., Pong, R., & Najgebauer E. (1999). Rural background and clinical rural rotations during medical training: effect on practice location. *Canadian Medical Association Journal*, 160(8), 1159-1163. [[MEDLINE](#)]
- Gagnon, D. & Ménard, M. (2001). Listening for direction: A national consultation on health services and policy issues. Prepared for the Advisory Committee on Health Services of the Conference of Federal/Provincial/Territorial Deputy Ministers of Health and Canadian Institutes of Health Research, Institute for Health Services and Policy Research. Retrieved October 4, 2006 from http://www.chrsf.ca/other_documents/listening/pdf/eslistfordir_e.pdf
- Hegney, D., Pearson, A. & McCarthy, A. (1997). *The role and function of the rural nurse in Australia*. Canberra: Royal College of Nursing Australia; 1997.
- Hegney, D., McCarthy, A., Rogers-Clark, C., & Gorman, D. (2002). Why nurses are attracted to rural and remote practice. *Australian Journal of Rural Health*, 10(3), 178-186. [[MEDLINE](#)]
- Hegney, D., McCarthy, A., Rogers-Clark, C. & Gorman, D. (2002a). Retaining rural and remote area nurses: The Queensland, Australia experience. *Journal of Nursing Administration*, 32(3), 128-135. [[MEDLINE](#)]
- Henderson-Betkus, M. & MacLeod M. (2004). Retaining public health nurses in rural British Columbia: the influence of job and community satisfaction. *Canadian Journal of Public Health*, 95(1), 54-58.
- Ingersoll, G. Olsan, T., Drew-Cates, J. DeVinney, B. & Davies, J. (2002). Nurses' job satisfaction, organizational commitment, and career intent. *Journal of Nursing Administration*, 35(2), 250-263. [[MEDLINE](#)]
- Johnson, A., Fyfe, T. & Snadden, D. (2006). Rural and remote suitability score: A review. Available from the University of Northern British Columbia/University of British Columbia Northern Medical Program, 3333 University Way, Prince George, B.C. V2N 4Z9).
- MacLeod, M., Kulig, J., Stewart, N., Pitblado, J., Banks, K., D'Arcy, C., et al. (2004). *The nature of nursing practice in rural and remote Canada*. Ottawa, Ontario: Canadian Health Services Research Foundation. Retrieved Feb. 13, 2007, from www.chrsf.ca

- MacPhee, M. & Scott, J. (2002). The role of social support networks for rural hospital nurses: Supporting and sustaining the rural nursing work force. *Journal of Nursing Administration*, 32(5), 264-272. [MEDLINE]
- Ministry of Health (2006). B.C Nursing Strategy for 2005/2006- Updated. Government of British Columbia: Nursing Directorate. Retrieved Feb. 15, 2007, from https://www.healthservices.gov.bc.ca/ndirect/nstrategies/ns_summary_0506.html
- Ministry of Health (2007). Rural and Remote Health Initiative. Government of British Columbia: Rural Health. Retrieved April 4, 2007, from <http://www.healthservices.gov.bc.ca/rural/initiative.html>
- Muus, K., Stratton, T., Dunkin, J. & Juhl, N. (1993). Retaining registered nurses in rural community hospitals. *Journal of Nursing Administration*, 23(3), 38-43. [MEDLINE]
- Ndiwane, A. (1999). Factors that influence job satisfaction of nurses in urban and rural community health centers in Cameroon: implications for policy. *Clinical Excellence for Nurse Practitioners*, 3(3), 172-180. [MEDLINE]
- Ndiwane, A. (2003). The effects of practice location and work setting on job satisfaction of nurses. *Clinical Excellence for Nurse Practitioners*, 7(1-2), 27-33.
- Pan, S., Dunkin, J. Muus, K.J., Harris, R. & Gellar, J. M. (1995). A logit analysis of the likelihood of leaving rural settings for registered nurses. *Journal of Rural Health*, 11(2), 106-113. [MEDLINE]
- Pong, R. & Russel, N. (2003). A review and synthesis of strategies and policy recommendations on the rural health workforce. Sudbury, Ontario: Centre for Rural and Northern Health Research, Laurentian University. Retrieved Feb. 13, 2007, from www.crnhr.ca
- Poz, M. R. D., Kinfu, Y., Dräger, S. & Kunjumen, T. (2006). Counting health workers: definitions, data, methods and global results. Geneva, Switzerland: World Health Organization, Department of Human Resources for Health Evidence and Information for Policy.
- Provincial Collective Agreement (April 4, 2004 to March 31, 2006). Provincial Collective Agreement between Health Employers Association of British Columbia and Nurses' Bargaining Association. Retrieved March 30, 2007, from http://www.bcnu.org/contracts_services/provincial_contract/pdf/bcnu_ca_060331.pdf
- Shader, K., Broome, M.E., Broome, C.D., West, M.E. & Nash, M. (2001). Factors influencing satisfaction and anticipated turnover for nurses in an academic medical center. *Journal of Nursing Administration*, 31(4), 210-216. [MEDLINE]
- Stratton, T., Dunkin, J., Juhl, N. & Geller, J. (1995). Retainment incentives in three rural practice settings: variations in job satisfaction among staff registered nurses. *Applied Nursing Research*, 8(2), 73-80. [MEDLINE]

APPENDIX 1

Figure 1. The Decision to Stay of Leave

From "Retaining Public Health Nurses in Rural British Columbia: The Influence of Job and Community Satisfaction" by M.

Henderson-Betkus and M. L. P. MacLeod, 2004, *Canadian Journal of Public Health*, 95(1), p. 54.