Rural Nurse Characteristics

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To the Faculty of Washington State University:

The members of the Committee appointed to examine the Non-thesis Masters project of Robert L. Bowen find it satisfactory and recommend that it be accepted.

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ACKNOWLEDGMENT

This project would not have become a reality were it not for the patience and encouragement as well as financial support of several people. First, I want to acknowledge my life partner, mentor and friend Kimber, without her patient indulgence and being “ok” with the many nights she has spent alone in front of the television while I sat at the computer, my reality could be much different today.

I want to acknowledge my kids, Arielle, Shanda, Jamin, Shad, Cayle, Aspen, and Dakota who have suffered somewhat, in order for their father to complete this goal. For the younger ones it has lasted through their lifetimes. For the older kids it was the final years they were still at home. It was hard on all of you, and time will tell if the investment of time I put into obtaining this goal, will pay out the dividends I have always projected it would.

I would like to acknowledge John Dauble. The financial assistance and counseling you provided have made this dream a reality.

Lastly I would like to thank Deana Molinari and the members of my committee Zana Higgs (my advisor), and fellow student, turned faculty, Ryan Townsend, who took the time to assist this country boy to bring my writing to the point that Submission for publication of this document would be possible. I sincerely appreciate what all of you have done, and the roles you have played, Thank god, it’s done.
Abstract

The purpose of this study was to identify registered nurse characteristics to aid administrators in hiring and retaining new nurses. This descriptive study investigates registered nurse characteristics in the northwest region of the United States, utilizing the data from a two-part online survey. Survey data were divided into two dimensions, "how they live" and "where they live." Characteristics were examined from this perspective. Rural nurses in this sample were older, mostly married white females who place elevated significance on living and practicing in rural settings. They set high value on family and friends, recreational access and suitable climates. Nurses report satisfaction with the rural lifestyle, recreational activities and the topography where they live. Nurses are however dissatisfied with the benefit packages offered by their facilities. Thirty seven percent, reported feeling overwhelmed by their job responsibilities/workload, and 24% indicated they plan to move within the next two years.
Rural Nurse Characteristics

Throughout the nursing research literature, the characteristics that define rural nurses are only minimally described. What is a rural nurse, and how is their practice different from metropolitan/urban practice? A survey of rural nurses throughout the northwest region of the United States (US) was conducted to ascertain the characteristics that in part, define rural nurses.

Debate continues regarding the differences between rural and metropolitan practice. The ongoing nursing shortage compounds the problem of securing adequate staffing levels in rural areas (National Rural Health Association [NRHA], 2005). Expenditures required to frequently replace nurses who find the challenges of rural nursing too rigorous, detracts from the limited resources of rural health care delivery systems. The knowledge of these characteristics may assist administrators, and human resource departments to hire nurses that have the experience, knowledge, and background to flourish as rural nurses.

Literature Review

The available literature covering rural nurse characteristics is scarce; as such, the impetus to investigate and describe this group of nurses to rectify the lack of knowledge in this area of nursing literature was undertaken. A description of rural settings, in terms of definitions and healthcare challenges is presented.

Definitions of Rural Nursing

A large percentage of rural nursing research originated in other countries. Australian authors have varying descriptions of what rural nursing is, without coming to any consensus. The only definite consensus is that rural nursing takes place in non-
metropolitan areas. The Association of Australian rural nurses (AARN) describes rural
nursing as:

practice in remote environments with limited medical, collegiate and other
supports that require nurses to assume high levels of responsibility. Australian
rural nurses use similar core skills as their Metropolitan nurse counterparts. But
the skills required for rural practice are more generalist than specialist in nature.

(Francis, Bowman, & Redgrave, 2001, p. 4)

Other Australian authors suggest that rural practice has its "own unique stressors" that
inadequate training for rural area practice may push nurses to the limit in what is already
recognized as a stressful occupation (Bell, Daly,& Chang, 1997).

Other authors conclude that it is difficult to generalize about the role of rural
nurses because each community in which nurses practice is different (Bushy, 2004). A
Canadian researcher gives the following rural nursing definition, "nursing practice in
rural and remote Canada is characterized by its variability and complexity and by the
need for a wide range of knowledge and skills in situations of minimal support and few
resources" (MacLeod et al., 2004, p.1). Canadian researcher Moszczynski and Haney
(2002), point out "that rural nurses face unique stressors not identified in the nursing
literature" (Moszczynski, & Haney, 2002, p.496). Moszczynski also states “that most of
the stressors rural nurses contend with are not addressed in the literature, which focuses
on nurses in urban settings” (Moszczynski, & Haney, 2002, p.496).

Rural research originating in the US is consistent with Australian and Canadian
contextual findings. "Sparse populations, distance to providers, decreased resources, and
reduced formal structure are characteristic of rural nursing."(Bushy,& Leipert, 2005, p.3).
There is paucity in the literature related to the depiction of the characteristics of rural nurses. Increasing the knowledge base related to the characteristics of rural nurses is important for several reasons due to the high cost of staff turnover, recruitment and retention expenses.

Throughout the literature, studies describe the rural nurse work setting; some describe how rural nursing differs from the urban or metropolitan setting. Other articles touch on certain aspects of the characteristics that define rural nurses, such as the increasing age of the rural nurse workforce (Abrams, 2000; Hanvey, 2005). A comprehensive descriptive dialogue dedicated to defining characteristics of rural nurses is lacking. This study is important to the body of nursing literature, because it adds to the knowledge base regarding rural nurses. Conclusions drawn from this data can be used to solve problems related to staffing and retention in the delivery of rural health care, such as the high cost of staff turnover.

Turnover costs related to dissatisfaction with a rural lifestyle may be reduced if the characteristics of flourishing rural nurses can be described. Reducing turnover expense is important in dropping the high cost of training and orienting rural generalists. The fiscal cost for replacement of a nurse who leaves and the recruitment and orientation of his/her successor is estimated to be between $8000 and $140,000 depending on experience and specialty (Mundie, Eichna, & Delima, 2002). Maintaining adequate staffing levels is one of a multitude of challenges in rural nursing. The significance of the challenges becomes more apparent, as the distances from metropolitan areas increase, access to healthcare services decreases as population density decreases. If rural nursing
is the care provided by nurses living and working in rural areas, the question then arises what defines a rural area.

_DEFINITIONS OF RURAL_

The US Government created several definitions of what constitutes rural. These definitions, created by different agencies, support desires to service specific populations. The most widely utilized definition is provided by the United States Census Bureau, which defines urban or metropolitan areas, rural is defined by exclusion (Rural Assistance Center [RAC], 2006 b). Rural America includes 17% of the population of the United States (RAC, 2006 a), but only 9-10% of the nation's physicians live and work in rural and remote areas (Eldridge & Judkins, 2002; US Department of Health and Human Services [HHS], 2003). This becomes more significant taking into account that rural residents are distributed across 75% of the land mass according to the 2000 census (NRHA, 2005). Estimates of the rural population range from 49 million to 68.5 million, depending on the source (HHS, 2003; RAC, 2006 b; NRHA, 2005). Examination of some of the phenomena that makes rural nursing practice unique is required to grasp the extent of rural nurse experience.

_THE GENERALIST ROLE_

Health professionals are described as "generalists" because they care for individuals of all ages with a wide variety of health problems. As a health care provider, the rural nurse often performs the roles of other health care disciplines, practicing independently to a degree unknown by urban health professionals. Frequently encountering gaps in health care provision, especially in the areas of primary care, health promotion, emergency care, and mental health services (Ide, 2000, p. 2). For example, in
a small rural hospital nurses may care for an obstetrical patient, a patient who recently had surgery and elderly persons with persistent chronic health problems during a single shift (Bushy, 2004). This is only a fraction of the challenges that confront rural nurses.

The generalist nurse must be resourceful, and possess skills that enhance the collaborative care process. Critical thinking and communication skills are demanded of the most novice rural nurse. Rural practice commonly occurs without supportive resources, with limited medical expertise and few nursing colleagues. This in turn requires nurses to assume high levels of responsibility for a broad spectrum of core demands. Another challenge that rural nurses confront daily is, frustration related to equipment and supplies being limited or outdated (Eldridge & Judkins, 2002).

One of the most prominent characteristics of rural nursing is the lack of privacy and confidentiality afforded both the nurse and the health care client. Nurses who work and reside in small communities do not have the anonymity of nurses who live and work in urban settings. Their patients are their neighbors, rural nurses are on duty when they are not at work, their neighbors know them as nurses and frequently medical advice is sought and provided in the checkout line at the grocery store (Bushy, 1999; Long & Weinert, 1999; Weinert & Burman, 1999).

The literature repeatedly indicates that the majority of nurses working in rural areas are minimally trained (Skillman, Palazzo, Keepnews, & Hart, in press). US government surveys indicate that there are far more two-year degree, and diploma prepared nurses than baccalaureate prepared nurses in the United States (HHS, 2005). A study investigating safety in rural health care delivery, summarized data collected from nine rural nursing studies that took place in 14 different states. Finding that 67% of rural
nurses had not attained baccalaureate level training and those nurses typically worked in three hospital departments on a daily basis (Cook, Hoas, & Guttmannova, 2003). Other factors influencing the uniqueness of rural nursing are related to the challenges inherent in the rural lifestyle.

*Rural Health Challenges*

Americans living in rural areas are subject to disadvantages and disparities in relation to health care services and delivery. Rural residents have less education, a higher proportion have not completed high school; this in turn leads to lower socioeconomic status (Skillman, et al, in press). Rural nurses provide care for approximately 50% of the medically underinsured, with 40% of all rural families living below the poverty level (Bushy, 2004). There are higher incidence rates of chronic illnesses, such as hypertension and cardiovascular disease. The problems unique to rural occupations, which include farm machinery accidents, skin cancer from sun exposure, and respiratory problems from exposure to agricultural chemicals are a small part of the unique ailments that plague rural residents. High rates of mental illness and stress-related diseases are also earmarks of rural America. Rural Americans have higher infant and maternal morbidity rates. Fewer rural Americans have health insurance with pharmacy coverage plans, and may spend as much as 25% more on prescription drugs when compared to their urban counterparts (Bushy, 2004). Rural healthcare providers must also deal with high risk behaviors.

Rural adults are less likely to engage in preventive behaviors such as regular blood pressure checks, Pap smears, or breast examinations. Rural adults engage in high risk lifestyle behaviors such as smoking, not wearing seat belts and not engaging in
regular exercise, all of which have implications for a person’s health status (Bushy, 2004; HHS, 2003). These factors are interwoven into the reality of rural nurse experience playing a major role in the delivery of healthcare in rural settings.

Summary

The literature indicates and government definitions verify a lack of clarity in definitions of rurality. The literature shows rural nurses are less educated, need generalist skills, and work with a population with higher morbidity rates. Workforce studies have focused on urban nurses. It is not known if the same characteristics and issues are applicable to the rural nurse. A comprehensive descriptive dialogue related to defining characteristics of rural nurses is lacking.

Methodology

A descriptive, cross-sectional design employing two online surveys was used to gather data in an effort to describe the characteristics of rural nurses in the northwest region of the United States. The demographics survey consisted of 101 questions. A modified McCloskey-Mueller satisfaction scale (Mueller & McCloskey, 1990) provided 84 questions.

The data was collected on Silhouette, transferred to Excel spreadsheets, then converted to SPSS 13 for statistical analysis. Cronbach's alpha was used to ascertain internal consistency for the 11 satisfaction variables of the demographics survey, Alpha = .82; The McCloskey- Mueller tool yielded an alpha = .96. Crosstabulation and correlational analyses were performed, investigating additional areas of interest within the dataset. The tools consisted of questions that utilized several formats. The likert scales used 5 and 7-point scales. The data from these scales were summarized into the
categories of agree, satisfied and important or disagree, unsatisfied, or unimportant depending on the variable being measured. Several open-ended answer forms were also included. Permission to use these tools was granted by the Institutional Review Board at Washington State University prior to utilization, as part of a larger study on the stress of practice. All participants were informed that their participation in the survey implied consent.

Sample

The sample consisted of registered nurses residing in the Northwest region of the United States. Participants at a rural nursing conference and staff nurses from 43 rural hospitals that are spread across four Northwest region states were asked to participate anonymously. Study announcements and correspondence with rural hospital administrative personnel were used to generate interest in the survey.

The demographics survey received 73 responses; the McCloskey-Mueller survey received 65 responses. Conference attendees utilized paper copies of the surveys; that data was later entered into the computer by the research team. Data from rural hospital participants were obtained through there participation utilizing the online surveys.

Results

The demographics survey data from 73 responses; coupled with McCloskey-Mueller survey data responses (65), comprised the dataset. Two dimensions, "where they live" and “how they live" were identified. The dimension "where they live" consists of items found on the demographic survey about the importance and satisfaction of the rural community. "How they live" consists of work related variables regarding perceived risk, comfort levels, and satisfaction.
Demographics

In the sample, nurses were older, (52%) reporting their age at 46 years or greater. The majority of rural nurses were female (86.3%) and Caucasian (90.3%). Most rural nurses report being married (77.8%) with 57.5% not having children at home. Nearly half, (46.5%) of the rural nurses report nursing experience of greater than 10 years. More than half (61.6%) of the nurses responding to this survey were born in rural areas. Other factors leading to the choice of practice setting are indicated by the importance nurses place on the following factors.

Where they live. The information contained in this dimension, is derived from survey questions that deal with the importance of factors associated with where one lives. Cost of living (COL) is identified as an important factor by 73.6% of the nurses. Living in a rural area was highly preferred by these nurses (75.4%). Having adequate employment for their spouses was an important consideration for 63.0% of the sample. Access to recreational activities was valued by 76.7% of the respondents. For 67.1%, family proximity was an important consideration and the proximity of close friends was important for 65.9%. Importance of climate was reported at 75.0%, but topography was important to only 54.9%. Only 58.9% of nurse respondents considered quality school system an important consideration.

Fewer than half of the rural nurses (48.6%), considered access to a variety of religious organizations an important aspect of choosing a practice setting location. Cultural considerations were not an important contributing factor to practice location. Another question from the survey, asked for location and proximity of their closest friends. Responses indicated an even split. One third reported close friends within 50
miles. One-third reported close friends lived more than 50 miles away, the rest reporting their close friends lived in the same community. The satisfaction of rural nurses in regards to these same factors was examined.

The data indicates a general overall satisfaction by rural nurses in regard to these variables related to where they live. Rural nurses reported satisfaction with the rural lifestyle (89.1%). They are content with the cost of living (80.5%), and their climate (80.5%). Concerning recreational activities, satisfaction is high at 79.5%. Nurses were pleased with the proximity of their close friends (76.7%), topography (74.6%), and family proximity (69.8%). The following areas have a lower satisfaction rating (note importance rating also low); quality school satisfaction at 57.6%, and satisfaction with religious organizations at 50.6%. The lowest satisfaction level falls in the domain of "cultural activities" at 46.5%.

How they live. The data related to "how they live" is another important aspect of describing rural nurse characteristics. The dimension "how they live", addresses work demographics and conditions. Personal perceptions are also included. The majority of the nurses participating in the survey reported working between 36 and 40 hours a week. However, there was a large array of responses, ranging between 22 to 60 hours a week. In relation to longevity at the work site, the majority have been at their present facility less than six years. In regards to salaries, 67.6% reported wages greater than $41,000 per year. More notable is that 35.2% reported salaries greater than $50,000 per year. Of the 73 nurses that responded to the demographics survey, 17 had plans to move (23.6%). The data related to "plans to move" were further investigated. Crosstabulation analysis was performed with the following results.
Retention can be measured by looking at a person’s intention to move. Results from crosstabulation analysis indicates the importance of a reasonable cost of living is related to "plans to move", 75% of those responding "yes" to "plans to move", also indicated high importance on reasonable cost of living. The majority of those planning to move do not place high importance on a rural practice setting (53.0%). Respondents did however find climate, a justifiable reason to leave their current rural practice setting (70.5%). Of the 17 respondents who indicated they have plans to move 15, (88.2%) did not have children in the home. Where participants planned to move was not ascertained.

Correlational analyses indicate a strong relationship between importance of rural setting and satisfaction with rural settings (.438, p =< .01). That nurses with plans to move are not married (-.411, p = <.01). The majority were not born and raised in rural areas (-.269, p=< .05). Nurses with plans to move did not place importance on living and practicing in rural settings (.490, p = < .01). Additionally these nurses derived little satisfaction with the rural setting, (.380, p = < .01). Nurses who indicated high importance on recreational activities, did not indicate importance on employment for their spouses (.295 p = <.05).

The data included in this section represents rural nurse responses to questions related to risk of selected phenomena occurring within their facility. Rural nurses perceive significant risk in the area of nurse turnover (70.5%). More than half feel it is likely they will work shifts without adequate staffing (52.8%), be required to work overtime (87.7%), and have the opportunity to meet and work with temporary nurses (69.5%), while experiencing heavy patient workloads (78.1%).
Sixty-five participants responded to the McCloskey-Mueller satisfaction survey. The questions dealt with satisfaction and comfort ratings pertaining to work settings and practice issues.

Rural nurses are satisfied with their vacation schedules (72.3%), indicating that shift satisfaction is acceptable at the same rate (72.3%). Overall schedule satisfaction is indicated by (73.8%). Satisfaction with opportunities to work straight days, have weekends off and work part time are (76.9%, 70.8%, 60.0%) respectively. Part time scheduling is one of two areas with a high level of dissatisfaction (40%). Benefit packages had the highest dissatisfaction rating (66.2%).

The data indicates rural nurses are comfortable caring for their dying patients (97%), delegating tasks (90.8%), obtaining assistance from the other nurses on the floor (96.9%), They feel supported by the nurses that they work with (90.8%). However, of the 65 rural nurses that responded to this section of the survey 36.9% report feeling overwhelmed by their job responsibilities and workload.

Discussion
The findings of the Demographics and McCloskey surveys and the implications will be discussed in terms of where they live and how they live, importance, satisfaction, risk and comfort are addressed. Limitations are identified, and relationships discussed

Demographics
The demographic data supports the literature, in regards to the aging nursing workforce. In this sample, the nurses were older and married which may explain why more than half do not have children at home and find it easier to move. The fact that more than half of
the rural nurses reported practicing nursing less than 10 years, in conjunction with the advanced age of the nurses indicates an influx of nurses who graduated at an age older than traditional nursing students. The majority of the nurses were born in rural areas, supporting the premise that rural nurses with rural backgrounds are easier to retain. Participants plainly showed a preference for living in rural areas.

Where They Live

As recognized, older nurses, whose children are grown and out on their own, have little need for a quality school system for their children. By the same reasoning, because nurses are older with many nearing retirement, the importance placed on spousal employment (low), and recreational activities (high), may be explained. Participants found climate very important. It is not known if climate would be as important to a younger sample of nurses. Interest in cost of living, plays an important role, in regards to choosing a practice setting, influencing both recruitment and retention

Because satisfaction ratings are the most likely indicators of how content a person is with a given aspect of their life, it appears that rural nurses are generally pleased with where they live. This sample of nurses did not find access to the following three community resources important: schools, religion, and cultural activities. Whether this phenomena is consistent with aging or a shift consistent with the “Postmodern Era” is unknown. Mills contends that “family values, for increasing numbers of people are less rooted in sacred principles of church and community then in a very private mix of personal and situational beliefs” (Mills & Sprenkle, 1995, p.368). A younger or more ethnically diverse sample might disagree. However, for this sample, community strengths were not as important as individual interest in topography, climate and recreational
access. The question arises then as to motive for the shift from more traditional family/community oriented values to an individually oriented, leisure values focus. If future research indicates similar findings in rural nurse populations, recruiters might want to highlight availability of leisure opportunities over traditional family/community values.

*How They Live*

Work conditions and personal perceptions related to rural nurse experience encompasses the data in the "how they live" section. Although nurses indicate satisfaction with salary, the wages reported are below urban averages (Skillman, et al, in press). Rural nurses expressed contentment with the issues of vacation schedules, ability to schedule time off, and opportunities to work straight days. High levels of satisfaction experienced by nurses, in regards to flexibility within work site settings in these areas does increase retention rates.

Survey participants indicated that the occurrence of registered nurse turnover is a risk within their facilities. High turnover, leads to insufficient staffing, and required overtime, leading to increased dissatisfaction and thus increased turnover. The use of temporary nurses to alleviate heavy patient workloads is a reality in many rural health care facilities. Unlike urban areas where there is a pool of available nurses, rural areas generally do not have this resource. The lack of a float Pool or on-call staff leads to the use of agency or travel nurses. Dissatisfaction with the high cost, and transitory nature of agency staffing promotes job dissatisfaction, further reducing the likelihood of retention.

The benefit package offered by rural hospitals is the major area of dissatisfaction reported by study participants (66.2%). Since rural nurses are satisfied with vacation
benefits, dissatisfaction must arise from other aspects of the benefit package such as 401(k) plans, healthcare benefits, or childcare facilities/reimbursement.

McCloskey-Mueller

The McCloskey-Mueller data provided an idea of the comfort levels nurses felt in regards to their practice. The proportion (36.9%), of the nurse participants reporting feeling overwhelmed by their responsibilities and workload was unexpected. Further research is needed to discover the basis for this level of discomfort, and its source, to enable intervention processes. The majority of respondents indicate feeling comfortable caring for dying patients (87.7%), delegating tasks (98.8%), and asking for help when needed (96.9%). These are important aspects of nursing practice. However, comfort and personal ability to provide care is only part of the picture. Again, additional study to identify specific characteristics required for successful practice is needed.

Implications for Practice

According to the findings in this study, administrative personnel could enhance recruitment and retention efforts by seeking applicants who have ties to rural areas. For instance, according to findings people who grew up in rural areas and who have family and/or friends in the area are most likely to remain in their positions. Administrative personnel designing recruitment and retention strategies might want to consider the importance of "rural living" when considering applicants. Those who did not consider living in rural areas important were most likely to leave in this sample. Administrators designing recruiting strategies may want to consider screening for satisfaction with the climate and recreational opportunities available in the recruiting area.
The data indicates rural nurses who did not plan to stay in rural areas, were dissatisfied with climate and the cost of living. A lack of children in the home, not being married and not having any family in the area were also noted as reasons for leaving current positions in rural hospitals.

Conclusion

Study participants consisted of mostly older, Caucasian female nurses. How representative this sample is across the nursing population in the US. is unknown. Secondly, the use of two surveys, hampered study across variables, as not all nurses completed both surveys. Findings provide some important identifying characteristics of rural nurses, through the investigation of importance, satisfaction, and perception of phenomena related to the rural nurse experience.

Further research is needed to identify whether a younger nurse population would have similar preferences or derive similar satisfaction levels as indicated in this study. As the "graying of America" continues, so does the graying of the American nursing workforce. Flexibility to accommodate rural nurse preferences, regardless of age, will promote satisfaction and retention.

Administrative personnel in the face of current nursing workforce shortages are challenged to find new ways to recruit new blood into the rural nurse workforce. Through identification of the characteristics of the current rural nurse workforce, a more educated and selective recruiting process can be developed, and programs designed to enhance retention in rural health care facilities, can be created and implemented. A study using qualitative design should be performed to determine what it is within their work setting that leads them to be overwhelmed with rural nursing practice.
References


