

Nursing in Rural and Frontier Areas: Issues, Challenges and Opportunities

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The nursing shortage is receiving a great deal of attention around the world in both professional publications and the mass media. Currently in the United States (US), there are more nurses in the workforce than ever before. Yet, a world-wide nursing shortage exists, especially in regions designated as rural (more geographically remote with a lower population density). According to the US National Center for Health Workforce Analysis, of the 1.89 million full-time employed Registered Nurses (RNs), there was a 6% shortage of the 2 million that are needed in the workforce. Professional organizations, philanthropic groups and economists in health care, along with federal and state governments, have focused on the shortage of nurses. A range of strategies have been recommended to fix the problem; but, the situation continues to become more serious.¹⁻⁹ The shortage of nurses in rural areas cannot be resolved without new resources along with changes to the education and health care systems in which they function. The complexity of the issue mandates multidimensional strategies and partnering by

educators, researchers, rural communities and policy makers to ensure a competent nursing workforce that meets the increasingly complex health care needs of both rural and frontier residents. This article examines rewards and challenges of nursing practice in the rural setting and highlights strategies and policies to address the current workforce and alleviate future shortages.

Background and Rationale

In rural areas of the US (regions having ninety-nine or fewer people per square mile), nursing shortages are exacerbated by the difficult task of recruiting nurses to work in small towns. This situation is coupled with local health care employers' inability to compete with urban-based employers in terms of wages, start-up bonuses and benefits. Non-acute health care settings fare worse, in particular private practice settings, schools, health departments, extended care facilities and other types of community-based agencies which typically

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offer lower salaries to nurses than do acute care facilities. In frontier regions (areas having fewer than six persons per square mile), recruitment of health care providers in general is an even greater challenge, and the wage disparity may be even more significant in these more remote settings.¹⁰ In the US, rural residents make up about one-fifth (20%) of the total population, distributed across four-fifths (80%) of the land mass. Thus, about 54 million US residents live in areas defined as “rural.” Globally, a significant segment of the land mass is rural, much of which is located in developing and Third World countries. Furthermore, rural residents generally have a lower annual income, less education and overall poorer health status than their urban counterparts. Health Personnel Shortage Areas (HPSAs), a specific designation used by some US government entities, are characterized by an insufficient number of primary care health professionals. Counties designated as such experience even greater nursing shortages.^{11,12} While there may be no such designation as “HPSA” in other nations, similar nursing recruitment and retention challenges are experienced internationally in remote, less populated regions of the world.

The profession of nursing and the supply of nurses in the workforce are impacted by societal mandates, legislation, policy, changes in the health care delivery system and reimbursement practices. Although the current nursing workforce is at its highest level in recorded history, shortages are projected to become even more critical, associated with an aging population, declining enrollment in professional education programs, wider career opportunities for women, along with higher salaries in other disciplines. Intense workloads and higher patient acuity levels all contribute, in turn, to the lack of retention of nurses, perpetuating shortages. Some speculate that the negative im-

age of nurses is another deterrent for someone choosing nursing as a profession. The popular media, in particular, have a tendency to portray female nurses as frivolous and subservient to male physicians or employed for long hours in unpleasant work at a low salary. Hence, nursing has become less appealing than some other professions to young people who are making career decisions.

More remote and less populated communities face additional challenges in recruiting and retaining health professionals.^{11,12} Fiscal constraints, in particular, limit health care facilities in small towns from aggressively competing with urban-based counterparts who offer higher salaries and flexible work hours. Small hospitals, oftentimes financially strapped, are not able to offer educational benefits, nor do they have opportunities for nurses to practice in preferred specialty areas such as critical care, oncology, or psychiatry. In fact, nursing shortages have contributed to closure of some small hospitals or, in some instances, merging with a large health care system. Having an adequate number of nurses is also a factor in whether or not a rural community is able to recruit and retain physicians to their area, thus further restricting access to care for many rural consumers. In other words, rural residents may need to travel greater distances to an urban-based provider and have higher out-of-pocket costs to obtain specialty and sometimes even essential health care services.

Characteristics of the Rural Lifestyle and Professional Rural Nursing Practice

There is an ongoing debate as to whether there is any difference between nursing practices in rural and urban health care facilities.^{13,14}

Some nurse scholars believe that rural practice is not unique and that the nursing care needs of individuals are similar regardless of setting. Others suggest rural practice is a specialty unto itself, because it requires a nurse to have certain skills associated with providing care to clients within a more austere context. The rural context includes features such as a sparser population, greater distance between services and providers, fewer “formal” resources, and residents’ preference for informal social structures. These contextual features require that nurses in the rural setting be “expert generalists” in their practice. Other contextual features are reflected in the terms “isolation,” in reference to geographical distances with fewer health professionals, and “local politics,” in reference to informal social structures that prevail in small towns. Furthermore, transportation challenges coupled with the great distances to a specialist may require that rural-based providers make decisions about a patient’s care that are less likely to present in an urban setting with greater immediate access to an array of health-related resources.

According to the literature, successful nurses in rural settings tend to be quite familiar with small-town political and social dynamics and are committed to improving health care in those communities. They cite personal, financial and professional rewards of living and working in a less populated area and of being part of a small community. Such sensitivity to the local politics and informal social structures of small towns is reflected in the following statements by nurses in rural practice.

In rural towns, you know most everyone’s history, their family, their sorrows and joys. They are neighbors, friends, family, or family/friends of someone you know. As a nurse you have a greater

degree of responsibility and accountability. Having worked in both urban and rural environments, I found it was much easier to just “do the job” in the urban setting. I didn’t know anyone. There was no connection. I didn’t go home at night and worry about the patients. In the rural setting, as a nurse you are compelled to find the answers, to leave no stone unturned for the patients you care for . . . follow-up on every possibility . . . go home from work and worry about those you cared for. The rural nurse must have commitment and a connection to the people he or she cares for . . . that transcends the experience of nursing in an urban setting. (Anonymous)¹⁴

Insiders versus outsiders . . . The nurse must know whom the community views as insiders versus those who are outsiders. Small town residents have a preference for interacting with long established local residents (insider) versus a newcomer (outsider) to their community . . . to include the nurses who provide care to them. (Anonymous)¹⁴

Familiarity and threats to privacy . . . In a small-town practice setting you must be very mindful of your demeanor and speech. The community grapevine is always very active. Maintaining confidentiality can be very difficult where everyone knows everyone else . . . when everyone has a vested interest in learning about what is happening in town . . . especially when someone is ill or has some kind of misfortune. . . (Anonymous)¹⁴

Table 1. Reasons for Choosing Rural Nursing Practice

<p>1. Personal considerations</p> <ul style="list-style-type: none"> • location of family/spouse • small town lifestyle • connection with the community • love of nature • quality of life/simplicity • good place to raise children • spouse's position/work • my/our hometown • know neighbors • less crime <p>2. Professional considerations</p> <ul style="list-style-type: none"> • prefer smaller hospital • range of experiences • ability to provide much need services • opportunity to give back to community • already work in the area • working with a particular population (e.g. Native American) • disproportionate morbidity/mortality (i.e. health disparities) • opportunity for family practice • more accessible patient/family history • position uses NPs very well <p>3. Financial considerations</p> <ul style="list-style-type: none"> • loan repayment • pay is very competitive • need for health insurance for family

Table 2. Challenges Associated with Rural Nursing Practice

<p>1. Contextual features of the environment</p> <ul style="list-style-type: none"> • distances to services • isolation (geographic/professional) • weather-related travel in inclement conditions • informal social networks • politics of familiarity • limited job opportunities <p>2. Professional realities</p> <ul style="list-style-type: none"> • lack of anonymity • threats to maintaining patient confidentiality • privacy/politics in small practice • outsider bias (by long time residents) • no/few specialists in area (for patient referrals) • fewer resources (time/personnel/equipment) • limited professional backup • less access to educational opportunities • educating public about NP role in a community with physician dominance <p>3. Patient-related considerations</p> <ul style="list-style-type: none"> • large patient loads • patients are sicker when they seek professional care • high(er) rates of uninsured/under-insured • professional/ethical conflicts about treatment regimen • knowing family history/background
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Maintaining confidentiality and anonymity can pose challenges for people who live and work in a small town. In particular, maintaining anonymity is a concern for rural residents, even those who say they enjoy being personally acquainted with most others in the community. For instance, leaks in confidentiality often result from chance encounters that can quickly

become public knowledge via an active and concerned community rumor mill. Innovative approaches are required on the part of nurses in rural practice to ensure patient confidentiality, while at the same time treating others in the community with respect. Nurses who are comfortable with the rural context recognize that lack of anonymity and confidentiality-related

threats are both challenges and opportunities. For instance, some find that public recognition is a positive aspect of rural life, while others see it as an invasion of personal privacy. It is important to note that rural nurses are highly esteemed in their communities, which, in turn, can make it difficult to delineate one's personal and professional identity. To deal with these realities requires a certain degree of social finesse on the part of nurses in rural settings.

Professional isolation requires an outstanding ability for a nurse who does not have immediate access to peers to prioritize needs and determine the most appropriate services for a particular client. Lack of immediate access to other health care providers and continuing education can be a source of considerable strain for the nurse. Consequently, nurses who are uncomfortable working alone or who lack the confidence to make independent decisions probably will not fare well in more remote rural practice settings.

Obviously, the nurse who chooses this rural practice must be creative and flexible in order to successfully plan and implement health care to fit local residents' preferences, while taking into consideration the realities of the community environment. Rural practitioners in general, and nurses in particular, must possess a wide range of skills to care for individuals with diverse conditions across their life span. In other words, they are comfortable in the role of "expert generalist." For example, a nurse in a small rural hospital may care for an obstetrical patient (mother and baby), someone who had surgery for an acute condition, and an elderly person with an exacerbation of a chronic health problem - all on the same shift. And, the patients are likely to be friends, neighbors and even relatives.^{13,14}

Addressing the Rural Nursing Shortage: Strategies and Policies

The National Rural Health Association (NRHA), the official organization for rural health care providers, developed official statements on *Recruitment and Retention of a Quality Health Workforce in Rural Areas: a Series of Policy Papers on the Rural Health Careers Pipeline*. Of these, one specifically targets nursing recruitment and retention (Number Six, December 2005).¹² The NRHA notes that addressing the nursing shortage in rural areas mandates collaboration and partnering between institutions of higher education, leaders in small communities, philanthropic organizations along with state and federal entities. The next section of this paper highlights strategies for nurse educators, rural health care providers, and the state and federal government to help address the prevailing shortage in nurses.

Education

Institutions of higher learning have a responsibility to prepare nursing students to function in a variety of settings, rural and urban alike. Students should be exposed to rural contextual features such as informal social structures and planning a continuum of care within the constraints of less immediately accessible resources. Faculty with experience in rural health delivery should be sought, and students with a rural background should be invited to share their insights. Students should be made aware of the importance of self-care and learn how to become part of a support system in communities having fewer professional caregivers. Mentoring arrangements in the form of short-term student internships and more extensive preceptorships with nurses in

rural practice is one way to foster networking that can continue post-graduation. As for content areas, nurses having an interest in rural practice should know how to assess a community's health needs, understand the importance of morbidity and mortality rates, and develop appropriate care for individuals, groups, and communities with diverse needs. Students having these skills will feel more confident when seeking nursing positions in rural settings; and, once employed, they will be more likely to remain there long term.¹²

To retain a highly skilled rural nursing workforce, continuing education must be accessible to nurses. Nursing educators should survey nurses in rural locales to learn about their particular learning needs and career goals. Then, education offerings should be tailored to address those preferences. Where feasible, technology might be one way to deliver educational offerings as a way to help nurses in more remote settings maintain clinical expertise and pursue advanced nursing degrees. Then, too, there is a growing need for collaborative academic and rural clinical research arrangements. Findings from these studies must, in turn, be published to expand the knowledge base relative to rural nursing practice.¹²⁻¹⁴

Rural Communities and Health Care Providers

Local leaders along with health care providers must become proactive in addressing a rural community's nursing needs through long range planning and partnering with other entities. To ensure that there is an adequate nursing workforce for future generations, career pipelines need to be put into place in rural schools. In other words, early on local youth must be exposed to nursing as a career option. Elementary and secondary students should be

exposed to health careers and, subsequently, systems should be put into place to ensure that those who are interested are competitive in university admission processes and successful in rigorous academic programs. The community as a whole must work with educators in local elementary and secondary schools to emphasize the importance of mathematics and science studies. Career pipelines targeting under-represented groups are critically needed, and best practice health career progression models could be put in place that have proven successful in other rural communities. Another strategy to create awareness about nursing as a career is to create job shadowing opportunities with nurses in local health care facilities and involve the media to disseminate the information about innovative advisement programs to further promote awareness of nursing as a fulfilling and rewarding career.¹²

The nursing care needs of people will continue to escalate along with an aging population. For this reason, models of care delivery must be developed that enhance, expand and augment professional nursing services. Technology and electronic communication hold great potential to reach clients in more remote and rural regions (i.e. telehealth, telemedicine). Or, nurses could teach lay persons (friends, family members) how to provide personal care to a loved one, and thereby augment limited nursing services in the community. Or, with nursing consultation, local non-profit or volunteer organizations could coordinate professional and lay care for individuals with chronic health problems in a medically under-served rural region.

Administrators in rural health care facilities and the community as a whole have a role in recruiting as well as retaining nurses in their region. Job satisfaction for rural nurses extends beyond the walls of the employing institution.

Rather, it includes feeling accepted and “fitting into” the community. Health care facilities in a small town, in partnership with other local entities including health care providers and businesses, should be encouraged to develop innovative strategies that contribute to job satisfaction, such as nursing service recognition programs, self-governance programs and career development models.¹⁵

Support networks in more remote regions are especially important for nurses in advanced practice roles such as nurse practitioners, nurse midwives and nurse anesthetists to alleviate feelings of professional isolation. These networks will probably include interdisciplinary members and use electronic communication technology to stay connected. Acute care facilities in rural settings could adopt programs that support nursing leadership, such as the Magnet Hospital Recognition Program. This initiative recognizes health care organizations that provide the very best in nursing care and uphold the tradition within nursing of professional nursing practice. The program also provides a vehicle for disseminating successful practices and strategies among nursing systems. To reiterate, existing nursing care delivery models must be evaluated, and information about best practice models needs to be disseminated so that these programs can be replicated in other rural settings.^{12,15}

State and Federal Government Policies

Federal, provincial and state entities play an important role in educating, recruiting and retaining a competent and adequate nursing workforce.^{12,16} Over time, Congress has developed rural initiatives to address nursing workforce shortages. In particular, the Division of Nursing at HRSA provides national

leadership to ensure an adequate supply and distribution of qualified nursing personnel to meet our nation’s health care needs. The Division is responsible for implementing the Nursing Workforce Development authorities with overarching goals cited as:

- Increase access to quality care through improved composition, distribution, and retention of the nursing workforce
- Increase diversity and cultural competence in the workforce
- Improve the quality of nursing education and practice
- Identify and use data, program performance measures, and outcomes to make informed decisions on nursing workforce issues
- Increase the supply, distribution, and retention of the nursing workforce through financial assistance

Currently, Title VIII programs provide grants to institutions, as well as scholarships and loans to individual students in pursuit of graduate or undergraduate nursing education. These authorities provide flexible and effective support. They are the largest source of federal funding that assists students, schools of nursing, and health systems in their efforts to recruit, educate, and retain registered nurses. Preference is given to projects that benefit rural or underserved populations and help meet public health needs in medically under-served areas. In FY 2004, Nursing Workforce Development Programs assisted over 50,000 students in obtaining their nursing education through individual student support and programmatic support. Currently, the requested funding of \$175 million from Congress targeting nursing would provide an additional \$25 million to support the following programs.¹⁶

Advanced Education Nursing Programs

This federal initiative helps schools of nursing, academic health centers, and other nonprofit entities improve the education and practice of nurse practitioners (NP), nurse-midwives, nurse anesthetists, nurse educators, nurse administrators, public health nurses, and clinical nurse specialists.¹⁶ Institutional grants support master's and doctoral programs, combined RN/master's degree programs, and post-nursing master's certificate programs. In addition, traineeship grants to institutions directly support individual students seeking advanced education. These grants in particular have made a difference in the lives of students who come from rural underserved areas and who want to work with underserved populations. Since these individuals graduate without debt, they do not have to move to a better-paying job in another facility or state.

Nursing Workforce Diversity Programs

This federal initiative includes grants and contract opportunities that are awarded to schools of nursing, nurse-managed health centers, academic health centers, and nonprofit entities to increase access to nursing education for disadvantaged students, including racial and ethnic minorities under-represented among RNs.¹⁶ The program funds scholarships or stipends, pre-entry preparation, and retention activities to enable students to complete their nursing education. It targets students enrolled in elementary and secondary schools, pre-nursing and nursing programs. Rural communities need to assume a proactive role in partnering with schools of nursing to develop these career pipelines, so that local youth are prepared to

be successful in these rigorous and competitive educational programs.

Nursing Education, Practice and Retention Program

This competitive federal grant program helps schools of nursing, academic health centers, nurse-managed health centers, and health care facilities strengthen nursing education, practice, and workforce retention with the following purposes:¹⁶

Education Grants

- Expand enrollments in baccalaureate nursing programs
- Develop internship and residency programs to enhance mentoring and specialty training
- Provide for new technology in education, including distance learning

Practice Grants

- Expand practice arrangements in non-institutional settings to improve primary health care in medically underserved communities
- Provide care for underserved populations such as the elderly, persons diagnosed with HIV/AIDS, individuals who abuse alcohol and drugs, the homeless, and domestic abuse victims
- Provide skills to practice in existing and emerging health systems
- Develop cultural competencies

Retention Grants

- Develop Career Ladder Programs to support nursing education and assist individuals in obtaining the education they need in order to enter the profession and advance within it

- Enhance patient care delivery systems by incorporating best practices for both increased collaboration and improved communication — innovations that have proven to double nurse retention rates and improve patient care quality

Nursing Loan Repayment and Scholarship Programs

These much needed federal programs support current students and new graduates by directing them to practice in areas with the greatest need, including departments of public health, community health centers, home health agencies, nursing homes, and disproportionate share hospitals. The Nursing Education Loan Repayment Program assists participating RNs by repaying 85% of nursing student loans in return for three years of practice in a designated health care facility. In FY 2005, 4,445 nursing students applied, only 803 were accepted, leaving 82% turned away due to the lack of funding. In other words, 3,662 RNs interested in working in facilities deemed to have a critical shortage of nurses were not accepted.

The federal Nursing Scholarship Program offers individuals who are enrolled as full-time nursing students the opportunity to apply for scholarship funds. Upon graduation, a nurse is required to work for at least two years in a health care facility with a critical shortage of nurses. Preference is given to students with the greatest financial need. In FY 2005, 3,379 applications were submitted, only 212 received scholarships, and 98% were turned away from this program.¹⁶

Nurse Faculty Loan Program

Currently, the nursing shortage extends to faculty in nursing schools as well. Until there

are more nursing faculty members, it is not realistic to expect that enrollment can increase in these educational programs. This federal program supports the establishment and operation of a loan fund within participating schools of nursing to assist nurses in completing their graduate education to become qualified nurse faculty. Students may pursue a master's or doctoral degree in a full-time academic program for Advanced Education Nursing. Students must agree to teach at a school of nursing in exchange for cancellation of up to 85% of their educational loans over a four-year period. Student loans may cover the costs of tuition, fees, books, laboratory expenses, and other educational expenses.¹⁶

Comprehensive Geriatric Education Grant Program

Rural communities have a high proportion of elderly in their midst, and many of them have serious chronic health problems. This federal initiative awards grants to better provide health care services for the elderly. These grants may be used to educate RNs who will provide direct care to older Americans, develop and disseminate geriatric curricula, prepare faculty members, and provide continuing education. They allow participating RNs to use their knowledge to strengthen the skills of other nursing care providers who care for seniors.

Nursing Student Loan Program


This revolving fund was established in 1964 by Congress to address nursing workforce shortages. It provides undergraduate or graduate nursing students with a maximum of \$13,000 in loans at 5% interest. Schools of nursing participating in the Nursing Student Loan (NSL) Program select recipients and de-

termine the level of assistance provided. There is a preference for those in financial need. Funds are loaned to new students as existing loans are repaid. This program has not received additional appropriations since 1983, however. A similar provision in the FY 2006 appropriations law will return additional funds to the Treasury that could help nursing students complete their education.¹⁶

Essentially, authorities under Nursing Workforce Development enable schools of nursing to increase their enrollments, provide programmatic innovation, and prepare students for the realities of caring for our nation's diverse populations in many health care settings across the life span. However, despite excellent outcomes, the programs are severely under-funded, and in many instances the rural perspective is not taken into consideration. Also, funding for research at the National Institutes of Health (NIH) must be expanded to address nursing conditions and nursing outcomes prevalent in rural areas in order to support rural health professionals, enhance human capacity in rural areas, and ensure the financial stability of rural health care systems.¹⁶

Summary

The intrinsic value of having an adequate number of appropriately prepared nurses in rural communities cannot be overstated. For those considering this setting, it is advisable to learn about the scope of nursing practice in rural and remote settings by carefully reviewing the nurse practice acts of a state or province. An understanding of community norms and behaviors is extremely useful to help one make nursing decisions that are ethically sound and culturally appropriate. The shortage of nurses in rural areas cannot be resolved without new

resources along with changes to the education and health care systems in which they function. None of the aforementioned recommendations is "less important" than the others, and there is no easy or single solution. The complexity of the issue mandates multidimensional strategies and partnering by educators, researchers, rural communities and policy makers to ensure a competent nursing workforce that meets the increasingly complex health care needs of both rural and frontier residents. While there are challenges in rural practice, the rewards can be great. In the end, highly skilled and creative nurses are prepared to "leave no stone unturned" when caring for patients in rural and remote communities. 

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