

Osteopathic Family Physician

Nursing shortage in rural America: a tragedy not yet fully acknowledged?

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KEYWORDS:

Nursing; Practice management; Staffing **Summary** Nursing shortage in rural America is a catastrophe about to be realized. Countless agencies, both government and private, have discussed this issue. Policies, legislative acts, diatribes, plans suggested, and much hand-wringing has taken place over the past few years, but we seem to be nowhere nearer to actually fixing the problem. This dilemma is compounded in the rural areas of our country for several reasons. This paper explores some of the reasons why rural areas will fare worse than urban areas. The solutions for rural America will need to include considerations for the local economy and viability of the hospital, issues not as relevant in urban and metropolitan areas. There is both a "staffing shortage" and a "workforce shortage," and we must find out how to correct both. Some of the causes of the shortage include nurse burn-out and injury, an aging workforce (both in current staffing and education of future nurses), job dissatisfaction, low morale, gender and workforce diversity, and issues of autonomy. Areas for improvement include salary and benefit packages, help with the cost of education, and respect within the profession and from other professions within the health industry.

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The problem

There are currently not enough qualified people to do the basic nursing work required of an aging population. Many reports and reporting agencies give impressive numbers regarding forecasts of shortages. This paper will not focus on the numbers but rather will look at the reasons for them and explore possible solutions. The Robert Wood Johnson Foundation (RWJF) asks whether it is a "staffing shortage" or a "nursing workforce shortage." These problems are defined differently: *staffing shortage* is defined in the RWJF report as a "misdistribution of nurses or insufficient numbers of nurses with adequate skills and experience," whereas *nursing workforce shortage* is defined as an "imbalance of supply and demand attributed to qualifications, availability, and willingness to do

the work." Undoubtedly, the answer to rural America's problem is multifactorial, including these two factors and many more, some of which are less easily defined.

There are many sources of information, recommendations, and potential solutions to the shortage of physicians. One is to enlist lesser-trained providers, e.g., nurse practitioners, physician assistants, psychologists, pharmacists, optometrists, and others to fill the need. However, who and where is the workforce to fill the nursing void? Whenever registered nurses (RNs) and licensed practical nurses (LPNs) are asked about giving certified nursing assistants (CNAs) more responsibility in nursing, they invariably throw up their hands in horror at the thought of lessertrained individuals doing the patient care they consider to be in need of their (RNs') level of care. Perhaps part of the problem of nursing staff shortages is that administrators, doctors, and nurses are looking at this issue from different vantage points and with some blind spots; thus, none of us are looking at it similarly.

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The recent RWJF report¹ lists several causes: aging population, fewer workers, a generation (Gen X) who does not view nursing as a desirable career, aging workforce (mean age 44), more job options for women, negative work environment, consumer activism that puts the field under close scrutiny, and a ballooning health care system fraught with problems; there are probably other factors involved that are not yet identified.

Historically, war results in an increased need for nurses and efforts to increase the supply. Rural areas are often more patriotic for war efforts (many of our armed forces members are from rural areas) and there may be an exodus of nurses to the military because the national average for governmental salaries is higher.²

Definition of nursing

One might be surprised at the many types of nurses currently in the workforce. Those most needed in hospitals and medical facilities, "floor nurses," are usually LPNs and RNs. Also needed, from review of the available literature, are ASNs (Associate Degree) and BSNs (Bachelor of Science). The following lists examples of the advanced nursing degrees one might elect after completing basic nursing education: LPN, LVN (licensed vocational nurse), RN (diploma; 3-year, associate's degree; 2-year: ADN, bachelor of science, 4-year: BSN), LPN to associate degree, LPN to BSN, RN to BSN, second degree BSN, accelerated degree BSN, master of science (MSN), and RN to MSN are the basic or nonprofessional levels. That is, these are entry points. Those desiring more autonomous professional nursing careers must complete advanced training, including postgraduate level areas such as nurse anesthetists (CRNAs), nurse practitioner (NPs), and nurse midwives, which require a master's-level degree. They can further springboard to even more advanced practice opportunities with a new degree program called a doctorate of nursing (DNP, doctor of nursing practice). The plan is for NPs to practice more autonomously; however, it also has the potential to confuse the public, because the DNP has the term "doctor" in the title and people may not understand the difference between medical doctors and nurse doctors.

In addition, there are several types of doctorate level nurses. The literature² cites areas of health administration, clinical research, system management, and advanced clinical practice. The major distinction between a DN (Doctor of Nursing, which is being phased out) and DNP (Doctor of Nursing Practice) seems to be a difference in number of years of study. In addition, there are degree programs for doctor of nursing science, doctor of philosophy, forensic nursing and legal nursing, as well as dual and joint degrees. It should therefore come as no surprise, given current working conditions in clinics, nursing homes, and hospital wards, combined with the availability and access to higher-level nursing fields, that few individuals desire careers as "worker-bee" nurses.

Definition of rural

Of the many sources reviewed for a definition of rural (mainly government sites of one kind or another) most seemed to define rural based on *what it is not*. For our purposes, however, a more demographic determination is needed. Too frequently, numbers and statistics miss the essence of what it means to be rural, and the contributing factors of rural existence add to the problem of the concept of shortage of nurses in rural America. According to Whitaker,³ "rural" was first used by the U.S. Bureau of the Census in 1874. At that time, it was defined as a county of any cities or towns with 8,000 or fewer inhabitants, but by the 1980 Census, no specific definition for rural was used. Instead, it was defined by what it was not: all population not classified as urban, or *nonurban*. This said "frontier," which is different from rural, has not been defined.

Let us consider some quantitative and qualitative definitions. The Office of Management and Budget (OMB)⁴ and "What is Rural?"5 define rural as the remaining areas that are not assigned as urban. This definition bespeaks an identity crisis. The Census Bureau⁶ requires a metropolitan area (MA) to contain a minimum population of 50,000 in the area's central city, or 50,000 in an urbanized area (UA) and 100,000 in total MA. The Census Bureau⁶ classifies 61.7 million (25%) of the total population as rural; the OMB classifies 55.9 million (23%) of the total population as nonmetropolitan. According to the Census definition, 97.5% of the total U.S. land area is rural; according to the OMB definition, 84% of the land is nonmetropolitan. The Farmers Home Administration considers rural areas to be open country communities with a population of as much as 20,000 in nonmetropolitan areas.⁷

Rural is often described as simple life, agriculturally dominated, and isolated. These descriptors are inadequate.

Contributing factors

Factors that interplay with the dilemma of hospital viability and nursing staff include social, demographic, economic, and educational. The economic base areas may include farming, mining, manufacturing, medical, and government. Still others define rural issues under titles such as occupational, ecological, and sociocultural. Social factors cover the problems of what can become persistent poverty and a population made up of the young and very old. The phrase "retired" in relationship to the older population in rural areas is amusing because rural elderly rarely retire in the sense of the word most associated with its meaning. Many people who live in rural areas live there because they are retired. That is somewhat changing now, because baby boomers with money often have a place in the country and it is their choice to live there after retirement. Historically, however, the elderly in rural areas are there because they work as long as they can, have nowhere else to go, nor do they necessarily want to go somewhere else.

Although the geography of rural areas is bucolic to some, to those living there it can cause isolation and may become a barrier to what they need and want. It certainly can create difficulties in getting acute medical care from a geographical perspective.

Viability of the hospital

In an article in *Rural Roads*,⁸ the author states, "The emergency room (ER) is one engine that drives many rural hospitals, generating much of the inpatient, outpatient, and support services revenue upon which these hospitals rely." Declining use of the hospital in general will have a negative effect on the viability of the hospital. Staff, including nursing, intuitively understand this and anticipate job security issues. They may begin looking elsewhere, perhaps for a stimulating and financially rewarding job with security.

With the advent of managed care in the early 1990s, reimbursement to hospitals from insurance and Medicare dwindled; at the same time, inpatient acuity levels rose. As hospital reimbursement decreased, jobs were cut, often with the most expensive employees first. Hospitals, using various measurement tools, soon realized that patient safety suffered when nursing was cut. Many facilities use temporary services, but it seems this is a more costly way to match nurses to acuity needs, and temporary nurses are often a source of irritation to the regular staff nurses who have to pick up the slack of the temps who do not know how things are run, where things are, etc., and may be paid more than the regular staff nurses.

Education and practice areas of nurses

Research suggests that the nursing degree and feelings of autonomy in the job affect job satisfaction and retention. According to the Health Resources and Services Administration, 29% of graduate nurses are baccalaureate level and 70% are diploma and associate level. This level of education affords different levels of perceived and/or real autonomy, which in turn affects the experience of job satisfaction and turnover. The age at which students enter nursing can affect which degree they go for; diploma and associate's degrees offer a quicker pathway. Younger students do not want to work in a place they consider unresponsive to their needs or too stressful. More women are going into other areas of medicine that have more autonomy. Gender issues in rural areas can cause impediments to autonomy and managerial efforts.

RNs usually practice in hospitals, nursing homes, and other extended care facilities, community/public health settings (health departments and home health agencies, etc.), and ambulatory care settings, e.g., doctor's offices, outpatient surgical centers, or they teach in one arena or another. "Rural RNs have less nursing education, are less likely to work in hospitals, and are more likely to work full time and in public/community health than urban RNs." ¹⁰

Job satisfaction

In any career, job satisfaction is a major determinant. Morale is known to be low among hospital nurses. The Federation of Nurses and Health Professionals has measured this fact, and it is one that is well-known to physicians who do hospital work. The American Association of Nurse Executives¹¹ gives the following figures: turnover went from 12% in 1996 to 21.3% in 2000. Reasons range from factors related to the job and patient care, isolationism, factors in hospital politics, of other nursing employees, and the nurses' personal expectations of age and career goals. All sources reviewed agreed that nursing managers have the ability to positively affect these issues, but this is contraindicated by same or similar sources that relate issues of lack of autonomy of nursing with physicians and administration. Again, as a personal anecdote, nurse administrators have confided that when they go to management meetings they are often ignored, and worse, their recommendations are belittled at best. This begs the question, at least in the minds of these nurses, how much power do they really have to affect anything?

Reasons cited for leaving their positions include the nurses' experience of being shut out of providing input on work areas or given channels for suggesting input; in short, they feel they are simply not being listened to or that their opinions and insight are considered irrelevant and illegitimate.

Recruitment and retention

There is a limited pool of potential students from which to attract new nurses. Most nursing students are still female, and there is still a real or perceived issue of the male/female quotient. In addition, lack of workforce diversity compounds ability to recruit nurses from different ethnic backgrounds, thus further reducing the number of new nurses. Many sources are recruiting from foreign applicants, which call into question our responsibility for the brain drain we are creating for other countries when we take their health care workers.

Problems that compromise ability to recruit and retain nurses include an aging workforce, fewer faculty to teach nursing (who are also part of the aging workforce), smaller student pool, and inability for the qualified to get in becaue of the issue of fewer faculty.

Family issues may be more important in rural areas, where lack of spousal employment opportunities can impede nursing recruitment. Conversely, if the spouse is employed and has a job change for whatever reason, it will negatively impact retention of that nurse. As it is for physicians, family life and personal needs/expectations can impede recruitment as well.

Nursing burnout and injury

There are many reasons why an individual would give up a job he/she initially enjoyed, but for nurses these reasons are compounded by factors such as mandatory overtime, extra shifts, fewer staff to assist in care (reduction in the patient to staff ratio), an aging workforce, and the obesity epidemic that means many patients are overweight. When staff-to-patient ratios were changed and nurses had to do more for less, in less time, with less help, injuries and low morale were an expected eventuality. These are the problems repeated by nurses who complain of and use as reasons to leave the job.

Solutions

Numerous local, state, federal, and other governmental and nongovernmental agencies, as well as hospital and nursing associations, recognize the growing problem of deficits in nursing care within rural areas. For a number of years, this problem has been examined, and a plethora of reports on the topic exist. Why can't this problem be fixed?

Unfortunately, this paper falls short of finding the magic answer, but it does posit some thoughts and possible solutions. Although the national question is too multifaceted to tackle, the rural answer will consist of a composite of the issues that affect the viability of rural economies. Many sources (see references) give lists of solutions similar to the following. These include: recruitment, efforts aimed at retention, increasing supply through various means, elevating nurses' place in the employment hierarchy, improving the respect afforded to them, expanding career options (although this option appears to be already in place), compiling data for planning (again, we have the data but are not using it strategically), and strengthening nursing leadership. Increased compensation was alternately listed as important and not important in the scheme of things. Historically, rural jobs have lower pay, lower salary thresholds, fewer start-up bonuses, and a less attractive benefits package.

The recommendations of a position paper from the National Rural Health Association¹² are broken down into categories of Employers/Organizations and Congress/State Governments. The first category includes recommendations of a more emotional and in-house policy type: emotional support, overtime issues, and protection mechanisms. The second category includes policy-type issues, training programs, and funding plans.

The following recommendations apply to nursing education and information technology options:

- Clear up the confusion over nursing education, which degree to pursue, and the period of time it takes to get the degree. If the move is away from diploma plans and toward the BSN and to have fewer LPNs, then nursing education needs to look seriously at this issue.
- Rural areas usually have vocational-tech centers, community colleges, and similar facilities that might be used more in the effort of training.
- 3. Access to the tools and information to do one's job is critical. Being able to obtain information quickly is even

- more important in rural hospitals with limited staff. Most hospital libraries are embarrassingly archaic. Although some recent hard-copy information should be available, computer technology is better and can be more complete without the cost associated with paper. Therefore, digital libraries should be available to nurses as well as physicians. (Why isn't there a library for nurses in every hospital like there is for physicians?)
- 4. There should be easy and convenient continuing education that can be accessed when convenient to the nurse. Also, virtual access to nursing colleagues for collaboration and other communicative needs should be available.
- Explore what other facilities in the region are doing to provide continuing education units for nurses onsite or in the local area, thus avoiding or eliminating travel and the expense of time and money.
- Increase the use and supply of grants, scholarships, and loan forgiveness–type programs. Advertise them better so rural students know of them.

Hospital health

There is some help for the hospital administration to stay viable, in the form of federal and local programs. One priority would be for hospital administrators and community leaders to review how the hospital is designated according to Medicare funding parameters. Hospitals designated as Sole Community Hospitals or Medicare Dependent Hospitals can receive enhanced Medicare reimbursement. A classification as a Rural Referral Center might receive disproportionate share payments from Medicare. A listing as a Federally Qualified Health Center offers other benefits. Under Section 330 of the Public Health Service Act, if the area is designated by the Department of Health and Human Services as a health professional shortage area, or a medically underserved area or population, it is eligible for other federal funds and grants.¹³ H.R. 2961¹⁴ was designed to amend title XVIII of the Social Security Act to extend and improve protections for sole community hospitals under the Medicare Program. Section 3624¹⁵ was designed to amend title XVIII of the Social Security Act to enhance disproportionate share of hospital treatment for sole community hospitals under the Medicare program. Appendix A (year unknown) and B of the Act¹⁶ discuss many of the methods and criteria to qualify for Medicare funds.

The economic viability of the hospital is tied to reimbursement. Systems such as the Medicare Prospective Payment System have a complex formula for determining payment amount for Medicare beneficiaries. ¹⁷ This involves applying a "hospital wage index," which for most rural hospitals means a reduced payment. This needs to be addressed and corrected by a legislative process.

Community economic health

This is a difficult area to explore for answers, because each locality is different in personality. To bring in business, business owners look for an economic base and population, or the promise of such. That often means bringing in more population; thus making the area less rural. This is good in some ways, bad in others, depending on your point of view. Because most rural communities are having a difficult time remaining viable economically, solutions here would need to be individualized.

Recruitment and retention

The Nurse Reinvestment Act was passed on July 22, 2002 and is designed to facilitate recruitment and retention through a variety of mechanisms, which include scholarships, grants, loan forgiveness, and promotion of the field in various ways. ¹⁸

Because the insurance companies seem to have aggravated the exodus of nurses, they should be brought to the table to help find solutions. For rural areas, most medical insurance coverage tends to be Medicaid and Medicare. The following are suggestions for improving recruitment and retention of nurses:

- 1. The Nurse Training Act¹⁹ was the first time federal funds were made available to increase the supply of nurses,²⁰ but the onset of managed care created a situation of decreased use and decreased nursing jobs, aggravated by reports from the Pew Health Professions Commission, calling for a reduction in the number of nursing education programs by 10 to 20 percent.²⁰ After realizing that the above was in error, The Health Professions Education Partnerships Act of 1998 reauthorized the Nurse Training Act in the form of the Nurse Reinvestment Act.²¹ Rural communities might consider working through the National Rural Health Association and other agencies to maintain support for nursing programs (if they are not already doing so).
- 2. We need to strike early, young, and frequently. Career days at schools are certainly applicable to rural areas. Area Health Education Centers (AHECs) often help here, as do other entities such as nursing schools. These programs introduce students to a wide assortment of health career possibilities, guide them in goal setting and educational planning, and offer science courses that strengthen critical thinking skills. The University of Virginia led their AHEC in recruiting and education efforts in rural Southwest Virginia, in areas such as Wise and Grundy counties. This was very productive for helping attract students to nursing, medicine, pharmacy, etc.
- 3. AHECs and Health Education Training Centers (HETCs) offer programs such as Medical Academy of Science and Health Camp. AHECs and HTECs also are used in rural areas to help with continuing medical education for health professionals of all types. "Candy stripers" and other hospital volunteers have been a long tradition of service; many former volunteers choose to enter the medical field. These programs should be encouraged.

- 4. Various organizations offer grants, scholarships, and other types of funding for education. Some examples include the Department of Health and Human Services, the National League for Nurses (NLN), the National Health Service Corps (which has a nursing branch), and the TriCouncil (made up of American Association of Colleges of Nursing, American Nurses Association, American Organization of Nurse Executives, and NLN). Another is the Quentin Burdick Rural Interdisciplinary Training Program.²²
- 5. Review of information related to salaries, and through informal discussion with nurses it seems that they are already paid according to skill and seniority level. Hospitals must find a way to better determine staffing needs that do not rise and fall with acuity levels to cut down/ eliminate using temp nurses. This seems to be a big area of contention and can worsen the already low morale. Mandatory overtime must also be scrapped for the same reasons. Flexible work schedules and split jobs would increase retention and recruitment in rural areas, where other family factors play a larger role. Most facilities already have some kind of day care availability.

Pay levels have not been as big an area of concern as the more intangible areas of workday parameters. Salaries are often a bit less (average \$40-\$50K yearly in rural areas vs. urban). The argument is often offered that rural cost of living is less; however, many nurses will drive from a rural area to an urban area for the higher salary. According to careerbuilder.com, the national average salary for a nurse is \$56,880; the government (as employer) average salary for a nurse is \$60,935. A brief perusal of the website on October 5, 2006 revealed numerous nursing jobs of all types all over the country, many of which had been posted on the site since October 2005. Also noted on review of the site: Nurse Practitioners are being offered the same salary range (at upper end of range) that new doctors just starting out are being offered. This salary potential will likely drive more current nurses into the fields of higher-level practicing and away from "regular" nursing, thus worsening our nursing crisis.

- 6. State Centers of Nursing can serve as the infrastructure regionally. The main purpose of a Center of Nursing is to address issues of supply and demand for nursing, including recruitment of nurses into the profession, retention of nurses in the state, and use of nurse manpower resources in the state. These centers also establish and maintain databases of nurses, nursing needs, and determine priorities of needs. These centers can arrange meetings of nurses, other health care providers, business and industry, consumers, educators, and legislators who can plan, collaborate, and implement strategies; they can also identify the various stakeholders and bring them to the table.
- 7. Employers should use flexibility as an employment incentive. Flexibility of training, job sharing, part-time hours, and other flexible issues of scheduling work hours might help retain current nurses, re-enter nurses cur-

rently not working, and look attractive to those considering nursing.

Recruitment of nurses to rural areas is difficult because one has to have a desire or a readiness to live in a rural area above and beyond the barriers to nursing employment listed above. Resources are less readily available for families, and the feeling of isolation can be daunting. Rural existence creates barriers not present in urban areas.

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