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Jeanine Warren-Newmon
University of Nevada Las Vegas

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Nevada "Nurselessness": An Acute or Chronic Condition?
An Examination of the Etiology
and Possible Treatment Alternatives

Presented by

Jeanine Warren-Newmon

Bachelor of Science in Nursing
West Texas A&M University
1982

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Department of Public Administration
Greenspun College of Urban Affairs
University of Nevada, Las Vegas
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ABSTRACT

Data released by the Department of Health and Human Services in February, 2001, revealed that Nevada has the lowest number of registered nurses per 100,000 population in the nation. The state's population is growing faster than the nursing programs are currently able to produce new graduates. Current predictions are that the existing nursing shortage will become more severe and have a longer duration than has ever before been experienced. While there may not be one single identifiable causative factor, the aging nursing workforce, low unemployment, and the universal nature of the shortage magnify the problem. This paper focuses on the ills of the State of Nevada, truly a population at Risk, by addressing the incidence and prevalence of "Nurselessness" as a public health threat, possible causes, epidemic proportions, treatment alternatives, and potential cost to cure.

INTRODUCTION: THE NURSING SHORTAGE

The health care system in the United States has historically relied heavily on the services of nurses. Nurses make up the largest group nationally of health care providers. Recently, there have been media reports and studies conducted that have suggested that there is an inadequate supply of nurses to meet the nation's needs. In response to this concern, several congressional hearings were held (USGAO, 2001; "Nevada's Washington," 2001; "Senate Passes," 2001). At two of these meetings, the United States General Accounting Office testified on the nurse recruitment and retention problem. In an effort to address the nation's critical shortage of nurses, the U.S. Senate unanimously approved the Nursing Reinvestment Act on December 20, 2001, and Congress passed it in July of 2002 (Scott, Jr., 2002).

The number of unemployed registered nurses per capita has declined in recent years; currently providers from around the country are reporting growing difficulty recruiting nurses to work in several states and localities. One of these states is Nevada, which reported an average nursing position vacancy rate of 11 percent. An estimate of supply versus demand of registered nurses in Nevada and neighboring states for 2000 is summarized in Table 1 (USDHHS, 2000).

Table 1

Estimated Supply versus Demand for Registered Nurses in Nevada and Neighboring States -

2000

STATE	RN SUPPLY	RN DEMAND	SHORTAGE	PERCENT
Nevada	9,320	10,461	-1,141	-11%
Arizona	28,575	34,559	-5,984	-17%
California	154,002	166,665	-12,663	-8%
Idaho	6,765	6,235	530	No Shortage
Oregon	21,498	22,347	-849	-4%
Utah	10,940	11,900	-960	-8%

Note. From Projected supply, demand, and shortages of registered nurses: 2000-2020, 2000, National Center for Health Workforce Analysis. Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS). (p. 15)

Increased attention by state governments indicates the seriousness of the problem and growing concern. According to the National Conference of State Legislatures (2001), legislation to address nurse shortage issues has been introduced in 15 states. Additionally, a variety of nurse workforce task forces and commissions have recently been established (USDH, 2003). Nationally, there are multiple impediments involved in increasing the supply of nurses. The nurse workforce is aging, and fewer individuals are entering the profession to replace those who are retiring or leaving. Nurses increasingly report discontent with many aspects of the work environment, including

staffing levels, heavy workloads, increased overtime, lack of sufficient support staff, and inadequate wages. This growing dissatisfaction has, in many cases, affected the decision of many nurses to remain in the nursing field (Sullivan, 2000).

Less younger people, predominantly women, are choosing nursing as a career. Over the last two decades, as opportunities for women outside of nursing have expanded, the number of young women entering the RN workforce has declined (Buerhaus, Staiger, & Auerbach, 2000). The Buerhaus et al. study reported that women graduating from high school in the 1990s were 35 percent less likely to become RNs than women who graduated in the 1970s. Reductions in nursing program enrollments within the last decade reflect this trend. Nursing, as a career option, is still not attracting enough males (p. 1). According to Doreen Begley, R.N. M.S., Nevada Hospital Association's Nurse Executive, "Over the last ten years we have seen the male nurse population grow from 5 to 7% of the total nursing population. This is just a 2% increase. Nursing is just not an attractive choice for men." Ms. Begley added, "National nursing associations have suggested that if the name was changed to something other than "nurse" as the airline industry did when they changed the name of "stewardess" to "flight attendant," we would see more men enter the profession." This is highly unlikely, however, as the title of "nurse" carries with it

history and a well-regarded social status that most nurses would not want to part with. Ms. Begley reports that, "Nevada institutions are attempting to attract more men into the profession by ensuring the advertisement and recruitment material uses pictures that are at least 50% men" (personal communication, D. Begley, March 7, 2003).

The American Hospital Association expects a serious shortage of nurses in the future as pressures are exerted on both demand and supply (AHA, 2001). Future demand is expected to increase significantly as the population aged 65 years and older is expected to double between 2003 and 2030. During that same period of time, the number of women between 25 and 54 years of age who have traditionally comprised the core of the nurse workforce is expected to remain unchanged (p. 1).

According to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the growing shortage of nurses in America's hospitals is putting patient's lives in danger and requires immediate action. The solutions proposed by a special Joint Commission Expert Roundtable focused on transforming the nursing workplace, creating a clinical foundation for nursing educational preparation and advancement, and providing financial incentives for health care organizations to invest in high quality nursing care. Failure to address this problem, JCAHO

warns, is likely to result in increased deaths, complications, lengths-of-stay, and other undesirable patient outcomes.

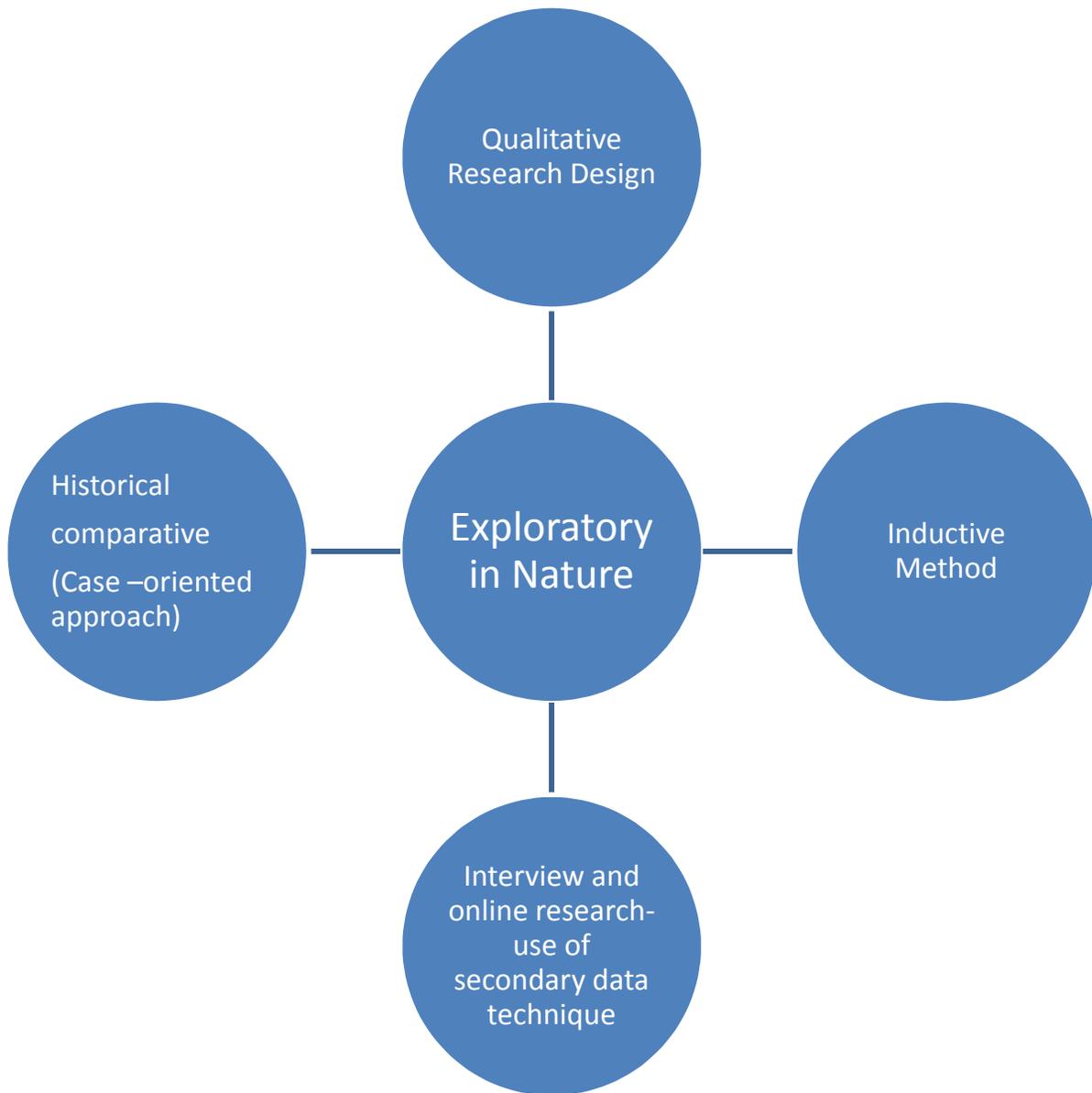
"The need for solutions to this problem is particularly urgent," according to Dennis S. O'Leary, M.D., president of JCAHO. "We must, as a country, understand not simply what needs to be done, but who specifically is responsible for getting each task done; otherwise, we face a future in which patient safety and health care quality will be significantly compromised" (JCAHO, 2002).

This case study will explore the root cause(s) of the nursing shortage in the State of Nevada. The research approach, shown in Figure 1, applies historical and comparative information obtained through interviews with local and national health care professionals, as well as pertinent secondary data obtained through published research from national sources.

Schutt (2001) contends that new insights into social processes can be generated by seeking answers to research questions using historical and comparative methods. These methods provide means for investigating topics that usually cannot be studied with experiments, participant observation, and/or quantitative components. He recommends several methodological techniques that are particularly useful in these types of investigations: secondary data analysis, demographic review, and oral history interviews (p. 309).

Figure 1

Model of Research approach to Nevada "Nurselessness" Case Study



BACKGROUND ON NEVADA'S NURSING SHORTAGE

According to the 2000 census, between 4,000 and 6,000 people move into Clark County monthly. In 1999, 33.8 million people visited Las Vegas; the number rose to 35.8 million in

2000. In the city of Las Vegas alone, the population is about 478,434, yet there are only 7 acute care hospitals with a little over 2,000 beds (cited in Richmond, 2002, p. 3).

Nevada has the highest rate of adult-onset diabetes, heart disease, suicide, and deaths related to cigarette smoking. The state's senior population is growing faster than anywhere else in the United States, according to Bill Welch, president of the Nevada's hospital association (Richmond, 2002).

Job burnout and dissatisfaction are driving nurses to leave the profession. According to data released in the Journal of the American Medical Association (JAMA) in October, 2002, nurses reported greater job dissatisfaction and emotional exhaustion when they were responsible for more patients than they could safely care for. Lead researcher Dr. Linda Aiken concluded, "The failure to retain nurses contributes to unavoidable patient deaths" (p. 9).

Nevada nurses have been fighting for nurse-to-patient ratio laws that would help ease the burden and danger of heavy patient loads. Seventy-five percent of Las Vegas nurses who quit working in hospitals over the last two years left because of poor working conditions, according to a study produced by the Service Employees International Union Local 1007. The union represents more than 7,000 Clark County health care workers and

has been lobbying for legislative change to mandate staffing ratios for several years (Babula, 2000, p. 1).

A shortage of more than 500 registered nurses in Las Vegas is jeopardizing patient care, according to one local nurse. "I'm very concerned, and I'm a nurse on the inside with an insider's perspective," said Shirley Hughes, a charge nurse at University Medical Center who has been practicing for 40 years. "If any of my family members have to go to the hospital, I'm going to have to see to it that they get good care. Hospitals don't want us to tell the public that we're really short-handed, really short-staffed, but at times we are" (Babula, 2000, p. 1). Hughes said that the result of nursing shortages includes delays in medications and inattention to patients' basic needs. Family members and friends of patients have been forced to feed and bathe the patient they are visiting. These are tasks normally performed by trained hospital staff. Hughes indicated that it was not unusual to arrive at work to find 30 patients under her care. "We try to do our best to make things a priority like pain medications and bed pans, but there is no doubt at times medications are delayed," Hughes said (p. 1).

Ray Brown, spokesperson for Valley Health Systems Hospitals – which includes Valley, Desert Springs, and Sumerlin hospitals – said the nursing shortage is significant, but that health care is not threatened. "If there is not appropriate staffing,

hospitals won't accept patients," he said, "But the fact of the matter is, if you physically have beds available and not enough nurses to staff them, it's a concern" (Babula, 2000, p. 2).

According to a 2002 study by the Nevada Hospital Association, there is a lack of interest in the profession by Nevada's youth population and an aging nurse population. Add nationwide competition, and it is difficult for hospitals to both hire and retain nurses. The Nevada Hospital Association study surveyed 20 hospitals in the state, including every hospital in Clark County. Results show that 18 of the 20 hospitals report nursing vacancies. Currently, there is a need for 650 registered nurses, 37 licensed practical nurses, and 117 certified nursing assistants in Nevada. The study predicts that over the next five years an additional 2,740 registered nurses, 285 licensed practical nurses, and 930 certified nursing assistants will be necessary. The majority of the vacancies are in Clark County (NHA, 2003).

According to Bill Welch, President of the Nevada Hospital Association, hospital officials and nurses, the shortage is partly due to increasing career opportunities for women in other fields. "You can come out of school as a computer programmer and start at a much higher level in salary than someone coming out of a nursing program," said Alice Costello, public health nurse supervisor for the Clark County Health District. "Nursing

is very rewarding work, but it's very hard work. You're looking at working holidays and weekends. The pay is just not proportionate." In Nevada, the average hourly wage for a registered nurse is \$23 (Babula, 2000, p. 2).

However, according to local nurses, pay is not the biggest problem (Babula, 2000). Many nurses are fearful they will lose their licenses because they cannot provide quality care to an increasing number of patients. "Patient health is in jeopardy, any nurse will tell you that," said Nancy Reynolds, a registered nurse who said she abandoned her hospital-nursing career in 1995 because she was fearful of losing her license due to compromised care. "Nurses are asked to do more and more for less and less, and are leaving the field in droves because they just can't stand it anymore. They know it's unsafe" (p. 2).

Christine Sawyer, a member of the Service Employees International Union Local 1107, said, "I was disgusted and left without another job to go to. I was being asked to take care of too many patients without enough people to help me. I was in charge of 12 people. I couldn't breathe, and all I could do was the bare minimum. An RN is the eyes and ears for the doctors when they're not at the hospital, and I didn't have a chance to do that" (Babula, 2000, p. 2-3).

THE EFFECT OF THE NURSING SHORTAGE IN NEVADA

The nursing shortage in Nevada has been described as the worst in the nation, and it appears destined to continue if the state's educational programs aren't quickly expanded to allow for double the number of nursing school graduates every year. "We project that unless something changes, the education programs right now will grow to produce only 300 to 400 nurses per year," said Bill Welch, President of the Nevada Hospital Association. "Nevada's needs per year right now are 670 nurses. In Las Vegas alone, the annual need for new nurses is 495" (Babula, 2001, p. 1). Nevada currently has the fewest nurses per capita in the nation. This has translated into many problems in the state's hospitals and medical facilities.

A report by the Nevada Hospital Association's Nevada Nurse Task Force was released in March 2001 and presented in a two-day nursing conference in Reno (NHA, 2001). At that time, Las Vegas hospitals were closing their emergency rooms to ambulance patients every day, frequently due to lack of nurses. This critical shortage of nurses plagues the Las Vegas Valley at a time when hospital construction is booming, and projections show that the shortage may continue at a crisis level for at least five years.

Five new hospitals, with 676 additional beds, are being developed in the Las Vegas Valley with a sixth in the planning stage. But Clark County already has problems recruiting enough nurses to staff the current nine full-service medical facilities (Richmond, 2002, p. 1).

The state's six active nursing programs graduated 277 students last year, and community college officials hope to double enrollment over the next few years. However, the Nevada Hospital Association predicts that 662 additional nurses will be needed each year through 2008 (Richmond, 2002, p. 2). Nevada's population growth outpaces its production of new nurses, which means that the state will continue to rely on bringing in RNs from other states. The Las Vegas Hospital Nurse Recruitment representatives from Sunrise, St Rose, and Valley Hospitals were contacted by this researcher and all acknowledged that they use supplemental/temporary staffing from Traveling Nurse Agencies on a regular and too frequent basis. They all declined, however, to provide any data on costs of these nurses or percentages of positions filled with "Travelers," citing the competitive nature of the hospital business as the reason for their silence. They were also unwilling to disclose their success rates in recruiting and retaining these nurses to fill permanent openings.

A recent study by Packham (2002) indicated that Nevada produces a scant half of the nurses required to handle the state's population growth. The issue could be serious enough that hospitals in Nevada may be forced to close for lack of nursing staff. The Las Vegas Valley Hospital is already struggling with overcrowded emergency rooms. An emergency room is supposed to be the place where patients are either treated and released or admitted to a ward. When there are not enough nurses to staff the ward beds, the patients must stay in the emergency room. Eventually, the emergency room is forced to close its doors to all but the most critical cases.

From December 30, 2001, to January 5, 2002, Sunrise Hospital's emergency room was forced to close for nearly forty-eight hours due to a lack of nurses to adequately staff the facility. UMC was closed for a little more than a day during the same period. Lake Meads Hospital's emergency room was closed for two hours. Sunrise Hospital spokeswoman Ann Lynch admitted that staffing shortages, and not a lack of bed space, were the cause of many emergency room closures (Richmond, 2002). "The nursing shortage is reaching crisis levels in Nevada just as it is nationwide," said Richard Schlegel, Executive Director of the Nevada Nursing Association. "Nurses are already pulling extended shifts just to keep the floor staffed. At current

staffing levels, not even looking at hospital expansion, we're already facing a very serious situation" (Richmond, 2002).

Health administrators fear the new regulations in California, which mandate fewer patients per nurse in hospitals, could drain workers from Nevada's nursing pool, exacerbating the problem. Hospital administrators predict a bidding war over nurses, with many likely to go to California (Richmond, 2002).

The California legislature has ordered the state's health division to put into effect mandatory nurse-to-patient ratios. This legislation sets minimum nurse staffing levels for a variety of hospital units (Bernstein, 2002). On general medical and surgical units, there must be a minimum of one registered nurse for every five patients. On pediatric units, there must be one registered nurse for every four children. On obstetrical units there must be one registered nurse for every two women in labor. In emergency rooms, there must be one registered nurse per patient. This will mean that many facilities will be required to hire more staff (p.1-2).

On September 29, 2002, the California Nurses Association (CNA) welcomed the release of the formal regulations implementing the nation's first minimum nurse-to-patient ratio ("California Nurses Welcome," 2002). CNA President Kay McVay, RN, said, "We are gratified that this critical process is moving ahead, and that patients can look forward to the day when all

California hospitals must maintain a minimum safe standard of registered nursing care" (p. 1). CNA also welcomed the announcement of 13 regional Nursing Workforce grants to assist the recruitment of additional RNs. McVay called the step "an important component of reducing the hospital nursing shortage," and added, "along with implementation of ratios, and other economic improvements in the workplace, CNA has won in many hospitals" (p. 1). Governor Gray Davis has also pledged \$60 million to expand the capacity of California's nursing schools to meet the estimated need for 5,000 new registered nurses immediately.

It is important to note that other states such as Texas and New York are also pledging large sums to address this issue, while Nevada's legislators have not seen fit to do the same. This concern was expressed on KNPR radio. In February, 2003, Dr. William Thompson, a University of Nevada/Las Vegas professor of Public Administration expressed his sentiments about Governor Kenny Quinn's State of the State speech which kicked off the 2003 Nevada legislative session. "The governor said a lot in his State of the State speech. Our state was fragile, our society broken, our state treasury broke. He said we need new taxes, we need new programs. But there was a lot he did not say." Dr Thompson continued, "He did not say one word about nuclear waste. He did not say one word about doctors leaving

because of insurance costs. He didn't mention a nursing shortage" (KNPR Radio, 2003).

Nevada would be likely to see an exodus of nurses seeking an education or leaving to fill job openings created by the legislation in California. "Will there be an attempt by California to poach staff away from us and everyone else? Absolutely," said Welch. "They will be forced to pay whatever they have to, and then we'll be forced to counter with higher offers of our own just to keep the people we already have" (Richmond, 2002, p. 1).

Joanne Spetz, an analyst with the Public Policy Institute in San Francisco, said the new staffing ratios may tempt nurses who left California for Nevada to return (Richmond, 2002). "A lot of nurses chose Nevada because of the lower taxes and they want to keep the warm climate," Spetz said. "But California hospitals are going to have to offer higher salaries and better working conditions if they want to lure those nurses back" (p. 1-2).

The nursing associations and hospital administrations at Las Vegas Valley hospitals agree that a priority must be placed on recruiting, developing, and training nurses. Las Vegas needs more hospital beds, and state colleges are trying to train more nurses to staff them, but they do not have the enrollment to meet the projected demand. Some programs are targeting children

as young as kindergarten for future nursing careers. "If we don't move now to produce those professionals, we will not have the work force to accommodate new hospitals," stated Bill Welch (Richmond, 2002).

THE IMPACT OF NURSE STAFFING SHORTAGES ON PATIENT CARE

A review of recent surveys demonstrates that the nursing shortage has led patients to feel they are not receiving the proper care. In some cases, nurses who are not fully trained are attending to patients. This can be potentially dangerous when one considers medicine dosages or recognizing symptoms.

A survey that evaluated the impact of the nursing shortage on patient care was conducted by the Harvard School of Public Health and the Henry J Kaiser Family Foundation. Authors Needleman, Buerhaus, Mattke, Stewart, and Zelevinsky (2002) found that 53% of physicians and 65% of the public cited the shortage of nurses as a leading cause of medical errors. Overall, 42% of the public and more than a third of U.S. doctors reported that they or their family members have experienced medical errors in the course of receiving medical care. The authors conducted national surveys of 831 practicing physicians, who responded to mailed questionnaires, and 1,207 members of the public, who were interviewed by telephone. Respondents were asked about the causes and solutions to the problem of

preventable medical errors. As many as 35% of physicians who responded and 42% of members of the public reported errors in their own or a family member's care. A majority of both groups believed that the number of in-hospital deaths due to preventable errors is lower than that reported by the Institute of Medicine (p. 1716).

According to a study published in the October, 2002 issue of the Journal of the American Medical Association, more nurses at the patient's bedside could save thousands of lives each year. Nurse researchers at the University of Pennsylvania determined that patients who have common surgeries in hospitals with high nurse-to-patient ratios have an up to 31% increased chance of dying. Funded by the National Institute for Nursing Research, the study determined that every additional patient in an average patient's nurse workload increased the risk of death in surgical patients by 7%. Having too few nurses may actually cost more money given the high cost of replacing burnt-out nurses and caring for patients with poor outcomes (Aiken, 2002, p. 7).

Health Care at the Crossroads: Strategies for Addressing the Evolving Nursing Crisis, a report by the Joint Commission on Accreditation of Healthcare Organizations, indicates that a shortage of nurses in America's hospitals is putting patients' lives in danger (2002). JCAHO examined 1,609 hospital reports

of patient deaths and injuries since 1996, and found that low nursing staff levels were a contributing factor in 24% of the cases (p. 8).

Needleman et al. (2002) also found that a higher proportion of nursing care provided by RNs and a greater number of hours of care by RNs per day are associated with better outcomes for hospital patients. The mean number of hours of nursing care per patient was 11.4, of which 7.8 hours were provided by registered nurses and 2.4 hours by nurses' aides. Among medical and surgical patients, a higher proportion of hours of care per day provided by registered nurses was associated with a shorter length of stay and lower rates of complications. A higher proportion of hours of care provided by registered nurses was also associated with lower rates of pneumonia, shock, cardiac arrest, and death. The authors used administrative data from 1997 for 799 hospitals in 11 states (covering 5,075,969 discharges of medical patients and 1,104,659 discharges of surgical patients) to examine the relation between the amount of care provided by nurses at hospitals and patients' outcomes. Additionally, they conducted regression analysis in which they used, as a control, patients' risk of adverse outcomes, differences in nursing care needed for each hospital patient, and other variables.

THE IMPACT ON NURSES

One of the most serious and visible effects of the nursing shortage is job burnout. In the study by Aiken, Clarke, Stoane, Sochalski, and Silber (2002), nurses reported greater job dissatisfaction and emotional exhaustion when they were responsible for more patients than they can care for safely. Lead researcher, Dr. Linda Aiken, concluded that "failure to retain nurses contributes to unavoidable patient deaths" (p. 9).

Dr. Linda Aiken (2001) examined job satisfaction for nurses in the May/June issue of Health Affairs. Her results demonstrate that more than 40% of nurses working in hospitals reported being dissatisfied with their jobs. The study indicates that one out of every three hospital nurses under the age of 30 are planning to leave their current jobs in the next year (Aiken, 2001, p. 3).

The Federation of Nurses and Health Professionals published The Nurses Shortage: Perspectives from Current Direct Care Nurses and Former Direct Care Nurses (2001). Results indicated that one out of every five nurses currently working is considering leaving the patient care field for reasons other than retirement in the next five years" (p. 6).

The League of United Latin American Citizens, the Progressive Leadership Alliance of Nevada, and Nevada Senior Centers sponsored a forum, attended by a group of approximately

70 medical professionals on April 22, 2001. The group spent the morning discussing the long hours nurses work, the need for more staff, and the impact on patients. "We wanted to give the nurses a chance to tell it like it is," said Bill Freitas, of Operating Engineers Local Union No. 3, which represents registered nurses (Guidos, 2001, p. 1).

Several nurses described the difficulty of taking care of patients when working double shifts. They urged hospital administrators and the state to look at the problem closely. Andrea Wagner, a nurse in Reno for six years, commented that everyone needs to be concerned. She said the type of care a person receives and the amount of time a nurse spends with a patient are affected by nurse staffing. "The public needs to open their eyes and raise the issue because this one does affect them at this point," Wagner said. "We are in a desperate situation and that impacts how we care about our patients. I'm afraid that the administration doesn't care and we want the public to know that we're on their side" (Guidos, 2001, p. 1).

Judy Davis, spokeswoman for Washoe Medical Center, said hospitals are taking the shortage seriously, but can't keep up with the complex problem that has made Nevada the state with the largest nursing shortage. "The administration doesn't care," she said (Guidos, 2001, p. 1).

Paul Gowins, of The Nevada Disability Forum, said he was present to make it known that people with disabilities are especially affected because they enter the hospital with more frequency than the public. "Waiting periods are longer and patients are not receiving proper care," he said. "The reason: there aren't enough nurses to go around," Mr. Gowins added. "We feel that we have to take a stand," Gowins said. "We want to join them (the nurses) to do that. Staffing levels make working conditions difficult. When people go into hospitals, the care won't be there" (Guidos, 2001, p. 1).

The executive editor of the Las Vegas Sun said one well-informed local nurse recently told him that, at Nevada hospitals, "nurses who voiced concerns about how downsizing and work re-design were affecting their ability to provide patient care were commonly told, 'if you don't like it, leave.' And many did," (O'Callaghan, 2002, p. 1), "The Nevada Nurses Association has been telling lawmakers for over seven years that if changes were not made in working conditions and staffing levels, and nurses continued to leave at current attrition rates, we would have another nursing shortage."

Norma Brown, nurse executive at St. Mary's Health Network, commented that the nurses have a legitimate concern. "As long as the nursing shortage continues, it is going to get worse," she said. Brown added that several nurse groups have been

trying to pass legislation to help students get through nursing school, but the problem is more complex than just getting more students through school. Additional students would stretch current resources and would compromise training (Guidos, 2001, p. 1).

FEDERAL AND STATE LEGISLATION

On December 20, 2001, the U.S. Senate unanimously approved S.1964, the Nurse Reinvestment Act, which addresses the critical nursing shortage in America (Senate, 2001). Contained within the legislation are two measures, by Senator Joseph Lieberman (Connecticut) and Senator John Ensign (Nevada) that help retain nurses in hospitals and health care facilities. "I am pleased the Senate unanimously approved what amounts to a helping hand for our nation's nurses. The measures that Senator Lieberman and I authorized in this legislation will not only aid in the recruitment and retention of nursing professionals, but most importantly, provide quality health care services to all patients," Ensign said (Senate, 2001, p. 1).

The Lieberman-Ensign legislation addresses the nursing retention problem by creating incentives for hospitals and health care facilities that have taken the first step in developing aggressive retention techniques. It would provide funds for nurses to return to school on a full scholarship to complete a nursing degree. The first component creates a

competitive grant program that would provide funds to health care facilities of up to \$600,000 based on staffed bed size for nursing services to bolster their retention efforts and improve the work environment for the nursing staff the hospitals. The second element would allow nurses to return to school on a full tuition scholarship in order to complete a Bachelor of Science in Nursing (Senate, 2001, p. 1).

The legislation is based on research showing a complex and ongoing problem (O'Callaghan, 2001). The problem of a shortage of nurses has been under discussion in the Nevada legislature and media for almost 20 years. "In fact, the Nevada nursing shortage in the late 1980s was never resolved. It was overshadowed by the downsizing in California hospitals that resulted in the layoffs of thousands of California nurses who migrated to Nevada," said Mike O'Callaghan. "It was also coupled by the downsizing and work redesign in Nevada, which decreased our need for nurses" (p. 2).

In 2001, Constituent Member Associations (CMAs) of the American Nurses Association implemented a nationwide state legislative and regulatory agenda focusing on issues affecting registered nurse staffing of hospitals and other health care facilities. No other nursing organization has had the political influence that member nurse associations have in either state legislative arenas, or the structure that is provided by the

presence of a nurses association in every state ("Nevada's Washington," 2001).

Congresswoman Shelley Berkley, Nevada, co-sponsored the Nurse Reinvestment Act. She wrote, "The legislation would fund scholarships and loan repayments for nurses who agree to work in areas hardest hit by the shortage. The legislation is badly needed because the way to recruit and retain more nurses is to offer educational incentives that will help them begin to advance in their careers. Both the House and the Senate have passed versions of this bill, and I am optimistic that the President will sign the final version" ("Nevada's Washington," 2001).

The Senate finally agreed to accept the Mikulski amendment providing \$20 million in new funds for the Nurse Reinvestment Act. Final cosponsors of the amendment included Senators Kennedy, Kerry, Jeffords, Clinton, Murray, Rockefeller, Corzine, Lieberman, Collins, Sarbanes, Lautenberg, Tim Johnson, Biden, Cantwell, and Gordon Smith. The American Nurses Association reported that calls, faxes, and email by nurses were a huge help (AACN, 2001).

On August 1, 2002, President Bush signed the Nurse Reinvestment Act into law. Nurses across America had fought for its passage. While this legislation marks a major victory for

nursing, the fight is not over. Funding must be provided to make the intent of the law a reality.

The law authorizes the following provisions:

1. Loan repayment programs and scholarships for nursing;
2. Public service announcements to encourage more people to enter the nursing profession;
3. Career ladder programs for those who wish to advance within the profession;
4. Best practice grants for nursing administration as modeled after ANA/ANCC's magnet program;
5. Long-term care training grants to develop and incorporate gerontology curriculum into nursing programs; and
6. Fast-track faculty loan repayment program for nursing students who agree to teach at a school of nursing.

The Bureau of Labor Statistics estimates that there will be openings for more than one million nursing positions between now and 2010 (USDOL, 2003). At the same time, the aging of the U.S. population - led by the retirement of the baby boom generation - is expected to cause an increase in demand for nursing services. Therefore the projection is a national shortage of RNs beginning now. Nevada needs to expand educational opportunities and rethink ways to recruit nurses before the exploding population and aging residents worsen an already critical public health issue.

THE HOSPITAL RESPONSE

In 1967, Surgeon General of the United States William H. Stewart, in his presentation to the American Hospital Association, stated:

Nursing education is not an end to itself, but a means to a much higher end. Working together, we need to attract a growing number of promising and dedicated young people into health service careers. We need to build into our system the kind of flexibility and mobility that will keep them interested, keep them excited, and enable them to perform the highest service of which they are capable. We must offer educational and career fulfillment... No single element, not the hospital nor the university nor the government can do this job alone. But each has a key job to perform in designing and operating such a system. (AHA, 2001, p. 4).

Dr Stewarts' ideas center around the concept of collaboration, innovation, and efficient use of resources. The Nevada Hospital Association, in conjunction with the member hospitals, is taking an unyielding, hands-on approach to the role of the hospital in solving the problem (Nevada Hospital Association). According to St. Rose/Siena Hospital Chief Operating Officer, Val Baciarelli:

The nursing shortage is real. The cause is a combination of factors; explosive growth for one. We are not training enough nurses in this state, we need to train more. As a hospital we support the plan to double enrollment in the nursing schools. St. Rose and Siena have also been active in providing financial and political support for the addition of nursing education at the new Nevada State College. We have a clear supply and demand issue here. Our parent corporation, Catholic Healthcare West, is assisting us with national recruiting efforts by attending job fairs, especially in cold weather areas of the country, to bring nurses to our hospitals in Las Vegas (Personal communication, V. Bericilli, April 29, 2003).

Ms. Dee Hicks, Vice President of Nursing Services for Sunrise Hospital and Medical Center concurs:

We are doing many things to improve working conditions for our nurses. We have started to offer various shift options to keep our aging nurses and young mothers; we have 6, 8, 10 and 12 hour shifts. On our Medical-Surgical units we have, based on popular opinion, employed a "Team Nursing" model called "Partners in Care", which consists of an RN, LVN, and Nurse Assistant team to care for from 8 to 10 patients. We have doubled our internal recruitment bonus for our employees to incentivize them to refer another

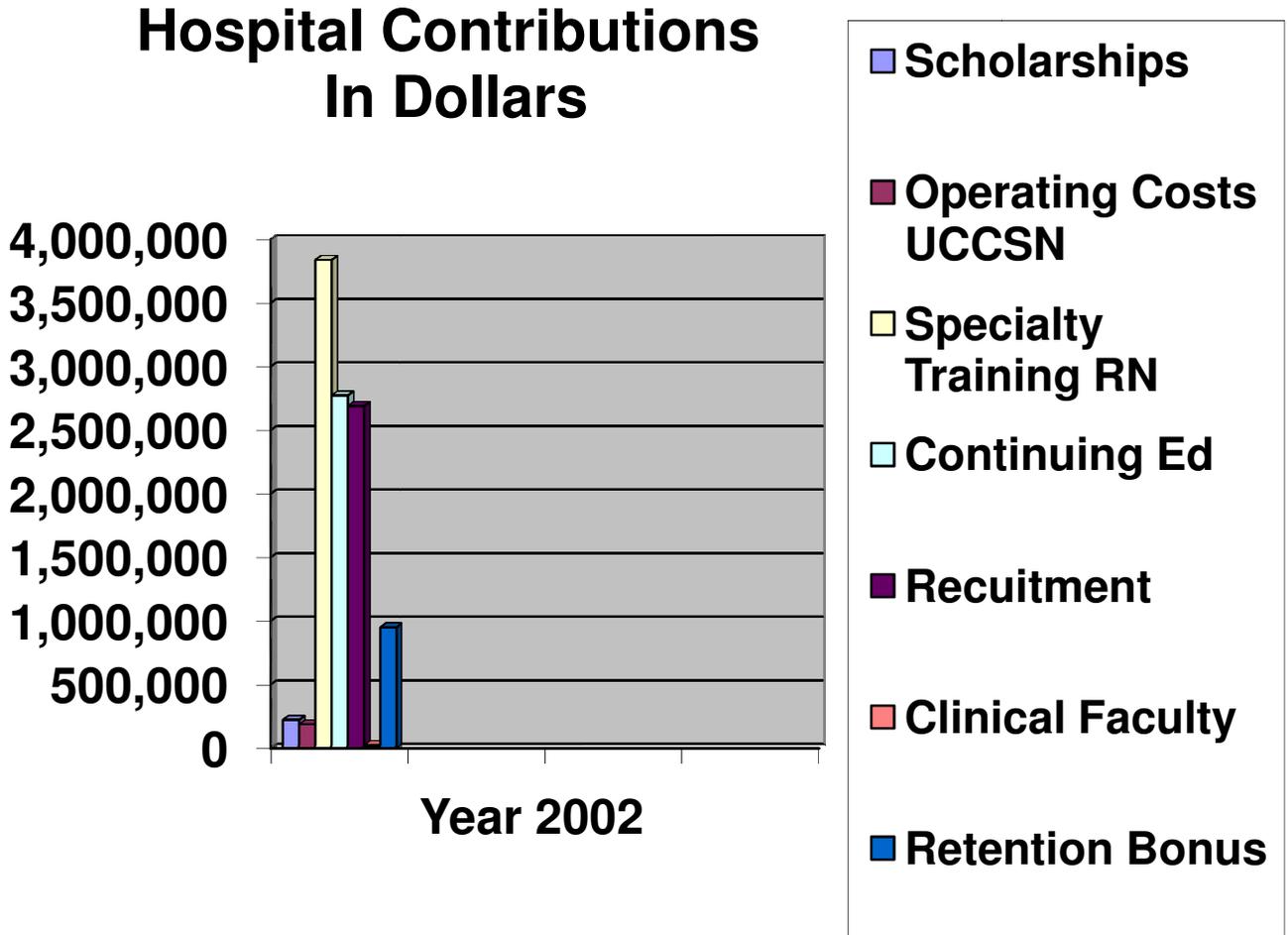
nurse, and we have purchased lap-top computers for bedside charting to save our nurses time and effort. The goal at Sunrise is to communicate with the nurses and incorporate the feedback. We get good ideas from them. (Personal communication, April 28, 2003)

Regarding the message she hopes to send to the community and to future nurses she said, "We need to tell the good stories about nursing, how we save lives and make a difference. We need to start loving nursing and what it means to those we serve" (Personal communication, April 28, 2003).

In preparation for the 2003 Nevada Legislative session, the Nevada Hospital Association (NHA) conducted a survey of all Nevada member hospitals to demonstrate their commitment to the effort to cure the nursing shortage in the state (NHA, 2002). The aggregate dollars contributed by Nevada hospitals in 2003 are shown in Figure 2. The data shows that the most significant financial contributions made by the hospitals in the year 2002 were for specialty and advanced training for areas of higher need/acuity, e.g., Emergency room, Labor and Delivery, for RNs who were re-entering the workforce or would switch departments, continuing education, and general recruitment costs. Approximately half of that amount was spent on retention bonuses to keep existing staff. Notably, the lowest amount of dollars

contributed was for the area of highest need: the education of student nurses.

Figure 2
 2002 Hospital Contributions (aggregate data)



The hospitals gave \$219,870.00 in Nursing Scholarships, reported an allocation of \$185,516.00 in operating costs for supplies and equipment for student nurses while training in their facilities, and spent \$21,324.00 to provide additional clinical faculty for clinical training of students (NHA, 2002). This makes the total contribution by Nevada Hospital Association members for direct educational costs for future nurses

\$426,710.00, or 4% of the collective \$10,673,304.00 spent for the calendar year 2002. According to Doreen Begley, Nevada Hospital Association Nurse Executive, "The member hospitals have also committed to provide the UCCSN an extra \$334,708.00 for necessary ancillary equipment if the plan to double nursing school enrollment gets funded" (NHA, 2002).

NURSING SCHOOLS

Nevada is the state with the fewest number of registered nurses per 100,000 residents. Doreen Begley, nurse executive of the Nevada Hospital Association, said:

Expanding nursing opportunities would be a step toward shedding the 'dubious distinction' Nevada holds at the bottom of the state rankings. No question exists that Nevada's community colleges and four-year colleges need to produce more nursing graduates who can deliver high-quality care, especially in hospitals. (Patton, 2002, p. 1)

Nevada's constitutional obligation to provide a child with public education does not apply to college and no federal mandates exists compelling states to subsidize the costs of higher education (Patton, 2003). The absence of this legal commitment and higher education's costs have put colleges in funding jeopardy.

Nevada Governor Guinn outlined his budget priorities and tax increase proposals in 2002. Instead of advocating higher education spending cuts, the governor urged lawmakers to support budget increases for enrollment growth and expanding programs during the official start of the 72nd Legislative session in February 2003 (Patton, 2003).

During the January 17, 2003 budget presentation, higher education officials asked lawmakers to allot \$12.1 million in addition to what Governor Guinn had proposed for the UCCSN system for the next two years (Whaley, 2003, p. 1). Nevada State Senator Rawson, R-Las Vegas, urged legislators to make the training of nurses a high priority. "We really need nurses," Senator Rawson said after learning that local hospitals were unable to take all patients because of staffing shortages.

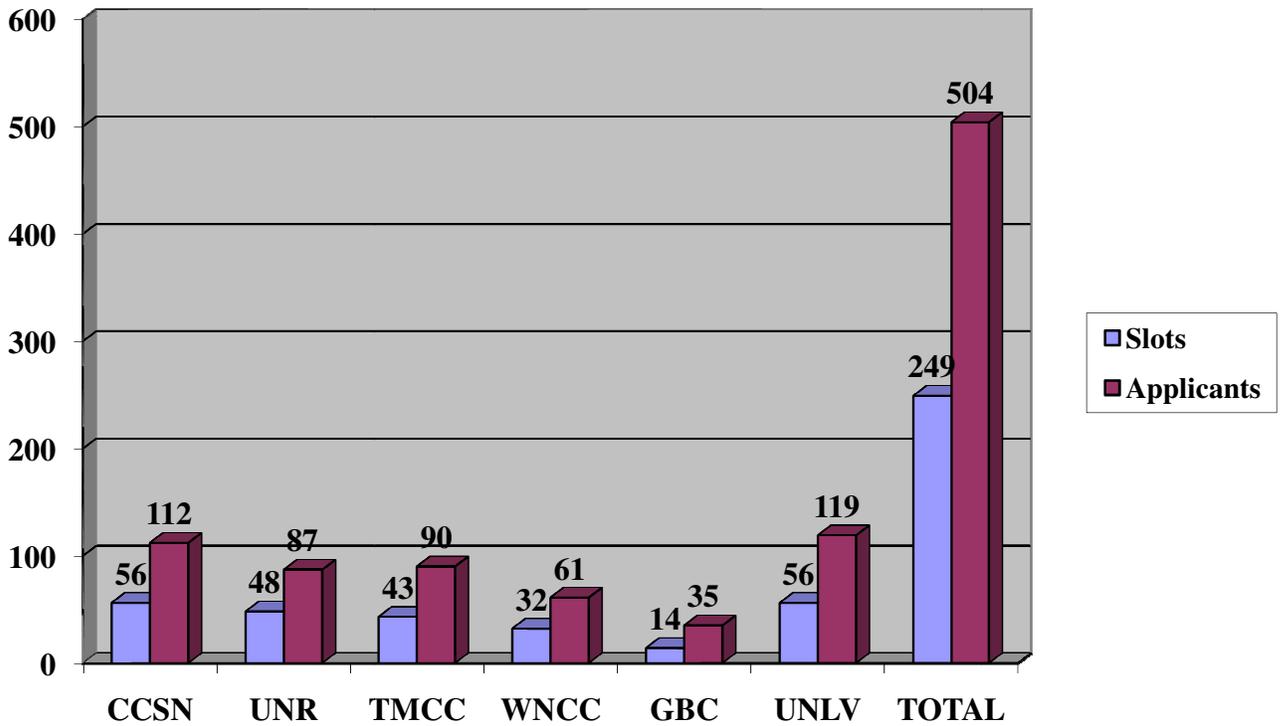
John Ellerton, chief of staff at Univesity Medical Center in Las Vegas, views nursing education as "a key to Nevada's future in continuing to improve our state. I think education needs the funding to provide a quality, accessible education" (Rogers, 2002). "The majority of Nevada's nursing schools have traditionally had more qualified applicants than available positions," said Julie Johnson, nursing school department chair at the University of Nevada, Reno. The university's Orvis School of Nursing recently had 81 qualified applicants for 48

positions. Twenty-four additional applicants joined the program in the fall of 2002 when grant funding became available.

"We still have more applicants than we can take," Urbana branch director Carol Humpherys said. "The number of applicants we can take is limited. We have a waiting list for our program" (Scott, 2002).

Figure 3

Qualified Applicants vs.UCCSN Available Slots -2002



As reported to Nevada Hospital Association by Individual Schools of Nursing 2002

The comparison of UCCSN qualified nursing applicants to available admission slots is represented in Figure 3. The data clearly demonstrates that if capacity were available to expand

the nursing programs to meet the demand, Nevada schools would have been able to achieve the goal to double enrollment in 2002.

"There is a shortage in every field of nursing from nursing faculty to advisors," Humpherys said. "In the past 6 months, we have spent more time on planning. We have had more planning meetings to attract graduate students." Humpherys said she blames many factors for the nurse shortage, including inadequate pay. "Nursing is a pretty stressful career choice," she said. "Some people choose not to enter the field." The Nurse Reinvestment Act does include strategies to address the burnout and frustration that drive many nurses out of the profession. "There has to be some nurse support system," Humpherys said. "Students must be educated at a higher level. There is no simple solution" (Scott, Jr., 2002, p. 2).

Julie Johnson, Director of UNR's Orvis School of Nursing, said a \$233,000 grant awarded to UNR will allow the school to recruit two or three new faculty members for the next two years. An inadequate number of nursing faculty nationwide has exacerbated the nursing shortage (American Association of Colleges of Nursing, 1999). Factors contributing to the faculty shortage include the fact that nurses enter college teaching late in their career, academic salaries are low, there is competition from clinical settings that pay at a much higher rate, and the faculty are aging and retiring (Hinshaw, 2001).

The Nevada State Board of Nursing requires all Nevada nursing schools to have a ratio of 1 faculty member for every 8 students (NSBN, 2002). This is a fairly common ratio across the country and the Nevada Board of Nursing stance on this is firm. "It limits the number of students who can be enrolled currently to only 48," Johnson said. "For the last two years, we've had twice as many qualified applicants as we've been able to admit. Nevada has the worst nursing shortage in the country, so this will certainly help. It's not going to fill all the need, but it's a small step in the right direction," Johnson reported ("Nursing school," 2002).

Increasing nursing enrollment must continue to be a priority for the University and Community College System of Nevada (UCCSN) and the State of Nevada must find the funding necessary. This trended data is provided on Table 2 below. The data represents the number of RN program graduates from UCCSN nursing programs (AY 1998-99 to AY 2000-2001).

Table 2: RN Program Completions from UCCSN Nursing Programs - Academic Years 1998-2001*

University and Community College System(UCCSN) Nursing Program	AY 1998-1999	AY 1999-2000	AY 2000-2001	THREE YR AVERAGE
CCSN	94	82	82	86
GBC	14	13	17	15
TMCC	37	22	34	31
WNCC	29	22	29	27
UNLV	103	73	56	77
UNR	49	41	46	45
TOTAL	326	253	264	281

Note. Unpublished RN program completion data from the University and Community College System of Nevada. Average figures.

Note. From Nursing Workforce Supply and Demand in Nevada, 2000 to 2002. (2003), p. 11.

The data depict a 23.5% decline in the number of nursing graduates in the year 2000-2001 from the year 1998-1999. The academic years from 1998-2001 confirm an average of 281 students have completed the RN degree requirements over a three-year period.

TREATMENT ALTERNATIVES

The Nevada Nurses Association facilitated the Nursing Summit process in 2001 (NNA, 2001). The purpose of this initiative was to assemble nurse leaders in the state to identify priority problems and develop solutions affecting all

of the Nevada nursing community. Representatives from the Nevada Nurses Association, State Board of Nursing, hospitals, home care, long term care, and educational programs from across the state and schools of nursing attended. Eight summit gatherings were held for the purpose of building a strategic business plan.

Three priorities were identified as a result of this assembly (NNA, 2001). They were: the nursing shortage, recruitment, and retention issues. They are not seen as discrete, separate problems, but as interwoven and interacting factors. The association issued recommendations for five areas: Education, Media, Manpower/Human Resources, Practice/Work Environment and Retention Efforts, and State Wide/Political Efforts. These recommendations were:

Education Recommendations

1. Promote a standardized core nursing curriculum to facilitate transfer from one School of Nursing in Nevada to another in the system.
2. Increase nurse faculty positions to accommodate growth in student enrollments.
3. Establish tuition waivers to promote nursing school enrollments.

4. Facilitate greater flexibility in nursing education programs, such as offering part time study, evening classes, and summer school.
5. Increase the Board of Regents' understanding about the need for more nursing school enrollments to promote increasing the supply of adequate numbers of registered nurses in Nevada.
6. Obtain tuition waivers for graduate study so nurses can access advanced nursing education.
7. Increase financial support for nursing students, such as loan repayment, scholarships.
8. Promote more nurses acquiring advanced degrees in nursing education to prepare for the nurse educator role.
9. Improve nurse faculty salaries to be competitive with the marketplace.
10. Have a positive introduction into the workplace.
11. Establish mechanisms, which provide for nursing education subsidy funding programs in exchange for service requirements.
12. Focus on recruiting a broader diversity of nursing students (i.e. minorities, males, second career applicants).
13. Expand school program capacity for LPN and Certified Nursing Assistants to provide adequate numbers of Assistive personnel to the registered nurse.
14. Improve articulation among high schools and Nevada community college nursing programs.

15. Improve articulation between community college and university level nursing programs.
16. Expand use of different educational options such as on-line and distance learning; school-to-work programs in the public school system in concert with the university and community college system; federal funds to produce a video of collateral materials for presentation of educational options; develop mechanisms to ease the transition from student to practitioner; ensure that educational preparation provides for the ability to practice to meet future needs. (NNA, 2001).

Media Recommendations

1. Institute a nursing career choice marketing program spotlighting nursing as a terrific career.
2. Work with radio, television, and print reporters to highlight nursing choices and specialty areas.
3. Initiate an educational campaign to inform the public about the scope of the nursing shortage, its impact on the public, and solutions that can turn it around.
4. Survey high school students about what would make them consider a nursing career and what barriers are preventing them from choosing nursing as a career.
5. Educate consumers about health care costs, and how little money actually goes to nurses' salaries.

6. Promote a positive image of nurses in popular media. (NNA, 2001).

Manpower/Human Resource Recommendations

1. Educate appropriate audiences about new nurse professionals and what they want and expect from a nursing position.
2. Increase efforts targeted for out-of-state recruitment of registered nurses.
3. Establish greater communication between nursing practice and nursing education so both groups gain a better understanding of each other's needs in providing professional nursing services.
4. Promote the skills needed for the entry level practitioner for today's complex health care systems. (NNA, 2001).

Practice/Work Environment & Retention Strategy Recommendations

1. Initiate nurse support groups in the workplace for nurses to meet and talk with one another, problem solve, and engage in conversations as colleagues.
2. Improve compensation of entry level and established nurse positions (i.e. wages, benefits, incentive packages).
3. Reduce burdensome regulations and their impact on influencing nurses to leave the profession/workplace.

4. Create practice environments, which meet the needs of the contemporary nurse (i.e. better compensation programs, flexible work schedules, autonomy, and control of patient care).
5. Implement Nurse Task Forces in every type of work setting to review, revise, and reform their systems.
6. Query nurses leaving a job or the nursing profession about what factors led to their decision and what would allow them to stay in the job or the nursing profession.
7. Institute programs to add social recognition and respect for nurses, and provide professional, courteous interactions with nurses.
8. Establish the concept of necessary nursing care and afford it parity with the concept of necessary medical care.
9. Create a safe forum for nurses to gather and express their needs/concerns to reduce division and prejudice.
10. Promote safe working environments by addressing such issues as mandatory overtime, ergonomics, and workplace violence.
11. Increase the visibility of nurses to the public so that they can recognize when a nurse is caring them for. (NNA, 2001).

State Wide/Political Recommendations

1. Institute a State-Wide Task Force on Nursing and Allied Health Education and Workforce Needs; funding in the 2001 legislative session.

2. Identify whether nurses are changing jobs or leaving the nursing profession.
3. Count practicing nurses accurately and avoid double counting nurses who hold two positions.
4. Establish a database on current and projected nursing supply and demand.
5. Monitor and manage the database to increase the supply of registered nurses (Nevada Nursing Association, 2001).

The Nursing Summit believes a major problem facing health care in the state is the barriers to availability and access to nursing services for its residents (NNA, 2001). Solutions to these problems are urgently needed, as Nevada's population is growing and aging. The Nursing Summit believes that the Nevada nursing community cannot solve these problems alone. It will take the dedication, commitment, vision, and positive resolve of many groups to make meaningful and long-term reform efforts a reality. This strategic business plan delineating the nursing community's recommendations for action should serve as the primary foundation, as it represents ideas from those nurses who do the work and understand the full complexities of being a nurse professional. It is an excellent starting point for the journey to success. However, it does not identify the root

cause of the problem, or address the essential issue necessary to ensure the solution: funding.

On February 10, 2003, Bill Welch, President/CEO and Doreen Begley, RN, MS, Nurse Executive for the Nevada Hospital Association presented, as testimony before the Nevada Assembly Health and Human Services Committee, the UCCSN Plan to Double the Capacity of Nursing Programs within the System (Johnson, 2003). The Doubling Plan, mandated during the 2001 Legislative Session, was a collaborative effort developed by Nevada's seven schools of nursing and unanimously approved by the UCCSN Board of Regents. The plan clearly demonstrates the commitment to help develop a solution for Nevada's nursing shortage.

Ms. Begley described the Doubling Plan for which she was the co-author as a plan that is "collaborative, innovative, and takes into consideration an economic use of resources." She said, "In California, Governor Gray Davis has pledged \$60 million to address their needs, but they have no specific plan. Here in Nevada we have developed a precise plan that is focused to accomplish the daunting task that was laid before us during your 2001 session; to double the nursing capacity of our UCCSN nursing programs that now needs your support for funding" (Johnson, 2003). Begley pointed out that Nevada's neighboring states were all in similar dire situations and suffering from the effects of this crisis as well.

Nevada currently ranks 51st in Registered Nurse population per 100,000 population (Sprately, 2001). Table 3 provides data on the total employed RN population per 100,000 in Nevada and each state bordering Nevada. Additionally, most of Nevada's neighbors, such as Arizona which ranks 47th, and California which ranks 50th, are stationed near the bottom of the same ranking. Notably, Nevada is geographically sandwiched between Utah and California, which rank, respectively, 49th and 50th in the U.S. in RNs per capita.

Table 3

Supply of Registered Nurses in Nevada and Neighboring U.S. States - 2000*

STATE	TOTAL RN	RN POPULATION	
	POPULATION	PER 100,000	POPULATION
		Number	Rank**
Nevada	10,384	520	51
Arizona	32,222	628	47
California	184,329	544	50
Idaho	8,230	636	45
Oregon	27,121	793	29
Utah	13,229	592	49
United States	2,201,813	782	

Note. From "The registered Nurse population: Findings from the National Sample Survey of Registered Nurses, March, 2000."

** Rank among all 50 U.S. States and the District of Columbia

Johnson and Begley (2003) concluded that "We cannot count on recruiting nurses from our neighboring states, as we are all suffering from the effects of the shortage. The solution is that Nevada must 'grow our own'." The report added:

Last year, the system had to deny admission due to lack of available positions to over 255 qualified applicants.

These are students who had successfully completed the prerequisites, and were eager to enter nursing school.

When students are not admitted to nursing schools, they leave the state, or choose another career path. So last year, in 2002, Nevada lost a potential 255 nurses to nursing programs in other states.

This is a significant fact as nursing students tend to remain in the state where they were educated. Nevada has had a consistent retention rate of 90% of nursing student graduates. "In 2002, the state graduated 264 students, and turned 255 away." If you fund it, they will come," Begley testified before Nevada Assembly Health and Human Services Committee (Johnson, 2003). The Doubling Plan presentation points out the painfully obvious: additional funding is needed to hire sufficient nursing

instructors to accommodate the demand for admission by qualified nursing students who would like to become nurses.

CONCLUSION: THE CURE

The nursing shortage has seriously impacted health care in Nevada, and clearly threatens the state's public health. A role of government is to be responsible for the assessment of population health needs, provide assurance that the services for the protection and promotion of health of a population are available, and for the development of policies to protect health (Shannon, 1995). The 1988 report from the Institute of Medicine, National Academy of Science (IOM/NAS) defines the mission of public health as "fulfilling society's interest in assuring conditions in which people can be healthy with contributions toward this end made by governmental and nongovernmental agencies" (p. 187).

In 1997, the Attorney General's office, representing the interests of the State of Nevada, filed a lawsuit against the tobacco industry to seek damages for illness caused by smoking and to repay the state for the expenses incurred as a result of tobacco related health problems. In 1999 a settlement was reached with the tobacco industry as a part of a multi-state settlement proposal that provided an estimated \$1.2 billion to Nevada over 25 years. Payments in excess of \$48 million would

then continue in perpetuity. The tobacco industry was required to pay at least \$1.5 billion for a national public education fund, and at least \$250 million for a separate fund to address youth tobacco use and substance abuse ("Nevada's Tobacco," 2000).

The program then proposed by Governor Guinn and approved by the 1999 legislature allocated \$32.3 million from this settlement to operate the Millennium Scholarship program to provide higher education for Nevada high school students with a grade-point average of B or better for the next two years. It also funded two-three administrative positions for the program beginning in 2000. The administration of this program was budgeted to cost \$423,000 for the two-year-period. Funding from the tobacco settlement is expected to be available to Nevadans for the next decade ("Nevada's Tobacco," 2000).

Lawmakers also authorized the Department of Human Resources to use the tobacco funds to fill two positions for the prescription drug program for senior citizens. This program will cost the tobacco fund \$1.7 million in its first two years. The final tobacco-money-related action by lawmakers was to direct 10 percent of the funds, or \$3.8 million, into a trust fund (Donrey Capital Bureau, 2000).

In the 2001 legislative session, the Nevada State Legislature recognized the state nursing shortage as a serious

issue and enacted AB 378 (Government Affairs, 2001). One provision of the bill mandated that:

On or before August 15, 2002, the Board of Regents of the University of Nevada shall develop a plan toward the goal of doubling the capacity of the programs of nursing of the University and Community College System to enroll students in programs of nursing from its capacity in school year 2000-2001. The Board of Regents shall include that plan as a separate identifiable component of its proposed biennial budget that is submitted pursuant to NRS 353.210 and set for the estimates of expenditures that would be necessary to carry out the plan.

This was done. A collaborative effort by Nevada's seven schools of nursing, the addition of Nevada State College for fall 2003, the UCCSN Regent's Health Education Committee, with the Nevada Hospital Association, presented respective budgets to the 2003 legislative session detailing costs related to doubling their enrollment through funding for additional faculty, equipment, and facility renovations. Additional funding is also requested in the plan to assist students with the cost of attending nursing school, an estimated \$500,000 over the next two years (Johnson & Begley, 2002).

It is time for the Governor and the Nevada Legislature to consider the most pressing needs of Nevadans and the most

appropriate allocation of available resources. The estimated cost for the UCCSN to fund the necessary faculty expansion needed to address Nevada's "Nurselessness" for the next biennium is \$10,252,776.00. For the next two biennia the total cost to meet faculty and facility expansion needs is \$27,266,235 (Packham, 2002). According to Packham's report (2001) Nursing Workforce Supply and Demand in Nevada, 2000 to 2020 regarding the nursing workforce and nursing education in Nevada, "It must be stressed that dealing with this [nursing] shortage will not come cheap or quickly. Nonetheless, the price of inaction will ultimately be borne by all Nevadans at some point in time" (Packham, 2003).

It is in the best interest of all Nevadans, an "at-risk" and particularly vulnerable population, to become actively involved in aiding our policymakers in identifying "Nurselessness" as a public health threat and to prioritize this major public interest for our safety. Nevadans should demand re-allocation of available resources from the tobacco settlement funds, from the Millennium Scholarships to the highly critical and more appropriately designated area of the nursing shortage by funding necessary additional faculty. We may not totally eradicate our ills by doubling student enrollment through the expansion of our nursing schools, but it will be a positive and

significant step in the right direction for the health of all Nevadans.

EVALUATION

The results of the exploratory study regarding the nursing shortage in Nevada support the findings of others in the state (e.g., Packham et al., 2002) that increased funding is necessary for the UCCSN to hire more faculty to augment nursing student enrollment. The results of the study also clearly identify the current interest and active participation of all stakeholders; legislators, educators, hospital administrators, and nurses in solving the problem.

Evaluation of the state of Nevada's "Nurselessness" condition will be an on-going process. The first measure of a successful cure will be the extent to which the plan to double enrollments in the UCCSN schools of nursing is funded by the 2003 Legislature. The use of money from the tobacco settlement is just one option for funding the increase in nursing educators. Every available option must be explored until ample funding is obtained. The second measure will be the continued implementation of the common and unique strategies discussed by the Nursing Summit and outlined in the Nurse Reinvestment Act. A future study should be conducted to examine the retention rates of Nevada nursing school graduates over the next five to

ten years, as well as the on-going analysis of the RN supply versus demand.

Collaborative initiatives to improve recruitment and retention, as well as job satisfaction in the hospital setting, which were recently undertaken by the UCCSN and area hospitals, should be evaluated for their efficiency and effectiveness. It is vital to maintain a constant focus on this critical ill; to increase the number of qualified and competent nurses in the state to ensure Nevadans receive satisfactory health care.

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