
Staff Nurses and Their Solutions to the Nursing Shortage

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Nurses in acute care hospitals report that situations in their work setting and profession are in dire need of repair. Although they waiver on their intention to remain in their institution and nursing, they do not waiver on their selected resolution to nursing's shortage. A total of 787 staff nurses in eight geographically and demographically diverse states responded and were asked to select the "Top 5" actions they thought would improve nursing and decrease the shortage. Creating career ladders was endorsed by most respondents (85%) with increasing pay endorsed by the fewest (33%). When selecting the single most important action, they reversed the order—increased pay was the most endorsed (26%), and creating career ladders and increased educational opportunities were endorsed by less than 1%. Nurses appeared to be concerned about the profession in general; however, when asked the "most important" thing to do, an age-old action was selected—increase pay.

Keywords: *shortage; work environment; work satisfaction; commitment; turnover*

No one is more aware of the nursing shortage than nurses working in acute care hospitals. On a daily basis they face the dilemma of how to provide quality care when they are short of nursing staff and confronted with ever-increasing patient workloads. Vacancy rates vary from hospital to hospital, with the national average being 10.2% in 2000 (HSM Group, 2002).

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When a hospital has a vacancy rate of 4% or less (reflects fairly stable staffing), less money will be spent on recruitment; vacancy rates greater than 8% create unstable staffing, which could become an institutional crisis, and lead to high recruitment costs (Lacey & Shaver, 2003). Staffing in U.S. hospitals is, on average, unstable. Institutions are expending increasingly larger amounts of money on recruitment and retention programs. Although there have been many solutions to the shortage proposed, most have come from national nursing and health care organizations. This discussion turns to the health care provider in the middle of the crisis—staff nurses in today's acute care hospitals—to find out if they agree with the pundits' proposed solutions and what they offer as their solutions to the shortage.

The Shortage in Context

Nurses are the backbone of the U.S. health care system. As the largest group of health care professionals, any lack of stability in the supply of nurses to meet the health care demands of the populations they serve is a serious threat to the quality of care provided in the United States. In 2000, there was, overall, a 6% shortage of nurses, projected to grow to a 29% shortage by the year 2020. Thirty states had shortages (supply vs. demand) ranging from 3.5% to 17% ($M = 9\%$); by 2020, it is projected that all but 6 states will have shortages ranging from 5% to 63% ($M = 33\%$; U.S. Department of Health and Human Services [USDHHS], 2002).

This shortage is different from previous ones. In the past, shortages resulted from a lack of employed nurses, not a lack of educated nurses. The unemployment rate of nurses today is at its lowest point in many years, currently resting at about 1% (General Accounting Office [GAO], 2001). Past shortages have tended to be short lived; the current shortage was noted as early as the middle of the 1990s and has yet to retreat other than in isolated areas by the addition of a large workforce of foreign-born and educated nurses (Buerhaus, Staiger, & Auerbach, 2003). Just preparing more nurses or asking nurses to work harder or more efficiently will not meet the demand for nursing care.

This shortage is not local—it is global. The escalating demand for professional nurses in developed countries has also contributed to the depletion in the supply of nurses in less developed countries. At the present time, English-speaking countries need more nurses than they are producing or retaining. The percentage of foreign-educated nurses as a percentage of the total nursing workforce in selected countries is New Zealand (23%), United Kingdom (8%), Ireland (8%), Canada (6%), and the United States (4%; Aiken, Buchan,

(Sochalski, Nichols, & Powell, 2004). These data support the position that the developed countries need to do more to create a sustainable nursing workforce to meet their own health care needs rather than relying on importing nurses educated in other countries to supplement their supply of nurses.

The shortage is worsened by fewer people entering nursing programs, a rise in the average age of employed nurses (45) from younger than age 40 years in the 1980s, and the increased demand for nurses to care for the increased population, elderly, and those who are critically ill (Buerhaus et al., 2003; GAO, 2001; USDHHS, 2002). The final blow to the supply of nurses is the many employment options nurses have outside of nursing, attracting 28% more nurses in 2000 than occurred in 1992 (Health Resources and Service Administration [HRSA], 2002).

Many studies and commissions have documented issues in the nursing practice environment that have contributed to the nursing shortage; they have posited changes that must take place to resolve the shortage—among them the Institute of Medicine of the National Academies of Sciences (IOM; Page, 2004), the Joint Commission on Accreditation of Health Care Organizations (JCAHO, 2002), The Robert Wood Johnson Foundation (RWJ; Kimball & O'Neill, 2002), and the American Federation of State, County and Municipal Employees (AFSCME, n.d.). Multiple strategies and actions to resolve the crisis are presented in these and other publications, which would seemingly be an agenda for action. Because these proposed solutions have been generated and presented at the national organizational level, there is a need to see what the response from the grassroots level is in this crisis—the level of the practicing staff nurse in the acute care hospital. Thus, the current study was designed to capture the opinions of these nurses about the solutions proposed by the national organizations and to offer them the opportunity to propose solutions of their own.

Purpose

The purpose of the current study was to find out what hospital-based staff nurses say about nursing today and, because the recommended priorities and methods for eliminating the nursing shortage have come from the organizational level rather than from the level of the affected nurses, to find out what nurses prioritize as the needed changes in their work or work environments. In addition, the current study was designed to examine professional satisfaction, work job satisfaction, and commitment of these nurses and examine the influence of these variables on the nurses' proposed solutions to the shortage.

Design

The current study was based on a survey or descriptive design with respondents drawn using random sampling.

Sample

The respondents for the current study were registered nurses (RNs) licensed in one of eight states, selected to represent an RN population diverse in size of state (population), demographics, rural and urban nature, region of the country, labor union versus nonunion status, and degree of current or projected nurse shortage. The states chosen were, in alphabetical order, Arizona, Idaho, New Jersey, North Carolina, Texas, West Virginia, and Wyoming. Staff nurses were particularly targeted because this segment of the nursing profession has taken much of the brunt of the current nursing shortage.

The original plan was to obtain a list of nurses working in staff nurse positions in acute care hospitals from each state's board of nursing and randomly select (simple random sample) 300 names. As it turned out, after contacting almost all of the 50 state boards of nursing, few allow a list sent to a researcher (and presumably others) to be culled to a specific set of nurses by position, employment setting, or other characteristic(s). In five of the eight selected states, the list could be limited to the RNs of interest (hospital based and staff nurses). For the other three states where the mailing list could not be limited to only nurses employed in staff positions within hospitals, we decided to oversample nurses (simple random sample) to, hopefully, get the questionnaires in the hands of a sufficient sample of appropriate RNs. The oversampling factor was 1.67 (500 nurses) because 60% of all RNs are employed in acute care staff nurse positions in hospitals (HRSA, 2002).

After receiving approval from the University of North Carolina Nursing Institutional Review Board, questionnaire packets were mailed to prospective respondents in eight selected states. The packet included a cover letter that presented a discussion of the purpose of the study and the elements of informed consent along with the questionnaire and a business-reply envelope. Implied consent was given by the respondents when they completed and returned the questionnaire.

Questionnaires were mailed to 3,000 RNs, 300 to the randomly selected sample from each state with the delimited mailing list (five) and 500 to each of the three states with generic lists of RNs' names. Of the 3,000 questionnaires

mailed, approximately 2,400 should have ended up with RNs in staff nurse roles in acute care hospitals (1,500 in the five states with delimited lists and 900 [60% of 1,500] on the three generic list states). A total of 787 usable responses were received for a return rate of 26% (787/3,000) and an adjusted return rate of 33% (787/2,400). Across the states, the return rates varied from 21% (63/300) to a high of 39% (118/300).

The typical respondent is described using medians and percentages. Medians were used as the measure of central tendency for all demographic variables because all the distributions were skewed. The typical respondent was a 44-year-old, married (74%), White (90%) female (93%) who was initially prepared at the associate-degree level (42%) and is now baccalaureate prepared (42%). She worked full-time (73%) on a medical-surgical unit (floor or intensive care), has been in her current position for 5 years, and in the current setting for 6 years. She has worked at least part-time since initial employment (82%). Her hospital has 200 beds (range 6 to 2,475). She cares for six patients each day. The number of patients she cares for has increased in the past year, and 66% reported that this increase in patients has had at least a moderately negative influence on the quality of care provided on her unit (options were none, minimal, moderate, and considerable).

In terms of their own institutional longevity, 54% reported they would not leave or it was unlikely they would leave their current institution in the "near future." A total of 20% were certain or very likely to leave their current place of employment in the near future. The remaining 26% of the respondents were uncertain as to their staying or leaving. When asked to consider their employment status at this institution in 3 years, 64% said they would still be working there.

When longevity in nursing was considered, 48.5% reported they would not leave nursing in the "near future" with an additional 27% reporting that they were unlikely to leave nursing. A total of 9% of the respondents reported that they were likely or definitely leaving nursing in the "near future" with the remaining 15% being uncertain about staying or leaving. When considering whether they would be in nursing in 3 years, 88% reported that they would still be in nursing in 3 years. Those planning on leaving nursing in 3 years ranged in age from 26 to 74 ($M = 51.5$, $SD = 12.2$). Of the nearly 12% planning on not being in nursing in 3 years, one half of them said they would be retiring. Those planning to leave nursing but not planning on retiring ranged in age from 26 to 61 ($M = 43.5$, $SD = 9.6$); those planning on leaving nursing and retiring ranged in age from 46 to 74 ($M = 61.4$, $SD = 5.5$).

Method

Data Collection

The current study, for the most part, used the total design method for mailed surveys posited by Dillman (1978). The focus in this method is on well-designed questionnaires, personalized communication, information about the study and/or survey in a cover letter, and contact with nonrespondents. His program includes the first mailing followed 7 days later by a questionnaire that is followed in 7 days by the mailing of a second questionnaire to nonrespondents. Two changes were made to this procedure—extending the time between the mailings and giving respondents an opportunity to ward off a second mailing. Previous experience with mailed questionnaires has taught us to extend the interval between mailings to 2½ to 3 weeks; the 7-day period suggested by Dillman does not allow sufficient time for returned mail because of respondents having moved or having expired addresses. This is particularly important in mailed surveys targeting nurses because they are very mobile, and some states' boards of nursing only update their mailing lists every 3 to 5 years. Regarding the respondent's opportunity to prevent receiving a second questionnaire, included in the first mailing was a request, for any respondent willing to do so, to place her or his name and address on the outside of the return envelope. Reassurance was provided that the envelope information would be used only to remove her or his name from the list for the second questionnaire mailing. Ten percent of the respondents provided their names and addresses saving unnecessary reproduction and mailing costs.

Instruments

The entire questionnaire contained several sections, only one of which is specific to this discussion; however, the instruments are reviewed because they are used to illustrate the results of the current study. One section addressed the satisfaction of the respondents—professional and job and/or work satisfaction. Professional satisfaction, seen as career choice and meaningfulness of work within one's life goals, was measured using six items from the Price and Mueller studies (Price & Mueller, 1981a, 1981b, 1986). The six items compose a single factor with acceptable reliability in previous use ($\alpha = .88$); no validity data were available for these items; for this study it was $\alpha = .87$.

Work and/or job satisfaction, seen as the interaction of people with their work environment and conditions of employment, was measured using the Satisfaction in Nursing Scales (SINS). Derived from qualitative interviews, the SINS is a 54-item Likert-type scale with four response options ranging

from 1 (*strongly disagree*) to 4 (*strongly agree*). It has four primary factors derived using principal-axis factoring (direct oblimin rotation)—Workload, Intrinsic Satisfiers, Collegiality, and Administrative Support—with Cronbach's coefficient alphas ranging from .87 to .94 (Lynn, Morgan, & Moore, 2002). The SINS has been tested for content validity using a panel of 20 nurses using the process described by Lynn (1986). The reliability estimates for the SINS ranged from $\alpha = .87$ to $\alpha = .92$ in the current study.

The second section of the questionnaire booklet was composed of items measuring organizational commitment from the Organizational Commitment Questionnaire (OCQ; Price & Mueller, 1981a, 1981b, 1986), three items addressing intent to leave nursing and two items focused on intent to leave the current nursing position. All of these items were responded to using the same 4-point scale used for the SINS, and alphas have been generally above .80. No validity reports for the OCQ were found. The reliability for the organizational commitment items in the current study was $\alpha = .76$. The reliability of the two intent to leave position items was $\alpha = .76$ and for the three intent to leave nursing items it was $\alpha = .85$. There was no reported validity work on these items.

Specific to this discussion, the nurses were presented with the 16 proposed solutions to the nursing shortage and asked to select the “five actions (they) think are the most important to address to improve nursing today *and* help eliminate the nursing shortage.” After they completed that selection, they were to select the “most important” of those actions. They also had the option of adding two actions and including them in their chosen set of five actions and in their choice of the most important selection.

The final segment of the questionnaire was a demographic section with traditional demographic questions and questions addressing their current position (years in position, average number of patients cared for each day), unit (type of unit, any change in acuity of patients during the past year, frequency of inadequate staffing), and institution (number of beds).

Data Analysis

The data were analyzed by calculating response frequencies for the actions on the original list and the completion responses; measures of central tendency and dispersions were determined for the traditional and additional demographic data. Each instrument used was subjected to reliability estimation using Cronbach's coefficient alpha. Additional data analysis included dividing the respondents into higher and lower groups on the professional satisfaction, work satisfaction, and commitment measures by dividing the group into quartiles. The top quartile was the higher group and

the bottom quartile was the lower group. Then these groups were compared, visually, on their most important action chosen. The rationale behind this examination was to see if nurses at the extremes on these measures endorse related actions differently between the higher and lower groups, for example, would those who were most satisfied with their current workload tend to select the workload actions (therefore needing attention) less often.

Results

When given the opportunity to select five of the listed actions (or add up to two actions and include them in the selection), the staff nurses endorsed education and administration actions first, then scheduling and financial benefit actions, followed by changes in workload, number of nurses, and a climate of retention. Increasing pay was endorsed the least often across all the actions. See Table 1 for an ordered listing of the actions.

When the staff nurses selected the “most important” of the five actions they had previously selected, the one selected the most often was increase pay (26%), which was chosen by nearly twice as many respondents as chose the next highest action, *create a climate of retention in health care facilities* (14%). The only other action chosen by more than 10% of the RNs was decrease patient load and/or workload (11%). The percentage of nurses choosing each action can be seen in Table 2. A few of the nurses (less than 2%) selected more than five responses—most selected six. Because there was no way to identify the “extra” response and eliminate it, all of their responses were retained.

A total of 76 additions were made to the list of actions and/or approaches to address the situation in nursing and the nursing shortage. Most of these responses could be classified into broad categories. The categories with at least four responses (5% of the total additions) were (number of responses in parentheses) professional issues (13), monetary rewards (10), nurse–physician relationships (7), scheduling (5), administration (4), and new graduates (4). Professional issues included the image of nursing, the climate and/or culture of the nursing unit (need for team orientation, confidentiality), and expanding the role of nurses and/or nursing. Some of the “monetary” considerations were increased benefits (although it was also on the existing list), rewarding seniority and experience, and addressing salary compression. All of the nurse–physician additions were similar—the need for respect, communication, and teamwork. Scheduling focused on 12-hour shift and mandatory overtime. Administration was either the need for “less of them” or keeping them and increasing their understanding of the staff nurses’ plight. New graduates were

Table 1
Frequency of Selecting Up to Five Recommendations
to Improve Nursing and Help Eliminate the Nursing
Shortage in Decreasing Order of Endorsement (*n* = 776)^a

Recommendation	Endorsing Recommendation	
	%	<i>n</i> ^b
Create career ladders in nursing	85.4	672
Increase administrative support	84.4	664
Enhance communication with administration	83.7	659
Increase educational opportunities for nursing	83.2	655
Eliminate mandatory overtime	82.5	649
Increase benefits	76.4	601
Hire more support staff	75.0	590
Mandate specific maximum nurse-to-patient ratios	72.9	574
Involve nursing staff in problem solving in this institution	70.1	552
Streamline administrative and documentation tasks	69.0	543
Increase flexible scheduling and child care options	65.2	513
Decrease patient load and/or workload	61.6	485
Increase number of nurses available for patient care	60.5	476
Decrease the number of nonnursing tasks nurses have to regularly do	59.5	468
Create a climate of retention in health care facilities	55.4	436
Increase pay	33.2	261

a. Eleven of the respondents did not complete this part of the questionnaire.

b. Twenty nine (3.6%) choose fewer than five actions.

addressed in three ways—a need for an increase in the entry level for nursing, more stringent National Council Licensure Examinations (NCLEX) requirements for professional entry, and more mentorship for new graduates.

When the staff nurses chose the “most important” action to address the nursing shortage, all of them except two nurses chose the action they added to the list as the principal means of addressing the shortage. The two respondents who did not vote for their additional action as “most important” added “better insurance” and “vacation options” to the list of actions.

When the staff nurses were divided into the higher and lower groups on the professional satisfaction, work satisfaction, and commitment variables, the comparison conducted was visual because statistical comparison of the frequencies across 16 cells for each of two groups would not be very informative, whether significant or not. The criteria for being included in the subsequent discussion were that at least 20 nurses endorsed the action and at least

Table 2
Frequency of Selecting Each Recommendation as the Most
Important Means to End the Shortage in Decreasing
Order of Endorsement ($n = 652$)^a

Recommendation	Endorsing Recommendation	
	%	<i>n</i>
Increase pay	26.4	72
Create a climate of retention in health care facilities	13.8	90
Decrease patient load and/or workload	11.3	74
Increase number of nurses available for patient care	9.5	62
Mandate specific maximum nurse-to-patient ratios	7.1	46
Streamline administrative and documentation tasks	5.2	34
Decrease the number of nonnursing tasks nurses have to regularly do	4.3	28
Increase flexible scheduling and child care options	4.1	27
Involve nursing staff in problem solving in this institution	4.1	27
Increase benefits	3.1	20
Eliminate mandatory overtime	2.0	13
Hire more support staff	2.5	16
Eliminate mandatory overtime	2.0	13
Increase administrative support	1.4	9
Create career ladders in nursing	.9	6
Increase educational opportunities for nursing	.8	5

a. 135 of the 787 respondents did not answer this question.

a 2:1 ratio seen in the frequencies between the quartile groups. These are, admittedly, arbitrary decisions; however, the decision to use these “cutoffs” was made to ensure that the action was reasonably desirable to the staff nurses (at least 20 endorsed the action) and the apparent difference in the endorsements sufficient (at least 2:1 ratio) to suspect a difference in their opinions. The number of nurses selecting actions (when $n > 20$) is shown in Table 3. No statements of significance in the following discussion are made or inferred.

When the professional satisfaction scores were used to create higher and lower quartiles there were four actions that appeared to differ across those groups in terms of their endorsement. Those nurses with higher professional satisfaction scores endorsed the action *create a climate of retention* at a higher rate than did those in the lower group. However, those in the lower group favored two action items more than the higher group—*increase nurses available* and *decrease patient load*.

Table 3
Number of Nurses Endorsing Each the “Most Important”
Action by Upper and Lower Quartile Groups on
the Commitment and Satisfaction Measures^a

Measure	Quartile & Number Endorsing Action		Action
	Higher	Lower	
Professional satisfaction scale			
Professional satisfaction	29	15	Create a climate of retention
	9	25	Increase the number of nurses available for patient care
	9	31	Decrease patient load and/or workload
Work satisfaction factors			
Intrinsic rewards	28	14	Create a climate of retention
	12	23	Decrease patient load and/or workload
Workload	12	30	Increase the number of nurses available for patient care
	8	31	Decrease patient load and/or workload
Collegiality			No action was discrepant across the groups
Administrative support	33	75	Increase pay
Commitment scale			
Commitment	31	9	Create a climate of retention
	9	21	Increase the number of nurses available for patient care

a. Minimum of 20 nurses endorsing the action and at least a 2:1 to be included.

When work satisfaction was considered there were some similarities and some differences compared to the professional satisfaction findings. The higher group on the intrinsic rewards factor endorsed the action about a climate of retention twice as often as did the lower group; the lower group endorsed decreasing the patient load twice as often as did the higher group. For the Workload factor it was not surprising to find that the lower group (less satisfied) endorsed increasing nurses and decreasing patient work almost 3 times as often as did the higher group. The higher and lower groups on the Collegiality factor did not differ substantially across the actions. For the Administrative Support factor the only apparent difference was endorsement of the increased pay action, which was favored by 75 of the lower group and 33 of the higher group on this factor. No other endorsement

comparisons within these factors exceeded the at least 20 nurses endorsing the action and the difference being at least 2:1 for inclusion criteria.

The higher commitment group endorsed almost 4 times as often as did the lower commitment nurses the action *create a climate of retention*. The lower commitment group endorsed one action approximately twice as often as higher commitment nurses—*increase the number of nurses available for patient care*. The groups were evenly split on two actions as well—*increase pay* (47 to 46) and *mandate specific maximum nurse-to-patient ratios* (10 to 13).

Discussion

The current study is limited in scope and presents several limitations. First, budgetary limitations kept the prospective sample size fairly small (2,400) thereby limiting the ability to generalize the results or make inferences about the attitudes or opinions of nurses employed in U.S. hospitals. Using simple random sampling does provide strength to the data obtained; however, the marginally acceptable response rate (33%) likewise compromises it. The response rate was undoubtedly influenced by our being unable to secure an adequately delineated mailing list in three of the eight states. Given that the majority of those receiving questionnaires did not return them, all results presented and conclusions reached should be seen as tentative and in need of support from additional research.

When the results from selecting five actions deemed to be the most helpful to nursing and the nursing shortage appeared to be almost the total opposite of the results when the “most important” action was selected, there was sufficient cause to examine the original data to be sure a data entry error had not occurred. It did not. So then there was the dilemma of explaining one set of results for the “select 5” answer and another for the “most important” selection. What follows is one possible explanation of these results.

When nurses considered selecting a set of actions to help nursing and the shortage, they appear to have focused more on the “help nursing” arm of nursing, or those actions that would, eventually, elevate and strengthen nursing. These respondents appeared to have a profession-oriented posture when selecting actions that were the top actions to address the nursing shortage. That posture (profession oriented) was supported by the actions they added to the list of actions because the highest frequency category of added actions related to the profession and/or professionalism of nursing.

When the nurses were focused only on the “most important” action, they took a more personally appealing and less altruistic approach. Selecting increasing pay corresponds to what has generally been done to deal with

shortages—it is straight forward and, temporarily, an easier approach. The respondents may have thought that their selected actions that would change the culture and the profession of nursing, although important, may not be ways that would (immediately) address the issues in nursing. It is not clear whether they thought these changes could not occur at all or not occur in a reasonable time period to address the nursing and shortage issues. Although initially it seemed odd that a climate of retention would follow increasing pay in rank order, reflection suggests that many nurses equate *increasing pay* with *retention*. Nurses are considered by some researchers as “economic workers” and highly motivated to remain in a position by a pay increase (C. B. Jones, personal communication, January 13, 2005). These results are in opposition to those reported by Lynn et al. (2002), who interviewed nurses about work and professional satisfaction. None of the nurses interviewed ever mentioned anything about their pay. When they were asked about pay after the interview, a typical response was “Sure, you can pay me more, but that’s not it. That’s not what really makes a difference.”

Prioritization of pay is consistent with Herzberg’s factor hygiene and motivation theory (Herzberg, Mausner, & Snyderman, 1959) and Maslow’s (1970) hierarchy of needs. These long-standing theoretical discussions of motivation (both) and satisfiers (Herzberg et al., 1959) suggest that pay is a primary satisfier but not a motivator for advancement, recognition, or retaining an interest in work or how well work is performed. Accordingly, nurses’ selection of pay as the primary solution to the nursing shortage appears to be resolving an unexpressed component of their dissatisfaction, despite the fact that it may not translate to enhanced performance in their clinical roles.

The issue of salary compression has been long standing in nursing, and these data suggest that little has been done to address that. In addition to salary, the top ranking of a clinical ladder would also support that. The data imply that little has been done to change the working environment issues that also have been long standing in nursing. Given that many factors in the work environment have been identified by many national commissions, and still remain as top priority actions that need to be addressed by these respondents, it is probably not surprising to hear respondents identify a “show me the money” strategy. That short-term response has worked in the past and is often the only response to a shortage staff nurses see from their employers. In fact, it is seen as “the” solution to the shortage by some (Spetz & Given, 2003). Money, unfortunately, is still seen as “the” solution as it is unlikely to be an effective response in the long run. It is even questionable if hospitals will be able to make substantive changes in salaries, given the low or negative operating margins in most hospitals today.

Although not a statistical comparison, the 20% of the respondents that were definitely or very likely to leave their current institution is a slightly higher

percentage than recent reports of turnover rates (15.5%; "By the Numbers," 2004; "RN Turnover Rate," 2004) but is consistent with relatively contemporary rates (21%; "AONE Reports 21% Turnover Rate," 2002). By contrast, the percentage of nurses planning turnover in the current study is slightly less than rates reported in the 1990s (23% to 27%; Jones, 1990; Wise, 1990).

It was not surprising to find that a meaningful percentage (9%) of the respondents were planning on leaving nursing in the next 3 years, with one half of them planning on retiring. Of the nearly 2.6 million nurses in the United States, almost 20% are not employed in nursing. Of that 20% not employed in nursing, one fourth of them are employed in nonnursing fields (HRSA, 2002). It is possible that many of the 50% of those planning on leaving in the next 3 years and not retiring might be pursuing employment in nonnursing occupations.

The "high commitment" group, one that by definition is invested in their organization and committed to its mission and goals, recognizes the importance of making changes in the working environment. Their endorsement of creating a climate of retention is in keeping with the types of changes that have been identified as essential by the IOM, JACHO, and other national groups. It confirms the importance and value of identifying and implementing those strategies that will result in fundamental and lasting changes in the working environment and will likely have greater effect than short-term changes. Considerable evidence exists that these "best practices" by management will have an impact not only on nurses but also on the quality of patient care they deliver.

One concern when having respondents select actions from a list is the primacy effect, that is, that the respondents will select the first few items on any list regardless of their actual preferences (Krosnick, 2000). Although we had some concern about this in establishing the list, we were unable to create multiple randomly ordered lists because of the prohibitive printing costs. We definitely did not have the primacy effect occurring in these data as the first several actions on the original list were create a climate of retention in health care facilities, increase flexible scheduling and child care options, and streamline administrative and documentation tasks. As can be seen in looking at either Table 1 or Table 2, these actions were rarely even in the top one half of the actions selected. The action *increase pay* was 10th of 16 on the original list and was the lowest action on one list (Table 1) and the highest one on the other (Table 2).

Is the glass half-full or half-empty? A narrow majority (54%) of the respondents in the current study were very sure of their intention to remain in their current institution with 20% being very sure they would not. The turnover rate is higher for nursing than the other health care professionals ("By the Numbers," 2004; "RN Turnover Rate," 2004); the results of the current study do not paint a more optimistic picture. A considerably greater

percentage of the respondents (76%) were definite about their plans to remain in nursing for the “near future,” supported by the 88% who intend to be practicing nursing in 3 years, suggesting the glass is half-full.

The strategies these nurses identify as important or necessary to keep them in nursing or in their institution will present major challenges to the health care industry. We know about the vast majority of these strategies; indeed they are “best practices” of needed changes in the work environment and have been implemented, in part, in some settings. Unfortunately, most efforts have been targeting retention of new graduates (e.g., Goode & Williams, 2004; Whittman-Price & Kuplen, 2003). The question remains—when will all nurses see these important changes in their immediate work environments? Investing in nursing pays off in an institution’s “bottom line” and in the quality of care provided (JCAHO, 2002; McCue, Mark, & Harless, 2003). Yet the fight for lower RN-to-patient ratios has been a hard fought one, and most of the financial packages offered to nurses are sign-on bonuses rather than retention bonuses, valuing the new nurse over the one already in the institution. This suggests the glass is, indeed, half-empty.

Nurses working in hospitals are stressed and suggest an immediate need for better pay, career mobility, administrative support, and better working conditions, recommendations similar to those found in secondary analyses (e.g., Sochalski, 2002). Although it is acknowledged that many hospitals are attempting to implement the types of practice environment changes identified as necessary by the respondents in the current study, it remains to be seen whether the changes are coming fast enough to address the challenges faced by staff nurses today.

References

- Aiken, L. H., Buchan, J., Sochalski, J., Nichols, B., & Powell, M. (2004). Trends in international nurse migration. *Health Affairs*, 23(3), 69-77.
- American Federation of State, County and Municipal Employees. (n.d.). *Is there really a nursing shortage? The critical need to bring nurses back to the hospital industry*. Retrieved January 25, 2005, from www.afscme.org/una/sns02.htm
- AONE reports 21% RN turnover rate. (2002). *OR Manager*, 18(3), 27.
- Buerhaus, P. I., Staiger, D. O., & Auerbach, D. I. (2003). Is the current shortage of hospital nurses ending? *Health Affairs*, 22(6), 191-198.
- By the numbers. (2004). *Modern Healthcare*, 34(4), 9.
- Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York: Wiley-Interscience.
- General Accounting Office. (2001). *Nursing workforce: Emerging nurse shortages due to multiple factors*. Washington, DC: Author.
- Goode, C. J., & Williams, C. A. (2004). Post-baccalaureate nurse residency program. *Journal of Nursing Administration*, 34(2), 71-77.

- Health Resources and Services Administration. (2002). *The registered nurse population: Findings from the National Sample Survey of Registered Nurses*. Washington, DC: Author.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work* (2nd ed.). New York: John Wiley.
- HSM Group. (2002). *Acute care hospital survey of RN vacancy and turnover rates in 2000*. Retrieved January 25, 2004, from www.wha.org/workforce/pdf/aone-surveyrnvacancy.pdf
- Joint Commission on Accreditation of Healthcare Organizations. (2002). *Health care at the crossroads. Strategies for addressing the evolving nursing crisis*. Washington, DC: Author.
- Jones, C. B. (1990). Staff nurse turnover costs: Part II, measurements and results. *Journal of Nursing Administration*, 20(5), 27-32.
- Kimball, E., & O'Neill, E. (2002). *Health care's human crisis: The American nursing shortage*. Princeton, NJ: Robert Wood Johnson Foundation.
- Krosnick, J. (2000). The threat of sacrificing in surveys: The shortcuts respondents take in answering questions. *Survey Methods Newsletter*, 20(1), 4-8.
- Lacey, L., & Shaver, K. H. (2003). *Nursing vacancy rates in North Carolina hospitals*. Retrieved January 25, 2005, from www.nursenc.org/research/empsurv2003/vachosp.pdf
- Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research*, 35, 382-385.
- Lynn, M. R., Morgan, J. C., & Moore, K. A. (2002, February). *The context within which nurses work: Work satisfaction in the 21st century*. Paper presented at the annual meeting of the Southern Nursing Research Society, San Antonio, TX.
- Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York: Harper & Row.
- McCue, M., Mark, B., & Harless, D. W. (2003). Nurse staffing, quality, and financial performance. *Journal of Health Care Finance*, 29(4), 54-76.
- Page, A. (Ed.). (2004). *Keeping patients safe: Transforming the work environment of nurses*. Washington, DC: National Academies Press.
- Price, J. L., & Mueller, C. W. (1981a). A causal model of turnover for nurses. *Academy of Management Journal*, 24, 543-565.
- Price, J. L., & Mueller, C. W. (1981b). *Professional turnover: The case of nurses*. Jamaica, NY: Spectrum.
- Price, J. L., & Mueller, C. W. (1986). *Absenteeism and turnover of hospital employees*. Greenwich, CT: JAI.
- RN turnover rate outpaces other health care professions. (2004). *RN*, 67(4), 12.
- Sochalski, J. (2002). Trends: Nursing shortage redux: Turning the corner on an enduring problem. *Health Affairs*, 21(5), 157-163.
- Spetz, J., & Given, R. (2003). The future of the nurse shortage: Will wages close the gap? *Health Affairs*, 22(6), 199-206.
- U.S. Department of Health and Human Services. (2002). *Projected supply, demand and shortages of registered nurses, 2000-2020*. Washington, DC: Author.
- Whittman-Price, R., & Kuplen, C. (2003). A recruitment and retention program that works! (Success stories). *Nursing Economics*, 21, 35-39.
- Wise, L. C. (1990). Tracking turnover. *Nursing Economics*, 8(1), 45-51.

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