THE JOURNAL OF NURSING ADMINISTRATION

The Effect of a Nursing Labor Management Partnership on Nurse Turnover and Satisfaction

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Objective: The effects of a nursing labor management partnership (NLMP) on nurse turnover and nurse satisfaction were examined.
Background: Job satisfaction and retention are among the factors related to the nursing shortage. The NLMP was a specific intervention where nursing leaders, both nonbargaining and bargaining, worked collaboratively to improve patient care and outcomes.
Methods: The study was conducted in a large, Magnet-designated urban academic medical center in the Northeastern United States. The hospital has more than 1,000 inpatient beds and more than 2,200 registered nurses, 2,107 of whom are members of a nursing union. Nurse turnover and satisfaction were studied before (2005) and after (2008) the implementation of the NLMP model.
Results: There was a significant decrease in nurse turnover and a significant increase in nurse satisfaction (from moderate to high) post-NLMP.
Conclusions: This study establishes a basis for further nursing research on the implementation of an NLMP in union environments.

The nursing shortage is a result of many factors including the work environment,[1] recruitment and retention issues,[2] and job dissatisfaction.[3] Maintaining the registered nurse (RN) workforce, increasing job satisfaction, and decreasing turnover of qualified nurses are increasingly important challenges in hospitals. To meet the challenges, nurse leaders are examining many aspects of nurse satisfaction such as leadership styles and interpersonal skills, staff involvement, and recognition of staff. The purpose of this study was to examine the effect of a hospital-based nursing labor management partnership (NLMP) on RN turnover and RN satisfaction. Identifying ways for nursing management and nursing labor unions to work together to improve the workplace environment was expected to have a positive effect on both groups, leaving more time to focus on patient care and shared goals. This NLMP includes 5 key stages of development. Leaders from both management and the labor organization must recognize these stages and work collaboratively to build the partnership. Although the stages may be understood in a sequential manner, there is a dynamic flow between the partners. The stages included are (a) perceived need or goal (may be identified by either partner but must then become a shared goal or mutually identified need), (b) assessment of risk or benefits (this process requires involvement of both partners), (c) decision to assume risk (requires shared commitment), (d) relationship based on positive outcomes (these outcomes provide incentives to move forward in the partnership), and (e) mutual performance expectations are met (success is important to build the NLMP and to move to the next level of mutual goal seeking). These concepts and definitions of the NLMP are summarized in Table 1.

Background

Nurse leaders with high visibility and participatory management styles that foster a shared decision-making

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Table 1. *Major Concepts and Definitions of the Nursing Labor Management Partnership Intervention*

Perceived need or goal	Identification of a need or goal to be achieved by both management and the local bargaining unit that cannot be achieved without assistance from both groups working together.
Assessment of risk and benefits	Identification and evaluation of risks and benefits of reaching out to each other to work together toward a common goal.
Decision to assume risk	Both groups independently decide to assume the risk of working together in partnership to attain a goal or meet a need that cannot be attained independent of each other.
Relationship based on positive outcomes	Positive experiences validated by members of both groups.
Mutual performance expectations met	Subsequent positive behavioral outcomes that develop and enhance the working relationship, including transparency of information, sharing information, open communication, mutual respect, fairness on both sides, improved communication and follow-up, and mutual input into decision making.

process were found to be linked to increased nurse retention.[4] However, specific partnerships among hospital nurse leaders and nurse union leaders have not been studied. Kaiser Permanente Health System entered into a labor management partnership (LMP) in 1997 with the AFL-CIO and 26 of their local unions covering 57,000 employees. Although the nursing union did not agree with the partnership during the beginning years, an agreement was later signed. Some of the lessons learned included the need to share in decision making, assure solution-oriented issue resolution with a reduction in grievances, and engage employees and managers in jointly evaluating and improving work processes in their own areas.[5] One of the key leadership challenges was to provide education for both labor and management, focusing on how to work together and balance traditional roles and responsibilities effectively. Working in an LMP enables both parties to occasionally disagree and have multiple goals. Also, each party respects the legitimacy of the other parties' perspectives, concerns, and goals and agrees to work through the problem-solving process.[5] The Kaiser Permanente LMP is the only report of a hospital-based LMP found in the literature. The content of this report is descriptive. There was no data-based study found in the literature that specifically focused on a partnership between leaders from both management and labor unions.

Outcome variables in this study were nurse turnover and satisfaction, both of which have been studied extensively among nurses. Although both of these variables have been linked to the work environment, neither has been linked empirically to the implementation of an NLMP.

Researchers have explored the links between nursing turnover and perceptions of the work environment[6]; leadership style[7]; empowerment[8]; organizational commitment[9]; and autonomy, work schedules, and workload.[10,11] Furthermore, researchers have

suggested that leadership interventions, such as those designed to improve the quality of work life, are effective in reducing turnover.[10]

Job satisfaction among nurses has been positively related to Magnet hospital status,[12] longevity in practice,[13] workload,[14] and acculturation.[15] Job satisfaction also has been related to autonomy, decreased job stress and positive nurse-physician collaboration,[16] nursing leadership,[1] and opportunities for self-growth and promotion.[17]

There are a number of studies that link nurse job satisfaction to anticipated turnover.[11,18,19] However, although many nurses belong to unionized workforces, there has been little written regarding bargaining unit nurses and their work experience, job satisfaction, and turnover. In a study of RN job satisfaction and collective bargaining unit membership status, Pittman[20] found that nonbargaining nurses had higher job satisfaction in the subcategories of professional relationships, work environment, and patient care. Bargaining unit nurses were more satisfied with their salaries and benefits.[20] No researchers have examined the effect of a hospital-based NLMP on nurse satisfaction and nurse turnover. This study was designed to address this gap and add to the body of knowledge regarding nurse satisfaction and nurse turnover.

Methods

The study used a quantitative, quasi-experimental design to examine the influence of the intervention, the NLMP, on the dependent variables, nurse turnover and job satisfaction. The setting was a large, Magnet-designated nursing department of an academic medical center in an urban area in the Northeastern United States. The nursing workforce includes more than 2,200 RNs; 2,107 are members of a nursing union. Institutional review board approval was obtained before the study.

Table 2. *Sample Characteristics of All Registered Nurses at the Study Hospital in 2005 and 2008*[a]

Characteristic	n	%	n	%
Sex				
Male	163	9.5	203	10.9
Female	1,556	90.5	1,653	89.1
Ethnic origin				
European-American	414	24.1	439	23.7
African American	495	28.8	500	26.9
Hispanic	140	8.1	171	9.2
Asian	669	38.9	739	39.8
Other	1	0.1	7	0.4
Age				
20-25 y	136	7.9	157	8.4
26-30 y	185	10.8	261	14.1
31-35 y	223	12.9	232	12.5
36-40 y	199	11.6	217	11.7
41-45 y	244	14.2	198	10.6
46-50 y	309	18.0	272	14.6
51-55 y	168	9.8	254	13.7
≥56 y	255	14.8	265	14.3

[a]2005 RN sample 1: n = 1,719; 2008 RN sample 2: n = 1,856.

The year before the signing of a hospital-based LMP with formal introduction of the NLMP was 2005. This became year 1 of the study. The post-implementation of the NLMP occurred in 2008 and became year 2. The NLMP was co-led by the chief nursing officer and the president of the local nursing union. The model is based on an experiential journey between nursing management and local nursing union leadership working with clinical nurses toward positive patient outcomes.[21]

Samples

Four samples of RNs working in clinical areas throughout the hospital were studied. Samples 1 and 2 included all registered clinical nurses (staff nurses) working full-time and part-time at the study site in 2005 and in 2008, respectively. The characteristics of samples 1 and 2 are included in Table 2. Samples 3 and 4 included RNs who participated in the 2005 National Database of Nursing Quality Indicators (NDNQI) Nurse Satisfaction Survey in 2005 and in 2008, respectively. Sample 3 and 4 characteristics are included in Table 3.

All RNs who worked full-time, part-time, and per diem at the hospital; spent at least 50% of their job in direct patient care; and had been employed for a minimum of 3 months were eligible to voluntarily participate in the NDNQI Nurse Satisfaction Survey in 2005 and in 2008. In the NDNQI Nurse Satisfaction Survey, RN satisfaction was defined as the answer to the question: "I am fairly satisfied with my job." This response is reported as a *T* score in the

NDNQI survey report. Several studies have indicated that the NDNQI RN Satisfaction Survey is a valid and reliable instrument.[22,23]

Nurse turnover data were collected throughout the year by clinical nurse managers, clinical nursing directors, the chief nursing officer, and the nursing department financial analyst and then reported annually. The nurse turnover data that were collected and monitored in the study hospital were focused on clinical RNs. Turnover was defined as the percentage of the full- and part-time RNs who left involuntarily and voluntarily over the average RN (staff nurse) positions filled for the calendar year.[24]

The NLMP grew out of an existing LMP at the study hospital that became energized with a change in senior leadership and a renewal of the consensus to work collaboratively between both labor and management. In September 2006, an official LMP agreement was written and signed by all of the members of the LMP committee at the study hospital.[21]

Results

Characteristics of the Samples

Samples 1 and 2 were inclusive of staff nurses who were employed full- or part-time in the study hospital in 2005 and 2008, respectively. Overall, the RNs in the 2005 and 2008 nurse samples were comparable. Specifically, in 2005, 90.5% of nurses were women, most nurses reported being of an Asian racial/ethnic identity (38.9%), and the average age was 42.4 years (SD, 11.4 years; range, 22-72 years). Among the nurses in the 2008 sample, 89.1% were women, most reported being of an Asian racial/ethnic identity (39.8%), and the average age was 42.0 years (SD, 11.9

Table 3. *Sample Characteristics of All Registered Nurses at the Study Site Who Participated in the NDNQI Nurse Satisfaction Survey in 2005 and 2008*[a]

Characteristic	n	%	n	%
Sex				
Male	43	7.0	140	10.0
Female	569	93.0	1,257	90.0
Ethnic origin				
European-American	177	29.0	307	22.0
African American	0	0.0	293	21.0
Hispanic	0	0.0	98	7.0
Asian	0	0.0	503	36.0
Other[b]	435	71.0	196	14.0

Abbreviation: NDNQI, National Database of Nursing Quality Indicators.
[a]2005 RN sample 3: n = 612; 2008 RN sample 4: n = 1,397.
[b]This percentage was not reported by the NDNQI in the sex and race table.

years; range, 21-79 years). Nurses in the 2005 sample had a significantly higher mean (SD) number of years worked at the study site before their study year (11.3 [10.2] years) relative to the nurses in the 2008 sample (10.6 [10.5] years; $t_{3,565.5}$ = 1.97, P < .05).

Regarding nurse turnover, the actual values indicated 143 turnovers out of 1,719 nurses in 2005 and 116 turnovers out of 1,856 nurses in 2008. The administrative computation to determine turnover used the average number of nurses employed during the year, which was 1,443 in 2005 and 1,695 in 2008. Based on these numbers, the official turnover rates were 9.9% in 2005 (average of 1,443 nurses/143 actual terminations) and 6.8% in 2008 (average of 1,695 nurses/116 actual terminations). Thus, these numbers indicated a 3.1% decrease in the rate of RN turnover between 2005 and 2008.

Samples 3 and 4, composed of nurses who participated in the NDNQI surveys in 2005 and 2008, were similar regarding sex (93% vs 90% women, respectively) and race (29% vs 22% European-American, respectively). The mean age of participating RNs at the study site was also comparable in 2005 and 2008 (mean, 44 vs 44 years, respectively). Regarding their ratings of job satisfaction, available NDNQI data indicated that the T score for job satisfaction was 57.90 (SD, 8.4) in 2005 and 61.77 (SD, 7.8) in 2008.

Tests for statistical power were conducted as post hoc analyses. Estimates indicated that 2,130 participants would be needed (1,065 per group) to have an at least 80% power to detect an event rate difference of 3%, using a 2-tailed test, with probability set at .05. Both the 2005 and 2008 samples had more than 1,065 participants; thus, there was sufficient statistical power for the analyses. There was a turnover rate of 9.9% in 2005 and 6.8% in 2008 among RNs at the study site, an event rate difference of approximately 3%.

Based on the difference between these T-score values and standard deviations, power analysis estimates indicated that a sample size of 144 (72 participants per group) would be needed to have an at least 80% power to detect a significant difference between scores, using a 2-tailed test, with probability set at .05. Both the 2005 sample and the 2008 sample provided sufficient statistical power for the analysis. Data from the NDNQI indicated that the T score for job satisfaction was 57.90 (SD, 8.4) in study year 1 (ie, 2005) and 61.77 (SD, 7.8) in study year 2 (ie, 2008).

Effect of a Hospital-Based NLMP on Nurse Turnover

A binary logistic regression model, used to generate an odds ratio with a 95% confidence interval (CI),

Table 4. *Summary of Changes in Dependent Variables From Year 1 to Year 2*

Dependent Variable	Year 1 (2005)	Year 2 (2008)
Nurse satisfaction	57.90	61.77
Turnover	9.9%	6.8%

indicated that nurses employed at the study site in 2005 were significantly more likely to terminate their positions relative to their counterparts in 2008 (n = 3,138, χ^2_1 = 9.64, P < .01). Specifically, nurses who were employed at the study hospital in 2005 were 50% (95% CI, 1.16-1.93) more likely to terminate their positions relative to nurses who were employed at the study hospital in 2008.

Effect of a Hospital-Based NLMP on Nurse Satisfaction

An independent-samples t test was carried out to determine differences in job satisfaction from 2005 and 2008. In 2005 and 2008, the T scores reflecting nurse job satisfaction were 57.90 (SD, 8.4) and 61.77 (SD, 7.8), respectively; there was a statistically significant difference (t_{130} = −2.73, P < .01), with the 2008 scores significantly higher. A Cohen d statistic was computed, revealing an effect size of 0.50, based on the differences between these means and the standard deviations of each group. Also, there was a difference in the categorization of scores as per the NDNQI scoring method. In 2005, the scores fell into the moderate job satisfaction category, and in 2008, the scores fell into the high job satisfaction category in the NDNQI survey.

Thus, there were statistically significant results for the effect of the NLMP on the 2 dependent variables, RN satisfaction and RN turnover. The summary results are presented in Table 4.

Discussion

The increase in the study site nurses' participation in the NDNQI nurse satisfaction survey from 612 nurses in 2005 to 1,397 nurses in 2008 is noteworthy; the number more than doubled between 2005 and 2008. The fact that the nurses had increased interest and enthusiasm to participate in the survey and did so voluntarily points to engagement of nursing staff in their work environment. A feedback loop had been developed in the NLMP whereby survey results were shared in a short time frame after the final reports are received at the study site.

The local practice developed for NDNQI survey results is as follows. First, the survey results were

presented to the nursing management, local union leadership, and nursing staff. Then, they are infused into the professional practice committees, the model of shared governance in this unionized nursing population. Nurses and nursing management worked with the unit-based results to identify key areas of nurse satisfaction to be improved and develop action plans to be worked on throughout the year. Both the clinical nurses and nursing management were accountable for working together to achieve improvements in nurse satisfaction. Progress is tracked through the NLMP.

Since this study has been completed, further discussions have occurred concerning whether the NLMP would facilitate improved communication, increase collaborative decision making, and open minds to discussing and recognizing numerous perspectives on the same issue and sharing the decision making in a unionized environment. Would the NLMP encourage rallying around evidence-based practice and help reconnect nurses to their profession? All of these and more have encompassed the NLMP and are subjects for further discussion and research.

Nurse turnover is an outcome that is monitored by many hospitals. Turnover is costly. Estimates of the cost of nursing turnover have great variability and make it difficult to compare from one study to another. Recently, Jones[25] has provided the 2007 calculation of the estimated cost of RN turnover as approximately $88,000 per RN. The study hospital experienced a 3.1% reduction in turnover, with 27 less RNs leaving the hospital in study year 2 (2008) as compared with study year 1 (2005) at an approximate turnover savings of $2,376,000.

Turnover may also impact staff morale and patient care. Nursing turnover has a high cost to the organization and has an impact on the remaining staff who may be frequently orientating newly hired nurses. Experienced nurses leaving a hospital will affect quality of patient care as they take their expertise with them. When turnover is high, nurse leaders are focused on obtaining staffing and less time is available for higher level quality initiatives. The NLMP has led to key involvement of the partners in achieving the goal of a high-quality RN staff who can be retained. The partners decided to involve staff nurses in the interview process for incoming staff and managers. Thus, representatives from labor and management, working together, can ensure recruitment of excellent nursing staff.

In 2005, the nurse turnover rate at the study hospital was 9.9%. This rate represented the baseline measurement made before the signing of the hospital-based LMP in 2006. In 2006 and 2007, the rates of departmental RN turnover were 9.5% and 9.3%,

respectively. These numbers represented rates of nurse turnover that were on a downward trend from 2005 as nursing, both labor and management, officially joined the LMP agreement at the study site. Subsequently, data indicated that the rate of RN turnover at the study hospital in 2008, after the implementation of the hospital-based NLMP, dropped to 6.8%, representing a 3.1% decrease in the rate of RN turnover between study time points 2005 and 2008.

Limitations

Although the results of this study are impressive, as with any study, there also are limitations. For example, because the NDNQI survey is anonymous and data are reported by unit, it is not possible to know if the same RNs participated in both 2005 and 2008. Even so, as an aggregate, the changes in both the mean satisfaction score and in the participation rate are noteworthy. Also, although it is not possible to directly link the changes to the NLMP alone, it is important to note that there were no other major changes in the institution during the time period of the study.

Implications for Professional Practice

The NLMP is a model that can be implemented in both a union and a nonunion environment. The premise is centered on solid management practice and connecting nursing to the bedside and patient outcomes. The NLMP recognizes leadership at all levels. Nurse administrators are viewed as managerial leaders by nature of their position, but clinical nurses who have leadership roles in a nursing union are leaders of nurses as well. Clinical nurses also assume leadership roles in practice through quality work, evidence-based practice projects, and functioning as preceptors and role models and are identified by others for their excellence in practice. The NLMP provides the forum for nursing leaders, both formal and informal, to work together toward shared goals, operational decision making, and team building.

The NLMP was implemented in a robust, culturally diverse nursing population, in an academic medical center, in a large urban environment, and with a multicultural patient population. Basic principles of relationship building and sound leadership from both union and management were implemented. When both parties realized that, together, outcomes could be achieved that were not achievable by working in isolation, the parties became invested in the model.

Future Research

Nursing unionized work environments are often viewed as difficult to manage and motivate to reach quality goals. This study site indicates that in this instance, that was not the case. This study site is

among 6% of all hospitals in the United States that have achieved Magnet status and among less than 0.7% of all US hospitals that are both Magnet designated and having a unionized nursing workforce. The development of an NLMP is of interest to other countries with a generalized unionized workforce. The study site has been contacted and visited by several delegations of nurses from around the world interested in replicating the NLMP model.

There are opportunities for future research with the NLMP. It is important to capture the stories of the key representatives in the partnership. This can be initiated through in-depth interviews with RNs who benefit from the partnership as well as among those who are leading the partnership design and implementation. Other avenues for future research include comparisons across institutions with and without partnership models in place. Outcomes such as RN turnover and satisfaction are relatively easy to capture. Comparisons could be made between the effects of the NLMP and other models such as shared governance models.

In conclusion, this research establishes a basis for further empirical study of the effect of labor and management working together in a hospital-based NLMP model to achieve nursing, patient, and organizational improvements and outcomes.

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