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Leadership Style and Patient Safety

Implications for Nurse Managers

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OBJECTIVE: The purpose of this study was to explore the relationship between nurse manager (NM) leadership style and safety climate.
BACKGROUND: Nursing leaders are needed who will change the environment and increase patient safety. Hospital NMs are positioned to impact day-to-day operations. Therefore, it is essential to inform nurse executives regarding the impact of leadership style on patient safety.
METHODS: A descriptive correlational study was conducted in 41 nursing departments across 9 hospitals. The hospital unit safety climate survey and multifactorial leadership questionnaire were completed by 466 staff nurses. Bivariate and regression analyses were conducted to determine how well leadership style predicted safety climate.
RESULTS: Transformational leadership style was demonstrated as a positive contributor to safety climate, whereas laissez-faire leadership style was shown to negatively contribute to unit socialization and a culture of blame.
CONCLUSIONS: Nursing leaders must concentrate on developing transformational leadership skills while also diminishing negative leadership styles.

Nursing leaders are needed who will change the work environment and increase patient safety.[1,2] Hospital nurse managers (NMs) are positioned to impact care at the point of service. Through their leadership, NMs can influence practices that either promote or diminish patient safety. Several research studies document the need for strong nursing leadership to promote safety.[3,4] However, despite these recommendations, leadership failures significantly contribute to sentinel events (unexpected death or serious injury), even surpassing communication failures, which have been considered the root cause of errors.[5] It is therefore essential for nurse executives and NMs to understand how NM leadership influences patient safety.

Background

Leadership

Leadership is a complex concept. A leader guides, directs, and fosters goal attainment, thus motivating followers to reach their full potential.[6] A manager's leadership style is influenced by skill, experience, education, personality of the leader, ethics, teamwork, culture, and self-management.[7] Current leadership theories are multifaceted.[6-9]

Transformational-transactional leadership model is a well-known multifaceted theory. In this theory, leaders exhibit 3 types of leadership styles: *transformational*, *transactional*, and *laissez-faire*. While leaders usually have a tendency toward 1 particular style, leaders may exhibit traits from more than 1, depending on the environment, situation, and persons being led.[6]

Transformational leaders are proactive and convince followers to strive for higher performance. These leaders are respected, instill pride, motivate others, stimulate creativity, and recognize need for individual achievement.[6] Transformational leaders talk positively about the future and articulate a compelling vision.[2,10]

In contrast to transformational leaders, transactional leaders lead through social exchange using 2 key methods to motivate their followers: contingent

reward and active management by exception.[11] Employees who receive only contingent rewards are not engaged and committed to the organization because they are not self-motivated. Active management by exception is a corrective action approach that is even less effective than contingent reward. While these leaders address issues where immediate action is required, their style fails to ensure long-term commitment.[11]

Building on transformational/transactional leadership theory, laissez-faire leadership is the antithesis of transformational leadership and is characterized by passive management by exception. Leaders who take a passive approach wait to intervene until problems are serious. This passive approach is sometimes found in managers with large numbers of direct reports or whose job requires them to be absent and is perceived as less effective.[8,12]

The style of leadership exhibited by managers has been associated with the presence of a culture of safety.[13,14] Positive leadership attributes (transformational style, manager support, staff involvement with decision making, relationship oriented leadership, positive work environment) were associated with improved safety climate, improved work environment, improved safety outcomes, increased patient satisfaction, and reduced adverse events.[3,11,13]

Safety Climate

Safety climate refers to employees' perceptions of organizational culture including values, attitudes, behaviors, and commitment to safety.[15,16] When organizations value patient safety, these values must extend to the patient care level for the organization to be successful. Therefore, NMs who are responsible for day-to-day operations strongly influence patient safety climate because they bridge the gap between organizational and department safety climate.[16]

The purpose of this study was to explore the relationship between NM leadership styles and patient safety climate and to investigate to what extent leadership style promotes patient safety climate.

Methods

Following institutional review board approval, this descriptive correlational study included all adult inpatient departments from a convenience sample of 9 hospitals in a not-for-profit healthcare system in 1 state. SurveyMonkey (Palo Alto, California) was used to send an e-mail link to 1 579 RNs working in 41 departments. Responses were received from 466 nurses (29.5%).

Instruments

The subjects completed an online survey including 2 validated instruments: the Hospital Unit Safety Climate (HUSC) survey and Multifactorial Leadership Questionnaire (MLQ-5XS) plus demographics. The HUSC is a 33-item survey measuring 6 safety dimensions and 1 worker safety dimension. Instrument psychometrics are described in a previous publication.[15] Instrument subscales include (*a*) manager support, (*b*) socialization/training, (*c*) safety emphasis, (*d*) blameless system, (*e*) use of safety data, (*f*) pharmacist support, and (*g*) worker safety. Responses to each question are rated on a 5-point Likert scale (1 = strongly disagree, 3 = neutral, 5 = strongly agree).

The MLQ-5XS is a 45-item instrument measuring transformational, transactional and laissez-faire leadership styles. Individual staff nurses rated their NMs' presence of these 3 leadership styles using a 0- to 4-point Likert-type scale (0= not at all, 4= frequently if not always).[6] The MLQ-5XS has been used in multiple research settings.[6]

Analysis

The level of analysis for this study was the inpatient nursing department. Each individual's scores for safety climate and leadership style were aggregated to derive mean department scores for each subscale. Demographic data were aggregated to a mean or percent department score.

SPSS 21 for Windows (Armonk, New York) was used for data analysis. After conducting descriptive statistics, a 1-way analysis of variance (ANOVA) was completed to determine mean differences in the variables by department type (ICU/non-ICU), level of education, national certification, age, and years of experience. A bivariate analysis (Pearson *r*) was conducted to identify direction and degree of association between predictor and outcome variables.

Variables significant in the bivariate analysis were entered into a backward stepwise regression to determine how well leadership style predicted safety climate. A separate regression was conducted for each dependent variable subscale (socialization and training, blameless system, pharmacist support, and manager support for safety). The 4 predictor variables (transformational, transactional, and laissez-faire leadership styles and department type) were entered and removed 1 at a time until significance was reached. Using linear regression alone underestimates the SEs and overestimates the *P* value, which may result in a type I error.[17] Therefore, multilevel analysis was completed to determine the effect of the nested structure of the data (ie, nurses within departments) (see Table, Supplemental Digital Content 1, http://links.lww.com/JONA/A401).

Results

Initially, 523 staff nurses from 42 departments across 9 hospitals responded. Cases with more than 50%

missing data were deleted, and the department was included in the final data analysis if there was at least a 5% response rate. This resulted in a final sample of 466 participants (29.5% response rate) from 41 nursing departments. The department response rate ranged between 5% and 45% (mean, 12% [SD, 7.45%]). In multilevel analysis (see Table, Supplemental Digital Content 1, http://links.lww.com/JONA/A401), small sample sizes at level 1 (staff nurse level) do not bias the results; however, the number of level 2 (nursing departments) of 50 or less may lead to biased estimates.[18]

The typical study subject was a female staff nurse (n = 367; 79%) working full time (mean, 36 [SD, 11.6] h/wk) in a non-ICU unit (n = 298; 64%) with an associate's degree as the highest education level obtained (n = 236; 50.6%). Hospitals in the study had an average hospital size of 218 beds (range, 30-440 beds), and most had received Magnet® recognition (n = 6; 65%) and were teaching hospitals (n = 5; 57%).

A descriptive analysis of the HUSC and MLQ-5XS scores is provided in Table 1. The mean total safety climate score was 3.8, with a range of department mean scores from 3.5 to 4.0 (5-point scale). No significant difference across department type was identified except in the socialization and training subscale. Nurses in ICU departments reported a slightly lower but statistically significant (P = .029) socialization and training score than did those in non-ICU departments (mean, 3.9 and 4.0, respectively). The mean MLQ scores were transformational (2.97), transactional (2.56), and laissez-faire (0.93). No significant difference in MLQ scores was identified by department type.

In the bivariate analysis, there was a significant relationship among leadership style and most safety climate subscales (Table 2). However, these relationships were positive for transformational and negative for laissez-faire leadership. The strongest association was identified between transformational leadership style and the NM and pharmacist support subscales (r = 0.782 and 0.522, respectively). For laissez-faire leadership style, the strongest negative relationship was with blameless system and manager support (r = −0.708 and −0.522, respectively) (Table 2).

Multivariate Results

The regression findings indicated that laissez-faire leadership style and department type (ICU, P = .04; non-ICU, P = .05) contributed to 20.9% of the variance in the socialization/training subscale. Laissez-faire leadership style also contributed to 27.2% of the variance in blameless system. Transformational leadership style contributed to 24.2% of the variance in the pharmacist support subscale. Transformational and laissez-faire leadership styles (P = .001 and .011, respectively) contributed to 63.2% of the variance in the manager support subscale. The multilevel analysis identified the same relationships with the predictor variables and is reported in supplemental online materials (see Table, Supplemental Digital Content 1, http://links.lww.com/JONA/A401).

Discussion

Patient safety is key to providing quality healthcare. This is accomplished by creating work environments that support patient safety. While NMs have accountability for nursing care at the department level, it has previously been unclear how they impact patient safety. In this study, NM leadership style was associated with socialization and training, a blameless system, and pharmacist support.

Table 1. *HUSC and Multifactorial Leadership Subscales (n = 466)*

HUSC Subscales (1- to 5-Point Scale)	All Departments		Critical Care		Noncritical Care		
	Mean	SD	Mean	SD	Mean	SD	α
Manager support	3.9	0.303	3.9	0.35	3.9	0.29	.847
Socialization/training	3.9	0.493	3.9[a]	0.17	4.0[a]	0.22	.762
Safety emphasis	3.6	0.616	3.6	0.24	3.7	0.23	.789
Blameless system	3.6	0.551	3.6	0.21	3.6	0.25	.783
Use of safety data	3.5	0.568	3.5	0.31	3.4	0.22	.768
Pharmacist support	3.9	0.624	3.9	0.27	3.9	0.31	.827
Worker safety	3.8	0.519	3.7	0.21	3.9	0.20	.729
Total safety climate	3.8	0.428	3.7	0.21	3.8	0.16	.866
Leadership Style (0- to 4-Point Scale)	Mean	SD	Mean	SD	Mean	SD	α
Transformational	2.97	0.35	3.20	0.33	2.90	0.38	.954
Transactional	2.56	0.17	2.70	0.26	2.50	0.19	.681
Laissez-faire	0.93	0.34	0.84	0.36	0.97	0.34	.877

Abbreviation: HUSC, Hospital Unit Safety Climate.
[a]ANOVA, F_{39} = 5.1, P = .029.

Socialization and Training

Socialization is a process where new nurses learn not only knowledge and skills to perform their role but also the cultural norms of the department.[19] Unit culture encourages unwritten expectations where nurses learn what is permissible on the unit, regardless of overall organizational goals. In this study, the combination of NM laissez-faire leadership and ICU contributed to an environment where nurses reported being socialized into a negative safety climate. Similar findings were reported in an exploratory study of medication errors where unit climates that promoted nursing insecurities resulted in nurses who risked being wrong rather than asking for help. Nurses also reported cutting corners to appear they managed their time well.[20] In another cross-sectional study of 276 pediatric nurses, younger nurses (<34 years) reported that older nurses influenced how closely they followed medication policies.[21]

Blameless System

A blameless system exists when errors are viewed by team members as learning opportunities rather than incompetence. An environment free of blame is a major tenet of providing safe, high-quality healthcare.[22] An important finding in this study is the relationship between laissez-faire leadership and blame. Nurses who reported their manager as having laissez-faire leadership also reported a system of blame when errors occurred. This was manifested in both ICU and non-ICU departments.

These findings are consistent with literature about laissez-faire managers. When pressured to address safety problems, laissez-faire managers are likely to find quick fixes, be indecisive, or become hostile rather than investigate the root cause.[23] This results in employees who are not motivated or engaged in unit goals.[24] These findings are important for NMs in hospitals with increased financial pressure to secure outcomes. For example, in a qualitative study of 77 hospital leaders and staff nurses, when leaders were pressured to comply with pay-for-performance measures, they were more likely to blame nursing staff for healthcare-acquired conditions resulting in decreased staff morale and a negative work environment.[24]

Interprofessional Teamwork

Nurses are members of formal and informal interprofessional teams. These teams play a critical role in patient safety. In this study, nurses who reported their managers were transformational also perceived that the pharmacy was helpful in medication delivery. This is consistent with literature showing that including a pharmacist on interprofessional teams decreased medication errors.[25]

Table 2. *Bivariate Analysis of Leadership Styles and HUSC*

	Socialization/ Training	Safety Emphasis	Blameless Culture	Safety Data	Pharmacists Support	Worker Safety	Transformational Leadership	Transactional Leadership	Laissez-Faire Leadership	Leadership Outcomes
Manager support	0.547[a]	0.508[a]	0.584[a]	0.434[a]	0.548[a]	0.400[a]	0.782[a]	0.514[a]	−0.708[a]	0.788[a]
Socialization		0.553[a]	0.455[a]	0.281	0.361[b]	0.708[a]	0.440[a]	0.442[a]	−0.366[b]	0.388[b]
Safety emphasis			0.314[b]	0.443[a]	0.198	0.581[a]	0.444[a]	0.407[a]	−0.421[a]	0.379[b]
Blameless culture				0.510[a]	0.337[b]	0.228	0.371[b]	0.145	−0.522[a]	0.409[a]
Safety data					0.230	0.036	0.124	0.041	−0.329[b]	0.089
Pharmacy support						0.134	0.522[a]	0.310[b]	−0.314[b]	0.516[a]
Worker safety							0.422[a]	0.574[b]	−0.395[b]	0.379[b]
Transformational leadership								0.717[a]	−0.737[a]	0.958[a]
Transactional leadership									−0.509[a]	0.657[a]
Laissez-faire leadership										−0.759[a]

Abbreviation: HUSC, Hospital Unit Safety Climate.
[a]Correlation is significant at the .01 level (2-tailed).
[b]Correlation is significant at the .05 level (2-tailed).

Implications for Nurse Leaders

This study has important implications for NMs and nurse executives. In order to promote patient safety, NMs need to apply transformational characteristics in their practice.[2] Socialization of new nurses is a particularly important aspect of patient safety impacted by NM leadership style.[19] NMs can foster socialization through the development of recognition programs, role modeling, and specific transition into practice strategies that may result in improved nurse satisfaction and retention.[19]

Another aspect of safety climate influenced by NMs is blame. Environments where errors focus on blame tend to be hierarchical and focused on compliance.[26] In these environments, a blameless culture will not be attained through continuing education; it must be actively pursued. NMs can create a blame-free culture by increasing employee involvement in decision making, developing a culture of trust, and looking at error as an opportunity to improve processes rather than reprimand employees.[25-27]

The study findings further support the role of the NM in fostering alliances with pharmacy by including the unit pharmacist in daily rounds, inviting them to regular in-service trainings, clarifying their role, and setting clear expectations.[25]

In addition to fostering safety climate through positive leadership styles, NMs must understand that transformational leaders may exhibit some laissez-faire tendencies, especially when experiencing an increased workload. Work volume and responsibilities outside the unit may create absences that are interpreted by staff as laissez-faire leadership. Organiza-tional influences may pressure the NMs to respond too quickly or assign blame rather than identify a problem's root cause.[26] Table 3 illustrates how NMs who exhibit transformational and laissez-faire leadership styles engage in practices that promote or detract from patient safety.

Limitations

The limitations of this study include small sample size, low response rate, and a sample representing 1 healthcare system in 1 state. The data were self-reported, and managers sent staff the link to the survey, which might have affected response rate or resulted in a bias. The numbers of facilities and departments with their varying cultures may also be considered a limitation.

Conclusions

To promote patient safety, the Institute of Medicine recommends transformational leadership.[1] In this study, transformational leadership style was identified as a contributor to safety climate, whereas laissez-faire leadership was shown to negatively affect safety climate. This study emphasized the need for NMs to exhibit transformational leadership qualities while also decreasing negative leadership styles. Future research is needed on the impact of nursing department culture from the microsystem perspective and the role of interprofessional teams. In addition, contributing factors such as staffing, burnout, generational differences, influence of informal leaders, organizational culture, and other quality improvement processes were not addressed in this study.

Table 3. *Practices That Promote or Detract From Patient Safety by Leadership Style*

	Transformational Leaders	Laissez-Faire Leaders
Vision	• Sets department vision • Articulates hospital mission, vision, and values (MVV)	• Does not have a clear vision • Expectations often change
Visibility	• Conducts patient and staff rounds on all shifts	• No formalized rounding plan • Rounding is often 1st task to be missed
Socialization	• Meets early and often with new staff • Ensures that nurses who orient are supportive of the MVV	• Leaves orientation and on-boarding to other staff
Interprofessional practice	• Meets with other disciplines • Sets clear expectations for all services • Interdisciplinary patient rounds are focused on outcome goals • Open communication to resolve interdisciplinary communication issues	• Nurses and allied health don't know what to expect • Attempts at interdisciplinary rounds are merely reporting rather than integration of services • Staff continually disappointed by the failure to communicate
Blame/error	• Errors seen as an opportunity for process improvement • Reporting near-miss events is encouraged	• Errors are blamed on incompetence • Learning/change does not take place following error

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