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REVIEW

Leadership skills for nursing unit managers to decrease intention to leave

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Aim: To examine specific elements of nursing leadership linked to intention to leave, in public acute care hospitals.

Background: Nurse turnover is a global issue receiving widespread attention due to prolonged and projected workforce shortages. Nurse management and leadership qualities have been associated with intention to leave and turnover of nurses. The role of the nurse unit managers in the retention of nurses is becoming increasingly important, particularly because of their strong influence on the quality and stability of the work environment.

Methods: Data were collected from 62 medical, surgical, and mixed units across eleven public acute care hospitals in three Australian states (September 2008 to August 2010). A total of 1,673 nurses completed a nurse survey that included measures of intention to leave and leadership aspects of the practice environment. Analyses explored specific leadership characteristics that were associated with turnover intent.

Results: The role of nursing unit managers was confirmed to be a major factor in nurses' intention to remain or leave their current workplace. Nurses valued "human" skills more highly than other leadership characteristics, including their manager's connection with nurses' concerns, clarity, participation in decisions, and encouragement.

Conclusion: Strong leadership qualities in the nursing unit manager have been associated with greater job satisfaction, reduced turnover intention among nursing staff, and improved patient outcomes. Nurse leaders need to be supported in an effort to retain nurses given ongoing workforce issues and to ensure high-quality patient care.

Keywords: nurse managers, leadership, work environment, turnover, retention

Introduction and background

Australia is expected to face a shortfall of as many as 109,000 nurses (27%) by 2025,1 which will impact significantly on future staffing levels and the capacity of the health care system to meet patient demands. Not surprisingly, this projected shortage has focused greater attention on retention of the existing nurse workforce, which could decrease the shortage to approximately 20,000. Much has been written about the leadership role of nursing unit managers (NUMs) in ensuring a positive work environment, which has been linked to nurse retention.² Indeed, NUM leadership, as measured by the leadership scale in the Practice Environment Scale of the Nursing Work Index (PES)³ and the Shortell Leadership Scale in aggregate, is strongly associated with retention.⁴ However, no published studies have examined the relationship between the individual items in these two scales and intention to leave. The aim of this paper is to explore specific elements of nursing leadership in public acute care hospitals that have been linked to intention to leave.

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Over the past few years in Australia, significant changes to the structure of the health care industry have led to changes in the role of NUMs^{5,6} from a predominantly clinical position providing clinical leadership^{7,8} to a more contemporary role requiring managerial, leadership, and clinical skills.^{2,9} Now, NUMs primarily perform general management activities (64%) such as staff management and budgeting, with only 16% of tasks being patient focused. 10 As a result of this shift in responsibilities, some have adopted the position that leading a nursing unit does not require a nurse. 11 This view emanates from the public management literature, 12,13 which suggests that anyone can manage any business11,12 and overlooks the clinical realities that NUMs face daily. Instability in staffing factors (turnover, high part-time rates, poor mix of staff) and instability in patient factors (high bed occupancy and unplanned admissions) increase the complexity of unit management and impact negatively on patients' morbidity and mortality. 14 Managing this complexity requires leadership and an understanding of nursing work.15

This change in role of frontline managers has, to some extent, coincided with high rates of executive nurse turnover, 16 which result in a lack of/change in direction for the NUM, reduced morale, 17 and diminished organizational commitment. 6 More importantly, dissatisfaction and disengagement with the change process result in higher nurse turnover. 16 Data collected in Australia show that the average turnover rates during the recent global financial crises was 15.1% (ranging from 12.6% in NSW to 16.7% in WA), at a cost per registered nurse of AUD49,255. 18 Understanding the leadership skills required of NUMs to minimize this loss of staff and human capital is critical.

A wide range of environmental and personal factors have been shown to influence nurse turnover. 19-21 Studies of acute care settings have found that some environmental factors significantly associated with intent to leave are lack of communication with doctors, poor managerial leadership, little participation in hospital affairs, unsupportive work environment, lack of developmental opportunities, inadequate pay, poor work—life balance, and excessive work pressure. 22-24 Personal factors linked with intent to leave include older age, low professional status, burnout, and lack of goal internalization. 22,25,26

Both theoretical and empirical works support using nurses' intention to leave as a proxy construct for actual turnover. "Reasoned action" theory describes decisions about human behavior, such as the decision to leave one's job, as a weighted function of individual intentions and societal pressures.²⁷ Other theoretical models consider intention to leave as a cognitive step taken in conjunction with assessing alternative options and current job embeddedness.²⁸ Providing an empirical basis for connection between intention to leave and actual turnover, a study of 365 full-time nurses at four US hospitals found that anticipated turnover predicted actual turnover with a fairly high rate of accuracy (73%–76%).²⁹

A literature review by Cowden et al identified 23 highand medium-quality manuscripts examining the relationship between nurse manager leadership and intention to stay.²⁰ The instruments most frequently used to detect leadership qualities were the Multifactor Leadership Questionnaire (four studies) and the Nurse Working Index (three studies). Eighteen of the studies detected a positive relationship, six found a negative relationship, and five found no significant relationship.²⁰ Several studies on this topic have been published since that review. Carlos Do Rego Furtado et al surveyed 266 nurses in a Portuguese hospital using the Leadership Effectiveness and Adaptability Description (LEAD) measure.³⁰ They found that persuading and sharing are the leadership components most negatively associated with retention.³⁰ A second study of 342 recent nursing graduates found that nurse manager leadership, which was measured using the Multifactor Leadership Questionnaire, was associated with higher job satisfaction and thus lower career abandonment intent.31 Finally, Duffield et al used the leadership domain of the Revised Nursing Work Index to show that nurse manager leadership, in aggregate, is a significant predictor of job satisfaction and intention to leave.2

The PES and the Shortell Leadership Scale hold particular promise to reveal substantive findings about the relationship between NUMs and staff nurse intent to leave, as they both contain subscales with questions specifically about nurse leadership. Both are strongly based in theoretical concepts, validated, and easy to administer.^{3,4} The PES has been used to examine nurse staffing³² and nurse outcomes such as nurse burnout,^{33,34} emotional exhaustion,³⁵ job satisfaction,³⁶ and intent to leave.^{37,38} The Shortell Leadership Scale is also frequently relied upon in the literature. 39-42 Although many studies have examined the relationship between different aspects of nurse manager leadership and staff nurses' intent to leave or a related outcome, none have investigated which of the individual items of the PES or the Shortell Leadership Scale are most strongly associated with intent to leave, a gap filled by this study.

Methods

This paper reports a secondary analysis of data collected for a larger study that has investigated nurses' views of turnover, 43 and explored the rates and costs of nursing turnover in Australia. 14,18

Sample and settings

Data were collected in eleven public acute care hospitals across three Australian states from September 2008 to August 2010. A random selection of 62 medical, surgical, and mixed medical/rehabilitation nursing units were included in the study. Data were collected from each ward in two 3-month periods separated by 12 months. Data collected included a nurse survey, patient outcomes, and a unit profile that measured unit turnover and turnover costs. In order to address the aim described in the Introduction and background section, only subset of data from the nurse survey is reported here. All nurses on each ward were asked to complete the nurse survey during each data collection period. Across the 62 wards, an overall response rate of 44.4% (n=1,673) was achieved. The survey was voluntary and anonymous, and the study was approved by seven Human Research Ethics Committees representing the participating health services and the university.

Instruments

The nurse survey included a range of demographic items (age, sex, and experience as a nurse) and other data not reported here.¹⁴ Nurses' intention to leave their current position was captured in a single question with a dichotomous response: not intending to leave or intending to leave within 12 months. Two instruments collected data on aspects of nursing leadership: PES³ and the leadership scale from Shortell's ICU Nurse-Physician Questionnaire.⁴

PES

The PES is currently the most widely used tool to assess the quality of the nursing work environment.⁴⁴ It consists of 31 items that measure five domains: nurse–doctor relationships; nurse manager ability, leadership, and support

of nurses; foundations for quality of care; participation in hospital affairs; and staffing and resource adequacy.^{3,32} The PES has been used in a wide variety of nursing studies and has demonstrated validity and generalizability.⁴⁵ Each item is scored on a 4-point scale (1–4) with higher scores showing a stronger presence of that item. Subscales are calculated as a mean of the relevant items. In this study, only the nurse leadership domain is explored.

Shortell Leadership Scale

Eight items from the ICU Nurse-Physician Questionnaire, focusing on nursing leadership, were used in this study.⁴ Example items include the following: "This unit nursing leadership emphasizes standards of excellence to the staff" and "This unit nursing leadership is sufficiently sensitive to the different needs of unit members". The original scale is a 47-item tool used to measure the quality of communication, co-ordination, and relations between nurses and physicians.³⁶ It was originally designed for intensive care unit work environments but is considered suitable for other workplace settings.³⁶ Each of the eight items is scored on a 4-point Likert scale, with the mean of these items providing a view of leadership in the range of 1–4.⁴

Analysis

Data were analyzed using Stata version $12.^{46}$ Descriptive analyses were first undertaken in order to provide an overview of the nature of the sample. Tests of difference (t-test) and univariate logistic regression models on intent to leave were undertaken in order to confirm the expected association between each of the leadership scales and the dependent variable. Subsequently, factor analysis (principal axis factoring) was performed to determine which of the specific items loaded most strongly on the leadership domain.

Results

The total number of responses to the survey was 1,673 (response rate 44.4%), with 1,635 providing a complete response to the items examined here (Table 1). The average

Table I Sample and leadership scale characteristics

	Intending to leave, mean (SD)	Not intending to leave, mean (SD)	t (df)	P-value	Overall mean (SD)
Nurse manager leadership and support (PES)	2.71 (0.719)	2.95 (0.605)	5.781 (510.45)	<0.01	2.89 (0.640)
Shortell Leadership Scale	2.76 (0.559)	2.94 (0.574)	5.09 (586)	< 0.01	2.90 (0.575)
N	366 (22.4%)	1,269 (77.6%)			1,635

 $\textbf{Abbreviations:} \ \mathsf{SD}, \ \mathsf{standard} \ \ \mathsf{deviation}; \ \textit{df}, \ \mathsf{degrees} \ \ \mathsf{of} \ \mathsf{freedom}; \ \mathsf{PES}, \ \mathsf{Practice} \ \mathsf{Environment} \ \mathsf{Scale}.$

age of respondents was 39.2 years, the average experience 11.7 years, and the majority were female (n=1,482, 90.6%). Most (n=1,316, 80.5%) were registered nurses, employed full time (n=985, 60.3%), and on permanent contracts (n=1,493, 91.3%). Over three quarters of participants indicated that they were not intending to leave their current position within the next 12 months (n=1,269, 77.6%). The overall mean score for the PES leadership scale was in the positive range as described by Lake and Friese³² but with a statistically significant difference between those who intended to leave and those who did not. Similarly, differences were found between the groups on the Shortell Leadership Scale.

Separate univariate logistic regression models were conducted on nurses' intent to leave: one with each of the scales as the explanatory variable. Each scale was found to be a negative predictor. For each point increase in the PES leadership scale, there was a 44% decrease in the odds of intending to leave (Table 2). The Shortell Leadership Scale showed a similar effect, with a potential impact, for both scales, of up to a 53% decrease in the odds of intending to leave. As the purpose of this paper was to explore specific leadership items that linked to turnover intention rather than to determine the most predictive of these scales, a regression analysis that used both scales as explanatory variables was not performed. Rather, a factor analysis of each scale was undertaken to explore which of the individual items loaded most strongly on their respective scales.

Principal axis factoring of the five items in the PES domain nurse manager ability, leadership, and support of nurses indicated that all items loaded in the very good range, at over 0.6 (Table 3).⁴⁷ The perceived leadership ability of nurses' immediate manager was the strongest item at 0.720, substantially more than the other four items. In decreasing order of loading were two items regarding manager's support of clinical nurses, followed by the leader's attitude toward learning from mistakes and perceived praise and recognition.

With regard to the eight items of the Shortell Leadership Scale (Table 4), the standout item was the manager's connection with nurses' concerns. Clarity, participation in decisions, and encouragement were also regarded as important,

Table 2 Logistic regression models on intent to leave

Scale	OR (SE)	95% CI	P-value
Nurse manager leadership and support (PES)	0.56 (0.052)	0.47–0.68	<0.01
Shortell Leadership Scale	0.59 (0.063)	0.48-0.72	<0.01

Abbreviations: OR, odds ratio; SE, standard error; CI, confidence interval; PES, Practice Environment Scale.

Table 3 Factor analysis of "nurse manager ability, leadership, and support of nurses" (PES)

Item	Loading
A nurse manager or immediate supervisor who is a good manager and leader	0.720
A supervisory staff who is supportive of the nurses	0.683
A nurse manager or supervisor who backs up the nursing staff in decision making, even if the conflict is with a physician	0.669
Supervisors use mistakes as learning opportunities, not criticism	0.656
Praise and recognition for a job well done	0.649

Notes: Principal axis factoring: Kaiser–Meyer–Olkin 0.840; Bartlett's test 2,412.489 (10); P<0.01; % of variance 47.549; Cronbach's alpha 0.82.

Abbreviation: PFS. Practice Environment Scale

while high standards of care were slightly lower (although above 0.5). Most items loaded in the good-to-very good range,⁴⁷ although the loading for the manager's problemsolving skills was in the poor range.

Discussion

This analysis supports the growing body of work that finds that the role of NUMs is a major factor in nurses' decisions about whether or not to remain in their current workplace. More specifically, the results presented here provide an indication of some of the leadership skills that nurses seeking to undertake a management position must possess. That is, while nurse managers must be adequately prepared to manage a unit's staffing and finances, it is the "human" skills most valued by nurses in their leaders. As workforce shortages are projected to continue, the need to develop and maintain nurse managers' skills associated with retention will become even more critical.

Table 4 Factor analysis of Shortell Leadership Scale

Item	Loading
This unit nursing leadership is in touch with nurse	0.815
perceptions and concerns	
This unit's nurses are clear where they stand with	0.773
the unit nursing leadership	
This unit nursing leadership does not make decisions	0.738
without input from unit nurses	
This unit nursing leadership encourages nurses	0.679
in taking initiative	
This unit nursing leadership is sufficiently sensitive to the	0.643
different needs of unit members	
This unit nursing leadership makes it clear what it expects	0.618
from members	
This unit nursing leadership emphasizes standards	0.585
of excellence to the staff	
This unit nursing leadership effectively adapts	0.379
its problem-solving style to changing circumstances	

Notes: Principal axis factoring: Kaiser–Meyer–Olkin 0.871; Bartlett's test 5,207.062 (28); P < 0.01; % of variance 44.36; Cronbach's alpha 0.86.

Previous research has identified the significance of communication and conflict resolution skills, collaborative and participative decision making, accessibility, recognition and constructive feedback, and the leadership qualities found to be important in the present study.^{2,9,48} We found that nurses perceive more positive leadership when the NUM engages with nursing staff, provides support and motivation, is sensitive to their needs, and facilitates professional development. This contrasts with those skills and attributes that are more traditionally associated with management such as supervising, controlling, or directing.⁴⁹ It is challenging but important for NUMs to provide support and demonstrate leadership during periods of change as the associated insecurity that accompanies it can increase workplace stress and reduce mental wellbeing, especially among newer and younger nurses.^{50,51} However, new NUMs do not always have the skills nec-

However, new NUMs do not always have the skills necessary for the role. Traditionally, these managers have been selected based on clinical skills and level of seniority, with or without a formal qualification in management. ^{52,53} Once appointed to managerial roles, many experience role ambiguity and struggle with the level of skill required. ⁵⁴ Further, they often have limited opportunities to acquire these skills "on the job" ^{52,55} and may therefore take months to transition into the position, affecting productivity, nurse satisfaction, and patient outcomes. ^{52,55} In order to become accomplished leaders and managers, attention must be paid to the appropriate selection of candidates, mentoring, organizational support, and educational qualifications. Consideration may also be given to the formation of a specific professional organization for frontline managers.

New NUMs require the support of senior managers, and of the organization as a whole, in their transition to this role, a difficult task when executive turnover has been shown to be high. ^{56,57} A key aspect of organizational support is ensuring clarity in the aims and functions of the managers as some have reported a lack of authority and autonomy when their role is not clear. ⁵⁸ This corresponds to the role ambiguity described in the previous paragraph and possibly also links to a lack of academic qualifications, leaving nurse managers feeling less confident in their own abilities. ⁵⁹ One strategy suggested to address these issues and to improve leadership competencies is strategic succession planning. ^{52,55} Providing mentoring from senior managers may offer role clarity as well as providing support. ⁶⁰

Effective succession planning also facilitates the retention of organizational knowledge⁶¹ and fundamentally, permits the identification of potential leaders before they are formally in a management role, providing the time needed for mentoring

and formal education for leadership development. ⁶² That is, clinical skills and seniority may not be the most appropriate criteria on which to judge suitability for the role. Indeed, if many new managers are experiencing role ambiguity, it suggests that there is significant improvement to be made in selecting those candidates with effective leadership skills or those who are able to readily develop them. ⁵⁴

In accordance with the findings of this study, educational programs for these candidates should not only focus on management skills but must also instill the essential people skills for appropriate leadership. However, Titzer et al note that current approaches to on-the-job training and didactic education often create ineffective leaders. 55 In the US, organizations such as the American Organization of Nurse Executives established in 1967 aim to shape health care through nursing leadership by supporting nurse leaders in management, leadership, education, and professional development, and by influencing public policy and legislation. 63 Other US organizations committed to leadership initiatives include the American Academy of Nursing.⁶⁴ Similarly, in the UK, the National Health Service Leadership Academy runs programs (eg, Top Leaders program, Ready Now program, Frontline Nursing and Midwifery program, Senior Operational Leaders program) for different levels of leadership responsibilities and experience with a focus on developing leadership skills (eg, greater influence and impact, strategic, stronger voice).65 The Royal College of Nursing Clinical Leadership Program also provides a framework for first-line nurse managers to develop skills in leadership and management.⁶⁶ It is timely for Australia to follow in this direction to ensure that nurse leaders are able to drive policy change and health care reform for improved quality of health care and patient outcomes.⁶⁶

Further, organizations must ensure not only that nurse managers have the skills to effectively lead and support their staff but also that change processes do not diminish their authority and influence within the organization. For example, recent work in the US found that nurses derived support from the wider organization rather than directly from unit managers. Those researchers suggested that this perception of unit managers may be linked to organizational reforms and subsequent diminishment of nurse manager authority and influence. If nurse managers are to support and retain staff, the potential impact of organizational change must be considered and addressed.

Limitations

This study was not intended to repeat analyses that have regressed environmental and organizational factors on outcomes such as intent to leave or job satisfaction. The analysis is intended to identify and explore key aspects of nursing leadership derived from the items of the PES and Shortell Leadership Scale.

The univariate regression models undertaken on intent to leave did not account for the known complexity of the nursing practice and organizational environment. Their purpose here was to confirm the relationship between leadership and the outcome variable, not to explore the strength of this factor, as has been undertaken in many other studies. This confirmation then permitted confirmatory factor analysis to identify those items that loaded most strongly, addressing the aim of the paper.

The response rate in this study was 44.4%, consistent with survey responses in other studies.⁶⁸ Participation was voluntary, so there was no opportunity to compare participants to those who did not participate. This does limit the generalizability of the findings.

Conclusion

This study supports previous findings that NUMs play an important role in the operation and well-being of a nursing unit. When the leadership on a ward is perceived by staff to be strong, consistent, and effective, it is associated with greater job satisfaction and reduced turnover intention among nursing staff,¹⁷ and is also linked to increased satisfaction and reduced negative outcomes in patients.⁶⁹ The central role of the nurse manager in retention is important to consider regardless of the influence of external factors linked to variations in retention rates, such as the number of employment options.^{24,70} These factors will fluctuate and in order to address them over the long term, nurse manager's focus on the development and maintenance of positive, healthy work environments, that foster nurse fulfillment and build workplace commitment, would offer better results for the health care industry.

As a key component, and driver, of positive work environments,^{31,38} development and support of frontline nursing leadership must be a priority issue for health services in order to address ongoing workforce issues and of course in the interest of high-quality patient care. Pegram et al⁷¹ note that the lack of preparation for ward leadership roles reflects the lack of attention made by decision makers to the importance of management at the ward level. They conclude that further research is required to determine what unit managers do and the skills they need. This study contributes to that discussion and has clarified some of the essential leadership qualities that are essential in these positions.

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