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Abstract

Aims and objectives: This paper examined the impact of leadership characteristics of nursing unit managers, as perceived by staff nurses, on staff satisfaction and retention.

Background: A positive work environment will increase levels of job satisfaction and staff retention. Nurse leaders play a critical role in creating a positive work environment. Important leadership characteristics of the front-line nurse manager include visibility, accessibility, consultation, recognition and support.

Design: Secondary analysis of data collected on 94 randomly selected wards in 21 public hospitals across two Australian states between 2004 - 2006.

Method: All nurses (n=2488, 80.3% response rate) on the selected wards were asked to complete a survey that included the 49-item Nursing Work Index-Revised [NWI-R] together with measures of job satisfaction, satisfaction with nursing and intention to leave. Sub-scales of the NWI-R were calculated. Leadership, the domain of interest, consisted of 12 items. Wards were divided into those reporting either positive or negative leadership. Data were analysed at the nurse level using SPSS version 16.

Results: A nursing manager who was perceived to be a good leader, was visible, consulted with staff, provided praise and recognition and where flexible work schedules were available were found to distinguish the positive and negative wards. However, for a ward to be rated as positive overall, nurse leaders need to perform well on all the leadership items.

Conclusion: An effective nursing unit manager who consults with staff and provides positive feedback and who is rated highly on a broad range of leadership items is instrumental in increasing job satisfaction and satisfaction with nursing.

Relevance to clinical practice: Good nurse managers play an important role in staff retention and satisfaction. Improved retention will lead to savings for the organisation, which may be allocated to activities such as training and mentorship to assist nurse leaders in developing these critical leadership skills. Strategies also need to be put in place to ensure that nurse leaders receive adequate organisational support from nursing executives.

Key words: nursing unit managers; leadership; staff retention; work environment.

Introduction

At the present time, many member countries of the Organisation for Economic Cooperation and Development (OECD) are facing a severe shortage of nurses (Simoens *et al.* 2005) and Australia is no exception

(Australian Institute of Health and Welfare 2008, National Health Workforce Taskforce 2009). It has been estimated that in 2006, there was a shortfall of at least 10 000 trained nurses in Australia (Productivity Commission 2005). This shortage is expected to become more acute in coming years with estimates ranging from 10 000 to 40 000 nurses by the end of 2010 (AHWAC 2004, Karmel & Li 2002, Moore 2007, Productivity Commission 2005).

Several strategies have been adopted in an effort to reduce this shortfall. In Australia, many of these efforts have focussed on expanding the number of training places available for nurses (Department of Employment Education and Workplace Relations 2008) and reducing the costs of students' education by designating nursing as an area of 'national priority' (Department of Employment Education and Workplace Relations 2009). Whilst attracting new nursing staff to the profession is one means of addressing the current staff shortages, such an approach provides only a partial solution (Ulrich *et al.* 2005). Rather, as overseas studies have suggested, health care organisations also need to be more pro-active in improving staff retention. Studies from the USA have suggested that the turnover rate for registered nurses is around 20% per year (Cohen *et al.* 2009, Force 2005, Kleinman 2004b), although some organisations have reported turnover rates in excess of 36% per year (Gess *et al.* 2008, Stone *et al.* 2007). Turnover rates for registered nurses in the UK are similarly high, with estimates ranging from 11-38% per year (Finlayson *et al.* 2002).

Of particular concern is the number of new graduates and younger nurses leaving, or intending to leave, their current place of employment (Aiken *et al.* 2001, Bowles & Candela 2005, Parry 2008, Strauss 2009). For instance, in the USA, Bowles and Candela (2005) found that 35% of newly graduated nurses left their place of employment within one year, whilst 57% left within two years. Similarly, Aiken *et al.* (2001) found a much larger proportion of nurses under 30 reported intending to leave their current position within the next year compared to nurses aged over 30. Some of these nurses may be moving to other nursing positions. However, others may be leaving nursing altogether. For example, Armstrong (2004) reported that 20% of nursing graduates in Australia left the profession within the first year of employment.

Replacing and training new nurses is a costly process. Due to the use of different costing measures (some of which include only the direct costs of replacing staff, whilst others include indirect costs such as orientation and training of new employees) estimates of the precise cost of replacing a staff nurse vary significantly, from U.S. $10,000 - U.S. $60,000 per nurse (Hayes *et al.* 2006, Jones 2004, O'Brien-Pallas *et al.*

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2006b). A more recent study by Jones (2008), which adjusts for inflation, estimates turnover costs at U.S. $82,000 - U.S. $88,000 per nurse. Less research on turnover costs has been undertaken in Australia. However, in a recent pilot study of the impact of nurse turnover on patient, nurse and system outcomes, O'Brien-Pallas *et al.* (2006b) estimated mean turnover cost for nurses in Australia at U.S. $16,634 per nurse. As well as being economically costly, high rates of nurse turnover are also associated with negative patient outcomes, including decreased continuity of care (Gess *et al.* 2008). Additionally, nurses working in units with high turnover tend to report higher levels of stress as they may be called on to cover vacant shifts and to participate in the frequent training and induction of new staff (Erenstein & McCaffrey 2007).

BACKGROUND

To address methods of staff retention, several studies have attempted to identify those factors in the nursing work environment which are related to nurses' satisfaction (Christmas 2008, Erenstein & McCaffrey 2007, Kleinman 2004b). The link between a healthy work environment, nurses' satisfaction and retention has been noted by various researchers (Aiken & Patrician 2000, Cho *et al.* 2003, Cohen *et al.* 2009).

This raises the question of defining the 'work environment' and more importantly, determining which aspects of the work environment seem to have the biggest influence on staff retention. At the broadest level, the 'work environment' refers to 'the tone of any workplace' (Christmas 2008 p. 316). However, as Christmas notes, it is influenced by a wide variety of different factors, including the role of management, peer relations, patient acuity, availability of equipment and the physical environment (Christmas 2008). Ulrich *et al.* (2005) studied work environment which included factors in the physical environment (such as experience of workplace injury and exposure to violence), factors related to professional practice (such as the opportunity to undertake professional development studies) and work relationships (including relationships with managers, peers and support staff). In an acute care setting, Dunn *et al.* (2005) examined a wide variety of work environment factors which they grouped into four main categories; organisational (including rostering [referred to as scheduling in the USA], staffing and workload); interpersonal (including relationships with peers and managers); structural (including features of the physical environment); and professional (including perceived autonomy and quality of care).

The Revised Nursing Work Index (NWI-R) has been used by many researchers as a measure of factors in the work environment which support professional nursing practice (Aiken & Patrician 2000, Lake 2002, Lake & Friese 2006). The NWI-R provides a means of assessing whether those attributes which define a positive

practice environment, such as professional autonomy, collaborative relationships with physicians, access to resources, leadership and organisational support, are present (Aiken & Patrician 2000, Flynn 2005, Lake 2002).

One factor which has been identified as being critical to a positive work environment is the role of nurse leaders. Important characteristics of leaders in the clinical setting include visibility, accessibility, open discussion and support of nurses in the provision of quality care through high standards and strong relationships with staff (Aiken *et al.* 2001, Kleinman 2004a). Studies have shown that a positive work environment will increase levels of staff retention (Andrews & Dziegielewski 2005). However, as Upenieks (2003) has suggested, a positive work environment and hospital culture do not naturally occur. It is created and fostered by strong nurse leaders (Cohen *et al.* 2009, Colonghi 2009, McGuire & Kennerly 2006), in particular front-line nurse managers such as the Nursing Unit Manager (NUM). In New South Wales (NSW) the NUM is a registered nurse in charge of a ward or unit in a hospital or community health setting. This first-line management role encompasses both clinical aspects (such as the co-ordination of patient services and clinical care) and managerial functions (including unit management and nursing staff management) (NSW Department of Health 2009, Paliadelis 2008). NUMs usually now possess a bachelor degree in nursing and increasingly a graduate qualification in management and may be recruited via internal or external advertising (NSW Department of Health 2009). Importantly, whilst the NUM role demands significant management skills, in her study of Australian NUMs, Paliadelis (2008) found that few NUMs possessed formal management qualifications.

It is critical to understand the relationship between strong nurse leadership, a healthy work environment and staff retention. In recent years, organisational changes in countries such as Canada and Australia have resulted in dramatic alterations in the roles and responsibilities of health workers and their managers, particularly front-line nurse manager positions (Duffield & Franks 2001, Paliadelis *et al.* 2007). Studies from Canada show that a decade of restructuring has resulted in the loss of 6617 (2.8%) nurse manager positions (Laschinger & Finegan 2008).

In New South Wales, flattening of organisational structures has decreased the number of middle managers (Duffield *et al.* 2007a). As a consequence, NUMs now have a broader role and greater responsibilities than previously (Anthony *et al.* 2005, Duffield & Franks 2001, Paliadelis 2008). The diversification of their role and the increased focus on administrative responsibilities has resulted in front-line managers having less time available to provide clinical leadership (Duffield *et al.* 2007a, NSW Department of Health 2009). A recent study of

NUMs in NSW found that 64% of their tasks involve general management activities (such as budgeting and staff management), whilst a further 14% of tasks involved quality, safety and risk management. In contrast, only 16% of tasks were focused on patient care and 6% on leadership, where leadership is defined as involving activities such as 'empowering' staff members, maintaining professional standards, supervising staff, encouraging team work, mentoring and recognising staff achievements (NSW Department of Health 2009).

This shift in focus is a concern given empirical evidence suggesting links between strong leadership, staff nurse satisfaction and retention (Kleinman 2004b, Laschinger *et al.* 1999, Volk & Lucas 1991). Flynn (2005) found in her study of US home care nurses that nurses rated having a manager who was skilled at managing people and a good leader as one of the most important traits contributing to job satisfaction. Cohen *et al.* (2009) found significant differences for perceptions of supervisor support between RNs who left their position during a 24 month period and those who stayed in their position. RNs who reported higher levels of supervisor support were less likely to leave their unit or hospital than were RNs who reported lower levels of supervisor support (Cohen *et al.* 2009). Taunton *et al.* (1997) and colleagues investigated the causal relationship between manager leadership and staff nurse retention and found that nurse manager consideration had a direct, significant relationship to retention.

While the above studies suggest a link between strong nurse leadership, staff satisfaction and retention (Cohen *et al.* 2009, Doran *et al.* 2004, Flynn 2005) the question remains as to what it is that the nurse leader/NUM does that promotes a positive work environment. Previous research has investigated the relationship between NUM performance and nurses' perceived satisfaction (Aiken & Patrician 2000). However, the specific aspects of a NUM's performance and the relationship with staff satisfaction is understudied and of greater interest.

Empirical studies have used the NWI-R, the Practice Environment Scale of the Nursing Work Index (PES-NWI; Lake 2002, Lake & Friese 2006) and interview techniques to identify which aspects of nurse leaders' behaviour are associated with higher levels of staff nurse satisfaction and staff retention (Aiken *et al.* 2001, Aiken & Patrician 2000, Kleinman 2004b, Lake 2002, Scott *et al.* 1999, Ulrich *et al.* 2005). Five important factors which have been investigated are visibility, recognition, being a 'good' manager or leader, flexible rostering and consultative leadership.

Leader visibility and its relationship to staff satisfaction and staff nurse retention, has been noted by several researchers (Cohen *et al.* 2009, Erenstein & McCaffrey 2007, Force 2005, Kleinman 2004b, Kramer 1990, Kramer & Schmalenberg 1988, Scott *et al.* 1999, Tomey 2009). For instance, both Connelly and colleagues (1997) and Manion (2004) found that staff nurses reported greater respect for managers who were approachable and visible in the work environment. Additionally, Upenieks (2002) found that the visibility and responsiveness of hospital nurse leaders was an important contributor to the job satisfaction and perceived empowerment of clinical nurses. In a later study, she found that visibility and accessibility were rated as the most valued traits of nurse leaders (Upenieks 2003). Finally, in her study of night shift nurses, Claffey (2006) identifies lack of leader visibility as one of the major sources of dissatisfaction for shift workers, with less than 50% of shift workers reporting that their managers communicate well with them.

Another factor which has been found to be related to staff nurse satisfaction is recognition and praise (Aiken & Patrician 2000) and in particular, recognition of one's contribution (Gess *et al.* 2008). In contrast, lack of recognition has been found to be associated with discontent, poor morale and reduced productivity and has been cited as the primary reason for turnover among employees (Gess *et al.* 2008, Ulrich *et al.* 2005).

The third factor of note in regards to nurses' satisfaction and retention is the presence of a supervisor or manager who is a skilful and competent leader (Kramer 1990, Kramer & Schmalenberg 1991). Researchers have offered several suggestions about traits which define an effective or skilled leader. For example, Kleinman (2004b) notes that effective nurse leaders are seen as providing opportunities for open discussion, considering the ideas of others, being available, maintaining high standards of performance, instilling pride in the workplace and promoting strong relationships between staff members. Upenieks (2003) suggests that the effective nursing leader is one who is credible, passionate, supportive, visionary, knowledgeable and supportive.

Another factor found to be important in staff nurse satisfaction is the ability for staff to actively participate in the development of their own roster (Cohen *et al.* 2009, Dunn *et al.* 2005). For instance, in a study of Australian acute care nurses' perceptions of their work environment, Dunn *et al.* (2005) found that rosters were the most frequently cited factor influencing work satisfaction. The extent of nurse influence over rostering arrangements appears to be positively correlated with reductions in absenteeism, turnover and job dissatisfaction (Cohen *et al.* 2009, Hung 2002). Additionally, Hung (2002) reports that self-scheduling significantly reduced the

amount of hours which NUMs spent on rostering/scheduling and shift changes, meaning more time can be spent on other tasks and activities.

The final factor of interest which has been previously found to be important to nurse satisfaction is having a nurse unit manager or leader who consults with staff on a regular basis and seeks staff input on the daily problems and procedures (Erenstein & McCaffrey 2007). Evidence from leadership studies supports this link. For instance, in their study of the relationship between management style and turnover, Volk and Lucas (1991) found that a participative management style (characterised by seeking staff ideas, integrated decision making and extensive communication) was associated with lower levels of staff turnover (Volk & Lucas 1991). Similarly, in his study of ED nurses, Raup (2008) found lower staff turnover in units where managers adopted a transformational leadership style, characterised by seeking different perspectives, instilling a strong sense of purpose and pride in the workplace.

METHOD

The present article is a secondary analysis of data collected in two large studies (Duffield *et al.* 2007b, Duffield *et al.* 2009). The conceptual framework for these studies included concepts of nurse staffing, workload, the working environment, nurse and patient outcomes without predictions of specific links. Leadership was measured in the context of the working environment. Nurse, environment and patient data were collected for seven consecutive days on 94 randomly selected medical, surgical and combined medical/surgical wards in 21 public hospitals across two Australian states between 2004 - 2006. Emergency departments, ICUs, paediatric, obstetric and psychiatric units were excluded. Ethics approval was gained from the University, participating health services and state Health Departments; a total of 18 committees.

All nurses on the selected wards were asked to complete a survey that included the 49-item Nursing Work Index-Revised [NWI-R] (Aiken *et al.* 2001, Estabrooks *et al.* 2002, Sochalski *et al.* 1999), together with questions relating to job satisfaction, satisfaction with nursing as a profession and nurses' intention to leave their present position. Hospital data on retention or turnover rates were not available to these studies.

The NWI-R identifies organisational attributes that have been associated with positive outcomes such as higher patient satisfaction, lower mortality, lower nurse emotional exhaustion and lower incidence of needle stick injuries (Aiken & Fagin 1997). For this study analyses used the five sub-scales (autonomy, leadership,

resource adequacy, control over practice and nurse-physician relations) adopted by O'Brien-Pallas et al. (2004) in Canada. The domain of interest, Leadership, contained 12 items (Table 1) with a Cronbach's alpha of 0.80.

Sub-scales of the NWI-R were calculated using the method employed by Lake (2002); the mean response of the items for each factor. Scores have a potential range of 1-4 with higher scores indicating more agreement with the item. Values above 2.5 therefore suggest agreement that the characteristic is present and those below 2.5 suggest disagreement (Lake & Friese 2006). In accordance with the categorisation validated by Lake and Friese (2006), wards were divided into those reporting either 'positive' (≥ 2.5) or 'negative' (< 2.5) leadership. The variables job satisfaction, satisfaction with nursing and intention to leave were dichotomous.

There was a total of 3099 potential consenting respondents and an overall response rate of 80.3% (2488 nurses). Missing data were imputed as the ward mean or, in the case of more than 10% missing data, not used in analyses. Data from three wards were incomplete and therefore excluded from analyses, leaving a final sample of 2141 nurses in 91 wards.

Data were analysed at the nurse level for description and regression analyses using SPSS version 16 (SPSS Inc. 2007). Comparisons between wards required aggregated data, in which case the items of the NWI-R were calculated as the ward mean and dichotomous variables were transformed into the proportion per ward (e.g., the proportion of nurses who reported being satisfied with their job). As the intention of regression analyses was to identify only the most significant NWI-R items, no other variables were entered into the models. This should be considered when applying the findings of this study.

RESULTS

In the final sample used for analyses, most respondents (n=1559) were registered nurses (72.8%), including a small number (n=29) of clinical nurse educators and clinical nurse consultants (similar to Clinical Nurse Specialists in the USA). Additionally, 531 enrolled nurses or trainee enrolled nurses (24.8%, similar to licensed practical nurses in the USA) and 51 assistants in nursing (2.4%, similar to patient care assistants) returned completed surveys. More than half of respondents were employed full time (n=1107, 51.7%), with the remainder working part time (less than 38 hours per week, n=696, 32.5%) or casually (n=338, 15.8%).

Most respondents indicated that they were satisfied with their current position (n=1437, 67.1%) and with nursing as a profession (n=1548, 72.3%). Less than one third of nurses (n=601, 28.1%) intended to leave their present job in the next 12 months. The overall mean score for the leadership items was 2.8 (SD 0.48). Each of

the NWI-R leadership items were then examined individually. Table 2 shows the average score across the sample for the items, along with the range when these scores were calculated per ward.

Most items averaged 2.5 or over, in the range described previously as 'positive' (Lake & Friese 2006) and two items had scores in the 'negative' range (<2.5). However, the range per ward and standard deviation indicated that many wards had mean scores below the middle point of the scale. Wards were then divided into 'positive' and 'negative' categories according to their mean score over all leadership items.

Figure 1 shows mean scores for the 2 groups of wards (positive and negative) for each of the NWI-R leadership items. Higher scores indicate greater agreement that the leadership item was present. A larger gap between the groups therefore indicates disparity for that item.

The difference between wards with positive leadership scores and those with negative scores was most marked for the items 'A nurse manager or immediate supervisor who is a good manager or leader', 'Nurse managers consult with staff on daily problems and procedures', 'Flexible or modified work schedules are available', 'A senior nursing administrator who is highly visible and accessible to staff' and 'Praise and recognition for a job well done'. In contrast, there was little difference between these wards on items such as 'Nurses actively participate in efforts to control costs', 'Nursing care is based on a nursing rather than a medical model' and 'A clear philosophy of nursing that pervades the patient care environment'. The difference between ward mean scores for these items ranged from 0.6 for 'A nurse manager or immediate supervisor who is a good manager and leader', to 0.1 for 'Nurses actively participate in efforts to control costs'.

Linking Leadership Items to Nurse Outcomes

Logistic regressions on the variables job satisfaction, satisfaction with nursing and intention to leave their current job provided an indication of the influence each of the items would have on that outcome (Table 3). Six items were found to be significantly related to job satisfaction. These items increased the chance of job satisfaction by between 15-47%, all other items being held static. Two variables increased the likelihood of satisfaction with nursing by 40% and 29% respectively. In regard to nurses' intention to leave their current job, two items were found to be significant influences. If the identified factors increased by 1, intention to leave decreased by either 17% or 20%.

Summary

Several items were common across each of the three regression models. The item 'Praise and recognition for a job well done' had a relatively low score in both positive and negative wards, but was statistically significant in all regression models. This item had the strongest influence on job satisfaction and satisfaction with nursing, with an increase of one point linking to a 47% increase in the odds of being satisfied with the job and a 40% increase in the odds of being satisfied with nursing. This item was also associated with a 17% decrease in nurses' intent to leave.

In addition, an increase of one on the item 'A nurse manager or immediate supervisor who is a good manager and leader' decreased intent to leave by 20% and increased job satisfaction by 17%. This factor scored highly in positive wards and also in the positive range for wards with an overall negative leadership score. However, it also showed a large difference between these two ward categories of 0.6 (Fig. 1) suggesting there is considerable room for improvement.

Finally, the presence of 'A clear philosophy of nursing that pervades the patient care environment' increased satisfaction with nursing and job satisfaction by 29% and 26% respectively. Again, both ward categories were in the positive range, although with a relatively small difference of 0.4.

DISCUSSION

There were five items which distinguished between wards with positive leadership scores and those with negative scores, namely:

- A nurse manager or immediate supervisor who is a good manager or leader

- Nurse managers consult with staff on daily problems and procedures

- Flexible or modified work schedules are available

- A senior nursing administrator who is highly visible and accessible to staff

- Praise and recognition for a job well done.

An immediate nurse manager who is perceived to be a good leader and manager by the staff is also related to job satisfaction and retention. Less clear is the qualities or characteristics that may assist staff's positive perception of the occupants of this role. However there are some 'clues' from the results. Providing positive feedback and leadership to staff is a critical management skill. For instance, as Doran et al. (2004) found, nurse managers with a positive leadership style had more-satisfied staff and lower levels of staff turnover

than nurse managers who adopted a negative leadership style. Providing positive feedback and recognising staff achievements helps to create a positive practice environment where staff members feel valued and appreciated (Gess *et al.* 2008, Hirst 2005, Lyons *et al.* 2003). Additionally, creating a positive practice environment where staff are recognised and praised for their achievements has been found to be associated with decreased turnover and increased organisational commitment (Force 2005, Gess *et al.* 2008, Manion 2004).

However, there are other factors which are equally important and which provide staff with a feeling of 'engagement' in the work of the unit or ward which have been associated with decreased turnover and increased staff retention. The importance of consulting with staff about problems and procedures (Curran 2004, Kleinman 2004b, Laschinger *et al.* 1999, Scott *et al.* 1999), participation in developing their own work schedules (Cohen *et al.* 2009, Dunn *et al.* 2005, Hung 2002, O'Brien-Pallas *et al.* 2006a) and working on a unit with a strong 'nursing' rather than medical focus (Flynn 2005, Mark *et al.* 2003) also need to be considered.

Of great interest also is that nurses want a senior nurse (in the context of these studies, a nurse in a senior management or executive position in the hospital) who is visible and accessible. There is an assumption that this individual understands their issues and work environment and will act on their behalf. The nurse leader has a role in providing direct support and advice to ward staff, as well as acting as an advocate for staff in discussions with upper management (Allan & Smith 2005, Shirey *et al.* 2008). Having a nurse leader who is visible, accessible, available and responsive has been shown to play an important role in both leadership effectiveness and empowerment (Upenieks 2002). This relationship between visibility, leadership effectiveness and empowerment is significant, because, as Upenieks (2002) has noted, empowerment of staff is one of the key factors contributing to job satisfaction.

Additionally, the link between visibility, accessibility and empowerment is particularly important in the current climate (Duffield *et al.* 2007a). In this State (NSW) the organisational structure is such that many nurse executives (directors of nursing) are held accountable for the standards of care but have no line management responsibility for the human and financial resources to ensure standards are maintained. This situation is exacerbated by reductions in the number of management positions and the associated broadening of the NUM role which has meant that these managers have less time available for clinical leadership (Duffield *et al.* 2007a). The reduction in middle management positions has seen first-line managers (NUMs) assume responsibility for many of the administrative tasks previously undertaken by middle managers. As a result of these increased

administrative responsibilities, NUMs have less time available to spend on the ward. The number of NUM positions has also decreased, meaning that remaining NUMs are required to manage larger numbers of staff. Due to these factors, NUMs have less contact with individual nursing staff and fewer opportunities to provide direct clinical leadership (Duffield *et al.* 2007a). As such, having a nurse leader who is able to empower staff to act on their own expert judgements rather than seeking advice from higher authority is critical (Laschinger *et al.* 2003, Laschinger *et al.* 2001, Laschinger *et al.* 1999).

Also of interest is that it is important for NUMs to be perceived by staff as performing well in all the leadership aspects measured in this study (Fig. 1) for the ward to be rated positively. In other words, it would seem that a NUM cannot be a 'star' - performing well in one aspect or in a small number of aspects. The findings of the present study suggest that whilst some items (such as 'A nurse manager or immediate supervisor who is a good manager or leader') had a larger influence on overall ward ratings than other items (for instance, 'The nursing staff participates in selecting new equipment'), the NUM needed to be performing well in each of the twelve leadership aspects for the ward to be rated positively overall. These findings have important implications for leadership development and training. In particular, the present study suggests not only that NUMs require a broad range of skills and capabilities, but that they need to be performing well in all of these diverse tasks for their wards to be rated positively overall. However, as Paliadelis (2008) has found, many NUMs feel underprepared and overwhelmed by the scope and complexity of the NUM role. In addition, recent research by the NSW Department of Health (2009) found that good support and management education enabled NUMs to better achieve all aspects of the role. Greater levels of training, mentorship and support for NUMs may act as enablers and assist in ensuring that NUMs feel comfortable with the role and able to perform well on all of the distinct leadership aspects.

CONCLUSION

Managing the complexities of a clinical unit is perhaps more difficult today than ever before. Shortages of trained nursing staff, as well as the large number of nurses leaving the profession and the high cost of recruiting and training new staff, means that it is vitally important for nurse managers to reduce staff turnover. Additionally, reductions in managerial positions have resulted in an increased range of responsibilities for remaining NUMs. Most notably, NUMs report spending more time on administrative tasks and less time on direct clinical leadership (Duffield *et al.* 2007a). Whilst previous research has suggested a link between effective nurse

management and staff retention (Kleinman 2004a), the issue of which particular aspects of the nurse manager's behaviour are most important in staff nurse satisfaction has remained unaddressed. The present study shows that an effective nursing unit manager who consults with staff and provides positive feedback is instrumental in increasing job satisfaction and satisfaction with nursing. However, for a ward to be rated positively overall by staff nurses, the nurse unit manager needed to be performing well on all leadership aspects.

These findings have important implications for clinical practice. The fact that few NUMs have formal management qualifications (Paliadelis 2008) and the complex nature and varied responsibilities of the role (NSW Department of Health 2009) suggests that additional training may assist NUMs in developing the advanced leadership skills they require. The acquisition of such leadership skills could be fostered by the provision of training courses or mentorship programmes. However, whilst the NUM plays a primary leadership role, it is vital that they receive adequate organisational support in the form of a visible nurse executive who has a 'seat at the table' where decisions about nursing and its future are made.

Relevance to clinical practice

Good nurse managers play an important role in staff retention and satisfaction. Improved retention will lead to

savings for the organisation, which may be allocated to activities such as training and mentorship to assist nurse

leaders in developing these critical leadership skills. Strategies also need to be put in place to ensure that nurse

leaders receive adequate organisational support from nursing executives.

Figure 1 Mean Scores on NWI-R Leadership Items, Wards Divided Into 'Positive' and 'Negative' Groups
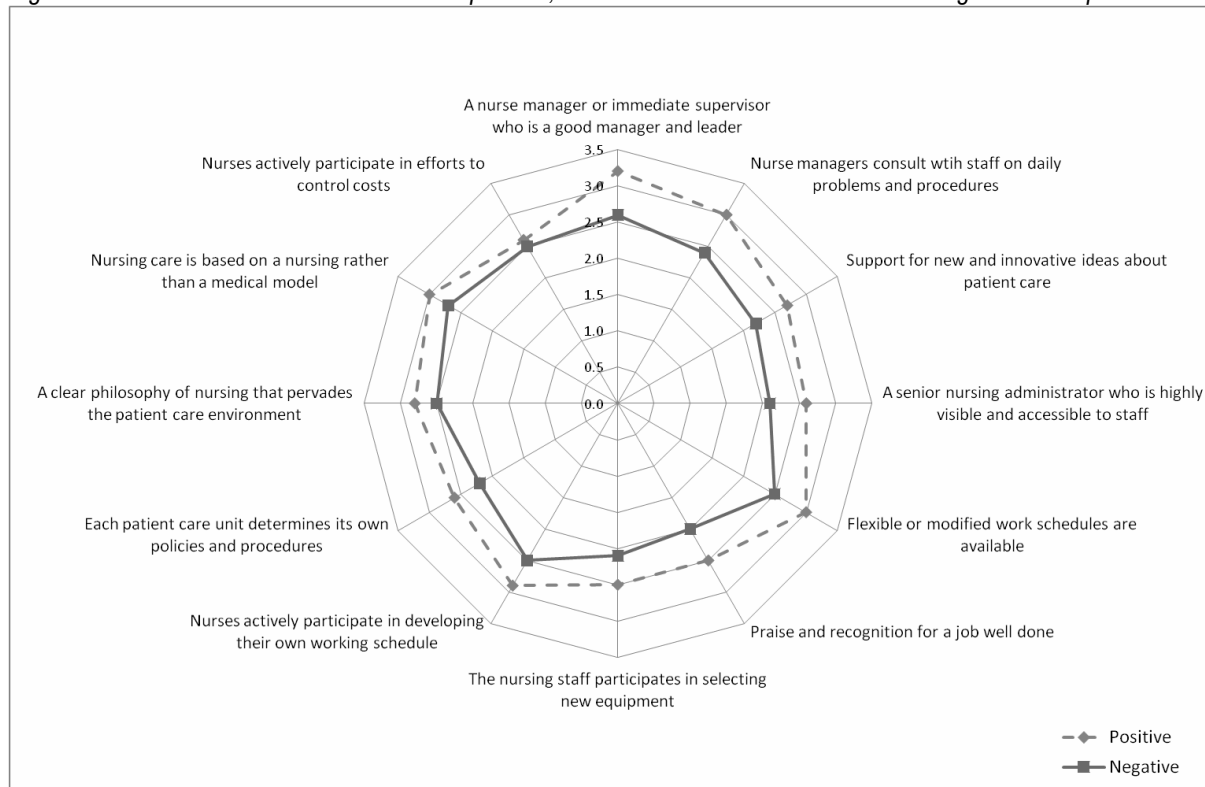
Note: Each axis indicates an item on the NWI-R. Higher scores indicate greater agreement that the item was present and a larger gap between groups indicates disparity between the groups. 'Positive' wards are those with mean leadership scores ≥2.5, 'negative' wards are those with mean scores <2.5.

Table 1 Leadership Items of the Revised Nursing Work Index

Item Number	Item
10	Support for new and innovative ideas about patient care
13	A nurse manager or immediate supervisor who is a good manager and leader
14	A senior nursing administrator who is highly visible and accessible to staff
15	Flexible or modified work schedules are available
18	Praise and recognition for a job well done
28	A clear philosophy of nursing that pervades the patient care environment
29	Nurses actively participate in efforts to control costs
31	The nursing staff participates in selecting new equipment
38	Nursing care is based on a nursing rather than a medical model
41	Nurse managers consult with staff on daily problems and procedures
47	Nurses actively participate in developing their own working schedule
48	Each patient care unit determines its own policies and procedures

From O'Brien-Pallas et al. (2004)

Table 2 Overall Mean Scores for Leadership Items and Range Of Ward Mean Scores

Item	Mean (SD)[a]	Ward Mean Range[b]
A nurse manager or immediate supervisor who is a good manager and leader	3.1 (0.83)	2.1-3.9
Nursing care is based on a nursing rather than a medical model	3.0 (0.72)	2.4-3.3
Flexible or modified work schedules are available	3.0 (0.86)	1.9-3.6
Nurse managers consult with staff on daily problems and procedures	2.9 (0.85)	2.2-3.8
Nurses actively participate in developing their own working schedule	2.9 (0.84)	1.7-3.7
A clear philosophy of nursing that pervades the patient care environment	2.8 (0.71)	1.8-3.2
Nurses actively participate in efforts to control costs	2.6 (0.80)	2.1-3.1
Support for new and innovative ideas about patient care	2.6 (0.76)	2.0-3.1
Each patient care unit determines its own policies and procedures	2.6 (0.80)	1.6-3.2
A senior nursing administrator who is highly visible and accessible to staff	2.5 (0.96)	1.8-3.2
The nursing staff participates in selecting new equipment	2.4 (0.85)	1.7-3.2
Praise and recognition for a job well done	2.4 (0.88)	1.7-3.3

N = 2141

[a] Mean score for responses to this item across the sample

[b] Range of ward mean scores

Table 3 Logistic Regression of Leadership Items on Job Satisfaction, Satisfaction with Nursing & Intent to Leave

Item	Job Satisfaction [a]	Satisfaction with Nursing [a]	Intent to Leave [a]
Praise and recognition for a job well done	1.47 (1.299-1.674)**	1.40 (1.250-1.578)**	0.83 (0.739-0.937)**
A clear philosophy of nursing that pervades the patient care environment	1.26 (1.084-1.452)**	1.29 (1.123-1.490)**	
A nurse manager or immediate supervisor who is a good manager and leader	1.17 (1.028-1.341)*		0.80 (0.712-0.908)**
Flexible or modified work schedules are available	1.16 (1.023-1.303)*		
Nurses actively participate in efforts to control costs	1.16 (1.027-1.310)*		
A senior nursing administrator who is highly visible and accessible to staff	1.15 (1.025-1.291)*		

N = 2141
[a] Odds Ratio (95% C.I.)
* P ≤ 0.05, ** P ≤ 0.01

Contributions

Study design: CD, MR

Data collection and analysis: CD, MR, NB,

Manuscript preparation: CD, MR, HS

Conflict of interest: None

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