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Changes to nurses' practice environment over time

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Abstract

Aims: To examine changes in the nursing practice environment, retention-related factors, unit stability, and patient care tasks delayed or left undone, over two periods between 2004 and 2013.

Background: Positive nurse practice environments have been linked to nurse retention and care quality outcomes.

Methods: Collection of the Practice Environment Scale of the Nursing Work Index, job satisfaction, intent to leave, unit instability, and tasks delayed or not done from six acute-care hospitals across three Australian states, in two waves between 2004 and 2013; results from the two waves are compared.

Results: On average, practice environment scores declined slightly; nurses reported greater difficulty in finding another nursing position, lower intent to leave their current job, and greater instability in their current position. Rates of delayed tasks increased over the period, while rates of tasks left undone have decreased over the period.

Conclusions: The decline in nurses' perceptions of the quality of the practice environment is disappointing, particularly given the protracted workforce shortages that have persisted. Significant organisational restructuring and turnover of nurse executives may have contributed to this decline.

Implication for Nursing Management: Managers need to apply existing evidence to improve nurse practice environments and manage instability.

Key Words: practice environment, nurses, employment instability, missed or delayed care, turnover.

Introduction

Internationally, research into the relationship between nurses' practice environments and outcomes such as nurse retention and missed nursing care has grown and increased in importance in recent years (Aiken et al. 2011, Duffield et al. 2011a, Ausserhofer et al. 2014b, Wang et al. 2012). Along with the important factors of staffing levels and skillmix, associations have been found between the practice (work) environment and outcomes for patients, nurses and the system (Duffield et al. 2011a). In particular, the practice environment has been linked to nurse retention (Gabriel et al. 2013, Bakker et al. 2010), unit instability (e.g. forced job change) (Duffield et al. 2014) and tasks delayed or not done (Duffield et al. 2011a, Jones et al. 2015). Aiken et al. (2011) suggested that it is the work environment that exerts a greater influence over quality of care and patient well-being. They argue that staffing, along with skillmix, should be viewed more as factors that contribute to the quality of a work environment and subsequent improvement of patient outcomes, rather than the singular driving force. With current and forecasted nursing shortages, nurse retention is a pertinent issue (Buchan et al. 2015), and timely completion of nursing tasks is a pre-requisite for high-quality patient care (Berwick 2002), underscoring the importance of measuring and examining these outcomes. Understanding how nurses' perceptions of work environments have changed in recent years, and comparing those changes with simultaneous changes in stability and delayed or incomplete patient care tasks, can therefore offer important information about these components of the health system, and provide the opportunity for improvement.

Background

The conceptual framework that guides this study is the Patient Care Delivery Model (PCDM) (O'Brien-Pallas et al. 2004, Meyer et al. 2009, O'Brien-Pallas et al. 2011). This framework comprises 'inputs' such as unit and nurse characteristics; 'throughputs' such as skillmix, workload and the practice environment; and 'outputs' such as patient and nurse outcomes. This systems-based model permits feedback from outputs to inputs, so that outputs such as nurses'

intention to leave can be considered an input into the practice environment, in addition to an output of that and other inputs. The PCDM does not predict specific relationships but does suggest that improvements in the practice environment have the potential to impact important outcomes such as missed or delayed nursing care, or nurse retention. This model therefore provides a foundation for comparing the practice environment, unit instability, and nurse tasks delayed or not done, over time.

The construct of the nursing practice environment as most commonly used in the literature includes five factors: nurse leadership, collegial relationships with doctors, nurse participation in decision making, resource availability, and the necessary foundations for quality care (Lake 2007, Warshawsky & Havens 2011). It is commonly measured using the Practice Environment Scale of the Nursing Work Index (PES) (Lake 2002) or a derivation thereof. The characteristics measured by PES were drawn from traits observed in early research into Magnet hospitals (Kramer & Hafner 1989) and are still extensively used by the American Nurses Credentialing Center (ANCC) in determination of Magnet Hospital status (Kelly et al. 2011).

This well-known concept has been explored widely in the literature and several reviews undertaken. A synthesis of research on nurse practice environments identified 24 studies that used the PES (Lake 2007). Of these, 12 used PES to predict nurse retention, 3 used PES to predict nurse-assessed quality of care outcomes, and 9 examined differences in PES scores across different hospitals. Substantial evidence was found across the synthesized studies that the PES is predictive of both nurse retention outcomes and patient quality of care outcomes. Similarly, Warshawsky and Havens' (2011) review of the use of the PES found 37 papers that linked the practice environment to many outcomes including nurse job satisfaction, burnout, intention to leave, and unmet patient care needs. This is supported by recent multi-level cross-sectional analyses from the US and elsewhere that have also linked it to turnover rates in acute hospitals (Gabriel et al. 2013, Van Bogaert et al. 2010). A longitudinal study in Pennsylvania found that improvements in PES scores between 1999 and 2006 had a significant effect on job

satisfaction and intention to leave (Kutney-Lee et al. 2013). In Australia, Duffield and colleagues' (2011a) study identified a link between aspects of the practice environment and the number of tasks delayed or left undone by nurses at the end of a shift.

Other work has linked unit instability, or staff turnover on a ward (churn), to the practice environment. Staff who are forced to change units or who anticipate forced change due to restructuring may impact ward operations including lost productivity, increased workload for the unit manager, reduced morale and greater workloads for existing staff, especially full-time employees, a potential increase in adverse patient outcomes and disrupted continuity of care for patients (Cabana & Jee 2004, Siow et al. 2012). A large European study by (Laine et al. 2009) found that greater anxiety was experienced by nurses in regards to involuntary unit transfers and changes in shift schedules than to general employment security or becoming unable to work. Nurses can be directly affected by executive turnover (Duffield et al. 2011c) and organisational change such as redundancies and downsizing, internal transfers, shift alterations and witnessing colleagues lose their jobs, all of which increase concerns about job security and potentially impact on the work environment. Although the present study is not designed to test associations between practice environments, retention related factors, tasks delayed or not completed, or unit instability, it provides informative comparisons of how these components of the patient care delivery model changed over time.

The established associations between practice environment and nursing and system outcomes motivate research to understand predictors of practice environment, although few empirical studies have attempted to document and understand changes in the practice environment over time. In addition to the aforementioned study in Pennsylvania (Kutney-Lee et al. 2013), a quasi-experimental study found enhancing resource availability on wards was associated with improvements in nurses' perception of the practice environment (Hall et al. 2008). An interrupted time series study from Germany found that leadership and the adequacy of

resources decreased over a 10-year period during which a new payment system was implemented (Zander et al. 2013).

The Study

Aims

The purpose of this study is to examine changes in the practice environment, retention related factors, unit instability, and nurse tasks delayed or not done, over two periods between 2004 and 2013, in six acute-care hospitals across three Australian states.

Design

This paper reports a descriptive secondary analysis of data from three previously reported studies (Duffield et al. 2011a, Dawson et al. 2014, Roche et al. 2012), in combination with data from a recently completed project. All studies were led by the same chief investigator with members of the same research team.

Sample

Data were collected between 2004 and 2013 from six publicly funded general acute hospitals across three Australian states. Each hospital was sampled twice over the course of the studies with gaps of between two and four years. In each study, participating nursing units were selected randomly from those meeting inclusion criteria, within a random selection of acute-care hospitals. Units included were medical, surgical or combined medical-surgical, while intensive care, psychiatric, pediatric, obstetric units and emergency departments were excluded. The first study collected data from 19 hospitals during 2004 and 2005 with a response rate of 80.3% (n= 2278) (Duffield et al. 2011a). The second study collected 202 completed surveys (response rate 51%) from 2 hospitals in 2006 (Roche et al. 2012, Duffield et al. 2009b). The third study surveyed 11 hospitals across three Australian states in 2009 and 2010 with a response rate of 44.4% (n=1655) (Roche et al. 2015a, Dawson et al. 2014). The most recent study added 154 surveys from three hospitals (35.4% response rate) during 2012

and 2013. Data from each study were merged and matched by hospital across the studies. The final dataset included 1604 surveys from six hospitals with 892 in the first data collection period (referred to here as a 'wave') and 812 in the second (Table 1) with a similar number of responses from each hospital in each wave for most hospitals.

Data Collection

Data collection procedures in all studies were similar, with researchers providing a unit briefing and written information to nurses on the selected units. All nurses on the participating units were asked to complete an anonymous survey and return via reply-paid post or a secure data collection box. The most recent study added an optional online survey procedure. The nurse survey used in these studies captured demographic items and the employment characteristics of respondents, the number of direct-care interventions delayed or left undone at the end of their most recent shift, and questions on intent to leave, job satisfaction, and unit instability (i.e. being forced to change jobs in the last 12 months or anticipating being forced to do so in the next 12 months, including forced job loss, through restructure). The survey also included the widely used 31-item PES (Lake 2002) that measured the practice environment for each unit. The final dataset included only those variables that were present in all studies.

The PES measures five domains, calculated as the means of relevant items: Nurse-doctor relationships; Nurse manager leadership and support; Foundations for quality of care; Participation in hospital affairs; and Staffing and resource adequacy. Together these domains gauge the quality of the work environment in relation to nursing values and job satisfaction (Lake & Friese 2006, Lake 2002). Cronbach's α scores in each of these studies compared favorably with other work (Manojlovich & Laschinger 2007, Lake & Friese 2006) and ranged from 0.70 to 0.85, with an overall α of 0.82.

Table 1 Matched Hospital Sample (N)

Hospital code	Wave	
	1	2
A	138	184
B	115	104
C	159	270
D	32	29
E	192	23
F	256	102
Total	892	812

Ethical Considerations

Data were anonymous but coded by hospital in order to enable aggregation. Ethics approval was obtained from participating health services, state Health Departments and the University (32 committees in total) between 2004 and 2012.

Analysis

Descriptive statistics with tests of difference (X^2 or t-test) were first conducted on individual and nurse employment characteristics. A similar approach was then taken to the practice environment, turnover intent and job satisfaction, unit instability, and tasks delayed or not completed. Graphical representation illustrates variation in PES sub-scale changes across hospitals. Data were analyzed using SPSS version 21 (IBM 2012).

Results

The average age of respondents was under 40, with nurses in the first wave approximately two years younger (Table 2). This was younger than the average age for medical and surgical units in Australia for the same period, which ranged from 43.1 years in 2003 to 44.6 years in 2012 (AIHW 2012, AIHW 2006). The average experience level was similar between waves, at around 12 years, and approximately 90% of respondents were female. There were differences in employment status between studies with more casual staff in the first wave and more full time staff in the second wave. This difference may be a consequence of the addition of electronic survey completion in the most recent study, which may not be as readily available to casual staff.

Table 2 Sample characteristics

	Wave 1	Wave 2		
	Mean (SD)	Mean (SD)	t (df)	p
Age in years	37.8 (11.45)	39.7 (11.3)	-3.344 (1570)	<0.01
Years nursing	11.5 (10.9)	11.9 (10.83)	-0.877 (1538)	0.38
	N (%)	N (%)	X² (df)	p
Gender				
Female	803 (90.2)	641 (90.7)	0.088 (1)	0.77
Male	87 (9.8)	66 (9.3)		
Employment status				
Full Time	507 (56.9)	448 (63.0)	7.496 (2)	0.02
Part Time	323 (36.3)	230 (32.3)		
Casual	61 (6.8)	33 (4.6)		
Position				
Assistant in Nursing	12 (1.4)	15 (2.1)	6.51 (2)	0.04
Enrolled Nurse	162 (18.3)	161 (22.7)		
Registered Nurse	712 (80.4)	533 (75.2)		
N*	892	812		

**Missing Data varies per item*

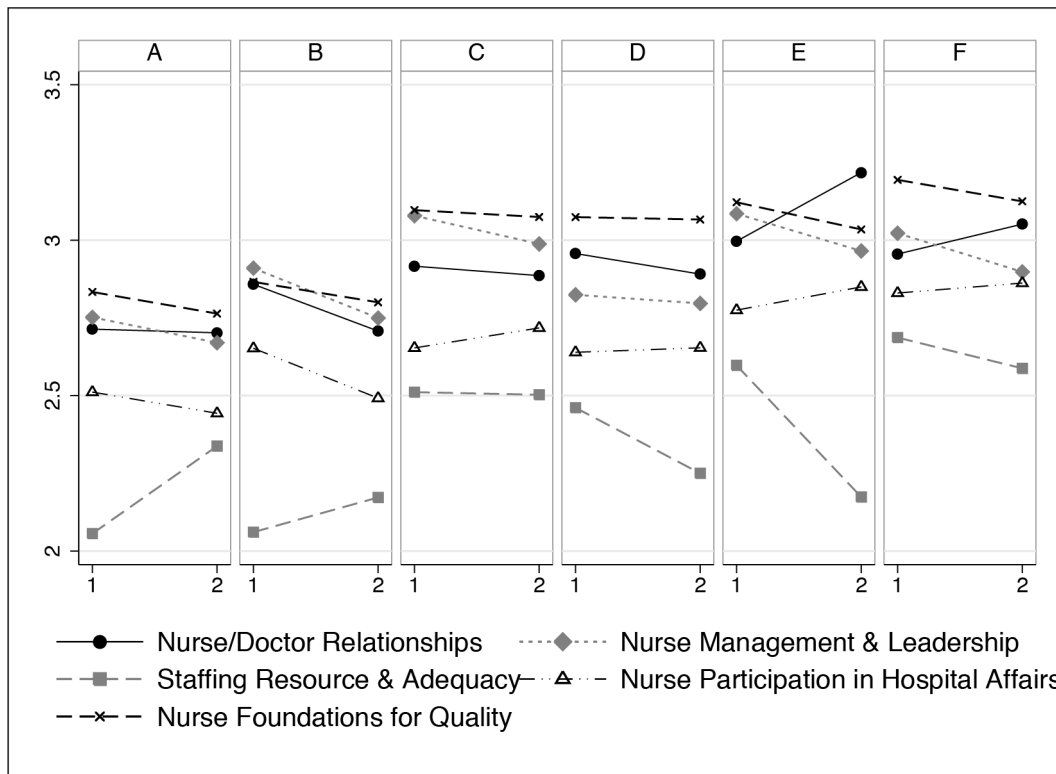
SD: Standard deviation; DF: Degrees of Freedom

Table 3 Practice Environment

	Wave 1	Wave 2		
	Mean (SD)	Mean (SD)	t(df)	p
Nurse/Doctor Relationships	2.9 (0.57)	2.8 (0.60)	2.015 (1450.2)	0.04
Nurse Management and Leadership	3.0 (0.61)	2.9 (0.65)	4.098 (1442.7)	<0.01
Staff Resource and Adequacy	2.4 (0.70)	2.4 (0.68)	1.305 (1577)	0.19
Nurse Participation in Hospital Affairs	2.7 (0.52)	2.6 (0.58)	2.345 (1345.04)	0.02
Nurse Foundations for Quality	3.1 (0.44)	3.0 (0.50)	3.637 (1253.6)	<0.01
Overall Practice Environment	2.8 (0.45)	2.7 (0.50)	3.423 (1412.6)	<0.01

Results from the PES (Table 3) show that all subscale scores are significantly lower in wave 2, with the exception of staffing and resource adequacy, which remained consistent across both waves. Whilst this domain is consistent, it had the lowest score of all subscales and was below the scoring midpoint of 2.5, indicating that it was perceived as a negative characteristic of the practice environment (Lake & Friese 2006). These results suggest that the presence of and satisfaction with nurse/doctor relationships, management and leadership, participation in hospital affairs and foundations for quality has reduced across the study hospitals and that overall satisfaction with the practice environment has slightly declined over time.

Figure 1 Variation in PES Subscales by Hospital, across waves



The overall sample scores by wave did not fully demonstrate the hospital-level variation between the waves, so a *post-hoc* graphical representation was developed (Figure 1) to illustrate this variation. This highlights the considerable difference between the hospitals on each of the PES subscales. Of particular note again is nurses' perception of staffing and resource adequacy, which displayed an overall mean in both waves of 2.4 (Table 3). However, when the data are examined by hospital, it can be seen that hospitals A and B show improvement in staffing and resource adequacy while hospital C is static (and just above the mid-point) and hospitals D, E and F show a decline in this domain. Other subscales also diverge from the means, but show a less distinct variation across the sites.

Table 4 Instability, Job Satisfaction & Intent to Leave

	Wave 1	Wave 2		
	N (%)	N (%)	X ² (df)	p
Unit Instability*	169 (19.1)	201 (28.3)	18.7 (1)	<0.01
Job satisfaction	713 (84.1)	472 (94.2)	30.271 (1)	<0.01
Plan to leave present nursing job	219 (24.8)	138 (19.5)	6.306 (1)	0.01
Easy to find another nursing job	610 (72.3)	437 (68.1)	3.1 (1)	0.08

N (%) = number of nurse respondents stating 'yes', and percentage of valid survey responses, for each item;

**Forced to change units, or anticipating forced change or job loss due to restructuring; df = Degrees of Freedom*

A mixed picture was seen in regard to factors related to retention (Table 4). The number of nurses who reported being satisfied with their job increased 10.1%, while the number of nurses intending to leave decreased by approximately 5%. However, the number of nurses reporting that they would find it easy to find another job also decreased. There was an increase of nearly 10% in the overall percentage of nurses reporting unit instability, while the median across individual hospitals increased by 19% (from 16% to 35%). This change in unit instability indicates that there is an increased incidence, or anticipation of, involuntary ward changes and reduced job security (i.e. forced unit change or job loss due to restructuring).

Table 5 Tasks Delayed or Not Done

	Wave 1	Wave 2		
	N (%)	N (%)	X ² (df)	p
Tasks Delayed				
Discharge planning	96 (20.0)	162 (22.8)	4.018 (1)	0.05
Nursing care planning	130 (27.3)	244 (34.4)	6.688 (1)	0.01
Tasks Not Done				
Routine vital signs	51 (6.0)	24 (3.4)	5.859 (1)	0.02
Back rubs and skin care	200 (23.5)	117 (16.4)	12.064 (1)	<0.01
Oral hygiene	199 (23.4)	105 (14.7)	18.558 (1)	<0.01
Preparing patient for discharge	111 (13.1)	57 (8.0)	10.307 (1)	<0.01
Comforting patients	267 (31.4)	118 (16.6)	45.934 (1)	<0.01
Documenting nursing care	94 (11.1)	35 (4.9)	19.298 (1)	<0.01
Care planning	172 (20.3)	91 (12.9)	15.084(1)	<0.01
	Mean (SD)	Mean (SD)	t (df)	p
Number of tasks delayed last shift	2.8 (2.78)	4.2 (3.39)	-8.824 (1370.6)	<0.01
Number of tasks not done last shift	1.4 (1.79)	1.1 (1.82)	3.268 (1504.2)	<0.01

SD: Standard deviation; DF: Degrees of Freedom

Tasks delayed or not done is an important measure of nursing workload and is reflective of a ward's operational abilities. Changes in the overall mean number of tasks delayed or not completed per shift between wave one and two indicate that delayed tasks have increased, but that the average number of tasks not done has fallen from 1.4 to 1.1 (Table 5). While these results indicate that there are fewer tasks not completed per shift, delays in the provision of patient care have increased and on average nurses will complete a shift with at least one task undone.

Discussion

The present study compared aspects of the practice environment, retention related factors, unit instability, and nurse tasks delayed or not done from six hospitals at two time points between 2004 and 2013. The results indicate that nurse perceptions of the quality of the practice environment declined over this period, while unit instability and the number of tasks not completed increased, with important implications for staff retention and quality of patient care (Roche et al. 2015b, Francis 2013, Ball et al. 2013). It is concerning that despite the increased interest in the practice environment and extensive study in this area over the past decade, workplace quality appears to have decreased rather than improved. Furthermore, given the increased emphasis placed on staff retention nationally by Health Workforce Australia (2013, 2012), who argued that the projected nursing shortage of 109,490 by 2025 could be decreased by 80% with an enhanced focus on retention, improving the practice environment should be a key priority. This is the first study to examine changes in these factors over time, and indicates the need for improvements in practice environment at the unit level. We argue that nurse managers and executives have a key role to play in driving the necessary change.

The results demonstrate changes in nurses' perceptions of the quality of the practice environment over time. In particular, there were overall decreases in the quality of nurses' relationships with doctors, nurse management and leadership, nurse participation in hospital affairs and nurse foundations for quality care. Nurse managers have a key role to play in

improving the practice environment through effective leadership. Good leadership is linked to greater job satisfaction and reduced turnover intention in nursing staff (Duffield et al. 2011b) and is also associated with increased satisfaction and reduced negative outcomes in patients (Wong & Cummings 2007). It entails promoting good communication practices between nurses and other healthcare staff, fostering nurse engagement and participation in the operation of the hospital, facilitating high quality nursing care through setting of standards and continuity of care, and ensuring appropriate staffing and skillmix. The different patterns of scores on the PES domains across the hospitals included in this study suggest that some of these aspects are being attended to in some settings, but somewhat inconsistently, highlighting the need for managers to be sensitive to the particular issues within their area of responsibility in order to focus their efforts appropriately.

Staffing and resource adequacy, which relates to staffing levels and mix, time spent with patients and patient-orientated collaboration with colleagues was the only PES domain to remain stable but also the only domain to score poorly/negatively. Whilst this factor appeared to have remained stable over the ten-year period, the wide variation across hospitals indicates that this is not the case. This is an important, unit specific area that can greatly affect patient safety, nurse satisfaction and nurse well-being (Duffield et al. 2011a, Estabrooks et al. 2005). The Global Financial Crisis (GFC) may have impacted nurse staffing decisions resulting in poor scores across this domain, with the resulting fiscal restraint potentially remaining a serious issue for many facilities and their managers, particularly nurse managers. Nonetheless, nurse managers must continue to advocate for appropriate staffing in order to maintain a positive work environment and quality patient care. It is the responsibility of nurse executives to then consider the body of evidence that supports this advocacy in order to address the issue.

However, staffing and resource adequacy are highly susceptible to executive and organisational turnover and change, and frequent changes to executive and management positions have been noted in previous Australian research (Duffield et al. 2011c). Different executives have differing

foci and priorities, many of which are only partially addressed or pending when another round of executive turnover occurs. As this 'churn' of executive turnover spirals upwards (Duffield et al. 2011c), it is nursing unit managers (line managers) who must again advocate for appropriate staffing, and also make the best decisions they can for patient safety with the staff they have.

The elevated unit instability reported by nurses within the present study may be influenced by this executive turnover. Unit and hospital restructuring is often the result of high-level change and consequent change in priorities. It poses significant issues for nurses who may have little option but to accept forced relocations and shift changes unless they wish to change employers, which is not possible in small or regional areas. Nurses of all positions and levels of experience are affected by organizational change and, importantly, unit managers may also experience feelings of insecurity as a consequence of the rise in unit instability. To create a stable, positive work environment they themselves must feel supported in their role by the executive team (Van Bogaert et al. 2014), a difficult task if these executives also continue to change. If nurse managers are to enact and maintain positive work environments, then they too need appropriate support and organizations need to ensure this is a prime consideration during organizational restructure.

The practice environment includes nurses' views of nurse management and leadership. A negative perception is a potential result of either nurse managers failing to provide adequate staff support or nurse managers themselves being inadequately supported. Again, strong leadership is in serious need, especially in light of the increase in workplace instability. Like the visibility and accessibility of healthcare executives, who as they become known may inspire confidence and security to unit managers, so too these characteristics in a unit manager enhance team spirit and demonstrate interest and awareness of the unit's operations (Duffield et al. 2011b). Strong, visible, leadership can promote unity and improve interaction amongst staff, which is important as workplace conflict is a major source of occupational stress that leads to reduced psychological wellbeing and increased turnover intention (Lenthall et al. 2011).

Building team unity is especially important during times of instability to assuage rising tensions and declining morale.

One consequence of a negative work environment may be the results for tasks delayed or undone. Findings in the present study are comparable to a recent UK study where 86% of respondents reported at least one care activity not done on their last shift due to lack of time (Ball et al. 2013). Despite the increase in full-time employees, there was also a 5% decrease in RNs accompanied by a corresponding increase in enrolled (i.e. level 2) nurses. This change in skillmix, albeit small, still equates to an increased level of responsibility and workload for RNs, and may be a contributing factor in the increased number of tasks delayed. That study also found that a lower nurse to patient ratio and a higher RN staff level related to fewer tasks being missed. Other work has indicated that care tasks are more likely to be left undone in wards with a lower quality work environment (Ausserhofer et al. 2014a), further supporting the idea that the corresponding decline in quality of practice environment over the duration of the present study may also contribute to the increase in tasks delayed.

It is interesting to note the change in employment status over time, with an increase in full-time employment and a reduction in part-time and casual employment. This change may have contributed to the increase in job satisfaction through more consistent staffing, where there is increased opportunity for interaction, continuity of care for patients and a familiarity of colleague skills and strengths, making for a more consistent workplace (Siow et al. 2012, Cabana & Jee 2004). Alternatively, the increase in full-time employment may be attributed to RNs working additional hours and the re-entry of many RNs back into the workforce following the GFC in 2007-2009 (Auerbach et al. 2013). Consistency of staff and the presence of more full-time employees can assist in creating a more stable work environment, where skill and experience can be better utilized and nurse unit managers given the opportunity to interact and support nursing staff (Duffield et al. 2009a, Schmalenberg & Kramer 2009). Unit instability notwithstanding, front line nurse managers have an opportunity with greater numbers of full

time nurses to improve continuity of patient care through scheduling and models of care, to enhance patient outcomes (Siow et al. 2012).

As poignantly noted in a recent article (Beglinger 2014), best practice and established standards exist for patient care. These practices are mandated and adhered to as they have been built on evidence and knowledge gathered over time. In contrast, a large body of evidence exists concerning safe staffing, skillmix, and the importance of a positive work environment, to name a few, and yet it is often overlooked by executive decision makers. Workforce research addresses a wide range of topics tied to the care and safety of the patient. The selective adoption of some practices over others despite compelling evidence means that until healthcare executives address this gap, avoidable patient risk will remain (Beglinger 2014).

Limitations

The use of cross-sectional data and analysis of three factors of interest in isolation from each other prevents the conclusive establishment of associations between factors explored. The relatively low response rate in some of the studies is also an issue in terms of generalizability. However, similar characteristics were evident across waves, suggesting reasonable consistency. Respondents were asked to complete only one survey within each of the studies, but may have completed more than one across the different studies. It is therefore possible that there is a mix of initial and repeat respondents within each of the matched hospitals. As there is no unique nurse identifier across the studies, the scope, and therefore the potential impact, of this issue is unknown. Given the length of time between waves, the PES and other items analyzed here provide a snapshot for each wave of data collection that is unlikely to be influenced by the number of initial or repeat respondents.

Conclusion

Despite a decade long shortage of nurses, when ensuring a positive work environment for nurses to enhance retention should have been a priority, this does not appear to have been the

case. Nurses over this decade have indicated that the environment in which they are working is less positive. As workforce shortages have eased, these findings do not bode well for institutions that now may have less difficulty in attracting staff. However, retention of these staff in a work environment perceived to be less than ideal will be problematic as the broader economy improves, potentially leading to another cycle of workforce shortages. A key aspect is the role played by the executive and nursing leadership teams, as they are responsible for determining the strategic direction and 'climate' of the organisation they lead, and play a major role in determining the level of unit instability. Future research must examine the impact executive 'churn' has on instability, staff and patient outcomes. When the broader economic environment changes and nurses again find it easier to obtain employment elsewhere, institutions with less than ideal practice environments will find it difficult to attract and retain staff, with potentially serious consequences for the quality of patient care.

Implications for Nursing Management

The findings of this study indicate that over the last decade there has been decline in the quality of the nurse practice environment, together with increased instability. There is no more fundamental role for managers than ensuring that nurses feel their workplace is positive, that they are included in decision-making, are respected by their medical colleagues, and, crucially, are able to provide quality patient care. Nurses expect to be led by capable and competent leaders and managers who represent their interests to non-nurse executives. Key leadership behaviors that contribute to a more positive practice environment will include advocating for appropriate staffing and resources, being visible to inspire and motivate staff, providing positive feedback and appreciation, setting high standards of care, promoting engagement by nurses in the operation of the hospital, facilitating continuity of care, and fostering clear and meaningful communication. The evidence from this and other studies suggests that these actions will improve the work environment and have an impact on quality of care such as reducing the rate of incomplete or delayed tasks. Front line managers and executives need to apply the existing evidence to improve work environments and to manage instability, while being aware that the

specific application of the evidence will vary with the particular practice environment issues within each ward or hospital.

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