Work environments and staff responses to work environments in institutional long-term care

Ann Tourangeau[1], Kimberly Widger[2], Lisa Cranley[3], Sue Bookey-Bassett[4], Jaime Pachis[5]

[1,2,3,4,5]Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, Ontario, Canada

ABSTRACT

Background: Structures and processes of care such as work environments and care provider responses to work environments have been shown to influence organizational outcomes. To improve health care quality, structures, processes, and outcomes of care should be considered. There is almost no literature reporting on the structural characteristics of work environments and care provider responses to work environments in institutional long-term (chronic) care settings.

Purpose: The purpose of this article was to report how a convenience sample of multidisciplinary care providers working in institutional long-term (chronic) care settings in Ontario, Canada, evaluated their work environments and their responses to these environments.

Methods: A sample of multidisciplinary care providers working within six institutional long-term care settings completed a survey rating their work environments (e.g., supervisor support and effectiveness and work empowerment) and responses to work environments (e.g., job satisfaction, burnout, and intention to remain employed). The survey included three well-established instruments: Supervisory Support Scale; Learn, Empower, Achieve, and Produce instrument; and the Maslach Burnout Inventory. Descriptive statistics were used to summarize survey data. To determine whether there were differences in staff characteristics, ratings of work environments, and responses to work environments across the four participant job categories, tests of differences were completed using analyses of variance with Tukey post hoc (continuous variables) and chi-square (categorical variables) tests.

Findings: Ratings of the work environment were similar across job categories and indicated opportunities for improvement. Overall job satisfaction was rated between "neutral" and "satisfied." On average, the staff reported moderate levels of emotional exhaustion (burnout). More than one third of all staff members reported planning to leave their employment, including two thirds of allied health professionals.

Practice Implications: Strategies are suggested to strengthen institutional long-term care work environments to promote more positive staff responses to work environments, including higher job satisfaction and intention to remain employed.

Key Words: Job satisfaction, health care quality, leadership, retention, work environments

Introduction

Efforts to evaluate and improve care quality in health care settings must include examination of relevant outcomes and key determinants of these outcomes such as the structures and processes of care. Examining and understanding health care service structures such as work environments and employees' (staff members') responses to their work environments are important quality improvement endeavors. There is mounting evidence that health care work environments and staff's responses to work environments have been shown to influence a number of organizational outcomes such as patient mortality, patient satisfaction with care, and other patient safety outcomes (Capuano, Bokovoy, Hitchings, & Houser, 2005; Clarke, 2007; Estryn-Behar et al., 2007; Laschinger & Leiter, 2006; Tourangeau et al., 2007; Vahey, Aiken, Sloane, Clarke, & Vargas, 2004). However, most of this literature focuses on acute care hospital settings rather than on institutional long-term care (ILTC; chronic) settings. Furthermore, studies of health care work environments usually focus on perceptions of single occupational work groups rather than on developing a broader understanding of the work environment from the perspectives of the multidisciplinary health care team. This study begins to address gaps in knowledge by reporting how a sample of multidisciplinary staff members working in ILTC settings in Ontario, Canada, evaluated their work environments and their responses to these environments.

Theory and Background

The overarching theoretical perspective guiding this study is a health services quality model originally developed by Donabedian (Aday, Begley, Lairson, & Balkrishnan, 2004; Donabedian, 1988). This quality model is frequently used to study and improve health care services and their outcomes. There are three core components within the model: structures of health care, processes of health care, and outcomes of health care. Structures of health care refer to characteristics of care providers; the social and economic environments where health care services are delivered; and the availability, organization, and financing of health care services. Processes of health care are the interactions between providers of health care services and recipients of these services. Health care outcomes are those intended and unintended effects that the structures and processes

of health care services have on recipients of care, on organizations that deliver care, and on communities and societies. In this quality model, it is hypothesized that structures, processes, and outcomes of health care services are related. How health care service delivery is structured influences the processes of care, which directly impacts outcomes of health care. To gain a more complete understanding of health care quality with the aim of improving outcomes, all three model components should be considered (Aday et al., 2004; Donabedian, 1988).

Our conceptualizations of the structures of health care services in ILTC flow directly from Donabedian's health services quality model and include characteristics of the ILTC staff, the work environments within these settings, and staff responses to their work environments. Characteristics of care providers that may influence processes and outcomes of care include educational preparation, age, years of experience within the current role, gender, employment status as part-or full-time, and continuing staff education initiatives being undertaken. Conceptualizations of characteristics of the work environment and staff responses to their work environments are most informed by the person– environment congruence theory that proposes that people either fit in their work environment or not and that this fit affects how well work is accomplished. Employees have basic needs for safety, socialization and support, privacy, empowerment, and accomplishment (Dendaas, 2004; Murray, 1959; Van Harrison, 1978), and employee fit within the organization is a function of how these needs are perceived to be met by employees. Accordingly, we identified four essential components of the work environment to be measured including supervisor relationship and support, workplace empowerment, organizational climate, and work effectiveness.

Because staff members respond to their work and work environments and their responses may also impact how they interact (processes of care) with care recipients, we conceptualized four key staff members' responses to their work environments as important components of health care structures: job satisfaction, self-reported health (including missed hours of work), emotional exhaustion burnout, and intention to remain employed.

Summary of related literature

A scan of the health services quality and outcomes literature yielded some evidence of structural characteristics of health care services in several health care sectors, with a stronger focus on the acute care hospital and nursing home sectors and very little reports of those structural characteristics within ILTC (chronic care) settings. Furthermore, most of this literature reports on structural characteristics of health care services from the perspective of single categories of staff such as nurses rather than from the perspective of the members of a multidisciplinary staff who provide ILTC. This brief literature review is organized around two structural characteristics of health care services: characteristics of the work environment and staff responses to their work environment, and focuses first on literature from the chronic care or ILTC sector. When little or no literature exists related to ILTC settings, the review is supplemented with findings from the nursing home or acute care sectors.

Characteristics of work environments

One important component of the work environment is the nature and effectiveness of leadership, management, and supervision. Leadership and management behaviors are important in shaping the health care work environment and in creating conditions for safe quality patient care (Armstrong & Laschinger, 2006; Laschinger & Leiter, 2006). No studies of the structural characteristics related to leadership or supervisory characteristics in ILTC/chronic care settings were found. Leadership and supervision have been studied in nursing home settings. McGilton, McGillis Hall, Wodchis, and Petroz (2007) examined perceived supervisor support by unlicensed nursing aides in nursing homes in Ontario, Canada. Mean reported supervisory support scores were 60.4 (theoretical range = 15–75). In a study examining work stress in long-term care facilities in Taipei City, Lin, Yin, and Li (2002) conducted 102 interviews with nursing aides and found that patient care tasks were considered to be most stressful and that relationships with their supervisors were considered least stressful. In contrast, there has been considerable study of leadership in acute care settings. In a study of nurse retention, Tourangeau and Cranley (2006) reported that, on average, Canadian acute care hospital nurses rated their manager's ability and support at 46 out of 100, indicating that they ''somewhat disagreed'' to ''somewhat agreed'' that their managers were supportive and capable.

Other work environment components include workplace empowerment, organizational climate, and work effectiveness. Empowered employees have access to information, support, and resources, as well as have opportunities to learn and develop. Empowered employees feel confident that they can successfully complete job-related responsibilities, can assert their opinions, and can influence organizational change (Armstrong & Laschinger, 2006). No studies could be located related to ILTC settings, but one recent study report was found that examined these structural characteristics within nursing home settings. Hollinger-Smith and Ortigara (2004) measured perceived work empowerment, organizational climate, leadership effectiveness, and work effectiveness in a sample of nurses and nursing assistants working in 14 U.S. nursing homes. They reported that the proportion of staff members rating these work environment characteristics as ''excellent'' or ''above average'' were the following: work empowerment (50%), leadership effectiveness (60%), organizational climate (57%), and work effectiveness (92%).

In contrast, there has been considerable study of workplace empowerment, organizational climate, and work effectiveness in acute care hospital settings. In a large sample of U.S. nurses working in Magnet hospitals, Ulrich, Buerhaus, Donelan, Norman, and Dittus (2005) studied nurse influence and empowerment and found that 19% reported ''very good'' or ''excellent'' opportunities to influence workplace decisions and that 26% rated their opportunity to influence as ''good.'' Other studies examining structural empowerment among acute care hospital nurses have found that nurses perceived their work environment to be ''somewhat'' to ''moderately'' empowering and that their leaders' behaviors were rated as ''somewhat'' empowering (Greco, Laschinger, & Wong, 2006; Laschinger,

Wong, & Greco, 2006).

One report of workplace empowerment was located from the multidisciplinary team perspective, although this team was located in an acute care hospital environment (Suominen et al., 2007). Work empowerment was conceptualized as consisting of three components: verbal empowerment (e.g., ability to debate a point of view), behavioral empowerment (e.g., ability to learn new skills), and outcome empowerment (e.g., ability to introduce changes). The staff exhibited the greatest confidence in verbal and behavioral empowerment and the least confidence in outcome

Staff responses to work environments

Over the past decade, studies have been conducted internationally to explore health care providers' responses to their work environments, particularly focusing on satisfaction, emotional exhaustion burnout, self-reported health, and intent to remain employed. Reports of staff's job satisfaction within ILTC settings were not found; however, job satisfaction rates for staff working in nursing home settings have been reported. In a study examining job satisfaction and intent to remain employed among 1,779 unlicensed nursing aides working in U.S. nursing homes, Castle, Engberg, Anderson, and Men (2007) found that aides reported mean overall job satisfaction scores of 7.6 (theoretical range = 1–10). Hollinger-Smith and Ortigara (2004) studied job satisfaction of 543 registered nurses and nursing assistants working in 14 U.S. nursing homes and found that 79% of the staff reported excellent or above-average job satisfaction. McGilton et al. (2007) investigated job satisfaction among 222 unlicensed nursing aides working in 10 nursing homes in Ontario, Canada, and found that unlicensed aides reported mean job satisfaction levels of 150 (theoretical range = 74–205). Rondeau and Wagar (2006) reported mean nurse leader job satisfaction across 124 western Canadian nursing homes as 3.61 (theoretical range = 1–6).

Burnout is an important staff response to the work environment. Burnout and other negative health responses among health care providers, particularly in nurses, have been frequently studied after the restructuring and downsizing of health care organizations in the 1990s. Emotional exhaustion is one core component of burnout (Maslach, Jackson, & Leiter, 1996). One study was located that measured staff burnout within ILTC settings. Allen and Mellor (2002) studied emotional exhaustion burnout levels in nurses working in chronic care facilities and acute care hospitals in Australia and found that, on average, chronic care nurses reported moderate levels of emotional exhaustion of 2.86 (theoretical range = 0–6) and that there were no significant differences in emotional exhaustion levels between nurses working in acute or chronic care (ILTC) settings. In a Dutch study of 2,262 nursing staff members working in general hospitals and in nursing homes, van den Berg, Landeweerd, Tummers, and van Merode (2006) found that the nursing staff working in nursing homes reported significantly higher emotional exhaustion (M = 2.27, theoretical range = 0–6) than did nursing staff working in acute care hospitals (M = 2.17). Similar mean emotional exhaustion burnout scores at the moderate level of burnout have been found for nurses working in acute care hospitals (Estryn-Behar et al., 2007; Laschinger &

Leiter, 2006; Tourangeau, Coghlan, Shamian, & Evans, 2005).

Intent to remain in or leave employment is another important staff response to work environments. No studies were found reporting staff's intention to remain employed in ILTC settings, and only one study was located that reported on intent to remain employed in nursing home settings. With a sample of 1,779 nursing aides working in U.S. nursing homes, Castle et al. (2007) reported that, when asked if they were thinking about leaving their jobs, the mean score was 1.9 (theoretical range = 0–4, with 0 indicating no intention of leaving). North American studies in acute care hospital settings indicate that between 21% and 43% of nurses reported intending to leave their current jobs (Tourangeau et al., 2005; Ulrich, Buerhaus, Donelan, Norman, & Dittus, 2007; Vahey et al., 2004). Estryn-Behar et al. (2007) reported that intention-to-leave rates among hospital nurses in several European countries were approximately 15%, which is considerably lower than those reported in North America.

Others have reported additional staff responses to work environments such as self-reported health. No studies could be located reporting staff health in ILTC settings. When Tourangeau et al. (2005) asked Canadian acute care hospital nurses to rate their general health compared with that of other people their own age, nurses reported mean overall health as 67.6 out of 100, indicating self-reported overall health to be better than ''good'' but less than ''very good.'' Acute care hospital nurses have also been asked to report the number of hours of work missed. On average, nurses reported missing 15.1 hours of work in a 3-month period (Tourangeau et al., 2007).

In conclusion, little or no evidence exists describing the structures of health services in ILTC (chronic) settings. Yet, for improvements to be made in the quality of health services in ILTC settings, a clear understanding of the structures and processes of care is required.

Research Questions

In this article, we begin to address this gap in knowledge of the structural characteristics of health care services in ILTC settings by answering the following three research questions:

- What are the characteristics of a sample of a multidisciplinary staff working in ILTC settings in Ontario, Canada?
- How do members of multidisciplinary staff working in ILTC settings in Ontario, Canada, evaluate their work environments?
- How do members of a multidisciplinary staff working in ILTC settings in Ontario, Canada, evaluate their response to their working environments?

Methods

Context

In Ontario, three categories of continuing care exist (as opposed to acute hospital care): nursing homes, rehabilitation, and ILTC, also referred to as chronic care or complex continuing care. ILTC serves higher acuity patients who require continuing hospital care but no longer require acute care hospitalization. Patients cared for in ILTC settings have health care needs that

are too intensive for nursing home or community care.

A convenience sample of six hospitals with ILTC units were invited to participate in the study. Because the focus of this study was on care quality for ILTC patients recovering from stroke, only staff members working in ILTC units where care was provided to patients recovering from stroke were invited to participate. Multidisciplinary staff members working in these six hospitals within ILTC units serving stroke recovery patients were invited during 2005–2006 to complete a survey asking them about their work environments and their responses to these environments. Of the six study hospitals, three were large ILTC facilities (chronic care hospitals), and three were acute care hospitals with designated ILTC units. Occupancy rates on study units ranged between 90% and 100%. Bed capacity for study units in which these staff members worked ranged from 32 to 52.

Ethical approval for this study was received from the Health Sciences Ethical Review Board of the University of Toronto. Annual renewal of ethics approval has been received for this study since 2004.

Survey participants and procedures

Multidisciplinary staff recruitment was encouraged through investigator and research assistant presentations at staff meetings in each facility. Each staff member was provided an information letter regarding the study. Participants were invited to complete the survey after the information session but were also given the opportunity to complete the survey at another time and return the survey by mail. Survey completion indicated consent to participate. Staff members were invited to participate in the study only once, and no follow-up invitations were given to non-responders. Across the six hospitals, 251 multidisciplinary staff members working in seven patient care units were invited to complete the survey. Of these, 162 completed surveys were received, yielding a response rate of 64.5%. Staff's response rates across hospitals ranged from a low of 40% to a high of 76%.

In ILTC settings, members of the multidisciplinary team of care providers work together on a day-to-day basis to provide maintenance and restorative care for patients and, therefore, contribute to and experience similar work environment conditions. Survey responses were grouped into four job categories of participants: 95 licensed nursing staff (consisting of 48 registered nurses and 47 registered/licensed practical nurses), 35 allied health professionals (including 10 physiotherapists, 12 occupational therapists, 4 speech pathologists, 3 recreation therapists, 3 social workers, 2 dieticians, and 1 pastoral care chaplain), 28 unlicensed aides (including 16 personal support workers, 6 physiotherapy assistants, 3 occupational therapy assistants, and 3 recreation therapy assistants), and 4 leaders/educators (including 2 managers and 2 educators; all were registered nurses).

Measures

In the survey, staff participants were invited to answer questions in a paper-and-pencil format. Survey content included self-reported assessments of the work environment, including relationship with their supervisor; responses to the work environment, including job satisfaction, burnout, career intentions, and health; and employment circumstances and demographic information. Three previously developed and validated instruments were included in the survey: the Supervisory Support Scale (SSS); the Learn, Empower, Achieve, and Produce (LEAP) survey; and the Maslach Burnout Inventory (MBI). These three instruments were selected based on four criteria:

- Strength of link between study concept and concept measured in the instrument,
- Evidence of adequate psychometric properties within similar populations,
- Appropriate for use with a variety of staff categories with different education levels,
- Least respondent burden.

The SSS is a 15-item instrument developed to measure relations between staff members and their supervisors in nursing home settings. Respondents are asked to rate how often their supervisor demonstrates behaviors related to empathy and dependability and the supervisor's ability to build connections with staff. Response options are a 5-point frequency scale ranging from never to always. Tests of validity have confirmed a one-factor solution reflecting overall supervisory support. Detailed evidence of validity and reliability of the SSS is found elsewhere (McGilton, 2003; McGilton et al., 2007). In our study, the theoretical range for the SSS is 0 to 100 as we summed responses for all 15 items and standardized scores to be out of 100. The higher the score, the higher the staff members rated their supervisor as empathic, dependable, and able to build connections with staff. This scale is an indicator of the work environment.

Learn, Empower, Achieve, and Produce is a 34-item instrument that has been developed and tested to assess long-term care work environments. Respondents are invited to rate either the frequency of or their agreement with each item on a 5-point scale (never to always, very dissatisfied to very satisfied, or strongly disagree to strongly agree). Tests of validity have confirmed the existence of five subscales: work empowerment, leadership effectiveness, organizational climate, work effectiveness, and job satisfaction (Hollinger-Smith, Lindeman, Leary, & Ortigara, 2002; Hollinger-Smith & Ortigara, 2004). In this study, the first four LEAP subscales are indicators of the work environment. The fifth subscale measuring job satisfaction is an indicator of staff response to the work environment. The work empowerment subscale includes six items related to opportunities for staff development, access to information, and perceived formal and informal power. The leadership effectiveness scale includes 10 items related to the supervisor's ability to mentor staff, deal with conflict, and solve problems. The organizational climate scale includes four items related to organizational communication, trust in administration, and participation in decision making. The work effectiveness scale includes five items related to the respondents' evaluation of their own ability to make decisions and accomplish goals. The job satisfaction scale includes 9 items related to satisfaction with supervisors, coworkers, rewards, and communication. Evidence of LEAP validity and reliability has been reported elsewhere

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(Hollinger-Smith et al., 2002; Hollinger-Smith & Ortigara, 2004). In this study, the theoretical range for each LEAP subscale is 0 to 100 as subscale items are summed and scores are standardized to be out of 100 to facilitate comparison.

The MBI is a 22-item instrument that measures three dimensions of employee burnout: emotional exhaustion, personal accomplishment, and depersonalization (Maslach et al., 1996). Respondents are asked to rate how frequently they feel what is identified in each item by choosing one of seven response options ranging from never to every day. In this study, burnout is conceptualized as being emotionally drained or exhausted from one's work. The sum of responses to 9 items reflects emotional exhaustion. Emotional exhaustion scores greater than 26 indicate high burnout, scores between 17 and 26 indicate moderate burnout, and scores less than 17 indicate low burnout. There is strong evidence of validity and reliability of the MBI (Maslach et al., 1996). Because there are established norms for different levels of burnout for the emotional exhaustion subscale of the MBI, scores were not standardized out of 100. Level of emotional exhaustion is an indicator of a burnout response to the work environment.

In addition to the three instruments contained within the staff survey, participants were invited to answer several one-item questions. There is some controversy about the goodness, including predictive validity, of using single-item questions rather than using multiple-item scales to measure concepts. Strong evidence exists for the appropriateness of using single items rather than multiple items for concept measurement. Single items are appropriate and often superior to measure concepts that are concrete and singular and when respondent burden is a concern (Bergkvist & Rossiter, 2007; Gardner, Cummings, Dunham, & Pierce, 1998). Furthermore, there is sound evidence that there is no difference in predictive validity of single versus multiple items measuring the same concepts (Bergkvist & Rossiter, 2007; Gardner et al., 1998). In this study, because these concepts are concrete, specific, and singular, we have chosen to use single items to measure each element of provider characteristics as well as three staff members' responses to their work environments: overall health, missed hours of work, and intention to remain employed.

Participants were asked to rate their overall health by responding to the question: In general, how would you rate your overall health compared with that of other people your age? There were five response options: poor, fair, good, very good, and excellent. Scores were standardized to be out of 100, with higher scores reflecting higher self-ratings of health. Participants were also asked to identify how many hours of work they had missed in the three preceding months. Because intention to remain employed is a key response to the work environment and is a serious and growing global concern across health care settings, participants were asked to identify how likely it was that they would continue to work in their current job until retirement. There were five response options, ranging from ''very unlikely'' to ''very likely.'' Scores were standardized to be out of 100, with higher scores reflecting more intention to remain employed.

Data analysis

Data were analyzed within the SPSS Version 15 (Chicago, IL) software. Descriptive statistics were used to summarize survey data. To examine differences in responses across job categories, analyses of variance with Tukey post hoc tests were used for continuous variables, and chi-square tests were used for categorical variables. Because there were only four respondents in the leaders and educators job category, work environment and responses to the work environment for this group are not reported to protect their anonymity.

Findings

Characteristics and employment circumstances of care providers

Table 1 contains descriptions of characteristics and employment circumstances of the sample of staff by job category. Staff members' characteristics include mean age, mean number of years of experience in their role at the current hospital, percentage female, percentage working full-time, percentage with a baccalaureate or higher level of education, and percentage enrolled in a university or college educational course. There were no significant differences between staff job categories in relation to proportion of females, proportion working full-time, and proportion enrolled in continuing education activities. However, although the mean age of all participants was 43.9 years, licensed nurses were significantly older than were allied health professionals (p = .001). The number of years experience in the current role was different across all job categories (p values for pairs ranged from .02 to <.0001). Leaders and educators had the least amount of experience (2.1 years), and licensed nursing staff had the most experience (11.8 years). A significantly higher proportion of allied health professionals (68%) reported having a baccalaureate university degree than did licensed nurses (14%) and unlicensed aides (25%; p < .0001 for both).

Work environment

Four aspects of the work environment were measured: supervisory/leadership support and effectiveness, work empowerment, organizational climate, and work effectiveness. Two scales were used to measure supervisor/ leadership support and effectiveness: the supervisor support scale and the leadership effectiveness scale of the LEAP. The correlation between the scores for the two measures of leadership/supervisor support and effectiveness was .83 (p < .0001). This finding indicates a strong positive relationship between the staff members' perceptions of the nature and amount of support received from their supervisors, with ratings of effectiveness of that supervisor/leader. Table 2 contains results of how members of the multidisciplinary staff rated their work environments on each of these variables by occupation category. When analysis of variance was used to test for differences in responses among staff categories, no statistically significant differences were found.

Supervisor support scale findings indicated that the staff members reported their immediate supervisor as displaying empathy, being dependable, and building connections with staff more often than ''occasionally'' but less frequently than "often."

Table 1 Staff characteristics by job category

Staff characteristic	All (n=162)	Licensed nursing (n=95)	Allied health professionals (n=25)	Unlicensed aides (n=28)	Leaders/Educators (n=4)
Age, M (SD)	43.9 (11.2)	46.3 (10)	38.3 (12.2)	42.3 (12.1)	47.5 (9.3)
Years in current role, M (SD)	9.0 (8.3)	11.8 (9.1)	3.3 (3.1)	6.0 (4.2)	2.1 (1.2)
Female, %	93	95	94	87	100
Full-time, %	70	63	77	83	100
Baccalaureate or higher education, %	31	20	68	21	50
Enrolled in university/ college course, %	15	14	10	25	25

Findings are similar for the other four subscales measuring work environment: leadership behavior, work empowerment, organizational climate, and work effectiveness. However, on average, the staff members reported significantly higher scores about their own work effectiveness than other aspects of their work environments.

Responses to work environments

Five indicators of staff responses to their work environments were measured: self-reported overall health, missed hours from work over the preceding 3 months, job satisfaction, emotional exhaustion burnout, and intent to remain employed until retirement. Table 3 contains descriptions of these finding by occupation category. Two indicators of staff responses to the work environment were significantly different between job categories: reported missed hours and intention to remain employed in the current job.
The sample mean self-reported health score was 69.6 and ranged from 67.9 to 72.9 among staff categories. These findings indicated that the staff members rated their general health between ''good'' and ''very good.'' There were no significant differences in self-reported health among categories of staff. The sample mean number of missed hours in the preceding 3-month period was 10.7 hours and ranged from 6.6 to 23.8 hours. When analysis of variance was used to test for differences in responses among staff categories, a statistically significant difference was found. Tukey post hoc tests were used to determine which groups were significantly different. Both licensed nursing staff

and allied health professionals reported significantly fewer missed hours from work than did unlicensed aides (p = .006 for both pair comparisons). It is noteworthy that across the sample, 53% (86 staff) reported missing no hours from work in the preceding 3-month period.
The sample mean level of job satisfaction score was 61.1 and ranged from 59.7 to 62.8 among staff categories. These findings indicated that staff members rated their overall job satisfaction as higher than ''neutral'' but less than ''satisfied.'' There were no significant differences in job satisfaction among staff categories.
The sample mean level of emotional exhaustion was 20.0 and ranged from 14.9 to 20.9 among staff categories. Although no statistically significant difference was found in emotional exhaustion levels across the staff categories, on average, both the licensed nursing staff and allied health professionals reported experiencing moderate levels of emotional exhaustion, but the unlicensed staff reported low levels of emotional exhaustion. When examined by level of emotional exhaustion (low, moderate, or high), 27.3% of all staff reported experiencing high emotional exhaustion, 30.5% were experiencing moderate emotional exhaustion, and 42.2% were experiencing low emotional exhaustion.
The sample mean score of intention to remain employed was 60.0 and ranged from 34.4 to 68.1 among staff categories. When analysis of variance was used to test for differences in responses among categories of staff, statistically significant differences were found. Tukey post hoc tests were used to determine which groups were significantly different. Both licensed nursing staff

Table 2 Staff evaluation of the work environment by job category

Work environment characteristic	All (n=162)	Licensed nursing (n=95)	Allied health professionals (n=35)	Unlicensed aids (n=28)
Supervisor support	69.4 (21.0)	69.8 (21.6)	69.6 (17.4)	66.1 (22.9)
Leadership effectiveness	65.8 (18.4)	64.8 (19.7)	66.0 (14.2)	67.1 (18.5)
Work empowerment	59.2 (16.5)	58.7 (18.0)	60.3 (13.7)	58.5 (14.6)
Organizational climate	61.4 (14.2)	60.3 (15.2)	60.4 (12.4)	64.5 (11.9)
Work effectiveness	73.5 (14.21)	73.4 (13.8)	70.0 (14.4)	75.6 (9.1)

Note. To facilitate interpretation, all scales have been standardized to be out of 100. Values are in M (SD).

(p < .001) and unlicensed aides (p = .01) reported being significantly more likely to remain in their current jobs until retirement than allied health professionals. For the sample as a whole, 36.4% of the staff reported that they were either unlikely or very unlikely to remain employed in their current job until retirement. This proportion was much higher for allied health professionals (67.7%).

Discussion

There are two striking findings related to characteristics of the sample of staff working in ILTC settings. First, the allied health professional and leaders/educator groups had fewer years of experience working in their current roles than did both licensed nursing staff and unlicensed aides. This suggests that retention of both categories of personnel in ILTC may be a serious challenge. The second is that the group with the lowest proportion of baccalaureate-prepared (university-degree) personnel was the licensed nursing staff. The rate of baccalaureate education for the licensed nursing personnel was lower overall than that for the unlicensed aide group. Further examination showed that 33% (16 of 48) of registered nurses and 6% (3 of 47) of registered/licensed practical nurses had earned a baccalaureate university degree in nursing or field other than nursing.

The finding of no difference between staff categories in their ratings of the work environment is not surprising given the consistency of the members of the work group and their common experiences within the work environment. The important knowledge gained from how ILTC staff members rated their work environments is the overall ratings. Of all indicators of the work environment, staff members rated their work empowerment lowest on average (59.2 out of 100) and their own work effectiveness highest (73.5 out of 100).

We compared supervisor support ratings reported by our multidisciplinary ILTC staff sample with ratings found by the staff in other health care sectors using the same scale. We standardized (out of 100) mean supervisor support ratings reported by nurse aides working in Ontario nursing homes (McGilton et al., 2007) and found that the staff members in our study rated their supervisory support somewhat lower than did nurses working in Ontario nursing homes (69.4 vs. 75.7). We also compared supervisor support scores with those found in a

sample of Ontario acute care hospital nurses. Our sample of multidisciplinary ILTC staff reported higher supervisor support scores (69.4 vs. 46.1) than did nurses working in Ontario acute care hospitals (Tourangeau & Cranley, 2006). No tests of difference were implemented with external study data, so these differences may or may not be statistically significant.

Similar to previous findings by Hollinger-Smith and Ortigara (2004) from U.S. nursing homes, we found that ILTC staff members rated their own work effectiveness as the highest component of their work environments. Overall, the staff members ''agreed'' that they were able to solve problems, accomplish their goals, and deal effectively with unexpected events.

Similar to other health care sectors, reported levels of job satisfaction for the staff working in ILTC was rated between ''neutral'' and ''somewhat satisfied'' (Tourangeau & Cranley, 2006). Of interest is that staff members from all categories rated their job satisfaction similarly. This indicates that there is much room for promoting staff job satisfaction.

Of serious concern is the proportion of the sample staff members who plan to leave their ILTC employment. More than one third of all staff members, including two thirds of allied health professionals, are planning to leave their current employment. This suggests that retention of staff is a major concern in ILTC, as it is in many health care sectors.

Emotional exhaustion burnout scores for this staff sample were somewhat lower on average than were found in other health care provider populations, suggesting that emotional exhaustion levels may be lower for the staff working in ILTC settings (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Tourangeau & Cranley, 2006). However, study scores overall indicate an average level of moderate emotional exhaustion, which is congruent with emotional exhaustion scores reported by health care providers in other health care sectors.

Implications

There are four key implications for managers and health administrators based on findings from this study. First, although the ILTC staff members rated their work environments somewhat positively, there is much room for development of stronger and more positive work environments. Work

Table 3 Staff response to their work environments by job category

Response	All (n=162)	Licensed nursing (n=95)	Allied health professionals (n=35)	Unlicensed aids (n=28)
Self-reported health	69.6 (22.3)	67.9 (22.7)	69.4 (22.1)	72.9 (20.7)
Missed hours	10.7 (17.5)	9.1 (14.8)	6.6 (10.3)	23.8 (27.5)
Job satisfaction	61.1 (13.7)	60.3 (14.6)	62.8 (10.9)	59.7 (12.9)
Emotional exhaustion	20.0 (11.1)	20.9 (11.2)	20.4 (11.4)	14.9 (9.4)
Intent to remain employed	60.0 (35.6)	68.1 (32.9)	34.4 (31.6)	62.5 (38.5)

Note. To facilitate interpretation, all scales expect missed hours and emotional exhaustion have been standardized to be out of 100. Scores for the emotional exhaustion subscale of the Maslach Burnout Inventory are normalized: scores less than 17 indicate low burnout, scores between 17 and 26 indicate moderate burnout, and scores greater than 26 indicate high burnout. Values are in M (SD).

empowerment was the lowest rated aspect of the ILTC work environment. Staff work empowerment could be promoted by ensuring consistent and meaningful access to staff development activities and by sharing work-and organization-related information in timely and appropriate ways. Having the necessary knowledge and skills for performing a job leads to increased feelings of empowerment (Armstrong & Laschinger, 2006).

Second, as work effectiveness is rated as the highest component of the ILTC work environment, efforts should be made to sustain and strengthen perceived work effectiveness. This can be accomplished by providing timely and constructive feedback to employees about their performance and by promoting workplaces that encourage and value performance feedback among peers. Work effectiveness can also be strengthened by setting work team goals, monitoring their progress, and celebrating accomplishments.

Third, the importance of effective relationships between managers/supervisors and employees deserves attention in ILTC. Because of growing evidence of the importance that leadership and management have in shaping the work environment and in creating conditions for safe quality patient care (Armstrong & Laschinger, 2006; Laschinger & Leiter, 2006), supervisors and managers need to learn and practice leadership behaviors that effectively support staff and assist them to do their jobs as well as possible. These findings suggest that ILTC supervisors and managers also need access to opportunities to learn and develop as effective leaders. For example, others have found that participation in leadership development programs results in significant increases in employee ratings of leadership effectiveness (Tourangeau, 2003). Providing ILTC supervisors and managers with leadership training may lead to higher perceptions of their effectiveness by employees. Perceived supervisory support and leadership effectiveness are related not only to supervisor abilities but also to span of control. Managers with wider spans of control generally have less opportunity to develop relationships with individual staff (Cathcart et al., 2004). Therefore, when examining leadership and supervision effectiveness in ILTC, consideration should be given to the number of persons who report to each supervisor to allow for the development of effective employee– supervisor relationships (Simons, 2005; Morash, Brintnell, & Rodger, 2005).

Fourth, two staff responses to the work environment merit special consideration: job satisfaction and intent to remain employed. Overall job satisfaction among care providers working in ILTC was rated between ''neutral'' and ''satisfied.'' The importance of job satisfaction is underscored as evidence continues to mount that job satisfaction is the most consistent predictor of intention to remain employed and ultimately of staff retention (Aiken et al., 2002; Sourdif, 2004; Tourangeau & Cranley, 2006). There may be no easy solutions to improving overall job satisfaction, but one strategy might be to engage staff members in discussions about what promotes job satisfaction from their perspectives and then collaboratively plan and implement strategies related to employee-identified job satisfiers.

Staff retention in ILTC settings may be challenging as many parts of the world are experiencing shortages of health care providers. More than one third of the sample reported planning to leave their employment. Therefore, targeted strategies to strengthen retention of all staff members are suggested. Improving job satisfaction, as suggested above, may be one of the most important approaches to promoting retention of ILTC staff. Other strategies to promote retention of staff include promoting a more overall positive work environment. Suggested strategies are those that promote staff empowerment (as above), those that create and sustain an organizational climate such as engaging in timely organizational communication and enabling active staff participation in decision making, and those that assist employees to realize their contribution to organizational accomplishments. The specifics of how these strategies should be planned and implemented depend on the staff working in each organization. Involving staff in these plans and strategies may be integral to promoting development of stronger work environments that result in more positive staff responses and, ultimately, in better organizational outcomes. Although retention of all ILTC staff is a concern, our evidence suggests that the those from the allied health professional category of ILTC staff is at highest risk to leave their employment and should, therefore, be given immediate and special attention.

Future Research

Considerable resources are expended in caring for those who require chronic and longer term institutional care. In 2004, Ontario (Canada's most populated province) reported spending 798.4 million dollars on ILTC care (Hospital Report Research Collaboration, 2005). It is essential that efforts are undertaken to account for the use of these resources and the impact they have on the health and well-being of the patients served and the health system as a whole. Perhaps the most important research that can be done in the future involves outcome research involving ILTC settings using the health services quality model framework. This would first involve identification of key outcomes of concern in ILTC, measurement of these outcomes, as well as measurement of the structures and processes of care that contribute to these outcomes. Research examining the contribution of the structures and processes of care on key outcomes offers knowledge of what structures and processes could be changed to improve valued outcomes.

Study Limitation

There are a number of limitations concerning these study findings, particularly related to external validity of findings. First, because this study involves a convenience sample of six hospitals with ILTC settings, the representativeness of this staff sample of all staff working in ILTC settings in Canada or across the world is uncertain. Furthermore, although all staff members who regularly worked on study units were invited to participate by completing the staff survey, differences in work environment perceptions and experiences might have existed between participant responders and nonparticipants. Also, although there have been no significant systematic events or changes within ILTC settings since these data were collected in 2005–2006, current staff members, their perceptions of the work environment, and their responses to work may not be the same today as then. Therefore, study findings should be generalized with caution.

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