# Why Nurses Are Calling in Sick: The Impact of Health-Care Restructuring

#### Leona R. Zboril-Benson

L'absentéisme chez les infirmières autorisées est une préoccupation importante pour les employeurs; c'est un problème qui coûte cher et résulte en un affaiblissement des normes en matière de soins. Malgré l'intérêt manifesté partout au monde et les recherches menées sur la question, on a accumulé relativement peu de connaissances sur ces déterminants. De nature non expérimentale et quantitative, la présente étude tente de cerner les raisons de l'absentéisme à partir d'un échantillon regroupant 2000 infirmières de première ligne dans la province canadienne de la Saskatchewan. On a défini l'absence comme la période correspondant au temps de travail manqué, à l'exclusion des périodes de vacances, de grève ou de mise à pied. On a cerné les causes principales de l'absentéisme, dont les affections bénignes et la fatigue attribuable à la surcharge de travail. Au total, 450 répondantes ont réfléchi sérieusement à la possibilité de quitter la profession infirmière; 50,4 % d'entre elles ont invoqué comme raisons principales la surcharge de travail et le stress. On a établi une corrélation entre un degré élevé d'absentéisme et un faible taux de satisfaction au travail, la longueur des quarts de travail, le travail aux soins actifs et le travail à temps plein. On a associé un degré modéré d'insatisfaction au travail à la longueur des quarts de travail et au travail aux soins actifs. La pénurie actuelle d'infirmières commande l'adoption de stratégies pour réduire l'absentéisme et augmenter la satisfaction au travail.

Absenteeism among registered nurses is a major concern for employers; it is costly and results in decreased standards of care. Despite the international interest in and research on absenteeism, there is relatively little cumulative knowledge regarding its determinants. This quantitative, non-experimental study profiled the reasons for absenteeism in a random sample of 2,000 front-line nurses in the Canadian province of Saskatchewan. Absence was defined as time away from work excluding holidays, strike, or layoff. Major causes of absenteeism were identified, including minor ailment and fatigue related to work overload. A total of 450 respondents had seriously considered leaving the nursing profession, with 50.4% citing overwork and stress as the primary causes. Higher rates of absenteeism were found to be associated with lower job satisfaction, longer shifts, working in acute care, and working full-time. Moderate job dissatisfaction was found to be associated with longer shifts and working in acute care. In light of the current nursing shortage, strategies for reducing absenteeism and increasing job satisfaction are warranted.

Canada and the United States are currently facing a shortage of nurses (Canadian Institute for Health Information, 2000; Canadian Nurses Association, 1997; Sochalski, 2001). Ryten (1997) estimates that by 2011

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Canada will be short approximately 100,000 nurses. This shortage is exacerbated by a number of factors thought to be linked to recent health-care reforms, particularly in acute-care facilities. Many health-care professionals and consumer groups have not enthusiastically embraced restructuring and re-engineering initiatives (Aiken & Fagin, 1997), citing concerns over the implementation of restructuring strategies without empirical evidence of their effectiveness and the undermining of professional nursing practice.

Health-care restructuring has brought tremendous pressure to cut costs while maintaining or improving quality (Blegen, Goode, & Reed, 1998; Corey-Lisle, Tarzian, Cohen, & Trinkoff, 1999; Jones, 1993; Jones, Jennings, Moritz, & Moss, 1997). It has drastically changed the nursing environment, particularly in the acute-care sector. Cost-cutting measures have altered job designs and care delivery systems. Restructuring initiatives have included decreasing the number of nursing personnel, reducing the length of patient stays, developing multi-skilled workers by cross-training nurses, decentralizing services to patient-care units, and increasing the number of unlicensed personnel.

Restructuring approaches in the province of Saskatchewan are not unlike those used elsewhere and have had a similar effect on nurses. Health-care cuts have often been directed first at the nursing budget, which is the largest labour cost (Aiken, Clarke, & Sloane, 2000; Corey-Lisle et al., 1999; Gilliland, 1997; Kangas, Kee, & McKee-Waddle, 1999). Decisions to downsize the nursing workforce have been made on the assumption that shortened patient stays would reduce the need for acute-care nurses (Moore, Clarke, Regan, & Steele, 1999). Unfortunately, the workforce was reduced without first reducing the workload. Many registered nurses report that they are working harder than ever and that the quality of care has deteriorated over the past few years (Buerhaus & Staiger, 1999). Efforts to shorten patient stays have resulted in increased nursing needs among those patients who remain in hospital.

Studies have shown that an organization's climate and culture influence commitment, job satisfaction, turnover, and absenteeism among | its employees (Adams & Bond, 2000; Aiken, Sloane, Lake, Sochalski, & Weber, 1999; Blegen, 1993; Blythe, Baumann, & Giovannetti, 2001; Cameron, Horsburgh, & Armstrong-Stassen, 1994; McDermott, Spence Laschinger, & Shamian, 1996; Meyer, Allen, & Topolnytsky, 1998; Vahtera, Kivimaki, & Pentti, 1997). Nurses who have remained in the workforce after restructuring face heavier workloads due to high nurse:patient ratios, resulting in increased levels of psychological dis-

tress and emotional exhaustion, and therefore higher absenteeism. Absenteeism, in turn, exacerbates the nursing shortage.

The nursing shortage can be viewed from two perspectives, as an internal shortage and as an external shortage (Kramer & Schmalenberg, 1988). The internal shortage, which refers to the professional work of nursing, can be caused by a variety of conditions in the work environment. According to Kramer and Schmalenberg, some of these conditions are: inadequately educated nurses; inexperienced nurses (such as new graduates or nurses who are new to the organization); nurses unaccustomed to working together or unfamiliar with the patients or the equipment (float and part-time nurses); inadequate support services, resulting in nurses having to fulfil non-nursing duties; and low job satisfaction among nurses. The external shortage is caused by such factors as insufficient numbers of nurses produced and increased demand for nursing staff due to changing technology and an increasingly aging population resulting in a larger number of high-acuity patients.

The nursing shortage is exacerbated by employee absenteeism (Rogers, Hutchins, & Johnson, 1990). Absenteeism leads to diminished quality of patient care (Gauci-Borda & Norman, 1997; Shamian & Villeneuve, 2000). It also puts increased pressure on those nurses who remain on the job, resulting in decreased morale and job satisfaction, and possibly turnover.

High rates of absenteeism among registered nurses are very costly to the health-care system and threaten the continuous delivery of quality care. In 1997, Statistics Canada estimated Canadian absenteeism at 7.4 days per year per employee ("Higher cost of health," 1998). Based on Statistics Canada estimates, in an organization of 1,000 employees with an average salary of \$190 per day, the cost of absenteeism would be \$1.4 million per year. In 1998, the estimated rate of absenteeism rose by almost half a day, to 7.8 days; nurses were the sickest employees in the country, losing 12.8 days (Akyeampong, 1999), significantly more than the national average.

A research investment spanning almost 50 years has yielded relatively little cumulative knowledge regarding the determinants of absenteeism (Brooke & Price, 1989). A comprehensive range of independent variables has been studied in an attempt to understand these determinants. Unfortunately, few reliable predictors have emerged and the total amount of variance accounted for in absence behaviour remains small (Kaiser, 1998). As suggested by Martocchio and Harrison (1993),

more effort is needed to uncover the mechanisms that generate absence-taking.

## Purpose of the Study

The purpose of this study was to profile the reasons for absenteeism given by front-line acute-care and long-term-care registered nurses in Saskatchewan. Given the staggering cost of absenteeism, a better understanding of its causes is of critical importance (Paget, Lang, & Schultz, 1998). In light of the current nursing shortage, it is clear that the health of nurses and of their work environment are important factors in sustaining the level of care that has been evident in the Canadian health-care system.

### Conceptual Framework

The primary assumption of Nicholson's (1977) A-B Continuum of Absence Types theory is that attendance is "normal" behaviour in most forms of employment. Most people, most of the time, attend work regularly, and the search for the causes of absence is a search for those factors that interrupt the regularity of attendance. Nicholson classifies absence-inducing events according to the degree of freedom they leave the individual to decide whether or not to stay away from work. Nicholson places events on an A-B continuum: A-type events are situations in which individual choice cannot influence the probability of absence (unavoidable absence); B-type events are situations in which the individual has complete control (avoidable absence). This theory focuses on causes (events) rather than effects (absences), and it places events on the continuum according to the characteristics and work and personal circumstances of the individual (Nicholson & Payne, 1987). Nicholson's theory offers researchers a way to more fully understand the role that individual attributions play in absenteeism.

#### Literature Review

Since its publication, Nicholson's (1977) theory has been tested in two empirical studies, thus contributing to researchers' understanding of absenteeism.

Nicholson and Payne (1987) interviewed four groups of workers (white-collar male, white-collar female, blue-collar male, and blue-collar female) in Britain. They asked the workers to rate 12 events on their likelihood of causing them to be absent from work, and then to indicate

whether the same 12 events had actually been the causes of specific absences. These causes had been chosen to represent a continuum, varying in the degree to which they left the individual free to decide whether to stay away from work. The workers were found to be more likely to attribute absence to A-type events than to B-type events, even though a B-type event may have been the original cause of the absence.

The results of Nicholson and Payne's (1987) investigation yield support for Nicholson's (1977) theory. Only one event, serious illness, was clearly rated as an A-type event by the entire sample. Serious domestic problems and workplace accidents were rated equally close to the midpoint between A-type and B-type events. The remaining events (personal business matters, minor ailment, minor domestic problems, feeling depressed, local event of interest, major disagreement with boss, difficulty getting up on time, serious work overload, and disagreement with co-workers) were unreservedly rated as B-type events.

Paget et al. (1998) incorporated the items generated by Nicholson and Payne (1987) into a paper-and-pencil survey designed to assess frequency and type of absence among 118 working college students in California. Their investigation extended Nicholson and Payne's work significantly through the use of a questionnaire versus personal interview and American working students versus British workers. It assessed the reliability and validity of the Nicholson and Payne survey as suitable for the collection of employee absenteeism data.

Many studies have chosen not to utilize Nicholson's framework. Martocchio and Harrison (1993) argue that absenteeism research stems from a belief that absenteeism is a managerial problem rather than from scientific curiosity about individual behaviour. The framing of absence questions seems to compel researchers to seek a technique for reducing the incidence of absenteeism without any real understanding of the reasons for it (Cohen-Mansfield & Rosenthal, 1989; Covner, 1950). The availability and convenience of archival absence data have generated a lack of forethought about the questions, hypotheses, and methods used to address absenteeism (Martocchio & Harrison). Steers and Rhodes (1978) and Ferris and Rowland (1987) appear to place more value on predicting outcomes than on understanding the phenomenon of absenteeism. Farrell and Stamm (1988), after completing their meta-analysis, concluded that the best predictor of future absenteeism is past absenteeism.

Interestingly, absenteeism has been conceptualized as an individual or managerial problem. Little research has been conducted on the relationship between absenteeism and the work environment of an institution. Investigating the work environment of an institution as an independent variable of absenteeism could serve to uncover the mechanisms that produce absence.

The present study was carried out in order to address the paucity of research focused on understanding absenteeism. It views absence not as a unitary construct but as comprising heterogeneous elements. The challenge lies in discovering what these elements are.

#### Methods

Ethical approval was obtained from the Thesis Committee, College of Nursing, University of Saskatchewan; the University of Saskatchewan Advisory Committee on Ethics in Behavior Sciences Research; and the Saskatchewan Registered Nurses' Association.

The investigation was conducted through a survey of registered nurses employed in both acute-care and long-term-care settings using a revised questionnaire from the non-experimental research design of Paget et al. (1998).

The questionnaire was mailed to a sample of 2,000 nurses drawn from the total population of 4,936 practising acute-care and long-term-care registered nurses in Saskatchewan, or approximately 41% of the population. The sample was randomly selected from the Saskatchewan Registered Nurses' Association database. A reminder letter with an additional copy of the survey was mailed to the entire sample approximately 1 month after the initial mailing. Data were collected over a 4-month period (August–November 1999).

The questionnaire consisted of six parts. The first was a question concerning the respondent's number of absences. The next two parts were Likert-scale items on frequency of and susceptibility to absenteeism. One item asked respondents to rate the frequency of 18 different types of absence. The other item asked respondents to rate the causes of absence on a continuum from A (unavoidable) to B (avoidable). Parts 4 and 5 were open-ended questions on intentions to leave the nursing profession and recommendations for reducing nurse absenteeism. The final part comprised questions on demographics: age, gender, level of nursing education, years of nursing experience, primary area of work, and employment status. The concluding item in this part was a rating of overall job satisfaction on a five-point scale (highly dissatisfied, moderately dissatisfied, satisfied, moderately satisfied, highly satisfied).

For the present study, a number of changes were made to better reflect the nursing profession. One cause of absence was reworded and four causes were added (fatigue related to work overload, fatigue related to length of shift/potential for overtime at end of shift, double-booked with another agency/facility, inclement weather, and other).

Return of the completed survey was taken to signify consent to participate.

### Pilot Study

A pilot study was conducted with respondents similar to the study population to assess internal consistency, reliability, and content validity of the revised instrument. Eleven practising, front-line registered nurses were asked to review and provide feedback on the preliminary version of the questionnaire. They were asked whether they understood the questions and the instructions and whether they found the questions objectionable in any way. All respondents expressed a belief that the instrument captured important causes of absenteeism. One question was added as a result of the pilot study (primary area of work: acute care or long-term care).

## Data Analysis

Data analysis was completed using SPSS version 9.0 (SPSS, 1999). Initially the data were examined to determine the distribution of the scores. Descriptive statistics were used to determine the frequency of responses to each item. Cross-tabulations were performed to determine frequency of item responses within categories. Chi-square, the most commonly used non-parametric test (Norman & Streiner, 1999), was used to examine associations between variables. When the chi-square is statistically significant, a residual can be computed to determine which cells, or groups, are the major contributors to the significant chi-square (SPSS).

# **Findings**

A total of 1,079 useable questionnaires were returned, for a response rate of 54%. The typical respondent was female, prepared at the diploma level, aged 41 to 45 years, married, and with fewer than two dependants living at home. The largest percentage of respondents worked full-time rotating 12-hour shifts and were employed in acute-

care facilities. They worked an average of 34 hours and approximately 2 hours of overtime per week. The typical respondent lived approximately 15 kilometres from work, was not responsible for elder care, and did not have a chronic illness. As part of the survey, the respondents were provided with examples of chronic illnesses. Migraine headache was the illness most commonly circled. The majority of respondents had a partner who, as the primary wage earner, was employed outside of the home and whose work did not involve travel.

Table 1 Frequency of Absence-Causing Events in Previous 3 Months (n %)		
	1 or 2	> 3
Minor ailment yourself (e.g., cold, headache, upset stomach, hangover)	428 (39.7)	26 (2.4)
Fatigue related to serious overload of work duties	191 (17.7)	50 (4.6)
Serious illness yourself	191 (17.7)	22 (2.0)
Serious domestic problem (e.g., death in the family, relationship problems, family illness)	188 (17.4)	2 (0.2)
Local/social event of interest to you during work hours (e.g., concert, wedding)	132 (12.2)	22 (2.0)
Personal business to attend to during work hours (e.g., doctor's appointment, buying a house)	113 (10.5)	10 (0.9)
Fatigue related to length of shift/ potential of overtime at end of shift	104 (9.6)	35 (3.2)
Minor domestic problem (e.g., family member with minor illness, child-care problems)	97 (9.0)	8 (0.7)
Accident to yourself at work	92 (8.5)	5 (0.5)
Other	76 (7.0)	22 (2.0)
Feeling depressed	66 (6.1)	7 (0.7)
Dislike work	57 (5.3)	7 (0.6)
Inclement weather	51 (4.7)	0 (0.0)
Finding it difficult to get up on time	38 (3.5)	20 (1.9)
Double-booked with another agency/facility	20 (1.9)	0 (0.0)
Car/transportation problems	19 (1.8)	2 (0.2)
Disagreement with boss	12 (1.1)	3 (0.3)
Disagreement with co-workers	11 (1.0	2 (0.2)

Cause of Absence	Susceptibility*	
	Mean	SD
Serious illness yourself	1.82	1.03
Serious domestic problem	2.53	1.41
Accident to yourself at work	3.17	1.05
Minor ailment yourself	3.90	.97
Minor domestic problems	4.20	1.00
Local/social event of interest to you during work hours	4.25	1.04
Fatigue related to serious overload of work duties	4.32	.93
Inclement weather	4.42	.89
Fatigue related to length of shift/potential of OT	4.48	.85
Personal business to attend to during work hours	4.48	.89
Car/transportation problems	4.54	.84
Feeling depressed	4.61	.77
Double-booked with another agency/facility	4.71	.81
Dislike work	4.72	.66
Disagreement with boss	4.79	.61
Disagreement with co-workers	4.81	.52
Finding it difficult to get up on time	4.85	.53
Other	4.90	.54

## Numbers and Causes of Absences

Respondents were asked to indicate their number of absences in the previous 3 months. An absence was defined as any time away from scheduled work excluding holidays, strike, or layoff. The mean number of absences for the sample was 2.08 days (median =  $1.00 \, \text{day}$ ;  $SD = 5.43 \, \text{days}$ ). A total of 475 respondents (44%) had not been absent. Of the remainder, the mean number of absences was 2.89 days (median =  $2.00 \, \text{days}$ ;  $SD = 4.13 \, \text{days}$ ).

Respondents were asked to rate 18 classes of causes in order to determine the prevalence of absence. Table 1 shows the percentage dis-

tribution for the 18 absence-producing events, rank ordered by the number of respondents claiming events had occurred one or more times. Minor ailment (N = 428; 39.7%) was the most frequent cause of absences that occurred once or twice. Fatigue related to work overload (N = 50; 4.6%) and fatigue related to length of shift/potential for overtime at end of shift (N = 35; 3.2%) were the most frequent causes of absences that occurred three or more times.

Respondents were asked to rate 18 potential causes of absence on a five-point Likert scale (1 = certain to be absent; 5 = certain to go to work). This item measured those absences deemed by respondents as unavoidable, or towards the A end of the continuum. Table 2 shows the mean scores for the 18 events.

The results indicate that one event, serious illness, is almost guaranteed to lead to absence. The respondents ranked only serious illness at the A end (unavoidable) of the continuum. Serious domestic problems and accidents at work were ranked approximately midway on the continuum. All of the other causes were ranked at the B end.

### Considering Leaving the Profession

Respondents were asked whether they had seriously considered leaving the nursing profession. Of those who had considered leaving (N = 450), the most frequent reasons given were overwork and stress (N = 227; 50.4%) and disillusionment with nursing (N = 70; 15.6%).

# Recommendations for Reducing Absenteeism

Respondents were asked to provide recommendations for reducing nurse absenteeism. Some offered more than one recommendation. There were 335 (26.1%) blank responses. Of the recommendations offered, provision of adequate staffing levels in the workplace was the most common (N = 468; 36.5%).

# Job Satisfaction

Seventy percent of respondents rated their overall job satisfaction as "satisfied" to "highly satisfied." Chi-square analyses revealed that nurses with lower job satisfaction were significantly more likely to cite the following causes for their absence: minor ailment ( $\chi^2 = 14.842$ , p < .01), feeling depressed ( $\chi^2 = 22.490$ , p < .01), fatigue related to work overload ( $\chi^2 = 47.670$ , p < .01), fatigue related to length of shift/potential for overtime at end of shift ( $\chi^2 = 21.576$ , p < .01), accident at work

	Absolute Frequency (N)	Relative Frequency (%)
Overworked and stressed	227	50.4
Disillusioned with nursing	70	15.6
Serious injury/chronic illness	37	8.2
Poor management	30	6.7
Heavy work/home responsibility	25	5.6
Undervalued by management/public	22	4.9
*Transferred jobs (within nursing)	17	3.8
Politics/government	13	2.8
Miscellaneous	9	2.0
Total	450	100.0

( $\chi^2$  = 9.963, p < .05), double-booked with another agency/facility ( $\chi^2$  = 15.049, p < .01), and dislike work ( $\chi^2$  = 33.377, p < .01). None of the other causes of absence were significantly associated with the job satisfaction variable.

# Job Satisfaction and Absenteeism

Chi-square analyses were used for absence and job satisfaction and to examine absence and job satisfaction for each of the following factors: employment status, primary area of work, and length of shift. Nurses who expressed high job dissatisfaction were significantly more likely to have several absences (8 or more) ( $\chi^2 = 28.748$ , p < .01).

Absence was also significant for employment status, primary area of work, and length of shift. Nurses who worked 12-hour shifts had higher absence than nurses who worked 8-hour shifts ( $\chi^2 = 7.606$ , p < .05). Full-time nurses had higher rates of absenteeism than part-time nurses ( $\chi^2 = 16.054$ , p < .01). Acute-care nurses had higher absenteeism than long-term-care nurses ( $\chi^2 = 11.243$ , p < .05)

Job satisfaction was significant for primary area of work and length of shift but not for employment status. Nurses who worked 12-hour

shifts experienced moderate job dissatisfaction while those who worked 8-hour shifts experienced high job satisfaction ( $\chi^2$  = 19.679, p < .01). Nurses working in long-term-care settings expressed higher job satisfaction than nurses working in acute-care settings ( $\chi^2$  = 10.438, p < .05).

#### Discussion

Absenteeism is a complex phenomenon. Although a multitude of factors have previously been studied with a view to establishing relationships among them, these investigations have resulted in few reliable predictors. The present study found predictors of absence among nurses to be moderate to high job dissatisfaction, full-time work, 12-hour shifts, and working in an acute-care setting.

These self-reported data show that minor ailment, fatigue related to work overload, serious illness, and serious domestic problems are the most frequently occurring absence-inducing events. These findings are similar to those of Nicholson and Payne (1987), who found minor ailment, serious illness, and serious domestic problems to be the most frequent causes of absence. It is noteworthy that fatigue related to work overload, one of the most frequent causes of absence in the present study, was not offered as a possible choice in Nicholson and Payne's investigation. This type of fatigue may be related to the current work environment of nurses. Nurses who worked 12-hour shifts experienced moderate job dissatisfaction and higher rates of absenteeism. A large percentage of the nurses in the sample had seriously considered leaving the profession as a result of overwork and stress. It is possible that the most common recommendation for reducing nurse absenteeism, the provision of adequate staffing levels, would be effective in reducing fatigue among nurses.

There is an interesting disparity in the findings. The respondents rated minor ailment (3.90) and fatigue related to work overload (4.32) as unlikely to keep them from going to work (see Table 2). However, they also gave minor ailment and fatigue as a frequent cause of absence (see Table 1). They appear to have underestimated the degree to which they used minor ailment and fatigue as causes of absence.

Minor ailment was the most frequently reported event and most frequently reported cause of absence — that is, it was rated towards the A end of the continuum. Yet minor ailment was rated towards the B end of the susceptibility scale. One must ask whether nurses are absent from work for this reason more often than anticipated, or whether their

attributions of their absence differ from their estimates of susceptibility. Extending Nicholson and Payne's (1987) explanation to the nursing profession, perhaps nurses are more likely to use medical justifications for their absence when reporting actual events than when rating their own susceptibility. The implication is that a number of absences might have been incorrectly attributed to minor ailment.

Employees might be expected to attribute their absence to factors outside their control (minor illness) instead of to factors within their control (e.g., attending a concert, waking up late). By attributing absences to minor illness (A-type cause), nurses may be masking the fact that the cause is actually B-type. Since illness is, among both employers and employees, a socially acceptable reason for absence (Edwards & Scullion, 1982; Martocchio & Judge, 1994; Nicholson & Johns, 1985; Nicholson & Payne, 1987), minor illness may be remembered as the cause even if it was not the cause. Unfortunately, Nicholson's A–B theory does not hypothesize that A-type events differ across individuals for susceptibility. Furthermore, the A–B theory may not be fully supported with this nursing population. While serious illness was the only cause whose mean score was ranked near the A end of the continuum, there appears to be some disagreement about this among respondents, as evidenced by the high standard deviation (see Table 2).

## Fatigue and Absenteeism

Of the 450 respondents (41.7%) reporting that they had seriously considered leaving the nursing profession, 227 (50.4%) gave overwork and stress as the reason. This finding is particularly disturbing in an era of acute nursing shortages. It also supports the results of previous studies linking nurses' job satisfaction and working conditions. Irvine and Evans (1995) established a relationship among job satisfaction, behavioural intentions, and turnover in their meta-analysis of 70 studies of nursing retention and job satisfaction published before 1992. Variables negatively correlated to job satisfaction were work overload, stress, and role conflict. Blegen (1993) reached similar conclusions in a meta-analysis of 48 job-satisfaction studies with over 15,000 nurses. High job dissatisfaction emerges as a determinant of absenteeism, turnover, and propensity to leave (Cavanagh, 1990; Kaiser, 1998) and magnifies the problems of nurse recruitment and retention (Tovey & Adams, 1999).

As previously noted, registered nurses working 12-hour shifts experienced moderate job dissatisfaction and higher absenteeism than those working 8-hour shifts. Fatigue related to length of shift was one

of the most frequent causes of three or more absences over the 3-month period. Perhaps 12-hour shifts are too long for nurses in the current health-care situation. While they offer longer and more frequent blocks of time off than 8-hour shifts, concerns about fatigue and safety must be addressed (Smith, Folkard, Tucker, & Macdonald, 1998). It is possible that instituting 10-hour shifts or flexible scheduling would serve to reduce fatigue-related absenteeism among nurses. Investigation of these possibilities is warranted in the context of the current nursing shortage, in order to help decrease absenteeism, boost job satisfaction, and possibly increase nurse retention and recruitment.

### Nursing Shortage

Kramer and Schmalenberg (1988) suggest that external nursing shortages are caused by internal nursing shortages. Hospitals must foster organizational conditions that attract nurses and that earn them a reputation of excellence in nursing practice. A corporate culture of excellence is a major determinant of job satisfaction, retention, and recruitment among nurses (Goodridge & Hack, 1996; Kangas et al., 1999). Studies with magnet hospitals have identified several organizational attributes that enable nurses to fully use their knowledge and expertise in providing high-quality care. These attributes include autonomy and control over the practice environment, good relationships with physicians, communication, visible management, support for education, employee recognition, self-governance, and opportunities for specialized practice (Aiken et al., 1999; Aiken, Havens, & Sloane, 2000; Aiken & Sloane, 1997; Aiken, Sloane, & Lake, 1997; Aiken, Sloane, & Sochalski, 1998; Aiken, Smith, & Lake, 1994; Aiken, Sochalski, & Lake, 1997; Buchan, 1999; Havens & Aiken, 1999; McClure, Poulin, Sovie, & Wandelt, 1983; Scott, Sochalski, & Aiken, 1999). In work environments that feature a culture of excellence, internal nursing shortages are avoided through the recruitment and retention of satisfied, qualified nurses. As a result, external nursing shortages may have a lesser effect on these organizations.

In the particular setting of the present study, quality nursing care appears to have been overshadowed by budgetary concerns that left nurses feeling overworked, stressed, and contemplating the notion of leaving the nursing profession. In the face of the current external nursing shortage, the adoption of effective retention strategies, such as those described in the magnet hospital literature, may help to alleviate the internal nursing shortage.

#### Conclusions

Health-care restructuring has drastically altered the work environment of nurses, particularly in the acute-care sector. Increasing patient acuity and changes in the staff mix and staffing levels in health-care organizations have created more responsibility and heavier workloads for nursing staff. Patient care may suffer because nurses no longer have sufficient time to achieve quality outcomes, which may result in lower job satisfaction and morale and in increased absenteeism. Nurses are experiencing fatigue under the current conditions. The staff nurse is the one essential link in the delivery of quality patient care. Every effort must be made to foster the conditions necessary to ensure quality patient care. Furthermore, long-term strategies are needed to increase the supply of registered nurses and to avoid Ryten's (1997) projected shortage.

Monitoring the rates and causes of absenteeism is important to health resource management and planning. Therefore further research is required into the frequency and susceptibility of minor ailment as a cause of absence. Are nurses using this as a blanket reason for absence because it is acceptable to their employers and co-workers? In the present study, nurses rated minor ailment towards the A end of the continuum (unavoidable) for absence frequency but towards the B end (avoidable) for absence susceptibility.

Future studies of absenteeism might identify the areas of nursing in which respondents are employed (e.g., medicine, surgery, critical care, pediatrics, emergency, operating room). Absenteeism may be influenced by the degree of nursing specialization required. Do nurses working in highly technological areas such as critical care or the operating room exhibit higher levels of absenteeism? Furthermore, it might be useful to split fatigue related to length of shift/potential for overtime into two separate causes of absence, as one could have a greater impact than the other.

The results of this study add to the body of knowledge on the issues surrounding nurse absenteeism and may be useful in various health-care settings. The job satisfaction and absenteeism levels reported may be indicative of the turbulent times in which nurses are working as health care continues to change. In the context of the nursing shortage, policy-makers and decision-makers must keep informed about the changes and about the impact of the evolving health-care environment on nurses' job satisfaction, particularly if retention rates of qualified nursing staff are to be improved.

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