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Job Stress and General Well-Being: A Comparative Study of Medical-Surgical and Home Care Nurses

The purposes of this study were to examine job stress among medical-surgical and home care nurses, and determine if high job stress predicted general well-being. A comparative, descriptive design was used. Findings support the need to examine workplace stressors and implement strategies to reduce overall job stress among medical-surgical nurses.

Stress is pandemic in today's society. Results of an occupational stress survey in the early 1990s (Northwestern National Life, 1991) showed that the proportion of workers who reported feeling "highly stressed" more than doubled between 1985 and 1990 (Speilberger & Vagg, 1999). Since that time, the work environment has become more stressful due to mergers, downsizing, and intense competition. Health care and nursing have not been spared. Increasing patient acuity and decreased length of stay in both acute and home care settings, a composite of new technology, managed care, increased supervisory responsibilities, risk and fear of litigation, and the current nursing shortage all place increased stress on today's nurses. Other key factors contributing to workplace stress include team conflict, unclear role expectations, heavy workload, and lack of autonomy (Calnan & Wainwright, 2001; Huber, 1995; Peterman, Springer, & Farnsworth, 1995; Taylor, White, & Muncer, 1999).

The Occupational Health and Safety Survey (National Institute for Occupational Safety and Health [NIOSH], 1995) confirmed the deleterious effects of stress in certain occupations. An examination of more than 22,000 health records of employees from 130 occupations showed 40 occupations had higher than expected incidences of stress-related disorders. Along with six other health professions, nursing was among the occupations experiencing the negative impact of stress.

Failure to acknowledge and take action to reduce nursing occupational stress has potential physiological, psychological, spiritual, occupational, and economic effects. In an early study, Harris (1989) compared stress-related symptoms in surgical nurses to the general population and found that nurses presented with higher mortality rates, stress-related disease, high blood pressure, anxiety, and depression. Even more alarming, Metules and Bolanger (2000) reported that suicide is among the top five causes of death among nurses — a much higher rate than the general population.

High stress leads to negative work environments that rob nurses of their spirit and passion about their job. Low job satisfaction in nurses is linked empirically to chronic absenteeism, decreased morale, reduced job performance, burnout, increased tardiness, high turnover, and substance abuse (Lancero & Gerber, 1995; Laschinger, Wong, McMahon, & Kaufmann, 1999; Lobb & Reid, 1987). Moreover, high stress affects over-

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all quality of care. Loss of compassion for patients, and increased incidences of mistakes and on-the-job injuries are consequences of high stress levels (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Laschinger et al., 1999; Laschinger, Finegan, Shamian, & Wilk, 2001; Lusk, 1997).

Some authors have attempted to estimate the impact of stress in terms of economic consequences. Stress has been estimated to cause half of workplace absenteeism and 40% of turnover, which is projected to cost the U.S. economy \$200 – \$500 billion annually (Department of Health and Human Services [DHHS], 1999; Matteson & Ivancevich, 1987; Maxon, 1999). Discussing the negative impact of psychological stress resulting from downsizing, Wright and Smye (1996) quoted an earlier estimate by Spielberger and Vagg (1991) projection the overall costs to business and industry of burned out or dispirited employees at \$150 – \$180 billion a year.

Job stress combined with the stress from everyday life can lead to detrimental physical and emotional outcomes for nurses and their families. This awareness has been responsible for growing attention to employee well-being. There are two common components to well-being: the actual physical health of workers and the mental, psychological, or emotional aspects of workers (Budge, Carryer, & Wood, 2003; Geiger-Brown et al., 2004; Pomaki, Maes, & Ter Doest, 2004). *Well-being* comprises the various work/job-related satisfactions (for example, satisfaction and/or dissatisfaction with pay, the job itself, co-workers, and supervision), as well as life/non-work satisfaction enjoyed by individuals. There are personal and organizational consequences of well-being. Nurses' and other health care providers' experience of constant stress may affect their well-being and lead to disengagement, poor judgment, distress, and burnout. Stress and concomitant decreased well-being are contributing factors to organiza-

tion inefficiency, high staff turnover, absenteeism because of sickness, decreased quality and quantity of care, increased costs of health care, and decreased job satisfaction (Abu Al Rub, 2004).

Recognizing the clearly established relationship between high levels of stress and adverse employee and organizational effects, nurse leaders must begin to examine levels of workplace stress and factors contributing to stress. Proactive interventions then can be used to decrease the target stress and/or help nurses adopt strategies to cope with stressors. Hence, the purpose of this study was to identify stressors and the intensity of stressors for nurses employed in medical-surgical and home care units, and to determine the relationship between stress and mental well-being. It was hypothesized that nurses employed on medical-surgical units would report higher stress levels and that nurses reporting high job stress would have negative affect scores.

Methodology

A comparative, descriptive study was designed to explore the causes and the severity of stress in hospital-based medical-surgical and home care nurses, and to examine the relationship of occupational stress to nurses' affective mood. The target population was drawn from RNs and LPNs in two hospitals from a Northeast health care system (one urban and one suburban location) and three area home care agencies, representing both freestanding and hospital-based agencies. Convenience sampling was used.

Instrumentation

The majority of quantitative measures of stress, such as the Work Environment Scale (Moos, 1994), Occupational Stress Indicator (Cooper, Sloan, & Williams, 1988), and NIOSH Generic Job Stress Questionnaire (Hurrell & McLaney, 1988), focus on identifying job stressors and determining the *intensity* of each stress. Measurement of stress is generally not discipline-specific. Rather,

these measures focus on commonly known aspects of work situations that result in job strain. Thus they address items such as "making critical, on-the-spot decisions" or "conflict with other departments" instead of specifically identifying "decision making in a code situation" or "conflict with a physician."

Focusing on job stressors themselves in the absence of frequency assessment may not provide a full picture of the work environment (Spielberger & Vagg, 1991). The impact of stress is influenced not only by the severity of the stressor but also by the frequency of its occurrence. For example, a "code situation" in either home care or in the acute care environment may be considered highly stressful; however, if one nurse experiences that stress weekly and another experiences the stress annually, the stress phenomenon is different. Consequently, measures of occupational stress that evaluate both the perceived severity of specific sources of stress and the frequency of occurrence of that stressful event within a preset time period may provide a more accurate measure. The method of measurements prevents overestimating the effects of highly stressful events that rarely occur in a particular work setting, as well as underestimating the impact of moderately stressful events that occur quite frequently (Spielberger & Vagg, 1991).

Job stress survey. In this investigation, occupational stress was measured by using the Job Stress Survey (JSS) (Spielberger & Vagg, 1991). The JSS measures the perceived severity (intensity) and frequency of occurrence of 30 general sources of work-related stress that are experienced commonly by both men and women employed in a wide variety of business, industrial, and educational settings. The JSS has been used to provide information about specific work-related stressors that adversely impact employees, as well as to evaluate and compare the stress levels of employees in different work departments and settings. The

instrument contains 30 items. Each item is rated twice by the participant on a 9-point scale, first for perceived severity and then for frequency of occurrence within the last 6 months. The JSS yields scores for three scales and six subscales. The three scales are total scores for job stress severity (JS-S), job stress frequency (JS-F), and job stress index (JS-X). The JS-X combines the severity and the frequency ratings of the 30 items and is an overall indicator of perceived stress level.

Factor analysis of the JSS has demonstrated consistently two major components of job stress: job pressure (JP) and lack of organizational support (LS). Ten-item subscales for each of these components provided additional information on pressures associated with the job itself (JP) and lack of support (LS) from supervisory personnel, fellow workers, or an organization's administrative policies and procedures. Three scores are reported for JP and LS, yielding the six subscale scores. These scores are similar to the overall job stress scale scoring and provide information on the severity of the stress within the category, the frequency of occurrence, and the overall index score.

The JSS has been used extensively in professional health care settings. Data have been normed on 1,873 individuals drawn from managerial, professional, health care, and clerical employees. Cronbach's alpha for the overall job stress scale, the severity subscale, and the frequency subscale all were reported above the 0.80 level. Cronbach's alpha for this study was high, with a severity index alpha of 0.96 and a frequency index alpha of 0.92. The overall total reliability score for the stress index in this investigation was 0.95.

Affect balance scale. The Affect Balance Scale (ABS) (Bradburn, 2001) was employed to measure mental well-being or overall affect. This 11-item questionnaire contains two subscales, a five-item positive affect scale (PAS) and a five-item negative affect scale (NAS). The 11th ques-

tion asks participants to rate their general happiness. Each question is scored on a 3-point scale assessing the frequency of occurrence of the positive or negative feeling. The ABS score is computed by subtracting NAS scores from PAS scores and adding a constant of 5 to avoid negative scores. The model specifies that an individual will be high in psychological well-being to the degree to which he or she has an excess of positive-over-negative affect and will be low in well-being in the degree to which negative predominates over positive (Bradburn, 2001).

The original instrument was normed on a probability sample of 2,006 adults ages 29 to 49 living in four small Illinois communities. The test-retest reliability was reported by Bradburn to be 0.76. Positive affect was correlated with social participation, companionship, and sociability. Negative affect was correlated with tensions, worry, and difficulty adjusting to work or marriage (Boyd & McGuire, 1996).

Interview guides. An interview guide designed of five open-ended questions was used to elicit in-depth responses to overall job stress, workplace stressors, support, and perceived well-being. The interview guide was prepared by the researchers and reviewed by two nursing administrators who had an active program of stress research. After completion of the quantitative survey, nurses who indicated a willingness to be questioned for a broader look at workplace stress were contacted by the researchers in either phone or face-to-face interviews, or through focus group interviews.

Data Collection

Institutional review board approval was obtained through both the hospital system and the academic facility where the researcher was employed. Permission from the vice president of nursing also was obtained at each of the home care sites. The participating acute care organization was selected conveniently and the home care agencies were

selected to represent the main referrals from the agency. The participating acute care units were designated by the agency to be medical-surgical units. A site resource manager assisted with on-site survey distribution and collection, and kept the completed research packets in a locked cabinet until returned to the investigator. Research packets consisted of a cover letter advising the nurses of the purpose of the research, an informed consent, the Job Stress Survey, the Affect Balance Scale, a demographic sheet, and an envelope for returns. All packets were numerically and color-coded to differentiate by unit. No personal identifiers were used. A total of 142 research packets were distributed to all eligible RNs on the five participating units/sites. Data collection proceeded over a 1-month period. Qualitative interviews were conducted after completion of the quantitative portion of the study with a purposive subsample of nurses who agreed to be interviewed.

Data Analysis

Independent sample *t*-tests were used to determine differences in stress cores between medical-surgical and home care nurses. One-sample *t*-tests were used to compare the group results with known normative scores for professional women. A significance of 0.01 was set because the analysis would require multiple *t*-tests and this would reduce the likelihood of a type 1 error.

Results

Sample and setting. Of the research packets distributed, 95 packets were returned (67%); however, only 89 were used for analysis because of missing data. Table 1 provides the demographic characteristics of the sample by age, work status, position, education, and years in nursing. The majority of respondents were middle-aged, female, and employed as staff nurses with many years of nursing experience.

Job stress. Table 2 shows that the total stress score and sub-

