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ROLE STRESS, OCCUPATIONAL BURNOUT AND DEPRESSION AMONG EMERGENCY NURSES

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Abstract

The aim of this paper was to review the literature on factors related to role stress in nurses, and present strategies for addressing this issue based on the findings of this review while considering potential areas for development and research. Computerized databases were searched as well as hand searching of articles in order to conduct this review. This review identified multiple factors related to the experience of role stress in nurses. Role stress, in particular, work overload, has been reported as one of the main reasons for nurses leaving the workforce. This paper concludes that it is a priority to find new and innovative ways of supporting nurses in their experience of role stress. Some examples discussed in this article include use of stress education and management strategies; team-building strategies; balancing priorities; enhancing social and peer support; flexibility in work hours; protocols to deal with violence; and retention and attraction of nursing staff strategies. These strategies need to be empirically evaluated for their efficacy in reducing role stress.

Keywords: age and role stress, role stress and nurses, role stress and staffing, role stress and violence, role stress reduction.

Introduction:

Role stress in nurses continues to be an area of great interest to the profession, particularly as stress affectsthe mental and physical health of the nurses as well ashaving an economic cost to the community (Cooper, 1998). Evidence by a review of the literature conducted by Lambert and Lambert (2001) found that over 100 articles on role stress in nursing had been publishedin English over the past two decades, signifying the underlying importance of this area and its continued lack of resolution. Changes continue to occur rapidly in the health care

area, and currently an epidemic exists of an international shortage of nursing staff that shows little sign of abating (Janiszewski Goodin, 2003). In the USA, more than 10 000 nurses are required to meet existing shortages, with demand outstripping supply by more than 800 000 by 2020 (Buerhaus, 2004). In Aus- tralia, the shortage is the greatest since World War II and there will be a shortage of up to 40 000 nurses by 2010 (RMIT University, 2003).

This situation, coupled with an environment of increasing consumption of health care goods and ser-vices, indicates the need for continued attention in identifying the most problematic areas for nurses in terms of work stress. This information can be used in supporting nurses in their roles.

This article reviews literature on factors related to role stress in nurses from 2000 to 2003, followed by a discussion on potential suggestions for strategies to reduce this experience for nurses, based on the litera-ture.

SEARCH STRATEGY

A recent review of the literature was conducted using computerized databases that were searched over the time period 2000–2003 and included CINAHL (nurs- ing and allied health), PsychINFO (psychology) and SSCI (the Social Science Citation Index). Hand search- ing of articles was also performed as well as citations in papers identified by the above searches. Key words included 'role stress' and 'nurs*', and 'nurs* burnout' This search resulted in approximately 500 articles, of which 68 were relevant to this paper.

Definitions of stress, role stress and burnout

The experience of stress occurs when situations are perceived as exceeding one's resources (Lazarus & Folkman, 1984). Work stressors are 'antecedent condi- tions within one's job or the organization which require adaptive responses on the part of the employees' (Jex & Beehr, 1991 p. 312). Role stress may be viewed as the consequence of disparity between an individual's per-ception of the characteristics of a specific role and what is actually being achieved by the individual currently performing the specific role (Lambert & Lambert, 2001). Thus, when role expectations exceed what is achieved, role stress occurs. Burnout is a role stress reaction and may be regarded as a syndrome of emo- tional exhaustion, depersonalization and reduced per-sonal accomplishment (Maslach & Jackson, 1986).

REVIEW OF THE LITERATURE ON ROLE STRESS AND NURSING

A review comparing international research on role stress and strain conducted by Lambert and Lambert (2001) found that most of the studies in this field have been conducted in the USA and the UK. The key areas identified by the studies can be grouped as work envi-ronment factors, followed by the next most common aspect studied being the factors which influence and predict role stress. In smaller proportions, physiologi-cal and attitudinal factors and evaluation of instrumen-tation were also studied.

Common work environment factors found to be associated with role stress were: having little control in one's job; high job demands and low supportive rela- tionships (e.g. Chapman, 1993; Fong, 1993; Glass *et al*., 1993; Tovey & Adams, 1999; Webster & Hackett, 1999; Cheng *et al*., 2000); dealing with death and dying; being moved among different patient care units within the organization; shortage of essential resources, including nursing staff; and work overload (Foxall *et al*., 1990; Frisch *et al*., 1991; Snape & Cavanagh, 1993; Hatcher & Laschinger, 1996; Lally & Pearce, 1996; Avallone & Gibbon, 1998; Chung & Corbett, 1998; Murray, 1998). Environmental factors highlighted by the studies included uncooperative family members and clients, inability to reach physicians and unfamiliarity with sit- uations (e.g. Walcott-McQuigg & Ervin, 1992); concern for poor quality of nursing staff, medical staff and patient care (Scalzi, 1990); inability to deliver quality nursing care (Boswell, 1992); shift rotation (Robinson & Lewis, 1990); time demands and state laws restricting the ability to carry out the advanced practice role (Manderino *et al*., 1994); poor relationships with super- visors, coworkers and physicians

(Decker, 1997); andlow organizational commitment (Lee & Henderson, 1996).
Given that nursing shortages are at an all time high it is important that a more recent review of the literatureon role stress and factors related to the experiencebe conducted, as well as suggestions for strategies to reduce role stress among nurses. This review also aims to obtain a wider international perspective as most studies have focused on the USA/UK experience.

STRATEGIES TO REDUCE ROLE STRESS

Previous studies on role stress in nursing suggest that a range of strategies could be implemented to assist nurses with this experience. A qualitative study usinggrounded theory methodology found that the stress experienced by perioperative nurse managers was reduced through the use of hospital resources and peer support, referring to postmanagement education and information obtained from attending conferences (Schroeder & Worrall-Carter, 2002). In addition, theyused team-building strategies, balanced priorities andengaged in social activities. While the generalizability of these findings are limited by their qualitative nature, further evidence that social support may assist in cop-ing with role stress comes from research by Garrett and McDaniel (2001) who used a cross-sectional survey and found that the social climate of the workplace wasnegatively associated with burnout. They suggest that 'social networks are important during times of changeand uncertainty in the work environment: a supportive workplace can protect against burnout.' (p. 2). Othershave concluded from their research that burnout may be prevented by fostering social relations in the orga-nization (Janssen *et al*., 1999).
Flexibility in work hours may reduce role stress. Traditionally, nursing was seen as a vocation and women did not combine this career with parenting. Today, however, nursing remains a predominantly female workforce, but with many having dependant children. One of the major personal issues identified in Australia as influencing nursing retention is the lack ofa 'family friendly' workplace. The strain of participat- ing in a 7 day per week/24 h coverage roster reduces the resources available for nurses to cope with the demands of family roles. A research study of female nurses, combining partner and parent roles while work- ing a rotating-shift roster, found that the interaction between work and family roles resulted in chronic fatigue that was a risk factor, especially when com- bined with the acute fatigue associated with shiftwork(Clissold *et al*., 2002). The researchers concluded that the need for flexible rostering is paramount in the retention of nurses. In terms of dealing with violence, Jackson *et al*. (2002) suggest that 'effective protocols are needed to deal with bullying and abuse of power by nurses and others that are aimed at supporting nursingpersonnel' (p. 19). They recommend that both employ- ers and educational institutions ensure nurses are pre-pared to deal with acts of violence as they arise, and that employers demonstrate that they are committed to ensuring the safety of nurses. They believe that nurses need to feel that they are supported by their employer when reporting incidents of violence againstthem. However, evidence for the efficacy of these strat-egies is needed.
Concerning new graduates, Chang and Hancock (2003) recommend from their research findings that nurse unit managers (NUMs) should not only assess the impact of levels of role conflict and ambiguity onnurses' adjustment to their role, but the impact of these factors on new graduates' working environment. Adjustment could also be enhanced by the NUMs specifying the roles of the neophyte to both the indi- vidual and other staff. Recruitment, retention and facilitation of transition for new graduates can beenhanced by orientation, preceptorship and/or men- toring programs (Allanach & Jennings, 1990; Anders-son, 1993; Boyle *et al*., 1996; Brans, 1997; Oermann & Moffitt-Wolf, 1997; Prebble & McDonald, 1997). Greenwood (2000) reported that factors such as formal unit orientation programs; a unit 'climate' of open communication; preceptor programs; the timely provi- sion of constructive feedback; assignment congruence (tasks commensurate with competence) participative, democratic governance; appropriate advice and guid-ance from senior staff; and continuing staff develop- ment opportunities greatly assists new graduates in their experience of role

stress and ambiguity. However, evidence for the relevance and appropriateness needsto be undertaken to inform practice. A review of the literature on stress management interventions in men-tal health nurses conducted by Edwards and Burnard (2003), that included research from 1966 to 2000, sug- gested that the most effective way to manage stress is a multilevel approach. First, to minimize or eliminate the stressors themselves, the organizational environment must be proactive rather than reactive in its manage- ment strategies. Due to the lack of research on the effectiveness of interventions it is difficult, however, to determine which specific techniques are the most effec-tive. A second step is to use stress education and man- agement strategies to reduce the negative effects of stress. Lastly, those who are experiencing the effects of stress should be assisted. Differing use of methodolo-gies, tools and evaluation of different interventions, however, makes it difficult to compare the studies and generalize findings.

Although Edwards and Burnard (2003) looked spe-cifically at mental health and stress rather than rolestress specifically, these recommendations are transfer-able to the context of role stress/strain being experi-enced in a general, hospital setting. To address theproblem of an increasingly aging workforce and thefinding that baby boomers experienced greater rolestress (Santos *et al*., 2003), one possible strategy is toremove the mandatory age of retirement and encour-age nurses to continue pursuing further study to pre-vent a drain of experience from the workforce. Newand innovative work practices are needed to support the special needs of nurses in the older age bracket.These ideas, however, need to be tested for their utility.Workload is a dominant factor arising from this review as being related to role stress and strain. Giventhat Healy and McKay (2000) found that work stress,as measured by the Nursing Stress Scale (Gray-Toft &Anderson, 1981), was the strongest predictor of mood disturbance in nurses in their research study, along withthe findings of other researchers (ANA, 2001a, 2001b;Buchanan & Considine 2002; Janiszewski Goodin,2003), interventions aimed at reducing the impact ofenvironmental stressors such as workload and staffingare recommended to decrease their stress levels andencourage retention of staff. Janssen *et al*. (1999) also suggest that emotional exhaustion can be reduced by paying attention to workload. For instance, apart fromemploying more staff, workload can be spread more equally among units, or roster duty techniques can beapplied so that there is a more adequate spread ofactivities during a certain timespan. Wickett *et al*.(2003) suggest that nurses need to be better preparedto work in an environment of increasingly sickerpatients with greater turnover. Again, however, these
suggestions need to be tested for their impact.

Research has found a relationship between work motivation and work content (Janssen *et al*., 1999). Asuggested strategy arising from this finding is to makeelements of the job more challenging and worthwhile through varying tasks, providing more opportunities for autonomy and timely feedback. Job posting, job rotation, career counselling, career development and more comprehensive integrated human resource man-agement programs can also assist with increasing work motivation, and thereby reducing the negative impactof role stress.

A recent theoretical article published by Lambert*et al.* (2003) presented strategies that could be used in the health care environment to enhance the three com- ponents of psychological hardiness (commitment, con- trol and challenge), and thereby reduce the experienceof stress in the workplace. Lambert *et al.* (2003) suggestthat building commitment (defined as a sense of pur-pose and meaning expressed through active involve-ment in life's events [Lambert *et al*., 2003]) may beachieved through the following strategies: revising andrehearsing what you would do the next time the spe-cific stressful event occurs; express yourself directly tothe involved person(s); and rework the situation inyour mind. Building control (tendency for the personto believe and act in a way that influences life's eventsrather than feeling helpless when confronted withadversity (Lambert *et al*., 2003) can be enhanced byseeking more information about the situation; trying toreduce stress (e.g. physical activity);

trying to lighten or brighten the environment; or searching for a philo- sophical and/or spiritual meaning in the stressful expe-rience. Building challenge (belief that change, instead of stability, is normal in life rather than a threat to secu-rity (Lambert *et al*., 2003), can be enhanced by use of interpersonal skills; searching for ways to keep a sense of perspective about the situation; broaden the range of influence and concern beyond the specific work sit-uation; and cultivate an objective, intellectual attitude. Although the framework of psychological hardiness can be applied to role stress in nursing, it needs further empirical testing in terms of stress reduction outcomes.

In their research study of Japanese nurses, Lambert *et al*. (2004) found that there was a positive correlation between physical and mental health. Although causal relationships cannot be demonstrated, their findings lend support for the hypothesis that an increase in workload affects the physical well-being of nurses. They also found that lack of support and the use of escape-avoidance as coping mechanisms were not helpful in terms of maintenance of mental health. This research suggests that contending with stressful events rather than avoiding them and the provision of sup- port within the workplace are important ways of enhancing mental health and therefore coping with role stress.

The obvious strategy of reducing workload by employing more nursing staff is a stop-gap measure lacking sustainability due to the inadequate numbers of staff available to recruit from initially. As mentioned previously in this review, there exists a chronic short-age of nursing staff available to be recruited.

CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

This review has identified multiple factors related to the experience of role stress in nurses. Role stress, in particular, work overload, has been reported as one of the main reasons for nurses leaving the workforce. It is therefore a priority to not only reduce workload by attracting more nursing staff into the workforce, but to find new and innovative ways of supporting nurses in their experience of role stress. Some examples dis- cussed in this article include use of stress education and management strategies to reduce the negative effects of stress; use of team-building strategies, balancing pri- orities, enhancing social support through engaging in social activities and peer support; flexibility in work hours; protocols to deal with violence; strategies to build commitment, control and challenge in the work-place; making elements of the job more challenging and worthwhile through varying tasks, providing more opportunities for autonomy and timely feedback; removing the mandatory age of retirement and encour-aging nurses to continue pursuing further study to prevent a drain of experience from the work.

One of the problems in comparing research on role stress/strain in nurses is the heterogeneity in the mea-sures and methods used, making it difficult to compare findings. Furthermore, most studies rely on self-report measures only. It is recommended that cross-cultural research comparing the experience of role stress in var- ious countries using the same methods and measures be conducted. The authors are part of an international research team currently participating in such research. The research will enable an investigation of demo- graphic, workplace stressors and coping mechanisms used as determinants of physical and mental health, similar to that performed by Lambert *et al*. (2004). This will assist in determining whether different countries are grappling with similar problems with regard to role stress, and whether differences lie in the levels of inten-sity or importance of various contributing factors. The study will also assist in predicting which ways of coping with role stress are most adaptive for RNs from an international perspective and specifically for each country studied.

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