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Sources, coping mechanisms, and consequences of burnout among nurses in Hong Kong public hospitals: implications for human resource management practices

Key Messages

1. Professional recognition and job demands appear to be core issues among nursing professionals. We suggest that the Hospital Authority of Hong Kong (HA) in general and nursing managers in particular focus on career development, performance feedback and performance management.
2. Supervisory support needs to be improved considerably. Unless supervisors show sensitivity to the constraints that the nurses face, the emotional health of nurses will deteriorate.
3. When young and less-experienced nurses have work-related problems, there should be a mentor available who can listen and give advice and direction.
4. In high-pressure working environments (eg A&E, Medicine, etc), the HA may consider establishing 'stress-free' areas for the nurses to retreat to during their breaks, such as rest areas close to work-stations, but far enough away to be free from interruption, to enable the nurse to 'switch off'.

Introduction

Some important consequences of nursing stress are job burnout and withdrawal symptoms manifested as an intention to quit the job. Job burnout is a stress syndrome characterised by emotional exhaustion (depletion of emotional resources), depersonalisation (negative and cynical attitudes towards one's clients), and a diminished sense of personal accomplishment (the tendency to evaluate oneself negatively).^{1,2}

Aims and objectives

The present study aimed to (a) establish baseline data on the magnitude of job burnout among nurses employed by the Hospital Authority of Hong Kong (HA), (b) develop norms for the purpose of diagnosing acute job burnout, (c) identify major sources of stress and their influences on job burnout and intention to quit, and (d) gain insights into the role coping resources play in reducing job burnout.

Methods

This study was conducted from October 1998 to September 2000 in two phases comprising focus group interviews, followed by an extensive questionnaire survey of nursing professionals covering all 43 public hospitals.

Phase I: Focus group interviews

The objectives of the focus group interviews were to understand the phenomenon of job burnout from the perspective of the nursing professionals, examine the relevance of the proposed variables under study, and assemble appropriate survey instruments to launch a large-scale empirical survey.

Focus group interviews were conducted with nurses from each of the nine largest hospital in terms of staff size. The participants were selected by a person in charge in each hospital. The number of participants in each focus group ranged from six to nine. All participants were nurses from different ranks (from enrolled nurses to department operation managers) and different departments. A total of 66 nurses took part.

Phase II: Questionnaire survey

We collected organisational data from the HA concerning such variables as type of hospital, total number of employees, number of nurses, number of beds, and type of work units. The primary data from the nurses were collected through a comprehensive survey questionnaire translated into Chinese and launched in 2000. It contained, among other things, measures of job burnout, intention to quit the job, sources of stress, and coping resources used to combat stressful situations.

Job burnout—the Maslach Burnout Inventory^{1,2} was used to measure three dimensions of job burnout, ie, emotional exhaustion, depersonalisation, and per-

Hong Kong Med J 2006;12 (Suppl 1):S35-8

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Table 1. Normative data on three dimensions of job burnout

Category	Emotional exhaustion	Depersonalisation	Personal accomplishment
No. of scale items	9	5	8
Possible range of scores	0-54	0-30	0-48
Hospital Authority nurses (n=2267)			
Mean	27.46	10.12	29.68
Standard deviation	12.56	7.06	8.12
Coefficient alpha	0.90	0.82	0.78
American nurses and physicians (n=1104) ²			
Mean	22.19	7.12	36.53
Standard deviation	9.53	5.22	7.34
Coefficient alpha	0.90	0.79	0.71

Table 2. Descriptive statistics for perceived sources of stress and coping resources (n=2267)

Category	No. of items	Possible range	Mean	SD	Coefficient alpha
Perceived sources of stress					
1. Lack of professional recognition	9	0-36	18.17	6.15	0.81
2. Patient care responsibilities	6	0-24	15.47	3.69	0.65
3. Professional uncertainty	5	0-20	8.64	3.56	0.76
4. Inter-personal and family conflicts	5	0-20	7.90	3.41	0.71
5. Tensions in work relationships	4	0-16	6.72	3.06	0.73
6. Tensions in nurse and patient relations	3	0-12	5.70	2.70	0.75
7. Role conflict	8	8-56	33.12	9.29	0.85
8. Job demands	7	7-35	26.27	4.69	0.86
Coping resources					
1. Job control	17	17-85	39.00	9.96	0.88
2. Supervisory support	4	4-24	11.69	4.64	0.85
3. Co-worker support	4	4-24	16.72	4.09	0.84
4. Self-efficacy	17	17-119	86.57	13.61	0.87

sonal accomplishment (Table 1). Respondents indicated how frequently they experienced a particular aspect of burnout on a 7-point scale ranging from 0 (never) to 6 (every day). High scores on the subscales of emotional exhaustion and depersonalisation and low scores on the personal accomplishment subscale reflect a high degree of burnout.

Intention to quit—three items measured intention to quit.³⁻⁵ Illustrative items are: “I will probably look for a new job in the coming year”; “I often think of quitting”. Responses were obtained on a 7-point scale ranging from strongly disagree (1) to strongly agree (7). The possible range for scores was 3 to 21.

Reasons for likelihood of quitting—eight items examined the reasons for likelihood of quitting the job. Reasons included marriage, further education, the job itself, immigration, inter-personal relationships, salary and/or benefits, health and retirement. The respondents rated each item on a 7-point scale ranging from 1 (least likely) to 7 (most likely).

Measures of perceived sources of stress—based on the findings obtained from the focus group interviews, we selected and adopted scales from the extant literature and devised some new items for measuring perceived sources of job stress.

Items were selected from the Health Professions Stress Inventory⁶ and Nursing Stress Scale⁷ representing stressors

such as, lack of professional recognition, patient care responsibilities, professional uncertainty, inter-personal and family conflicts, and tensions in work relationships. We further measured tensions in nurse and patient/relative relations. The respondents indicated how often they found each job situation to be stressful on a 5-point scale anchored by 0 (never) and 4 (very often) [Table 2].

We measured role conflict using an eight-item scale.⁸ Similarly, seven items were adopted to measure job demands⁹ (Table 2).

Coping resources—we examined the role of four types of coping resources in the study: (a) job control, (b) supervisory social support, (c) co-worker social support, and (d) self-efficacy. A brief description of each is presented below.

A 17-item scale¹⁰ measured the nurses’ perceptions of control over different facets of their work environment, including control over the variety of tasks performed, the pace of task performance, the policies and procedures, the amount of resources, scheduling of rest breaks, the time for and amount of inter-personal interaction at work, the physical conditions, etc. The respondents were asked to indicate how much control they had on each aspect on a 5-point scale (Table 2).

We measured two aspects of social support, ie, supervisory and co-worker support, using 4-item scales.¹¹

An illustrative item is: "To what extent are the following groups of people reliable when things get tough at work? (a) your supervisor(s), (b) your co-worker(s)". Responses were obtained on a 6-point scale anchored by 1 (never) and 6 (very great). Similarly, we used the General Self-efficacy Scale¹² consisting of 6 positively worded and 11 negatively worded items. Responses were obtained on a 7-point scale anchored by 1 (strongly disagree) and 7 (strongly agree). Scores on the negatively worded items were reverse coded for the purpose of analysis (Table 2).

Sample selection

We sought the assistance of the Operations and Human Resource Division of the HA to draw a random sample of 9380 nurses from all 43 public hospitals, representing over 50% of the total nursing population. From the selected nurses, 2267 returned usable questionnaires, generating a response rate of 24.2%.

Results

Table 1 contains normative data on the three dimensions of job burnout. Nursing professionals employed by the HA obtained higher scores on emotional exhaustion and depersonalisation and lower scores on personal accomplishment compared with American nurses and physicians.² In particular, emotional exhaustion, the core of job burnout appeared to be widespread, especially in its aspects of physical fatigue and chronic stress.

Certain areas of work can be clearly designated as highly stressful, eg A&E, medicine, community nursing service, orthopaedics and traumatology, extended care, and oncology. Interestingly, nurses in intensive care units scored lower than the overall mean score on emotional exhaustion.

Using Hong Kong norms developed in this study, the registered nurses showed above-average scores on emotional exhaustion, as did younger and less-experienced nurses. The same groups of nurses had also higher intention to quit the job. The major reasons for the likelihood of quitting the job were health, retirement, and the job itself. Retirement was of greater concern to older nurses and those with administrative responsibilities and health and the job itself were of greater concern to registered and younger nurses and those with less experience.

Table 2 presents descriptive statistics for perceived sources of stress and coping resources. Results obtained from regression analyses showed that all the perceived sources of stress had significant effects on one or more outcome variables, ie, emotional exhaustion, depersonalisation, personal accomplishment, and intention to quit. Several of these sources of stress were also reported by the focus groups.

Lack of professional recognition and job demands were the key sources of stress as they had significant effects on

all three dimensions of job burnout and intention to quit. These were followed by professional uncertainty and inter-personal and family conflicts, which showed positive effects on emotional exhaustion and depersonalisation. Role conflict had a positive effect only on depersonalisation.

Self-efficacy appeared to be the most effective coping resource as it had significant negative effects on emotional exhaustion, intention to quit, and depersonalisation and a positive effect on personal accomplishment. The nurses had a good measure of self-confidence and belief in their capabilities. Job control contributed positively only to personal accomplishment.

Co-worker support significantly increased the sense of personal accomplishment while supervisory support reduced emotional exhaustion and intention to quit. The nurses enjoyed a good deal of social support from co-workers while supervisory support was perceived to be deficient especially in the areas of comfort in talking to supervisors and the supervisors' willingness to listen.

Discussion

This study established baseline data on the magnitude of job burnout among nursing professionals employed by the HA. As these data were obtained from a large-scale survey, they may be useful as reference points in future small-scale diagnostic surveys of job burnout among individual nurses and potentially stressful work units. However, the low response rate may limit the overall applicability of these data.

Our findings suggest that registered nurses as well as younger and less-experienced nurses should be the prime targets in any organisational intervention dealing with job burnout and employee retention. This is because these groups of nurses had above-average scores on both emotional exhaustion and intention to quit. Nurses looking for new jobs may experience greater stress on account of being unable to leave under conditions of poor job availability.

Professional recognition and job demands are two key sources of job burnout and intention to quit. These sources of stress require the attention of both line managers and the Human Resource Division by focusing on the issues of career development, performance feedback, and performance management. Supervisors can help reduce emotional exhaustion among nurses by making greater effort to be approachable to them and be willing to listen to their problems.

Belief in one's capabilities to meet given situational demands were widely held by the nursing professionals. These beliefs signify self-efficacy that enhanced their emotional resilience, sense of accomplishment, and intention to remain in the job. The HA may further foster

and sustain these beliefs by providing opportunities for continuous professional self-development to the nurses.

Conclusions

Attempts to deal with the sources of stress and their consequences need to be made at individual, inter-personal, and organisational levels. At an individual level, nurses may continue to develop self-efficacy through professional training and continuing education. At an inter-personal level, social support from co-workers should be sustained at the current levels. Organisationally, there is clear need for promoting nurses' emotional well-being through professional recognition, work reorganisation, and supervisory support. It is in the best interests of both parties to take reasonable steps to create a healthy working environment.

Acknowledgements

This study was supported by the Health Care and Promotion Fund (#278108). We thank our collaborators from the HA, Dr Kathleen So, JP, Deputy Director (Operations & Human Resources Division); Ms Susie Lum, Senior Executive Manager (Nursing); Ms Joyce Leung, Co-ordinator (Staff & Organization Development); and Mr Daniel Lo, Manager (Nursing). We thank the focus group participants who shared their views and the numerous

nursing professionals who spent time completing the survey questionnaire.

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