# THE RELATIONSHIP BETWEEN BURNOUT AND JOB SATISFACTION AMONG REGISTERED NURSES AT AN ACADEMIC HOSPITAL IN JOHANNESBURG, SOUTH AFRICA

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#### **ABSTRACT**

Rationalisation and deployment have become features of organisational restructuring in South African academic hospitals, and might be sources of dissatisfaction and stress among nurses. Job satisfaction levels and work-related burnout are important determinants of nurses' retention and turnover rates and might adversely affect their work performance and the quality of nursing care rendered. The purpose of this study was to determine registered nurses' (RNs) satisfaction with factors in their work environment and whether these correlated with burnout experiences.

Quantitative data were collected from a random sample of RNs (N=165), using a Job Satisfaction Scale and the Maslach Burnout Inventory (MBI). Data were analysed using Chi-square ( $X^2$ ) and Fisher's Exact tests to determine the significance (at 0.05) of associations between job satisfaction variables and the dimensions of burnout, namely, emotional exhaustion, depersonalisation and personal accomplishment.

Most RNs reported low levels of satisfaction with both extrinsic and intrinsic job factors. Levels of emotional exhaustion were moderate to high (75.8%) with correspondingly high levels of depersonalisation (71.5%). Despite these findings, high levels of personal accomplishment were reported by most RNs (77.0%).

There was a significant, inverse relationship between job satisfaction and two dimensions of burnout: emotional exhaustion and depersonalisation. Despite low satisfaction levels and some degree of burnout, the majority of RNs derived a sense of personal accomplishment from their jobs. Specific measures should be explored and implemented to improve nurses' physical work

conditions, industrial relations, institutional management, promotion opportunities and recognition for good work to enhance nurses' levels of job satisfaction, and possibly also nurses' retention rates.

**KEYWORDS:** burnout among nurses, emotional exhaustion among nurses, nurses' depersonalisation experiences, nurses' feelings of personal accomplishment nurses' job satisfaction levels

## INTRODUCTION

Various factors in organisations and work environments contribute to employee dissatisfaction. Organisational change, through restructuring and transformation, impacts on employees' work environments. Such factors in the workplace include rationalisation, cost containment strategies, diminishing resources and increasing responsibilities. As a consequence, nurses may experience dissatisfaction and stress, which in a cyclical manner, is followed by their inability to respond appropriately to organisational change.

In the academic hospital which was the setting for this study, rationalisation and deployment were important features of organisational restructuring and transformation. Nurses were deployed to work in other hospitals or community health clinics/centres, without regard for their preferences. Nurses also became more uncertain about their roles in public hospitals, resulting in poor quality of work life, increased work stress, job dissatisfaction, high burnout levels and the propensity to leave the profession. Job satisfaction and work- related stress are important determinants of nurses' retention rates and might affect their work performance.

Factors in the work environment that threaten the quality of care are potentially serious and should be prevented. However, not enough is known about aspects of nurses' work environment that might contribute to stress and burnout. The study sought to investigate registered nurses' (RNs) satisfaction with several aspects of their work environment and their correlations with burnout.

#### LITERATURE REVIEW

Job satisfaction is described as the degree of positive, affective orientation towards a job (Abushaikha & Saca-Hazboun, 2009:191). Job satisfaction in the current study was approached from the seminal work of Herzberg (Sachau, 2007:377) that proposes the two-factor Herzberg's theory. This theory posits that job satisfaction and dissatisfaction stem from two types of needs. The first type of 'motivators' or intrinsic factors are needs-related to the nature and challenge of the work itself. Some intrinsic factors include the work itself, recognition, growth, responsibility and advancement. Job satisfaction may also be influenced by promotion, potential mobility, autonomy, characteristics of the job itself and relationships within the organisation (Loke, 2001:193).

The second type of needs are called the 'hygiene factors' or extrinsic factors that relate to the physical and psychological environment in which the work is performed. Examples of extrinsic factors include the policies of the institution (hospital), supervision, interpersonal relationships, working conditions and job security. According to Herzberg's theory, if these factors are not present at acceptable levels, it could lead to nurses' dissatisfaction.

Maslach, Schaufeli and Leiter (2001:397) describe burnout as a prolonged response to chronic emotional and interpersonal stressors on the job; it is a common metaphor for a state of extreme work-related mental exhaustion. Nurses, who are in the human or health service industry, are particularly at risk of developing burnout. Aiken, Clarke, Sloane, Sochalski and Silber (2002:1988) caution against the worsening problems of burnout among hospital nurses and the resulting lack of safety for their patients. Such nurses are indifferent towards their work and are unable to provide quality nursing care in a consistently caring manner. While these nurses might still feel concerned about others, they can no longer give of themselves as they did formerly (Kent & Lavery, 2007:2). Burnout and job satisfaction are thus inextricably linked.

Burnout is measured on the basis of Maslach's Burnout Inventory (MBI), which is recognised as the leading measure of burnout (Beckstead, 2002:785; Halbesleben & Buckley, 2004:861). The MBI has three subscales designed to measure individuals' burnout levels as indicated by their levels of emotional exhaustion, depersonalisation and personal accomplishment. The theory underpinning the MBI predicts that people experiencing burnout would be dissatisfied with opportunities for personal growth and development on the job. It further predicts that burnout would be related to people's desire to leave their job; thus, preventing and reducing burnout amongst nurses is important for enhancing retention of nurses. The Emotional Exhaustion (EE) subscale is used to describe people's feelings of being emotionally overextended and exhausted by their work. The original work of Maslach (Kent & Lavery, 2007:2; Halbesleben & Buckley, 2004:859) reported that nurses who are emotionally exhausted, lack the resources to adapt to job demands and cannot give of themselves.

Depersonalisation (Dp) is used to describe employees' detachment from their job and the development of uncaring and impersonal responses toward recipients of their care or service (Halbesleben & Buckley, 2004:860). Higher mean scores for emotional exhaustion and depersonalisation usually correspond with higher levels of burnout. Personal Accomplishment (PA) refers to people's feelings of competence and successful achievement in their job. Individuals with reduced PA tend to evaluate themselves negatively (Kent & Lavery, 2007:2) and are not on good terms with their co-workers.

A study by Kaliath and Morris (2002:650) investigated job satisfaction and burnout among RNs in a general community hospital in the Midwestern United States (US). The

results indicated that in a stressful work environment, higher levels of job satisfaction might reduce levels of burnout among employees. They also found that higher levels of job satisfaction might protect employees from extreme psychological strain induced by experiencing burnout. RNs could react to environmental factors such as excessive workload, budget cuts and organisational restructuring, by not caring about others. The meaning of work diminishes due to self-care deficits, which will be shown by lack of emotional development and physical well-being, followed by powerlessness and loss of purpose.

In a study of hospitals in the Gauteng Province of South Africa, Cilliers (2003:62) reported an overall significant negative correlation between burnout and salutogenic functioning. Emotional exhaustion and depersonalisation both correlated negatively with all the salutogenic dimensions of sense of coherence, hardiness and learned resourcefulness. PA correlated positively with all the salutogenic dimensions. Strong links exist between stress, job satisfaction and various dimensions of burnout. Variations in the strength and direction of such links are determined by organisational structure, transformation, staff changes and staff dynamics, determining the type of environment in which nurses work.

## **PROBLEM STATEMENT**

Job satisfaction levels and work-related burnout are important determinants of RNs' retention and turnover, and may affect their work performance. Factors in the work environment that threaten the quality of care are potentially serious and worthy of being prevented. Reported observations suggest that RNs do not render quality nursing care and that the high levels of job dissatisfaction (Selebi & Minnaar, 2007:57) and burnout experienced by RNs might be contributory factors. However, not enough is known about certain aspects of RNs' work environment that might contribute to burnout and job dissatisfaction. The questions this study addressed were: 'What are the levels of burnout amongst RNs?' and 'To what extent does burnout correlate with their job satisfaction levels?'

## **PURPOSE AND OBJECTIVES**

The purpose of the study was to determine whether relationships existed between RNs' levels of job satisfaction and the dimensions of burnout at an academic hospital in Johannesburg, South Africa. It was assumed that there would be a relationship between burnout and job satisfaction; higher levels of job satisfaction should predict lower levels of burnout. The objectives were to determine:

- the level of extrinsic and intrinsic job satisfaction among RNs using a job satisfaction scale
- RNs' burnout levels as indicated by emotional exhaustion, depersonalisation and personal accomplishment using the MBI
- whether the development of depersonalisation is related to RNs' experiences of emotional exhaustion
- whether there was an association between the dimensions of burnout and RNs' extrinsic and intrinsic job satisfaction levels.

## **RESEARCH DESIGN AND METHODS**

A quantitative, descriptive survey was used to identify RNs' job satisfaction levels and to determine whether any relationship existed between job satisfaction and burnout. The study population comprised all RNs at one academic hospital in Johannesburg (N = 680). Simple random sampling, by way of the fishbowl technique, was used to obtain a sample of 200 RNs from day and night duty schedules, constituting the sampling frame. A total of 165 RNs met the inclusion criteria of being permanently employed at the hospital with at least five years' clinical experience.

## **Data collection instruments**

A self-administered questionnaire was used to collect data during June 2007. The questionnaire comprised three parts, namely: a demographic data sheet for respondents' gender, age, years of experience and job category; the Job Satisfaction Scale; and the MBI.

## **Job Satisfaction Scale**

The 15-item Job Satisfaction Scale (JSS) of Warr, Cook and Wall (Stride, Wall & Catley, 2007:17; Onyett, Rees, Borrill, Shapiro & Boldison, 2009:6) comprises two subscales. The extrinsic satisfaction sub-scale contains eight items, namely: 'the physical work conditions, hours of work, your immediate boss, your fellow workers, the industrial relations between management and workers in your institution, the way your institution is managed, your job security and your rate of pay'. The intrinsic satisfaction sub-scale contains seven items, namely: 'the freedom to choose your own method of working, the amount of variety in your job, the attention paid to suggestions you make, your chance of promotion, the recognition you get for good work, the amount of responsibility given and the opportunity to use your abilities'. RNs indicated their level of satisfaction on a 7-point Likert scale, ranging from extremely dissatisfied to extremely satisfied.

# **Maslach Burnout Inventory**

The 22-item MBI assesses burnout on the following three dimensions: emotional exhaustion, depersonalisation and personal accomplishment. The Emotional Exhaustion (EE) subscale, which has nine items, measures feelings of being emotionally overextended by one's work; Depersonalisation (Dp) has five items that assess unfeeling and impersonal responses towards patients in one's care; the Personal Accomplishment (PA) subscale has eight items that measure feelings of competence and achievement in one's work. RNs rated the frequency of experiencing feelings related to each subscale using a 7-point scale with descriptors as follows: 0 = never; 1 = a few times per year or less; 2 = once a month or less; 3 = a few times a month; 4 = once a week; 5 = a few times a week; and 6 = every day.

# Reliability and validity

The JSS is reported (Stride et al., 2007:16) to be highly reliable with a Cronbach's Alpha score of 0.85 and 0.88 for the intrinsic and extrinsic subscales respectively. This scale has also been shown to be valid for occupational groups of managers, doctors, nurses and allied medical professionals (Stride et al., 2007:9).

Original research during the 1990s reported internal consistency estimates of 0.90, 0.79 and 0.71 for the emotional exhaustion, depersonalisation, and personal accomplishment subscales, respectively (Hastings, Horne & Mitchell, 2004:268). Factorial validity of the MBI was supported by confirmatory factor analysis (Beckstead, 2002:785) and exploratory and confirmatory factor analysis, which supported a three-factor model (Worley, Vassar, Wheeler & Barnes, 2008:797). A pre-test was conducted on nine respondents from the same population. The questionnaire took between 20–30 minutes to complete; respondents did not find any difficulty with the terminology used.

# Data analysis

Moonstats and Statistical Analysis Software (SAS) were used to summarise and present the data. Chi-square ( $X^2$ ) and Fisher's Exact tests were used to test for significance of associations between job satisfaction variables and the dimensions of burnout. Testing was done at a 0.05 level of significance.

The job satisfaction questionnaire was analysed according to intrinsic and extrinsic variables to identify any association between selected demographic variables. Responses to intrinsic variables were considered as 'dissatisfied' if between 7 and 14; 'indifferent' if between 15 and 35; and 'satisfied' if between 36 and 49. Responses to extrinsic variables were considered as 'dissatisfied' if between 8 and 16; 'indifferent' if between 17 and 40; and 'satisfied' if between 41 and 54.

In the MBI subscales, EE was considered low if between 9 and 18; moderate if between 19 and 45; and high if between 46 and 63. Dp was considered low if between 5 and 10; moderate if between 11 and 25; and high if between 26 and 35. PA was considered low if between 41 and 56; moderate if between 17 and 40; and high if between 8 and 16.

## **ETHICAL CONSIDERATIONS**

The study commenced after approval and ethical clearance had been granted by the respective university committees. Written permission was obtained from the Head of the Gauteng Department of Health (DoH). Verbal permission was obtained from the Chief Executive Officer of the hospital after receiving the letter from the DoH. Those RNs who were selected for the study were informed about the study. An information sheet explaining the purpose of the study enabled informed, written consent to be obtained from each respondent. With respect to the rights of respondents, RNs could exercise their right not to participate or to withdraw from the study without incurring any penalty. To ensure anonymity and privacy, codes instead of respondents' names were used on the questionnaires. Respondents were assured about anonymity and confidentiality of all information.

## **RESULTS**

Most respondents (97.6 %; n = 161) were females; 43.6% (n = 72) fell within the age group of 36–45 years; and 22.4% (n = 37) were older than 45 years. Of the respondents, 55.2% (n = 91) had 6–15 years' work experience; and 21.8% (n = 36) had work experience of 16–25 years. As many as 76 (46.1%) respondents were chief professional nurses (CPNs) while 43 (26.1%) were senior professional nurses (SPNs) and 46 (27.9%) were professional nurses (PNs), as shown in table 1.

<b>Table 1:</b> Demographic profile of the respondents (n =
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Demographic variable	Frequency	Percentage
Gender		
Female	161	97.6
Male	4	2.4
Age		
26-35 yrs	56	33.9
36-45 yrs	72	43.6
46-55 yrs	32	19.4
> 55 yrs	5	3.0
Work Experience	•	,

5yrs	26	15.8
6-15 yrs	91	55.2
16-25 yrs	36	21.8
> 25 yrs	12	7.3
Job Category		,
Professional nurse	46	27.9
Senior professional nurse	43	26.1
Chief professional nurse	76	46.1

#### Job satisfaction

Extrinsic job satisfaction was low with 34.6% (n = 57) of the respondents expressing their satisfaction with extrinsic job factors. RNs were dissatisfied with their rate of pay (70.9%; n = 117) and to a lesser extent, their physical work conditions (38.8%; n = 64), and issues with management (40.0%; n = 66). However, 58.8% (n = 97) were indifferent (see table 2). The Fisher's Exact test (for age) and Chi-square test (for experience and job category) were used to determine whether a relationship existed between demographic variables and extrinsic job satisfaction. The results showed no significant relationship between extrinsic job satisfaction and age (p = 0.3930), extrinsic job satisfaction and work experience (df = 6;  $X^2 = 3.5101$ ; p = 0.7426) and extrinsic job satisfaction and job category (df = 4;  $X^2 = 1.8174$ ; p = 0.7693).

With reference to intrinsic factors, RNs were equally dissatisfied with their chances of promotion (58.8%; n = 97) and recognition for good work (58.8%; n = 97), but some RNs (56.36%; n = 93) were indifferent. Results of the Fisher's Exact and Chi-square tests showed that the relationship between respondents' age (p = 0.5399), their work experience (df = 6;  $X^2 = 4.9304$ ; p = 0.5528), their job category (df = 4;  $X^2 = 3.4327$ ; p = 0.4882) and their levels of satisfaction with intrinsic factors was not statistically significant.

**Table 2:** Extrinsic and intrinsic job satisfaction item responses (n = 165)

Extrinsic factor	Dissatisfied	Indifferent	Satisfied
Item 1. The physical work condition	38.8	30.3	30.9
Item 3. Your hours of work	20.0	26.1	53.9
Item 5. Your immediate boss	23.0	23.0	53.9
Item 6. Your fellow workers	9.1	21.2	69.7
Item 8. Industrial relations between management and workers	40.0	40.6	19.39

Item 9. The way your institution is managed	40.6	33.3	26.1
Item 10. Your job security	20.6	28.5	50.9
Item 12. Your rate of pay	70.9	22.4	6.7
Item 2. The freedom to choose your own method of working	31.5	32.1	36.4
Item 4. The amount of variety in your work	27.9	27.9	44.2
Item 7. The attention paid to suggestions you make	28.5	38.2	33.3
Item 11. Your chances of promotion	58.8	24.8	16.4
Item 13. The recognition you get for good work	58.8	25.5	15.8
Item 14. The amount of responsibility you are given	31.5	29.7	38.8
Item 15. Your opportunities to use your abilities	23.6	35.8	40.6

## Levels of burnout

## Emotional exhaustion

Most RNs (75.8%; n = 125) reported moderate to high levels of EE. Of the 40 RNs who reported low EE, 60.0% (n = 24) were satisfied with the extrinsic factors in their work environment. However, some RNs who experienced moderate to high levels of EE, were indifferent to the extrinsic factors (64.3%; n = 106 and 66.7%; n = 119 respectively) (see table 3). The results showed a significant relationship between RNs' emotional exhaustion and extrinsic job satisfaction levels (df = 4;  $X^2 = 28.2507$ ; p < 0.0001).

Of those RNs (n = 40) who reported low levels of EE, 55.0% (n = 22) were satisfied with the intrinsic factors. Of the 98 RNs who reported moderate levels of EE, 65.6% (n = 61) were indifferent to the intrinsic factors, so too were the RNs (n = 27) who reported high levels of EE (55.6%; n = 15). There was a significant relationship between EE and intrinsic job satisfaction (df = 4;  $X^2 = 26.4825$ ; p < 0.0001).

In the CPN category, 80.3% (n = 61) reported moderate to high levels of EE. Similar high levels of EE were also reported by PNs (71.7%; n = 33) and SPNs (72.1%; n = 31). However, there was no significant association between EE and job category (df = 4 and p = 0.7200).

**Table 3:** Association between EE and extrinsic and intrinsic job factors (n = 165)

EXTRINSIC					INTRINSIC				
EE	Dissatis- fied (n) %	Indif- ferent (n) %	Satis- fied (n) %	Total (n) %	EE	Dissatis- fied (n) %	Indif- ferent (n) %	Satis- fied (n) %	Total (n) %
Low	0	16	24	40	Low	1	17	22	40
	0	9.7	14.6	24.3	1	0.6	10.3	13.3	24.2
	0	40	60			2.5	42.5	55	
	0	16.5	42.1			3.9	18.3	47.8	
Mode-	5	63	30	98	Mode- rate	16	61	21	98
rate	3	38.2	18.2	59.4		9.7	37	12.7	59.4
	5.1	64.3	30.6			16.3	62.2	21.4	
	45.5	65	52.6			61.5	65.6	45.6	
High	6	18	3	27	High	9	15	3	27
	3.6	10.9	1.8	16.4		5.5	9.1	1.8	16.4
	22.2	66.7	11.1			33.3	55.6	11.1	
	54.6	18.6	5.3		1	34.6	16.1	6.52	
Total	11 6.7	97 58.8	57 34.6	165 100	Total	26 15.8	93 56.4	46 27.88	165 100

# **Depersonalisation**

Most RNs (71.5%; n = 118) reported moderate to high levels of depersonalisation (see table 4). Since emotional exhaustion is derived from undue demands from people and can cause individuals to disconnect from the needs of others, it was important to test for an association between emotional exhaustion and depersonalisation. Of those RNs (n = 40) who reported low levels of EE, 55.0% (n = 22) also reported corresponding low levels of Dp. The RNs (n = 125) who reported moderate to high levels of EE, reported similar levels of corresponding moderate Dp (76.5%; n = 96 and 74.1%; n = 92 respectively). The Chi-square test showed a significant relationship between EE and Dp (df = 4;  $X^2 = 44.7755$ ; p < 0001).

**Table 4:** Association Dp and extrinsic and intrinsic job factors

EXTRINSIC					INTRINSIC				
Dp	Dissatis- fied (n) %	Indif- ferent (n) %	Satis- fied (n) %	Total (n) %	Dp	Dissatis- fied (n) %	Indif- ferent (n) %	Satis- fied (n) %	Total (n) %
Low	2	20	25	47	Low	3	27	17	47
	1.2	12.1	15.2	28.5		1.8	16.4	10.3	28.5
	4.3	42.6	53.2			6.4	57.5	36.2	
	18.2	20.6	43.9		1	11.54	29	37	
Mod-	8	73	32	113	Moder- ate	21	63	29	113
erate	4.9	44.2	19.4	68.5		12.7	38.2	17.6	68.5
	7.1	64.6	28.3			18.6	55.8	25.7	
	72.7	75.3	56.1			80.8	67.7	63	
High	1	4	0	5	High	2	3	0	5
	0.6	2.4	0	3	-	1.2	1.8	0	3
	20	80	0			40	60	0	
	9.1	4.1	0			7.7	3.2	0	
Total	11 6.7	97 58.8	57 34.6	165 100	Total	26 15.8	93 56.4	46 27.9	165 100

# **Personal Accomplishment**

Of those RNs (n = 47) who experienced low levels of Dp, 53.2% (n = 25) were satisfied with the extrinsic factors; those who experienced moderate to high levels of Dp (n = 118) were either indifferent towards the extrinsic factors (46.7%; n = 77) or to a limited extent, dissatisfied with them (5.5%; n = 9). The result showed a significant relationship between Dp and extrinsic job satisfaction (p = 0.0083). Of those RNs (n = 118) who reportedly experienced moderate to high levels of depersonalisation, 55.9% (n = 66) were either indifferent towards or dissatisfied with (19.5%; n = 23) the intrinsic job satisfaction factors, which was not significant (p = 0.0734).

Some PNs (65.2%; n = 30) and CPNs (76.3%; n = 58) reported moderate to high levels of Dp. In the SPN category there were no reports of high levels of Dp, whereas 69.8% (n = 30) reported moderate levels of depersonalisation. There was no significant association between depersonalisation and job category (df = 4; p = 0.4560).

Of the RNs, 77.0% (n = 127) reported high levels of personal accomplishment (PA); 59.1% (n = 75) of these RNs were indifferent towards extrinsic factors and 34.7% (n = 44) were satisfied with the extrinsic job factors (see table 5). Fisher's Exact test showed no significant relationship between PA and extrinsic job satisfaction (p = 0.1977).

Even though the majority of RNs felt they had accomplished on a personal level, 55.9% (n = 71) were indifferent towards the intrinsic job factors and only 29.9% (n = 38) were satisfied with them. The relationship between personal accomplishment and intrinsic job satisfaction was not statistically significant (p = 0.2599).

Table 5: Association between PA and extrinsic and intrinsic job factors

EXTRINSIC				INTRINSIC					
PA	Dissatis- fied (n) %	Indif- ferent (n) %	Satis- fied (n) %	Total (n) %	PA	Dissatis- fied (n) %	Indif- ferent (n) %	Satis- fied (n) %	Total (n) %
High	8	75	44	127	High	18	71	38	127
	4.9	45.5	26.7	77		10.9	43	23	77
	6.3	59.1	34.7			14.2	55.9	29.9	
	72.7	77.3	77.2			69.2	76.3	82.6	
Moder-	2	22	13	37	Moder- ate	7	22	8	37
ate	1.2	13.3	7.9	22.4		4.2	13.3	4.9	22.4
	5.4	59.5	35.1			18.9	59.5	21.6	
	18.2	22.7	22.8			26.9	23.7	17.4	
Low	1	0	0	1	Low	1	0	0	1
	0.6	0	0	0.6		0.6	0	0	0.6
	100	0	0			100	0	0	
	9.09	0	0			3.9	0	0	
Total	11 6.67	97 58.79	57 34.55	165 100	Total	26 15.76	93 56.36	46 27.88	165 100

## **DISCUSSION OF RESULTS**

RNs reported extrinsic job satisfaction in respect of their hours of work (53.9%), their immediate supervisor (53.9%) and their fellow workers (69.7%). The latter is congruent with the findings of Selebi and Minnaar (2007:53), that nurses were generally satisfied with their fellow workers. However, Kekana, Du Rand and Van Wyk (2007:31) reported that 62.0% of nurses were dissatisfied with their immediate supervisors. In a Middle Eastern study, Abushaikha and Saca-Hazboun (2009:196) found that, despite turmoil and organisational uncertainties, nurses benefited from positive aspects such as being content with their daily professional responsibilities and having good relations with their peers and supervisors. Breier, Wildschut and Mgqolozana (2009:97–102) found that South African nurses were concerned about deteriorating relationships between themselves and doctors and between students and staff

Nurses reported dissatisfaction with extrinsic factors, namely their physical work conditions (38.8%), industrial relations between management and themselves (40.0%), while most (70.9%) were dissatisfied with their salaries. South African studies (Uys, Minnaar, Reid & Naidoo, 2004:52; Kekana et al., 2007:31) reported that nurses were mostly dissatisfied with their pay and workload. Uys et al. (2004:52) concluded that South African nurses' salaries were not attractive. Although pay is an important dimension of job satisfaction it is least influenced by the organisational structure (Willem, Buelens & De Jonghe, 2007:1017) and changes within it. Satisfaction with pay is thus unrelated to factors that influence the stability of the institution.

In the current study, RNs were equally dissatisfied with intrinsic job factors, such as promotion opportunities (58.8%) and recognition for good work (58.8%). These findings are similar to those of Selebi and Minnaar (2007:55), which showed that nurses were dissatisfied with promotion opportunities and recognition received from their institutions. Minnaar (2003:40) showed that support needs, recognition and concerns of nurses were not met. It may be concluded that if the employer or management increases efforts to acknowledge nurses for work well done, their satisfaction with these intrinsic factors might be enhanced.

Most RNs (75.8%) experienced moderate to high levels of EE, expressed as feelings of being overwhelmed by their job demands. Job satisfaction is linked to high levels of stress, mental and physical exhaustion and high workloads (Aiken et al., 2002:1990). Variables that predict emotional exhaustion are mostly intrinsic factors (Bilge, 2006:1151). In the current study, however, satisfaction with both extrinsic and intrinsic job factors was significantly and inversely related to emotional exhaustion. RNs who experienced low levels of job satisfaction were thus more likely to experience EE. RNs' age, job category and years of experience did not significantly influence their level of EE (p = 0.594).

RNs who reported moderate to high levels of EE also reported corresponding levels of Dp. These findings concur with those of Kaliath and Morris (2002:648) who found that EE has a direct effect on Dp and that it increases in persons with low job satisfaction. Doctors and nurses were found to be particularly susceptible to high levels of EE (Grau, Suner & Garcia, 2005:464) and Dp (Willem et al., 2007:1011). Poor promotion prospects were reported to cause high levels of EE and Dp in nurses who experience effort-reward imbalance. Given that close to 60% of RNs in this study reported poor promotion opportunities and over 70% reported dissatisfaction with their rate of pay, it could be concluded that low satisfaction with these extrinsic job factors might influence RNs' feelings of Dp in their daily interactions with others.

RNs (71.5%) with moderate to high levels of Dp were mostly indifferent to extrinsic factors or to a lesser extent dissatisfied with them. Uncaring, impersonal feelings,

already induced by high Dp, might explain why RNs expressed apathy or indifference to factors in their work environment. RNs' moderate sense of job satisfaction might be attributed to low Dp (Abushaikha & Saca-Hazboun, 2009:195). Factors associated with high levels of Dp include low self-worth and low self-esteem and demographic characteristics such as years in the profession. In the current study, no significant association was found between Dp and RNs' age, years of experience and job category.

Most RNs (77.0%) felt that they were accomplished on a personal level. This was despite reported low levels of job satisfaction and significant associations between job satisfaction and their levels of EE and Dp. Personal accomplishment is described as the feeling of competence and successful achievement when working with others (Kent & Lavery, 2007:2). Since the RNs in the study felt satisfied with their supervisory relationships and their fellow workers, these relationships might have contributed to their sense of successful job achievement; the variety of their work and the opportunity to use their abilities were also satisfying to RNs, as increasing levels of competence and confidence are both parameters of personal accomplishment. However, the relationship between RNs' levels of personal accomplishment and their satisfaction with extrinsic and intrinsic factors in their work environment was not statistically significant. It is therefore likely that increasing stress in the work environment might diminish the usefulness and success of RNs' work, thus leading to decreased personal accomplishment (Grau et al., 2005:463). Some RNs with high levels of personal accomplishment were also indifferent to extrinsic (59.1%) and intrinsic (55.9%) job factors and this may point to their low importance in RNs' feelings of personal accomplishment.

## CONCLUSIONS

The significant, inverse relationship between RNs' job satisfaction with their levels of EE and Dp in an academic hospital requires action. When job satisfaction factors are in place, RNs' levels of EE and Dp will be lower and the quality of patient care might improve. Despite high levels of burnout, RNs enjoyed their professional responsibility, the opportunity to use their skills and the variety of nursing work. To these nurses, nursing is thus satisfying and personally rewarding, as reflected in their high personal accomplishment scores.

## RECOMMENDATIONS

It is recommended that specific measures be explored and implemented to improve RNs' physical work conditions, industrial relations, institutional management, promotion opportunities and recognition for good work. At the time of the current study, it was recommended that remuneration for RNs be investigated at a national level since over 70% of nurses were dissatisfied with their rate of pay. Since then, the Occupation

Specific Dispensation (OSD) policy has been implemented for improved remuneration. Research to determine whether OSD has had any influence on RNs' job satisfaction is thus a recommendation. It is also recommended that a qualitative study be conducted to solicit more in-depth and richer data for a better understanding of RNs' job satisfaction and their experiences of burnout.

## **LIMITATIONS**

Only one academic hospital was studied; thus the findings cannot be generalised to other workplace settings of RNs. Because of the limited sample size, the findings are not generalisable to other academic hospitals.

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