

Keys to Job Satisfaction of Nursing Officers in Government Hospitals

*Sathasivam Sridharan
Uditha Liyanage
Shirani Champika Wickramasinghe*

Abstract

Staff-perceived quality of care is influenced by staff job satisfaction. Employee perceptions of the working environment have a positive impact on customer-perceived service quality in health care service. Such impact is particularly important in government hospitals, where patients have a long-term relationship with staff, and could be vulnerable to poor quality of care. In any type of hospital, nursing personnel constitute the largest proportion of the hospital staff. For this reason alone, priority for the study of nurses could be justified. It is important to find out whether the environment of an organization (Central Ministry and Provincial Ministry hospitals) plays an important role in determining the job satisfaction of Nursing Officers.

This is a hospital-based descriptive, cross-sectional study carried out in selected hospitals in the Western Province. All four Central Ministry Hospitals with medical wards were selected for the study. Four hospitals under the Provincial Ministry of Health were selected randomly. The main study unit was a female Nursing Officer working in a medical ward of a selected hospital in the Western Province. Accordingly, a sample of 170 Nursing Officers was selected from Central Ministry and Provincial Ministry hospitals. . The data was collected using a self-administered questionnaire, that was adopted from an instrument developed by Traynor & Wade, to measure Job Satisfaction of Nursing Officers in the United Kingdom.

Dr. Sathasivam Sridharan is Registrar, (Medical Administration), at the Castle Street Hospital for Women (Teaching), Colombo 08.

Dr. Uditha Liyanage is Director, Postgraduate Institute of Management (PIM). He is also a leading consultant and developer of managers, and sits on the boards of a number of leading companies.

Dr. (Mrs) Shirani Champika Wickramasinghe is Director / International Health at the Ministry of Healthcare and Nutrition, Colombo 10.

The study illustrates that there is a significant difference in the job satisfaction of Nursing Officers between Central Ministry hospitals and Provincial Ministry hospitals. Job satisfaction of Nursing Officers working in Central Ministry Hospitals has a higher mean score (3.53 ± 0.59) than those working in Provincial Ministry Hospitals (3.31 ± 0.64). This study identified workload, professional support, training received, and working conditions as the main factors that influence job satisfaction among Nursing Officers. Of these, professional support influenced job satisfaction most, while this study revealed that opportunities for career development had no influence on their job satisfaction.

It is evident from the study that the independent variables considered in this study explained approximately forty percent of job satisfaction. Therefore, it is necessary to further research those other factors that influence job satisfaction. Recommendations are made according to the findings of the study in order to enhance the job satisfaction level of Nursing Officers in government hospitals.

1. Introduction

The Sri Lankan health care system is experiencing major changes, notably in its levels of quality and safety in health care systems, within its limited resources. In the recently held WHO's South East Asian Summit, the Organization stated that Sri Lanka has set an example for all other regions with its excellence in the departments of hospital administration, medical services, and patient care (Daily News, 03/09/2007).

Quality systems and quality awards - generic ones or designed specifically for health care systems - increasingly address continuous human resources development and the availability of highly motivated and quality-oriented staff as a precondition for the quality systems of an organization to be certified, recognized or awarded. Due to the anticipated significant impact of human resources management on the quality of services, and its increasing coverage in formalized quality systems, it is essential that a healthcare establishment pays attention to the quality of human resources in the early stages of the development of a quality system. Giving attention to the creation of job satisfaction for staff is then a fundamental component of human resources management.

All activities of a hospital are carried out by the staff, and the standard of service, patient care, etc. are dependent on employee satisfaction levels. It is vital that people participate effectively, both as individuals and as team members, with respect to performance and rapid adaptation to change; and hospital physicians and other staff

possess valuable knowledge about the performance of their organization and opportunities for improvement.

Job satisfaction represents the degree to which nurses like or enjoy their jobs, which is an essential issue for both employees and employers. It leads to less job turnover, increased staff productivity, and greater patient satisfaction. Nursing and hospital administrators need to focus on ways to increase job satisfaction, and thus improve the performance, and thereby raise the level of quality of patient care. Job satisfaction is an important factor in increasing the level of work performance and career aspirations. It is noted in the literature that there is a high correlation between job satisfaction, commitment and better performance (Culphan et al, 2002). There is a strong relationship between emotional exhaustion, staff conflict and job dissatisfaction (Piko, 2006).

2. Purpose of the Study

The importance of Human Resource Management (HRM) to the success or failure of health system performance has, until recently, largely been overlooked. Health sector reform in many countries in the 1990s focused mainly on structural change, cost containment, the introduction of market mechanisms, and consumer choice, but little direct attempt has been made to address human resource aspects (Buchan, 2004).

Human resource management in health would have to function in a sector with some unique characteristics. The workforce is large, diverse, and comprising separate occupations often represented by powerful professional associations as well as trade unions. Some personnel have sector-specific skills, while others could readily move from the health sector to employment in other sectors. The main avowed commitment of those with sector-specific skills and qualifications (physicians, nurses, etc.), are towards their profession and patients (ibid et al, 2004).

The Chief Nursing Officer, Calgary Health Region of Canada, says that “nurses play an important role in the health care system, and we know that it is important to maintain a positive and rewarding work environment for nurses and all health care workers. Job satisfaction studies are an excellent tool to help nurses and management achieve this goal. It supports the region's efforts to retain and attract nurses and to provide the best possible care for the community (Calgary Health Region, 2005)”. This statement can be applied anywhere, and in the Sri Lankan context, too.

Many researchers have demonstrated strong positive correlations between job satisfaction of medical staff and patient satisfaction, and the service levels in such health care settings (Leiter et al 1998).

Consequently, by creating an environment that promotes job satisfaction, a health care manager can develop employees who are motivated, productive and fulfilled. This in turn will contribute to higher quality patient care and patient satisfaction (Kaldenberg, 1999). The Nursing Officers are usually in the wards for 24 hours in a day on a shift basis. This means they are the category of health care workers who are with the patients most of the time. They function as the bridge between Medical Officers and patients, too. Therefore, job satisfaction of Nursing Officers is a highly important factor contributing to patient satisfaction. This is, indeed, critical to the process of attracting external customers through internal customers.

In any type of hospital, nursing personnel constitute the largest proportion of the hospital staff. For this reason alone, priority for the study of nurses could be justified (Nanayakkara 1988). This study intends to find out the job satisfaction levels of Nursing Officers in Central Ministry and Provincial Ministry hospitals. The study attempts to discover the factors affecting job satisfaction of Nursing Officers. Through this study, inhibitors as well as boosters of job satisfaction will be highlighted.

In Sri Lanka, there are many studies done on patient satisfaction but may be only a few studies on job satisfaction of hospital employees.

3. Research Objectives

General objective

To assess the effect of selected variables on job satisfaction of Nursing Officers in Central and Provincial Ministry hospitals, using a conceptualized model.

Specific objectives

1. To compare the job satisfaction of Nursing Officers in hospitals of the Central Ministry and Provincial Ministry; and
2. To conceptualize a model that describes job satisfaction of Nursing Officers.

4. Overview of Central Ministry Hospitals and Provincial Ministry Hospitals

The health services of the Government function under a Cabinet Minister. With the implementation of the Provincial Councils Act in 1989, health services were devolved. This resulted in the Ministry of Health at the national level and separate Provincial Ministries of Health in the eight provinces.

Keys to Job Satisfaction of Nursing Officers

The Central Ministry of Health is primarily responsible for the protection and promotion of people's health. Its key functions are setting guidelines, providing medical and paramedical education, management of teaching hospitals, tertiary care hospitals and specialized institutions, and bulk purchase of medical requisites.

The eight Provincial Directors of Health Services (PDHS) are totally responsible for the management of hospitals (District General, Base and District Hospitals, Peripheral Units, Rural Hospitals and Maternity Homes), and outpatient facilities such as Central Dispensaries and Visiting Stations. During 2003, there were twenty-six Deputy Provincial Directors of Health Services (DPDHS) to assist the eight Provincial Directors of Health Services (Annual Health Bulletin, 2003).

The Central Ministry and Provincial Ministry hospitals are curative care institutions, even though there is a difference in the administration, size and the range of facilities provided. It is observed that there are advantages and disadvantages in both forms of hospitals. Some of these are:

- Personal files are maintained at the institutional level in Central Ministry Hospitals, while in Provincial Ministry Hospitals personal files are maintained at the DPDHS office that may be located far away from the hospital. Therefore, increments and promotions are done at the right time in Central Ministry Hospitals, in contrast with Provincial Ministry hospitals. Also, in most of the Central Ministry hospitals overtime payment and allowances are paid punctually; in these hospitals departmental loans, too, can be obtained quickly.
- In Provincial Ministry hospitals, the employees, especially the Nursing Officers, commute from home. Therefore, they may be able to spend more time with their families;
- Supplies and repairs of instruments are quicker in Central Ministry Hospitals than in Provincial Ministry hospitals. This is mainly due to quick decision making directly in the Central Ministry hospitals, whereas in Provincial Ministry hospitals decisions are made away from the institutions; and
- The procedure of condemning items is easy in Provincial Ministry Hospitals in comparison with Central Ministry hospitals, especially those Central Ministry hospitals located far away from Colombo (Karandagoda, 2007).

Therefore, it is important to find out whether the environment of an organization (Central Ministry and Provincial Ministry hospitals) plays an important role in determining the job satisfaction of Nursing Officers.

5. Literature Review

Job satisfaction is an integral component of organizational climate, of which an important element is managing employee relationships. The assessment of employee attitudes such as job satisfaction has become a common activity in organizations in which management is concerned with the physical and psychological well-being of the people. Satisfaction results when a job fulfils or facilitates the attainment of individual values and standards. Dissatisfaction occurs when the job is seen as blocking such attainment. This attitude has received extensive attention from researchers and practitioners alike, because it was at one time, believed to be the cause of improved job performance. Recent research questions negate such a relationship and suggest a more complicated interaction between satisfaction, commitment, turnover and productivity. Now, because of the managers concern for creating both a humane and high performance workplace, researchers continue to search for definite answers about the causes and consequences of job satisfaction. For example, recent research suggests that employee involvement in information processing, decision making and problem solving have only a small, although statistically significant, effect on job satisfaction (Gordon, 2000).

Job satisfaction is good not only for employees but for employers too; as job satisfaction increases productivity and decreases staff turnover. Satisfied employees tend to be more productive, creative and committed to their employers.

Why Job Satisfaction is Important?

Rao (1996) stated several reasons for the importance of job satisfaction:

- Job satisfaction has certain relations with the mental health of the people. When an employee finds less satisfaction in his work, he may suffer from personality problems. Both scientific studies and casual observations provide ample evidence that is important for psychological adjustments, and the happiness of an individual;
- Job satisfaction has some degree of positive correlation with the physical health of the individual;
- It spreads goodwill in relation to the organization;
- Individuals can live with the organization; and
- It reduces absenteeism and turnover.

6. Determinants of Job Satisfaction

Workload

The content of work itself is a major source of satisfaction. For example, research related to the job characteristics approach to job design shows that feedback from the job itself and autonomy are two of the major job-related motivational factors. Recent research has found that such job characteristics and job complexity mediate the relationship between personality and job satisfaction, and if the creative requirements of employees' jobs are met, then they tend to be satisfied (Luthans, 2002).

The amount of work to be performed is a significant stressor for many workers. Both overload and under-load can generate psychological (and physical) strain. In 1908, Yerkes and Dodson proposed their now well-known Yerkes-Dodson Law, which states that there is an inverted U relationship between the amount of work required of a person and his or her health and performance. Each individual, therefore, has an optimal band of workload. Substantial deviations above or below this optimal band are likely to induce strain (Cooper et al 2001).

Professional support

Collaboration between health professionals is an integral part of nursing practice. Collaboration is a process which stresses joint involvement in the decision-making process to meet the goals of patient needs related to wellness and illness (Henneman et al, 1995). In creating an optimal working relationship, physicians and nursing practitioners (NPs) need to have a clear understanding of the nursing practitioner's role. Sellards and Mills (1995) stated: "Unclear boundaries between nursing Practitioners (NPs) and physicians may cause tension." The scope of practice of NPs includes a broad spectrum of direct interventions with clients, including health assessment, risk appraisal, health education and counselling, diagnosis and management of acute minor illness and injuries, and management of chronic conditions. The roles of the health team members are not to be viewed as substitutive, but collaborative. A meaningful and open working relationship rests on the ability of nursing practitioners, physicians, and other health team members to appreciate the uniqueness of their and each other's roles to provide the best care for the patients (Carroll & Fay, 1997).

Training received

Effective organizations seek to create alignment between the needs, wants, and expectations of their customers; the organization's strategies, goals, and objectives; and the day-to-day activities of their employees. Part of creating alignment is ensuring that employees have the appropriate education and training that enables them to perform

their job requirements, at a level that supports the customer's ultimate needs, wants, and expectations. A part of this education and training should include information about how quality, cost, schedule, and profit expectations for their job affect customer satisfaction. Effective employees understand the impact their job has on each of these concepts. They are involved in the decisions that affect their jobs (Summers, 2005).

Remuneration

Wages and salaries are recognized to be a significant but cognitively complex and multi-dimensional factor in job satisfaction. Money not only helps people attain their basic needs; it is also instrumental in providing upper-level need satisfaction. Employees often see pay as a reflection of how management views their contribution to the organization. Fringe benefits are also important, but they are not as influential. One reason undoubtedly is that most employees do not even know how much they are receiving in benefits. Moreover, most tend to undervalue these benefits because they do not realize their significant monetary value. However, research indicates that if employees are allowed some flexibility in choosing the type of benefits they prefer within a total package, called a flexible or cafeteria benefits plan, there is a significant increase in both benefits - satisfaction and overall job satisfaction (Luthans, 2002).

Career development

Career development is one category of potential stressors that includes job insecurity, perceived under-promotion or over-promotion within the organization, and a general sense of lack of achievement of one's goals and ambitions. For many employees, the linear career development path is no longer a feasible, or perhaps even desired, option. There is a growing body of evidence that a perceived lack of promotion opportunities and lack of progress in one's career represent primary sources of job dissatisfaction, and hence may function as major stressors for many people.

There is also substantial evidence that despite changes in societal attitudes concerning equal employment opportunities, women and minority groups still encounter organizational barriers to their career development, which inevitably will lead to higher levels of psychological strain for these groups of employees. (Cooper et al, 2001)

Working condition

Working conditions have a modest effect on job satisfaction. If the working conditions are good (clean, attractive surroundings, for instance), personnel will find it easier to carry out their jobs. If the working conditions are poor (hot, noisy surroundings, for example), personnel will find it more difficult to get things done. In other words, the effect of working conditions on job satisfaction is similar to that of the work group. If

things are good, there may or may not be a job satisfaction problem. Most people do not give working conditions a great deal of thought unless they are extremely bad. Additionally, when there are complaints about working conditions, these are sometimes really nothing more than manifestations of other problems (Luthans, 2002). Employees are concerned with their work environment for both personal comfort and for facilitating doing a good job. They prefer physical surroundings that are safe, comfortable, clean, and have a minimum degree of distractions (Robbins, 2003).

Conceptualization

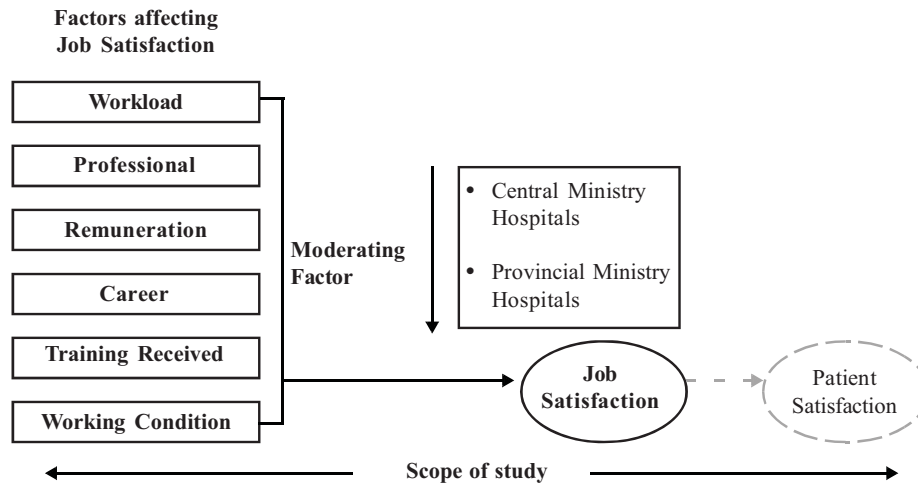
Although there are many factors affecting job satisfaction, for the purpose of this study, some of the key areas which may be most relevant are considered. Fredrick Herzberg's Dual-Factor theory of job satisfaction and motivation provided the idea for the conceptual framework for this research study. Herzberg's theory categorizes affects in the work places as either extrinsic factors - such as salary and supervision - or intrinsic factors - such as achievement and autonomy that influence job satisfaction. The key concepts were developed through the literature review. Further, two focus group discussions and brain storming sessions were held to validate these concepts. After the focus group discussions, the variables not appropriate to the Sri Lankan context were removed, while the variables relevant to the Sri Lankan context were included for the study.

With the knowledge gained from the literature review and information from the focus group discussions, the following concepts were identified for the study:

- Socio-demographic characteristics;
- Job satisfaction;
- Workload;
- Professional support;
- Career development;
- Training received;
- Remuneration; and
- Working conditions

This study will determine whether any moderating factors affect job satisfaction. The conceptual framework is shown in the following Figure.

Figure 1: Conceptual Framework



Hypothesis

H1 - Nursing Officers working in Central Ministry hospitals are more satisfied than Nursing Officers working in Provincial Ministry hospitals.

7. Methodology

Of the nine provinces in Sri Lanka, hospitals of the Western Province were selected as the study setting, because of the easy access to the principal investigator.

Only those hospitals that have medical wards with consultant coverage were selected. Usually medical wards are more overcrowded and have a high turnover rate than other wards irrespective of the type of hospital. To avoid any bias related to the specialty concerned only the medical wards are selected for this study. There are four Central Ministry hospitals and seven Provincial Ministry hospitals with specialist medical care located in the Western Province. Of these seven Provincial Ministry hospitals, four were randomly selected. As only five percent of the nurses were male nurses in government hospitals in Sri Lanka, it was decided to select only female Nursing Officers as the study population.

Appropriate formula and Epi Info are used to calculate the sample size. It was found out that 74 Nursing Officers from the Central Government hospitals and 74 Nursing Officers from the Provincial Ministry hospitals need to be studied. An allowance of 15% was added for non-respondents. The final sample was 85 Nursing Officers selected

Keys to Job Satisfaction of Nursing Officers

from each category of hospitals. A population proportionate to the size method was used to select nurses from each hospital.

The data was collected using a self-administered questionnaire. The questionnaire consisted of two parts:

1. Section on socio-economic characteristics.
This part comprised seven questions on socio-economic characteristics. The information collected was on age, gender, marital status, number of children, service period in the department, and the current hospital.
2. Section on attitude of the employee to certain selected aspects of the job.
This part consisted of 34 questions, mainly focused on the attitude of the employee on certain selected aspects of the job. The responses to these questions were assessed on a Likert Scale that has five ratings, i.e., very dissatisfied, dissatisfied, neither dissatisfied nor satisfied, satisfied, and very satisfied. Some questions were directed towards a positive reply, while others were towards a negative reply. There were twenty-four positive and ten negative questions.

The Principal Investigator checked the data collected before it was fed into the computer for analysis. The data was checked for missing and unused values. The data entry was carried out in MS-Access. Before the analysis the computer base was screened for possible data entry errors. An analysis of the data was carried out manually as well as with the aid of computers. The software package used for this study was MS-Excel, MS-Access and SPSS / PC+.

Ethical Issues

There were no anticipated risks or direct benefits for the participants in this study. The participants shared personal and confidential information with the researcher. They were given the assurance that their identities would not be revealed and also that the data would not be processed in terms of individuals, but as groups. Appropriate ethical approval was obtained from the Faculty of Medicine, University of Colombo, and the relevant authorities.

Analysis and Findings

A test-retest was carried out to find the reliability over time. A paired 't' test was used to find out whether each variable in the questionnaire was reliable. It is considered that if the 'p' value is more than 0.05, then the variable in the questionnaire is reliable. Test-Retest Reliability revealed that the significance level for paired sample correlation and paired samples test is more than 0.05 for all the variables. Therefore, the

questionnaire is reliable over time. In this study Cronbach's α coefficient is 0.86, and therefore, this questionnaire can be regarded as reliable.

Description of the Sample

Of the total calculated sample size (n = 170), only 164 participated in the study (dropout rate - 4.12%). The difference between the calculated sample size and the actual sample size was due to various reasons. Days off, leave, absence and hospitalized for treatment are a few of them. The following Table shows the demographic characteristics of the sample that participated in the study.

Table 3: Selected Demographic Characteristics between Central Ministry and Provincial Ministry Hospitals

		Type of Hospital	
Age		Central Ministry Hospital	Provincial Ministry Hospital
< 36 years	(n = 95)	53 (63.86%)	42 (52.5%)
36 - 45 years	(n = 43)	19 (22.89%)	24 (30.0%)
> 45 years	(n = 25)	11 (13.25%)	14 (17.5%)
Marital Status			
Unmarried	(n = 47)	27 (32.53%)	20 (25.0%)
Married	(n = 115)	55 (66.27%)	60 (75.0%)
Widow(er)	(n = 1)	1 (1.2%)	0 (0.0%)
Number of Years in the Department			
< 5 years	(n = 46)	21 (25.3%)	25 (31.25%)
5 - 8 yrs.	(n = 42)	27 (32.53%)	15 (18.75%)
9 - 12 Yrs.	(n = 17)	10 (12.05%)	7 (8.75%)
13 - 16 Yrs	(n = 25)	7 (8.43%)	18 (22.5%)
17 - 20 Yrs.	(n = 11)	6 (7.23%)	5 (6.25%)
> 20 years	(n = 22)	12 (14.46%)	10 (12.5%)
Number of Years in the Present Hospital			
< 5 years	(n = 69)	26 (31.33%)	43 (53.75%)
5 - 8 years.	(n = 47)	25 (30.12%)	22 (27.5%)
9 - 12 years.	(n = 14)	10 (12.05%)	4 (5.0%)
13 - 16 years	(n = 18)	12 (14.46%)	6 (7.5%)
> 16 years	(n = 15)	10 (12.04 %)	5 (6.25 %)
Total		83 (100%)	80 (100%)

Source: Survey data

The Chi Square test indicated that of these demographic characteristics, probably there is a significant association between the service period of the Nursing Officers in the hospital where the study was carried out, and the type of hospital (Central and Provincial Ministry hospital).

8. Job satisfaction in Government Hospitals in the Western Province

The job satisfaction level of Nursing Officers in four Central Ministry hospitals and four Provincial Ministry hospitals were measured. Table 4 gives the overall picture of the job satisfaction in Central Ministry and Provincial Ministry hospitals.

Table 4: Level of Job Satisfaction at Central Ministry Hospitals and Provincial Ministry Hospitals

Type of Hospital	Mean
Central Ministry Hospitals (n = 83)	3.53± 0.59
Provincial Ministry Hospitals (n = 80)	3.31± 0.64
Total (n = 163)	3.42±0.63

Source: Survey data

The mean score of job satisfaction was 3.42 for selected government hospitals. The Nursing Officers working in Central Ministry hospitals have a mean score of 3.53; this indicates a higher satisfaction level as compared with the Nursing Officers working in Provincial Ministry hospitals (where mean job satisfaction score is 3.31).

To verify the relationship of job satisfaction between the Nursing Officers of the two types of hospitals, ANOVA was used. The F score was 4.966, and the probable significance value for one-way ANOVA was 0.027, which is less than the five percent significant level. Therefore, we reject the null hypothesis stating that there is no difference in job satisfaction between Nursing Officers in Central Ministry hospitals and those in Provincial Ministry hospitals.

The results show that there is a possibility of a difference in job satisfaction between Nursing Officers working in Central Ministry hospitals and Provincial Ministry hospitals. When job satisfaction was compared with the mean value the Nursing Officers in Central Ministry hospitals were found to be more satisfied than the Nursing Officers in Provincial Ministry hospitals.

9. Relationship between Job satisfaction and Independent variables

Job satisfaction in Central Ministry hospitals and Provincial Ministry hospitals was analyzed using Pearson's correlation coefficient, simple linear regression and multiple regression analysis. Many studies on job satisfaction had used Pearson's correlation coefficient to find out the relationship between job satisfaction and other independent variables (Adams, 2000, Chu, 2003).

Table 5: Correlation Coefficient in Central Ministry and Provincial Ministry Hospitals

		Workload	Professional Support	Training Received	Remuneration	Career Development	Working Condition
Central Ministry Hospitals							
Pearson correlation	Job Satisfaction	0.189	0.532	0.395	0.274	0.172	0.370
Significance (1-tailed)	Job Satisfaction	0.043	0.001	0.001	0.006	0.061	0.001
Provincial Ministry Hospitals							
Pearson correlation	Job Satisfaction	0.416	0.479	0.234	0.292	0.123	0.358
Significance (1-tailed)	Job Satisfaction	0.001	0.001	0.018	0.004	0.138	0.001

Source: Survey data

Table 5 indicates that in Central Ministry hospitals, the probable significance value for job satisfaction and professional support is 0.001, which indicates that the correlation is significant, and the value of the Pearson correlation is (0.532) high. Therefore, we can conclude that there is linear relationship between job satisfaction and professional support. Although other dependent variables have a low probability significance value (< 0.05), the value of Pearson's correlation between the dependent variables and job satisfaction is low. Further, the probable significance value for job satisfaction and career development is > 0.05 (0.061), indicating that there is no significant correlation between them.

In Provincial Ministry hospitals, the significance level of correlation between job satisfaction and independent variables is less than 0.05 except for career development (where the significance level is 0.138). Professional support and workload have a

Keys to Job Satisfaction of Nursing Officers

high Pearson correlation. Therefore, we can conclude that there is a linear relationship between job satisfaction and professional support as well as workload. Further, the probable significance value for job satisfaction and career development is 0.123 (> 0.05), indicating that there is no significant correlation between them.

It reveals that professional support is the most important factor in determining job satisfaction in both Central and Provincial Ministry hospitals. Workload has contributed little to job satisfaction in Central Ministry hospitals, whereas in Provincial Ministry hospitals it was the second most important factor in determining job satisfaction. Career development has contributed the least to job satisfaction in both types of hospitals, and it is not significant too.

The analysis is carried out further using simple linear regression. The value of R^2 between job satisfaction and factors affecting job satisfaction using simple linear regression is given in the following table:

Table 5.28: R^2 between Job Satisfaction and Factors affecting Job Satisfaction using Simple Linear Regression

Type of Hospital	Variables	Work load	Professional Support	Training Received	Remuneration	Career Development	Working Condition
Central Ministry Hospital	Job Satisfaction	0.04	0.28	0.16	0.08	0.03	0.14
Provincial Ministry Hospital	Job Satisfaction	0.17	0.23	0.05	0.09	0.02	0.13

Source: Survey data

R Square is the coefficient of determination, interpreted as the percentage of variance in Y that can be explained by X. For example, an "R Square" of 0.04 (workload in Central Ministry hospitals) in the above Table indicates that only four percent of the variance in job satisfaction can be explained by the workload in Central Ministry hospitals, which is 17 percent in Provincial Ministry hospitals. Likewise, assumptions can be made for the variance in job satisfaction that can be explained by the other independent variables too.

According to simple linear regression, professional support, training received and working conditions were found to be important determinants of job satisfaction in Central Ministry hospitals and professional support, workload and working conditions were found to be important determinants of job satisfaction in Provincial Ministry hospitals.

The analysis was further carried out using Multiple Linear Regression. Table 5.14 summarizes the multiple regression model for job satisfaction of Nursing Officers working in Central Ministry and Provincial Ministry hospitals.

Table 5.14: Multiple Regression Model Summary (Central Ministry Hospitals)

R	R²	Adjusted R²	Standard Error of the Estimate
Central Ministry Hospitals			
0.618	0.382	0.333	0.4818
Provincial Ministry Hospitals			
0.580	0.337	0.282	0.546

Source: Survey data

Since $R^2 = 0.382$ in Provincial Ministry hospitals, this indicates that 38.2% of the variables can be explained by this multiple regression model, whereas it is 33.7% in Provincial Ministry hospitals. It indicates that some other important variables should be included in this model.

However, R Square tends to somewhat over-estimate the success of the model when applied to the real world. Therefore, an Adjusted R Square value is calculated which takes into account the number of variables in the model and the number of observations (participants) our model is based on. This Adjusted R Square value gives the most useful measure of the success of our model (Brace, 2006). This study has an adjusted R Square value of 0.333 according to which we can say that our model has accounted for 33.3% of the variance in the dependent variable in the Central Ministry hospitals and 28.2% in Provincial Ministry hospitals.

A multiple regression model for Central and Provincial Ministry hospitals was also developed.

$$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \varepsilon$$

Where y is job satisfaction

x is independent variable

β is the regression coefficients (or β coefficients) representing the independent contributions of each independent variable to the prediction of the dependent variable.

Keys to Job Satisfaction of Nursing Officers

The Beta value is a measure of how strongly each independent variable influences the dependent variable. Beta is measured in units of standard deviation (Brace, 2006).

ε is error

The Multiple Regression Model for Central Ministry hospitals is:

$$y = 1.098 - 0.135 (\text{Work load}) + 0.388 (\text{Professional support}) + 0.290 (\text{Training received}) + 5.004\text{E-}02 (\text{Remuneration}) + 3.298\text{E-}02 (\text{Career development}) + 0.191 (\text{Working condition}) + \varepsilon$$

To identify the probable significance level of the multiple regression, ANOVA was used. The F score was 7.8255 and the probable significance value for one way ANOVA was 0.001, which is less than the five percent significant level. Therefore, the fitness of the model can be correct.

The Multiple Regression Model for Provincial Ministry hospitals is:

$$y = 1.035 + 0.366 (\text{Workload}) + 0.290 (\text{Professional support}) - 0.114 (\text{Training received}) + 0.135 (\text{Remuneration}) - 0.0712 (\text{Career development}) + 0.194 (\text{Working condition})$$

To identify the probable significance level of the multiple regression, ANOVA was used. The F score was 6.183 and the probable significance value for one way ANOVA was 0.001, which is less than the five percent significant level. Therefore, the fitness of the model can be correct.

10. Discussion

Job satisfaction of Nursing Officers working in Central Ministry hospitals has a higher mean score (3.53 ± 0.59) than those working in Provincial Ministry hospitals (3.31 ± 0.64). The ANOVA test illustrates that this difference is significant. Considering that the basic socio-demographic characteristics are similar in both groups, Nursing Officers working in Central Ministry hospitals show a higher degree of job satisfaction. The six independent variables that are selected in this study had influenced job satisfaction differently in Central Ministry and Provincial Ministry hospitals.

The present study was compared with the studies on job satisfaction in other countries. Some counties show a higher job satisfaction for nurses while others do not. From this study, it is evident that the job satisfaction level of Nursing Officers in Provincial Ministry hospitals (3.31 ± 0.64) is somewhat similar to the job satisfaction of Nursing

Officers in Taiwan, where their mean score for job satisfaction on a 5-point scale was 3.32, and 0.28 being the standard deviation (Tzeng et al, 2002). The Nursing Officers of Jordan and South Korea have a job satisfaction level less than Nursing Officers working in Provincial Ministry hospitals in the Western Province of Sri Lanka. In a study done in Jordanian public hospitals, the nurses were moderately satisfied with a mean equal to 2.85 on a 5 point Likert scale (Mrayyan, 2005). Song et al (1998) showed that the level of work satisfaction among Korean hospital nurses (n = 225) is moderate or average (mean=3.06, range = 1-5). Job satisfaction of Nursing Officers working in government hospitals in the Western Province (3.42 ± 0.63) is almost similar to that of Nursing Officers in Hong Kong. In Hong Kong, nurses were more dissatisfied than satisfied, as indicated by the total scale mean of 3.46 in a 5-point range (Lee, 1998). The average job satisfaction score for nurses in Turkey was 3.8 ± 0.5 (Bodur, 2002). Their job satisfaction is higher than that of the Nursing Officers working in Central Ministry hospitals in the Western Province, Sri Lanka.

11. Job satisfaction and workload

In Central Ministry hospitals, the correlation between job satisfaction and workload was 0.18, with 0.04 being the significance level between them. Of all independent variables, only career development had a lesser correlation than the workload in Central Ministry hospitals while other independent variables had a higher correlation with job satisfaction.

In contrast, the Provincial Ministry hospitals had a correlation of 0.41 between job satisfaction and workload, while 0.001 was the significance level. That is, workload has contributed to job satisfaction more in the Provincial Ministry hospitals. These findings were supported by the simple linear regression, too. Workload explains only four percent of variance in job satisfaction in the Central Ministry hospitals, whereas it is 17% in Provincial Ministry hospitals.

Workload reflects the way work is organized and led in the wards, but is probably better explained by external factors such as population health status and hospital capacities in each hospital's catchment area, the referral patterns of the local doctors, and the emergency admittance profile of each unit. (Krogstad et al, 2005).

Workload has higher linear correlation in Provincial Ministry hospitals than in the Central Ministry hospitals. Since the Central Ministry hospitals are tertiary care centres, all the patients with complications are treated in these institutions. More attention is needed to care these patients. Further, at weekends usually there are more transfers from the Base Hospitals to the Central Ministry hospitals (Weerasinghe, 2005). In addition, the catchment area of the Teaching Hospitals is larger when compared with the Provincial

Ministry hospitals. Due to these reasons, workload is higher in the Central Ministry hospitals. This may be the reason for weak correlation between workload and job satisfaction in the Central Ministry hospitals.

The Provincial Ministry hospitals have only one or two medical wards. These hospitals are not Teaching Hospitals. However, of the four Central Ministry hospitals where this study was conducted, three hospitals (excepting the General Hospital, Kalutara) have more than two medical wards. In addition, these three hospitals are Teaching Hospitals. In Teaching Hospitals, usually a Nursing Officer has to spend more time due to two or more ward rounds and prolonged ward rounds. Apart from this, these tertiary care hospitals have more in-ward investigation and therapeutic procedures when compared with the Provincial Ministry hospitals. These aspects also increase the workload of Nursing Officers working in the Central Ministry hospitals.

12. Job satisfaction and professional support

The correlation between job satisfaction and professional support is 0.53 (significance level - 0.001) in the Central Ministry hospitals and 0.479 (significance level - 0.001) in Provincial Ministry hospitals. In the Central Ministry hospitals 28% percent of variance in job satisfaction can be explained in terms of professional support, whereas it is 23% in the Provincial Ministry hospitals. In both hospitals, professional support had the highest correlation coefficient out of all the independent variables.

Aiken et al (2001) found variation in nurse - job - satisfaction between hospitals related to staffing and professional support. The present study discloses that the mean of professional support in the Provincial Ministry (3.09 ± 0.55) is lower than in the Central Ministry hospitals (3.25 ± 0.59). This may be one of the causes for lower job satisfaction of Nursing Officers in the Provincial Ministry hospitals than in the Central Ministry hospitals.

Other studies related to job satisfaction and professional support were also reviewed. Nurses were moderately (mean - 3.4 on a 5-point Likert scale) satisfied with co-workers such as immediate supervisors and nursing peers, physicians, and the delivery care system in a study done in Jordan (Mrayyan, 2006). Nurses in Turkey had a mean of 3.6 ± 1.1 for the way co-workers get along with each other (Bodur, 2002). In Western Australia, professional support had a mean score of 3.669 with a standard deviation of 0.934 in a staff satisfaction survey of nursing homes. This was the highest mean score among all the other satisfaction components, such as personal job satisfaction, workload, and team spirit (Chou, S C et al, 2003), whereas in the present study the mean score of professional support is less than in the studies described above.

In both the Central and Provincial Ministry hospitals too professional support had a higher correlation with job satisfaction when compared with the other independent variables. The largest coefficient involved was in the case of the professional support, suggesting that the more people are jointly involved with the other categories of staff in the decision-making process, the more likely they are to be satisfied with their job in both types of hospitals. Thus, the present study suggests that professional support can play a central role in driving all other aspects of staff satisfaction. From this it can be noted that Belongings Needs of Maslow's hierarchy of needs dominates the Nursing Officers in the Western Province of Sri Lanka.

13. Job Satisfaction and training received

In the Central Ministry hospitals, the correlation between job satisfaction and training received was 0.395, with 0.001 being the significance level between them, whereas in the Provincial Ministry hospitals, the correlation was 0.234 with 0.018 being the significance level between them. In the Central Ministry hospitals, 16% of variance in job satisfaction can be explained by the training received, while in the Provincial Ministry hospitals it is only five percent.

Training received has a higher linear correlation in the Central Ministry hospitals but, this relationship is weak in the Provincial Ministry hospitals. This may be due to less opportunity for the Nursing Officers working in the Provincial Ministry hospitals to attend training programmes. Further, in this study, three Central Ministry hospitals selected were Teaching Hospitals. Usually, in Teaching Hospitals, there are more training sessions and on the job training than in the other hospitals.

Overseas studies were also reviewed. Owings (1999) found that among Family Nursing Practitioners in the United States Air Force, 20 to 25% cited dissatisfaction with funding and availability of time for them to attend training programmes. In Western Australia, training had a mean score of 3.303 with a standard deviation of 0.941 in a staff satisfaction survey in nursing homes (Chou, S C et al, 2003). In the present study, training had a mean score of 3.25 ± 0.57 in the Central Ministry hospitals and 3.21 ± 0.57 in the Provincial Ministry hospitals.

In a study done in the West Coast of the USA, the correlation between training and job satisfaction was -0.317 (Cavanagh, 1992), whereas in this study the correlation between job satisfaction and training is positive as seen in the Central Ministry hospitals (0.395) and the Provincial Ministry hospitals (0.234).

14. Job satisfaction and remuneration

The correlation between job satisfaction and remuneration was 0.27 with 0.006 being the significance level between them in the Central Ministry hospitals, and it was 0.292 with 0.004 being the significance level between them in the Provincial Ministry hospitals. In the Central Ministry hospitals eight percent of variance in job satisfaction can be explained in terms of remuneration, whereas it is only nine percent in the Provincial Ministry hospitals. It is noted that in the Central Ministry hospitals, job satisfaction had a higher correlation with professional support, training received and working conditions, than with remuneration. In Provincial Ministry hospitals, workload, professional support and working conditions had a higher correlation with job satisfaction than with remuneration. From these findings, it is evident that remuneration is not the main factor related to job satisfaction. This may be due to increments being mainly based on seniority and not on performance. Further, Nursing Officers are aware that the salary will be paid on time. There may be delay in getting overtime payments and allowances, but they will definitely be paid.

There is currently a shortage of Nursing Officers in Sri Lanka. To cover this shortage, extra duties are assigned to the Nursing Officers, and payment is made for overtime worked. In-depth interviews with Nursing Officers reveal that most of the Nursing Officers do not enjoy their extra duty. They prefer their family commitments to the extra duty payment.

A study in Australia reveals that with regard to remuneration, it was apparent that nurses report dissatisfaction with pay rates. It further says that length of employment can influence nurses' perceptions of the adequacy of remuneration. This finding is important as it was the newly employed nurses who were most dissatisfied (Hegney et al, 2006). In Taiwan, pay does not have a significant correlation with job satisfaction (Chu et al, 2003).

Numerous reports suggest that many nurses feel that they are underpaid (California Health Care Foundation, 2001). Compensation and benefits were identified as one of five challenges that hospitals must meet in their efforts to improve the workplace partnership. Canadian researchers provide evidence that while there is a correlation between job satisfaction and economic factors, the correlation was weak. (Andrews, 2005). In a Canadian study of pay satisfaction mean scores on a 1-7 point scale was 3.45 in the year 2000 and 3.13 two years later. In the years 2000 and 2002, pay ranked second in the Nurses' Job Satisfaction criteria (Best, 2006).

Cavanagh (1992) found that the fact that salary was only weakly associated with job satisfaction fuels the debate about this variable. Many conflicting findings have been reported in the literature. Froebe et al (1983) and Munro (1983) found that pay was

not a highly regarded feature of work. A study carried out in Ireland reveals that pay had contributed least to job satisfaction (Curtis, 2007). In the present study too, remuneration is weakly associated with job satisfaction. It is evident from the literature that pay is an important factor in job satisfaction. Yet, research findings have demonstrated small correlations between pay and job satisfaction (Curtis, 2007; Gruneberg (1979). They suggest: 'Money seems to be so central to our thinking in relation to our jobs that it leads one to be suspicious about research findings, which report money as being of relatively low importance. The reason for the difference between actual and reported importance of money might well be due to people distorting their replies to questionnaires. It may well be for example that many individuals do not think it 'proper' to admit that their main motivation for working is financial, rather than for the intrinsic interest of the job itself.'

This viewpoint may well explain why pay contributed least to respondents' current level of job satisfaction. This may be true in this study too.

15. Job Satisfaction and career development

In this study, the correlation between job satisfaction and career development is not significant in Central and Provincial Ministry hospitals. In Central Ministry hospitals, three percent of variance in job satisfaction can be explained in terms of career development, whereas in Provincial Ministry hospitals it is only two percent.

The results indicate that the value of the Pearson correlation is not significant when types of hospital were analyzed. This is mainly because in Sri Lanka, Nursing Officers have little chance of career development, especially in their early period of service. Further, nursing is a female dominant profession. In their personal life, the Nursing Officer, have to play different roles such as daughter, wife, and mother. According to Sri Lankan culture, the home is mainly managed by the housewife. These factors too hinder the career development of Nursing Officers.

A study was carried out to find the Satisfaction with Nursing Care and Work (SNCW) in the Melbourne metropolitan area among psychiatric nurses ($n = 78$) from mainstream health services. Professional growth had a mean score of 2.3 with a standard deviation of 0.98 (Happell, 2003). In a study done at Los Angeles, the prospects for promotion and career development were found to be linked with nurses' job satisfaction, with 0.148 being the path coefficient (Cavanagh, 1992). Positive perceptions of career development opportunities were a stronger predictor of commitment to nursing and job satisfaction (Brooks et al 2002). It is not so in this study. Therefore, career development of Nursing Officers needs more attention in the government hospitals in Western Province.

16. Job Satisfaction and working condition

In Central Ministry hospitals, the correlation between job satisfaction and working conditions was 0.37 with 0.001 being the significance level between them, while in Provincial Ministry hospitals, it was 0.358 with 0.001 being the significance level between them. With regard to correlation between job satisfaction and working condition there is not much difference between Central Ministry hospitals (0.37) and Provincial Ministry hospitals (0.358). In Central Ministry hospitals 14% of variance in job satisfaction can be explained in terms of working conditions, whereas it is 13 percent in Provincial Ministry hospitals.

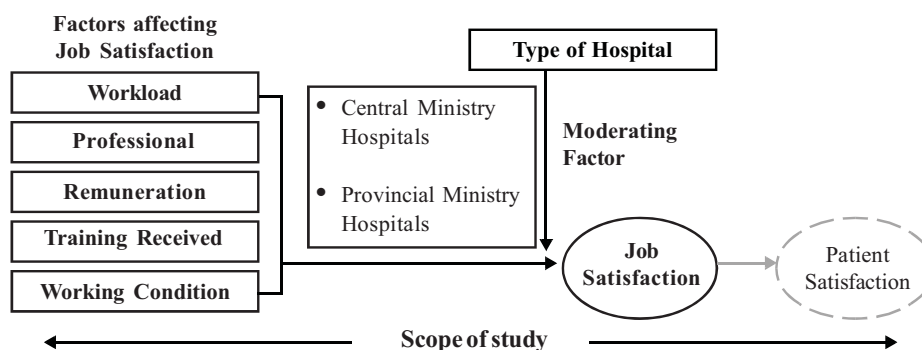
In both types of hospitals, working conditions have a closer correlation with job satisfaction than does remuneration. This indicates that, of external rewards, Nursing Officers value non-monetary motivation more than monetary motivation.

17. Refined Conceptual Framework of Job Satisfaction for Nursing Officers Working in Government Hospitals of Western Province after the Study

Before the study was carried out, the type of hospital was considered as the moderating factor. There were six independent variables selected for this study. Of these independent variables, using Pearson's correlation coefficient, it was found that the correlation between job satisfaction and career development was not significant in both the Central Ministry hospitals and Provincial Ministry hospitals. Therefore, career development was removed from the original conceptual framework.

There was a significant difference in the job satisfaction between the Central Ministry hospitals and Provincial Ministry hospitals. With these findings, the conceptual framework of the study is refined. Figure 2 shows the refined conceptual framework of the study.

Figure 2: Refined conceptual framework on job satisfaction of Nursing Officers in Western Province Hospitals of Sri Lanka



18. Limitations

Even though the study was carried out systematically after reviewing the literature on job satisfaction among nurses, there are a few limitations identified. Some of them are that this study was conducted only in medical wards in the hospitals of the Western Province. Smaller hospitals such as District Hospitals, Periphery Units and Rural Hospitals were not included in this study. In the comparison of findings with those of other studies, researchers often use a variety of instruments to measure the variables they are investigating. This diversity presents a significant problem for researchers in that they may find it difficult to compare their findings with those of previous research findings. This is partly true in this study too.

19. Conclusions and Recommendations

From the study it is clear that professional support plays an important role in determining the job satisfaction of Nursing Officers. Further, career development has not influenced job satisfaction. This needs attention. The majority of studies in other parts of the world reveals that career development had played a significant role in determining job satisfaction in their countries. According to this study, career development had not influenced job satisfaction when compared with the other variables. Therefore, more importance must be given to the career development of Nursing Officers by the policy makers and senior managers. Further, it is recommended that there is a need for further studies between job satisfaction and career development.

There was a significant difference in job satisfaction between Central Ministry hospitals and Provincial Ministry hospitals. In Provincial Ministry hospitals training has contributed less to job satisfaction. Therefore, it is necessary to organize regular in-service training programmes that provide equal opportunities for staff to update their practice, skills, and knowledge. Further, it is necessary to establish a resource centre, that will provide education and training materials such as textbooks, journals and videos, which the staff can access, and which will encourage self-initiated learning.

This study showed that professional support plays an important role in determining job satisfaction. Therefore, it is necessary to arrange regular staff meetings that allow staff at all levels to discuss concerns and difficult issues, exchange information and ideas, and support each other to solve encountered problems. This can be carried out by establishing Work Improvement Teams (WIT) in all the units.

Working conditions contributed more than remuneration in determining job satisfaction of Nursing Officers. Therefore, improving working conditions is important. Importance should be given to provide proper rest rooms, toilets, clean canteens and library facilities.

The present study was carried out only in the medical wards. Therefore, this type of research should be extended to Nursing Officers working in other specialties in future. To be comprehensive it is essential to study the job satisfaction of other categories of staff as well.

20. Acknowledgment

This research on job satisfaction was possible due to all the committed staff in health care organizations, who have influenced our life, and to whom we owe much gratitude. Gratitude is first expressed to Prof. Gunapala Nanayakkara, founder Director, Postgraduate Institute of Management. It is his commitment and vision for the profession of management that have inspired the new generation of Sri Lankan managers to pursue quality of life as well as work with dual commitment. We appreciate the support given by the heads of the institutions, matrons and nursing staff of the hospitals where the pilot study and the final study were conducted. Their assistance to collect data was considerable.

References

- Adams A, Bond S, "Hospital nurses' job satisfaction, individual and organizational characteristics", **Journal of Advanced Nursing**, Vol. 32, No.3, 2000, pp 536-543.
- Andrews D R, Dziegielewska, "The nurse manager: job satisfaction, the nursing shortage and retention", **Journal of Nursing Management**, Vol. 13, No. 4, 2005, pp 286-295
- Annual Health Bulletin**, Ministry of Healthcare & Nutrition, 2003, pp14
- Best, Maureen F, Thurston, Norma E, Canadian Public Health Nurses' Job Satisfaction, **Public Health Nursing**, Vol. 23, No. 3, May/June 2006 , pp. 250-255(6)
- Bodur S, "Job satisfaction of health care staff employed at health centers in Turkey", **Occupational Medicine**. Vol. 52, No. 6, 2002, pp 353-355
- Brace Nicola, Richard Kemp and Rosemary Snelgar, **SPSS for Psychologists**, Macmillan Publishers Limited, Third Edition, 2006
- Buchan J, "What difference does ("good") HRM make?" **Human Resource for Health**, Vol. 2, No. 6, 2004, pp 1-7
- Calgary Heath Region, **News Release**, 14th April 2005
- Carroll, T.L. & Fay, V.P. "Measuring the impact of advanced practice nursing on achieving cost-quality outcomes: Issues and challenges", **Nursing Administration Quarterly**, Vol. 21, No.4, 1997, pp 32-40.
- Cavanagh S J, Coffin D A, "Staff turnover among hospital nurses", **Journal of Advanced Nursing**, Vol. 17, No. 11, 1992, pp 1369-1376.
- Chu C I, Hsu N M, Price J L, Lee Y J, "Job Satisfaction of hospital nurses: an empirical test of a causal model in Taiwan", International Council of Nurses, **International Nursing Review**, 50, 2003, pp 176-182
- Chou S C, Boldy D P, Lee A H, "Staff satisfaction and its components in residential aged care", **International Journal of Quality in Healthcare**, Vol.14, No.3, 2002, pp 207-217
- Cooper L Cary, Philip J D, O'Driscoll P Michael, **Organizational Stress**, Sage Publications, First Edition, 2001
- Culpan Y A & Gillian H Wright, "Women Abroad; getting best results from women management", **International Journal of Human Resource Management**, Vol.13, No 5, Aug 2002, pp 784-801
- Curtis E A, "Job satisfaction: a survey of nurses in the Republic of Ireland", **International Nursing Review**, Vol. 54, No. 1, 2007, pp 92-99
- Daily News**, 3 Sep. 2007, p.3, col. 1

Gordon Judith, **Organizational Behaviour**, Fifth Edition, 2000, pp 80

Grunberg M M, **Understanding job satisfaction**. The MacMillan Press Ltd, London, 1979, pp 87 - 89

Happell B, Martin T, Pinikahana J, "Burnout and job satisfaction: A comparative study of psychiatric nurses from forensic and a mainstream health service", **International Journal of Mental Health Nursing**, Vol. 12, No.1, 2003, pp 39-47.

Henneman, E.A., Lee, J.L. & Cohen, J.I. "Collaboration: a concept analysis", **Journal of Advanced Nursing**, Vol. 21, No. 1, 1995, pp 103-109

Kaldenberg DO, Regrut BA. "Do satisfied patients depend on satisfied employees? or do satisfied employees depend on satisfied patients?" **The satisfaction report newsletter**, Vol III, March/April 1999, South Bend, Ind Press, Ganey Associates Inc.

Karandagoda K K W, A Personal Communication, 16th January, 2007

Krogstad U, Hofoss D, Veenstra M, Gulbrandsen P, Hjortdahl P, "Hospital quality improvement in context: a multilevel analysis of staff job evaluations", **Quality and Safety in Health Care**, 2005; 14:438-442

Lee F M, "Job satisfaction and autonomy of Hong Kong registered nurses", **Journal of Advanced Nursing**, Vol. 27, No 3, 1998, pp 355-363

Leiter MP, Harvie P, Frizzell C. "The correspondence of patient satisfaction and nurse burnout", **Social Science Medicine**, Vol. 47, No. 10, 1998, pp1611-1617

Luthans Fred, **Organizational Behaviour**, Ninth Edition, McGraw-Hill, 2002

Mrayyan M T, "Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care", **International Nursing Review**, 53, 2006, pp 224-230

Nanayakkara, G, "Training in hospital administration", Research paper: Organizational Behaviour 88-2, PIM, 1988, p 1

Piko F B, "Burnout, role conflict, job satisfaction and psychosocial health among Hungarian health staff: A questionnaire survey", **International Journal of Nursing Studies**, Vol. 43, No 3, March 2006, pp 311-318

Rao V S, Narayanan P S, **Organizational Theory and Behaviour**, Konark Publications (Pvt) Ltd, Second Edition, 1996, pp 170 - 179

Robins P Stephen, **Essentials of Organizational Behaviour**, Seventh Edition, Pearson Publication, 2003, pp 78 - 84

Sellards, S. & Mills, M.E. (1995). "Administrative issues for use of nursing practitioners", **Journal of Nursing Administration**, Vol. 25, No. 5, 1995, 64-70

Summers C S D, **Quality Management**, Prentice Hall of India Private Ltd, First Edition, 2005, p 67

Sri Lankan Journal of Management, Volume 13, Nos. 3 & 4

Tzeng H M, Ketefian S, "The relationship between nurses' job satisfaction: an exploratory study in a Taiwan teaching hospital", **Journal of Nursing Care Quality**, Vol. 16, No. 2, 2002, pp 39-49

Weerasinghe H, "Transfers of patients from other hospitals - Are they justifiable?" **Sri Lanka Journal of Medical Administration**, Vol. 8-9, 2005/06, pp 21-27