Relation between Job Stressors and Nursing Satisfaction

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Authors' contributions

This work was carried out in collaboration between all authors. Author HK wrote the protocol, manuscript preparation, editing and review and wrote the first draft of the manuscript. Author HA designed the study and managed the literature searches. Author AK analyses of the study. Author FG was gathering information and data. Author ZH inserted data. Author SHSB completed data and statistical analysis, manuscript preparation, editing and review. All authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Background: Nursing is one of the most stressful jobs that many factors involved in this stress. Stress reduction may improve the job satisfaction of nurses. The purpose of this study was to assess the relationship between job stressors and job satisfaction among nurses.

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Materials and Methods: A descriptive-correlational study was conducted to investigate the relationship between job stressors and job satisfaction. One hundred and sixty-nine nurses were selected by stratified sampling. Nursing stress scale and Herzberg occupational satisfaction were used to collect data. Pearson correlation coefficient, T-test and ANOVA were conducted to analyze data.

Results: There was no significant relation between job stressors and job satisfaction among nurses ($P > 0.05$). The mean job stressors was 79.11 ± 14.85 and mean job satisfaction scores was 71.74 ± 14.28. Majority of nurses had average job satisfaction and average job stressors. Most of the nurses were unsatisfied about lack of work place welfare and most of them were satisfied about colleague interaction among nurses, and the most of stressors were reported by the nurses was watching the death and suffering of patients.

Conclusion: In this study Nurses experienced average job stressors and average job satisfaction. Therefore, paying more attention to nursing work environment for the decision-makers and managers is necessary. Further exploration is required to find them to take practical steps to resolve them.

1. INTRODUCTION

Stress is a familiar phenomenon in routine life that shows itself with positive and negative consequences [1]. Stress is a psychological state, and when a person is faced with this threat some physical and Psychological reaction occurs. Stress produced in unbalancing between situation pressure and resources that person has for adaptation [2]. The highest rate of occupational injuries related to nurses that are one of the main members of health care team [3]. It plays an important role for recovery and health promotion in patients. Occupational stress is an unavoidable part of modern nursing [4]. The stress can also lead to dissatisfaction in nursing staffs [2].

Job stress can adversely affect employee health and well-being as well as worker turnover [5].

Occupational stress effect on organizational incompetence, relocation of employees, absence from work due to illness, reduce the quantity and quality of care, increase health care costs, decrease job satisfaction [6] and turnover intention [2].

There is a growing understanding that job-related stress negatively affects the health of workers and patients especially [7,8].

Hzavhay et al. [2] reported that 51.5% of the nurses had job stress. Job satisfaction is an important to the extent that more than four thousand articles published about this issue in 1980 [4]. Job satisfaction is a positive emotional state and that is the result of individual assessment of job or job experience [9]. It is an emotional adjustment of jobs and will be an important factor in career success and personal satisfaction [10] and is directly linked with the quality of nursing care and personal health nurse [11].

According to a research [12], the most important job stressors in nurses respectively were lack of reward and encouragement to participate in important decisions, lack of control on working conditions and lack of promotion. An earlier study was conducted on Iranian nursing reported that only one-third of the nurses (34.3%) had job satisfaction. [3], While results of another study in Iran showed that 78.2% of nurses had job satisfaction [13]. In another study in china, the most stressful domains were workload and time, working environment and resource, nursing profession and clinical duty, patient care and management and interpersonal relationship [14]. Hoffman indicated that the most important criteria for determining job satisfaction of nurses were income, independence and professional conditions [15]. In li and lambert survey the best predictors of job satisfaction were workload, years of experience in nursing, uncertainty about patients' treatment, behavioral disengagement and positive re framing [10].

There are many studies regarding the impact of job stress on anxiety, role conflict, and burnout [15,16]. Moreover, many Iranian studies have been conducted on nurses' stress [1,2,5,8,9,17]. In addition, some studies have examined nurses' job satisfaction [4,11,18,19]. Otherwise, especially in Iran the studies about the

relationship between job stress and job satisfaction are considered less, Because of lack of studies about that, this study was conducted to examine the relationship between job stressors and satisfaction of nurses in hospitals of Rafsanjan. The results of this study can help nursing manager to intervene in this matter, which would lead to improving the quality of nursing services.

2. MATERIALS AND METHODS

In this descriptive-correlational study the relationship between job stressors and job satisfaction were examined. The study population consisted of all nurses in hospitals affiliated by Rafsanjan University of Medical Sciences. Data gathering were lasted from first to the end of April 2015. Inclusion criteria were caring directly for the patients, no suffering from any mental diseases(The nurses who were under the supervision of psychiatrist), had not experienced severe stress such as death of a family member within the last six month and having at least six months job experience.
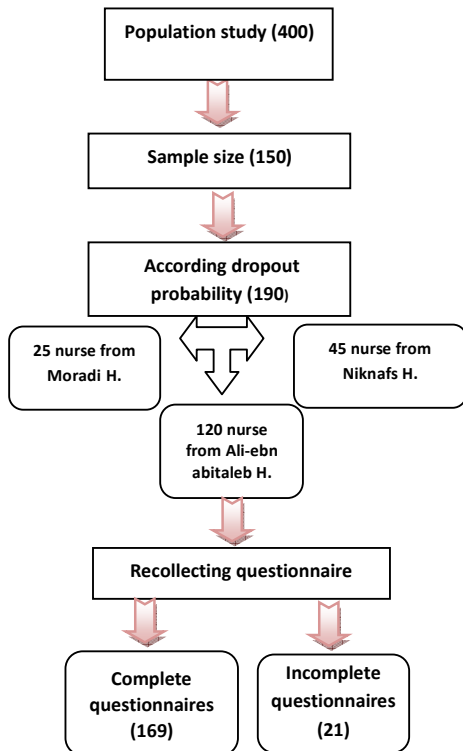

Diagram 1. Flow diagram of sampling

Stratified randomized method was used to conduct this study. Because the stress of the nurses in the study weren't available so by using

confidence interval 95% and d = 0.16SD the sample size was 150.

$$n = \frac{Z^2 *\ SD^2}{d^2} \quad n = \frac{1.96^2 *\ SD^2}{(0.16SD)^2} = \frac{1.96^2}{0.16^2} = \frac{3.842}{0.0256} = 150$$

Totally, 190 subjects were considered after taking into account dropout probability. A total of 169 participants were completed and returned questionnaires. Sampling was done proportionally from nurses who worked in rotating shift in general and educational health care centers of Rafsanjan University of Medical Science (Diagram 1).

Questionnaires distributed by researchers in different shifts and wards and recollected in next shift. The nurses were asked to complete the questionnaire on leisure time and emphasized on information confidentiality.

Tools for data collection in this study were demographic questionnaire, Nursing Stress Scale (NSS) and Herzberg's two-factor of job satisfaction questionnaire. Demographic information includes age, sex, marital status, educational level and job experience. NSS was built in 1981 by Gray-Toft and Anderson [11], which explains 34 situations that are stressful for nurses. This questionnaire consists of seven subsets of death and dying, work load, uncertainty concerning treatment, conflict with physicians, conflict with other nurses, inadequate preparation and lack of staff support [2]. The reliability of translated questionnaire (Cronbach's Alpha=0.93) [2] and validity (0.74) in Iran were assessed by Rezaee [20]. In addition, at the end of this research, the Cronbach's Alpha was also measured (0.7). This tool is based on the Likert scale in which never stressful (1 point), rarely (2 points), sometimes (3 points) and always (4 points). The lowest possible score for the questionnaire is 34 and greatest is 136. The score ranged from 34-66 (mean 49) represents the low stress, the score ranged from 67 to 99 (mean 83) represents the average stress and the scores ranged from 100 to 136 (mean 111) indicates high stress. Two-factor Herzberg's job satisfaction questionnaire has ten domains: Rate to payment, job condition, relating with colleagues, supervising, appreciative, job improvement, job essence, job responsibility, job security and job position. Content validity was assessed by experts in the study field and 34 questions for ten domains were considered. Correlation coefficient was 0.79. This tool is based on the Likert scale in which very satisfied (score 4), satisfied (score 3), unsatisfied

(score 2), very unsatisfied (score 1) and the lowest score possible is 34 and greatest is 136. The score ranged from 34-66 indicates low job satisfaction, 67 to 99 represents average job satisfaction and 100 to 136 indicates high job satisfaction. SPSS 18 and Pearson correlation coefficient, t-test and ANOVA with significant level of 0.05 were used to analyze data.

3. RESULTS

The mean range of nurse's age was 28.2±2.2. Most of the participants (47.9%) aged less than 30 years, (69.8%) were female and most of them (74.6%) were married. The majority of people (92.3%) were undergraduate education and most of them (58%) had less than 10 years job experience. The correlation coefficient indicated no significant correlation between job stress and job satisfaction for nurses (r=-0.18 and p=0.817).

After checking the normality and being sure about normal distribution, parametric statistic tests like ANOVA and T-test were used and no significant demographic variables differences observed between groups in job satisfaction and job stress (Table1). Death and dying, work load and uncertainty concerning treatment had the highest stress scores (Table 2).

The majority of participants (63.9%) had average job satisfaction, as well as the majority of them (61.5%) had average stress. Job stress range between 35-123, with an average of 79.11±14.85, and the scope for job satisfaction ranged between 33-111with an average of 71.74±14.28.

To examine the relationship between subgroups of job stressor with job satisfaction we used Pearson's correlation coefficient (Table 3).

The correlation between the subgroups of job stressor and job satisfaction showed there was a significant correlation between the deaths and dying, conflicts with doctors and lack of staff support with nurses' job satisfaction.

Table 1. Comparison of mean job satisfaction and job stressors with demographic characteristics in participants

Variable	Frequency (%)	Job satisfaction		Job stressors	
		Mean (SD)	ANOVA (P value)	Mean (SD)	ANOVA (P value)
Age (yr.)					
< 30	81(47.9)	71.13±17.20	0.223(0.80)	80.85±15.97	1.30(0.275)
31-40	68(40.2)	72.79±14.06		78.17±18.03	
> 40	16(9.5)	71.95±15.41		73.81±17.77	
Education					
B.Sc.	156(92.3)	71.58±14.83	0.289(0.021)	79.12±17.32	0.43(0.985)
M.Sc	7(4.1)	76.14±28.07		79.57±13.97	
Ph.D.	3(1.8)	71.75±15.66		82±13.22	
Nurses' position					
General	69(40.8)	69.78±16.1	0.81(0.8)	79.6±17.68	0.85(0.74)
ICU-CCU	57(33.8)	70.71±15.7		73.78±13.11	
Emergency	43(25.4)	74.79±15.11		81.9±17.75	
Work experience (yr.)					
<10	98(58)	71.29±16.52		80.82±17.56	
10-20	32(18.9)	69.15±12.98	1.28(0.281)	81.09±15.34	2.35(0.09)
> 20	20(11.8)	76.20±14.36		72.15±14.87	
Variable	Frequency (%)	Job satisfaction		Job stressors	
		Mean (SD)	T-test (P value)	Mean (SD)	T-test (P value)
Marital status					
Single	42(24.9)	72.16±17.92	0.109(0.913)	79.57±16.27	0.154(0.878)
Married	126(74.6)	71.83±14.57		79.11±17.27	
Sex					
Male	50(29.6)	69.74±16.69	-1.03(0.305)	81.02±15.11	0.984(0.327)
Female	118(69.8)	72.56±15.08		78.36±17.87	

Table 2. Job stressors subscales scores among nurses (n = 169)

Subscales	Mean (SD)
Death and dying	18.04±4.81
Work load	15.09±3.77
Uncertainty concerning treatment	12.20±3.35
Conflict with physicians	11.57±3.41
Conflict with other nurses	11.38±3.14
Inadequate preparation	6.04±1.91
Lack of staff support	4.79±1.37
Total	79.11±14.85

Table 3. Correlation between job stressors (and job stressors' subscales) and job satisfaction

Variable	Death and dying	Work load	Uncertainty concerning treatment	Conflict with physicians	Conflict with other nurses	Inadequate preparation	Lack of staff support	Total
Job satisfaction	-0.6*	0.11	-0.11	-0.76*	0.14	0.06	-0.7*	-0.18

Pearson correlation coefficient, ∗ P value < 0.05

4. DISCUSSION

Results of this study showed that overall job satisfaction of nurses is average, this finding was consistent with many studies [19,2,13]. And it is inconsistent with another study [21].

The majority agent of dissatisfaction was about the facilities unavailable at work and the highest satisfaction was about the Relating with colleagues.

Previous Iranian studies reported that most of the nursing satisfaction was related to communication with colleagues, and the least satisfaction was about facilities available at work [13,22]. These studies are consistent with present study. In this study, the mean stress in nurses was average, which is consistent with earlier studies, which reported moderate level of stress in nurses [2,6,15].

Distribution of statistical indicators related to job stress in each of the subgroups showed that the observation of death and dying of patient was the highest cause of stress in nurses (18.04±4.81), which is consistent with Hazavehei study [2]. The Hebrani study also reported that caring of unwell patient and death and dying were the most important sources of stress [1]. Gray-Toftand Anderson [11] mentioned seven stressors in nursing that the suffering and death is so important. Rezaee [20] Moreover, patient's suffering and death was the most stressful situation. The results of these studies are consistent with this study.

Work load was the second stressful subgroups. In present study fourth stressor was conflict with physicians (11.25±3.95), which is inconsistent with the previous study [2]. This difference maybe refer to different workload of nursing staff, presence or absence of medical and nursing students and different academic levels for physicians and nurses.

In this study, no significant correlation was found between job stress and job satisfaction, this result is consistent with Hazavehei et al. [2] study, and inconsistent with Mohammadi et al. and Lavasani study [15,16]. The consistency with a previous study [2] might be related to using the same instrument, while inconsistency with other studies [15,16] might be related using the different tool, different work environments, different burden in hospitals in different cities and the cultural context.

The Pearson correlation test showed that the subsets of stress like death and dying, conflict with physicians and the lack of staff support had negative correlation significant with job satisfaction.

According to T-test there was no significant difference base on demographic characteristics of gender and marital status between average score of job stress and job satisfaction of nurses.

In women the level of stress as much as 2.66 was less than men, which is inconsistent with Hazavei study [2], but it is consistent with Molazem study [17].

Analysis of variance showed that there was a significant difference between education and job satisfaction (p=0.021) MSc nurses were more satisfied (76.14±28.07). No significant difference on demographic variables was observed between the groups in terms of job satisfaction and job stress.

5. STUDY LIMITATIONS

This information is only collected from nurses in Rafsanjan and university hospitals, so caution is required in generalizing the results. The average age of nurses was 28.2. Selecting nurses with little work experience, is one of limitation in this study that is might impress to self-job stress. The time of data gathering was short so set timing for investigation and measuring exposures and risk to job dissatisfaction was immeasurable.

6. CONCLUSION

Nurses participated in this study have experienced average job stress and job satisfaction, Therefore, paying more attention to nursing work environment for decision-makers and managers is necessary. It's better for managers to modify a situation for nurses whom work with dead and dying states and advice the nurses who have more conflict with physicians. It is obligated for nursing administrators to make a constructive engagement with nurses to increase job satisfaction with them.

Most of the discontent was about the facilities available at work. Further exploration is required to find them to take practical steps to resolve them. Communication with colleagues in the study presented the most important factor in nursing satisfaction. It represents a good working environment in Rafsanjan hospitals. Management and cooperative between managers and head nurses can maintain and strengthen this important factor. More studies are needed to evaluate other factors that effect on job satisfaction.

CONSENT

All participants gave oral informed consent. Their privacy was protected since names were not required in the questionnaires.

ETHICAL APPROVAL

Ethical committee of rafsanjan university of medical science gave the ethical approve to do this study. Ethical approve No: IR.RUMS.REC.1394.118.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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