



Scholars Research Library

Der Pharmacia Lettre, 2017, 9(1): 37-42
(<http://scholarsresearchlibrary.com/archive.html>)



Study of Job Stress among Nurses Working in Teaching Hospitals

Azizollah Arbabisarjou¹, Gholamreza Ghoreishinia^{2*} Sadegh Zare², Mahnaz Shahrakipour³, Jassem chalileh²

¹Pregnancy Health Research Center, Zahedan University of Medical Sciences and Health Services, Zahedan, Iran

²Community Nursing Research Center, Student Research Committee, Zahedan University of Medical Sciences, Zahedan, Iran.

³Department of Biostatistics and Epidemiology, School of Health, Pregnancy Health Research Center, Zahedan University of Medical Sciences, Zahedan, Iran.

***Corresponding Author:** Gholamreza Ghoreishinia, Community Nursing Research Center, Student Research Committee, Zahedan University of Medical Sciences, Zahedan, Iran.

ABSTRACT

Introduction: There is occupational stress in every profession. Nursing is essentially recognized as a stressful job and it has caused that stress to be one of the issues considered by the nursing profession. Thus, current study aims at investigating job stress among nurses working in teaching hospitals. **Method:** This study was conducted as descriptive – analytical research on 180 nurses working in teaching hospitals affiliated to Zahedan University of Medical Sciences in 2016. Data were collected using HSE standard job stress survey. Data were analyzed using SPSS 19 software, and descriptive statistics, Pearson correlation and independent t-test were used for data analysis.

Findings: Findings indicated that average working experience of nurses was 7.31 ± 5.95 and their average age was 30.97 ± 6.49 and 136 nurses were female. Mean job stress score also was 115.79 ± 44 , which is a moderate score. 142 nurses experienced moderate stress, 38 of them were experiencing high stress and none of nurses experienced poor stress. The relationship between age, gender and experience with job stress variable was not significant.

Conclusion: Considering above findings it was found that job stress was among nurses working in teaching hospitals affiliated to Zahedan University of Medical Sciences in moderate level. Thus, it is suggested that in such jobs as nursing, which is recognized as stressful job, authorities act for eliminating stressful factors and calming work environment.

Keywords: Job stress, nurses

INTRODUCTION

In today world stress is known as one of harms for human resources and its harmful impacts on individual and social life is obviously visible. Although application of the term “Stress” in psychology is traditionally long, its usage has recently become also prevalent in management psychology and organizational behavior, and due to its prevalence in social life of people, it is has become part of organizational discussions [1]. Stress is a term for describing individual’s negative interpretation for a real or subjective event as a threatening factor which causes fear or anger [2]. One of the main sources of stress in the life of everyone is his job and job stress is today one of the common and costly issues in the working places [3]. Job stress is the stress which catches specific individual in specific job. That is, both individual’s characteristics and job related factors are involved in it, because the individual and the environment have interaction [4]. Job stress is one of the important issues related to human behavior which has entered to human resource occupational performance for different reasons. This variable is observed at complicated and widespread level in all human activities and it is as a problem which can lead to mental collapse of human beings and incidence of different psychological – behavioral disorders in the society at its severe level [5]. It should be noted that indicated that the most severe job-related stressors are as following: not enough staff deficiency to cover the unit adequately, lack of drugs and equipment deficiency required for nursing care and unpredictable staffing and scheduling respectively. The most frequent job-related stressors were including; watching a patient suffers and lack of drugs and equipment required for nursing care. Severities of job stressors were significantly related with age, night shifts, specialization and competencies. Frequencies of job-related stressors were significantly related with hospital type, experience, specialization, and night shifts [6]. Studies have shown that hypothalamic–pituitary–adrenal axis and sympathetic-adrenal are activated in response to stress leading to secretion of Adreno Corticotrophin Hormone (ACTH) Cortisol, epinephrine and norepinephrine which causes cardiovascular and metabolic changes such as increased arterial blood pressure, increased cardiac output, hyperglycemia, peripheral vascular dilation [7-10].

Psychologists and scholars have investigated role of stress in different situations. Meanwhile, impact of stress on health and treatment sector’s employees is more evident due to working complexity [11]. According to control – demand theory proposed by Karazak (1979), job stress occurs when mental demand on work is high and control over the work or decision making is low. Jobs such as nursing which have high mental demands and low decision making have high job stress [12]. Nursing is essentially recognized as a stressful job [13] and it has caused that stress has become one of the issues considered in nursing profession [14]. Especially stress incurs economic costs on the society and influences physical and psychological health of nurses [15] and it can lead to burnout of nurses [16]. Research works indicate high job stress and physical and psychological burnout in nurses which leads to escape from job, the clashes between personnel and intense displacement, impaired health and inability to perform the task, vulnerabilities in professional communication, and ultimately reducing the quality of care provided and dissatisfaction and leaving the profession [17-19].

Since nurses are individuals with sensitive job who deal with health of the society people and their functioning influences both their health and health of other society’s individuals, thus current study was conducted aiming at investigating job stress among nurses working in teaching hospitals of Zahedan.

METHODOLOGY

This study was conducted as descriptive – analytical research on 180 nurses working in teaching hospitals affiliated to Zahedan University of Medical Sciences in 2016. Data were collected using HSE standard job stress survey. It consisted of 34 items on five-point Likert scale (never, rarely, sometimes, often, and always). Scores of each item showed measured value of the item with change range of 1-5, where 1 denotes undesirable state and 5 denotes desirable state. Highest score was 170 and lowest score was 34. Score lower than 80 denoted poor stress, score between 80 -125 denoted average score and scores above 125 were considered as high score. Cronbach's alpha coefficient of the questionnaire was obtained as 0.78 in the study by Azad *et al.* [20]. Following gaining verbal consent of nurses and distribution of questionnaires, data were collected. For Assuring anonymity, code numbers were given on completed questionnaires after returning them to the researcher. In next step, data were transferred to SPSS ver.19 software, and analyzed by descriptive statistics to describe demographic variables. Pearson correlation used to measure job stress and some of demographic characteristics. Also independent t test were used to measure relationship between gender and job stress.

FINDINGS

Findings indicated that average working experience of nurses was 7.31 ± 5.95 . Nurses' age average age was 30.97 ± 6.49 and 136 nurses (75.6%) were female. Male nurses were 44 (24.4%). Mean job stress score also was 115.79 ± 44 , which is a moderate score. 142 nurses (78.9%) experienced moderate stress, 38 of them (21.1%) were experiencing high stress and none of nurses experienced poor stress. The relationship between age and job stress variable was measured by Pearson correlation and it was not significant ($P = 0.678$). The relationship between gender and job stress variable was measured through independent t test and it was not significant ($P = 0.069$) and mean score in women were higher. The way of responding to items of job stress questionnaire by nurses is given in Table 1.

Table-1: The way of responding to items of job stress questionnaire by nurses

Items of job stress questionnaire	%1	%2	%3	%4	%5
1. I clearly know what is expected of me at work.	1.1	3.9	13.9	3.0	51.1
2. I can decide when to rest.	8.9	14.4	23.3	24.4	28.9
3. Different groups at work want me to do things that are hard to combine them.	5.0	21.1	35.6	20.6	17.8
4. I know a way to do things to in my work	1.1	6.7	17.8	35.6	38.9
5. I'm exposed to offense by bearing the ugly words and undesirable behavior.	11.1	21.1	23.3	22.8	21.7
6. I do not have enough time for tasks and duties.	10.6	19.4	43.9	16.1	10
7. When I face a business problem, my colleagues help me.	5.6	10.6	37.2	30.0	16.7
8. I get others' comment about my work.	10.6	32.2	38.3	18.9	0
9. I must work very hard.	1.1	11.1	27.2	37.8	22.8
10. I have freedom of action in my work.	3.9	11.7	27.2	33.3	23.9

11. I am aware of my duties and responsibilities.	2.2	7.8	11.1	26.1	52.8
12. Due to high volume of work, I have to neglect some of the tasks.	18.3	27.2	28.9	15.0	10.6
13. I'm aware of the goals and visions for my job.	2.2	13.3	17.2	28.3	38.9
14. There are a tense relation among my colleagues.	8.3	34.4	31.7	13.3	12.2
15. I have right of choice in doing my works.	3.3	19.4	30	29.4	17.8
16. I do not have enough time to rest.	2.8	12.2	34.4	31.7	18.9
17. I'm aware of what I'm doing is part of the organization's objectives.	0.6	10	23.9	36.7	28.9
18. I am under pressure to work long hours.	6.1	17.2	28.9	25	22.8
19. I have right of choice to do what in the environment.	8.3	21.1	32.2	21.7	16.7
20. I have to work in high speed.	3.3	11.1	29.4	31.1	25.0
21. I'm exposed to harassment in the workplace.	18.9	28.9	28.9	14.4	8.9
22. The opportunity given to do something is not real and enough.	3.3	22.2	37.2	23.3	13.9
23. In dealing with problems I can count on the help of my manager.	8.9	15.0	31.7	23.9	20.6
24. If I need my colleagues help me.	5.0	11.1	34.4	27.8	21.7
25. I have opinions on what I'm doing.	2.8	10	28.3	35	23.9
26. I enough time to ask the manager about the changes.	8.3	18.9	32.2	25	15.6
27. I enjoy necessary and sufficient respect by my colleagues at work place.	3.9	9.4	22.8	31.1	32.8
28. In my work environment, changes are always consulted with staff.	8.3	14.4	41.1	20.6	15.6
29. I can talk with my boss about something that has bothered me.	8.9	13.9	32.8	28.3	16.1
30. The operating hours may be changed.	10.6	17.8	38.9	20	12.8
31. My colleagues are prepared to pay attention to my working problems.	9.4	18.3	40	25	7.2
32. When changes occur in things I'm clearly aware of their practicality.	1.1	10.6	36.7	35.6	16.1
33. When doing things that emotionally heavy I'm helped.	7.8	15	38.3	29.4	9.4
34. My relationships at work is strained.	10.6	28.9	34.4	16.1	10

DISCUSSION

Results of the study showed that job stress in nurses is in moderate level and 21 percent of them experience high level of stress. Various figures have been reported about job stress in nurses and considerably reported moderate stress level in nurses [21,22]. Findings in a study in Sweden on nurses showed that 80 percent of nurses experience high level of stress [23]. The results of a study indicated an average overall job related stress level of $58.46 \pm$

12.62[24]. It can be described in this way that stress is reaction of nurses to unpredictable events and since all nurses do not perceive and imagine a single even in the same way, thus stressfulness of an event is different for nurses. Nurses experience stress considering their experiences and given their characteristics. Nurses with neuroticism characteristics do not have good control over their behavior and practices due to the characteristics of shyness, a high tendency to experience anxiety, irrational thoughts, depression and low self-esteem and thus the quality of care and nursing, communication with patients and clients are influenced by these characteristics. On the other hand, annoying ambient factors such as noise, congestion, overload, death of patients, because of unpredictability and uncontrollability also affects them adversely and increase their mistakes and failure to provide appropriate services and thus increase their job stress [5]. But most importantly stress in nursing profession brings about qualitative and quantitative decline in health care services which will have adverse impacts on public health [25]. Hence, considering inevitability of some of the stressors in nursing profession and the need to prevent mental and behavioral effects of stress, applying measures and actions to improve quality of working life and training coping methods are among tasks of managers in health organizations [26]. Support of management, training nurses on more cooperation with other coworkers, patients, physicians, and participation in decision making are necessities for empowering environment which leads to autonomy nurses so that they are able to provide services in stressful environments and the most difficult conditions [27]. Patients and their families' collaboration and cooperation with doctors and health care givers, education of patients and their families may improve health promotion behaviors [29]. Social networks are useful and valuable for learning but it can influence on students' educational performance [29].

CONCLUSION

According to the results, it was found that job stress among nurses working in teaching hospitals affiliated to Zahedan University of Medical Sciences is in average level. Thus, it is suggested that in such jobs as nursing which is a stressful job, authorities eliminate stressors and calm the work place. Alternatively, it is recommended that the relationship between job stress and other physiological factors to be investigated in future studies.

REFERENCES

1. Moosavi Nasab M, Taghavi MR, Assessing evaluation of stress and remedy to confronting in psychological health. *Hormozgan Med J*, **2007**,11(1), 83-90.
2. Seaward BL, *Managing stress: Principles and strategies for health and wellbeing*, Jones & Bartlett Pub, 1999.
3. Rezaei SH, et al. Effect of communication skills teaching in job stress level among nurses occupying in rehabilitation center. *TUMJ*, 2006, 64(1), 21-26.
4. Hosseini Z, et al. Effect of educational stress management, based on Precede model, on job stress of nurses. *Bimonthly Journal of Hormozgan University of Medical Sciences*. *Bimonthly Journal of Hormozgan University of Medical Sciences*; **2011**, 15(3), 200-208.
5. Jafari A, et al. Relationship between personality characteristics and coping strategies with job stress in nurses. *Quarterly Journal of Nursing Management*. *Quarterly Journal of Nursing Management*, **2013**, 1(4) 36-44.
6. Ajjar B Al, Occupational stress among hospital nurses in Gaza-Palestine. *University of Manchester*, **2013**, 1-289.
7. Mastorakos G, Ilias I, Maternal and fetal hypothalamic-pituitary-adrenal axes during pregnancy and postpartum. *Annals of the New York Academy of Sciences*. *Wiley Online Library*, **2003** 997(1), 136-149.
8. Becker JB, *Behavioral endocrinology*, MIT Press, **2002**.

9. Chlan LL, Music therapy as a nursing intervention for patients supported by mechanical ventilation. AACN Advanced Critical Care. *LWW*, **2000**, 11(1), 128-138.
10. Morgan CA, et al. Relationships Among Plasma Dehydroepiandrosterone Sulfate and Cortisol Levels, Symptoms of Dissociation, and Objective Performance in Humans Exposed to Acute Stress. Archives of General Psychiatry, *American Medical Association*, **2004**, 61(8), 819-825.
11. Kahn RL, et al. Organizational stress: Studies in role conflict and ambiguity. John Wiley, **1964**.
12. Yazdi M, Assessing of fireman job stress in Tehran firefighting organization. Journal of Medical Faculty, **2000**, 6,73-88.
13. Rowe J, The suffering of the healer. Nursing Forum. Wiley Online Library, **2003**, 16-20.
14. Jex SM, Beehr TA, Emerging theoretical and methodological issues in the study of work-related stress. Research in personnel and human resources management, **1991**, 9(31), 1-365.
15. Rauhala A, Fagerstrom L, Are nurses' assessments of their workload affected by non-patient factors? An analysis of the RAFAELA system. Journal of Nursing Management. Wiley Online Library, **2007**, 15(5), 490-499.
16. Armstrong F, Can you hear us? There's a nursing shortage! Australian Nursing and Midwifery Journal. Australian Nursing and Midwifery Federation; **2004**, 12(2):21.
17. Hazavehei MM, et al. Assessing stress level and stress management among Hamadan hospital nurses based on precede model. The Horizon of Medical Sciences. The Horizon of Medical Sciences; **2012**, 18(2), 78-85.
18. DeVries MW, Wilkerson B, Stress, work and mental health: a global perspective. *Acta neuropsychiatrica*. Wiley Online Library, **2003**, 15(1), 44-53.
19. Khaghanizadeh M, et al. The study of relationship between job stress and quality of work life of nurses in military hospitals. *Journal Mil Med*, **2008**, 10(3), 175-184.
20. Azad ME, Gholami FM, Reliability, and validity assessment for the HSE job stress questionnaire. *Journal of Behavioral Sciences (JBS)* **2011**.
21. AbuAlRub RF, Job stress, job performance, and social support among hospital nurses. Journal of nursing scholarship. Wiley Online Library, **2004**, 36(1), 73-78.
22. Mojinyinola JK, Effects of job stress on health, personal and work behaviour of nurses in public hospitals in Ibadan Metropolis, Nigeria. *Ethno-Med*, **2008**, 2(2), 143-148.
23. Petterson IL, et al. Work environment, skills utilization and health of Swedish nurses—results from a national questionnaire study. *Psychotherapy and psychosomatics*. Karger Publishers, **1995**, 64(1), 20-31.
24. Dagget T, et al. Job-related stress among nurses working in Jimma Zone Public Hospitals, South-west Ethiopia: A cross-sectional Study, **2016**, 15(39).
25. Aghilinejad M, et al. Comparing stress level of woman nurses of different units of Iran university hospitals in autumn 2009. *Annals of Military and Health Sciences Research*, **2010**.
26. Pflanz S, Work stress in the military: prevalence, causes, and relationship to emotional health. *Military medicine*. Association of Military Surgeons of the United States; **2002**, 167(11), 877.
27. Lyons DM. Military Nurses Perceptions of Autonomy. DTIC Document, 2002.
28. Ansari H, et al. Prevalence of Hepatitis C and related factors among Beta Thalassemia Major patients in Southern Iran (2006-2006), *J Med Sci* **2007**, 7(6), 997-1002.
29. Arbabisarjou A, et al. Application of social networks among high schools' students in Sistan and Balouchestan, Iran, *Der Pharmacia Lettre*, **2015**, 7(9), 161-167.