Source of job stress for nurses in public hospitals

Ahmed S. Al-Aameri, PhD.

ABSTRACT

Objective: This study aims at assessing the different sources of job stress for nurses in a number of public hospitals in Riyadh city, Kingdom of Saudi Arabia. In addition, it intends to find out the most and least perceived sources of stress, and the effect of demographic factors on nurses' perception of these sources.

Methods: Four-hundred and twenty-four nurses working in a number of public hospitals in Riyadh city were the sample size. A questionnaire was used as a method of data collection. It was distributed through the first half of year 2002. Validity and reliability were examined and the score of Cronbach's alpha was found at .92. Furthermore, a number of statistical techniques such as mean, standard deviation, and regression analysis were used to examine the research questions.

Results: Six possible sources of job stress for nurses in public hospitals were found. These include organizational structure and climate, job itself, managerial role, interpersonal relationships, career and achievement and homework interface. The major sources of stress were the first 3 factors, but they have mixed views on the last 3.

Homework interface was not seen as a source of stress for nurses, which may refer to the fact that most of them are expatriate and may have little familial obligations. On the other hand, it was found that the effects of demographic factors on nurses' perception of these sources are little. The exception was between age and marital status regarding homework interface factor. It was found that old and unmarried nurses did not see this factor as a stressor on the contrary to young and married ones.

Conclusion: There are many sources of job stress for nurses in public hospitals. The most stressors found were organizational structure and climate, the nursing job itself, and the managerial roles. Public hospitals managers must deal with these and other stressors and manage them more constructively in a way that positive consequences will be maintained, and negative ones will be eliminated. Besides, there are many strategies for coping with job stress that managers should adopt. Finally, it must be noted that these results have to be taken with caution. More research in this area is needed before generalizing the study findings.

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Research has recently found that organizations lose hundreds of billions dollars yearly as a result of stress-related illness.[1] These outcomes create considerable managerial awareness for understanding its nature and developing programs for reducing its negative consequences. Like most other health professions today, nursing profession is full of stress due to the kind of job that demands daily care for patient and constant interaction with heavy work requests.[2] Job stress among nurses is represented by the fact that more than one third of the 1.4 million nurses in the United States of America left the profession in 1981. Nurses who remain in their jobs tended to have a high risk for psychological distress or substance abuse.[3] The significance of studying this subject stems from the fact that no consensus regarding

the sources of stress has been agreed upon to date. Despite the various studies on work-related stress, the absence of empirical research, especially in Saudi health sector that reflects on the sources of stress makes the present study imperative. In addition, the importance of focusing on sources of stress is due to its costly negative outcomes that affect individuals and organizations alike.[4] Among the negative consequences of stress are dissatisfaction with work, poor performance, absenteeism, employee withdrawal, job turnover, a lower job involvement, and a lack of organizational commitment.[5,6] In light of this, the main objective of this research is to find out the sources of job stress for nurses in public hospitals in Riyadh, Kingdom of Saudi Arabia (KSA). Specifically, the study aims to examine the following questions: 1. What are the sources of stress for nurses in Saudi public hospitals? 2. What are the effects of demographic factors on nurses' perception of these sources? 3. What can be done to cope with job stress?

The term "stress" refers to an unequal situation that occurs when the environmental demands exceed adaptable resources of an individual.[7] Burnard[2] defines stress as "psychological, physiological or spiritual discomfort that is experienced when environmental stimuli are too demanding or exceed a person's coping strategies". Cooper et al[8] define it as "a negative perceived quality, which as a result of inadequate coping with sources of stress, has negative mental and physical ill health consequences". It seems that the concept involves a complex interaction between employees and their work environments. When the worker's skills and ability do not match the demands and requirements of the job, or when the individual's needs are not supplied in the job environment, stress occurs.[6] Sources of job stress may be found both within the individual person and within the work environment.[9] At the individual level, the personal characteristics of the individual such as flexibility, interaction with colleagues, and Type A behavior (one's feelings of being competitive, aggressive, perfect and impatient to achieve goals) might cause job stress.[10-12] Organizational factors such as role structure, misfit between the employee and the environment, and inadequate management are also among the forces producing stress in the workplace.[10] Role structure involves the way in which tasks and duties are distributed among the various employees in an organization.[13] Some researchers have illustrated some characteristics of the roles that contribute to work stress such as role conflict, role ambiguity, and the amount of challenge of the job.[14] Environmental sources of job stress include the concept of misfit between the person and the work environment, which takes 2 forms.[15] The first deals with the conflict between a worker's personal motives and the supplies of the job and the environment. The second form involves the relationship between the demands of the job and the personal ability of the worker to meet those demands. In addition, much stress can be caused by poor management. For example, lack of adequate planning, lack of delegation, lack of job autonomy, and the absence of clear unity of command are among the sources of stress. Therefore, the lack of effective managerial practices might produce work stress and cause the individual to quit the job and leave the organization.[12] In nursing profession, research has found a number of sources of stress. Anderson et al[15] stated 9 sources of stress related to nursing. These include task, workload, death and dying, uncertainty, responsibility, role conflicts, relationships, homework conflicts, and fulfilling others' expectation of the role of nurse. Marshall mentioned[16] that sources of nurses stress vary with specialization, level in the organization, experience, type of hospital, and type of unit.[16] Alluisi and Fleishman[17] that such factors as gender play a major role in nurses' perception of job stress.[17] Also, they found that women are influenced by interpersonal conflicts a source of stress more than men. In addition, the results show that nurses perceive stress differently based on their age. As a whole, nurses are subjected to a great amount of stress due to the nature of their work. This stress produces a number of negative consequences for nurses themselves and for their work organizations. The cost of these outcomes is very high for all parties involved in health organizations. For this reason, managers in health care organizations must pay a great deal of attention to stress in their work settings and investigate the factors creating stressful situations for nurses. Based on that, they have to develop the most appropriate techniques to cope with stress and to manage it positively. This would not happen only if the whole issue of stress is closely examined and the sources of stress become known. It is the hope of this study to find out the most seen stressors for nurses in Saudi public hospitals.

Methods. *Study sample.* A cross-sectional study was conducted where the sample is drawn from nurses working at public hospitals in Riyadh city, KSA during the first half of year 2002. Using the non-probability sampling technique and accidental sampling methods, 600 nurses were selected from a number of hospitals to complete the questionnaire. Of these, 424 nurses completed the questionnaire and the rest did not return it for unknown reasons. The response rate was approximately 71% which is very much acceptable in social research.[18] The participants were 378 females and 46 males with a mean age of 34.4 years. These were 232 married and 190 unmarried. The average experience of the participants in their present hospitals was approximately 5 years.

Instrument. The instrument used in this study to measure the different sources of job stress was designed by Cooper et al.[8] It includes 61 questions related to the different sources of stress. These questions represent 6 sources of job stress, organizational structure and climate (11 items), job itself (9 items), managerial role (11 items),

interpersonal relationships (10 items), career and achievement (9 items), and homework interface (11 items). The instrument used the following scale: very definitely is a source (6), definitely is a source (5), generally is a source (4), generally is not a source (3), definitely is not a source (2), very definitely is not a source (1). It was tested for validity and reliability in many different professions, including nursing.[1,15,19,20] In this study, the author conducted a pilot study, which revealed that the instrument was highly valid and reliable. Moreover, the score of Cronbach's alpha was calculated with the study sample and it was found at .92.

Procedures of data collection and analysis. Six hundreds nurses working in a number of public hospitals in Riyadh city were contacted and given a copy of the questionnaire. A letter from the researcher explaining the purpose of the study, data confidentiality and how the questionnaire should be filled out was attached. All the questionnaires had been collected and a major revision and coding were carried out, which followed by computer feeding. The statistical package used to analyze the data was Statistical Package for Social Sciences for Windows. After that, a number of statistical techniques were employed to answer the research questions.

Results. The aim of this study is to find out the sources of job stress that nurses confronted in their work settings. To achieve this purpose several statistical techniques were used including, the mean and SD to articulate the most and least sources of stress, and the regression analysis to show the effects of demographic variables on nurses' perception of stress' sources. **Table 1** indicates that the most

perceived source of job stress for nurses was the hospital's organizational structure and climate as the mean of 3.75 showed. The variation among nurses regarding this source was low as the SD of .87. This result means that nurses consider the factors related to the organizational structure and climate such as inadequate guidance, lack of consultation and communication, favoritism, staff shortage and so forth. as the most stressor at work. The second most perceived stressor was the job itself with a mean of 3.49. The variation among the sample was the lowest as the SD of .74. The meaning of this result is that workloads, working hours, work variety, and so forth, create stress for nurses. The third most perceived source of stress is the managerial role with a mean of 3.43, with low variation among the sample with the SD of 0.87. What can be read from this result is that lack of power, role ambiguity, role conflict, incompatible between hospital values and nurse values and so forth, present certain amount of stress for nurses in these hospitals. Interpersonal relationship comes as the fourth most perceived source of stress with a mean of 3.34. The variation among the sample is considerably low with a SD of 0.80. This result can be explained on the basis that when a nurse faces some situations where there is a feeling of isolation, lack of encouragement from superior, personal conflict among the employees, they feel more stressful. Also, it was found that career and achievement could present certain causes of stress for nurses as the mean of 3.30 showed. Under situations where employees are undervalued, having unclear promotion prospects, lacking career advancement, stress can be developed. The least perceived source of stress was homework interface. The sample of nurses did not see it as a source of stress. This may refer to the fact that a large

Table 1 - Means and standard deviations of sources of job stress for nurses.

Source	Mean	SE	SD
Organizational structure and climate	3.75	0.04	0.87
Job itself	3.49	0.04	0.74
Managerial role	3.43	0.04	0.87
Interpersonal relationships	3.34	0.04	0.80
Career and achievement	3.30	0.05	0.93
Homework interface	2.96	0.05	0.95

Table 2 - Multiple regression of sources of job stress with enter method.

Dependent variables	Independent variables				R_2	SE
	Age	Sex	Marital status	Experience		
Organizational structure and climate	0.07	0.01	0.04	0.08	0.01	0.85
Job itself	-0.013	-0.02	0.06	0.06	0.02	0.72
Managerial role	-0.07	0.02	-0.01	0.09	0.01	0.86
Interpersonal relationships	-0.02	-0.06	-0.11	0.06	0.01	0.79
Career and achievement	-0.16†	-0.02	-0.08	0.09	0.03*	0.92
Homework interface	-0.24†	-0.03	-0.14*	0.08	0.07†	0.92

*Significant at .05, †Significant at .01

number of nurses are expatriate, unmarried and they do not have many obligations outside the work. The SD of 0.95 was the highest, which means that there are some variations among the sample. The effects of some demographic variables such as age, sex, marital status, and experience on sources of job stress were assessed using multiple regression with enter method as shown in **Table 2.** The results showed that 2 demographic factors: age and marital status have a few effects on 2 sources of job stress, which are the homework relationship and career and achievement. The independent variables, especially age and marital status, explain approximately 7% of the variance in homework relationship. This result mean that younger and married nurses observe the work home relationship as a source of job stress more than the older and unmarried ones as betas of -0.24, -0.14. In addition, it was found that these independent variables especially age, explain approximately 3% of the variance in career and achievement. This means that younger nurses observed this factor as a source of job stress more than the older ones. Yet, we have to admit that these results are weak and more research is needed to examine their validity.

Discussion. Work stress is one of the issues that attracted a considerable amount of attention theoretically and practically. In light of this trend, this study aimed at assessing the most and least perceived sources of stress for nurses in Saudi public hospitals. The results show that organizational structure and climate, job itself, and managerial role are the most stressors for nurses in Saudi public hospitals. Interpersonal relationships, career and achievement are perceived differently. Some nurses observed them as a major sources of stress, while some of them do not have this view. In terms of homework interface, the findings did not reveal that nurses observed it as a stressor due to the fact that most nurses in Saudi hospitals are expatriate and unmarried. This makes no conflict between their role at the hospitals and their role at homes. The results of this study are consistent with other studies in terms of some stressors. Much research on stress claims that job stress stems from the nature of nursing work. This includes many factors such as lack of guidance and consultation, heavy workload, role conflict and ambiguity, and so forth.[10,13,15,16] It seems that the findings of these studies are very much compatible with the findings of this study. However, some differences between the findings of this study and previous studies are found. Work-home interface was not found to be a major stressor for nurses. This may refer to the fact that most nurses working KSA are expatriate and generally have a few social and familial obligations. Regarding interpersonal relationships, as a stressor, nurses have different opinions. Some observed it as a major source of stress; others downplay its importance. Yet, we cannot neglect this factor as a source of stress and

it must be taken into consideration when dealing with job stress. The last factor, which is not very much consistent with the result of other studies, is that of career and achievement. This finding can be explained based on the fact that most nurses are expatriate, and they have specific annual contracts with their hospitals, where rights and obligations are precisely identified. If this is the case, it would be expected that nurses would not see it as a stressor since they may bear in their mind that they are temporarily working in these hospitals.

In conclusion, managers in health care organizations should realize that stress must exist in an amount that is productive to their organizations. When it turns out to be negative, it has to be managed constructively. There are many strategies that organizations can adopt to cope with job stress such as emotional support, taking time off, changing jobs, postponing risky decisions, altering policies and so forth. Weatherley and Irit[21] suggests 2 strategies to cope with stress: problems focused strategies and emotion-focused strategies. The problem-focused strategies include several coping techniques such as altering policies, making selective ignoring of policies, prioritizing policies, cognitive redefine policies, seeking information, postponing risky decisions and avoiding risky decisions. The emotional focused strategies include seeking emotional support, taking time off, separating work and home, changing jobs, lowering expectations, altering personal values and controlling thoughts and emotions. With all efforts exerted in this research, generalizing the results may not be advisable without further research. Two limitations to this study must be considered. First, the sample was drawn from Riyadh city only, which may not represent other cities in KSA. Second, participants were selected based on non-probability sampling technique, which may not represent the whole population of nurses in these hospitals. Therefore, more research is needed to examine these findings.

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