



## Original Research Article

# A Study of the Coping Strategies Used by Nurses Working in the Intensive Care Units of Hospitals Affiliated to Jahrom University of Medical Sciences

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## ABSTRACT

Nursing is a highly stressful job, so much so that the dissatisfaction caused by the stress can make nurses leave their jobs. What affect individuals' reactions to stress are their coping strategies for stress. The objective of the present study is to explore the coping strategies used by nurses working in the intensive care units of hospitals affiliated to Jahrom University of Medical Sciences. This is a cross-sectional descriptive study, with its sample being composed of 107 nurses working in the intensive care units of hospitals affiliated to Jahrom University of Medical Sciences. Sampling was based on the simple random method. Data was collected using a two-part questionnaire: demographic characteristics, and Jallowice standard coping questionnaire. Descriptive statistics were used to analyze the data. The results showed that in the case of problem-focused coping strategies, 43% of the participants were poor, 40.2% were moderate, and 16.8% were satisfactory in their application of the strategies. In the case of emotion-focused coping strategies, 33.6% of the participants were poor, 25.2% were moderate, and 41% were satisfactory in their application of the strategies. Nurses working in intensive care units employ problem- focused coping strategies at poor and moderate levels, while their application of emotion-focused coping strategies is satisfactory. In view of the inevitability of certain stressful factors in nursing and the necessity of reducing the mental and behavioral consequences of stress, it is essential that authorities at health organizations take measures to improve nurses' professional life quality by teaching them effective coping techniques.

### Keywords

Coping Strategies, Nurses, Intensive Care Units, Jahrom

## Introduction

Nursing is an immensely stressful job. The nurses face with the personal, communicative, and organizational stress

that adversely affects their health and job satisfaction (mortaghighasemi, ghahremani, vahedianazimi, and ghorbani, 2011). In

clinical practice, nursing professionals are often faced with difficult and emotionally charged situations, such as the prolonged suffering and death of a patient, generating feelings of sadness, anxiety, frustration, helplessness and even guilt (Martins, Chaves, & Campos, 2014).

Studies show that stress causes nurses to dislike their jobs, have problems communicating with their colleagues, and eventually quit their jobs (Bahrami, Akbari, Mousavi, Hannani, & Ramezani, 2011). Moreover, in the long term, occupational stress for nurses can result in burnout, lower efficiency, frequent absences from work, reduction in patients' satisfaction, family problems, alcohol and drug abuse, depression, and even suicide (Hebrani, Behdani, & Mobtaker, 2008). There are various opinions regarding jobs and the related stress, but nursing is often referred to as a stressful profession, especially in intensive care units (Thelan, 1990).

In Iran, nurses' occupational stress is higher than the global standards (Sheikhi, Sarechloo, Javadi & Moradi, 2009): Shahraki Vahed et al. report that 42.7% of nurses in Iran are subject to mental disorders and 50.7% suffer from severe occupational stress (Shahraki Vahed, Mardani Hamuleh, Sanchuli, & Hamed Shahraki, 2010). Elma et al. in their study sent electronic questionnaires to 1320 nurses in the U. S. and found out that high occupational stress was prevalent (Elamo, 2005).

Nursing is a sensitive job which includes communicating with patients and caring after them; failing to identify and fighting the accompanying stress can have dire consequences. In such units as C.C.U., I.C.U., and dialysis, the problems nurses encounter are more serious and they are subject to greater levels of stress (Fathi,

2003). Obviously, the main reason for most physical and mental disorders is one's inability to deal with psychological pressure (Grusi Farshi, & Moslemi, 2005), which in turn affects one's reactions to stress (Akouchekian, Roohafza, Hasanzadeh, & Mohammad Sharifi, 2009).

According to the transactional theory proposed by Lazarus and Folkman, coping behavior is defined as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." This theory postulates that coping behavior affects well-being and adaptation; In addition, coping behavior has also received attention from nursing researchers. (Kato, 2014)

Thus, one of the important factors in avoiding burnout is applying stress coping strategies (GrusiFarshi, & Moslemi, 2005). Two dimensions of coping are problem-focused coping and emotion-focused coping. Problem-focused coping consists of concrete attempts made to alter the stressful event while emotion-focused coping consists of attempts made to alter stressful feelings (LeSergenta, & Haney, 2005). People typically employ problem-focused coping strategies, purposively targeted at solving the problem at hand, when they perceive control over stressful events. Emotion-focused coping, aimed at minimizing negative emotions through seeking distraction and social support or by avoiding problems, predominates when people feel that the stressful event is something that must be endured. A systematic review showed that problem-focused coping was associated with good health, while emotion-focused strategies were related to poor health. In Asian and Australian hospital nurses, problem-focused coping was related

to better mental health, whereas emotion-focused coping was associated with reduced mental health. This finding suggests mental health benefits for nurses who use problem-solving to cope with stress by addressing the external source of the stress, rather than emotion-focused coping in which nurses try to control or manage their internal response to stress (Schreuder et al, 2012). For example, in a study of female hospital nurses, it was reported that affective-oriented coping was significantly associated with depressive symptoms, even after controlling for the effects of job stress, nursing-related work experience, and social support (Lin, Probst, &Hsu, 2010). Moreover, a study of hospital nurses in Australia and New Zealand found that type of coping strategy was significantly associated with physical and mental health, after controlling for the effects of job stress, years as a nurse in the current clinical unit, and income (Chang, Bidewell,& Huntington, 2007). Finally, Gunus,en and Ustun also reported, in 2010, that burnout among nurses is reduced when coping skills training was provided (Gunus,en NP, Ustun B, 2010). A passive coping style, which is a type of emotion-focused coping, associates with poor (mental) health in both Norwegian and Dutch hospital nurses. Nurses with habitual passive coping may experience little control over work and low support within the nursing team. Either way, it is important for nurse managers to recognize passive coping, because this type of coping associates with poor health (Schreuder et al, 2012).

Since nurses are under considerable stress, their professional and social status should be taken into serious consideration; otherwise, nursing services may undergo total deterioration (Grusi Farshi, & Moslemi, 2005). There are certain inevitable stressful factors in nursing that can adversely affect

nurses' minds and behaviors; it is important to find ways to deal with these factors before we can take measures to improve nurses' professional quality and teach them coping strategies (Lashonda, 2004). Nurses, when experiencing great stress, draw upon various coping strategies, and obviously, their manner of coping with stress influences the quality of their professional performance. Thus, it is essential to identify the various coping strategies nurses apply to reduce stress. This study aims to explore the coping strategies used by nurses working in intensive care units.

## **Materials and Methods**

### **Setting**

This is a descriptive study, and the study population consisted of nurses working in intensive care units in hospital affiliated to Jahrom University of Medical Sciences. Inclusion criteria were working in an intensive care unit, and being willing to participate. The exclusion criterion was unwillingness to cooperate further. Sampling was based on the simple random method.

### **Data Collection**

The data collection tools consisted of a questionnaire designed to establish the participants' demographic characteristics, and Jallowice standard coping strategies questionnaire. Jallowice coping strategies questionnaire is comprised of 39 items related to coping with stress—problem-focused and emotion focused—with the questions being the same as the statements in Jallowice eight-domain coping table. For each statement, there were five possible scales: 1.never, 2.rarely, 3.occasionally, 4.often, and 5.always. In case of emotion-focused coping strategies, the scores could

vary between 15 and 75, and in case of problem-focused coping strategies, the scores could vary between 24 and 120. For problem-focused coping strategies, scores would fall into one of three categories: low (below 50), average (50-60), and high (above 60). Similarly, the scores for emotion-focused coping strategies could be low (below 70), average (70-80), and high (above 80). The reliability of Jallowice standard coping strategies questionnaire has been verified by Jane Lee; in Iran, it has been verified by Aziznejad and Zahri Anbuhi. Once the participants completed the demographic and Jallowice questionnaires, the data was analyzed using descriptive statistics and the software SPSS.

## **Result and Discussion**

107 nurses participated in the study: 72% (77 nurses) were female; their average age was 31.15; 78.5% were married; the majority of the participants (60%) were contractual employees; the average length of the participants' clinical experience was 4.68 years. An analysis of the data showed that regarding problem-focused coping strategies, 43% of the sample were poor, 40.2% were average, and 16.8% were satisfactory in their application of the strategies. Regarding emotion-focused coping strategies, 33.6% of the sample was poor, 25.2% were average, and 41.1% were satisfactory in their application of the strategies.

The results show that nurses working in intensive care units tend to apply emotion-focused coping strategies more than problem-focused strategies. Regarding stress and its consequences, experts believe that coping strategies for stress are more important than the nature of stress itself. The more efficient the strategies applied to cope with stress, the less damage it will cause

(Lazaruse, 1984). Gholamzadeh et al in their study, discovered that nurses in emergency units applied emotion-focused coping strategies more than problem-focused coping strategies (Gholamzadeh, Sharif, & Dehghan Rad, 2011). In Muzinsky's study in 2003, nurses in trauma units applied problem-focused and emotion-focused strategies more than inefficient and less efficient approaches, which finding agrees with the findings of the present study; however, due to differences in the questionnaires, in the former study inefficient and less efficient approaches were deemed as incorrect practices, while in the present study emotion-focused strategies are considered as wrong (Moszczyński, & Haney, 2003).

In "A Study of the Relationship between Occupational Stress and Occupational Burnout in Nursing Staff," Zeighami Mohammadi et al. discovered that continuous occupational stress can lead to depression, exhaustion, disregard for one's colleagues and patients, unwillingness to provide care, loss of interest in one's job, and lower professional competence (Zeighami Mohammadi, & Asgharzadeh Haghghi, 2011). Identification of sources of stress and strategies to cope with them can reduce risk of burnout in nurses. In the study of Dehghani et al., nurses working in intensive care and emergency units were experiencing higher levels of stress. More responsibilities for nurses in intensive care units results in their experiencing the most stress: providing direct care for patients, facing unexpected events and patients' deaths, more tasks and less time for rest are among the reasons why nurses in intensive care and emergency units are more likely to be affected by depression (Dehghani et al, 2009).

**Table.1** Distribution of absolute and relative frequency of I.C.U. nurses' application of problem-focused coping strategies

Problem-focused coping strategies	Number	Percentage
<b>Low (below 50)</b>	46	43
<b>Average (50-60)</b>	43	40.2
<b>High (above 60)</b>	18	16.8
<b>Total</b>	107	100

**Table.2** Distribution of absolute and relative frequency of I.C.U. nurses' application of emotion-focused coping strategies

Emotion-focused coping strategies	Number	Percentage
<b>Low (below 70)</b>	36	33.6
<b>Average (70-80)</b>	27	25.2
<b>High (above 80)</b>	44	41.1
<b>Total</b>	107	100

It is interesting to note that parvin et al., in their study of the relationship between occupational stress and burnout in nurses of intensive care units, conclude that these nurses do not experience any stress (Parvin, Kazemian, Hassan poor, & Alavi, 2005); differences between questionnaires and among working conditions of various hospitals may account for this discrepancy in the results. However, most studies in Iran show that nurses do not have sufficient adaptability to face occupational depression, and occupational burnout among Iranian nurses is reported to be higher than the global standards (Rahimi, Ahmadi, and Akhond, 2004).

In the study of Schreuder et al nurses tended to apply problem-focused coping strategies and social support (Schreuder et al, 2011). According to Fathi, there are many factors in intensive care units that can cause stress for nurses, and it is impossible to remove all the stress-causing factors at work (Fathi, 2003). In their study, Hazavehee et al. discovered that the participating nurses' awareness of

stress and its harms and ways to deal with it was only moderate, which is not satisfactory in view of the fact that nurses are graduates in health-care; most of the nurses in their study were suffering from moderate or severe occupational stress (Hazavehei, Hosseini, Moeini, Moghimbeigi, & Hamidi, 012). Among the important factors in occupational burnout are one's coping strategies for stress (emotion-focused and problem-focused). Various studies show that individuals who adopt emotion-focused coping strategies to overcome mental pressure are more prone to occupational burnout than those who apply problem-focused coping strategies (GrusiFarshi, & Moslemi, 2005). After evaluating a group of nurses using Hamilton's questionnaire, Uddin realized that the nurses were suffering from high levels of stress (Uddin, 2006).

Apparently, failing to adapt to stressful conditions at work adversely affects nurses' mental and emotional well-being, and inflicts frustration and depression on them. It is essential that the mental and emotional

well-being of the nursing staff be treated as a matter of great importance: hospitals need to have lively and motivated staff to achieve their goals. Nurses' occupational environment is filled with various forms of stress, which can have negative consequences not only for their physical and mental health, but their performance and their organizations' productivity. To minimize the damage, such interventions as classes on coping with stress and professional support are necessary.

Recognizing the impacts of job-related stress and making use of effective coping methods play a vital role in reducing nurse's stress. A change in leadership styles from the managerial level and reallocation of manpower may help reduce job stress.

## References

- Akouchejian, S., Roohafza, H.R., Hasanzadeh, A., & Mohammad Sharifi, H. (2009). Relation between Social Support and Coping with Stress in Nurses in Psychiatric Ward. *Journal of Guilan University of Medical Sciences*. 18(69),41-6.
- Bahrami, A., Akbari, H., Mousavi, Gh.A, Hannani, M., & Ramezani, Y. (2011). Job stress among the nursing staff of Kashan hospitals. *Journal of Kashan University of Medical Sciences*. 15 (4), 367-73.
- Chang, E.M, Bidewell, J.W, & Huntington, A.D.(2007). A survey of role stress, coping and health in Australian and New Zealand hospital nurses. *Int J Nurs Stud*. 44(8),1354–62.
- Dehghani, M., Zoladl, M., Boland-Parvaz, S.H., Keshtkaran M Z., MahmoudiMR., & Jabbarnejad, A.(2009). A survey on depression and its related factors in Nurses who work in Namazi Hospital of Shiraz University of Medical Sciences-2008. *Iran occupational health journal*. 6(3), 24-31.
- Elamo J. Applying a cultural method to the concept of burnout. (2005). *J Transcul Nurs*. 16 (1), 71-6. <http://dx.doi.org/10.1177/1043659604270980>
- Fathi, M.(2003). Incidence rate and sources of stress among nurses working in intensive care unite of kourdisten university of medical sciences. *Scientific Journal of Kurdistan University of Medical Sciences*. 7(4),53-62.
- Gholamzadeh, S., Sharif, F., & Dehghan Rad, F.(2011). Sources of occupational stress and coping strategies among nurses who work in Admission and Emergency Departments of Hospitals related to Shiraz University of Medical Sciences. *Iranian journal of nursing and midwifery research*. 16(1), 41-6.
- GrusiFarshi, M., & Moslemi, M. (2005). Investigate the relationship between burnout and coping techniques Nurses Kurdistan province. *Quarterly Journal of Psychological Studies*, 1(4, 5),5-19.
- Gunusen, N.P, Ustun, B.(2010). An RCT of coping and support groups to reduce burnout among nurses. *Int Nurs Rev*. 57(4), 485–92.
- Hazavehei, M.M., Hosseini, Z., Moeini, B., Moghimbeigi, A., & Hamidi, Y. (2012). Assessing Stress Level and Stress Management Among Hamadan Hospital Nurses Based on PRECEDE Model. *Ofogh-e-Danesh. GMUHS Journal*. 18(3), 78-87.
- Hebrani, P., Behdani, F., & Mobtaker, M. (2008). Evaluation of stress factors in nurses of different hospital wards. *The Quarterly Journal of Fundamentals of Mental Health*. 10 (3), 231-37.
- Kato, T. (2014). Coping with interpersonal stress and psychological distress at work: comparison of hospital nursing staff and salespeople. *Psychol Res Behav Manag*. 7, 31–6.
- Lashonda, L. (2004). Factors that most influence job satisfaction among cardiac

- nurses in an acute setting. [Thesis]. USA. Marshall University.
- Lazaruse, R.S., & Folkman, S. (1984). Stress appraisal and coping New York.
- LeSergenta, C.M., & Haney, C.G. (2005). Rural hospital nurse's stressors and coping strategies: a survey. *International Journal of Nursing Studies*. 42,315–24. <http://dx.doi.org/10.1016/j.ijnurstu.2004.06.017>
- Lin, H., Probst, J.C., & Hsu, Y. (2010). Depression among female psychiatric nurses in southern Taiwan: main and moderating effects of job stress, coping behaviour and social support. *J Clin Nurs*. 19(15–16), 2342–54.
- Martins, M.C., Chaves, C., & Campos, S. (2014). Coping strategies of nurses in terminal ill. *Procedia - Social and Behavioral Sciences*. 113,171 – 180. <http://dx.doi.org/10.1016/j.sbspro.2014.01.024>
- Mortaghi Ghasemi, M., Ghahremani, Z., VahedianAzimi, A., & Ghorbani, F. (2011). Nurses Job Stress in Therapeutic Educational Centers in Zanjan. *Journal of Gorgan Bouyeh Faculty of Nursing & Midwifery*. 8(1), 42-51.
- Moszczyński, A.B., & Haney, C.J. (2003). Stress and coping of Canadian rural nurses caring for trauma patient who are transferred out. *J Emerg Nurs*. 29(2),96. <http://dx.doi.org/10.1067/men.2003.72>
- Parvin, N., Kazemian, A., Hassan poor, A., & Alavi, A. (2005). Evaluation nurses, job stressors in Shahrekord hospitals affiliated to medical university in 2002. *Modern care (Scientific Quarterly of Birjand Nursing & Midwifery Faculty)*. 2(3), 31-5.
- Rahimi, A., Ahmadi, F., & Akhond, M.R. (2004). An investigation of amount and factors affecting nurses' job stress in some hospitals in Tehran. *Hayat*. 10(3), 13-22.
- Schreuder, J.A., Plat, N., Magerøy, N., Moen, B.E., van der Klink, J.J., & Groothoff, J.W. (2011). Self-rated coping styles and registered sickness absence among nurses working in hospital care: A prospective 1-year cohort study. *Int J Nurs Stud*. 48(7), 838-46.
- Schreuder, J., Roelen, C., Groothoff, J., Van der Klink, J., Magerøy, N., .... & Pallesen, S. (2012). Coping styles relate to health and work environment of Norwegian and Dutch hospital nurses: A comparative study. *Nursing outlook*, 60, 37-43. <http://dx.doi.org/10.1016/j.outlook.2011.05.005>
- Shahraki Vahed, A., Mardani Hamuleh, M., Sanchuli, J., Hamed Shahraki, S. (2010). Assessment of the relationship between mental health and job stress among nurses. *Journal of Jahrom University of Medical Sciences*. 8(3), 34-40.
- Sheikhi, M.R., Sarechloo, M.E., Javadi, A., & Moradi, M. (2009). Effect of nurses' empowerment on coping with job stresses. *JQUMS*. 12(4), 38-42.
- Thelan, Lynne. A (1990). Text book of critical care nursing diagnosis and management. The C.V. Mosby Company Philadelphia, 870-73.
- Uddin, M.T. (2006). A study on the Quality of nurses of government hospitals in Bangladesh. *Proc Pakistan Acad Sci*. 43 (2), 121-9.
- Zeighami Mohammadi, S.H., & Asgharzadeh Haghghi, S. (2011). Relation between Job Stress and Burnout among Nursing Staff. *Scientific Journal of Hamadan Nursing & Midwifery Faculty*. 19(2), 42-9.