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# Survey of stress and coping strategies to predict the general health of nursing staff

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## Abstract:

**BACKGROUND:** Nurses are often faced with the variety of work-related stress which could affect their physical and mental health. Coping strategies play an important role in reducing stress and consequently increasing the health and well-being. This study was conducted to investigate the role of stress and coping strategies to predict the general health of nursing staff.

**SUBJECTS AND METHODS:** An analytical cross-sectional design was carried out on 318 nurses working in governmental health centers of Guilan University of Medical Sciences, the North of Iran, in 2017. Data were collected through multistage cluster sampling using self-report questionnaires and demographic characteristics. The study instruments included Hospital Job Stress, Coping Strategies, and General Health Questionnaires. For analysis of data, descriptive statistics and regression test were applied using SPSS software version 19.

**RESULTS:** The results revealed that the highest mean score ( $47.71 \pm 7.88$ ) of different dimensions of coping strategies was related to task-oriented strategy. Furthermore, the results indicated that stress and coping strategies together could explain around 2.5% of variance of general health ( $\Delta R^2 = 0.025$ ). However, based on the statistically significant level, the results revealed the coping strategies as the predictor of general health ( $P = 0.002$ ,  $\beta = 0.094$ ).

**CONCLUSIONS:** The results highlight the importance of considering coping strategies for predicting general health in nurses. Regarding the inevitability of some stressors in the nursing profession and the need to prevent stressful effects, workshops as an effective training method to reduce staff stress should be on the agenda of managers.

## Keywords:

Coping strategies, health, nursing, stress

## Introduction

Nurses are often faced with a variety of work-related stress.<sup>[1]</sup> Work-related stress is considered to be harmful when physical and emotional responses occur when there is a mismatch between job requirements and the workers' capabilities, resources, or needs.<sup>[2]</sup> When stress increases, it has a negative impact on employees and the organization.<sup>[3]</sup> Workplace stress can influence healthcare professionals' physical and emotional well-being.<sup>[4-6]</sup>

All theoretical models that interpret stress as a transaction are based on the theory of Lazarus.<sup>[7]</sup> The theoretical framework used in this study is the transactional model of stress and coping by Lazarus and Folkman (1984). This model is a framework for assessing stress and managing its process.<sup>[8]</sup>

Coping is an essential component in the understanding of workplace stress. It is defined as the cognitive and problem-solving behavior people employ to tolerate, minimize, or eliminate stress.<sup>[3]</sup> Based on psychological theories, coping strategies play an important role in reducing stress and consequently increasing the general

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health.<sup>[9]</sup> The previous studies indicate that coping with stress is more important than the nature of stress and the more appropriate stress-relieving method is applied, the damage caused by it will be less.<sup>[10]</sup> In other words, the use of appropriate coping strategies can reduce the occurrence of stress-related diseases.<sup>[11]</sup>

Different strategies of coping with stress were identified.<sup>[12]</sup> According to Endler and Parker, coping strategies can be divided into three categories of task-oriented (problem-focused), emotion-oriented, and avoidant strategies.<sup>[13]</sup> Problem-focused coping aims to directly manage a stressor to reduce distress.<sup>[14]</sup> This strategy requires obtaining information about the stressful situation and its possible consequences. People who use this strategy try to prioritize their activities with respect to their importance and to manage their activities timely.<sup>[13]</sup>

Emotion-focused coping aims to cope with the emotions and feelings aroused by the stressor.<sup>[14]</sup> These strategies involve finding ways to control emotions and trying to be hopeful at the time of exposure with stressful situations. People using this strategy, while controlling their emotions, may show feelings as anger or disappointment. The avoidant strategy involves denying or minimizing stressful situations. Individuals who use this method consciously rebound tension thinking and replace it with other ideas.<sup>[13]</sup>

In recent years, there are an increasing interest in exploring the preferential methods of individuals in dealing with stressful life situations and the process that humans used to cope with stress.<sup>[15]</sup> For example, the results of the study Jordan *et al.* showed that nurses in the "high stress/poor coping" group had the poorest health outcomes and highest health-risk behaviors compared to other groups.<sup>[16]</sup> A study by Dehkordi and Shahgholian also showed that there is a significant association between coping and emotion-focused dimension.<sup>[17]</sup>

In general, considering the importance of identifying of effective coping forms as a mediating variable in health variable in health and regarding the importance of nurses' health in providing care to patients, conducting the research about stress and coping strategies is required. Despite previous research on stress and coping strategies, in the literature review, no study was found on the simultaneous role of stress and coping strategies for predicting the general health of nursing staff. Therefore, regarding the impact of changing cultures on the health of individuals and also considering the lack of such study in Guilan Province, the purpose of this study was to investigate the role of stress and coping strategies to predict the general health of nursing staff working in the Guilan University of Medical Sciences' health centers. It is hoped that the results of this study could help the managers to plan nurses' health promotion program.

## Subjects and Methods

The design of this study was analytical cross-sectional. The study population was all nursing staff working in government health centers of Guilan University of Medical Sciences, the North of Iran, in 2017. Guilan University of Medical Sciences has 25 governmental health centers. There are eight health centers in the provincial capital (Rasht city), nine health centers in the east of Guilan, and eight health centers are located in the west of Guilan.

Inclusion criteria included employment in one of the provincial medical centers, with a bachelor's degree and above, and at least 1 year of clinical experience. Exclusion criteria were having diseases (such as cardiovascular, digestive, migraine, psychological, respiratory, and sleep disorders and diabetes) before employment.

The sample size was calculated 106 based on the correlation of previous study,<sup>[18]</sup> with the following formula. Then, with regard to cluster sampling method to compensate for systematic error, three times the amount, i.e. 318 was calculated.

$$n = \frac{(z_{1-\frac{\alpha}{2}} + z_{1-\beta})^2}{(\omega)^2} + 3 = \frac{(1.96 + 0.84)^2}{(0.277)^2} + 3 = 106$$

( $r = 0.27$ ,  $\omega = 0.277$ ,  $\alpha: 0.05$ , power of 80%)

Data were collected through multistage cluster sampling using self-report questionnaires and demographic characteristics. The study instruments included three questionnaires (General Health Questionnaire [GHQ], Hospital Job Stress Questionnaire [HSS-35], and Coping Strategies Questionnaire).

Each of which is briefly described as follows:

The GHQ contains 28 items, with four subscales (1 – somatic symptoms, 2 – anxiety and insomnia, 3 – social dysfunction, and 4 – severe depression).

Every seven items evaluate one subscale. For scoring, the 4-point Likert scale (as options: "not at all," "no more than usual," "rather more than usual," and "much more than usual") was used. Each item was scored from 0 to 3. In this scale, high scores indicate low general health. The recommended cutoff point to determine the general health status is 23 and above. Thus, the nurses with a general health score of 23 or less are considered as healthy and those with score 24 or more are considered individuals with disorder in general health. Validity and reliability of this tool have been confirmed in various studies.<sup>[19]</sup> Internal consistency reliability in our research was calculated using Cronbach's alpha ( $\alpha = 0.84$ ).

The HSS-35 was designed to measure stressors in working environments (especially in hospital and therapeutic settings). This 35-item questionnaire has 11 subscales (role overload, role insufficiency, role boundary, role ambiguity, relationships with superiors, collaborative relationships, work shift, physical factors, chemical factors, biological factors, and ergonomic factors). Each item was scored on the 5-point Likert scale (from score 1 for “never” to score 5 “always”). Hence, the score of this questionnaire was classified as low job stress (35–80), average job stress (81–130), and high job stress (over 131). The psychometricity of this questionnaire was reported in Iran by Badaghi.<sup>[20,21]</sup>

The Coping Strategies Questionnaire has 48 questions. Each 16 questions were relates to a type of coping strategy. Answering to each question is based on the 5-point Likert scale from never<sup>[1]</sup> to always.<sup>[5]</sup> Earn more score in each subscale is considered the preferential coping strategies of each person. This questionnaire was validated by Shokri *et al.* Their finding showed that the subscales of this questionnaire had high validity (Cronbach’s alpha coefficient ranged from 0.70 to 0.86).<sup>[15]</sup>

In this research, multistage cluster sampling method was used. In this way, the health centers were divided into three clusters consisting of the province center (with 8 centers), west (with 9 centers), and east (with 8 centers). Then, four categories (health center) were selected randomly from each cluster. Finally, according to the share of each health center in sample size, the samples were randomly selected.

For analysis of data, descriptive statistics (frequency distribution, mean, and standard deviation) and regression test were carried out using the Statistical Package for the Social Sciences version 19 (IBM Company, Armonk, NY, USA). To examine the normality distribution of the data, initially, the Kolmogorov–Smirnov test was used.

For ethical considerations, institutional permission of study was obtained by the local Ethics Committee of Guilan University of Medical Sciences, Rasht, Iran (No. IR.GUMS.REC.1395.237). Next, the researcher entered the research setting and invited the nurses to participate after proper information about the purpose of the study. Then, they signed informed consent form. All participants were ensured that the questionnaires were anonymous and participation in research was completely free.

## Results

Of the 318 participants, 41.2% aged between 31 and 40 years . Most respondents (94%) were female. In

addition, the majority of them were married (73.3%) and had a bachelor degree (94.7%).

The finding in relation to the stress status of nursing staff showed that most samples (77%) had moderate stress [Table 1].

Regarding the general health of nursing staff, the finding showed that 50% of them were healthy and the remaining 50% were in the health disorder group [Table 2].

Concerning coping strategies, the present study revealed that the highest mean of different dimensions of coping strategies was related to task-oriented strategy with a mean score of 47.71 ( $\pm 7.88$ ), and secondarily, it was related to avoidant strategy with a mean score of 47.09 ( $\pm 7.99$ ) [Table 3].

Regarding the simultaneous role of stress and coping strategies in predicting the general health of nursing staff, the finding indicated that stress and coping strategies together could explain around 2.5% of variance of general health ( $\Delta R^2 = 0.025$ ). However, based on the statistically significant level, the results of this study suggest the coping strategies as the predictor of general health ( $P = 0.002$ ,  $\beta = 0.094$ ). Hence, it can be stated that coping strategies can predict the general health [Table 4].

## Discussion

The finding of the research regarding the stress status of nursing staff indicated that the stress levels of the samples were moderate. This finding is in accordance with the

**Table 1: Stress status of nursing staff of Guilan University of Medical Sciences (n=318)**

Variable	Frequency (%)
Stress	
Mild	8 (2.5)
Moderate	245 (77.0)
Sever	65 (20.4)
Total	318 (100.0)

**Table 2: Health status among nursing staff of Guilan University of Medical Sciences (n=318)**

Health status	Frequency (%)
Healthy	159 (50.0)
With disorder	159 (50.0)
Total	318 (100.0)

**Table 3: Descriptive statistics of stress coping strategies among nursing staff (n=318)**

Coping strategies	Mean $\pm$ SD	Minimum	Maximum
Task-oriented	47.71 $\pm$ 7.88	16	74
Emotion - oriented	42.94 $\pm$ 8.27	23	68
Avoidant	47.09 $\pm$ 7.99	23	74

SD=Standard deviation

**Table 4: Regression analysis of health predicted by coping strategies and stress among nursing staff (n=318)**

Variable	R <sup>2</sup>	ΔR <sup>2</sup>	Unstandardized coefficients		Standardized coefficients	t	P
			B	SE	β		
Stress	0.031	0.025	-0.024	0.039	-0.034	-0.618	0.537
Coping strategies			0.094	0.031	0.170	3.059	0.002**

ΔR<sup>2</sup>=Adjusted R<sup>2</sup>. Significant difference of values is indicated by \*\*P<0.01. SE=Standard error

results of Noorian *et al.* and Andolhe *et al.*'s study.<sup>[19,22]</sup> Mokhtar *et al.* reported that the majority of Khartoum nurses suffer from higher than the average occupational stressors.<sup>[23]</sup> Dagget *et al.* indicated that approximately one-third of nurses had low stress, one-third of them had moderate stress, and one-third remained severely stressed.<sup>[24]</sup> These results are not in accordance with the finding of this present study. Perhaps, the cause of the difference in the level of experienced occupational stress mentioned in the studies is related to the type of instrument used to assess the stress, type of ratings, the number of samples, and the different conditions of the job physical environment. It seems that different measurement tools of occupational stress can lead to different results, and it is suggested that the validity and reliability of these tools should be compared together in a separate study.

Concerning the general health status of nursing staff, the present study revealed that half of them were healthy and the remaining half were in the health disorder group. Our results are similar to Fatehi *et al.*'s study that reported about half of the participants are suspected of having general health disorder.<sup>[25]</sup> Furthermore, the finding of the present study is consistent with the results of a study carried out by Noorian *et al.*, which stated that the general health status of the majority of nurses (55.3%) as unhealthy.<sup>[19]</sup> Conversely, it is inconsistent with the results of Sahraian *et al.* (2008) that the majority of the samples (60%) had mental illness,<sup>[26]</sup> and study of Maghsoudi *et al.*, which 70.3% of nurses had mental disorders.<sup>[27]</sup>

The finding of research in relation to the stress coping strategies in nursing staff showed that the nurses more used task-oriented coping strategy. Studies on nurses' coping strategies have shown that most of the nurses use task-oriented coping as the most effective strategy for coping with stress.<sup>[28]</sup> Kohantorabi and Abolmaali claimed that the coping skills can predict job satisfaction. People with positive coping skills can easily manage stress in the environment, and thus, they will have more job satisfaction and less complaint. They will also be able to maintain greater compatibility with their environment and eliminate stressful stimuli in their workspace.<sup>[29]</sup> It seems that problem-oriented coping style helps people to choose adaptive coping strategies, and people with rational coping styles experience less anxiety.<sup>[30]</sup>

Nurses should adopt problem-oriented coping strategies and avoid emotion-oriented strategies. Responses such as trying to find new ways of doing things, attempting to persuade others into useful action, giving and receiving sympathy from colleagues and patients, looking for ways to improve workplace procedures, and interpreting events positively to the extent possible.<sup>[31]</sup>

Regarding the role of stress and coping strategies in predicting the general health of nursing staff, the finding indicated that coping strategies can predict the general health. Pouranghash Tehrani *et al.* showed that task-oriented coping and emotional-focused coping strategies had the highest share in predicting mental health status.<sup>[32]</sup> Livarjani *et al.* revealed that, among the coping strategies, the emotional strategy was the significant predictor of health and it has been determined that with the increase of the emotional strategy, general health decreases.<sup>[33]</sup> Iannello and Balzarotti reported that the task- and avoidance-oriented coping styles were predictors of less work-related stress, while emotion-oriented coping was associated with higher levels of stress.<sup>[34]</sup> The results of these studies confirm the current study's findings.

To make sure the patient who receives the best available care, nurses should be healthy and be able to cope with stress.<sup>[35]</sup> Understanding how to deal with occupational stress is an important strategy for nurses, for relevant organizations and caregivers.<sup>[36]</sup> A combination of individual coping skills, organizational planning, and social support are the best and most effective ways to manage and cope with stressful situations in nurses.<sup>[8]</sup>

The researchers hope that the finding of this study will be used in various nursing areas including nursing education, nursing management, nursing care, and nursing research. In the field of education, the finding of this study can be a guide for professors, nursing students, and nursing education planners. In the area of management, awareness of the results of this research can be achieved by providing the necessary information to the authorities in order to provide the necessary planning and provision of required measures to apply effective coping strategies to reduce stress and increase the health of nurses. To do this, considering that coping strategies are a set of skills that are learned from education and experience, training these strategies in staff continuing education programs seems necessary

so that personnel can use effective coping strategies to counteract coping with stress.

Given that good care cannot be taken without knowledge, the increase in knowledge will also add to the professional competence of nurses, and they will have better care of patients with higher knowledge. The current finding, in addition to providing empirical data to fill the gap in literature, provides information that may be valuable to researchers. The results of this study, which illustrate the current status of stress, coping strategies, and general health of nursing staff, can be used as a basis for further research to improve their health. For this reason, it is suggested that in another research, the effect of training coping strategies on stress reduction and personal health should be investigated.

The main limitation of this study was utilization of self-report questionnaire that respondents may be answered in a socially desirable manner. However, the assumption of study was based on the trust of the respondents and their understanding of the questions.

In the future, interventional studies assessing the impact of effective coping strategy training on health and decreasing mental and behavioral effects of occupational stress should be considered. In addition, more studies are needed to explore and compare validity and reliability of different measurement tools of occupational stress.

## Conclusion

The results of this study showed that coping strategies can predict the general health. Regarding the inevitability of some stressors in nursing profession and the need to prevent mental and behavioral effects of stress, this research suggests health promotion of nurses by reducing workplace stress and training of the positive coping strategies. Workshops as an effective training method to reduce staff stress should be on the agenda of managers. Practical training of coping strategies can help employees, with proper evaluation of their strategies, able to maintain their fitness in a good mental condition, and in the future, they will face fewer challenges.

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## Conflicts of interest

There are no conflicts of interest.

## References

1. Sedighi-Arfaee F, Rahimi H, Zare-Ee A, Ghodsi Z, Nadi M. Predictability of mental health based on attachment styles and coping styles of nurses. *Int J Acad Res Psychol* 2014;1:50-7.
2. Hoboubi N, Choobineh A, Kamari Ghanavati F, Keshavarzi S, Akbar Hosseini A. The impact of job stress and job satisfaction on workforce productivity in an Iranian petrochemical industry. *Saf Health Work* 2017;8:67-71.
3. Harris LJ. Ways of Coping: Understanding Workplace Stress and Coping Mechanisms for Hospice Nurses. Dissertation for Doctor of Public Health: University of Pittsburgh; 2012. Available from: [http://www.d-scholarship.pitt.edu/17134/1/LHarrisDissertation\\_011613\\_FINAL.pdf](http://www.d-scholarship.pitt.edu/17134/1/LHarrisDissertation_011613_FINAL.pdf). [Last accessed on 2018 Dec 03].
4. Koinis A, Giannou V, Drantaki V, Angelaina S, Stratou E, Saridi M. The impact of healthcare workers job environment on their mental-emotional health. Coping strategies: The case of a local general hospital. *Health Psychol Res* 2015;3:1984.
5. Forouzanfar F, Nadi MA, Molavi H. Investigation the relationship among personality characteristics, burnout and marital disenchantment with mental health in nurses in Isfahan City. *N Y Sci J* 2014;7:13-7.
6. Kakooei H, Rahimi MH, Hosseini M. The role of bright light during night work on stress and health status of shift work nurses. *Int J Occup Hyg* 2009;1:46-50.
7. Papathanasiou TV, Tsaras K, Neroliatsiou A, Roupia A. stress: Concepts, theoretical models and nursing interventions. *Am J Nurs Sci* 2015;4:45-50.
8. Iyi O. Stress Management and Coping Strategies among Nurses: A Literature Review. Degree Thesis. Degree Programme in Nursing. Lovisa City, Finland; 2015. Available from: <https://www.theseus.fi/bitstream/handle/10024/102221/Thesis-%20Obiora.pdf;sequence=1>. [Last accessed on 2018 Dec 01].
9. Zeighami M, Pour Bahaadini Zarandi N. The relationship between academic achievement and students' general health and coping styles: A study on nursing, midwifery and health students of Islamic Azad University – Kerman branch. *Strides Dev Med Educ* 2011;8:41-8.
10. Akouchekian SH, Roohafza HR, Hasan Zadeh A, Mohammad Sharifi H. Relation between social support and coping with stress in nurses in psychiatric ward. *J Guilan Univ Med Sci* 2009;18:41-6.
11. Bhagyalakshmi M, Ramana BV, Suresh H, Raj JM. Assessment of the level of stress and coping strategies among patients with coronary artery. *J Sci Soc* 2012;39:136-40.
12. Svensson T, Inoue M, Sawada N, Yamagishi K, Charvat H, Saito I, *et al*. Coping strategies and risk of cardiovascular disease incidence and mortality: The Japan public health center-based prospective study. *Eur Heart J* 2016;37:890-9.
13. Memarbashy M. Comparing the Relationship between Social Support and Coping Strategies with Job Performance and Mental Health in Nurses of Psychiatric and Nonpsychiatric Hospitals. Ms Thesis, Ferdowsi University of Mashhad; 2011.
14. Jensen C, Forlini C, Partridge B, Hall W. Australian university students' coping strategies and use of pharmaceutical stimulants as cognitive enhancers. *Front Psychol* 2016;7:277.
15. Shokri O, Taghilou S, Geravand F, Paeizi M, Moulaei M, Azad Abdelahpour M, *et al*. Factor structure and psychometric properties of the Farsi version of the coping inventory for stressful situations. *Adv Cogn Sci* 2008;10:22-33.
16. Jordan TR, Khubchandani J, Wiblehauser M. The impact of perceived stress and coping adequacy on the health of nurses: A pilot investigation. *Nurs Res Pract* 2016;2016:5843256.

17. Dehkordi LM, Shahgholian N. An investigation of coping styles of hemodialysis patients. *Iran J Nurs Midwifery Res* 2013;18:42-6.
18. Vafaei SM, Hosseini MS, Foroutan R, Seyed Hosseini N. Survey of nursing staff stress and its relation with some of demographic characteristics in hospitals of neishabour healthcare network. *Urmia Nurs Midwifery J* 2006;4:177-83.
19. Noorian C, Parvin N, Mehrabi T. Evaluation of the relationship between occupational stress and general health condition in nurses working in Isfahan university hospitals 2005. *J Community Health* 2010;5:45-52.
20. Abarghouei MR, Sorbi MH, Abarghouei M, Bidaki R, Yazdanpoor S. A study of job stress and burnout and related factors in the hospital personnel of Iran. *Electron Physician* 2016;8:2625-32.
21. Gadirzadeh Z, Adib-Hajbaghery M, Matin Abadi MJ. Job stress, job satisfaction, and related factors in a sample of Iranian nurses. *Nurs Midwifery Stud* 2017;6:125-31.
22. Andolhe R, Barbosa RL, Oliveira EM, Costa AL, Padilha KG. Stress, coping and burnout among intensive care unit nursing staff: Associated factors. *Rev Esc Enferm USP* 2015;49:58-64.
23. Mokhtar K, El Shikieri A, Taha EM, Rayan A. The relationship between occupational stressors and performance amongst nurses working in pediatric and intensive care units. *Am J Nurs Res* 2016;4:34-40.
24. Dagget T, Molla A, Belachew T. Job related stress among nurses working in Jimma Zone public hospitals, South West Ethiopia: A cross sectional study. *BMC Nurs* 2016;15:39.
25. Fatehi F, Mohammadi M, Karimian M, Azmon M, Shahabi H, Gharibi F. Job stress factors and their relationship with self-efficacy and public health nurses and midwives of best hospital. *Shenakht J Psychol Psychiatry* 2015;2:100-11.
26. Sahraian A, Fazlzadeh A, Mehdizadeh AR, Toobae SH. Burnout in hospital nurses: A comparison of internal, surgery, psychiatry and burns wards. *Int Nurs Rev* 2008;55:62-7.
27. Maghsoudi S, Hesabi M, Emami Sigaroudi A, Kazemnejad Leili E, Monfared A. General health and related factors in employed nurses in medical-educational centers in rasht. *J Holist Nurs Midwifery* 2015;25:63-72.
28. Lim J, Bogossian F, Ahern K. Stress and coping in Australian nurses: A systematic review. *Int Nurs Rev* 2010;57:22-31.
29. Kohantorabi F, Abolmaali K. The prediction of job satisfaction based on coping skills in pilots and assistant of pilots. *J Serv Sci Manage* 2014;7:260-6.
30. Foroutani MR, Bagherian M, Kazemian S. Power of emotional intelligence, coping strategies and locus of control in predicting students' general health. *J Res Health* 2014;4:630-5.
31. Chang EM, Bidewell JW, Huntington AD, Daly J, Johnson A, Wilson H, *et al.* A survey of role stress, coping and health in Australian and New Zealand hospital nurses. *Int J Nurs Stud* 2007;44:1354-62.
32. Pournaghash Tehrani SS, Akbari B, Teymori Z. Assessment of the relationship between coping styles with stress and mental health based on demographic variables in gilan's drug addiction treatment. *Soc Psychol Res* 2012;2:54-61.
33. Livarjani SH, Najarpour Ostadi S, Zafranchi Zadeh M, Esmkhani Akbari Nejad H. The relationship between general health with coping strategies and identity styles. *Woman Fam Stud* 2015;8:93-112.
34. Iannello P, Balzarotti S. Stress and coping strategies in the emergency room. *Emerg Care J* 2014;10:72-5.
35. Tsaras K, Daglas A, Mitsi D, Papathanasiou I, Tzavella F, Zyga S, *et al.* A cross-sectional study for the impact of coping strategies on mental health disorders among psychiatric nurses. *Health Psychol Res* 2018;6:9-15.
36. Al-Sagarat AY, Barmawi M, Al Hadid LA, Qaddumi JA, Moxham L. Validating the psychiatric nurses methods of coping questionnaire: Arabic version. *BMC Psychiatry* 2017;17:410.