# Education Effect of Stress Management in Cognitive-Behavioral Manner on Coping Styles of Female Nurses of Imam Ali Hospital of Zarand

#### Nasrin Pourhabibi

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# **Abstract**

The aim of present study is education effect of stress management in cognitive manner - a behavior on coping styles of female nurses of Imam Ali hospital of Zarand. In this semi-test study, 40 female nurses was selected as sample and then was put two groups with 20 people (test and evidence). After doing pre-test, test group put into education of stress management in cognitive- behavioral manner. Then post-test in both groups administered by questionnaire of coping responses of Billkis (1981). It was used from SPSS software and dependent T test to analyses data. Results showed that education of stress management in cognitive behavioral manner has a significant effect on coping styles of female nurses (p < 0.01) and has caused to improve behavioral, cognitive, issue - driven coping styles. So, it is proposed that administration and continuity of stress management education in cognitive - behavioral manner paying attention to treatment responsible to improve coping styles of female nurses.

**Keywords:** Stress Management, Cognitive – Behavioral Manner, Coping Styles, Nurses.

## Introduction

Since the previous years, the effective role of stress and anxiety in human beings has been identified and the manners and effects of this effect have been discussed by scholars (yousefi, 2008:13). Stress refers to anything that is real or imagined that endangers the survival or credibility of the person, and is the body's reaction to stress involves a set of responses that tries to reduce the effect of the stressor and restore the balance of the body to its original state. Stress can be immediate and acute, or it may be timeconsuming and long-term. The human body, through its automated systems, and in particular the nerves and hormones, tries to provide a ground for defense, and these processes are accompanied by signs and symptoms in various organs of the body. Therefore, when dealing with any stress, it is expected that signs and symptoms are created that indicate the reaction of the body. Some of these symptoms, which are due to the activity of nervous systems, are physical, and some of them are

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characterized through various hormones and biochemical as changes in mood and behavior, and a sample of physical changes are palpitation, hand shaking and from mental changes, anxiety and depression. Stress can also reduce the level of immunity in the body and provide grounds for some infectious diseases and cancers. It should be noted here that the severity of stress is different and in some schools stressful events are categorized according to severity, among which cancerous diseases are considered to be the greatest stress (Vora Pifer, 2008: 16).

In addition to having different coping responses, people in the face of stressful situations, features and characteristics of the situation, in particular, the ability to control stressors, have a different coping response. Applying different types of efficient and non-efficient coping ways has different consequences on physical and mental health of individuals (Sarafino 2002: 9). Any change in a person's life, whether pleasant or unpleasant, requires a kind of re-adaptation. The ways to cope with changes in life and the tensions resulting from these changes vary from person to person, depending on different situations. Coping strategies are a set of cognitive and behavioral attempts of the individual that is used to interpret and interpret a stressful situation and reduce the suffering caused by it. The two main coping strategies are: an emotional coping strategy that involves attempts to regulate the emotional consequences of a stressful event, and maintains emotional and excited balance by controlling the emotions from a stressful situation and problem solving coping strategies are include individual constructive measures in relation to stress conditions and tries to delete or change resource of stress. The results of some studies have shown that emotional and ineffective coping in the face of stress leads to increased stress and stress and thus leads to increased cardiovascular responses in patients (Strickland et al, 2012: 273).

In general, stressful situations increase the symptoms of the disease by 20 to 40 percent in patients. Also, the amount of intermixing these disorders mainly involves anxiety and depression is high. Also, the amount of intermixing these disorders mainly involves anxiety and depression is high. Cognitive-behavioral therapy Stress management is a family of stress management treatments that focuses on the cognitive-behavioral approach. Stress management increases the ability of

individuals to reduce stress and adapt to stressful situations. This intervention consists of elements such as increasing awareness of stress, relaxed education, identifying inefficient individuals, rehabilitation, problem solving training, self-expression skills training, anger management, self-management and activity planning.

Cognitive-behavioral stress management therapy is a combination of contraceptive techniques and behavioral cognitive techniques. The program includes a combination of various types of resilience, illustration and other anxiety reduction techniques with common cognitive-behavioral approaches, such as cognitive reconstruction, effective coping education, self-expression training and anger management. These techniques are all gathered in a group plan that includes 10 weekly topics, as well as some of the temporary stressors of individuals' lives in order to apply these stress management techniques (Antoni, Ironson and Schnider Man, translated by Al Mohammad and Neshat Doust, 2017: 74).

The results of Behzadipour's research (2013) aimed at investigating the effectiveness of cognitive-behavioral stressmanagement behavioral interventions on quality of life and coping strategies in women with breast cancer that the statistical population of the study was breast cancer patients referring to the oncology centers eligible for entry into research, select 30 people and test in two groups with 15 people and replaced evidence and showed that a significant improvement in the quality of life scales and coping strategies was in comparison with the evidence group. Follow up after 2 months confirmed the results in two groups. At the end, it is concluded that cognitive-behavioral stress management interventions improve the quality of life and coping strategies of patients with breast cancer. In the study of Qanbari (2013), the aim of the study was to investigate the effectiveness of cognitive-behavioral stress management on promoting the psychological, emotional and social well-being of non-native students of the first year with a feeling of roving on 228 first year university students, roving feeling were evaluated 2 weeks after the beginning of the school year by questionnaire. The results of statistical tests and the calculated indices show that there was no significant difference between the two groups in the pre-test, but cognitive-behavioral stress management training in the experimental group significantly improved the psychological, emotional and social well-being scores. Therefore, cognitivebehavioral stress management training program can be part of intervention programs in target groups and general population of counseling centers of universities in order to increase the productivity of the university environment by increasing the psychological and emotional well-being of students.

Timmerman, Emmekamp and Sanderman (2015) investigated management educational program effects on stress. The results of their research showed that this training can bring stress, anxiety, daily problems to less and more courage and more satisfaction. And also showed that behavioral relaxation training or muscle relaxation can reduce student anxiety. And control training and coping with stress reduces people's scores significantly in

depression, general anxiety and social function disorder (cited by Qanbari, 2013).

The aim of this study is to study the effect of stress management on work stress and work-life conflict between nurses (2012). The findings showed that the two groups did not have a significant difference in mean score of work-life conflict as well as stress before intervention. But one month after the intervention, a statistically significant difference was observed in the mean scores of work-life conflict as well as stress between the two groups.

Hazavehie (2013) assessed the level of stress and its coping strategies in nurses using PRECEDE pattern. Based on the results, 51.5% of the nurses had moderate stress and 5.9% had severe stress. About 40% of the students were psychologically overweight and 75.1% were dissatisfied with their job. There was a reverse correlation between psychological stress and job satisfaction. The level of awareness of stress risks and coping with it was moderate. In terms of enabling factors, the use of educational resources was negligible and more than 90% of nurses had no amplifying factor.

Nurses are the largest service providers in the healthcare system and have significant potential that can affect the quality of health care provided, and nursing quality is directly relevant to the health system's effectiveness. Nurses play a vital role in health and treatment systems. On the other hand, their roles and responsibilities are becoming increasingly widespread definitions and nursing is recognized as a special and independent profession for medical communities. So that organizations and health care centers without effective nursing staff cannot succeed. Since coping skills against stressors is one of the essential requirements of life today and leads to the success of nurses in different areas of life, therefore, the existence of these skills at the optimal level can be the key to success in the social and personal life of nurses, in other words, to increase the quality of life and achieve its independence. On the other hand, the knowledge and understanding of mental health professionals regarding the coping behavior of patients and healthy people, as well as the application of different methods in dealing with issues and situations, can be effective in dealing with them and forming coping behaviors and effect on their different aspects of life. As a result, evaluations and early interventions can have a significant impact on the growth of coping behavior. This awareness can be a great help in planning and designing educational models for these people in the field of coping skills. Therefore, appropriate training, such as cognitive-behavioral stress management training, timely and timely encouragement, and the provision of appropriate strategies, can take effective steps to enhance adaptive skills and, ultimately, coping strategies. Because coping methods include the skills of individuals to successfully confront different situations. Therefore, in a field study, the effect of cognitive-behavioral stress management training on the coping styles of female nurses in Imam Ali Hospital, Zarand, should be identified in order to improve the styles of coping with nursing women's stress, hope that this will be realized.

#### Variations definition

Stress management in cognitive – behavioral style: Cognitive-behavioral therapy Stress management is a family of stress management treatments that focuses on cognitive-behavioral approach. Stress management is the ability of individuals to reduce stress and adapt to stressful situations. Stress management is the ability of individuals to reduce stress and adapt to stressful situations. This intervention consists of elements such as increasing awareness of stress, relaxation education, identifying inferior thoughts, cognitive reconstruction, and problem solving training, skill training, anger management, and time management (Antoni, translated by Al Mohammad and Neshat Doust, 2017: 70).

**Coping strategies with stress:** Behavioral and cognitive strategies are used by individuals to deal with emotional and functional dimensions of stress and stress situations (Lazarus and Folkman, 1984: 85). Stress coping strategies refer to how people are exposed to stress in their lives, a way of coping. This term is used for methods of combating stress.

**Behavioral Stress Management Strategy:** Strategies that are applied unconsciously for direct coping with stress, not from the source of stress.

**Avoidance Stress Management Strategy:** Strategies that are unconsciously to avoid and avoid the source of stress, including avoiding the level of thinking and denying the existence of stressors or abnormalities at the practice level.

**Stress Coping Cognitive Strategy:** Strategies that are applied consciously for direct response to the source of stress and to solve the problem.

**Emotional Stress Management Strategy:** Strategies that are influenced by emotional states and associated with different emotions

The strategy of focusing on a problem solving or an issue: It is one of the coping strategies that focuses on dealing with the problem is systematic and systematic, and involves considering different perspectives or ways to solve the problem and deal with the problem.

# Methodology

In this semi-experimental study 40 female nurses of Imam Ali Hospital (Zarand) were selected by sampling method and then were randomly assigned into two groups of 20 (test and control). After performing the pre-test, the experimental group received cognitive-behavioral stress management training for 5 sessions. Then, post-test was administered in two groups with a questionnaire of coping responses of Billkis (1981). It was used from SPSS software and dependent T test to analyses data.

The summary of the training in these 5 sessions is as follows:

Titles of education sessions

Session	Subject					
First	Understanding Stressors and Stress Responses					
	Muscular resignation education for 16 muscle groups					
second	Exercise Education and Social Assistance					
	Meditation training breathing count, Sun-meditation					
	practice					
third	Training for replacing rational thoughts and effective					
	(efficient) coping					
	Self-taught training for heavy weight and therm					
fourth	Teaching Effective Coping Responses and Managing					
	Anger					
	Self-taught learning with visual visualization and					
	positive self-education, and the practice of sun-					
	meditation with self-meditations, as well as the					
	training of mantra meditation					
Fifth	Explain the relationship of thoughts and emotions and					
	the introduction of negative thinking and cognitive					
	distortions					
	Respiratory training, visualization, muscle spasm for					
	four muscle groups and gradual passive muscular					
	agitation					

Billkis and Mouse Coping Style Styles indices

This questionnaire was prepared by Billkis and Mouse in 1981, which has 19 items and measures coping strategies in dealing with stress. These responses are coping-behavioral responses (questions 17-21-17), cognitive (questions 19- 1-8), avoidance (questions 3-7-9-12-18), and problem solving (questions 10 - 13-14-16) and focused on emotion (Questions 4-6-15). In this questionnaire, respondents are asked to take into account a recent personal crisis or stressful events. Depending on how they deal with that incident or incident, they respond to the questionnaire as always, often, sometimes, and never. To score questions, if it has always used that method, score 3, and so on, the most frequently used method, score 1, sometimes, score 2 or never use that method to deal with stress, zero score It is meant to be. In a research, the reliability of this questionnaire was calculated by using the Spearman and Brown correction formula, whose coefficient was 0.87.

# **Findings**

For normal variables, Smirnov test and equality of variances have been used by Leven test and because –p of pre-test and post-test are greater than significant level of 0.05; so, we can say that groups variance are equal to each other and data are normal and parametric test is administrable.

Table 1: T-Stress Test Styles in Testing and Testing Groups

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Time Group	Pre-test		Post-test		
	Avoraga	Standard	Average	Standard	Significance
	Average	deviation		deviation	
Evidence	30.9	5.359	30	3.524	0.78
Test	30.7	4.993	37.9	2.818	0.023

The mean of the use of coping strategies in the nurses in the experimental group in the pre-test and post-test was calculated based on the t-test and because –p of pre-test and post-test are greater than significant level of 0.05; so in this level, assumption is zero. As a result, we can say that the mean scores of coping styles in the experimental group are not the same in the pretest and posttest, and these differences are statistically significant.

Table 2: T Test Styles of variety of stress coping styles in testing and testing groups

		Pre-	-test	Post-test		
Variables	Time of group	Average	Standards deviation	Average	Standard deviation	Significance
Behavioral Stress	Evidence	11.1	3.28	11.3	3.45	0.64
Management Strategy	Test	11.02	3.25	14.9	3.22	0.014
Avoiding Stress	Evidence	11.4	3.34	11.7	2.88	0.27
Management Strategy	Test	12.03	2.89	11.66	2.64	0.21
Cognitive Stress	Evidence	10.5	3.2	10.7	3.28	0.53
Management Strategy	Test	11.7	3.3	15.8	3.28	0.021
Problem-oriented	Evidence	12.14	3.5	12.7	3.31	0.73
coping strategy	Test	12.3	3.8	15.7	3.45	0.034
Emergency Copy	Evidence	15.13	2.3	14.89	2.9	0.51
Strategy	Test	16.03	3.28	13.73	2.9	0.014

The mean of the use of coping strategies in the nurses in the experimental group in the pre-test and post-test was calculated based on the t-test and because –p is a (significance) amount in test group in behavioral, cognitive, problem-oriented, emotion-focused coping styles smaller than significance level of 0.05; so in this level, zero assumption is rejected. As a result, it can be concluded that the mean scores of behavioral, cognitive, problem-oriented, emotion-oriented coping styles in the experimental group are not the same in the pre-test and post-test and these differences are significant statistically. Comparison of means shows that with stress management training in the experimental group, behavioral, cognitive, and problem-oriented coping styles have been significantly increased, but the emotional-focused style has significantly decreased.

# **Discussion and Conclusion:**

The results of this study showed that cognitive-behavioral stress management training has been effective on coping styles of female nurses and has improved their coping styles. This result is consistent with the findings of Behzadi Pour (2013); Timmermann, Emcomp and Sanderman (2015); Alavi et al. (2013) and Hazavehei (2012).

In explaining this result, it can be said that coping responses have described as emotional, cognitive, and behavioral attempts to increase the person's adaptation to the environment or attempts to prevent the negative consequences of stress conditions.

Therefore, if these stress-coping efforts are effective, adequately and adaptively, stress is considered less stressful and the response to it will be in order to reduce its negative outcomes. If the style or pattern of coping is incompatible and inadequate, it not only does not control stress, but the reaction itself is a source of pressure and make the situation worse.

One of the limitations of this research was the limited research sample to the nurse, so generalization of the results of this study to other groups should be done with caution. Finally, it is anticipated that hospital and clinic officials will try to organize workshops for stress management training for nurses and all staff every year.

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