

*Original Article*

## The effectiveness of stress management training program on depression, anxiety and stress of the nursing students

Mohsen Yazdani\*, Sara Rezaei\*\*, Saeid Pahlavanzadeh\*\*\*

### Abstract

**BACKGROUND:** Stress has been defined as a barrier to concentration, problem solving, decision making, and other necessary abilities for students' learning; it also has some symptoms and illnesses in the students such as depression and anxiety. In reviewing stress and its consequences, the methods of coping with stress in the method of response to it would be more important than the nature of stress itself. Therefore, this study aimed to determine the effectiveness of stress management training program on depression, anxiety and stress rate of the nursing students.

**METHODS:** This parallel group randomized quasi-experimental trial, was done on 68 Bs nursing students of Nursing and Midwifery School in Isfahan University of Medical Sciences from 2010 to 2011.-The questionnaires of this study consisted of individual characteristics and Depression, Anxiety and Stress Scale (DASS-42). In a random fashion, The intervention group was trained with stress management training program in 8 two hours sessions, twice a week. The questionnaires were completed by both groups before, after and one month after the study.

**RESULTS:** The results of the study indicated that there was no significant difference before the intervention in depression, anxiety and stress mean scores in the two groups. After the intervention, the mean scores of anxiety and stress in the intervention group was 5.09 (4.87) and 8.93 (6.01) and in the control group was 10 (6.45) and 13.17 (7.20), that reduction in depression mean score was significantly greater in the intervention group in the control group ( $p = 0.040$ ). Furthermore, the mean scores of anxiety and stress showed a significant difference between the two groups (Anxiety  $p = 0.001$ ; Stress  $p = 0.011$ ); this reduction also had been remained after a month.

**CONCLUSIONS:** According to the results of the present study, holding stress management training program workshops in different courses of the mental health department can improve mental health of the students.

**KEY WORDS:** Psychological stress, training programs, depression, anxiety, nursing students.

IJNMR 2010; 15(4): 208-215

Stress is a multidimensional phenomenon which is focused on dynamic relationship between the individual and the environment. It is also defined as a stressor, individual's response to the stimuli and interaction between the individual and the environment. It should be noted that some degree of stress can be effective on increasing and improving individuals' performance. Evidences indicate that most of the human successes are created in stressful

conditions; but high rate of stress would followed by numerous consequences, including mental and physical illnesses, sleep disorders, restlessness, irritability, forgetfulness, abnormal fatigue, reduced individual's resistance and recurrent infections, headaches, poor concentration, memory impairment and reduce in problem solving ability.<sup>1</sup> In general, everyone experiences the stress, but students are a group of people who are at the higher risk of stressors

\* MSc, Faculty Member, Department of Psychiatric Nursing, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.

\*\* MSc Student, School of Nursing and Midwifery, Medical Students Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.

\*\*\* MSc, Faculty Member, Nursing and Midwifery Care Research Center, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.

Correspondence to: Mohsen Yazdani, MSc.

Email: mohsen\_yazdani@nm.mui.ac.ir

This article was derived from MSc thesis in the Isfahan University of Medical Sciences, No: 389253

due to the transitional nature of the student life; because they need to adjust themselves with the life environment which requires compliance with new social norms and new friendship. Accordingly, their perception from an event is affected as a stressor and selecting coping strategies which they use them in the particular situations. These groups should cope with the increasing global demands i.e. decision making about issues such as occupation, life style, friends, family, religion and politics. They should also meet the needs of family, teachers, friends and other groups; therefore, they establish important emotional ties with the environment or non-family members and also establish their own value systems which, in most of the cases, influenced by the family and the culture they have been belonged to.<sup>2</sup> Studies indicated that medical students such as nursing students experience many stressor agents.<sup>3</sup> Nursing students are influenced by the various hospital stressor agents in addition to the stress caused by theoretical training environment. Hospitals are considered as one of the most stressful work environments, because there, it is the matter of humans' death and life.<sup>4</sup> According to the study of Fathi which was done in Kurdistan in 2004, the most psychological stress factor of the nurses was related to the ward's critical environment (77.13%) and patients' mortality (75.7%). Besides, Fathi quoted from Nasiri that the most stressful cause of the nursing students had been due to transmission of the contagious diseases.<sup>5</sup> The stress which is resulted from the environment not only can cause the academic failure, but also can affect the way their personality develops and also cause the incidence of many undesirable behaviors in them.<sup>4</sup> Totally, these stressor agents can be divided into three categories: category related to education, clinical, and socio individual factors.<sup>6</sup> Various types of stress causes the reduction of individual's resistance through the negative effect which apply on the person's social and individual coping resources and in long-term can have unpleasant effects on student's physical and mental health. It was indicated that stress can cause mental and physical illnesses, dysfunction and

adjustment disorder and ultimately reduction of students' quality of life.<sup>7,8</sup> So that in 2006, Asadi et al in their study found that psychological problems was more prevalent among medical students, graduates and women.<sup>9</sup> Studies indicated that prevalence and severity of mental and psychological problems has been increased in students compared to the non-student population. According to the reports of National Institute of Mental Health, recent study results in Wolfson Health Sciences Institute of London indicated that 44 percent of the male students and 64 percent of the female students suffered from anxiety and 12 percent of the male students and 15 percent of the female students suffered from depression. The consultants of the mentioned institute had reported the increase rate of referred students to the consultant centers from 2.4 per 100,000 students in 1995 to 9.7 in 2000.<sup>10</sup> In the study of Ebrahimian on 113 nursing students of Azad University of Semnan, it was indicated that 57.5% of nursing students of Azad University suffered from various degrees of depression.<sup>11</sup> In reviewing stress and its consequences, in the stress coping strategies, the method of response to it would be more important than the nature of stress itself. The more appropriate method used in coping with stress, the less he/she would be damaged.<sup>12</sup> There are various methods recommended to control or reduce the stress.<sup>13</sup> Stress coping skills have a comprehensive concept and multiple cognitive-behavioral components. Generally, coping has been described as efforts to comply the individual with the environment or efforts for preventing from the negative consequences of stressful situation. Two main methods for preventing from stress are deal with problem-focused directly on the issue which includes direct activities on the environment in order to change or correction of the situation which is threatening and also emotion-focused practices which include thoughts or activities in order to control the unpleasant feelings which have been created from stressful conditions. Problem oriented techniques include active methods such as cognitive and behavioral problem solving.<sup>14</sup> Cognitive-behavioral coping strategies are

the most effective methods to reduce the stress.<sup>15</sup> Considering that all the living organisms experience the stress, the aim of nursing is not removing the whole stress completely, because stress is part of the life. Response to stress can be in an unhealthy way, and the role of the nurse at this time is helping to promote the health. Health promotion includes strategies for reduction and management of the stress, the nurse also can use nursing process in order to manage the stress.<sup>16</sup>

Stress management practices include; yoga relaxation, progressive muscle relaxation, breathing exercises, meditation and mental imagery.<sup>17</sup> There have been done many studies about the effectiveness of stress management training on anxiety, depression and stress rate so that Mehrabi et al in their study had reviewed the effectiveness of this approach on emotional problems of the diabetic patients and have found that stress management training can be helpful as a comprehensive diabetes care.<sup>18</sup> Other studies also indicated the efficacy of this approach in reducing the stress and anxiety resulted from the tests in the pupils.<sup>15</sup> Researches indicated that stress management was associated with reduction of the depression<sup>17</sup> and anxiety symptoms.<sup>15</sup> Kong also in his study (2009) titled as "the effectiveness of a stress coping program based on mindfulness meditation on the stress, anxiety, and depression experienced by nursing students in Korea" showed that the above approach could be effective in reduction of the stress and anxiety of the nursing students.<sup>19</sup> The effectiveness of stress management training on the academic achievement of Tiran and Karvan's students was investigated; the results showed that stress management training could result in progression in academic achievement.<sup>20</sup> Considering the wide use of stress management training program for emotional problems and various diseases and also high rate of anxiety and depression in nursing, the studied researches on this group have been descriptive. Therefore, the researcher decided to conduct a study as reviewing the effectiveness of stress management training program on depression, anxiety and stress of the nursing students of School of Nursing and Midwifery of

Isfahan University of Medical Sciences in 2010. It will hope that this study be a step toward enhancing the scientific output and students effort to achieve the decent position and fertile the scientific context more appropriate.

## Methods

This study was a parallel -group randomized quasi-experimental trial, from 2010 to 2011 conducted in Nursing and Midwifery School in Isfahan University of Medical Sciences on 68 Bs nursing students.

The study population included all male and female nursing students who were studying in Isfahan Nursing and Midwifery university in 2010-2011, in the second and third years (third, fourth, fifth and sixth semesters). 72 students were randomly assigned to two groups using the list of students studying in the second and third year in 2010-2011 and based on the odd and even numbers. first group (n=38) trained stress management training program (8 two hours sessions, twice a week ). And second group (n = 38) did not received training.

The groups were heterogeneous in terms of gender and the majority of the members were fixed until the end of the sessions.

In order to match both groups, the questionnaires were analyzed and then called to all. After explanations about the study, they evaluated to had inclusion criteria, then consent forms and the questionnaires were completed by them. Finally seventy-six subjects elected among them.

At the last session of the stress management training program and one month after that, the questionnaires were given to the subjects of both groups to complete them simultaneously. This program was compound of cognitive-behavioral techniques which merged with cognitive-behavioral stress management method as stress management intervention. This program was a close and structural and had the intervention which was 8 sessions, twice a week, that each session was two hours. The activities of the studied sessions were as the following table. .

To collecting the data, the questionnaire was used which had two parts: a questionnaire for personal information (7 questions) and a self- report

<b>1<sup>st</sup> session</b>	Introduction session and providing information about the stress
<b>2<sup>nd</sup> session</b>	Familiarity with gradual muscle relaxation and its implementation with mental imagery
<b>3<sup>rd</sup> session</b>	Familiarity with the consequences and physical symptoms of the stress
<b>4<sup>th</sup> session</b>	Relaxation and imagery and training and diaphragm breathing practices
<b>5<sup>th</sup> session</b>	Linking thoughts and emotions and familiarity with cognitive errors
<b>6<sup>th</sup> session</b>	Discussion about relaxation exercises
<b>7<sup>th</sup> session</b>	Replacement of logical thoughts and personal stress management program
<b>8<sup>th</sup> session</b>	End of the stress management training program, completing the questionnaire

questionnaire with 42 questions for anxiety (14), depression (14) and stress (14) with Likert scale from 0 to 40 (DASS-42). The data were analyzed through descriptive and inferential statistical methods using Software SPSS<sub>18</sub>.

## Results

The mean age in both group was  $20.9 \pm 1.3$  (range: 19-25) and standard deviation was  $21.2 \pm 1.3$ . To assess these parameters, independent t-test was used indicating no significant difference between them ( $t = 1.14$ ;  $p = 0.256$ ). In the intervention group 57.6% and 42.4% of the students were female and male respectively, and in the control group 54.3% and 45.7%. In the intervention group and control group 97% and 88.2% of the study subjects were single. The maximum frequency of their current residential rate was in the intervention group (60.6%) for living with the family and in the control group (62.9%) for living in the dormitories. The most incoming rate of the subjects' families was in the intervention group (75%) and control group (79.4%) for living expenses. A hundred percent of the students' parents in the intervention group and 88.6% in the control group were alive. 69.7% subjects. In the intervention group and 71.4% in control group was related to the third year students. Evaluations of differences in mean changes of depression scores before, just after and one month later in the intervention group was done using ANOVA with repeated observations. The results of this test indicated that statistically there was a significant difference between depression scores before, just after and one month later of the intervention ( $p < 0.001$ ). Furthermore in the control group, comparing mean changes of depression

scores indicating a significant difference between the depression scores in three steps ( $p = 0.006$ ).

ANOVA with repeated observations in mean scores of anxiety in three phases in the intervention group showed that there was a significant difference between mean scores of anxiety in three steps ( $p = 0.005$ ), and as it was expected, mean scores of anxiety before and after the intervention had a significant difference by used of paired t-test ( $t = 2.71$ ;  $p = 0.011$ ), but mean scores of anxiety showed no significant difference after and one month after the intervention based on paired t-test ( $t = 1.03$ ;  $p = 0.306$ ) and mean score of anxiety had significant different one month after the intervention compared to before the intervention ( $t = 3.60$ ;  $p = 0.001$ ). The mean scores of anxiety had been reduced after the intervention so it can be concluded that stress management training program caused reduction in anxiety symptoms in the nursing students. Comparing mean scores of anxiety before, after and one month after that in the control group was done using ANOVA with repeated observations. The results of this test showed that there was a significant difference between anxiety scores in three phases ( $p = 0.009$ ). The mean scores of anxiety before and after the study had a significant difference based on the paired t-test ( $t = 4.067$ ;  $p = 0.000$ ). In addition, mean scores of anxiety had a significant difference after and one month after the study based on paired t-test ( $t = 2.452$ ;  $p = 0.019$ ). But mean score of anxiety was not significant one month after the study compared to before the study ( $t = 0.065$ ;  $p = 0.949$ ). Comparing mean scores of stress in the intervention group in three phases, before, after and one month after the intervention showed a significant

**Table 1.** Comparing the mean scores of depression, anxiety and stress in the intervention and control groups before the intervention

Mean score	Intervention group		Control group		Independent t-test	
	Mean	SD	Mean	SD	p value	t
Depression	10.63	10.02	9.34	7.79	0.553	0.591
Anxiety	7.60	6.10	7.88	6.51	0.856	0.181
Stress	13.39	9.18	12.82	9.09	0.80	0.806

**Table 2.** Comparing the mean scores of depression, anxiety and stress in the intervention and control groups after the intervention

Mean score	Intervention group		Control group		Independent t-test	
	Mean	SD	Mean	SD	p value	t
Depression	6.03	5.76	9.08	6.25	0.04	2.09
Anxiety	5.09	4.87	10	6.45	0.001	3.52
Stress	8.93	6.01	13.17	7.20	0.01	2.62

**Table 3.** Comparing the mean scores of depression, anxiety and stress in the intervention and control groups one month after the intervention

Mean score	Intervention group		Control group		Independent t-test	
	Mean	SD	Mean	SD	p value	t
Depression	4.69	5.35	6.02	6.08	0.343	0.955
Anxiety	4.39	3.54	7.82	8.14	0.029	2.22
Stress	5.96	5.60	10.40	9.96	0.028	2.24

difference ( $p = 0.000$ ), but this was not significant in the control group ( $p = 0.074$ ).

Tables 1 to 3 were designed in order to compare mean scores of depression, anxiety and stress in the intervention and control groups in three phases.

## Discussion

There were many studies that evaluated the role and importance of the cognitive and behavioral techniques in reducing the stress, anxiety and depression and other mental stress. The aim of present study was to determine the effectiveness of stress management training method on depression, anxiety and stress rate of the nursing students of Nursing and Midwifery school in Isfahan University of Medical Sciences. The results of this study indicated that anxiety level of the nursing students had reduced through implementing stress management training program. In the other hand, the stress management training program caused reduction in anxiety level which this result was in accordance with the result of of Sajadinejad et al<sup>27</sup>, Mehrabi et al<sup>18</sup>, Davazdahemami et al<sup>28</sup>, Antoni et al studies that all of them have approved the efficacy of

cognitive and behavioral stress management on reducing the depression.<sup>29</sup> It is necessary to reduce the anxiety level and prevent educational failure and their efficiency in the clinical practice. As the results of the present study indicated, stress management training program had a reductive effect on anxiety level of the nursing students.<sup>30</sup>

The studies of Hirokawa, Yagi and Miyata showed that stress management training based on the meditation could significantly reduce the anxiety level of the nursing students in the intervention group compared to before the intervention. Besides, this program caused a significant reduction in stress level of the nursing stress in comparison to before the intervention.<sup>31</sup> The study of Heravi et al evaluated the effect of relaxation practices on anxiety level of the nursing students' exams. In the mentioned study it was indicated that relaxation training programs (progressive muscle relaxation and diaphragm breathing practices) caused reduction in anxiety level in the intervention group from 46.5 percent (before intervention) to 17.5 percent (after the intervention).<sup>32</sup> Therefore, in the present study which was done on the

nursing students, relaxation techniques were used in order to reducing anxiety level of the nursing students who had high size courses, compaction of the exams, and stressful clinical environment; the results of both studies indicated the efficacy of this technique in reducing the anxiety level of the nursing students.

Any change in the individual's life requires new adjustment with the condition. Furthermore, according to the cognitive-behavioral theory, coping strategies have important role in stress reduction and consequently mental health. Besides, stress alone has a limited value in explanation and predication of individuals' situation, and do not considering as their coping skills. On the other hand, when someone has better sources for coping, the likelihood of catch at vulnerable situations are more.<sup>33</sup>

Accordance to the results of the present study, Dehghan Nayeri et al trial determined the effect of relaxation on stress and quality of life of the students lived in the dormitories, it showed that mean score of stress in the intervention group was 1.51 before the intervention which was t-test significant difference after the intervention in terms of stress level by using test showed.<sup>13</sup> Moreover, in support of the results of the present study, the findings of study of Ja et al (2004) titled as "the effect of psychosocial stress management on stress coping student nurses" indicated that students stress level in the intervention group after the intervention had significantly decreased that in comparison to the control group was significant, but on the depression and anxiety of the students this was not effective<sup>34</sup> which was not accordance in regard to present study; because in the present study stress management training program also had a reductive effect on the depression and anxiety of the students, May be due to difference in the obtain of results; in the present study, stress management training was used in cognitive-behavioral technique in addition to relaxation techniques. In addition, comparing the mean scores of anxiety and stress one month after the intervention showed a significant difference between the two groups, but there was no significant difference between two groups

one month after the intervention in depression mean score. The study results of Davazdahemami et al titled as "reviewing the effectiveness of stress management training in cognitive-behavioral technique on blood sugar and depression of patients with type II diabetes" indicated that stress management training program could reduce the depression mean score of the patients in the follow-up step, which this reduction was significant as compared with the control group.<sup>28</sup>

Study results of Antoni et al titled as "How stress management improves quality of life after the treatment for breast cancer" showed that depression level of the women with breast cancer had reduced in the intervention group in the follow-up step and this reduction was significant as compared with the control group.<sup>29</sup>

The study of Mehrabi et al indicated that stress management training program in cognitive-behavioral technique could have a significant reduction in stress, anxiety and depression level in the intervention group in comparison with the control group and this reduction was also significant in the follow-up step.<sup>18</sup> The researcher believed that maybe the cause of difference in the present study, unlike the two previous mentioned studies was that the study subjects were selected randomly from the nursing students who were studying in the School of Nursing and Midwifery of Isfahan who most of them were the classmates together and had interaction together in the university environment. Therefore, there was the possibility of transferring the learned information in the stress management training program and the control group might have been influenced by the intervention group. Therefore, the depression level of the control group had decreased in parallel with the intervention group so reduction in depression mean score could not be significant one month after the intervention in the test group in comparison with the control group. The findings of the present study indicated that management training program on depression, anxiety and stress rate of nursing students can promote the mental health and

improve academic achievement and provide clinical services in the hospital by the students.

The role of the psychiatric nursing department should not be ignored here, because they can have a valuable role in reduction the stress and facilitate the students learning, So according to the results of the present study, holding stress management workshops in different courses and implementing psychotherapy train-

ing programs can improve the mental health of the students.

The authors declare no conflict of interest in this study.

### Acknowledgments

Thanks go to all the dear students who had an active cooperation in conducting this study.

### References

1. Beddoe AE, Murphy SO. Does mindfulness decrease stress and foster empathy among nursing students? *J Nurs Educ* 2004; 43(7): 305-12.
2. Samari AK, Lali Faz A, Askari AA. Review Sources of support and ways to deal with stressors in students. *The Quarterly Journal of Fundamentals of Mental Health, Autumn & Winter 2006*; 8(31, 32): 97-107.
3. Taghavi Larijani T, Ramezani Badr F, Khatoni A, Monjamed Z. Comparison of stressors in the final year students of nursing and midwifery selected University of Tehran. *Journal of Nursing and Midwifery, Tehran University of Medical Sciences (Hayat) 2007*; 13(2): 61-70.
4. Abazari F, Abaszadeh A, Arab M. Evaluation and sources of stress in nursing students. *Journal of Medical Education Development steps 2004*; 1(1): 23-31.
5. Fathi M. Evaluation of stress factors and nurses in special sections of Kurdistan University of Medical Sciences in 2004. *Scientific Journal of Kurdistan University of Medical Sciences 2004*; 7(4): 53-62.
6. Shipton SP. The process of seeking stress-care: coping as experienced by senior baccalaureate nursing students in response to appraised clinical stress. *J Nurs Educ* 2002; 41(6): 243-56.
7. Gammon J, Morgan-Samuel H. A study to ascertain the effect of structured student tutorial support on student stress, self-esteem and coping. *Nurse Educ Pract* 2005; 5(3):161-171.
8. Ryan ME TR. Concerns, values, stress, coping, health and educational outcomes of college students who studied abroad. *International Journal of Intercultural Relations 2000*; 24(2000): 409-35.
9. Assadi SM, Nakhaei MR, Najafi F, Fazel S. Mental health in three generations of Iranian medical students and doctors. A cross-sectional study. *Soc Psychiatry Psychiatr Epidemiol* 2007; 42(1): 57-60.
10. World Health Organization. *Mental Health Policy and Service Guidance Package. Child & adolescent mental health policies & plans 2005.*
11. Ebrahimian A. Comparison of depression and related factors in nursing students, nursing students Semnan Islamic Azad University, Semnan 2004. *Tarbiat Modares University: Third Seminar of Students mental health, 2004.*
12. Akochekian Sh, Rohafza HR, Hasanzadeh A, Mohammad Shrfi H. Associated with social support coping strategies in a psychiatric ward nurses. *Journal of Medical Sciences Gilan 2008*; 18(69): 41-6.
13. Dehghan Nayeri N, Adib Hajbagheri M. Stress relaxation effect on quality of life and resident students in student dormitories. *Journal - Research Feyz 2006*; 10(2): 50-7.
14. Forozandeh N, Delaram M. Effect of cognitive behavioral therapy on coping methods non-medical student university of medical sciences. *Shahre Kord University of Medical Sciences Journal 2003*; 5(3): 26-34.
15. Kaviani H, Pournaseh M, Sayadlou S, Mohammadi MR. Effectiveness of stress management training in reducing anxiety and depression, participants in class exam. *New Journal of Cognitive Sciences 2007*; 8(2): 61-8.
16. Eby L, Brown NJ. *mental health nursing care.* In: Elder R, Evans K, Nizette D, editors. *psychiatric and mental health nursing.* Sydney: Elsevier, Mosby, 2009: 68.
17. Daubenmier JJ, Weidner G, Sumner MD, Mendell N, Merritt-Worden T, Studley J, et al. The contribution of changes in diet, exercise, and stress management to changes in coronary risk in women and men in the multisite cardiac lifestyle intervention program. *Ann Behav Med* 2007; 33(1): 57-68.
18. Mehrabi A, Fati L, Davazdah Emami MH, Rajab A. Effectiveness of stress management training based on the theory of cognitive - behavioral control blood sugar and reduce the emotional problems of patients with type 1 diabetes. *Iranian Journal of Diabetes and Lipid 2009*; 8(2): 103-14.
19. Kang YS, Choi SY, Ryu E. The effectiveness of a stress coping program based on mindfulness meditation on the stress, anxiety, and depression experienced by nursing students in Korea. *Nurse Educ Today* 2009; 29(5): 538-43.
20. Soltani M, Aminoroaya M, Atari A. Effect of stress management training on academic achievement and high school girls Tiran & karvan Isfahan City. *Journal of Behavioral Sciences Research 2008*; 6(11): 9-16.

21. Sadeghi Movahed F, Narimani M, Rahimi S. Effects of coping skills training on student mental health. *Journal Medical of Medical Sciences Ardebil* 2008; 8(3): 261-9.
22. Rahmati A, Etemadi A. Impact of life skills through group discussion on student attitudes toward drug abuse. *Quarterly Scientific Research Psychology Tabriz University* 2006; 1(4): 117-42.
23. Oman D, Shapiro SL, Thoresen CE, Plante TG, Flinders T. Meditation lowers stress and supports forgiveness among college students: a randomized controlled trial. *J Am Coll Health* 2008; 56(5): 569-78.
24. Rezaee Adreani M, Azadi A, Ahmadi F, Vahedian Azimi A. Comparison of depression, anxiety, stress and quality of life of male and female students living in student accommodation. *Magazine Research Nursing* 2007; 2(4, 5): 31-8.
25. Lovibond PF, Lovibond SH. The structure of negative emotional states: comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behav Res Ther* 1995; 33(3): 335-43.
26. Afzali A, Delavar A, Borjali A, Mirzamayn M. Psychometric characteristics of DASS-42 test based on a sample of high school students in Kermanshah. *Journal of Behavioral Sciences Research* 2007; 5(2): 81-92.
27. Sajadinejad M, Mohammadi N, Taghavi MR, Ashjazadeh N. Effect of cognitive group therapy - treatment of depression and feelings of disability from headache in patients with migraine and tension headaches. *Iranian Journal of Psychiatry and Clinical Psychology* 2008; 14(4): 411-8.
28. Davazdahemami MH, Roshan R, Mehrabi A, Atari A. Stress Management Training Effectiveness of cognitive - behavioral and depression on glycemic control in type 2 diabetic patients. *Journal of Endocrinology and Metabolism Iran, Medical Sciences and Health Services martyr Beheshti* 2009; 11(4): 385-92.
29. Antoni MH, Lechner SC, Kazi A, Wimberly SR, Sifre T, Urcuyo KR, et al. How stress management improves quality of life after treatment for breast cancer. *J Consult Clin Psychol* 2006; 74(6): 1143-52.
30. Hasanpor Dehkordi A, Masoudi R, Salehi Tali Sh, Forozandeh N, Naderipour A, Pourmirza Kalhori R, et al. Effect of progressive muscle relaxation on anxiety of nursing students on arrival at the Internship. *Shahre Kord University of Medical Sciences Journal* 2009; 11(1): 71-7.
31. Hirokawa K, Yagi A, Miyata YO. An Examination of the Effects of Stress Management Training for Japanese College Students of Social Work. *International Journal of Stress Management* 2002; 9(2): 113-23.
32. Heravi Karimoy M, Jadid Milani M, Reje N, Valaee N. Effect of relaxation training exercises on anxiety levels of students. *Journal of Mazandaran University of Medical Sciences* 2007; 14(43): 86-91.
33. Behrozian F, Nematpour S. Of stressors Coping strategies and their relation to public health students, entrance year 2005-2006 Ahvaz Jundi Shapur University of Medical Sciences. *Medical Journal* 2007; 6(3): 283-92.
34. Ja KC, Hur HK, Kang DH, Kim BH. Effects of Psychosocial Stress Management on Stress and Coping in Student Nurses. *Journal of Korean Academy of nursing* 2004; 33(3): 440-50.