Original Article

Effects of hope promoting interventions based on religious beliefs on quality of life of patients with congestive heart failure and their families

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Abstract

Background: Heart failure is one of the most important and prevalent diseases that may have negative effects on the quality of life (QOL). Today, the promotion of QOL in patients with heart failure is important in nursing care programs. This research aimed to determine the efficacy of hope-promoting interventions based on religious beliefs on the QOL of patients with congestive heart failure (CHF).

Materials and Methods: In this randomized clinical trial (IRCT2014100619413N1) conducted in Isfahan, Iran, 46 adult patients with CHF were selected and randomly assigned to study and control groups. Ferrans and Powers Quality of Life Index (QLI) was completed by both groups before, immediately after, and 1 month after the intervention. For the study group participants and their families, 60-min sessions of hope-promoting interventions based on religious beliefs were held twice a week for 3 weeks. Independent *t*, repeated measures analysis of variance (ANOVA), Chi-square, Mann–Whitney, and Fisher's exact tests were adopted for data analysis.

Results: The mean (standard deviation) overall QOL score in the area of satisfaction significantly increased in the study group, compared to the controls, immediately [70.7 (8.5) vs. 59.2 (12.5)] and 1 month after the intervention [75.2 (7.4) vs. 59.4 (12.9)] ($P < 0.05$). There was also a similar difference between the two groups in the area of importance immediately [73.6 (5.8) vs. 65.7 (7.5)] and 1 month after the intervention [76.3 (8.1) vs. 66.8 (8.5)] ($P < 0.05$).

Conclusions: Hope-promoting intervention based on religious beliefs is a useful method for improving QOL in patients with CHF.

Key words: Congestive heart failure, hope promoting, Iran, quality of life, religious beliefs

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Submitted: 05-Dec-14; Accepted: 20-Sep-15

Access this article online	
Quick Response Code:	Website: www.ijnmrjournal.net
	DOI: 10.4103/1735-9066.174755

Introduction

Heart disease is a major cause of disability and mortality in different countries of the world. Despite the different preventive approaches developed, it has still increased in prevalence. Among heart diseases, heart failure is one of the most important diseases and has the highest incidence of mortality and disability.[1] Almost 5 million people in America suffer from chronic heart failure.[2] In Iran, there are over 1 million patients with heart failure[3] The trend in percentage of deaths from cardiovascular diseases in Tehran, Iran, is similar to that of developed countries.[1] Heart failure is a global pandemic

How to cite: Binaei N, Moeini M, Sadeghi M, Najafi M, Mohagheghian Z. Effects of hope promoting interventions based on religious beliefs on quality of life of patients with congestive heart failure and their families. Iranian J Nursing Midwifery Res 2016;21:77-83.

and effects communities through the financial burden on the healthcare system.[4] Compared to other chronic diseases, heart failure has a more acute impact on the quality of life (QOL).[1] In addition, this disease impairs the functional capacity and QOL of patients.[5] Researchers believe that the QOL in heart failure patients is lower than that in cancer patients.[6] This disease affects all aspects of the patients' life, including physical, mental, and social status; therefore, it is recommended that medical staff, especially nurses, pay attention to the QOL of patients and provide treatment, care, and educational measures.[7]

On the other hand, diagnosis and treatment of diseases cause reduction or loss of hope in patients and patients with heart failure are not an exception. The severity of heart failure and the uncertain outcome of the disease among patients highlights the importance of hope in these patients.[8] Hope is defined as an inner force that can enrich life and enable patients to have an outlook beyond their current situation and suffering[9] Berendes *et al*. found that higher levels of hope were associated with elevated mood, better physical health, and greater ability to cope with illness and endure more pain.[10] In general, lack of hope and purpose in life leads to reduced QOL for the patient and negative beliefs.[9] Supportive interventions associated with hope in patients with heart failure can have an impact on health goals.[8]

Thus, giving hope to patients has been considered as an important intervention in medicine, nursing, and mental health, but the practical and predictive value of hope remains unclear.[11] Many studies have been conducted in relation with hope-promoting interventions. In most of these studies, hope treatment has been based on the theory of positive psychology, particularly Snyder's Hope Theory,[12,13] and less attention has been paid to religious beliefs to raise hope. Islam and its teachings include all the necessities of human life, and based on its many traditions and verses, all the sciences have been included in the Quran. There is a significant difference between the theory of hope in psychology and in the Holy Quran. The theory of hope in the Quran is based on the purpose of creation, is parallel to the human evolution, and its foundation is faith in God. However, in psychology, this central core has been overlooked. In psychology, the objectives of the theory of hope are defined by the individual and have material aspects. Nevertheless, the Quran has already identified these objectives as the worship of God in the vicegerent of God. Obstacles to achieving goals in the theory of hope in psychology also have material aspects, whereas in the Quran, obstacles are defined as desire and Satan. The models presented in the Quran for strengthening hope are the prophets, and compared to the patterns existing in psychology, they have a grand and glorious position.[14] It can be stated that Islamic teachings contain all that is required for growth, health, and human perfection. Knowing, believing, and applying these teachings in life have a significant role in promoting positive behavior and preventing mental and physical illness.[15] Baljani *et al*. believe that nursing and care interventions designed according to the religious beliefs of patients will maintain hope.[16] Therefore, in this study, hope-promoting interventions based on religious beliefs, instead of Snyder's Hope Theory, have been used among Muslims. There were only a few researches in the context of a hope-promoting intervention for heart failure patients based on religious beliefs in Iran, despite the country having a Muslim majority. Furthermore, there were no conflicting study results showing the lack of positive effect of hope therapeutic interventions.

Therefore, nurses benefit from this holy book and religious beliefs as an important source of hope for their hope-promoting interventions. However, studies show that patients with heart failure and their caregivers experience poor QOL and depressive symptoms, and the burden of caregivers' responsibilities and symptoms of depression are associated with patients' QOL.[17] Thus, when the nurse determines the patient's care needs, he/she must not ignore the needs of the family, especially when the family has the responsibility of caring for the patient.[18] Most studies focus on the patient and the disease, and less attention is given to the family caregivers of patients. Therefore, in this study, the patients' family members were also considered. The aim of this study was to evaluate the impact of hope-promoting interventions based on religious beliefs of patients and their family on the QOL of patients.

Materials and Methods

This study was a randomized clinical trial registered with the code IRCT2014100619413N1. It had two groups and was performed in three stages (before, immediately after, and 1 month after the intervention for follow-up).[19] The impact of hope-promoting interventions based on religious beliefs of the patients and their families was analyzed as the independent variable and patients' QOL as the dependent variable.

The study population included patients with heart failure class I and II (with ejection fraction of more than 40%) who referred to hospitals and clinics affiliated to Isfahan University of Medical Sciences, Isfahan, Iran. Primary sampling was performed via convenient sampling method based on confidence interval of (Z1) 95%, meaning 1.96, test power factor (Z2) of 80%, meaning 0.89. The minimum

difference in QOL score between the two groups (d), which showed the difference to be significant, was considered to be 0.83. Sample size was calculated as 23 patients in each group.

Inclusion criteria included age of 18 years and above, diagnosis of heart failure class I and II by a specialist physician, history of heart failure of at least 1 year,[1] full awareness and knowledge of the time, place, and person, lack of dementia, willingness to participate in the study,[4] belonging to Muslim faith, lack of speech, mental, and hearing disorders confirmed by a specialist, and lack of any other serious and limiting medical illnesses that could impact the QOL and mental health confirmed by a specialist.[12] Patients were randomly assigned to the groups. For the random placement of the samples in the groups, using a table of random numbers, the researcher selected a number with closed eyes with up and right directions. If the number on the right was an even number, the sample was placed in the experimental group and if it was an odd number, the sample was placed in the control group. For the random allocation, each of the numbers was written on a card and placed in sealed envelopes, and then, a code was given to them. Envelopes were placed in a box and were not opened until sampling in the research environment. On the day of sampling, each eligible subject was given an envelope in order of the codes. This action was continued until reaching the desired sample size in all the sampling centers with 20% probability of sample loss.

Sampling lasted for 4 months from September to February 2013. The patients were asked not to use other methods of alternative medicine that were associated with spiritual intervention during the execution of this study and to continue with their normal lives. Data were collected through a questionnaire that consisted of two parts. The first part included demographic characteristics (six questions for the patient and four questions for the family members) and questions about the status of the disease (three questions). The second part included the Ferrans and Powers Quality of Life Index (QLI),[20] which was answered by the patients in complete willingness. The QLI was designed in 1999 and the questions were developed in the two aspects of assessing importance of and satisfaction with health and performance, socioeconomic, psychological, spiritual, and familial dimensions. Each section contained 35 questions. In each section, 15 questions were related to health and performance measurement, 8 questions to the assessment of the socioeconomic dimension, 7 questions to psycho-spiritual assessment, and 5 questions to family relations.[20] The respondents determined satisfaction and importance based on a 6-point Likert scale: 0 (very dissatisfied) to 5 (very satisfied), and 0 (extremely unimportant) to 5 (very important). In this questionnaire, the rating scale was set from the lowest score to the highest score, from 0 to 5. The scores of each area were added and multiplied by 100, and then divided by the result of multiplying the number of questions by 5 to make the scores of each area and overall QOL understandable in the range of 0–100. The QLI could be used in any culture without any significant changes due to the lack of specific cultural problems.[21] The validity of the QLI was determined by Shojaei in 2008 through content validity and its reliability was confirmed by Cronbach's alpha of 0.86.[20] Panthee *et al*. also confirmed its reliability in their study in 2011 with a Cronbach's alpha of 90%.[22]

After obtaining informed consents from the subjects, the patients of the experimental group and their family members received hope-promoting intervention as a group. They received the intervention twice a week, each time for an hour, for 3 weeks. This intervention consisted of two stages of creating hope (including two steps of finding hope and strengthening it) and increasing hope (two steps of enrichment and maintenance of hope).[14] Meetings were held by the researcher, a monitoring colleague with a PhD in theology, and a psychiatrist consultant as group discussions and questions and answers sessions. At the end of each session, a booklet containing the content of the meeting and the next session's task was given to the patients to ascertain that they will be remembered by the patients and evaluate the meetings' efficiency. For the control group, two sessions were held on the disease. Contents of intervention sessions based on the Quran and Islamic religious beliefs were as follows:

Ethical considerations

The researcher obtained a referral letter from the School of Nursing and Midwifery of Isfahan University of Medical Sciences. Subsequently, the researcher presented the introduction letter and explained the objectives of the study to the hospital management, and after obtaining their consent, performed sampling. This research was scientifically and ethically validated by the ethics committee of Isfahan University of Medical Sciences.

First session

Aim

Explaining the objectives and rules, the relationship between despair and disease, and the importance and value of patient care in the Quran and other religious beliefs, requesting the patients to consider several important purposes of life, comparing the signs of disappointment with what has been offered in the Quran and doctrines and religious beliefs, the importance and value of having hope and denouncing despair.

Task

To note the effects of the Quran and other religious beliefs on their perspective of despair, mood, and attitude.

Second session

Aim

Recalling God's blessings in the lives of individuals, considering the hopeful stories of the Holy Quran and the lives of saints and Imams seeking hope (the first step in creating hope).

Task

Preparing a list of miracles that have occurred in their lives.

Third session

Aim

Setting Imams as their model, belief in resurrection, and having hope in benefiting from the worldly intercession of saints in order to strengthen hope (the second step of creating hope).

Task

Noting the level of relationship with one of the saints or attempts to communicate specifically and intimately with one of the saints, for example, Imam Hussein, Imam Reza, or Hazrat Abalfzl.

Fourth session

Aim

Explaining the effect of individual strategies, such as prayer, thought of God, enriching hope through familiarity with the Quran (the first step to increase hope).

Task

The use of at least one of the approaches presented and explaining its effect on the level of hope.

Fifth session

Aim

Explaining the effect of social practices like charity and forgiveness in raising hope (the first step to increase hope).

Task

The use of at least one of the solutions presented and expressing its effect on one's hope and on others (as a society).

Sixth session

Aim

Identifying evil and carnal desires as enemies of humanity and obstacles to achieving goals (unproductive thoughts resulting from desires and temptations of the devil) in order to preserve and maintain hope (second step to increase hope),[14] and reviewing previous meetings and thanking the participants.

Results

The results of demographic characteristics of the subjects including age, gender, marital status, employment status, educational level, and duration of heart disease, hospitalizations, and other chronic diseases are presented in Tables 1 and 2. In general, the results showed that the two groups were similar in terms of demographic characteristics and had no significant differences [Tables 1 and 2]. Independent *t*-test results showed no significant differences before the intervention between the two groups in terms of the mean QOL score in the performance and health, socioeconomic, psychological, spiritual, and familial dimensions and areas of satisfaction and importance. Immediately after and 1 month after the intervention, a significant difference was observed between the groups in terms of mean QOL score in the four dimensions and areas of satisfaction and importance, and the overall QOL score ($P < 0.05$) [Tables 3 and 4]. Repeated measures analysis of variance (ANOVA) also showed a significant difference between the three time durations in the control group in terms of mean QOL score in the four dimensions and two areas of satisfaction and importance. However, in the experimental group, there was a significant difference between the three time durations in terms of mean QOL score in the four dimensions and two areas of satisfaction and importance ($P < 0.05$). Moreover, mean QOL score had increased. According to the findings, it can be concluded that the implementation of hope-promoting interventions based on religious beliefs was effective in improving the QOL of patients of the experimental group.

Discussion

Numerous studies have indicated the poor QOL of patients with heart failure; therefore, therapeutic

Table 1: The mean age, duration of disease, and frequency of hospitalizations in the experimental and control groups

Group	Control group		Experimental group		Statistical test	
Variable	Mean	SD	Mean	SD	*P*	Independent *t*-test
Age	57.9	7.51	57.8	7.79	0.95	0.06
Duration of heart disease (years)	5.2	3.04	5.1	3.1	0.87	0.17
Frequency of hospitalizations	0.82	1	0.95	1.02	0.66	0.43

SD: Standard deviation

Table 2: Comparison of the distribution frequency of gender, marital status, education level, employment status, and other chronic diseases in the experimental and control groups

Variable	Group				*P*	Statistical test
	Control group		Experimental group			
	Count	Percentage	Count	Percentage		Fisher's exact test
Gender						
Man	0	0	2	8.7	0.24	
Woman	23	100	21	91.3		
Marital status						
Single	0	0	1	4.3	0.45	χ^2
Married	15	62.5	13	56.5		
Death of a spouse	8	34.8	9	39.1		
Education level						
Illiterate	14	60.9	13	56.5	0.86	Mann–Whitney Z=0.17
Diploma	9	39.1	9	39.1		
Higher education	0	0	1	4.3		
Employment status						
Unemployed	21	91.3	20	87	0.5	Fisher's exact test
Employed	2	8.7	3	13		
Other chronic diseases						
Yes	23	100	23	100	0.69	χ^2
No	0	0	0	0		

Table 3: Mean overall score of quality of life in the experimental and control groups in the area of satisfaction at different times

Time	Group				Statistical test	
	Control group		Experimental group			
	Mean	SD	Mean	SD	*P*	Independent *t*-test
Before the intervention	59.6	13.4	61.4	10.7	0.61	0.5
Immediately after the intervention	59.2	12.5	70.7	8.5	0.001	3.6
One month after the intervention	59.4	12.9	75.2	7.4	<0.001	5.03

SD: Standard deviation

Table 4: Mean overall score of quality of life in the experimental and control groups in the area of importance at different times

Time	Group				Statistical test	
	Control group		Experimental group			
	Mean	SD	Mean	SD	*P*	Independent *t*-test
Before the intervention	67.2	5.7	68.8	7.3	0.34	0.94
Immediately after the intervention	65.7	7.5	73.6	5.8	0.03	2.2
One month after the intervention	66.8	8.5	76.3	8.1	0.02	1.7

SD: Standard deviation

interventions, care, and training by healthcare workers, particularly nurses, must be performed with the aim of enhancing the QOL of these patients. According to the present study, implementation of hope-promoting programs based on religious beliefs for patients with heart failure and their family members improves the QOL of these patients. The findings showed that, 1 month after the intervention, the mean QOL score of experimental group patients, in the four dimensions and two areas of importance and satisfaction, was higher than that in the control group. This result indicated the endurance of the impact of the hope-promoting intervention in these patients even up to a month after the intervention. Khaledi Sardashti also found, in his study, that the effect of the intervention persisted 1 month after the treatment in patients with diabetes.[19]

There are few studies on hope-promoting interventions based solely on religious teachings, and most studies in this field are based on Snyder's hope therapy. Sotodehasl *et al*. aimed to compare the effect of medication therapy and hope therapy on QOL of patients with primary hypertension.[12] They found that Snyder's hope therapy improved the QOL of patients with primary hypertension more than medication therapy and the mean QOL score immediately after and 1 month after the hope therapy intervention had increased compared to before the intervention.[12] The study by Ghezelseflo and Esbati was also conducted on two groups (experimental and control).[13] The experimental group received eight sessions of 2-h duration of group hope therapy intervention based on Snyder's theory, and no intervention was conducted for the control group.[13] Their results showed that group hope therapy had a positive effect on the QOL of men who were HIV positive.[13] However, Khaledi Sardashti studied the effect of group hope therapy on the level of hope in people with diabetes.[19] He conducted eight 2-h sessions of a combination of Snyder's hope therapy and Quranic verses and sayings and stories such as the story of Joseph story.[19] The results showed a positive impact on the level of hope of people with diabetes in the intervention group.[19] Hope definition, two-staged hope-promoting therapy, using hope generating stories, focusing on past successes to create hope, and understanding the purpose and limitations to maintaining hope are some of the similarities between the intervention of this study and the present study. The main difference between the present study and other studies on hope-promoting therapy is that this study used only the Quranic theory of hope, contrary to the positive psychology theory used in other studies. The hope-promoting intervention used in this study was based on the purpose of human creation, was parallel to human evolution, and its foundation was based on the faith in God. Through this faith, such trust and confidence is achieved in the human psyche that he/she will become patient and resistant against all adversities of life and will not be disappointed. Moreover, the models used in this intervention to strengthen hope are the prophets of God, and have a grand position compared to the models existing in psychology. In general, patients' need for communication with God is an innate need, and the establishment of true peace and the strengthening of real hope are possible only through a relationship with the creator (Raad 28/13). Interventions based on the religious beliefs of these patients can be very effective. Patients need to feel safe and supported, and, more importantly, hopeful during their illness more than at other times. In addition, an Islamic culture exists in Iran, and 98% of Muslims adhere to their religious orders and values and benefiting from the Quran and Islamic teachings has a special place among them. Therefore, religious practices can be used to create, maintain, and enhance hope, and thus, improve the patients' QOL. Jahani *et al*. studied the relationship between spiritual well-being and QOL in patients with coronary artery disease.[23] They stated that the existence of a relationship between spiritual health and QOL in these patients must be taken into consideration in designing of care program therapies in countries with rich religious and cultural beliefs, such as Iran.[23] Reviewing previous studies showed that most studies have focused on the patient and the disease, and less attention has been paid to the patient's family. Hooley *et al*. conducted a study in 2005 entitled "The relationship of quality of life, depression, and caregiver burden in outpatients with congestive heart failure" in Canada.[17] This study showed that patients with heart failure and their caregivers experience poor QOL and symptoms of depression, and that burden of care and symptoms of depression were associated with patients' QOL.[17] Ghahremani *et al*. also believed that family is the most valuable and vulnerable resource for disabled patients, and family members play an important role in supporting patients, and thus, require attention.[24] Therefore, in this study, families of patients with heart failure also attended the hope-promoting interventions with their patients.

Conclusion

Hope-promoting interventions based on religious beliefs are effective in improving the QOL of patients with heart failure. Hence, this method is recommended in the care of patients with heart failure. Furthermore, due to the importance of family, its role in patients' QOL, and the profound effect of the physical and mental health of these patients' caregivers on their care, especially in home care, nurses should also attend to patients' family members.

Acknowledgments

This article was derived from a master thesis of Niloufar Binaei with project number 392463, Isfahan University of Medical Sciences, Isfahan, Iran. We appreciate Clinical Research Development Center of hospitals and clinics affiliated to Isfahan University of Medical Sciences, Isfahan, Iran(amin, chamran, feize,khorsheed). Our sincere appreciation goes to the Research Deputy of Isfahan University of Medical Sciences, the respected hospital staff, and all the patients with heart failure who participated in this study.

Financial support and sponsorship

Vice Chancellor for Research of Isfahan University of Medical Sciences, Isfahan, Iran.

Conflicts of interest

There are no conflicts of interest.

References

1. Mohammadi SZ, Shahparian MM. Quality of Life (QOL) and some factors related in males with heart failure in Karaj and Shahriar Social Security Hospitals. J Faculty Nurs Midwifery Gorgan Univ 2012;8:1-13.
2. Bekelman DB, Havranek EP, Becker DM, Kutner JS, Peterson PN, Wittstein IS, *et al*. Symptoms, depression, and quality of life in patients with heart failure. J Card fail 2007;13:643-8.
3. Khoshtarash M, Momeni M, Ghanbari A, Salehzadeh AH, Rahmatpour P. Self-care behaviors and related factors in patients with heart failure. J Holist Nurs Midwifery 2013;33:22-9.
4. DeWolfe A, Gogichaishvili I, Nazadze N, Tamariz L, Quevedo HC, Julian E, *et al*. Depression and quality of life among heart failur patients in Georgia, Eastern Europe. Congest Heart Fail 2012;18:107-11.
5. Rahnavard Z, Zolfaghari M, Kazemneghad A, Hatamipour KH. Quality of life and its influencing factors in patients with heart failure. Tehran Univ Med Sci (Life) 2006;12:77-86.
6. Iqbal J, Francis L, Reid J, Murray S, Denvir M. Quality of life in patients with chronic heart failure and their carers: A 3-year follow-up study assessing hospitalization and mortality. Eur J Heart Fail 2010;12:1002-8.
7. Ebrahimitabas E, Khamrnya M, Rezvani M, Pournamdar Z. Quality of life and related factors in patients with heart failure in CCU and heart hospitals in Khatamolanbiaand Ali Ibn Abi Talib in Zahedan. J Res Med Sci 2008;8:20-30.
8. Rustøen T, Howie J, Eidsmo I, Moum T. Hope in patients hospitalized with heart failure. Am J Crit Care 2005;14:417-25.
9. Abdi N, Taghdisi MH, Naghdi S. The Effects of Hope Promoting Interventions on cancer patients. A Case Study in Sanandaj. J Armaghandanesh 2007;14:13-21.
10. Berendes D, Keefe FJ, Somers TJ, Kothadia SM, Porter LS, Cheavens JS. Hope in the Context of lung cancer: Relationships of hope to symptoms and psychological distress. J Pain Symptom Manage 2010;40:174-82.
11. Khoshkharam N, Golzari M. Efficacy of hope therapy on the rate of increasing marital satisfaction and change in insecure attachment style in married university students. J Appl Psychol 2011;5:84-96.
12. Sotodehasl N, Taherneshat dost H, Kalantari M, Talebi H, Khosravi AR. Comparison of effectiveness of two methods of hope therapy and drug therapy on the quality of life in the patients with essential hypertension. J Clin Psychol 2010;2:27-34.
13. Ghezelseflo M, Esbati M. The Effectiveness of hope-oriented group therapy on improving the quality of life in men with HIV positive. J Thought Behav Clin Psychol 2011;6:89-97.
14. Parcham A, Mohagheghian Z. A Comparative study of the playbooks of creating and increasing hope from the perspective of positive psychology and Quran. J Marefat 2011;20:99-113.
15. Farhadian F. Mental health in the light of practical adherence to Islamic teachings. J Payame Zan 2011;236:70-3.
16. Baljani E, Khashabi J, Amanpour E, Azimi N. Relationship between spiritual well-being, Religion, and hope among patients with cancer. J Hayat 2011;17:27-37.
17. Hooley PJ, Butler G, Howlett JG. The relationship of quality of life, depression, and caregiver burden in outpatients with congestive heart failure. Congest Heart Fail 2005;11:303-10.
18. Pashaee F, Taleghani F, Tavakol KH, Rezaei A. Family experiences from caregivering of patient with coronary artery bypass graft surgery: A qualitative study. Iranian J Nurs Res 2010;5:61-71.
19. Khaledi Sardashti F. The effect of hope therapy on hope of people with diabetes admitted to the research center of S. T in Isfahan. Master's Thesis, Isfahan university of Medical Sciences School of Nursing and Midwifery 2012.
20. Shojaei F. Quality of life in patients with heart failure. Tehran Univ Med Sci 2008;14:5-13.
21. Akbari L. Effects of educational program on quality of life in patients with defibrillators implantreferred to Chamran hospital. Master's thesis, Isfahan University of Medical Sciences School of Nursing and Midwifery 2008.
22. Panthee B, Kritpracha C, Chinnawong T. Correlation between coping strategies and quality of life among myocardial infarction patients in Nepal. Nurs Media J Nurs 2011;2:187-94.
23. Jahani A, Reje N, Harvi M, Hadavi A, Zayeri F, Khatooni AR. The relationship between Spiritual well-being and quality of life in coronary heart disease patients. J Islamic Lifestyle 2013;2:19-24.
24. Ghahremani Z, Alavi MJ, Araghi M, Hosseini F. Correlates of quality of life in the family caregivers of schizophrenic patients with hope. Iran J Nurs 2006;19:17-26.