Original Article

DOI: 10.7860/JCDR/2018/36291.12097

Effect of Group Religious Intervention on Spiritual Health and Reduction of Symptoms in Patients with Anxiety

Psychiatry/Mental Health Section

MASOUD NIKFARJAM[1], KAMAL SOLATI[2], SAEID HEIDARI-SOURESHJANI[3], PARVIN SAFAVI[4], ELHAM ZAREAN[5], ELHAM FALLAH[6], IRAJ GOUDARZI[7]

ABSTRACT

Introduction: Anxiety is a disease which, in addition to the complications affecting the health of patients, imposes a high burden on health care systems.

Aim: To determine the effectiveness of a group religious intervention on spiritual health and reduction of symptoms in patients with anxiety.

Materials and Methods: In the present clinical trial, 72 patients with anxiety were included in the study with convenience sampling. Patients were randomly divided into two groups; Group I underwent drug therapy alone, and Group II underwent drug therapy+religious intervention.

The religious intervention group attended 5 sessions of 90 minutes at 3-week intervals and was administered with routine drug therapy. Then, the participants filled out the demographic questionnaire, Spiritual Well-being Scale and the Spielberger State-State anxiety Inventory. After data collection, the data were analysed by SPSS 18.

Results: There was no significant difference between the demographic characteristics of patients ($p>0.05$). The mean scores of religious and existential aspects of spiritual wellbeing and general spiritual health after intervention were significantly higher in Group II than in Group I ($p<0.05$). The mean scores of trait anxiety scores, state anxiety, and general anxiety after intervention were significantly lower in Group II than in Group I ($p<0.05$).

Conclusion: Religious intervention, in addition to increasing the level of spiritual health of the patients, improves their anxiety symptoms.

Keywords: Mental health, Religion, Wellbeing

INTRODUCTION

Spiritual health is a state in which a person is able to cope with everyday life in a way that he/she can fulfil all of his/her potentials, brings the meaning and concept to his/her life, and feels happy with himself/herself [1]. Spiritual health is determined by certain characteristics such as sustainability in life, calm, close relationship with God, and having a goal for life [2]. Regarding the importance of this dimension of health, spiritual health is one of the integral parts of health, which was added to the definition of health at the Summit of Regional Directors for the Eastern Mediterranean Region [3]. Mental health is another important aspect of health in individuals [4]. Meanwhile, anxiety disorders are one of the most common psychiatric illnesses that impose stupendous costs on the health care system [5]. Anxiety disorder is characterised by excessive fear and subsequent avoidance, usually in response to a particular object or situation, in the absence of real danger [6]. It is estimated that about 5% of people in a period of their lifetime are affected by this disorder, with women developing this disorder twice as much as men [7]. Like many other mental conditions, anxiety involves cognitive, neurobiological, and behavioural components, that is, if anxiety is chronic and resistant to treatment, it can impair personal functioning and lead to adverse consequences [6]. Several psychological treatments, relaxation techniques, medications and other therapies, such as spiritual psychotherapy, can be used to treat anxiety [7,8]. However, a study has been conducted on the effects of the religious intervention on anxiety and its treatment, with contradictory results [9].

Despite the fact that in recent decade's spirituality has been considered one of the important aspects of health by the scientific and research community, research results have not yet demonstrated a prominent role in its effect at the bedside [10]. Therefore, this issue should be studied further. In the present study, we investigated the effectiveness of a group religious intervention on spiritual well-being and reduction of the symptoms of patients with anxiety.

MATERIALS AND METHODS

In the present interventional clinical trial study, study population consisted of 72 patients with anxiety who were selected by convenience sampling to be enrolled in the study. The study population included patients with anxiety referred to Imam Ali Clinic in Shahrekord (southwest of Iran) in December 2016-April 2017. Then, patients with inclusion criteria were randomly assigned to two groups of intervention and control. The inclusion criteria consisted of suffering from anxiety according to clinical criteria and attaining at least a score of 20 on Spielberger State-State anxiety Inventory (STAI) [11]. To ensure that the participants suffered from depression and anxiety, a diagnostic criterion for anxiety according to the Structured Clinical Interview for DSM-V Personality Disorders was used [12]. According to which, people have a mental state of intense excitement and features such as fear, threat, panic, and concern. Other inclusion criteria were lack of mental illness, lack of psychotic disorders, severe form of anxiety, having physical health and full consciousness to attend meetings, and believing God and the religious dimension of man. Lack of providing consent to attend sessions, the presence of suicidal ideation, and disease progression were considered exclusion criteria. After obtaining written informed consent from the participants, they were randomly assigned to two groups by using the random number table.

Group I (n:36) included patients with anxiety who received current drug therapy such as Benzodiazepines (temporarily) and Selective Serotonin Reuptake Inhibitors (SSRIs) and Group II (n:36) included patients with anxiety who underwent religious intervention and drug therapy. According to various studies, these groups were matched for certain characteristics such as age, gender, marital status,

economic status, education level, place of residence, occupation and history of anxiety [13,14]. Before the intervention, the levels of depression and anxiety were measured by the therapist's interview and recorded in STAI for patients with inclusion criteria [11]. Then these levels were also evaluated by interview and completion of the questionnaire after two months of intervention. In the present study, a 3-part questionnaire was used. The first part was a demographic questionnaire.

The second part was the Ellison CW and Smith J, Spiritual Well-being Questionnaire (1982) [15], which include 10 items about religious health and 10 items about existential health. In both religious health and existential health items, the minimum score was 10 and the maximum score 60. Total spiritual health score is the sum of the total score of these two subscales. The score derived from the sum of the scores of these two aspects indicates spiritual health score, with a range of 20-120. The answers to the items are rated on a 6-point Likert scale from *Absolutely agree* to *Absolutely disagree*. In the end, the spiritual health of the people was divided into three categories: low (20-40), moderate (41-49), and high (100-120).

Ellison CW and Smith J, obtained an internal consistency coefficient of 0.89 for the sum of the two subscales [15]. Clearly, this questionnaire has been nativized to Iranian population, and the Cronbach's alpha coefficient was derived 0.89 in a study by Dastgheib Z et al., [16].

The third part of the questionnaire includes the STAI. This questionnaire has 40 items, of which 20 question address state anxiety (person's anxiety at the time of accountability) and 20 other do state anxiety (common feelings in most cases). Trait anxiety is measured by the items rated on a 4-point Likert scale from *very little* to *very much*. State anxiety is measured by the items rated on a 4-point Likert scale from *Never* to *Always*.

Each of the items in the questionnaire is assigned a score between 1 and 4, with a score of 4 indicating a high presence of anxiety; therefore, the scores of both subscales range from 20-80.

The scoring of the anxiety level in the two subscales is as follows:

Trait anxiety: 20-31: mild; 32-42: moderate to low; 43-53: moderate to high; 54-64: relatively severe; 65-75: severe; and over 76: very severe.

State anxiety: 20-31: mild; 32-42: moderate to low; 43-52: moderate to high; 53-62: relatively severe; 63-72: severe; and over 73: very severe.

Intervention group attended five sessions of 90 minutes at 3-week intervals and also received current drug therapy, while the control group received current drug therapy alone that consist of SSRIs and Benzodiazepines drugs.

The intervention was implemented by a clergyman working in the medical university and through the implementation of religious practices, lectures, group discussions, and the use of slides. The contents of the intervention are shown in [Table/Fig-1].

The present study was approved with ethical code IR.SKUMS.REC.1395.19 in Shahrekord University of Medical Sciences.

Session	Content of group religious intervention	Equipment	Time
1	The teaching of religious concepts and human relationship with God, God with man, and man with the universe and nature, establishing prayer meetings, and recommending to participate in congregational prayers and religious rituals on a daily basis.	Video projector	90 minutes
2	The role of hope, trust, forgiveness, patience and resistance, and divine predestination in Islamic lifestyle and holding prayer and repentance meetings and offering homework to be done at home.	Video projector	90 minutes
3	Reciting Quran and holy religious texts and thematic interpretation of these texts (with an emphasis on Islamic lifestyle and family and social communication), and offering homework.	Quran	90 minutes
4	Spiritual meditation and spiritual imagination, writing about and discussing spiritual feelings, resolving ambiguities, worshiping God, and offering homework	Pen and paper	90 minutes
5	Ethics and related concepts, healthy religious recreation, summarizing the contents and recommending the continuation of the content implemented in the future.	Video projector	90 minutes

[Table/Fig-1]: The contents of the intervention.

Variables		Group 1		Group 2		p-value
		Number	%	Number	%	
Sex	Male	15	41.7	15	41.7	1*
	Female	21	58.3	21	58.3	
Marriage status	Married	18	50	21	58.3	0.478*
	Single	18	50	15	41.7	
Educational level	Under high school diploma	3	8.3	4	11.1	0.103**
	High school diploma	10	27.8	10	27.8	
	Associate degree	9	25	16	44.4	
	Bachelors degree	12	33.3	3	8.3	
	MSc and higher	2	5.6	3	8.3	
Job	Employee	3	8.3	1	2.8	0.737**
	Laborer	4	11.1	7	19.4	
	Self-employee	5	13.9	6	16.7	
	Unemployed	7	19.4	4	11.1	
	Housewife	2	5.6	2	5.6	
	Student	15	41.7	16	44.4	
Habitat	Urban	22	61.1	19	52.8	0.475*
	Village	14	38.9	17	47.2	
Economic situation	Weak	11	30.6	12	33.3	0.551**
	Average	17	47.2	20	55.6	
	Good	7	19.4	4	11.1	
	Excelent	1	2.8	0	0	
Anxiety history	Yes	5	13.9	9	25	0.234*
	No	31	86.1	27	75	

[Table/Fig-2]: Frequency distribution of demographic variables in patients in Groups I and II.
*Independent t-test.
**Mann-Whitney.
p<0.05 was considered as a significant level

STATISTICAL ANALYSIS

Data were analysed by the SPSS version 18.0 software using descriptive statistics, independent t-test, paired t-test, and Mann-whitney test. p<0.05 was considered significance level.

RESULTS

In the present study, 36 patients with anxiety who received merely current drug therapy and 36 anxiety patients who underwent a religious intervention and pharmacotherapy were enrolled by random allocation. The mean age of the patients in the first group was 32.58±9.97 in the range of 18 to 52-year-old and in the second group 31.03±10.48 in the range of 18 to 56-year-old and there was no significant difference between the two groups in terms of age (p=0.09). There was no significant difference between the two groups in terms of sex, marital status, economic status, education

level, place of residence, family history of the disease (first-degree relatives), occupation, and duration of anxiety [Table/Fig-2].

According to [Table/Fig-3], based on the independent t-test, the mean scores of the religious and existential aspects and total spiritual well-being increased significantly in Group II ($p<0.01$); however, in Group I, the religious aspect of the spiritual well-being significantly decreased after the intervention and the existential aspect of the spiritual well-being and total spiritual well-being were not significantly different between before and after the intervention.

Also, based on independent t-test, the mean scores of religious and existential aspects of spiritual well-being and total spiritual well-being were significantly higher in Group II who received religious intervention than in Group I ($p<0.05$).

Variables	Religious dimension of spiritual health		p-value**	Existence dimension of spiritual health		p-value**	Overall spiritual health		p-value**
	Group 1	Group 2		Group 1	Group 2		Group 1	Group 2	
	Mean±SD	Mean±SD		Mean±SD	Mean±SD		Mean±SD	Mean±SD	
Baseline	39.32±11.09	40.63±11.59	0.630	36.22±12	38.36±9.68	0.408	74.94±22.33	79±20.74	0.427
After intervention	37.44±9.82	43.02±6.11	0.031	36.16±12.69	43.77±9.63	0.005	73.61±21.70	85.27±20.56	0.022
p-value *	<0.001	0.011		0.900	<0.001		0.214	<0.001	

[Table/Fig-3]: Comparison of mean scores of religious and existential aspects of spiritual well-being and total spiritual well-being in groups I and II in the pretest and post-test of the study.
*Paired t-test
**Independent t-test
p<0.05 was considered as a significant level

Variables	Trait anxiety		p-value**	State anxiety		p-value**	Total anxiety		p-value**
	Group 1	Group 2		Group 1	Group 2		Group 1	Group 2	
	Mean±SD	Mean±SD		Mean±SD	Mean±SD		Mean±SD	Mean±SD	
Baseline	55.05±8.27	55.94±4.88	0.580	55.05±6.74	54.88±6.22	0.914	110.08±13.83	108.94±19.31	0.775
After intervention	51.94±8.41	47.72±5.87	0.016	48.33±5.59	45.66±5.11	0.038	100.27±12.81	93.38±9.12	0.011
p-value*	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	

[Table/Fig-4]: Comparison of the mean scores of trait anxiety, state anxiety, and general anxiety in groups I and II before and after intervention.
*Paired t-test
**Independent t-test
p<0.05 was considered as a significant level.

According to [Table/Fig-4], based on the paired t-test, the mean scores of trait anxiety, state anxiety, and total anxiety after the intervention in Groups I and II significantly decreased ($p<0.001$). Also, based on the independent t-test, the mean scores of trait anxiety, state anxiety, and general anxiety after the intervention were significantly lower in Group II who underwent religious intervention ($p<0.05$).

DISCUSSION

The aim of the present study was to determine the effectiveness of a group religious intervention on spiritual health and reduction of symptoms in patients with anxiety.

In the present study, it was observed that the mean scores of the religious aspect of spiritual well-being, existential aspect of spiritual well-being, and total spiritual well-being increased after the intervention. On the other hand, it was found that the mean scores of trait anxiety, state anxiety, and general anxiety after the intervention were significantly lower in the intervention group than in the control group. Consistent with the results of present study, a study on the effect of a spiritual care program on the level of anxiety in patients with leukemia, showed that after intervention, there was a significant difference in the level of anxiety in the intervention group compared to the control group, and therefore the spiritual care program could be used to reduce the anxiety of cancer patients [17]. Also, in a review article that looked at religious and spiritual interventions on several aspects of mental health care, it was shown that clinical trials on religious-spiritual interventions found the benefits of these interventions to reduce clinical symptoms, particularly in anxiety, and that such interventions can be used as complementary therapies in health care [18]. In another review conducted by Koenig HG, the influence of religion and spirituality on mental health aspects, including anxiety and depression, was studied. The findings suggested that although religious beliefs and spiritual practices could be a powerful source of calmness, hope, and meaning in life, they could have a complex connection with psychosocial disorders, and sometimes it would be difficult to identify which one is the source or is included by the other one [19]. Rezaie AM et al., studied the relationship between spiritual health with stress and anxiety in women with breast cancer, and observed that there was a significant relationship between anxiety and the general score of spiritual well-being, but there was no relationship between the religious aspect of spiritual well-being and anxiety, as well as between the studied demographic variables and spiritual health; women with higher spiritual health also experienced less anxiety and stress [20].

Khademvatani K et al., found that there was an inverse correlation of spiritual health with anxiety and depression in patients with myocardial infarction and that the demographic variables were significantly associated with spirituality in these patients [21]. Dalmida SG et al., have reported that there is a significant relationship between religious-spiritual practices and the reduction of depression symptoms in women with AIDS, which necessitates further research to clarify the ambiguous aspects of this issue [22]. In other study showed that religious-based intervention has a greater impact on relieving depressive symptoms and increasing the QOL amongst elderly [23]. Research has shown that the spirituality of religion can have a preventative effect on many psychological disorders [24], and religion has healing effects on many psychiatric disorders [25].

However, the point here is that the anxiety and fear of people lead to a resort, namely, religion, and it is a way to overcome the disease, however it may be that causing people to be afraid of *Satan* and punishing them in the otherworldly life can exacerbate their anxiety [9]. Therefore, this should be addressed in the protocols and topics included in the interventions. These programs should be based on concepts such as hope, reliance on God's infinite power, and also patience and endurance against life's afflictions in order to have the greatest impact on the improvement of mental disorders. On the other hand, patients with anxiety can be socially protected by participating in religious circles and being present in the community, and by

increasing social interactions, they can contribute to the promotion of their spiritual well-being and subsequently their mental health [26].

LIMITATION

The lack of investigation of recurrence of the disease and long-term follow-up were the most important limitations of the study.

CONCLUSION

In addition to increasing the level of spiritual health of the patients, religious intervention reduced the anxiety symptoms in the affected patients. Religious intervention can be used as a complementary therapeutic approach along with drugs therapy to treat anxiety.

It is suggested that in future studies interventions based on the severity of the disease being investigated and individuals in groups with similar disease severity be examined. Interventions based on various divine religions should also be considered; however, this should be done by simulating educational content and interventions. On the other hand, the impact of these interventions on other mental disorders can also be investigated.

ACKNOWLEDGEMENTS

This article was derived from a research project approved by the Research and Technology Deputy of the Shahrekord University of Medical Sciences (approval no. 2132). Hereby, the researchers gratefully thank the dialysis patients who participated in the study.

REFERENCES

[1] Dhar N, Chaturvedi SK, Nandan D. Spiritual Health Scale 2011: Defining and Measuring 4th Dimension of Health. Indian J Community Med. 2011;36(4):275-82.
[2] Carven R, Hirnle C. Fundamental of nursing: human health and function. Philadephia: Lippincott Williams and Wilkins Publisher. 2003. pp. 1383-92.
[3] Nagase M. Does a Multi-Dimensional Concept of Health Include Spirituality? Analysis of Japan Health Science Council's Discussionson WHO's 'Definition of Health' (1998). Int J Appl Soc. 2012;2(6):71-77.
[4] Galderisi S, Heinz A, Kastrup M, Beezhold J, Sartorius N. Toward a new definition of mental health. World Psychiatry. 2015;14(2):231-33.
[5] Bandelow B, Michaelis S. Epidemiology of anxiety disorders in the 21st century. Dialogues Clin Neurosci. 2015;17(3):327-35.
[6] Moser DK. "The rust of life": impact of anxiety on cardiac patients. Am J Crit Care. 2007;16(4):361-69.
[7] PubMed Health. Generalized anxiety disorder: Overview USA: U.S. National Library of Medicine; Aug 13, 2014 [Available from: http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0072779/.
[8] Mohammadi MR, Akbari AA, Hatami N, Mokri A, Kaviani H, Salmanian M, et al. Effectiveness of Grouped Spiritual Psychotherapy on Patients with Opium Using Disorder. Hakim Res J. 2011;14(3):144-50.
[9] Koenig HG. Religion, Spirituality, and Health: The Research and Clinical Implications. ISRN Psychiatry. 2012;2012:278730.
[10] Tuck I. A critical review of a spirituality intervention. West J Nurs Res. 2012;34(6):712-35.
[11] Spielberger CD. Manual for the State-State anxiety Inventory STAI (form Y) ("self-evaluation questionnaire"). 1983.
[12] Association D-AP. Diagnostic and statistical manual of mental disorders. Washington, DC: American Psychiatric Association; 2013.
[13] Bonelli R, Dew RE, Koenig HG, Rosmarin DH, Vasegh S. Religious and spiritual factors in depression: review and integration of the research. Depress Res Treat. 2012;2012:962860.
[14] Chida Y, Schrempft S, Steptoe A. A novel religious/spiritual group psychotherapy reduces depressive symptoms in a randomized clinical trial. J Relig Health. 2015;55(5):1495-506.
[15] Ellison CW, Smith J. Toward an integrative measure of health and well-being. J Psychol Theol. 1991;19(1):35-48.
[16] Dastgheib Z, Gharlipour Z, Ghobadi Dashdebi K, Hoseini F, Vafaee R. Association of between mental health and spiritual health among students in Shiraz University. J Shahid Beheshti School Nurs Midwifery. 2014;24(84):53-59.
[17] Moeini M, Taleghani F, Mehrabi T, Musarezaie A. Effect of a spiritual care program on levels of anxiety in patients with leukemia. Iran J Nurs Midwifery Res. 2014;19(1):88-93.
[18] Goncalves JP, Lucchetti G, Menezes PR, Vallada H. Religious and spiritual interventions in mental health care: a systematic review and meta-analysis of randomized controlled clinical trials. Psychol Med. 2014;22(9):2393-400.
[19] Koenig HG. Research on religion, spirituality, and mental health: a review. Can J Psychiatry. 2009;54(5):283-91.
[20] Rezaie AM, Momeni Ghaleghasemi T, Ebrahimi A, Karimian J. The relationship between spiritual wellbeing with stress, anxiety, and some demographic variables in women with breast cancer referring to the specialized cancer treatment center in Isfahan, Iran. Health Sys Res. 2012;8(1):104-13.
[21] Khademvatani K, Aghakhani N, Esm-Hoseini G, Hazrati A, Alinezhad V, Nazari H, et al. Study of relationship between spritual health, anxiety and depression in acute myocardial infarctionpatients hospitalized in seyyedoshohada hospital in urmia. Urmia Med J. 2015;25(12):1092-101.
[22] Dalmida SG, Holstad MM, Dilorio C, Laderman G. Spiritual Well-Being, Depressive symptoms, and immune status among women living with HIV/AIDS. Women Health. 2009;49(2-3):119-43.
[23] Pramesona BA, Taneepanichskul S. The effect of religious intervention on depressive symptoms and quality of life among Indonesian elderly in nursing homes: A quasi-experimental study. Clin Interv Aging. 2018;13:473.
[24] Dabaghi P. Survey the role of spirituality and religion in health. MJIRI. 2009;4(1):01-04.
[25] Pajevic I, Sinanovic O, Hasanovic M. Religiosity and mental health. Psychiatr Danub. 2005;17(1-2):84-89.
[26] Nikfarjam M, Heidari-Soureshjani S, Khoshdel A, Asmand P, Ganji F. Comparison of spiritual well-being and social health among the students attending group and individual religious rites. World Fam Med J. 2017;15(8):160-65.

PARTICULARS OF CONTRIBUTORS:
1. Assistant Professor, Department of Psychiatry, Islamic Research Committee, Shahrekord University of Medical Sciences, Shahrekord, Iran.
2. Associate Professor, Department of Psychiatry, Islamic Research Committee, Shahrekord University of Medical Sciences, Shahrekord, Iran.
3. Deputy. Research and Technology, Shahrekord University of Medical Sciences, Shahrekord, Iran.
4. Assistant Professor, Department of Psychiatry, Islamic Research Committee, Shahrekord University of Medical Sciences, Shahrekord, Iran.
5. Assistant Professor, Department of Psychiatry, Islamic Research Committee, Shahrekord University of Medical Sciences, Shahrekord, Iran.
6. Psychologist, Department of Psychiatry, Islamic Research Committee, Shahrekord University of Medical Sciences, Shahrekord, Iran.
7. Assistant Professor, Department of Psychiatry, Islamic Research Committee, Shahrekord University of Medical Sciences, Shahrekord, Iran.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Saeid Heidari-Soureshjani,
Deputy of Research and Technology, Shahrekord University of Medical Sciences, Shahrekord, Iran.
E-mail: heidari_62@yahoo.com

FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **Mar 07, 2018**
Date of Peer Review: **May 11, 2018**
Date of Acceptance: **Jul 04, 2018**
Date of Publishing: **Oct 01, 2018**