

Examining the Effect of Teaching Islamic-based Coping Strategies on Indicators of Chronic Pain and Quality of Life among Women with Fibromyalgia

Hengameh Boloorsaz Mashhadi^{1*}, Maryam Aghaei², Mohyedin Mohammadkhani³, Abed Mahdavi²

1- Department of Educational Sciences, University of PayameNoor, Tehran, Iran.

2- Department of Psychology, Tehran University, Tehran, Iran.

3- Department of Psychology, University of PayameNoor, Tehran, Iran.

*Correspondence should be addressed to Mrs. Hengameh Boloorsaz Mashhadi; Email: Boloorsaz@se.pnu.ac.ir

Article Info

Received: Nov 21, 2016

Received in revised form:

May 6, 2017

Accepted: Jun 6, 2017

Available Online: Apr 6, 2017

Keywords:

Chronic pain

Coping strategies

Fibromyalgia

Quality of life

Women

Abstract

Background and Objective: Nowadays, beliefs and religious coping are regarded as significant factors in developing psychological comfort and personal adaptation among patients with chronic diseases. This study aimed to evaluate the effect of teaching Islamic-based coping strategies on women with fibromyalgia in terms of chronic pain and quality of life.

Method: The research design was a semi-experimental one with pretest-posttest and control group format. The sample included women with FMS who referred to Pain Clinics of Kermanshah in 2016. After ensuring research entry requirements, they were assessed based on IASP, ACR criteria, Demographic Questionnaires, PIS, CPAQ and WHOQOL-26. Those who got the highest scores were selected via convenience sampling. Then, the participants were randomly divided into experimental and control groups. The data were analyzed using descriptive statistics and multivariate analysis of covariance. In this study, the ethical issues were all considered and the authors declared no conflict of interest.

Results: The results indicate a significant difference between the experimental and control groups in reduction of pain intensity and increase in pain acceptance ($P < 0.05$). In addition, the total scores of the quality of life as well as subscales of psychological, physical, social and environmental health were significantly different ($P < 0.05$).

Conclusion: Teaching Islamic-based coping strategies affects the chronic pain and quality of life among people with fibromyalgia. As a result, such teachings used in conjunction with standard medical care would have a beneficial effect on health, reducing the severity of clinical disorders.

Please cite this article as: Boloorsaz Mashhadi H, Aghaei M, Mohammadkhani M, Mahdavi A. Examining the Effect of Teaching Islamic-based Coping Strategies on Indicators of Chronic Pain and Quality of Life among Women with Fibromyalgia. *J Res Relig Health*. 2017; 3(4): 48- 65.

Summary

Background and Objectives: Pain is one of the most common phenomena that force people to ask for help (1). For this reason, after saving individuals' life, relieving pain is the most important medical priority (2). Pain is defined as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage." (3). Chronic pain syndrome causes fundamental challenges for therapists (4). Physical pain often turns into mental pain (4); and the negative excitement causes persistence of pain (5). Among chronic pains, fibromyalgia is a common

outbreak; this is because from 2 to 4 percent of people suffer from this terrible pain (6). Patients with FMS have numerous complaints and resort to various treatments (7). Experts have not been able to determine the specific medical-biological causes of this disease (6,8) which is more common in women than in men (8-10).

Untreated psychological disorders can cause illnesses and physical disorders in the long term. This also reduces the effectiveness of conventional medical treatments and is associated with life expectancy (11). Today there is a general agreement that improving the quality of life should be one of the main goals of treatment (12). Quality of life is a multidimensional,

dynamic, and broad concept of health which emphasizes the four main dimensions of psychological, physical, social and environmental well-being (13,14). Research shows that the prevalence of chronic diseases in developing countries such as Iran has risen (15). Recently, they have focused on the importance of religious beliefs in the field of treatment and Islamic coping styles (16-24). So far, no successful treatment for pain has been reported (25). Research results of Rider and et al (23) showed that those who used the religious coping style in dealing with life worries were less prone to eating disorders and the severity of this disorder was lower in religious participants. Haghghi (26) found that there was no significant difference between women and men with the use of coping styles, but patients who believed in God more and had higher hopes reported less depression and stress. The results of the study, Elumelu and et al (27) also demonstrated that there was a significant difference between the patients with breast cancer with and without the religious coping style in quality of life and its dimensions. Also, the results of the research by Rippentrop and et al (28) showed that there was a significant relationship between the use of religious coping styles and both physical and mental health in patients with chronic pain.

After browsing through the related literature, we came to the conclusion that there has been no research on patients with fibromyalgia and the use of Islamic countermeasures in Iran. The present study was an attempt to pursue this aim. Hence, this study can be the basis for research in this area.

Method: The research design was semi-experimental with pre-test, post-test, and control group. The sample included women with FMS who attended Pain Clinics of Kermanshah from April to September, 2016 (N=53). 30 participants who got the highest scores were selected via convenience sampling. Then, the participants were randomly divided into experimental and control groups (n1=n2=15). After completing the sessions, the post-test was performed for both groups. The data were collected using demographic variables, pain intensity questionnaire (29), pain acceptance (30), and quality of life (31,32).

In addition to descriptive statistics, multivariate covariance analysis MANCOVA was used for data analysis.

Results: Demographic information of patients showed that the mean age in the experimental group was 42.16 ± 6.17 and in the control group was 44.27 ± 6.22 years old. In terms of demographic variables, the two groups were almost identical. The research indicated that there was a significant difference between the experimental and control groups in terms of pain intensity decrease and chronic pain acceptance increase ($P < 0.05$). Further, there was a significant difference in total quality of life scores and psychological, physical, social and environmental sub-scales ($P < 0.05$).

Conclusion: Islamic-based coping strategies teachings influence chronic pain and quality of life in people who suffer from fibromyalgia. Accordingly, such teachings

can be coupled with standard medical care to have the desired effect on health, reducing the severity of clinical disorders. This is consistent with the results of most studies previously conducted.

Not surprisingly, there were some limitations to this study. First, questionnaires were used to collect the required data for this study. Given the self-report nature of questionnaires, the participants might have misrepresented their responses because of self-defense mechanisms, bias, and personal distortions. Second, due to the fact that the respondents were all adult females, generalizing the findings to men or other age groups should be done with caution. Third, convenience sampling posed its own problems. Therefore, given the effect of Islamic-based coping strategies on the variables investigated in this study, it is suggested that this program be an optional and complementary one to reduce psychological signs and to improve the quality of life of those who suffer from chronic pains. Further, adopting this program with the purpose of coping with psychological disorders associated with other chronic pains and clinical disorders for different age ranges and also comparing it to treatments by medicine both individually and collectively are recommended.

References

1. Pagé I, Marchand AA, Nougrou F, O'Shaughnessy J & Descarreaux M. Neuromechanical responses after biofeedback training in participants with chronic low back pain: an experimental cohort study. *J Manipulative Physiol Ther.* 2015; 38(7): 449-57.
2. Chou R, Gordon DB, de Leon-Casasola OA, Rosenberg JM, Bickler S, Brennan T & et al. Management of postoperative pain: a clinical practice guideline from the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia, Executive Committee, and Administrative Council. *J Pain.* 2016; 17(2): 131-57.
3. McBeth J, Tomenson B, Chew-Graham CA, Macfarlane GJ, Jackson J, Littlewood A & et al. Common and unique associated factors for medically unexplained chronic widespread pain and chronic fatigue. *J Psychosom Res.* 2015; 79(6): 484-91.
4. Katz J, Rosenbloom BN & Fashler S. Chronic pain, psychopathology, and DSM-5 somatic symptom disorder. *Can J Psychiatry.* 2015; 60(4): 160-7.
5. Hughes RE, Holland LR, Zanino D, Link E, Michael N & Thompson KE. Prevalence and intensity of pain and other physical and psychological symptoms in adolescents and young adults diagnosed with cancer on referral to a palliative care service. *J Adolesc Young Adult Oncol.* 2015; 4(2): 70-5.
6. Mahagna H, Amital D & Amital H. A randomised, double-blinded study comparing giving etoricoxib vs.

placebo to female patients with fibromyalgia. *Int J Clin Pract.* 2016; 70(2): 163-70.

7. Inanir A, Yigit S, Tekcan A, Pinarli FA, Inanir S & Karakus N. Angiotensin converting enzyme and methylenetetrahydrofolate reductase gene variations in fibromyalgia syndrome. *Gene.* 2015; 564(2): 188-92.

8. Lami MJ, Martínez MP, Sánchez AI, Miró E, Diener FN, Prados G & et al. Gender differences in patients with fibromyalgia undergoing cognitive-behavioral therapy for insomnia: preliminary data. *Pain Pract.* 2016; 16(2): 23-34.

9. Diaz-Piedra C, Catena A, Sánchez AI, Miró E, Martínez MP & Buela-Casal G. Sleep disturbances in fibromyalgia syndrome: the role of clinical and polysomnographic variables explaining poor sleep quality in patients. *Sleep Med.* 2015; 16(8): 917-25.

10. Khanna D, Berrocal VJ, Giannini EH, Seibold JR, Merkel PA, Mayes MD & et al. The american college of rheumatology provisional composite response index for clinical trials in early diffuse cutaneous systemic sclerosis. *Arthritis Rheumatol.* 2016; 68(2): 299-311.

11. Miller CJ, Grogan-Kaylor A, Perron BE, Kilbourne AM, Woltmann E & Bauer MS. Collaborative chronic care models for mental health conditions: cumulative meta-analysis and metaregression to guide future research and implementation. *Med Care.* 2013; 51(10): 922-30.

12. Jones GL. Quality of life changes over time in patients with chronic obstructive pulmonary disease. *Curr Opin Pulm Med.* 2016; 22(2): 125-9.

13. Watson L, Groff S, Tamagawa R, Looyis J, Farkas S, Schaitel B & et al. Evaluating the impact of provincial implementation of screening for distress on quality of life, symptom reports, and psychosocial well-being in patients with cancer. *J Natl Compr Canc Netw.* 2016; 14(2): 164-72.

14. Ferreira FA, de Almeida-Neto C, Teixeira MC & Strauss E. Health-related quality of life among blood donors with hepatitis B and hepatitis C: longitudinal study before and after diagnosis. *Rev Bras Hematol Hemoter.* 2015; 37(6): 381-7.

15. Vos T, Barber RM, Bell B, Bertozzi-Villa A, Biryukov S, Bolliger I & et al. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet.* 2015; 386(9995): 743-800.

16. Chida Y, Schrepft S, Steptoe A. A novel religious/spiritual group psychotherapy reduces depressive symptoms in a randomized clinical trial. *J Relig Health.* 2016; 55(5): 1495-506.

17. Gonçalves 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.* 2015; 45(14): 2937-49.

18. Miller G. Winifred rushforth and the davidson clinic for medical psychotherapy: a case study in the overlap of psychotherapy, christianity and new age spirituality. *Hist Psychiatry.* 2015; 26(3): 303-17.

19. Dimatteo MR. The psychology of health. Vol². Translated by; Musavi Asl SM, et al. Pub SAMT. 2016. PP; 760-62. (Full Text in Persian)

20. Mbarki H, Tazi N, Najdi A, Tachfouti N, Arrayhani M, Sqalli T. Effects of fasting during ramadan on renal function of patients with chronic kidney disease. *Saudi J Kidney Dis Transpl.* 2015; 26(2): 320-4.

21. Koenig HG. Depression in chronic illness: does religion help? *J Christ Nurs.* 2014; 31(1): 40-6.

22. Gillen CT, Barry CT, Bater LR. Anxiety symptoms and coping motives: examining a potential path to substance use-related problems in adolescents with psychopathic traits. *Subst Use Misuse.* 2016; 51(14): 1920-9.

23. Rider KA, Terrell DJ, Sisemore TA, Hecht JE. Religious coping style as a predictor of the severity of anorectic symptomology. *Eat Disord.* 2014; 22(2): 163-79.

24. Cotton S, Grosseohme D, McGrady ME. Religious coping and the use of prayer in children with sickle cell disease. *Pediatr Blood Cancer.* 2012; 58(2): 244-9.

25. Rico-Villademoros F, Slim M, Calandre EP. Amitriptyline for the treatment of fibromyalgia: a comprehensive review. *Expert Rev Neurother.* 2015; 15(10): 1123-50.

26. Haghghi F. Correlation between religious coping and depression in cancer patients. *Psychiatr Danub.* 2013; 25(3): 236-40.

27. Elumelu TN, Asuzu CC, Akin-Odanye EO. Impact of active coping, religion and acceptance on quality of life of patients with breast cancer in the department of radiotherapy, UCH, Ibadan. *BMJ Support Palliat Care.* 2015; 5(2): 175-80.

28. Rippentrop EA, Altmaier EM, Chen JJ, Found EM, Keffala VJ. The relationship between religion/spirituality and physical health, mental health, and pain in a chronic pain population. *Pain.* 2005; 116(3): 311-21.

29. Anvari MH, Ebrahimi A, Neshatdoost HT, Afshar H & Abedi A. The Effectiveness of Group-Based Acceptance and Commitment Therapy on Pain-Related Anxiety, Acceptance of Pain and Pain Intensity in Patients with Chronic Pain. *J Isfahan Med Sch.* 2014; 32(295): 1156-65. (Full Text in Persian)

30. Rovner G, Vowles KE, Gerdle B & Gillanders D. Latent class analysis of the short and long forms of the chronic pain acceptance questionnaire: further examination of patient subgroups. *J Pain.* 2015; 16(11): 1095-105. (Full Text in Persian)

31. Yerdelen D & Altintas E. Health related quality of life in patients admitted for video-electroencephalography monitoring diagnosed with epilepsy or psychogenic non-epileptic seizures. *Neurosciences (Riyadh)*. 2016; 21(1): 47-51.
32. Roshanfar A, Padash Z, Mokhtari S & Izadikhah Z. The effectiveness of psychotherapy training based on Frisch's theory on the quality of life of clients in Isfahan. *J Health Syst Res*. 2014; 2046-55. (Full Text in Persian)
33. Cheatle MD. Biopsychosocial approach to assessing and managing patients with chronic pain. *Med Clin North Am*. 2016; 100(1): 43-53.
34. Jegindø EM, Vase L, Skewes JC, Terkelsen AJ, Hansen J, Geertz AW, et al. Expectations contribute to reduced pain levels during prayer in highly religious participants. *J Behav Med*. 2013; 36(4): 413-26.
35. Gilbert JW. Re: Büssing A, Michalsen A, Balzat H-J, Grünther RA, Ostermann T, Neugebauer EAM, and Mathiessen PF. Are spirituality and religiosity resources for patients with chronic pain conditions? *Pain Medicine* 2009; 10: 327-339. *Pain Med*. 2009; 10(8): 1501-2.
36. Lyon ME, Kimmel AL, Cheng YI, Wang J. The Role of religiousness/spirituality in health-related quality of life among adolescents with HIV: a latent profile analysis. *J Relig Health*. 2016; 55(5): 1688-99.
37. Caqueo-Urizar A, Urzúa A, Boyer L, Williams DR. Religion involvement and quality of life in patients with schizophrenia in latin america. *Soc Psychiatry Psychiatr Epidemiol*. 2016; 51(4): 521-8.
38. Zamanian H, Eftekhar-Ardebili H, Eftekhar-Ardebili M, Shojaeizadeh D, Nedjat S, Taheri-Kharameh Z, et L. Religious coping and quality of life in women with breast cancer. *Asian Pac J Cancer Prev*. 2015; 16(17): 7721-5.

e of SID