sleep disturbances in patients with rheumatoid arthritis–design of a randomized controlled trial. BMC musculoskeletal disorders. 2014;15(1):4

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2020-eular.2135

AB1307-HPR INVESTIGATION OF THE EFFECTIVENESS OF TAI CHI EXERCISE PROGRAM ON CARDIOPULMONARY FUNCTIONS AND QUALITY OF LIFE IN PATIENTS WITH SYSTEMIC SCLEROSIS

S. Y. Cetin[1], B. Basakci Calik[2], A. Ayan[3]. [1]*Akdeniz University, Department of Physiotherapy and Rehabilitation, Antalya, Turkey*; [2]*Pamukkale University, Physiotherapy, Denizli, Turkey*; [3]*Antalya Training and Research Hospital, Rheumatology, Antalya, Turkey*

Background: Systemic sclerosis (SSc) is an autoimmune disease that not only affects the skin but also causes symptoms that involve important internal organs such as joints, muscles, and heart and lungs. Due to all these multiple system involvements, the quality of life of individuals with scleroderma decreases. Tai Chi Chuan is a combination of physical exercise and relaxation techniques, and it is a traditional Chinese exercise method used to improve mental and physical health of people. There are many studies showing that Tai Chi improves the body's aerobic capacity and psychological well-being. In the literature, Tai Chi has been shown to reduce pain, improve physical function, improve healing effects on depression and quality of life, especially, in the elderly, individuals with musculoskeletal diseases such as rheumatoid arthritis and osteoarthritis, and improve cardiac vascular risk factors such as hypertension and diabetes.
Objectives: The aim of the study is to examine the effectiveness of Tai Chi on cardiopulmonary functions and quality of life in patients with SSc.
Methods: 28 SSc patients (25 females, 3 males) with an average age of 53.00 ± 10.00 were included in the study. For training, patients were divided into two groups by block randomization method. Group 1 received 60 minutes of Tai Chi exercise program and Group 2 received 60 minutes of home exercise for 2 days a week for 8 weeks. 6-min walk test (6MWT) and St. George Respiratory Questionnaire was used to evaluate the cardiopulmonary functions, Short form 36 (SF-36) was used to evaluate the quality of life. All evaluations were performed at baseline and at the end of the 8th week
Results: When the groups were compared before training, there was no significant difference (p> 0.05). In post-training comparisons, there was a significant difference in all parameters in Tai Chi group (p: 0.001-0.045); there was a significant difference in the physical function sub-parameter of SF-36 and 6MWT in the home exercise group (p: 0.045, p: 0.038, respectively). Comparing the post-training groups, Tai Chi group was found to be superior in terms of all parameters compared to the home exercise group (p: 0.00-0.04). No side effects were observed during the exercises.
Conclusion: As a result of our study; Tai Chi has a possitive effect on cardiopulmonery function and quality of life in patients with SS. Tai Chi should be included in rehabilitation programs as a safe alternative type of exercise to improve cardiopulmonery function and quality of life in patients with SSc.

References:

[1] de Oliveira NC, Portes LA, Pettersson H, Alexanderson H, Boström C. Aerobic and resistance exercise in systemic sclerosis: State of the art. Musculoskeletal Care. 2017;15:316–323.
[2] Jia X, Jiang C, Tao J, Li Y, Zhou Y, Chen LD. Effects of core strength training combined with Tai Chi Chuan for the musculoskeletal system and cardiopulmonary function in older adults: A study protocol for a randomized controlled trial. Medicine (Baltimore). 2018;97(35):e12024.
[3] Wang C, Schmid CH, Hibberd PL, Kalish R, Roubenoff R, Rones R, McAlindon T. Tai Chi is effective in treating knee osteoarthritis: a randomized controlled trial. Arthritis Rheum. 2009; 61:1545–1553.
[4] Wang C, Roubenoff R, Lau J, Kalish R, Schmid CH, Tighiouart H, Rones R, Hibberd PL Effect of Tai Chi in adults with rheumatoid arthritis. Rheumatology (Oxford) 2005; 44:685–687.

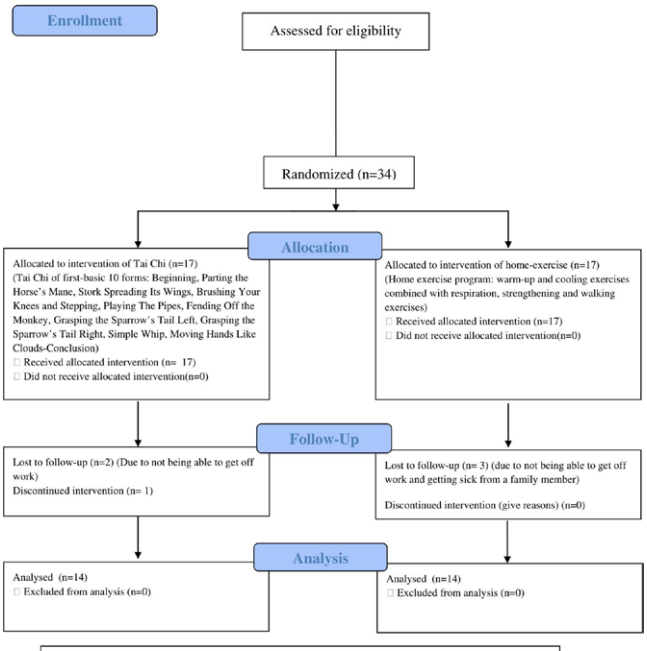

Figure1. Flow chart of the progress through the phases of the study

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2020-eular.5201

AB1308-HPR DEVELOPMENT OF AN E-LEARNING PATIENT EDUCATION PROGRAM TARGETING PATIENTS WITH RHEUMATOID ARTHRITIS: FROM CONTENT TO DESIGN

L. Raunsbæk Knudsen[1], K. Lomborg[2,3], A. De Thurah[1,3]. [1]*Aarhus University Hospital, Department of Rheumatology, Aarhus N, Denmark*; [2]*Steno Diabetes Center Copenhagen, Copenhagen, Denmark*; [3]*Aarhus University, Department of Clinical Medicine, Aarhus, Denmark*

Background: Patient education (PE), with the aim of supporting patients to self-manage their disease is important in the treatment and care of patients with rheumatoid arthritis (RA) (1). Today, there is a shift in the organization of healthcare systems due to a demographic change towards ageing populations and an increasing use of technology. Advancements in web-technology can offer alternative ways to provide PE – e.g. through an e-learning platform. However, *E-Learning development must be based on the needs of the learners and on existing evidence on both education and content.*
Objectives: To develop an e-learning platform targeting newly diagnosed patients with RA.
Methods: Focus group interviews with patients, rheumatologists and nurses, with the aim of exploring informational and educational needs related to RA and how this may be communicated in an e-learning program, were conducted. We used a short interview guide to ensure the focus of the interviews, however, strived for a less structured start of the interview to promote a free discussion and later a more structured discussion of specific questions. Pictures, illustrating possible topics in PE within RA and ways to communicate, were also applied. The transcribed interviews were analyzed using thematic analysis (2).
The theoretical framework in the development and design drew on the cognitive theory of multimedia learning (3) and entertainment education (4).
Results: Four themes, covering experiences and needs emerged in the analysis of the focus-group interviews; '*Knowledge of RA, the disease course and prognosis*','*Medical treatment*','*A new life situation*' and '*Daily living with RA*'.
Subsequently, the program was developed through an iterative process between the project group, patient representatives, a communication consultant, graphic designers and an e-learning company.
The program was divided into three learning modules covering knowledge of RA, complications, medical treatment, examinations and daily living with RA, e.g. coping with emotions, pain, fatigue, work, education, physical activity etc. It offers

Ann Rheum Dis: first published as 10.1136/annrheumdis-2020-eular.5201 on 2 June 2020. Downloaded from http://ard.bmj.com/ on September 20, 2021 at Akdeniz Universitesi. Protected by copyright.