Figure 2. Symptoms that can indicate a rheumatic disease, according to college students (n=75) after an educational session

Conclusion: Our results confirm that awareness and knowledge about RMDs are very low high school students. The single and educational session was very well received by all students, and the knowledge increased. Post-educational feedback was that students especially liked the testimony of a peer. Other sessions are taking place in primary schools.

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AB1305-HPR IS BETTER AND SAFER TOFACITINIB AS A FIRST LINE OF TREATMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS? – A COHORT STUDY

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Background: Tofacitinib is the first oral Janus Kinase inhibitor approved for the treatment of rheumatoid arthritis (RA); and although it is approved both after conventional treatment and after biological therapy, it is not well known its real-life effectiveness in both cases and if it is preferable to use it after cDMARDs or biologics.

Objectives: We compare the effectiveness and safety of Tofacitinib in patients with RA analyzing if better and safer Tofacitinib after cDMARDs or biologics.

Methods: A retrospective analysis of a real-world cohort of patients with RA, who were treated with Tofacitinib in last 3 years, as first line of treatment (T1) after failure with cDMARDs and second line of treatment after biologic drug failure (T2). The therapy was considered effective with the change from moderate-high disease activity to low disease activity or remission measured by DAS28, in those who met criteria of high adherence, without change or addition of other conventional DMARDs, without new dose or increase of dose of oral glucocorticoids. A logistic model of regression was performed to evaluate differences between T1 and T2, using as covariates sex, age, comorbidities, time of disease evolution, adverse events and other causes of discontinuation. Medication survival time and the main causes of suspension were measured. Mixed model regression and least-squared means were used to estimate the baseline changes and a Kaplan-Meier survival analysis to estimate time to remission and drug survival.

Results: 105 patients with RA were included (median age: 56.1 ± 11.7 years; 80.9% female, median disease duration 11.48 ± 10.1 years); 43% (45/105) of patients with positive rheumatoid factor and 73% (77/105) positive anti-citrulline antibodies. Regarding treatment 51% (54/105) used Tofacitinib as 1T, after failure to cDMARDs; on the other hand, Tofacitinib was used as 2T, after failure to biologics in 49% (51/105) of patients. DAS28 levels were reduced at 8, 16 and 24 weeks with statistical difference (p value 0.004, <0.0001, and <0.001,

respectively). HAQ-DI also reported reduction but without statistical difference. The use of Tofacitinib was more effective after failure to cDMARDs (p value 0.014) and patients with more than 3 years of disease (p value 0.04), a statistically better response. Also, corticoids use, positive RF, extended release tablet of tofacitinib reported better changes of DAS28 but without statistical significance. Patients with high disease activity treated with Tofacitinib 1T decreased from 30% at baseline to 19% at the last follow-up; patients in 2T way were in moderate activity of the disease in 57% at baseline and went to 37% in the last follow-up. There was an increase in patients who achieved remission in both groups, but higher in 1T where they went from 9% to 41%, while in 2T they went from 22% to 33% (p < 0.05). The survival rate of the medication was 1.7 years in 1T and 2.1 in 2T; in terms of time to remission, the use of Tofacitinib monotherapy presented statistical difference (p value <0.001). The main cause of suspension of treatment was therapeutic failure 12% (13/105), 9% in 1T (5/54) and 16% (8/51) in 2T (p <0.005). 6% of patients (6/105) presented suspension due to the occurrence of adverse events, 4% (2/54) in 1T and 8% (4/51) in 2T (p <0.005).

Conclusion: In patients with RA, the use of Tofacitinib as the first line of treatment (after failure to cDMARDs) is better in effectiveness and safer in comparison with its use as a second line of treatment (after biologics), with significant differences in the rates of therapeutic failure and occurrence of adverse events/reactions. On the other hand, concomitant corticoids use, positive RF, extended release tablet of Tofacitinib seem to increase the effectiveness of Tofacitinib in terms of DAS28 and HAQ-DI.

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HPR Interventions (educational, physical, social and psychological)

AB1306-HPR THE EFFECTS OF CLINICAL PILATES EXERCISES IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Rheumatoid Arthritis (RA) is a rheumatic disease that may coexist many symptoms clinically. These clinical symptoms progress in a vicious cycle in many patients. Physical activity and exercise are known to improve many symptoms in RA patients.

Objectives: This study was designed to investigate the effects of clinical pilates exercises on fatigue, depression, aerobic capacity, pain, sleep quality and quality of life.

Methods: Thirty voluntary RA patients were included in this study. Patients were separated into three groups equally and each group was applied treatment for eight weeks. Clinical pilates exercises were practiced to the first group, aerobic exercises were practiced to the second group and combined training which was a combination of pilates exercises and aerobic exercises was performed to the third group. Fatigue, depression, aerobic capacity, pain, sleep quality and quality of life were evaluated by Fatigue Severity Scale (FSS), Beck Depression Inventory (BDI), Six minute walk test (6MWT), Short- Form McGill Pain Questionnaire (MPQ), Pittsburg Sleep Quality Index (PSQI) and Rheumatoid Arthritis Quality of Life (RAQoL), respectively.

Results: According to our results, statistically significant improvements were found for clinical pilates exercises on fatigue, depression, aerobic capacity and quality of life (p<0.05). Improvements in all parameters except from pain were concluded for aerobic exercises and combined training (p<0.05). Also, there was no statistically significant difference among the treatment groups in assessments (p>0.05).

Conclusion: Pilates exercises were found effective and safe for RA patients. Clinical pilates training may be as effective as aerobic exercises in patients with RA according to our study. Therefore, addition of clinical pilates exercises to the routine treatment of RA may enhance the success of rehabilitation.

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

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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 positive effect on cardiopulmonary 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 cardiopulmonary function and quality of life in patients with SSc.

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

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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