reasons for dropping out of an intervention and consider how this can be avoided in planning future interventions. 3) Examine the effect of behaviour change techniques used on completion rates. 4) Explore the effect of adverse outcomes on completion rates.

Methods: A systematic review of the literature was carried out in February 2018. Inclusion criteria were: detailed intervention information, completion rates reported, published between 1998-2018 and published in English. Included papers were assessed using the Cochrane risk of bias tool by two assessors. The relevant data was then extracted, compared and conclusions were drawn.

Results: Nine studies with varying levels of quality were included in this review. Reasons for not completing an intervention could be divided into modifiable and non-modifiable factors; modifiable factors include the FITT principle, the behaviour change component and controlling for adverse outcomes. Non-modifiable factors included the environment, illness/flare-up and accidents. The results found that when people with RA had an individualised PA program that started at a low-moderate intensity they had higher participation rates than those who followed a generalised program, with no behaviour change component. Altering the intervention in response to patient's pain levels improved completion rates of the intervention.

Conclusion: When designing PA programs for people with RA, the EULAR PA guidelines for people who have inflammatory arthritis [3] should be followed. However, it should be noted that engagement and participation in PA interventions is increased when the intervention is of low impact PA and starts at a low-moderate intensity. Individualising the activity to the person and applying behaviour change techniques have also been found to improve participation.

REFERENCES:

- [1] Kersch-Schindl, K. and MacHold, K. (2011) 'Rehabilitation von Patienten mit rheumatoider Arthritis', *Physikalische Medizin Rehabilitationsmedizin Kurortmedizin*, 21(6), pp. 297–310. Doi: 10.4061/2011/681640.
- [2] Larkin, L. and Kennedy, N. (2014) 'Correlates of Physical Activity in Adults with Rheumatoid Arthritis: A Systematic Review', *Journal of Physical Activity and Health*, 11(6), pp. 1248–1261. Doi: 10.1123/jpah.2012-0194.
- [3] Rausch Osthoff, A. K. et al. (2018) '2018 EULAR recommendations for physical activity in people with inflammatory arthritis and osteoarthritis', *Annals of the Rheumatic Diseases*, 77(9), pp. 1251–1260. Doi: 10.1136/annrheumdis-2018-213585.

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FRI0717-HPR A COMPARISON OF THE EFFECTIVENESS OF CORE STABILIZATION EXERCISE AND COMBINED EXERCISE ON PAIN, FATIGUE, SLEEP PROBLEM AND HEALTH STATUS IN WOMEN WITH FIBROMYALGIA

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Background: Fibromyalgia (FM) is a syndrome characterized mainly by chronic widespread pain, fatigue, sleep disorders and decrease in health status. Exercise, one of the non-pharmacological approach, has favorable effects on clinic findings in FM, but studies investigating which types of the exercise are more effective in FM are limited.

Objectives: This study aimed to compare the effectiveness of core stabilization exercise (CSE) and combined exercise (CE) on pain, fatigue, sleep problem and health status in women with FM.

Methods: A total of 34 women with FM were included, allocated into the CSE (n:18, age: 43.05±9.23 years, body mass index (BMI): 27.25±5.23 kg/m²) and the CE (n:16, age: 38.43±9.55 years, BMI: 25.62±3.68 kg/m²) groups. Both the CSE and the CE programs were carried out 2 days a week for 6 weeks under the supervision of a physiotherapist. Pain, fatigue and sleep problems with Visual Analog Scale and health status with Fibromyalgia Impact Questionnaire were evaluated at baseline and after 6-weeks program.

Results: Physical characteristics of the groups were similar ($p_{age}=0.162$, $p_{bmi}=0.313$). After the program, it was found that pain ($p=0.001$; $p=0.014$), fatigue ($p=0.002$; $p=0.011$), and sleep problem ($p=0.007$; $p=0.039$) decreased, health status ($p=0.001$; $p=0.001$) improved in both the CE and the CSE groups, respectively. Moreover, sleep problem decreased in the CE group in comparison to the CSE group ($p=0.038$); but pain ($p=0.240$), fatigue ($p=0.178$), and health status ($p=0.098$) did not differ between groups.

Conclusion: In this study, it was observed that both the CSE and the CE programs were effective in decreasing pain, fatigue, sleep problem and improving health status of women with FM. In addition, the study suggested that the CE was superior in decreasing sleep problem in comparison to the CSE in women with FM. In clinics, both the CSE and the CE programs may be preferred to improve the symptoms of FM; however, the CE should be taken into account for the sleep problems in FM.

REFERENCES:

- [1] Busch, A. J., Webber, S. C., Brachanec, M., Bidonde, J., Dal Bello-Haas, V., Danyliw, A. D., ... & Schachter, C. L. (2011). Exercise therapy for fibromyalgia. *Current pain and headache reports*, 15(5), 358.
- [2] Sosa-Reina, M. D., Nunez-Nagy, S., Gallego-Izquierdo, T., Pecos-Martin, D., Monserrat, J., & Álvarez-Mon, M. (2017). Effectiveness of therapeutic exercise in fibromyalgia syndrome: a systematic review and meta-analysis of randomized clinical trials. *BioMed research international*, 2017.

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FRI0718-HPR THE EFFECT OF THE BIOPSYCHOSOCIAL EXERCISE PROGRAM ON PAIN COPING SKILL AND FATIGUE IN RHEUMATIC DISEASES

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Background: Although the trend towards biopsychosocial approaches is increasing today, studies on psychosocial effects of exercise are limited in the literature. There is a need for framed exercise programs to assess the clinical effectiveness of biopsychosocial approaches. The reason why biopsychosocial programs are important may be due to multidimensional features of symptoms such as pain, fatigue.

Objectives: The purpose of this study is to investigate the effectiveness of the biopsychosocial exercise program on pain coping skill and fatigue in rheumatic patients.

Methods: Ninety-one patients with the rheumatic disease were included in this study. The patients were divided into two groups based on a prospective cohort (BETY group, n = 56; and control group, n = 35). BETY is a biopsychosocial exercise approach (1). It was performed in a period of one hour, 3 times a week for 12 weeks and included clinical pilates exercises, dance therapy-authentic movement and pain management information. The control group did not take any exercise treatment. The BETY-Biopsychosocial Questionnaire (BETY-BQ) was used to evaluate the pain coping skill and fatigue as well as assessing whole biopsychosocial status of individuals (2). The answers were given to the 5th question (I don't know how to control my pain.) and the 11th question (I feel tired.) of the BETY-BQ were recorded as a 5-point Likert at ranging from 'yes, always' to 'no, never. Also, the total score of BETY-BQ was recorded. Demographic data were given as mean ± standard deviation (X ± SD), and answers given to the questionnaire were expressed in frequency tables.

Results: The mean ages of BETY group and control group were 49.63 ± 11 and 39.74 ± 10 years and body mass indexes were 26.93 ± 3 kg/m² and 26.54 ± 4 kg/m², respectively. The frequency of answers to the 5th and 11th question and the total score of the BETY-BQ on the first assessment (pre-treatment) and the second assessment (post-treatment) were shown in Table 1.

FRI0718HPR Table 1. Comparison of assessment results

	BETY exercise group			Control Group		
	Pre-treatment	Post-treatment	p	Pre-treatment	Post-treatment	p
BETY-BQ (0-120)	54.60±27	38.55±25	<0,001	56.51±24	53.63±28	0.221
5th question						
Yes always	24.1	7.4	<0,001	28.6	28.6	0.734
(%)						
Yes often (%)	7.4	3.7		20	14.3	
Yes	25.9	22.2		8.6	17.1	
sometimes (%)						
Yes rarely (%)	25.9	20.4		17.1	8.6	
No never (%)	16.7	46.3		25.7	31.4	