in August 2020. N=48 participants were recruited between October 2019 and March 2020 (six months). N=20 participants have commenced in the study, N=16 are awaiting baseline assessment, N=6 withdrew and N=6 were lost to follow-up prior to baseline. Trial protocol planned for the delivery of N=55 assessments and N=36 intervention sessions for participants who had commenced in the study. N=22 assessments and N=26 intervention sessions were delivered between November 2019 and March 2020. N=5 assessments and N=6 intervention sessions were conducted between August and October 2020. No assessment or intervention delivery occurred in November-December 2020 due to participant hesitancy in attending for assessment and/or intervention with increased public health restrictions. The impact of Covid-19 restrictions resulted in N=33 (60%) deviations from assessment protocol and N=10 (27%) deviations from intervention delivery protocol (Figure 1).

Figure 1. Deviations from assessment and intervention protocol in the PIPRA study

Conclusion: The Covid-19 pandemic has had a significant impact on the delivery of the PIPRA study. Feasibility study outcomes, including participant retention rate, and study delivery as per protocol, have been affected due to the Covid-19 pandemic. Participant reluctance to attend face-to-face sessions demonstrates the need to consider alternative methods of delivery, e.g. virtual delivery of interventions, where attending in person is not acceptable to participants [4], in future studies.

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AB0873-HPR

EFFECTIVENESS AND COST-EFFECTIVENESS OF LONGSTANDING EXERCISE THERAPY VERSUS USUAL CARE IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS OR RHEUMATOID ARTHRITIS: THE PROTOCOLS OF TWO PARALLEL RANDOMIZED CONTROLLED TRIALS

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Background: Axial SpondyloArthritis (axSpA) and Rheumatoid Arthritis (RA) are chronic rheumatic diseases with an often progressive course, defined by

chronic inflammation. With respect to exercise therapy, in axSpA and RA, multiple systematic reviews concluded that supervised exercise therapy is an effective and safe treatment option, resulting in small to modest improvements in pain, disease activity, functional ability and axial mobility. In general, most of the studies included in these reviews concerned programs of a relatively short duration (<12 weeks) and the studies mostly concerned patients with stable disease, without co-morbid conditions and relatively favorable functional ability (1-5). The group of patients with active disease, irreversible joint damage, multiple joint replacements and/or severe comorbidity hampering participation in exercise therapy programs and in need for individualized, longstanding therapy is therefore likely to be underrepresented in research so far. Consequently, cost-effectiveness studies on longstanding physical therapy are also lacking in these specific subgroups.

Objectives: We aim to evaluate the effectiveness and cost-effectiveness of longstanding exercise therapy compared to usual care in the subgroup of patients with axSpA or RA and severe limitations in functioning.

Methods: In two separate, parallel randomized controlled trials, the effectiveness and cost-effectiveness of longstanding, active exercise therapy (52 weeks) compared with usual care (1:1) will be evaluated (Figure 1). The longstanding, active exercise therapy will focus on improving individual limitations in daily activities and participation, and will be given by a trained physical therapist in the vicinity of the participant. For each diagnosis, 215 patients with severe limitations in activities and participation will be included. Assessments are performed at baseline, 12, 26, and 52 weeks. The primary outcome measure of effectiveness is the individual level of functioning (activities and participation), as measured with the Patient-Specific Complaints instrument at 52 weeks. For cost-effectiveness analyses, the EuroQol (EQ-5D-5L) and questionnaires on healthcare use and productivity will be administered. The economic evaluation will be a cost-utility analysis from a societal perspective. After 52 weeks, the patients in the usual care group are offered longstanding, active exercise therapy as well. Follow-up assessments are done at 104, 156 and 208 weeks.

Figure 1. Study flowchart

Results: The results of these studies will provide insights in the effectiveness and cost-effectiveness of longstanding exercise therapy in the subgroup of axSpA and RA patients with severe functional limitations.

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AB0874-HPR TELEMEDICINE CONSULTING IN RHEUMATOLOGY: IDENTIFIED PROBLEMS OF NEW TECHNOLOGY

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Background: A feature of healthcare in 2020 was the work in conditions of massive incidence of COVID-19, limited and redistribution of human resources. One of the right decisions in these conditions is to organize schools for patients, which allow simultaneous education and convey the necessary information to a large number of people. The key aspects of the organization of telemedicine schools for patients are presented.

Objectives: To assess the feasibility of telemedicine schools for patients as a technology of modern health care in rheumatology.

Methods: The work was carried out by the method of a one-stage cross-sectional study of the questionnaire survey of participants of education in rheumatology, conducted in an on-line mode. The number of participants in rheumatology schools was 197 people, the results of the questionnaire were received from 36 respondents. The questionnaire based on the Google platform.

Results: 10 key principles of organizing online patient education at the present stage were identified: the use of distance technologies, the interest of a medical institution administration, the team approach, the technical possibilities of implementing schools, adaptation of lecture material for patients, the role of a specialized specialist in the educational process, patient participation, measurement efficiency and timely correction, development and improvement of educational technology for patients, desire for cooperation and exchange of experience.

Conclusion: The emergence of new opportunities related to online health education of the population, including educational activities for patients, opens up new prospects for improving clinical care aimed at promoting health and preventing disease.

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AB0875-HPR NON-PHARMACOLOGICAL AND PHARMACOLOGICAL APPROACHES TO THE MANAGEMENT OF PATIENTS WITH OSTEOARTHRITIS AND LIPID METABOLISM DISORDERS

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Background: Attention is drawn to the frequent combination of osteoarthritis (OA) with cardiovascular disease. Non-specific inflammation plays a significant role in the pathogenesis of OA and atherosclerosis. Limiting the physical activity of patients with OA is an additional important factor aggravating the course of cardiovascular disease (CVD). Chronic pain syndrome, causing a neuroendocrine response, is often the cause of the development of complications of atherosclerotic disease. Dyslipidemia is the main cause of atherosclerosis and vascular thrombosis.

Objectives: To study variants of lipid metabolism disorders in female and male patients of different age groups with osteoarthritis.

Methods: Case histories of 90 patients with OA were analyzed. The average age of patients was 63.27 ± 11.31 years. The average body mass index (BMI) is 39.8 ± 3.2. All patients underwent questionnaires, general clinical and biochemical blood tests with lipid profile determination, anthropometry, bioimpedansometry,

and the main metabolic rate assessment using indirect calorimetry in dynamics (at the beginning of the study and after 3 months).

Results: Burdened heredity for obesity, arterial hypertension (AH), diabetes mellitus (DM) was revealed. AH was diagnosed in 76 patients (84.4%), type II diabetes in 17 (18.9%), dyslipidemia and hypercholesterolemia in 56 (62.2%). Statins were taken by 43 patients (47.8%) - group I patients, which is associated with low adherence to therapy, group II included patients who did not initially take statins or stopped taking them at least 6 months before inclusion in the study.

Against the background of diet therapy and physiotherapy exercises, BMI (R0.99; p < 0.05), fat mass (R0.95; p < 0.05) significantly decreased, lipid profile normalization was noted: total cholesterol (R0.66; p < 0.05), LDL (R0.69; p < 0.05), HDL (R0.95; p < 0.05), TG (R0.57; p < 0.05), AST decreased (R0.64; p < 0.05) and ALT (R0.76; p < 0.05) in both groups of patients, regardless of lipid-lowering therapy. A decrease in fat mass correlated with TG levels (R0.51; p < 0.05), an increase in skeletal muscle mass (R0.60; p < 0.05), lean mass (R0.72; p < 0.05), and active cell mass (R0.59; p < 0.05). The lipid profile in the I group of patients was significantly better before and at the end of the study. Long-term effects have not been investigated due to the short duration of the study.

Conclusion: In patients with OA, a high frequency of concomitant diseases of the cardiovascular system, lipid metabolism disorders was found. Non-drug therapy has a positive effect on the lipid profile and the level of transaminases. The decrease in body weight due to loss of fat mass reliably correlates with the level of TG. Timely use of statins contributes to the normalization of the lipid profile, reduces the risk of cardiovascular disease in patients with OA. It is necessary to study lipid profile disorders in patients with OA with recommendations for lifestyle modification (diet, physical activity), and if necessary, prescribe lipid-correcting therapy.

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AB0876-HPR NEUROFEEDBACK AND TEMPERATURE BIOFEEDBACK TRAINING IMPROVE MICROCIRCULATION IN PATIENTS WITH SYSTEMIC SCLEROSIS

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Background: Microcirculatory disorders including Raynaud's phenomenon are one of the most important clinical symptoms of systemic sclerosis (SS).

Objectives: We found it appropriate to evaluate the clinical efficacy of biofeedback (BFB) in the complex therapy of SS patients based on analysis of nailfold capillaroscopy.

Methods: The study included 70 SS patients. 94% of patients we examined were women and 6% were men. The average age of the patients = 38±3,3 years, duration of illness = 14±2,6 years. Raynaud's phenomenon (RP) was observed in all the patients and its severe form was seen in 80% of the patients. The effectiveness of BFB was analyzed by studying the dynamics of the measures from the nailfold capillaroscopy and comparing the data obtained from patients of the main and control groups.

Results: Dynamics of capillaroscopic signs of therapy efficiency in main and control groups are summarized in the table:

Analyzed signs	Main group (n=40)		Control group (n=30)	
	before the therapy	after the therapy	before the therapy	after the therapy
Skin score, M±SD	22,56±10,24	14,99±9,44*	21,04±12,01	20,01±9,88
Dilation of the capillaries, %	34 (85)	16 (40)*	24 (80)	17 (56,6)
Avascular fields, %	26 (65)	24 (60)	13 (43,3)	17 (56,6)
Morphological capillaries' changes, %	36 (90)	22 (55)*	22 (73,3)	10 (33,3)*
Hemorrhage, %	25 (62,5)	10 (25)*	12 (40)	7 (23,3)

*- p < 0,05

It was found that patients participated in BFB training, showed significant positive dynamics in the following signs of capillaroscopic picture: dilatation of the capillaries ($\chi^2 = 9,643$; p = 0,026), morphological changes of the capillaries ($\chi^2 = 4,90$; p = 0,027), and hemorrhage ($\chi^2 = 4,514$; p = 0,034).