

The aim of this study was to investigate the effect of a variety of physical exercise programs on activities of daily living in patients with OP.

Methods: The 12 months randomized controlled study included 64 female patients with postmenopausal OP defined according to BMD criteria: T-score -2.5 on the femoral neck, and/or T -2.5 on L1-L5. Subjects were randomized in each cohort to receive specific medication or medication and physical exercise program. Regular weight bearing and muscle strengthening exercises were recommended to improve agility, strength, posture and balance. The results of the treatment were registered on the quality of life questionnaire (Qualeffo -41) devised by the International Osteoporosis Foundation. All patients were evaluated at the beginning of the study and after 6 months of treatment.

Results: 58 patients (90.62%) completed the study. Patients that followed physical exercise programs were assigned to small groups (a maximum of 5 patients in each group) and thus received individual attention and motivation. Quality of life was improved in both groups: a significantly greater improvement was registered in patients who performed physical exercise (Global score Qualeffo: $p=0.002$).

Conclusion: The test results confirmed the known positive effects of physical therapy on quality of life of osteoporosis patients. Exercise programs help to reduce the risk of falls and fractures; in addition, exercise may modestly increase bone density. The compliance of patients to therapy was very good: 90.62% of the patients completed the 6-month treatment period.

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DIETARY ACRYLAMIDE AND INCIDENT OSTEOPOROTIC FRACTURES: AN 8-YEAR LONGITUDINAL COHORT STUDY

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Objective: Increasing literature reports that acrylamide, a common component of fried foods, is associated with negative health outcomes. However, data regarding the association between dietary acrylamide and osteoporotic fractures is poorly explored. Therefore, this study aimed to investigate whether dietary acrylamide is associated with incident osteoporotic fractures in North American subjects at high risk or having knee osteoarthritis (OA) over 8 y of follow-up.

Methods: Dietary acrylamide was evaluated using a food frequency questionnaire and categorized in tertiles. Osteoporotic fractures (any site, spine, hip, wrist) were evaluated through self-reported history. A Cox's regression analysis, adjusted for baseline confounders was run and the data were reported as hazard ratios (HRs) with their 95% CIs.

Results: 4436 subjects (mean age: 61.3 years; 58.1% females) were included. Compared to participants with lower acrylamide intake (T1), those with a higher acrylamide intake (T3) reported a significant higher risk of any fracture (HR=1.27; 95%CI: 1.05-1.55; p for trend=0.048), forearm fracture (HR=1.67; 95%CI: 1.06-2.63; p for trend=0.03), spine fracture (HR=2.19; 95%CI: 1.15-4.20; p for trend=0.02), and hip fracture (HR=4.06; 95%CI: 1.34-12.29; p for trend=0.04). The association between dietary acrylamide intake and incident fractures was stronger in people with presence of an osteoporotic fracture at the baseline and in those not taking any anti-osteoporotic medication.

Conclusion: High dietary acrylamide was associated with an increased risk of osteoporotic fractures in subjects at high risk or having knee OA, over 8 y of follow-up

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PREDICTORS OF QUALITY OF LIFE IN WOMEN WITH OSTEOPOROSIS ABOVE THE AGE OF 50: PILOT STUDY IN CENTRAL POLAND

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Objective: To identify the factors influencing the quality of life (QoL) assessed on the QUALEFFO-41 scale in women with osteoporosis above the age of 50.

Methods: It was an outpatient survey carried out from June 2018 to May 2019. The study enrolled 198 women aged 72.31 ± 8.59 y with clinical postmenopausal osteoporosis, in two Osteoporosis Outpatient Clinics in the city of Lodz (Poland). The criteria for selection were as follows: postmenopausal osteoporosis in the patient's history according to ICD 10 – M81.0 and lack of other chronic diseases. The scales used in the study were: Quality of Life Questionnaire of the European Foundation for Osteoporosis (QUALEFFO-41), Acceptance of Illness Scale (AIS), Satisfaction With Life Scale (SWLS), Visual Analogue Scale (VAS) and the authors' own questionnaire. Statistical analysis was performed with the Statistica 13.0 program.

Results: The mean score on the QUALEFFO-41 scale was 40.26 ± 16.92 points. The mean life satisfaction on the SWLS was 73 ± 7.26 points and indicated moderate life satisfaction. The mean result on the AIS was 25.9 ± 10.19 points, which indicated a moderate level of acceptance and adaptation to the diseases in the study group. The mean VAS score was 4.87 ± 2.39 points.

The multiple linear regression model allowed explaining 73% of the variability of the modelled dependent variable. It was shown that the quality of life deteriorated by 0.17% yearly on the QUALEFFO 41 scale in patients with postmenopausal osteoporosis. It was proved that factors determining the quality of life in women over 50 years old with postmenopausal osteoporosis were: age, VAS, AIS and SWLS scores.

Conclusion: The quality of life of chronically ill patients is an important element of the overall health assessment, which affects the ability to maintain long-term positive doctor-patient relations. Life satisfaction assessment is not common in Poland yet.

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FATTY DIET AND OBESITY AS A CAUSATIVE FACTOR OF FIBROMYALGIA

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Objective: The fibromyalgia is a chronic disorder which is characterized by muscle pain and tenderness. It is mostly uncertain etiology however obesity plays a central and it aggravates the disease progression. The increased amount of body fat and simultaneous decrease in muscle quantity is the main characteristic of fibromyalgia. The daily function of an individual can be affected due to development of fibromyalgia. Our study reveals the high fatty diet and the risk of development of fibromyalgia among the students from Russia and India.