The Relationship between Osteoporosis-Related Knowledge and Physical Activity among Women Age over 50 Years

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Abstract : Osteoporosis is becoming a major public health problem, particularly in postmenopausal women, as the incidence of this disease is getting higher. Nowadays, one of the most common chronic musculoskeletal diseases is osteoporosis. Osteoporosis-related knowledge is an important contributor to prevent or to treat osteoporosis. The most important strategies to prevent or treat the disease are increasing the level of physical activity at all ages, cessation of smoking, reduction of alcohol consumption, adequate dietary calcium, and vitamin D intake. The aim of the study was to measure the osteoporosis-related knowledge and physical activity among women age over 50 years. For the measurements, we used the osteoporosis questionnaire (OPQ) to examine the disease-specific knowledge and the global physical activity questionnaire (GPAQ) to measure the quantity and quality of the physical activity. The OPQ is a self-administered 20-item questionnaire with five categories: general information, risk factors, investigations, consequences, and treatment. There are four choices per question (one of them is the 'I do not know'). The filler gets +1 for a good answer, -1 point for a bad answer, and 0 for 'I do not know' answer. We contacted with 326 women (63.08 ± 9.36 year) to fill out the questionnaires. Descriptive analysis was carried out, and we calculated Spearman's correlation coefficient to examine the relationship between the variables. Data were entered into Microsoft Excel, and all statistical analyses were performed using SPSS (Version 24). The participants of the study (n=326) reached 8.76 ± 6.94 points on OPQ. Significant ($p < 0.001$) differences were found in the results of OPQ according to the highest level of education. It was observed that the score of the participants with osteoporosis (10.07 ± 6.82 points) was significantly ($p=0.003$) higher than participants without osteoporosis (9.38 ± 6.66 points) and the score of those women (6.49 ± 6.97 points) who did not know that osteoporosis exists in their case. The GPAQ results showed the sample physical activity in the dimensions of vigorous work (479.86 ± 684.02 min/week); moderate work (678.16 ± 804.5 min/week); travel (262.83 ± 380.27 min/week); vigorous recreation (77.71 ± 123.46 min/week); moderate recreation (115.15 ± 154.82 min/week) and total weekly physical activity (1645.99 ± 1432.88 min/week). Significant correlations were found between the osteoporosis-related knowledge and the physical activity in travel ($R=0.21$; $p < 0.001$), vigorous recreation ($R=0.35$; $p < 0.001$), moderate recreation ($R=0.35$; $p < 0.001$), total vigorous minutes/week ($R=0.15$; $p=0.001$) and total moderate minutes/week ($R=0.13$; $p=0.04$) dimensions. According to the results that were achieved, the highest level of education significantly determines osteoporosis-related knowledge. Physical activity is an important contributor to prevent or to treat osteoporosis, and it showed a significant correlation with osteoporosis-related knowledge. Based on the results, the development of osteoporosis-related knowledge may help to improve the level of physical activity, especially recreation. Acknowledgment: Supported by the ÚNKP-20-1 New National Excellence Program of The Ministry for Innovation and Technology from the Source of the National Research, Development and Innovation Fund.

Keywords : osteoporosis, osteoporosis-related knowledge, physical activity, prevention

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