## **Abstract**

**Background:** The prevalence of osteoarthritis of the knee is growing significantly with age. Persistent pain from this disease, sleep disorders, decreased physical activity and increased disability, which increase the incidence of depression in these patients. Experiencing severe pain following mobility and inability to perform daily tasks also causes anxiety in these patients. On the other hand, the presence of depression and anxiety causes unrealistic pain and disability on the part of patients, and this vicious cycle reduces the patient's quality of life and complicates the treatment process. Accordingly, in the present study, we decided to study the relationship between the severity of osteoarthritis pain in the knee and depression, anxiety and quality of life.

**Aim:** Investigating the relationship between severe osteoarthritis pain and depression, anxiety and quality of life.

**Methods and material:** A total of 100 patients with osteoarthritis of the knee were randomly selected and included in the study. Their demographic information was collected by a checklist. The collected data (checklist and questionnaires of BDI, Beck, BAI, Short form-36, WOMAC index) were entered into SPSS software and analyzed using statistical tests (Spearman correlation) to examine the relationship between quantitative variables.

**Results:** 78 patients (78%) and 22 patients (22%) were male. 61 patients (61%) were illiterate and 39 patients (39%) were literate. 74 (74%) were housewives and 26 patients (26%) were employed. 59 patients (59%) lived in Ardabil and 41 patients (41%) lived in other cities of Ardabil province. 94 patients (94%) were urban and 6 patients (6%) were rural. The mean age of patients was 56.31 years with a standard deviation of 11.86. The duration of infection was 5.09 years and the duration of treatment was 3.40 years. Also, the average number of family members was 3.

**Conclusion:** According to the results of the present study, there is a significant relationship between knee osteoarthritis and psychiatric disorders such as depression and anxiety as well as reduced quality of life of patients. Therefore, in addition to treating osteoarthritis, it is necessary to consider programs to treat anxiety and depression and increase the quality of life of patients.

Keywords: Osteoarthritis, Depression, Anxiety, Quality of life