

Study of osteoporosis and osteopenia in patients undergoing densitometry in Imam Khomeini hospital of Ardebil city from 2017 to 2019.

Abstract

Background: osteoporosis is the most common metabolic disease of the bone, the most prominent of which is the reduction of minerals and bone matrix. In this disease, the risk of bone fracture increases. Diagnosis is diagnosed by measuring bone minerals (BMD) during densitometry. Every year over 5 million fractures caused by osteoporosis occur in the world. Women over 50 years old during their lives are 30% at risk of osteoporosis induced fracture. The World Health Organization has declared osteoporosis as the fourth main human enemy, and according to the death penalties, it is higher than that of cancer. It is necessary to determine the prevalence of the disease to prevent osteoporosis and its complications and costs.

Aim: Determination of osteoporosis and osteopenia in Donisitometric Patients of Imam Khomeini Hospital in Ardabil from 2017 to 2019.

Material and Methods: During this study, the prevalence of osteopenia and osteoporosis in patients referred to Imam Khomeini Hospital of Ardabil city Rheumatology Clinic from 2017 to 2019 was determined. Information such as weight, height, age, history of drug use, corticosteroid use history of immunosuppressive drug use and vitamin D levels were extracted from clinic files and bone density information from Imam Khomeini Hospital Radiology System in Ardabil and recorded in the checklist. Finally, the information was analyzed by descriptive statistics as tables and charts and statistical indicators in the average and standard deviation in SPSS software version 21.

Results: In terms of gender of patients, 239 patients (23.9 %) male and 761 patients (76.1 %) were female and the average age of patients was 58.42 years. 23.5 % and 64.9 % of patients had osteoporosis and osteopenia, respectively, and 28 % and 58 % of patients had osteoporosis and osteopenia respectively.

Conclusion: Population aging around the world is changing the epidemiology of osteoporosis and osteopenia, and implementation of programs to raise awareness of the disease and its results are essential for health care professionals and the general public. The most important complication of the disease is to increase the likelihood of pathological fractures that lead to mortality and reduce quality of life.

Keywords: Osteoporosis, Osteopenia, Bone mineral density, Z-score, T-score