

# INVESTIGATION OF LOW-ENERGY FRACTURE RISK FACTORS IN A SAMPLE OF ELDERLY PEOPLE LIVING IN THE COMMUNITY IN GREECE

Stolakis<sup>1</sup>, K., Marneras<sup>2</sup>, Ch., Tosounidis<sup>3</sup>, Th., Panagiotopoulos<sup>4</sup>, E.

1. Geriatrician, University of Patras, Rehabilitation Clinic of Patras
2. Nurse, University General Hospital of Patras
3. Orthopedic Surgeon, Assistant Professor of Medicine, University of Crete
4. Orthopedic Surgeon, Professor of Medicine, University of Patras

**Aim:** The aim of the study was to investigate the effect of factors, such as poor eyesight, fear of falls, depression and demographic characteristics, on low-energy fractures in elderly people living in the community.

**Material-Method:** The study was synchronous and was conducted in a random sample of 62 people over 65 years of age, who attended the program of an Open Care Center for the Elderly of the Municipality of Patras in the spring of 2020. The main scales used were: the NEI VFQ-25 (National Eye Institute Visual Function Questionnaire), the FES-I Scale (Falls Efficacy Scale - International) and the GDS-15 scale (Geriatric Depression Scale-15). This research is co-financed by Greece and the European Union (European Social Fund- ESF) through the Operational Programme «Human Resources Development, Education and Lifelong Learning 2014- 2020» in the context of the project “A Holistic Interdisciplinary Approach to Treating Patients with Fragility Fractures” (MIS 5047167).

**Results:** 78.1% of the sample were women and the mean age was 72.15 years (SD  $\pm$  6.04). 70.3% were married and the average value of years of education was 7.39 (SD  $\pm$  3.66), while 87.5% were not working. The screening showed that 40,6% had suffered a fracture. Of those with a fracture history, all were women (n = 24) and Spearman's correlation coefficient r showed no connection with ocular problems and depression. However, Spearman's correlation coefficient showed a positive correlation in terms of fear of falls (r =, 335, p <, 05), gender (r =, 396, p <, 01) and a negative correlation with monthly income (r = -, 41, p <, 01). The corresponding control in the fracture-only group showed only one correlation, which was a negative correlation with the caregiver relationship (r=-,490, p<,05), indicating that lonely individuals are more vulnerable to fractures.

## Conclusions:

In the relevant literature the most important risk factors for low-energy fractures are age, sex, body mass index, previous low-energy fractures, history of parent hip fracture, bone density, secondary osteoporosis, corticosteroid treatment. smoking, alcohol and frequent falls (Akesson et al, 2013; Svedbom et al, 2013). This study showed that one in four older people over the age of 65 had experienced at least one low-energy fracture. Female gender, fear of falling and low social status, as reflected in low income and lack of social support, are risk factors for low-energy fractures.

