

## PRIORITY RISK FACTORS OF OSTEOPOROSIS IN WOMEN OF BELARUS.

Problems of diagnostic of decreasing of bone mineral density (BMD) and revealing patients with high risk of low trauma fractures take an important place in modern healthcare due to the high economic and social expenditures for the treatment and rehabilitation of patients with low trauma fractures.

The aim of the study was to evaluate the most prognostic important risk factors of low BMD in elderly women by using the method of questioning.

Materials and methods. There were 507 women examined (mean age  $56,8 \pm 8,3$  years). Risk factors of osteoporosis were evaluated by the IOF questionnaire, BMD of lumbar spine and hips was measured by dual energy X-ray absorptiometry (Lunar Prodigy, GE, USA). Statistical analysis was performed using the software Statistic 6.0

Results. The analysis of obtained data revealed the most prognostic important for low BMD questions (fig 1): question №1 - Have either of your parents been diagnosed with osteoporosis or broken a bone after a minor fall (a fall from standing height or less); question №4 - Have you ever broken a bone after a minor fall, as an adult?; question №6 - After the age of 40, have you lost more than 3 cm in height ?

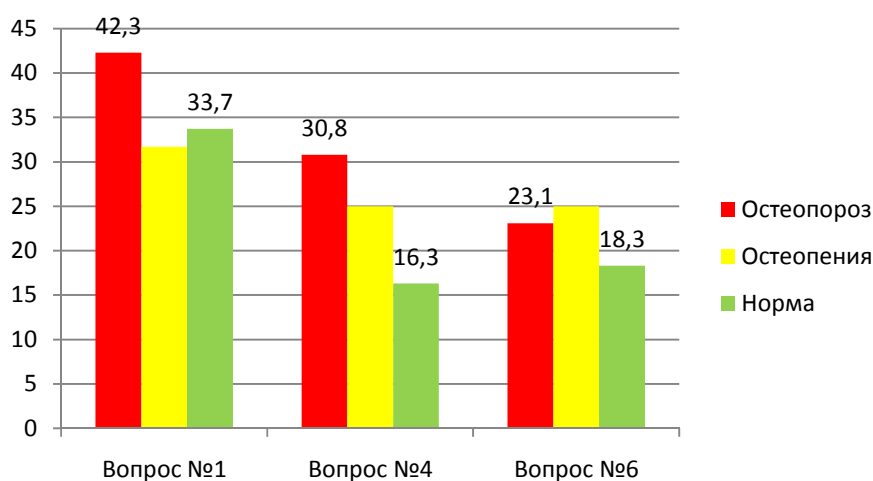


Figure 1 – the incidence of affirmative answers in groups with different meanings of BMD.

The answers to the rest questions were the same in different groups (questions 9-10 and 12-18) or the amount of the affirmative answers were so small that these questions couldn't be included in statistical analysis (questions № 3, 7, 8, 14, 15). The specificity of the model of prognosis of probability of decreased BMD consisted 97%, in other word, the probability not to administer bone densitometry to the patient with low BMD using this model is 3%.

Conclusion: the most prognostic important risk factors of low BMD are family history of low trauma fractures, fragility fractures in anamnesis and decreasing of height for 3 and more cm after age of 40. The method can be used widely in clinical practice to reveal individuals with the risk of low BMD for their further examination and treatment.