

As the rate of elders increases in overall population, so do the cases of osteopo...

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The population of older men and women has been increasing, and therefore the number of people with osteoporosis is increasing. But in some countries, the rate of hip fractures is rising faster than the population. For example, in Malmo, Sweden the number of people older than 50 doubled since 1950, but the number of hip fractures increased seven-fold. The reasons for this secular trend in increased hip fractures are not known, but decreased physical activity may be playing a role. When discussing the prevalence or incidence of osteoporosis, one must distinguish between prevalence of fractures (established osteoporosis) and of low bone density. Many women with low bone density do not have fractures.

Overall, 21% of U. S. postmenopausal women have osteoporosis, and about 16% have had a fracture. About 40% of women older than 80 have had a fracture of the hip, vertebra, arm, or pelvis. Men and women continue to lose bone mass as they age. Therefore, the prevalence of low bone mass increases as women age. Incidence of hip fractures The incidence of hip fractures is the easiest to measure, because almost all of the women and men who fracture their hip are hospitalized and the hospital records may be accessed. The graph shows that white women have the highest incidence of fractures with a rate that increases exponentially after the age of 50. This graph is from Jacobsen, SJ in AmericanJPublicHealth 80: 872, 1990. Incidence and prevalence of vertebral fractures are much more difficult to ascertain than of hip fractures, because many patients are unaware of the fractures. Epidemiological studies must involve lateral spine xrays. To make matters more complex, the degree of compression necessary to define a vertebral fracture is not standardized.

In England, the percentage of women aged 45 – 69 with vertebral fractures was 9.7 to 14.2, depending on the measurement method. In a study of 16,119 European men and women aged 50-79, the overall prevalence of vertebral fractures (using a moderately specific method) was 12% for males and 12% for females (Burger H, van Daele PLA, Grashuis K, et al. Vertebral deformities and functional impairment in men and women. J Bone Mineral Res 1997; 12: 152-7). Gender Osteoporosis is considered a woman's disease, but the prevalence in men also increases exponentially with age. The rise in hip fracture rate occurs about 10 years earlier in women than in men. By the age of 90, about 17% of males have had a hip fracture, compared to 32% of females. The incidence of hip fractures in US persons older than 65 is 8/1000 in women and 4.3/1000 in men. Men have a shorter life span than women, so they account for only 21% of all hip fractures. Vertebral fracture prevalence in men is close to that in women. The European study showed a higher incidence in the younger men, raising the possibility that some of the fractures were not related to osteoporosis, but to trauma sustained during their working life.