Factors associated with bone mineral density in postmenopausal women: A cross sectional study

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Osteoporosis is estimated to affect about 20 million women worldwide. In fact, about one in two women over the age of 50 will break a bone due to osteoporosis. Osteoporosis and its consequences can be regarded as a major source of mortality, morbidity, and medical expenditure around the world. It can affect people mental and social health. This study is aimed at investigating the relationship between the anthropometric and lifestyle factors and osteoporosis in post menopausal women. A sample of 503 postmenopausal women participated in the study. All participants underwent anthropometric measurements to calculate body mass index (BMI), and filled out a two-part questionnaire. The first part was about subjects’ demographic data; and the second part contained questions relating to subjects’ lifestyle. Bone mineral density (BMD) was measured using dual energy X-ray absorptiometry (DEXA) at the lumbar spine (L2-L4) and neck region of femur. Then the participants were categorized according to their BMD values of femur or lumbar spine as normal, osteopenic or osteoporotic. Lumbar spine and Femur BMD correlated significantly with age, BMI, and number of pregnancies. Exposure to sunlight showed significant difference among three groups based on lumbar spine site. However, at femur site, diet of fish and poultry, soda consumption and exercise was different among three groups. Aging, low BMI, and numbers of pregnancies were the risk factors associated with osteoporosis in participants. Diet of fish and poultry, restricted amount of soda intake, exercise and exposure to sunlight can prevent osteoporosis.

Biography
Golnaz YadollahiKhales is studying medicine at Shiraz University School of Medicine and is going to be graduated by August 2014. He has been granted many awards during his education including the best medical student in the country. As his major research interest is elderly disorders, he has conducted research on pathophysiology of memory and Alzheimer’s disease. He has published about 6 papers in ISI journals. His thesis is also about the degenerative deformity of lumbar spine among elderly. He has also participated in more than 10 international conferences in order to become familiar with the new topics in this field.

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