

5.4 Factors associated with osteoporosis among a sub-urban Sri Lankan population

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ABSTRACT

Introduction : Risk factors for osteoporosis can vary from country to country.

Objective: To determine the association between osteoporosis and age, physical activity, body mass index (BMI), smoking, alcohol consumption, consumption of milk, level of education and income in a sample of sub-urban Sri Lankan adults.

Methodology: A descriptive cross sectional study involving 22 grama niladari divisions of the Ragama MOH area was conducted from March to October 2007. A randomly selected sample of 700 adults, in the age group of 35-64 years, were invited to participate in the study. A structured interviewer administered questionnaire was used to collect demographic data and details of risk factors. Bone mineral density (BMD) was measured with a peripheral Dexa scan. A BMD of ≤ -2.5 was considered as having osteoporosis.

Result: Of the 700 subjects studied, 60% (n=421) were females. Using logistic regression analysis, age >50 years (OR 3.5 95% CI 1.9-6.2), female sex (OR 12.2 95% CI 4.8-30.9), low level of education (OR 1.8 95% CI 1.1-2.8), low BMI (OR 3.5 95% CI 1.7-7.3) and smoking (OR 5.8 95% CI 1.9-17.2) had a significant association with osteoporosis.

Conclusion: Age, sex, level of education, nutritional status and regular smoking showed a significant association with osteoporosis.