# 5.1 Prevalence of osteoporosis and osteopenia in a sample of Sri Lankan adults. 

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#### Abstract

Introduction: Osteoporosis is characterized by low bone mineral density and deterioration in the micro architecture of bone that increases its susceptibility to fracture. This condition is becoming increasingly common in our country in the elderly, especially in post menopausal women.


Objective: To determine the prevalence of osteoporosis and osteopenia in a sample of Sri Lankan adults.

Methodology: A descriptive cross sectional study was conducted at the Faculty of Medicine University of Kelaniya from July 2007 to October 2007. The study subjects were selected from 22 grama niladhari divisions of the Ragama MOH area. From each division males and females aged 35 to 64 years were randomly selected from the voters list and recruited for the study. A P-dexa scan was used to measure the BMD of the left middle finger. A T score of $\leq-2.5$ was considered as osteoporosis, $>-2.5$ to -1 as osteopenia. These two categories together were considered as low BMD. A T score of > -1 was considered normal.

Results: There were 762 subjects with a mean age (SD) of 52.3 (7.5) comprising $61 \%$ females and $39 \%$ males. The prevalence of osteoporosis and osteopenia were $14 \%$ and $29 \%$ respectively. In subjects aged less than fifty years $9 \%$ of females and $3 \%$ of males had osteoporosis and $31 \%$ of females and $18 \%$ of males had osteopenia. In subjects aged fifty years or more $33 \%$ of females and $3 \%$ of males had osteoporosis and $38 \%$ of females and $21 \%$ of males had osteopenia.

Conclusion: the prevalence of osteoporosis and osteopenia were higher among the females. The prevalence of osteoporosis among females aged over fifty years was markedly higher than the females who are less than fifty years.

