

Health care costs of osteopenia, osteoporosis, and fragility fractures in Mexico.

Carlos F¹, Clark P, Galindo-Suárez RM, Chico-Barba LG.

Author information

Abstract

Different sources were used to estimate the 2010 health care costs of managing low bone density (osteopenia/osteoporosis) plus caring fragility fractures in Mexico at 411 million USD. Figures are projected to rise 42 % by 2020. Preventive and timely interventions are required to decrease the financial burden of these entities.

INTRODUCTION: Osteopenia, osteoporosis, and fragility fractures (FF) are a public health concern. The study purpose was to estimate the health care costs of these conditions in Mexico during 2010 and project them to 2015 and 2020.

METHODS: Prevalence of osteopenia and osteoporosis was derived from international data. The Mexican version of FRAX® algorithm was used to assess risk for a major FF (hip, clinical spine, forearm, and proximal humerus) in osteopenic and osteoporotic population aged over 40 years. The estimates were applied to national demographic projections. Only direct medical costs composed by routine non-pharmacological management of osteopenia/osteoporosis besides the costs owing to medical care of major FF were considered into the analysis. Resource use for managing osteopenia/osteoporosis was defined from local sources (clinical practice guidelines, published literature, and expert opinion); unit costs were gathered from official lists. Costs for medical care of FF were based on diagnosis-related groups.

RESULTS: In population aged ≥ 40 years, prevalence of osteopenia and osteoporosis in 2010 was 32.8 and 8 %, respectively. A total of 75,763 FF occurred that year. Costs of managing osteopenia and osteoporosis were 154.9 million USD, whereas medical costs due to FF reached 256.2 million USD. Therefore, the annual health care costs of these entities in 2010 were 411 million USD. Total costs will be 19.2 % higher in 2015, and by 2020, the figures will have increased by 41.7 %.

CONCLUSIONS: Low bone density entails substantial epidemiological and financial burden in Mexico, and their impact will grow considerably during the next years.

PMID: 23526030 DOI: [10.1007/s11657-013-0125-4](https://doi.org/10.1007/s11657-013-0125-4)

[Indexed for MEDLINE]



Publication type, MeSH terms



LinkOut - more resources



PubMed Commons

[PubMed Commons home](#)

 0 comments

[How to join PubMed Commons](#)