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# INTRODUCTION

## Osteoporosis and status of bone health

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We are very pleased to introduce this special issue of *Salud Pública de México*, which is focused on several contemporary issues regarding bone health and related diseases; in addition, there is particular emphasis on osteoporosis and its major complication—bone fragility and risk of fracture. Furthermore, this issue includes a comprehensive number of article reviews written by recognized scientific groups worldwide that are leaders in their research areas. Original work published by Mexican research groups is also included.

All the article reviews aim to provide the best scientific-based evidence, on which to base practical conclusions that assist in the decision-making processes in public health and in day-to-day clinical practice. Therefore, this issue includes a combination of epidemiological reviews describing in detail the positive impact on the following aspects: diagnosis methods of trends in the global burden of osteoporosis with respect to fractures in Latin America, the importance of redefining treatment criteria for osteoporosis, new methods of assessing bone health, and a very thorough review about the clinical importance of improving peak bone mass in the early stages of life as a primary prevention strategy against osteoporosis.

The original work included in this issue provides important information regarding the normal reference values for Mexican Bone Mineral Density based on double beam low energy X-ray absorption bone absor-

tiometry (DXA). Hence, this addresses the topic dealing with the influence of ethnicity in the identification and incidence of abnormal cases. The results presented in this article will allow a correct estimation of the global impact of low bone mineral density (BMD), that results in clinical entities such as osteoporosis and osteomalacia in the Mexican *mestizo*— the mixed race population that represents the vast majority of Mexicans. It also includes new insights about the heritability of BMD in three generations of Mexican women as well as a normal reference database for peripheral forearm DXA in children. An important contribution to this publication is the analysis of the economic impact on the new public insurance system, which analyzes the costs of surgery to treat femoral fractures and the importance of anti-fracture prevention strategies. Moreover, this research is complemented by a comprehensive analysis of the pharmacological strategies useful in the treatment of osteoporosis.

We hope that this important and special issue of *Salud Pública de México* devoted to bone health will have a positive impact on professionals dealing with these public health problems by increasing their interest and timely involvement in this area.

Juan Alfredo Tamayo<sup>(1)</sup>

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(1) Comité Mexicano para la Prevención de la Osteoporosis, AC.