## **EDITORIAL**

## Osteoporosis in Mexico. "The challenge"

Osteoporosis was a neglected disease that used to be considered an inevitable consequence of aging. A couple of decades ago, many well-designed epidemiologic studies worldwide demonstrated that this disease and its consequences represent a high burden on health systems due to the high costs and the resources needed for the care of patients suffering from it.<sup>1</sup> Patient testimonies regarding the decrease in their quality of life have also been widely reported.

Mexico is facing an epidemiological transition with a growing number of elderly people and an increase in life expectancy. According to recent data from the CO-NAPO (Mexican Population Council), the population 60 years and over is currently 8.5 million, and this number will increase to 33.8 million by the year 2050. By that time the average life expectancy for Mexicans will be 81.9 years of age.<sup>2</sup> With these changes in demographic dynamics we can expect to have an epidemic of fractures in the near future.

Osteoporosis and fragility fractures have recently become a focus of research in Mexico, where one out of twelve Mexican women and one out of four Mexican men over 50 years of age will sustain a hip fracture in the remaining years of their life.<sup>3</sup> The estimated direct costs for treating hip fracture in Mexico was over \$97 million dollars in 2006.<sup>4</sup> This amount represents a significant burden for health systems in Mexico, equivalent to expenditures on insulin for all insulin dependent diabetics in Mexico the same year. Additionally, the prevalence of vertebral fractures in our population 50 years of age and over was found to be 19.5% for women and 9.6% for men, according to a radiological survey.<sup>5,6</sup>

With these figures in mind, the National Institutes of Health in Mexico have recently recognized osteoporosis and its fractures as a public health problem. As a

first step of action, the Coordination of the Institutes called for a multidisciplinary team of experts from different health institutes that belong to the Ministry of Health (SS), the Mexican Institute of Social Security (IMSS), the Mexican Institute of Public Health (INSP) and the Faculty of Medicine UNAM. Epidemiologists, clinical researchers in several specialties related to bone metabolism (rheumatologists, rehabilitation medicine, gynecologists, orthopedic surgeons, among others) and health economics and policy decision makers worked together to evaluate the size of the problem and put together a common agenda to set the priorities for the research and policy programs that will evolve into large-scale preventive programs.

This group of experts works to actively integrate all the scientific evidence available in the country, synergizing the knowledge and the resources available in each institution, to establish a feasible work plan for research and the development of programs with measurable indicators for intermediate- and long-term periods. Some immediate actions will be to implement the recently published instrument from the World Health Organization (FRAX)<sup>7</sup> to evaluate fracture risk based on clinical factors. The application of this instrument in the Mexican population will allow the detection of high-risk groups and the creation of guidelines for pharmacological treatment based on a cost-effectiveness analysis. Other items on the agenda will be to project fragility fractures, to create feasible programs oriented to reduce the numbers of fractures, and to promote bone health in all ages, with the primary objective to be prepared to fulfill the future demands of this significant growing health problem.

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