

Osteoporosis and Osteopenia – A Rising Healthcare Problem

Shahid Kamal*

Department of Nuclear Medicine and Molecular Imaging, Neurospinal & Medical Institute, Karachi, Pakistan.

With Asia housing 75% of humanity, and the proportion of seniors rapidly climbing from 5.3% in 2015 to 9.3% by 2025, Osteoporosis is rapidly becoming a growing medical ailment in this part of the world too [1].

In Pakistan, though clear data on occurrence of hip fractures (osteoporotic) annually is not established, large ultrasound studies suggest that there may be more than 9 million people (7 million women, 2 million men) afflicted with Osteoporosis. It is expected that these estimates may very well cross 12 million by the year 2050 – becoming a major health burden. Low per capita income and high hospital costs further derail the earning capacity.

Estimations indicate the population to cross 340 million by the year 2050, and of these 14.9% (50 million) will be over the age 60 years. A five year study from one hospital revealed a 2:1 female to male ratio of hip fracture cases, with 61 years being the average age of patients having osteoporotic fracture. This average age is lower than that reported in North America and Europe but matches data from India. Another study revealed 16% and 34% occurrence of osteoporosis and osteopenia respectively in females of age group 45 to 70 using ultrasound technique. Another study from KPK province estimated the numbers at 29 and 42% respectively. 75% of postmenopausal women from Peshawar seemed to be at risk of osteoporosis on a clinical risk score analysis [2-7].

As is prevalent across this region of South Asia, Pakistan also faces significant Vitamin D deficiency in its populace. In the major metropolis of Karachi as many as 8% of hip fracture cases also had histologically proven Osteomalacia [3]. Multiparous women of another district, Hazara, showed significant vulnerability to Osteomalacia [8]. More than 90% of patients presenting at clinics and were mobile suffered from low levels of 25(OH) D [9]. This deficiency was also rampant in infants [10]. With a generally low calcium intake especially in the female populace, a study indicated a 300 to 500mg calcium intake range in a group of post-menopausal women [6]. No scheme exists for fortification of food with Calcium and Vitamin D supplements, nor is there any formal programs for lifestyle prevention of osteoporosis.

Bisphosphonates, oestrogen, raloxifene, calcitonin, parathy-

roid hormone are available in generic and brand forms to treat osteoporosis. Government has yet to recognize Osteoporosis as a major health issue and still there are no policies, programs, nor approved physician guidelines or training programs. However, recently the Osteoporosis Society, Menopause Society and the Pakistan Endocrine Society have made efforts to increase awareness.

To summarize, Osteopenia and Osteoporosis are not only a significant problem in Pakistan, but potentially will become a major health burden. Apart from nutritional paucity (calcium and vitamin D), diagnostic facilities are also scarce and only thinly available. Other hindrances are lack of solid epidemiological data, limited knowledge amongst primary physicians and limited public awareness. To provide access to diagnostic services, DXA machines need to be installed in all hospitals.

CONFLICT OF INTEREST

Declared none.

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*Address correspondence to this author at the Department of Nuclear Medicine and Molecular Imaging, Neurospinal & Medical Institute, Karachi, Pakistan. Email: skamal77@hotmail.com

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