A lifespan approach in prevention of osteoporosis

Osteoporosis and related fragility fractures are recognized as a major problem of public health. The global burden of osteoporosis, measured by disability adjusted life years (DALYs) lost, is immense. In 2000, the total DALYs lost due to osteoporotic fractures was approximately 5.8 million worldwide [1]. In Europe, osteoporotic fractures accounted for more DALYs lost than most cancers (except lung cancer) [1]. The prevalence, and hence the global burden of osteoporotic fractures, is projected to rise substantially, owing to the ageing population [2].

Much focus has been placed on prevention of osteoporosis and fragility fractures in high-risk groups, such as older adults and postmenopausal women. Apart from pharmacological interventions, various forms of exercise interventions including resistance training [3–6], impact aerobic exercises [7], whole body vibration therapy [8–11], and fall prevention programmes [12], have been shown to have some benefits in maintaining or enhancing bone mass, and reducing the fall-related risk factors (e.g., poor balance, muscle weakness).

In the article titled “Prevention of osteoporosis: from infancy through older adulthood”, Cech has highlighted the importance of adopting a lifespan approach in the prevention of osteoporosis [13]. The battle against osteoporosis should start early during childhood and adolescence, when the skeleton is undergoing rapid growth. Appropriate physical activity should be incorporated into the young individual’s daily life to optimize bone growth and build a strong skeleton. Cech has provided us with an excellent review of the lifespan development of the skeletal system, and useful guidelines for development of osteoporosis prevention programmes for people of all ages [13]. With increasing emphasis on primary health care in the field of rehabilitation, we as physiotherapists should be more aware of the importance of health promotion and disease prevention. Promotion of skeletal health across different age groups should be one of the priorities in the overall management of our clients.

References


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