

Comment on Atiq U, Rafique R, Sami Atiq S, et al. (*J Pak Med Assoc.* 2023; 73: 1753)

Osteoporosis's undertreatment in Pakistan

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Dear Editor, We have read the letter to the editor by Atiq et al., with interest. They have correctly highlighted that osteoporosis is a silent killer and majority of the patients are diagnosed only when they already have a fragility fracture.¹ The authors have highlighted important measures to improve awareness of osteoporosis among general population and doctors like arranging seminars, establishment of hotlines and formation of a national committee. They have mentioned the lack of local guidelines for management of post-menopausal osteoporosis. We would like to update the readers that clinical practice guidelines regarding osteoporosis with 50 recommendations considering the local Pakistani context have recently been published.² The authors adopted the "clinical practice guidelines for the diagnosis and treatment of postmenopausal osteoporosis—2020 update from American Association of Clinical Endocrinology" to adapt to the local context by using GRADE-ADOLOPMENT process.²

As Rehabilitation Medicine physicians (PMR), we would like to advocate for multidisciplinary approach to management of osteoporosis and considering interventions beyond medications. These include interventions to improve diet with calcium and vitamin D supplementation, formulation of an exercise programme including resistive, weight bearing and flexibility exercises to increase bone mineral density, prevention of falls, interventions for joint protection, modification of activities of daily living and pharmacological management.^{3,4} Currently in Pakistan, only Rehabilitation Medicine physicians are formally trained to prescribe appropriate exercises to a variety of patients including those at the risk of osteoporosis or those who already had a fragility fracture. The role of a Rehabilitation Medicine physician in the management of osteoporosis relates to the following tasks:

1. Prevention: Rehabilitation Medicine physicians promote health by education of patients and self-management interventions like lifestyle modifications and prescription of exercise programme.⁴

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2. Risk assessment and modification: Rehabilitation Medicine physicians not only perform risk assessment of osteoporosis, but also for hazards of fall. Various risk factors for fall can be addressed like: urge urinary incontinence by urogynaecological rehab; orthostatic hypotension by elastic binders and exercise; improvement of transfer and mobility by ADL and mobility training; cognitive impairment by cognitive rehabilitation; and modification of home environment.⁴
3. Other assessments (assessment of functioning and quality of life (QOL)): Rehabilitation Medicine physicians are formally trained in assessment of function and disability using the World Health Organization Recommended International Classification of Functioning, Disability and Health (ICF) in patients with osteoporosis and patient specific rehabilitation plan to address functional impairments. Other assessments like gait analysis, postural control, gait speed tests and berg balance scale are some of the additional assessments that are performed by Rehabilitation Medicine physicians.⁴ PMR physicians are well cognizant with the effect of osteoporosis on QOL of patients and assessment of QOL of patients is a routine task.⁴
4. Diagnosis and treatment of Osteoporosis: Rehabilitation Medicine physicians are formally trained in interpretation of DXA scan and application of FRAX score along with the pharmacological and non-pharmacological treatment of osteoporosis.⁴
5. Optimizing function, promoting "activities and participation": Rehabilitation Medicine physicians not only perform detailed functional assessment of patients with osteoporosis, but also advise interventions to optimize function like postural training, gait training, ADL training, transfer training and management of pain by pharmacological and minimal invasive measures like (nerve blocks, intra-articular injections, kyphoplasty, vertebroplasty etc).⁴
6. Advocacy: Rehabilitation Medicine physician can help policy makers and government representatives to define policies and plans to improve bone health

because of their central role in management of osteoporosis.⁴

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