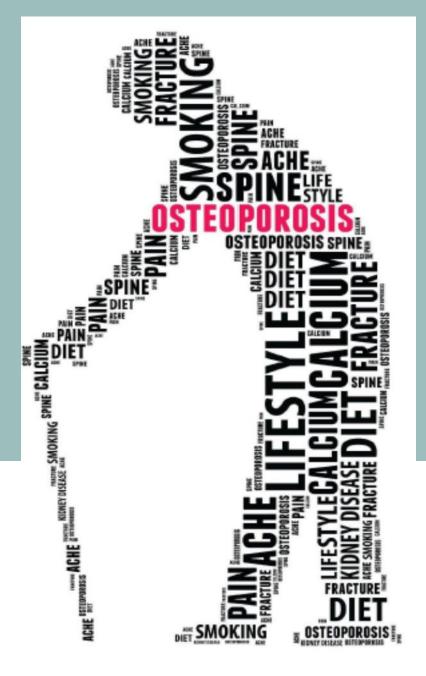
Intersectoral Collaborations In Promoting Musculoskeletal Health Programs

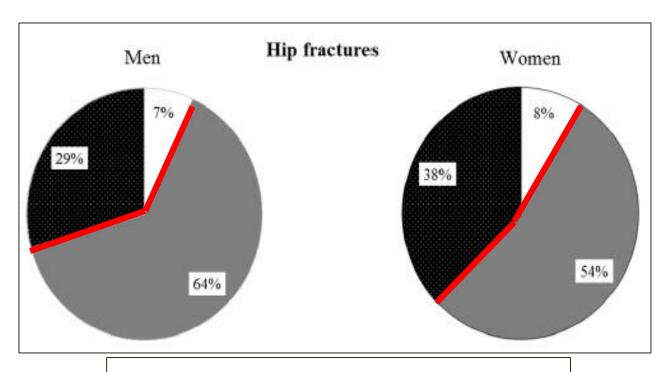
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MAGNITUDE AND IMPACT OF OSTEOPOROTIC FRACTURES

- Osteoporotic fractures are a major cause of morbidity and mortality in the elderly, especially hip and vertebral fractures
- > Almost 60% of fragility fractures are happened in men and women with osteopenia
- > Both osteopenia and osteoporosis should be addressed to reduce fragility fractures.

Osteoporosis



■ Osteopenia

□ Normal bone

Trajanoska K, Schoufour JD, de Jonge EA, Kieboom BC, Mulder M, Stricker BH, Voortman T, Uitterlinden AG, Oei EH, Ikram MA, Zillikens MC. Fracture incidence and secular trends between 1989 and 2013 in a population based cohort: The Rotterdam Study. Bone. 2018 Sep 1;114:116-24.

SOCIOECONOMIC AND HEALTH SYSTEM IMPACT

• These fractures account for **billions in healthcare costs** annually, primarily due to hospitalization, surgical treatment, long-term care, and loss of productivity.

 Policy frameworks emphasize that fragility fractures should be considered sentinel events—signals for systematic post-fracture secondary prevention

CLINICAL AND SURGICAL CHALLENGES FOR ORTHOPEDISTS

- Poor bone quality complicates internal fixation and surgical healing, increasing the rates of delayed union and implant failure.
- Re-fracture rates are higher than the rates in non-osteoporotic fractures.

POLICY AND CARE PATHWAY RECOMMENDATIONS WORLDWIDE

- Integrate osteoporosis and fragility fracture prevention into national chronic disease and healthy aging strategies.
- Establish national registries and audits for fragility fractures to monitor quality of care and population-level trends.
- Improve **reimbursement** for recognized diagnostic (DXA, FRAX) and therapeutic interventions.
- Promote multidisciplinary models of care including orthopedics, geriatrics, physiotherapy, and primary care.

PREVENTION AND EARLY DETECTION

- Expand osteoporosis screening for adults aged \geq 50 with fracture history or risk factors.
- Promote **falls prevention** programs in hospitals and communities, especially for older adults and women in post-menopause.
- Education campaigns should raise public and clinician awareness of osteoporosis as a preventable and treatable disease..

WHAT WAS DONE AND WHAT SHOULD BE DONE?

Many activities were started by Deputy of Health during previous years such as:

- Education campaigns should raise public and clinician awareness of osteoporosis
- Piloting osteoporosis screening for adults aged ≥50
- Piloting secondary fracture prevention programs
- Updating the osteoporosis management guideline (It has been notified by the Deputy Minister of Health to all universities and insurance organizations).
- Assesing the distribution of DXA machine in Iran (shows a significant disparity in the distribution of bone densitometry devices across the provinces and cities)

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WHAT SHOULD BE DONE?

The support of Deputy of Treatment in the improvement of Osteoporosis management in Iran:

- Expanding the secondary fracture prevention programs because:
 - $\sqrt{50\%}$ of hip fractures occurs in 16% of population who experienced one fracture
 - ✓ Most fractures come to hospitals and we have access to high-risk population there
 - ✓ The cost-effectiveness of such prevention program is proven
- Incorporating insurance systems into programs that help financial returns to the health system
- Planning for distribution of appropriate DXA machine to improve osteoporosis and fracture prevention throughout the country

CLOSING MESSAGE

"Fragility fractures are preventable"

Coordinated strategies save both lives and resources.

We know the problem.....

The Fracture Cascade + The Care Gap

One Fracture



More Fractures



Healthcare systems around the world are failing to capture the fracture...and prevent the second fracture.













