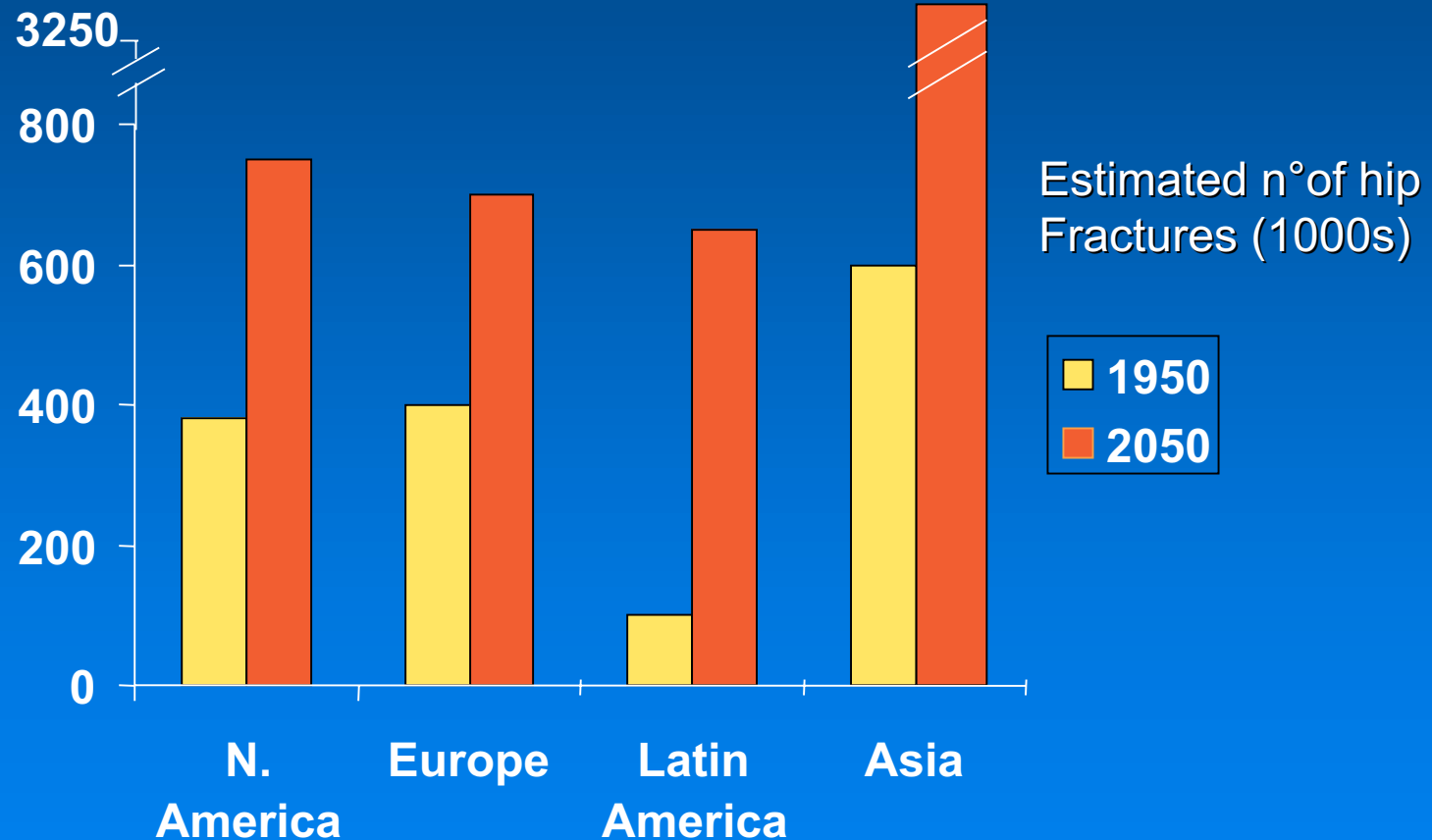
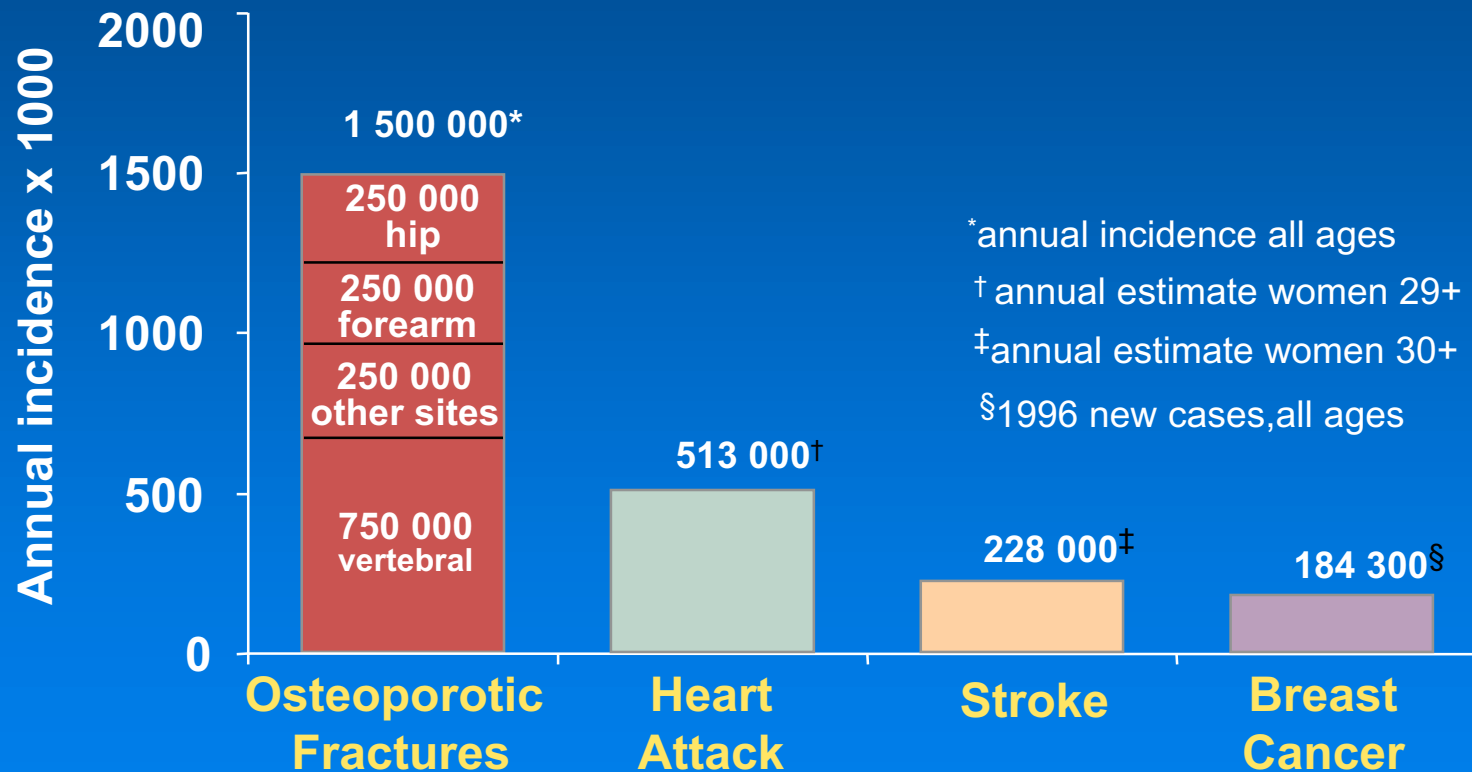


Projected burden of osteoporotic hip fractures worldwide



Total n° of hip fractures: 1990 = 1.66 million; 2050 = 6.26 million
Adapted from Cooper C., Melton U, *Osteoporosis Int* 2:285-289, 1992

Osteoporotic Fractures in Women: Comparison With Other Diseases



Riggs BL, Melton LJ. *Bone*. 1995.
Heart and Stroke Facts. 1996. American Heart Association.
Cancer Facts & Figures. 1996. American Cancer Society.

Risk of Death For Hip Fracture in Women Similar to Other Diseases

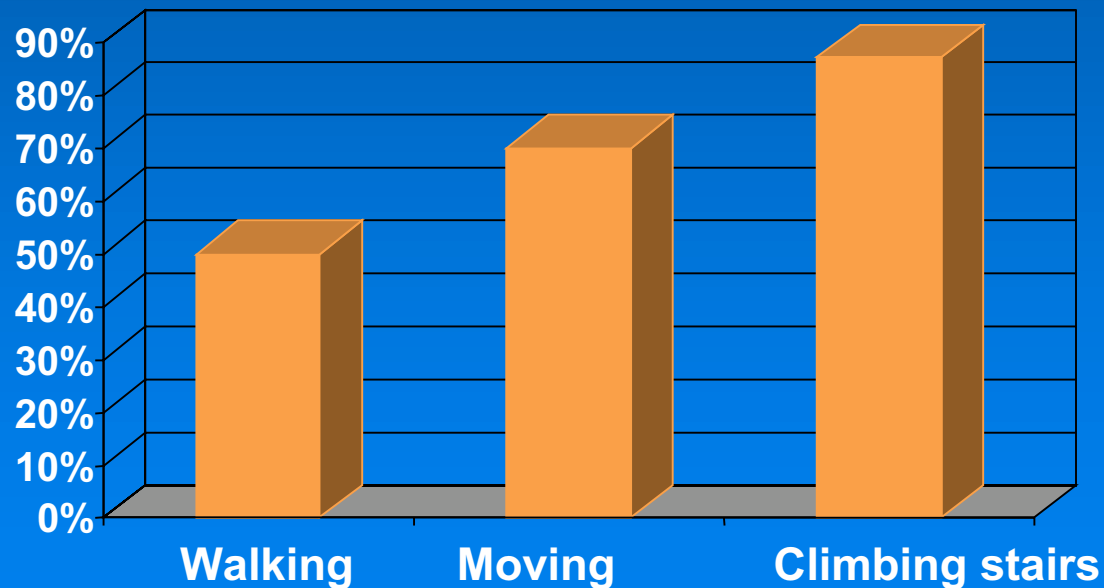
- A 50 year old woman's lifetime risk of dying from a hip fracture is equal to her risk of dying from breast cancer and greater than her risk of dying from endometrial cancer
 - Hip Fracture: 2.8%
 - Breast Cancer: 2.8%
 - Endometrial Cancer: 0.7%

Osteoporosis: The Impact of Disease



Consequences of hip fractures

Percentage of surviving patients who lose the ability to perform independently some daily activities



Marotolli et coll. *J Am Geriatr Soc* 1992 ; 40 : 861-6

Consequences of Vertebral Fractures

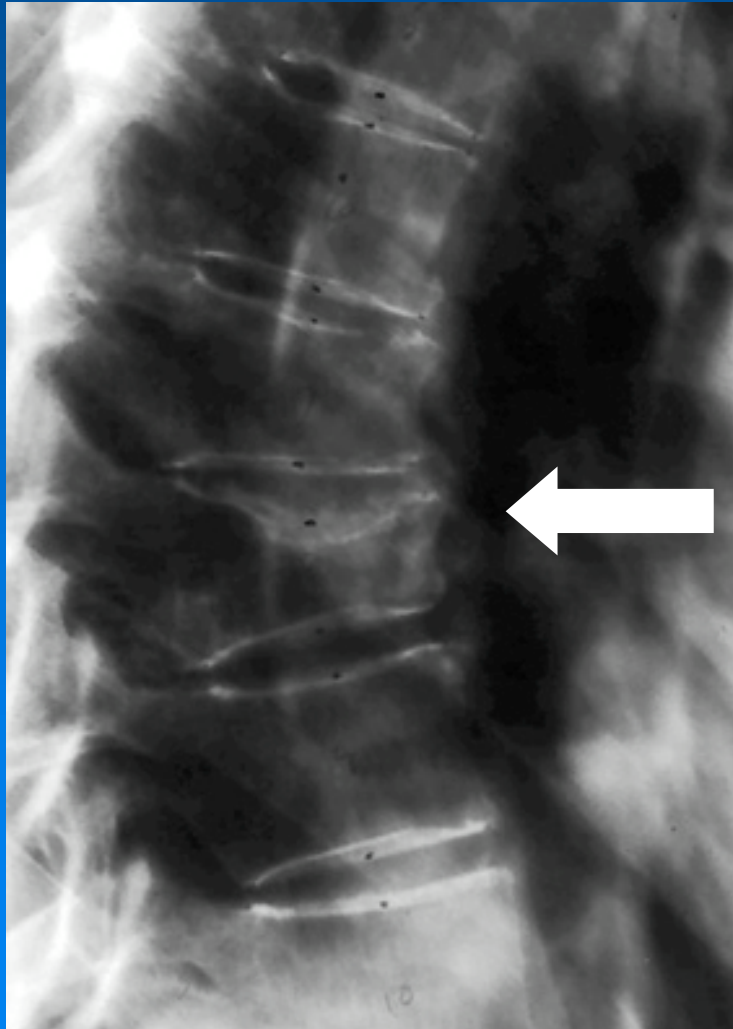
■ Kyphosis

- Loss of height
- Tummy bulges due to loss of space under the ribs



- Acute and Chronic Pain
- Breathing difficulties
- Indigestion & gastro-oesophageal reflux
- Depression
- Impairment of Quality of life

Vertebral fractures indicate a very high risk of further fractures



- Women with vertebral fractures have an **increased risk** of later vertebral fractures, hip fractures and other types of fractures.
- **One woman in five** will suffer from another vertebral fracture within a year
- **30% of vertebral fractures are not diagnosed**

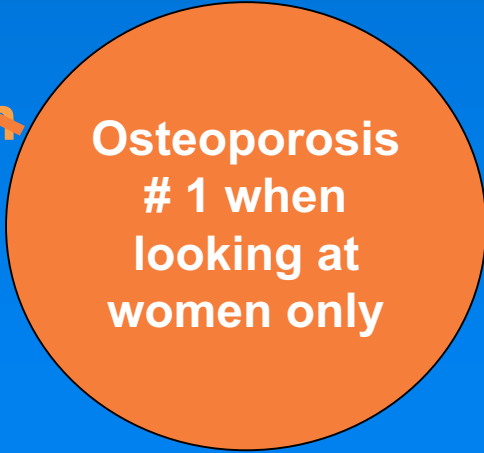
NOF Gallup Survey of 1039 Osteoporotic Patients (>55 years)

Among women who had already fractured:

- More than **80%** feared another fracture
- **73%** feared losing their independence or ability to perform daily activities
- **64%** worried that another fracture would result in long-term institutionalization
- **91%** wished they had known more about prevention

Osteoporosis Results in More Cost Than Many Other Diseases

- Annual cost of acute hospitalization in Switzerland in 1992: 600 million Swiss francs (US\$350 million)*
 - Number of bed days (men and women)
 - **701,000 for osteoporosis**
 - **891,000 for COPD**
 - **533,000 for stroke**
 - **328,000 for myocardial infarction**
 - **201,000 for breast cancer**



Osteoporosis
1 when
looking at
women only

*Lippuner et al. *Osteoporosis Int* 1997; 7: 414-25

Diagnosis of Osteoporosis

Bone mineral density (BMD) measurement is critical to the detection and administration of appropriate therapy when indicated

Dual energy x-ray absorptiometry (DXA):
the gold standard for BMD measurement at
the hip and lumbar spine

Effective and Safe Therapies Exist to Treat Osteoporosis

- Bisphosphonates (alendronate, risedronate)
 - Clinically proven to reduce hip, spine and wrist fracture by approximately 50%
- Selective estrogen receptor modulators (raloxifene)
 - Clinically proven to reduce the risk of spine fracture by 30- 50%

IOF survey

Concern Among Postmenopausal Women

- Overall, 93% of women acknowledge the seriousness of osteoporosis
- REALITY
 - 8 out of 10 do not believe they are personally at risk

IOF survey(2000):How fragile is her future?

IOF survey

Doctors Are Constrained By Lack of Resources

- **75%** of physicians consider the access to screening tools inadequate
- **83%** of physicians say level of health care coverage is inadequate
- **20%** say lack of time limit their screening capabilities

IOF survey(2000):How fragile is her future?

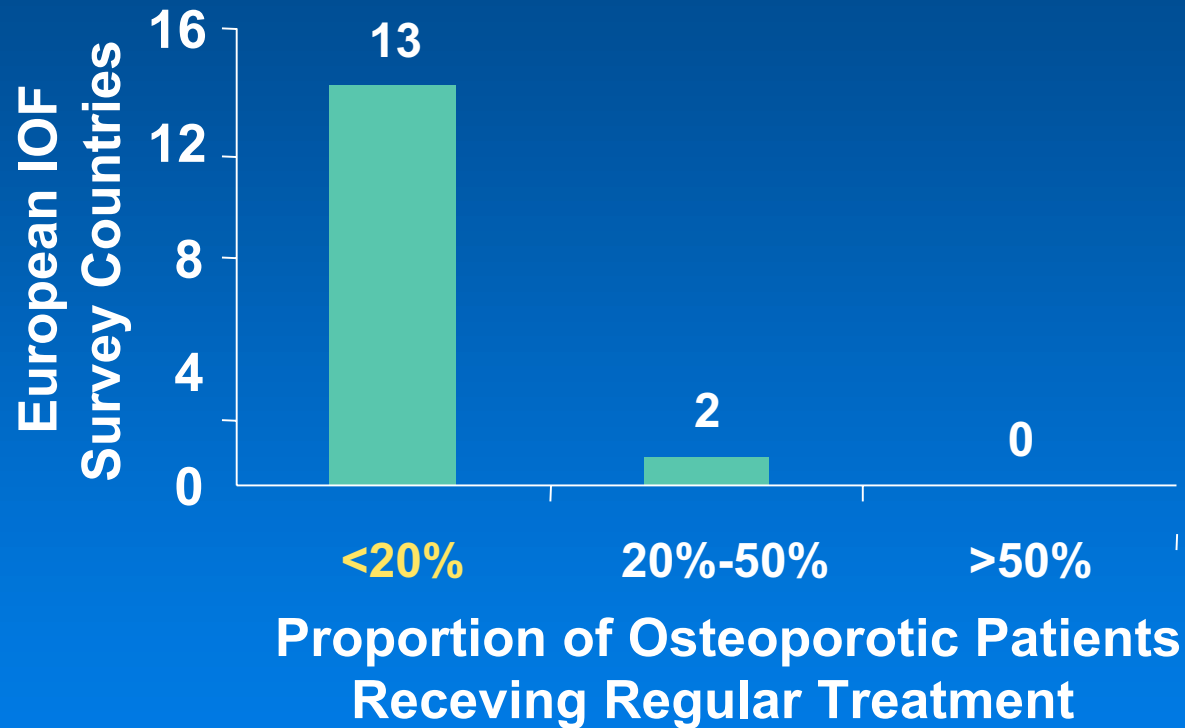
Underdiagnosis = Undertreatment

- If women are not being diagnosed then they cannot be receiving treatment either
 - Even highest risk patients (i.e., those with an existing fracture) are not being treated

IOF International Survey: A cause for concern (2000)

IOF Survey

Low Rate of Treatment



No pharmacological treatment of patients after hip fracture in 15 of 16 European IOF countries

IOF International Survey: A cause for concern (2000)

Awareness and Treatment of Osteoporosis in the world Is Low Despite....

- **Known disability,excess mortality and high cost associated with fractures**
- **Effective test (DXA) for early diagnosis of osteoporosis**
- **Availability of efficacious and safe treatments**



IOF's Mission

- Support member national societies
- Increase awareness and understanding of OP
- Motivate people to take action so OP is routinely prevented, diagnosed and treated



First launch of the 206 bone fund, presided by Mrs N. HARRIRI