Osteoporosis is an ancient disease

X-ray of Egyptian mummy,
c. 5000 B.C. showing osteoporosis

With courtesy of Ghassan Maalouf
But osteoporosis has only recently been defined

"A disease characterized by low bone mass and micro-architectural deterioration of bone tissue, leading to enhanced bone fragility and a consequent increase in fracture risk."

WHO definition, 1994, the first time osteoporosis had a clinical definition
Diagnosis of Osteoporosis
T-score < -2.5

A new EBM project on risk assessment of Osteoporosis is almost finished
The role of IOF

International Osteoporosis Foundation
IOF members of CNS Committee of National Societies

172 members in 85 locations
(November 2005)
Membership status

76 members

172 members

85 locations

33 members
Key new global activities

Program area 1: Science
Program area 2: The IOF family
Program area 3: Promoting policy changes
Program area 4: Outreach and education
Program area 5: Administration and finance
Programme Area 1

Science

Projects:

Socio economic projects
  Health economy model
  Quality of life in Europe
    Qualeffo
    I CAROS – EQ5D to fracture patients in Europe

Osteoporosis in Men- EU project NEMO

Osteoporosis in Children

Genetics

Vertebral fractures in Latin America

EU consulting panel- EU grant

Requirement of resources in Europe
Physician and healthcare workers training

WHO project for GP

Regional courses

BMD training courses

Specific projects
Evolution of World Osteoporosis Day
Three year lifestyle campaign

- 2001: Young people
- 2002: Workplace
- 2003: Quality of life
- 2004: Osteo. in men
- 2005: Exercise
- 2006: Food
- 2007: Reduce your risk

**2001**
- Young people

**2002**
- Workplace

**2003**
- Quality of life

**2004**
- Osteo. in men

**2005**
- Exercise
- Move it or lose it

**2006**
- Food
- Bone Appétit

**2007**
- Reduce your risk
World Osteoporosis Day 2005
“Move it or lose it”

3 posters
IOF website

- Re-design

- Regional sites for Latin America and Middle East

- Society news
WHO Health Academy

- For Children
- For Women
- For Men
- Health care workers
Global burden of osteoporotic fractures

DALYs (% NCD)

- Africa: 0.10
- E Mediterranean: 0.20
- SE Asia: 0.56
- Americas: 0.83
- W Pacific: 0.96
- Europe: 1.75
- World: 0.83
Global burden of osteoporotic fractures

Europe

Osteoporosis 2006
Lung 3244
Colorectum 1862
Breast 1703
Stomach 1352
Lymphoma/Myeloma 733
Leukaemia 712
Pancreas 705
Oropharynx 582
Prostate 541
Liver 532
Ovary 501
Uterus 454
Bladder 438
Oesophagus 428
Cervix 392
Skin 266

DALY's (000)
Risk of having a hip fracture within the next year

- 45-64
- 65-74
- 75-84
- 85-
% hip fracture within the next year for the following diagnoses, Age 45+

- Dementia: 3%
- Other psych.: 2.5%
- Anemia: 2%
- Dizziness: 1.5%
- Diabetes: 1%
- Hypertension: 0.5%
- Other injuries: 1%
- Stroke: 1.5%
- Alcohol dis.: 0.5%
Risk of having a hip fracture, MI, Stroke within the next year if diagnosed dementia
Hip fracture
Projected worldwide increase

Total number of hip fractures:
1950 = 1.66 million
2050 = 6.26 million

Estimated number of hip fractures: (1000s)

Projected to reach 3.250 million in Asia by 2050

Adapted from C., Melton U. Osteoporosis Int. 2:285-289, 1992
Suggestions

- Burden of disease- system-DALY?
- Health economy- Quality of life.
- Use detailed surveys in some countries- risk factors- perceptions- satisfaction.
- Attributable risk calculations based on data
This paper was produced for a meeting organized by Health & Consumer Protection DG and represents the views of its author on the subject. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission’s or Health & Consumer Protection DG’s views. The European Commission does not guarantee the accuracy of the data included in this paper, nor does it accept responsibility for any use made thereof.