

JORDAN

OVERVIEW

The Jordanian Osteoporosis Prevention Society (JOPS) is a nonprofit organization founded in February, 1998 under the umbrella of the Ministry of Social Development and the honorary presidency of HRH Princess Sarvath El-Hassan.

JOPS is a founding member of the Pan Arab Osteoporosis Society (PAOS) which was created in 1998, encompassing osteoporosis societies from several Arab countries. It is also an active member of the International Osteoporosis Foundation (IOF) whose patron is Her Majesty Queen Rania Al-Abdullah.

The society's goals are:

- Spreading awareness among the population as well as among physicians as to the nature of osteoporosis and its effects on the affected individual and on society.
- Working towards preventing this silent disease before fractures occur.
- Facilitating the execution of scientific research related to osteoporosis to best serve the local and international community.
- Helping osteoporosis patients via special programmes sponsored by the society.

JOPS main activities

Osteoporosis awareness campaigns: Lectures about bone health, osteoporosis diagnosis, prevention and treatment are a core activity and are delivered as power-point presentations in Arabic at various venues such as schools, clubs, meeting halls, etc. The material is varied according to the expected audience. On the average 15-20 such lectures are given annually, usually at the request of schools or different societies.

Educational activities to implement the awareness of osteoporosis, all over the country: JOPS has organized several seminars and conferences aimed at doctors in Jordan and the Arab world, often with the participation of international experts on osteoporosis.

National studies about Osteoporosis: Two major studies have been undertaken by JOPS. In 2004-2005, the First Jordanian National Osteoporosis Record (FJoNOR) defined the peak bone mass of Jordanian females and the prevalence of osteoporosis in Jordanian post-menopausal women. Several spin-offs were obtained from that study such as the determination of vitamin D levels in Jordanian women. The FJoNOR survey, from a national sample of 821 females aged 20-89, showed that 50.3% were insufficient in vitamin D (25-OHD level < 50nmol/L) and 33.3% were deficient (25-OHD level < 25 nmol/L) (*unpublished data*).

The second major study was designed to determine the incidence of fragility (osteoporotic) hip fractures in Jordan (FJoHip). This was carried out in 2008-2009 and involved obtaining data about every single patient with a hip fracture admitted to any hospital in Jordan over a period of one year.

The data from both these studies has been used to include Jordan in the 10-year fracture risk assessment (FRAX®) model.

JOPS has been given the task of translating all the FRAX® material into Arabic. This can now be viewed on <http://www.shef.ac.uk/FRAX/>

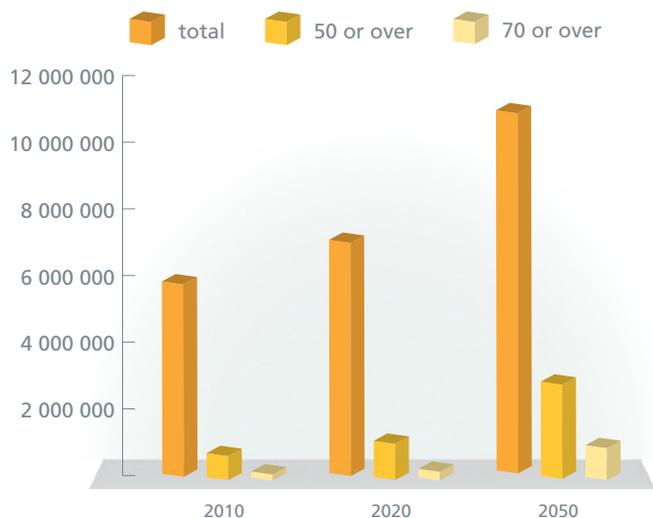
The Jordanian Ministry of Health and the Department of Statistics have had a central role in coordinating both these surveys. World Osteoporosis Day is celebrated around October 20 annually by holding public sessions that attract hundreds of people to watch presentations about osteoporosis, discuss their bone-health problems with volunteer doctors, and watch a skit about osteoporosis in an informal, friendly atmosphere. Various drug companies involved with osteoporosis treatment have also been key sponsors of our various activities and studies.

KEY FINDINGS

The present population in Jordan is estimated to be 6 million; of this 12% (750 000) is aged 50 or over and 3% (194 000) is 70 or over. By 2050, it is estimated that 26%

(3 million) of the population will be 50 or over and 9% (1 million) will be 70 or over, while the total population will increase to around 11 million (fig 1).

FIGURE 1 Population projection for Jordan until 2050



REF US Census Bureau

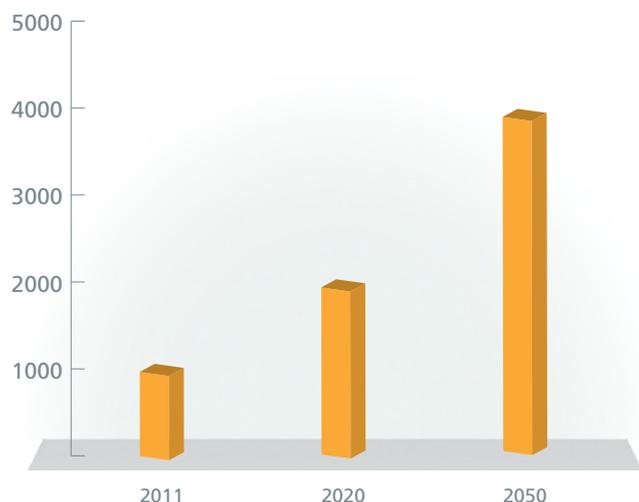
EPIDEMIOLOGY

No available information.

Hip fracture

Currently, it is estimated that there are 1008 hip fractures per year in Jordan, however based on the First Jordanian Hip Fracture Survey (2008), it is predicted that this number will quadruple by 2050.

FIGURE 2 Number of hip fractures projection



In Jordan, 80% of all hip fractures are surgically treated.

Direct hospital costs are estimated to be USD 7000.

The average hospital bed days for all hip fractures is 7 days (median figure obtained from Jordanian Hip Fracture survey in 2008).

Vertebral fracture, other fragility fractures

No available information.

DIAGNOSIS

There are 25 DXA machines in Jordan and 4 ultrasound machines located in urban centres. A DXA exam costs USD 70 and an ultrasound scan costs USD 40. The waiting time for a DXA scan is 0-1 day and there is no wait for ultrasound.

REIMBURSEMENT POLICY

DXA exams and QUS scans are reimbursed by the Jordanian government health plan and by most private health care insurances.

CALCIUM AND VITAMIN D

Calcium and vitamin D supplements are available, as well as fortified foods.

PREVENTION, EDUCATION, LEVEL OF AWARENESS

Osteoporosis is now recognized as a major health problem in Jordan.

There is no programme in lifestyle prevention of osteoporosis nor government public awareness programmes. However, the Middle East and North Africa Consensus On Osteoporosis (2007) has been approved by the government.

The level of awareness among individuals is considered as moderate and the level of awareness among health care professional is low, except among orthopedists, rheumatologists, endocrinologists and some gynecologists. In general, allied health professionals are poorly equipped and trained to participate in the care of patients with osteoporosis.

The Jordanian Osteoporosis Prevention Society has been very active in promoting bone health awareness at the national level via lectures, medical conferences, brochures, handouts, media involvement (TV appearances, radio interviews, newspaper and magazine articles). This has led to a vastly increased awareness about osteoporosis by the medical establishment and general public. Several private insurances now cover DXA testing and medical treatments of osteoporosis as a result of JOPS efforts. Government guidelines now exist.

RECOMMENDATIONS

The costs of treatment should be reviewed when insurance is not available and measures need to be put in place to improve patient compliance with appropriate therapy. Strategies and programmes should be undertaken to improve awareness of the burden of osteoporosis and treatment guidelines among physicians. For example there is often confusion between osteoporosis and other musculoskeletal diseases, such as osteoarthritis.

