Republic of Belarus

Overview

The first consulting room for osteoporosis prevention opened in 1997 on the premises of the M.P. Masherov’s Republican Hospital for Veterans Affairs and the first densitometry clinic began in 1992 in the clinic of the Research Institute of Radiation Medicine and Endocrinology. In 2005, a Public Association ‘Fight Osteoporosis Together’, was established with more than 600 members. This association promotes knowledge of osteoporosis among health care workers and the general population. It conducts regional and international scientific conferences on the issue, supervises research work, provides treatment and consultation work for osteoporosis patients, organizes and conducts schools on osteoporosis for the general population and health care workers, and widely covers the problem of osteoporosis in the media (regular sessions on the first national channel on the Health Programme, and on radio – regional and republican printed media).

Key findings

The present population of the Republic of Belarus is estimated to be 9.5 million, of this 34% (3.2 million) is 50 years of age and over and 11% (1 million) is 70 and over. By 2050, it is estimated that 51% (4 million) of the population will be 50 and over and 21% (1.6 million) will be 70 and over while the total population will decrease to 7.8 million (fig. 1).

The population of the country is 9.5 million people. It is suggested that 30% of people over 50 suffer from osteoporosis with 1 in 5 women over 55 years (350-400,000 people) (fig. 2) and 1 in 8 men over 60 years (150,000 people) having osteoporosis. The number of people with osteopenia ranges from 900,000 to 1 million people².

Fractures

Nearly 160,000 traumas and fractures occur every year in the Republic of Belarus, and 70% of them are so-called osteoporotic fractures. Elderly people are at particularly high risk for such traumas: they affect 15% of women older than 50 and 6% of men in the same range.
In 2008, 642 people aged 18 and over were considered to be disabled due to hip or lower extremity traumas. The average stay at hospital for any fracture is about 12.9 days. The average cost of a hip fracture osteosynthesis is 1,500-2,000 USD and an endoprosthesis costs 3,000-5,000 USD. Around 30% of patients with hip fracture are provided with rehabilitation. The average cost of rehabilitation after hip fracture is 1,000 USD. For the citizens of the Republic of Belarus the treatment is free of charge.

Diagnosis
The total number of DXA machines in the country is seven (0.8 per million population). Five DXA are located in the capital city Minsk, as well as in Brest and Gomel. There are also six quantitative ultrasound instruments. The cost of one DXA exam is 10-15 USD. The mean waiting time for the examination is 1.5 months. For the citizens of the Republic of Belarus densitometry is free if they are referred by a doctor and have medical indications for the procedure.

Reimbursement
Medications prescribed by the “concilium” (comprising the treating doctor, specialist in the field of osteoporosis and representative of the administration of the clinic) are given with a 10% discount. Calcium and vitamin D medications are available over-the-counter.

Calcium and vitamin D
Marked vitamin D deficiency has been found in 30% of postmenopausal women and 40% have a moderate deficiency. Milk consumption in Belorussia comprises around 260 liters per person annually. Nutritional products for children and certain milk and dairy products are also enriched.

Prevention, education, government policy
As the state level osteoporosis is recognized as one of the most important problems in health care. The Health Ministry of the Republic of Belarus officially introduced and implemented the following two practices in medical institutions:
1. procedures to identify individuals at high risk of osteoporotic fractures;
2. procedures for the complex diagnosis of low bone mass and osteoporosis in children and young adults.
A telephone hotline was opened and a website devoted to osteoporosis has been established. http://osteoporosis.belmapo.by

Additional information about the activities of Minsk City Centre of Osteoporosis
The Osteoporosis Centre of the city of Minsk was opened in 2006. Every day 60-70 patients visit the centre with 35-40 densitometry examinations carried out each shift, followed by consultation with specialists. In 2009 activists of the Belarus Public Association ‘Fight Osteoporosis Together’ held the International Conference on the Problem of Osteoporosis which was attended by 500 doctors, and in 2010 the IOF Osteoporosis Diagnosis Course was held with 300 participants. The Osteoporosis Centre carries out regular educational courses for various medical specialists taking postgraduate medical courses at the Belarusian Medical Academy of Postgraduate Training. Lectures on the problems of osteoporosis are included in the programme of education within the departments of therapy, paediatrics, endocrinology, laboratory diagnostics and others.

References
1. Source: U.S. Census Bureau, International Data Base.