Philippines

Overview

Awareness of osteoporosis in the Philippines was one of the lowest when compared to other Asian countries in the mid 1990s. Ten years later, awareness of the disease has moved one level higher. Many recognize the consequences of growing old and osteoporosis is one of the greatest fears of the elderly population. Osteoporosis is just one among the major health issues in the country due to a rapid increase in the ageing population. While the government has recognized osteoporosis as a major problem and has initiated measures to improve awareness about the disease, more sustained effort and structured programs are essential for substantive progress to be made. The elderly in the Philippines are usually cared for by their families. There is an urgent need to have more preventive programs which are government aided and also an increase in the diagnostic facilities especially in rural areas.

Currently the number of people over 60 years, in a population of 96 million, is 6-7%. The Philippines Osteoporosis Society has posed a Call to Action to the Philippines Government to try and address the shortfall in services for the many people suffering from osteoporosis and fractures (see recommendations).

Key findings

The current population of the Philippines is 96 million. Presently the number of people over 60 years of age is between 6.0 to 6.7% (6 million) of the total population. It is expected to increase to 110 million by 2020 and 146 million by 2050 and of this, 8.8% (9 million) and 17.9% (26 million) will be more than the age of 60 years (figure 1).

The prevalence of hip fractures in individuals over 70 years and above was estimated to be 160 per 10 000. Based on this prevalence rate, it is estimated that there were about 28 000 hip fractures in 2003 and 34 000 in 2005. The numbers are expected to reach 65 000 by the year 2020 and almost 175 000 by the year 2050.

A recent survey of urban postmenopausal women using ultrasound showed a 19.8% prevalence of osteoporosis, with age and lower body weight being major risk factors. A 2003 survey based on Osteoporosis Self Assessment Tool for Asians (OSTA) suggested that 11.23% women and 8.97% men over 50 are at high risk for osteoporosis; the risk in the Philippines Overview

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creased markedly with advancing age. It is predicted that about 4 million people will be at high risk by 2020, and this number may surpass 10 million by 2050 (figure 3).

**Figure 3** Projection of osteopenia and osteoporosis

![Graph showing projection of osteopenia and osteoporosis](image)

Philippine Health Insurance Program claims from 2001 – 2005 revealed that 66.46% of hip fractures were surgically treated. The total number of claims doubled between 2002 and 2005; the number of claims for vertebral fractures increased fourfold in this period.

On an average the direct cost for the treatment of a hip fracture in the elderly varies from 2000 USD per case at a government hospital to 6500 USD per case at a private hospital. The hospital stay for a patient is a minimum of 7 nights for an uncomplicated case. Even though hip fracture is the fourth or fifth most common cause for claim, it has the highest number of admission days at the hospital and higher cost claims. The annual economic burden of fractures, as estimated from insurance claims, is higher than carcinoma of the colon, prostate and ovary but less than that of breast cancer, and chronic disorders like diabetes and hypertension. The projection is that the claims will rise from 64 million in 2020 to 170 million USD in 2050. The indirect costs of hip fracture are much higher. This includes cost for rehabilitation therapy, transportation and meal allowance for the caregiver. The projections for 2020 are 10.48 million to 43.32 million USD and 2050 27.42 million to 117.28 million USD. Other than this there is loss of productivity for at least one of the family members during hospitalization, loss of salary, reduced productivity for the employer and other costs.

**Table 1** Hip fracture treatment

<table>
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<tr>
<th>% surgically treated</th>
<th>minimum hospital stay (nights)</th>
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<tr>
<td>66.46</td>
<td>7</td>
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</table>

 Calcium intakes in the Philippines are generally inadequate, averaging about 440 mg/day (2003 Food and Nutrition Research Institute of the Philippines Survey), and data on vitamin D status of the population is not available.

Virtually all drugs used in treatment of osteoporosis are available including oestrogen/progesterone preparations/ tibolone, calcitomin, all the bisphosphonates, strontium ranelate and parathyroid hormone. Brand-ed formulations are commonly used, while alendronate is available in generic form. Both government and private health plans offer partial reimbursement and senior citizens get 20% discounts on drug costs. Calcium and vitamin D are available without prescription. Although the government does not recognize osteoporosis among the top 10 health priorities, the Republic Act No. 19 implemented in 1990 declares every 2nd week of October as National Osteoporosis Awareness Week. There are National Guidelines 2004 for the Diagnosis, Prevention, and Treatment of Osteoporosis. The Osteoporosis Society of the Philippines Foundation (OSFFI) is actively promoting both health professional and public awareness programs. There are no government approved guidelines or training programs for the health professionals, but the OSPFI has joined with the Philippine Academy of Family Physicians in 2007 to conduct regular modular courses for general physicians.

A survey conducted in 1996 for public awareness which revealed that 3 out of 10 Filipino women were aware of osteoporosis. Public programs and free peripheral densitometry with corporate support are available. The efforts of OSPFI with the Philippines...

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**Table 2** Direct hospital cost

<table>
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<tr>
<th>per case (USD)</th>
<th>total 2020</th>
<th>total 2050</th>
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<tr>
<td>2500 (public hospital)</td>
<td>64 million</td>
<td>170 million</td>
</tr>
<tr>
<td>6500 (private hospital)</td>
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</table>

There are 21 DXA machines which are all confined to the urban centres. There is only one DXA machine for every 500 000 adults 50 years old and above, and the waiting time for a test does not exceed 2 days. Senior citizens can claim 20% rebate. Ultrasound is done free; however the cost for DXA varies from 20 to 130 USD.

**Table 3** Diagnostic tools and cost

<table>
<thead>
<tr>
<th>total population (’000s)</th>
<th>96 000</th>
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<tr>
<td>total DXA machines</td>
<td>21</td>
</tr>
<tr>
<td>DXA machine / 10 000</td>
<td>0.002</td>
</tr>
<tr>
<td>cost of DXA scan (USD)</td>
<td>20-130</td>
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<tr>
<td>income per capita per month (USD)</td>
<td>286</td>
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Calcium intakes in the Philippines are generally inadequate,
Bone and Joint Decade council has begun to improve the level of awareness among multiple specialties in the medical field.

The Osteoporosis Society of the Philippines Foundation Inc. (OSPFI) started its fight against osteoporosis in 1998. Presidential Proclamation No. 19 directs all local and national agencies along with the private sector to be supportive of activities of OSPFI in the annual celebration of NOAW. The OSPFI also joins the International Osteoporosis Foundation (IOF) in celebrating the World Osteoporosis Day annually on the 20th day of October where the global concern for the disease is highlighted.

OSPFI offers the following call to action in regard to improved osteoporosis prevention and treatment:

- Inclusion of osteoporosis as one of the official causes of significant morbidity and mortality of elderly persons 65 years and above
- Health care awareness programs, which should be closely coordinated with national osteoporosis organizations or societies
- National research studies to establish baseline risk for fracture in elderly Filipino persons
- Drawing up strategies for the early detection of high risk individuals through the inclusion of the use of Osteoporosis Screening Tool for Asians (OSTA), and case finding strategies of measuring bone density in health care packages of adult women and men
- Evaluation on impact of osteoporosis related fragility fractures, most especially vertebral fractures by including baseline thoraco-lumbar radiographs and central BMD measurement where available in health care packages of all postmenopausal women and elderly men age 65 years and above
- Revise privileges for the senior citizens set forth in the provisions of Republic Act 9257 with an increase of all grants accorded to senior citizens to at least 25% discount (from 20%).
- In view of such low calcium intake in the population there should be a call for increased fortification of food.

References

1. U.S. Census Bureau, International Data Base
5. Li-Yu J, Dela Rosa MF, Bonifacio L. 2005

The Philippines currently has a young population with slightly more than 6% above 60 years of age. However by 2050 almost 18% of the population will be over 60.