Editorial

Osteoporosis: Second in Line

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Editor

The government and NGOs have remained silent over the rampant prevalence of osteoporosis, a disease of the bones. The need for maximum awareness regarding the disease cannot be stressed enough, and it is suggested that people adopt a healthy lifestyle in order to protect and equip themselves in the battle against osteoporosis.

Osteoporosis is a silent killer, even the educated masses lack awareness and information when it comes to Osteoporosis. The Punjab government has announced to include Osteoporosis in its Prevention and Treatment of Non Communicable Diseases program.

It is stated that of all the complications experienced by females after their menopause none was more devastating than osteoporosis. It is estimated that about one-third of women aged between 60 and 70 years, and two-thirds of all women aged 50 years or older, were afflicted by this disorder. Fracture incidence is reported to be 2 to 3 times higher than heart attacks, strokes and breast cancer among women and needs to be paid the same amount of attention. According to the World Health Organization osteoporosis is second only to cardiovascular disease and is a leading health care problem. Statistics from the International Osteoporosis Foundation claim that, 30 to 50 per cent of women and 15 to 30 per cent of men were likely to suffer a fracture related to osteoporosis in their lifetime.(1)

More than 75 million people worldwide are affected by osteoporosis, whereas in Pakistan, it is estimated that, over 40 percent of women suffer from osteoporosis. In Pakistan there are 9.91 million people with osteoporosis out of which 7.19 million are females and 2.71 million are males. This number will rise to 13 million by 2050. Fifteen percent of the victims are over 60 years old. (2)

The risk factors for a fracture include: low bone mass density, advanced age, lack of exercise, menopause, Vitamin D or Calcium deficiency, use of hard drinks and junk food with lesser nutritional ingredients, excessive use of tea, carbonated drinks, alcohol and heparin, a history of fracture over the age of 50, a family history of hip fractures, long term use of steroids, rheumatoid arthritis and smoking.

The major consequence of osteoporosis is a fracture which, in the target population, occurs after a fall, most commonly resulting in hip and femur fractures. And such fractures consequently lead to, debility, incurrence of high cost in terms of treatment and rehabilitation, loss of freedom, mobility and prolonged dependency on others. Hip fractures are a particularly dangerous consequence of osteoporosis in the elderly. Approximately 20% of those who experience a hip fracture will die in the year following the fracture and only one-third of hip-fracture patients regain their pre-fracture level of function.

Osteoporosis afflicts nearly 16 per cent of the population of Pakistan. Women, specifically after menopause, are the main victims. It makes the bones weak and brittle, increasing the risk of a fracture by several folds.

In Pakistan, osteoporosis is normally diagnosed once the patient has suffered a fracture, which is a practice that needs to be stopped. Osteoporosis in itself, is easily diagnosed and prevented. It is therefore, increasingly being recognized by the medical fraternity as a significant health problem. There is an urgent need to diagnose and manage osteoporosis, before it results in catastrophe.

Osteoporosis may be diagnosed directly through the use of a bone scan that measures bone mineral density (BMD).X-ray technology is used in the scanning, known as bone density scanning or bone mineral density test. Two other names for it are dual-energy X-ray absorptiometry (DXA for short) and bone densitometry. Combined with the evaluation of risk factors, DXA offers an indication of the likelihood of fractures occurring due to the osteoporosis. The test is also used to track response to treatment. (3)

Fracture risks can be lowered by preventive lifestyle measures against osteoporosis:

- Get enough calcium (about 1,000-1,200 mg a day, with a higher amount needed by women over 50 and everyone over 70). Calcium is available in the diet or through supplements
- Get enough vitamin D (doctors can help monitor this; sunshine enables vitamin D production, so preventing being housebound helps; it is available from egg yolks, saltwater fish, and liver; the daily recommended amount is 600 international units, and 800 IU in men and women over 70)
- Stop smoking if applicable (this affects a number of factors, including reducing women's estrogen levels)
- Drink alcohol only in moderation (poor nutrition and risk of falls are factors here)
- Exercise - weight-bearing exercise, including simple walking, promotes healthy bone and strengthens support from muscles. Exercises such as yoga also promote posture and balance and so reduce the risk of falls and fractures. (4& 5)

It is imperative that awareness of osteoporosis be raised through campaigns and seminars, that the government and NGOs raise their voice to highlight this preventable cause of morbidity, and the masses be educated to adopt a healthier lifestyle and thwart osteoporosis.

REFERENCES

1. Ahmad A, Bakar A, Adil O, Iqbal M. Healthy Lifestyle Suggested to Combat Osteoporosis. The News 2014 October 19; City News, MKRMS Seminar Report:13 (Cols 2-8).
2. Saadat K. Osteoporosis and its Management. The News 2013 January 20; News International. Conference Presentation.
3. Radiology Info. Radiological Society of North America. Bone densitometry. Oak Brook Illinois US: Information published online.
4. American Family Physician. Osteoporosis. Am Fam Phys 2009; 79(3): 201-202.
5. American College of Rheumatology. Osteoporosis. Atlanta, Georgia, US: Information published online.