## Want to beat bone loss? Change your lifestyle!

Most people remain oblivious to medical care until the damage is done

Osteoporosis in BANGLADESH

Around 56 Lakh

people suffering

from Osteoporosis

BISHAKHA DEVNATH

HEN frequent painkillers stopped bringing much relief, Radhika Saha went to see a doctor for severe back pain. That was when she found out her bones were weakening, and that if they were not taken care of, the symptoms might lead to fracture.

Losing bone mass is defined as osteoporosis (meaning porous bone). Like 60-year-old Radhika, women are more likely than men to suffer early from the disease as a result of post-menopausal health complications.

Immediate medical attention and change in lifestyle can delay or slow down the process of reduction in bone mass and strength whereas a lack

Around 2 crore

people suffering

from bone erosion

Women suffer from

osteoporosis more

than men do

of awareness among doctors and patients causes most cases to remain undiagnosed in the country until it is too late, according to experts. There are preventive measures as well like including milk and dairy products in everyday diet, regular exercise and enough exposure to

Osteoporosis is a gradual decrease in bone density and so the symptoms pain around the wrist, lower spine and hip—appear long after one begins losing bone mass.

sunlight for the

body to produce

vitamin D.

Everyone suffers from the disease sooner or later as he or she ages, said Arun Kumar Sarker, assistant professor of orthopaedics at the National Institute of Traumatology and Orthopaedic Rehabilitation (Nitor) in the capital. People should be made aware of this so it can be controlled and so that they can avoid pain, fracture and fracture-inflicted death.

Globally, one in three women and one in five men over the age of 50 will have an osteoporosis-related fracture in their lifetime.

In this country, people from lower socioeconomic strata are thought to suffer more from osteoporosis and osteoporosis-related fracture owing to poor nutritional diets and their inability to afford medical

An inactive lifestyle and less exposure to sunlight are major factors behind the loss of bone mass among people belonging to middle and upper classes. And a lack of knowledge about treatment

opportunities leaves them crippled even though the health issue is treatable.

No research has been done yet to find out the severity of the problem across different strata of the population here, but the problem seems to be severe if we go by the experiences of handling outpatients in hospitals, said Prof Syed Atiqul Haq, chairman of the medicine department at Bangabandhu Sheikh Mujib Medical University.

Eight out of 10 patients whom he has come across have been diagnosed with osteoporosis when subjected to the bone mineral density (BMD) test, an efficient but expensive way to confirm the disease.

Most of the patients who receive healthcare at public hospitals are middle-class, said Mr Haq. "The

Around 40% of

women (16 to 45

years) have low

bone density

Average intake of calcium a day

should be 1000 mg, but it is

only 303 mg in Bangladesh

conditions of the poor and the disadvantaged are obscure."

All women

aged above 65 and men above 70 should take the BMD tests, regardless of whether there are any signs of osteoporosis, to learn about their bone health, Mr Sarker said. That would help them take precautionary measures like increasing their calcium intake or receiving necessary medication. Often

doctors prescribe

medication looking at symptoms only— without taking the test that costs at least Tk 3,000 because most patients would consider it as an unnecessary burden before the treatment even begins, he said. Also, a very few healthcare facilities offer such tests. When diagnosis and treatment costs are matters of

concern, the need for addressing the skeletal disease is imperative. By 2050, the population pyramid will change with a swelling elderly population replacing today's young population.

The government can play a significant role. It can bridge the gap by ensuring the needed infrastructure and the number of specialised physicians required to provide treatment to a greater population.

It can also create awareness and take measures paying heed to the special nutritional needs to keep osteoporosis at bay, said Mr Haq. For example, "The government can issue a directive that milk cannot be sold unless fortified with vitamin D" as is the case of

## 'Osteoporosis can be life-threatening and a major cause of long-term disability'

In conversation with Dr Aminul Hasan, MBBS, D.Orth, MS Orth, Consultant, Orthopaedic Surgery, United Hospital Limited

What are the major reasons behind osteoporosis?

Throughout our lifespan, our bodies undergo many physiological changes. Our bones grow till the age of 20, but our muscles keep growing and we continue to gain body mass. This disproportionate growth between bones and muscles is a major reason behind osteoporosis. Besides this, around the age of 50, the body starts getting affected by many chronic diseases such as diabetes and cardiac problems. These affect the internal tissues and lead to the reduction of bone density, thus resulting in osteoporosis.

Osteoporosis is a worldwide problem and, in most countries, up to one in three women and one in five men aged 50 years or over suffer osteoporotic fracture. Osteoporosis causes bones to become weak and fragile, making them vulnerable to minor falls, bumps, sudden movement or even a sneeze. Fractures caused by osteoporosis can be life-threatening and a major cause of pain and longterm disability.

Which age groups of people are most likely to be affected and why? How are women affected in particular? Women aged above 45 and men aged above 50 are more likely to get affected by osteoporosis. However, women are more likely to suffer from the disease due to causes such as hormonal changes, post-menopausal issues, and the stress women endure during pregnancy and motherhood. Besides, women also undergo a lot of physical and mental stress compared to men.

Societies in South Asian countries like Bangladesh are mainly maledominated. In such a scenario, the consumption of nutritious food in larger quantities is more prevalent among men compared to women. Thus, women, regardless of whether they are employed or not, usually remain deprived of a nutritious diet. They do not have the opportunity to take care of themselves as they remain too preoccupied fulfilling responsibilities towards family and work. Back pain and knee pain are some of the common problems that arise among women due to osteoporosis. Moreover, postmenopausal women, and those who have had their ovaries removed or who

have experienced early menopause before the age of 45 years, must be particularly concerned about their bone health. Rapid bone loss begins after menopause when the protective effect of estrogen is reduced. Intake of improper medication, mainly painkillers, also leads to loss of bone density, resulting in osteoporosis. For some women, hormone replacement therapy may help slow down the loss of bone density, when applied before the age of 60 years or within 10 years after menopause.

What are some good lifestyle habits for maintaining healthy bones? The first step, regardless of age or the state of bone health, is to ensure a healthy lifestyle. This includes doing regular exercises, maintaining a balanced diet rich in calcium, protein, vitamin D along with other important nutrients, and avoiding unhealthy habits such as smoking or excessive intake of alcohol. Access to fresh air and sunlight

is also necessary for maintaining healthy bones. Vitamin D, a crucial component for maintaining healthy bones, is made in our skin through exposure to the sun's ultraviolet rays. Vitamin D helps the body absorb calcium. However, Vitamin D deficiency is common, particularly in the elderly and in those who do not go outdoors frequently. Moreover, since most South Asian people, like those from Bangladesh, tend to have darker complexion, the absorption of Vitamin D through sunlight tends to be difficult. Physical exercise is very important to prevent obesity—a major cause of osteoporosis. Disorders such as anorexia and bulimia which can result in extreme weight loss are also dangerous for bone health. In young women, this can lead to estrogen deficiency (much like menopause) and dramatically reduce calcium retention. The result is rapid loss of bone minerals.

How should people who are already suffering from osteoporosis take care of themselves?

Individuals who are suffering from osteoporosis should do regular checkups. Besides maintaining proper diet and medication, individuals should do exercises to reduce obesity and take



DR AMINUL HASAN

care of other chronic diseases such as diabetes. Their diet should comprise of enough fruits and vegetables along with provision of sufficient amounts of calcium and Vitamin D. Patients at high risk will need proper drug therapy to effectively protect themselves against fractures. Today, there is a wider variety of treatment options than before. The type of treatment recommended will depend on one's individual risk profile.

What needs to be done to create mass awareness about bone health? In Bangladesh, individuals are more concerned about chronic illnesses like cardiac and renal diseases. They are not much concerned about the causes and effects of osteoporosis. Mass media can play an important role to raise awareness about osteoporosis.

Special programmes, focusing on women in particular, should be arranged. If we can raise awareness among the homemakers, they can in turn take care of themselves as well as their families.

The government should also try and carry out awareness programmes to reach the mass population. The health sector can play a major role as well but the channel needs to be created via the health ministry to provide treatment facilities to the general population. For example, reducing the cost of Bone Mineral Density (BMD) test will help increase awareness and interest among different socio-economic groups.

The interview was taken by Kazi Nafisa Hasan of The Daily Star.

