

# Osteoporosis: a silent killer

DR SHAHJADA SELIM

World Osteoporosis Day awareness on October 20 each year dedicated to raising global awareness of the prevention, diagnosis and treatment of osteoporosis and related bone diseases. It aims to put osteoporosis and fracture prevention on the global health agenda and reaches out to healthcare professionals, media, policy makers and the public at large. The theme of the day for this year is 'Love your bones - Protect your future'.

Osteoporosis is a bone disease that occurs when the body loses too much bone, makes too little bone or both. As a result, bones become weak and may break from a fall or, in serious cases, from sneezing or minor bumps.

The 2017 World Osteoporosis Day campaign aimed to:

- Promote worldwide awareness of osteoporosis and understanding of the heavy toll the disease can take on an individual's future if left undiagnosed and untreated.
- Improve understanding of the link between osteoporosis and fractures—which can be a major cause of disability and early death in older adults.
- Encourage individuals to recognise risk factors, including lifestyle factors, and to seek testing and treatment if required in order to protect their longer term future.



Promote bone-health nutrition and exercise as essential to good bone health, as well as awareness of the role of calcium, good nutrition, and regular exercise during childhood and adolescence when bones are developing.

Enable healthcare professionals and health authorities to close the persistent 'care gap' by addressing critical issues such as under-diagnosis and under-treatment, lack of fracture liaison services to systematically identify and treat high risk patients, and poor adherence to treatment.

Fractures from osteoporosis are more common than heart attack, stroke and breast cancer combined.

Due to its prevalence worldwide, osteoporosis is considered a serious public health concern. Currently it is estimated that over 200 million people worldwide suffer from this disease. At least 40% of these women and 15-30% of men will sustain one or more fragility fractures in their remaining lifetime. Ageing of populations worldwide will be responsible for a major increase in the incidence of osteoporosis in postmenopausal women.

Osteoporosis itself has no symptoms. Its main consequence is the increased risk of bone fractures. Osteoporotic fractures occur in situations where healthy people

would not normally break a bone; they are therefore regarded as fragility fractures. Typical fragility fractures occur in the vertebral column, rib, hip and wrist.

Risk factors

The most important risk factors for osteoporosis are advanced age and female sex, oestrogen deficiency following menopause, or surgical removal of the ovaries in conjunction with a rapid reduction in bone mineral density, while in men, a decrease in testosterone levels has a comparable effect.

Vitamin D deficiency, tobacco smoking, malnutrition, underweight/inactive, soft drinks, excess consumption of alcohol etc. is potentially modifiable risk

factors. Certain medications have been associated with an increase in osteoporosis risk.

Diagnosis

The diagnosis of osteoporosis can be made using conventional radiography and by measuring the bone mineral density (BMD). The most popular method of measuring BMD is dual-energy X-ray absorptiometry.

Prevention

Lifestyle prevention of osteoporosis is in many aspects the inverse of the potentially modifiable risk factors. As tobacco smoking and high alcohol intake have been linked with osteoporosis, smoking cessation and moderation of alcohol intake are commonly recommended as ways to prevent it. Proper nutrition and physical exercise are very much protective to bone loss.

Management

Weight-bearing endurance exercise and/or exercises to strengthen muscles improve bone strength in those with osteoporosis.

Medications

Biphosphonates are useful in decreasing the risk of future fractures in those who have already sustained a fracture due to osteoporosis.

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## GLOBAL ACCOLADE

### UNESCO awards Bangladeshi microbiologist



Dr Samir Saha

Professor Dr Samir Saha, an eminent microbiologist of Bangladesh has been announced for UNESCO Carlos J. Finlay Prize in Microbiology in 2017 along with Shahida Hasmin, a Pakistani microbiologist. The award was created by UNESCO in 1977, on the initiative of the Government of Cuba,

and is given to scientists with research and work that signify an important contribution to the field of microbiology.

The prize will be granted on November 6, 2017 within the framework of the 39th session of the General Conference of UNESCO, which brings together its 195 member States October 30 to November 14.

Samir Saha heads the department of microbiology at the Dhaka Shishu (Children's) Hospital in Dhaka, Bangladesh, and is the Executive Director of Child Health Research Foundation (CHRF) in Bangladesh. Dr. Saha, a member of Pneumococcal Awareness Council of Experts (PACE), played a key role in the implementation of vaccines in Bangladesh against bacteria responsible for meningitis and pneumonia, having a direct impact on children health. Dr. Saha was awarded the American Society for Microbiology (ASM) Award for Research in Clinical Microbiology in 2017. He is also leading the steering committee of the Coalition Against Typhoid (CAT).

## HEALTH bulletin

### Ways to get brighter, whiter teeth



STAR HEALTH DESK

Have your pearly whites lost their lustre because of dingy gray or yellow stains? Stained teeth can occur as a result of some common foods, drinks, and even mouth-washes can stain teeth. Do-it-yourself remedies can help whiten teeth, and avoiding substances that stain teeth can stop further discoloration.



Foods that cause teeth stains

There is another reason to watch what you eat. Some common foods can discolor teeth. Here is an easy way to tell if a food might be at fault: Anything that can stain a white cotton T-shirt can stain teeth, say dentists. Coffee stains teeth, for example. Other top offenders are beverages such as tea, dark sodas, and fruit juices.

### Taking iron every other day linked to better absorption in women

Taking iron supplements every other day instead of daily is associated with increased iron absorption in women with low iron levels, suggests a small study in The Lancet Haematology.

Roughly 40 women with depleted iron stores (serum ferritin 25 µg/L or less) but not moderate or severe anaemia were assigned to receive either 60 mg of ferrous sulfate (FeSO4) either on consecutive days for 2 weeks or alternate days for 4 weeks. Two weeks after treatment, the alternate-day group had higher fractional iron absorption (22% vs. 16% in the consecutive-day group) and total iron absorption (175 vs. 131 mg).

Next, 20 women received either once-daily dosing (120 mg) or half a dose twice a day, and then crossed over to the other regimen. In this case, absorption levels did not differ between regimens, leading the authors to say that dividing doses "in an attempt to increase iron absorption is unnecessary."

Commentators write that these results "are likely to lead to a more felicitous means of administering this widely used therapy."

Whitening toothpastes and rinses

How to get whiter teeth

Over-the-counter toothpastes, gels, and rinses help remove some surface stains. Many of these products contain mild abrasives, chemicals, or polishing agents. Unlike bleaches, they do not change the natural color of teeth.

Home remedies for whiter teeth

Some people still prefer the age-old home remedy of baking soda and a toothbrush to gently whiten teeth at home. Also, some foods such as celery, apples, pears, and carrots trigger lots of saliva, which helps wash away food debris on your teeth. Chewing sugarcane gum is a tooth-cleaning action and also triggers saliva.

Tooth whitening and dental work

Approach tooth whitening with caution if you have lots of dental veneers, bonding, fillings, crowns, and bridges. Bleach will not lighten these manufactured teeth, meaning they will stand out among your newly whitened natural teeth. In order to match your whiter teeth,

you may need to investigate new dental work, including veneers or bonding.

Preventing teeth stains

As we age, the outer layer of tooth enamel wears away. The underlying layer, called dentin, is yellowish. That is why it is important to try to avoid staining teeth in the first place, especially after whitening. If you take care with foods and drinks that discolor teeth, the results of whitening may last up to one year. Whitening teeth too often could make them look translucent and blue.

To keep teeth white, do not light up

Not only is it bad for your health, smoking is one of the worst offenders when it comes to staining teeth. Tobacco causes brown stains that penetrate the grooves and pits of tooth enamel. The longer you smoke, the more entrenched the stains become. It also causes bad breath and gingivitis (gum disease), and increases the risk of most types of cancer.

The antibiotic tetracycline causes gray teeth in children whose teeth are still developing. Antibacterial mouthwashes can also stain teeth. Some antihistamines, antipsychotic drugs, and blood pressure medications cause tooth stains, as can iron and excess fluoride.

Do not forget daily maintenance

One simple strategy can help maintain white teeth: brush. Brush at least twice daily. Even better, brush after every meal and snack.

Brushing helps prevent stains and yellow teeth, especially at the gum line. Both electric and sonic toothbrushes may be superior to traditional toothbrushes in removing plaque and surface stains on teeth. Also, do not forget to floss and use an antiseptic mouthwash daily.

Visit your dentist for whiter teeth

See your dentist for regular check-ups and professional cleaning. The abrasion and polishing methods dentists use can remove many teeth stains caused by food and tobacco.

Source: WEBMD



### Cancer medical mission 2017 initiated at NICRR

Cancer medical mission 2017, a week long programme, was initiated jointly by the Partners for World Health and Rotary club of Dhaka Mavericks at the National Institute of Cancer Research and Hospital (NICRRH), says a press release.

Elizabeth A Mclellan, founder and CEO of Partners for World Health says, "This disease needs extra care." She mentioned, "Not only the doctors, but also the nurses play a vital role in the treatment process. That is why they need proper training. Along with the treatment, they can provide mental support to their patients."

The Director of the hospital Mr Mosharof Hossain said this kind of initiative would improve the quality of cancer treatment across Bangladesh.

### Apollo Hospitals Dhaka observed World Spine Day

Every year on October 16, people from around the world join together to observe World Spine Day to raise awareness about spinal disorders as part of the Bone and Joint Decade's Action Week. This year, the World Spine Day (WSD) theme was 'Your Back in Action'.

In order to be a part of this global event, Apollo Hospitals Dhaka arranged a seminar with external doctors to discuss Neck and Low Back Pain.



## International Stuttering Awareness Day

October 22, 2017 in the World

Stuttering is a speech disorder characterized by repetition of sounds, syllables, or words; prolongation of sounds; and interruptions in speech known as blocks. An individual who stutters exactly knows what he or she would like to say but has trouble producing a normal flow of speech.

Stuttering is common among young children as a normal part of learning to speak. Young children may stutter when their speech and language abilities aren't developed enough to keep up with what they want to say.

### Risk factors

Approximately 75 percent of children recover from stuttering. For the remaining 25 percent who continue to stutter, stuttering can persist as a lifelong communication disorder. Males are much more likely to stutter than females are. Factors that increase the risk of stuttering include:

- Delayed childhood development
- Having relatives who stutter
- Stress

### Coping and support

If you're the parent of a child who stutters, these tips may help:

- Listen attentively to your child.
- Wait for your child to say the word he or she is trying to say.
- Set aside time when you can talk to your child without distractions.
- Speak slowly, in an unhurried way.
- Take turns talking.
- Strive for calm.
- Don't focus on your child's stuttering.
- Offer praise rather than criticism.
- Accept your child just as he or she is.

