

Drug-resistant tuberculosis now at record levels

In some areas of the world, one in four people with tuberculosis (TB) becomes ill with a form of the disease that can no longer be treated with standard drugs regimens, a World Health Organisation (WHO) report says.

In the new WHO's *Multidrug and Extensively Drug-Resistant Tuberculosis: 2010 Global Report on Surveillance and Response*, it is estimated that 440,000 people had MDR-TB worldwide in 2008 and that a third of them died. In sheer numbers, Asia bears the brunt of the epidemic. Almost 50% of MDR-TB cases worldwide are estimated to occur in China and India.

Encouraging signs

Tuberculosis programmes face tremendous challenges in reducing MDR-TB rates. But there are encouraging signs that even in the presence of severe epidemics, governments and partners can turn around MDR-TB by strengthening efforts to control the disease and implementing WHO recommendations.

Slow progress

Progress remains slow in most other countries. Worldwide, of those patients receiving treatment, 60% were reported as cured. However, only an estimated 7% of all MDR-TB patients are diagnosed. This points to the urgent need for improvements in laboratory facilities, access to rapid diagnosis and treatment with more effective drugs and regimens shorter than the current two years.

WHO is engaged in a five year project to strengthen TB laboratories with rapid tests in nearly 30 countries. This will ensure more



people benefit early from life-saving treatments. It is also working closely with the Global Fund to Fight AIDS, Tuberculosis and Malaria and the international community on increasing access to treatment.

Resistant form of TB

Multidrug-resistant TB (MDR-TB) is caused by bacteria that are resistant to at least isoniazid and rifampicin, the most effective anti-TB drugs. MDR-TB results from either primary infection with resistant bacteria or may develop in the course of a patient's treatment.

Extensively drug-resistant TB (XDR-TB) is a form of TB caused by

bacteria that are resistant to isoniazid and rifampicin (i.e. MDR-TB) as well as any fluoroquinolone and any of the

second-line anti-TB injectable drugs (amikacin, kanamycin or capreomycin).

The cost of treating TB

These forms of TB do not respond to the standard six-month treatment with first-line anti-TB drugs and can take up to two years or more to treat with drugs that are less potent, more toxic and much more expensive, from 50 to 200 times higher. While a course of standard TB drugs cost approximately US\$ 20, MDR-TB drugs can cost up to US\$ 5,000 and XDR-TB treatment is far more expensive.

In 2008, there were an estimated 9.4 million new TB cases, and 1.8 million TB deaths. 440,000 MDR-TB cases are estimated to have emerged in the same year with

150,000 MDR-TB deaths. No official estimates have been made on the number of XDR-TB cases, but there may be around 25,000 a year with most cases fatal. Since XDR-TB was first defined in 2006, a total of 58 countries have reported at least one case of XDR-TB.

Strengthening laboratories

There is an urgent need to expand and accelerate in countries access to new, rapid technologies that can diagnose MDR-TB in two days rather than traditional methods which can take up to four months.

EXPAND TB is a five year project targeting 27 countries, launched in 2008 and implemented by WHO, the Foundation for Innovative New Diagnostics (FIND), the Stop TB Partnership's Global Drug Facility (GDF) and the Global Laboratory

Initiative (GLI) with financial support from UNITAID.

Countries and case studies

Six countries are featured throughout the report in special focus sections. Bangladesh is one of the very few developing countries in which continuous surveillance among previously treated TB cases is being carried out in selected areas.

Risk factors: HIV and MDR-TB

The report highlights several reasons why drug-resistant TB may be associated with HIV. However, more research is needed to determine whether there is an overlap between the MDR-TB and HIV epidemics worldwide.

Reporting on MDR-TB globally

Despite the growing understanding of the magnitude and trends in drug-resistant TB, major gaps remain in geographical areas covered. Since 1994, only 59% of all countries globally have been able to collect high quality representative data on drug resistance.

There is an urgent need to obtain information, particularly from Africa and those high MDR-TB burden countries where data have never been reported: Bangladesh, Belarus, Kyrgyzstan, Pakistan and Nigeria.

Moreover, countries need to expand the scope of their surveys to cover entire populations, repeat surveys are needed to better understand trends in drug resistance and countries need to move towards adopting systematic continuous surveillance.

Source: World Health Organisation



WORLD WATER DAY

Clean water for a healthy world

STAR HEALTH DESK

One in eight people do not have access to clean water. Two million people, most of them children, die every year from water-borne diseases like diarrhoea and millions become seriously ill. Diseases such as cholera, dysentery, typhoid, hepatitis, polio, trachoma and tapeworms spread through water — many of which can be fatal to people in the developing world like Bangladesh. Other water-associated diseases, such as malaria and filariasis, affect vast populations worldwide.

In order to raise awareness among people to work for improving the quality of water, World Water Day will be observed tomorrow. This year's theme is — *clean water for a healthy world*. The theme emphasises that both the quantity and quality of water resources are at risk. More people die from unsafe water than all forms of violence including war. Most of these deaths could be prevented by making people aware and ensuring safe drinking water. It is a sad and terrifying reality that an estimated 884 million people around the world are forced to rely on unsafe drinking water sources.

Lack of safe water and adequate sanitation is the world's single largest cause of illness. Repeated episodes of waterborne diseases like diarrhoea can push children to the brink of survival, leaving them too weak and malnourished to survive even common childhood illnesses.

However, most of these deaths are preventable. It is estimated that almost half of the nearly 2 million deaths from diarrhoea every year could be prevented through an understanding of basic hygiene.

Meeting the water and sanitation targets set by the international community for 2015 is a crucial step towards the ultimate goal of providing safe drinking water and adequate sanitation to all. Providing access to water and sanitation is also fundamental for achieving the other Millennium Development Goals, such as alleviating poverty, hunger and malnutrition; reducing child mortality; increasing gender equality; providing more opportunity for education; and ensuring environmental sustainability. We all should come forward to ensure every people have access to safe water.

Risk factors for oral cancer, its prevention

STAR HEALTH DESK

The death rate for oral cancer is higher than that of cancers which we hear about routinely such as cervical cancer, Hodgkin's lymphoma, laryngeal cancer, cancer of the testes, and endocrine system cancers such as thyroid, or skin cancer. It is not because of the fact that it is hard to discover or diagnose, but due to the cancer being routinely discovered late in its development.

Often it is only discovered when the cancer has metastasised to another location, most likely the lymph nodes of the neck. Oral cancer is particularly dangerous because in its early stages it may not be noticed by the patient, as it can frequently prosper without producing pain or symptoms they might readily recognise, and because it has a high risk of producing second, primary tumors.

Oral cancer is any abnormal growth and spread of cells in the mouth or oral cavity, including lips, tongue, inside of the lips and cheeks, hard palate (roof of the mouth), floor of the mouth (under the tongue), back of the throat, gums and teeth.

Risk factors

There are many factors that can increase your risk of developing oral cancer. You are at greater risk if:

- You are over the age of 40.
- You are male. Men are twice as likely to develop oral cancer, even though this gap is narrowing.
- You have Human Papillomavirus (HPV).
- You use tobacco products, especially if combined with high alcohol consumption.
- You regularly drink a lot of alcohol.
- Your lips are exposed to the sun on a regular basis.
- Your diet is low in fruits and vegetables - robbing you of important protective factors.

Signs and symptoms

As part of your oral health regime, check the inside of your mouth for these potential signs and symptoms:

- Sores in the mouth that do not heal within 2 weeks
- Dark red or white patches in the mouth
- Lumps located on the lips, tongue or neck
- Bleeding in the mouth
- Sore throat and difficulty with swallowing

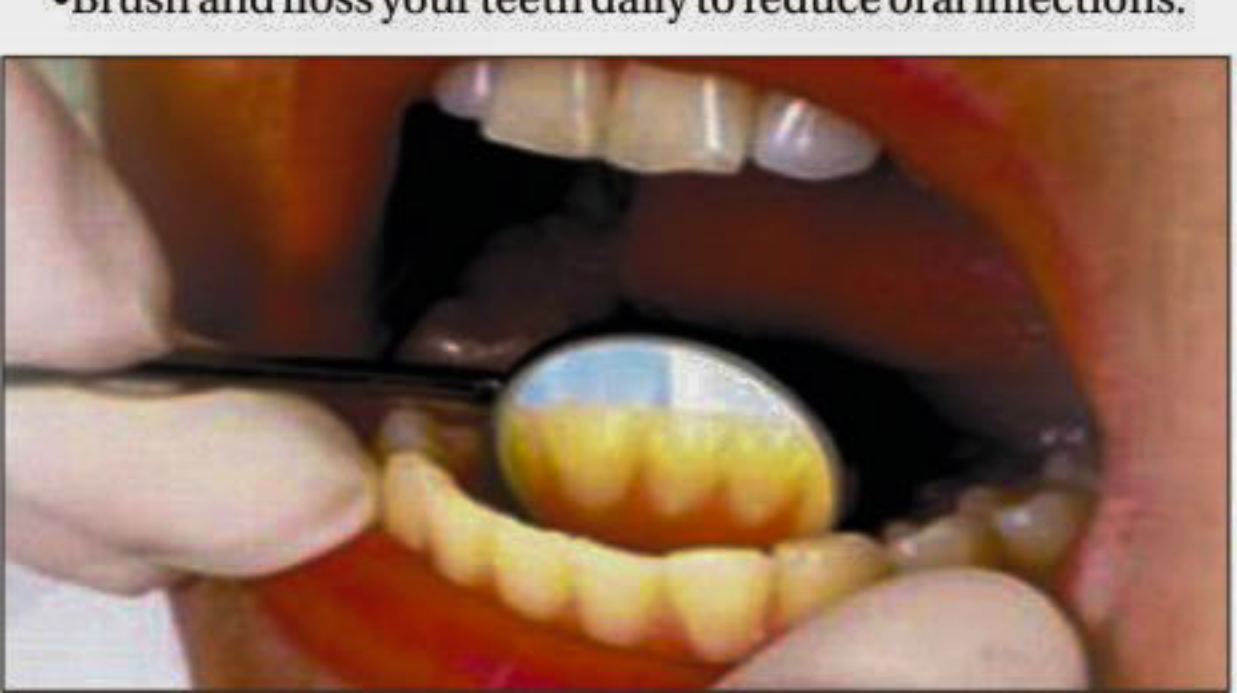
If you notice any of these signs and symptoms in your mouth, ask for an oral cancer screening at your dental or medical clinic.

Early detection of oral cancer can greatly increase the success of treatment and reduce the likelihood that the cancer would spread to other parts of the body.

Prevention

More importantly, oral cancer is a preventable disease. Make a commitment to reduce your risk today:

- Quit smoking or using other tobacco products.
- Reduce alcohol consumption.
- Use a condom to reduce your risk of HPV infection.
- Use UV protection on your lips when you're outside and exposed to the sun.
- Eat a healthy diet.
- Brush and floss your teeth daily to reduce oral infections.



Upholding nursing as a noble profession

DR ANISUR RAHMAN FORAZY

Like many countries in the world, Bangladesh is facing an acute crisis of skilled nurses. Although nurses are the essential part of healthcare system, there are very little initiatives to promote this noble profession. Thousands of patients are not getting proper medical care due to deficiency of skilled nurse. With proper attention and suitable programme, we can help revive the profession.

In Bangladesh nursing is considered as a second segmental job. That is why the work value and social recognition does not encourage the brilliant boys and girls to join the profession. It creates an ill impression and contributes as one of the major causes of shortage. In order to increase the number of nurse and fulfill the actual need both government and private sector should come forward with the initiative to open more nursing institutes, colleges to attract new generation to join in nursing.

There is also urgent need to uphold the significance of this noble profession. Among other barriers — negative social attitudes and more restricted policies, undefined status of nurses, lack of appreciations, cultural barriers and lack of financial supports for nursing education are also the central factors behind the shortage of nurses.

According to Bangladesh Health Watch report in 2007 (Health workforce), an estimated 2,80,000



nurses are required immediately to meet the work force of local health centers in Bangladesh. However, the Institutional capacities of nursing in Bangladesh are not designed appropriately. Professional training was adopted in domestic environment.

There are lack of infrastructural and quality teaching in nursing colleges or institutes. Besides these, the private initiators are not encouraged to open more nursing academy (institute or colleges). These types of barriers are obstacles to produce more qualified nurses. There is urgent need to take a

dynamic dimension to produce sufficient nurses to meet the demand of the country as well as to earn the remittance by migrating qualified nurses to abroad.

The government should give proper attention to nursing sector as it is one of the beneficial sectors of healthcare system of the country. The proper co-operation may be extended to private nursing colleges open for more international and local students.

A special programme like Masters in Clinical or Advanced nursing may be incorporated into academic field for preparing sufficient teacher and highly skilled manpower. Moreover, social negative perspective regarding nursing service should be changed to uphold nursing as a first segment service and noble profession.

Nursing is stereotyped with women as per finding of Bacon and Mckendrick's 2000. It recommended that stereotypical images of nurses to be changed encouraging more men, can build up nursing as a strong professional body.

Further, traditional nursing uniform may be changed by providing a smart and tidy uniform in respect of culture from the state licensing authority. In order to encourage new generation to undertake nursing education, an educational and marketing campaign can be arranged through media.

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HEALTH TIPS

Recovering from LASIK

LASIK eye surgery reduces a person's need to wear glasses or contact lenses. But an improvement in vision often is not quick. You can expect the followings after the procedure:

- Initially, the affected eye may burn, itch or feel like you've got something in it. Avoid rubbing the eye under any circumstance.
- You may have hazy or blurry vision on the day of the surgery. But it should subside soon afterward.
- You may need to wear a protective shield over your eye until your follow-up appointment with the doctor, which typically is 24 hours to 48 hours after surgery. If you have severe pain after the procedure, do not wait for the follow-up appointment to call your doctor.
- You should not drive until you can see clearly.
- Avoid using hot tubs or whirlpools, swimming, playing sports, and wearing cosmetics or lotions around the eyes for two to four weeks after the surgery.
- Expect that your vision may not fully stabilise for three to six months.

Prevent a fungal nail infection

A fungal infection of the fingernails or toenails can make them hard, brittle and discolored.

To avoid a fungal infection, you can follow these nail-care suggestions:

- Keep nails trimmed, with thick areas filed down.
- If you have an infection, use different files or cutters on the infected ones to avoid spreading the problem.
- If you have to submerge your hands in water, wear waterproof gloves to keep hands dry.
- Make sure socks are made of 100 percent cotton. Put on a clean pair every day, and change them when socks become damp and sweaty.
- Sprinkle socks with an anti-fungal foot powder, and make sure your toes have plenty of wiggle room inside your shoes.
- Don't walk barefoot in public places, especially in locker rooms.

Long-acting insulin boosts diabetes care

REUTERS, Boston

Long-acting insulin works better than other types of injections for people who need more than pills for their type 2 diabetes, researchers reported.

Long-acting Levemir insulin, given at bedtime, and NovoRapid insulin injections, given three times a day before meals, controlled insulin levels best in patients not doing well with the daily pills alone, the study found.

They were compared to results with twice-daily injections of NovoMix 30 in diabetes patients taking the pills metformin and sulfonylurea.

Drugmaker Novo Nordisk sponsored the trial of diabetes patients in Britain and Ireland and made all the insulin products tested.

The goal was to bring glycated hemoglobin levels — a measure known as a1c — down to 6.5 percent. This gives doctors an idea of insulin levels over the long term.

Dr Rury Holman of the Oxford Center for Diabetes, Endocrinology and Metabolism in Britain and colleagues watched their 708 patients for three years.

Most did need extra insulin to control their diabetes -- ultimately, 68 percent to 82 percent of the patients needed to add a second type of insulin to keep their blood sugar low.

The long-acting insulin helped about 45 percent of the patients, while only 32 percent of those who got twice-daily shots of NovoMix 30 controlled their insulin well, the researchers reported in the *New England Journal of Medicine*.

But the patients who got the three insulin injections a day were more likely to gain weight and more than three times as likely to have an episode where their blood sugar dipped too low, compared to those who took the long-acting insulin, the researchers found.

Potentially dangerous hypoglycemia incidents were nearly doubled among patients who received the twice-daily injections.



Levemir, a long acting insulin

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