

Bring TB patients under DOTS

TAREQ SALAHUDDIN

Tuberculosis (TB) is a major public health problem in Bangladesh. The country ranks 5th on the list of 22 highest burden TB countries in the world. It is estimated that 300,000 new cases crop up each year, of which about half of them are infectious TB. It is further estimated that about 70,000 people die every year.

Hence, each hour eight persons die of the disease for which very effective treatment (DOT), free of cost, is available in Bangladesh. Before 1993 TB control was limited to TB clinics and TB hospitals. Field implementation of TB control integrated into the general health services, delivered by Upazila Health Complexes (UHCs), started back in 80s. However, NTP Bangladesh revised its strategies and adopted DOTS in 1993. NGO's have been involved since 1994.

Facts about TB

- Tuberculosis is a disease caused by bacteria.
- There are two types of TB according to the location of infection - 1. Pulmonary TB or lungs TB, 2. Extra-pulmonary TB or TB that affect any part of the body other than lung.
- Pulmonary TB is the infectious one that occurs in about 80 per-



A BRAC sasthwa sebika (health worker) is providing DOTS service to a young TB patient.

cent cases.

• Transmission of pulmonary TB occurs by spreading of the bacteria into the air mainly through coughing, spitting, sneezing by a patient.

Key symptom of pulmonary TB

Cough for three weeks or more associated with fever, lethargy, loss of appetite and weight loss.

What is DOTS?

The internationally recommended approach for TB treatment is Directly Observed Treatment Short-course (DOTS). It is an

• It prevents development of multi drug resistance by ensuring that the full course of treatment is followed

DOTS in Bangladesh

Bangladesh adopted the DOTS in 1993 to combat TB. But it is a matter of great regret that the referral system is not yet satisfactory.

It is important that all patients should be brought under DOTS rather than treatment under particular care or responsibility.

The National TB control Programme (NTP) ensures DOTS through the government healthcare facilities and some NGOs. The health assistants and sasthwa sebika (female health worker) ensures DOTS all over the country. The drug is totally free of cost.

NGO activities

There are different partners to implement the NTP in different parts of Bangladesh. People should seek the TB treatment in those organisations. For example, in urban and perurban areas of the divisional headquarters are served by BRAC.

There is a dire need for the control of TB in Bangladesh, otherwise we will face an epidemiological crisis.

inexpensive strategy that could prevent millions of TB cases and deaths over the coming decade. Under this strategy, if a patient with infectious TB has been identified using microscopy services, health and community workers or trained volunteers observed the patient swallowing the full course of correct dosage of anti-TB medicine.

Advantages of DOTS

- The DOTS can produce cure rates up to 95 percent
- It can prevent new infections by curing infectious patients

WHO maps out new strategy to battle tuberculosis

REUTERS, London

The World Health Organisation unveiled a new strategy to fight tuberculosis, an infectious disease that kills about 1.7 million people worldwide each year.

The strategy, which aims to expand existing treatment programmes, improve diagnosis and prevent co-infection with HIV/AIDS to halve TB prevalence and death rates and save 14 million lives by 2015.

"The new Stop TB Strategy injects new energies to make efforts more comprehensive and effective," Dr Mario Raviglione, director of the WHO's Stop TB Department, said.

Patients with TB are treated with the DOTS (Directly Observed Treatment, Short-course) programme - a multi-level approach that involves government commitment, patient surveillance and drug treatment.

The programme is running

in 183 countries, but multi-drug resistant tuberculosis (MDR-TB), and co-infection in patients with HIV/AIDS present new problems. More than 260,000 people who died of TB in 2004 were co-infected with HIV.

"We must involve a much broader array of actors in TB control and adapt DOTS to HIV co-infection, MDR-TB and other special challenges if we're going to achieve 2015 targets of the Global Plan..." said Dr Marcos Espinal, executive secretary of the Stop TB Partnership.

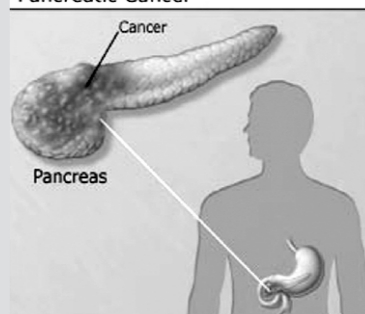
The strategy outlined in The Lancet medical journal also highlights the need for more research into new treatments and vaccine and the strengthening of local health systems in poor countries which are hardest hit by TB.

The bulk of patients with TB live in the most populous countries in Asia. Bangladesh, China, India, Indonesia and Pakistan account for 48 percent of the new cases that are diagnosed each year.

Health Tips



Pancreatic Cancer



Increased levels of dietary folate from food, but not from supplements, appears to reduce the risk of developing pancreatic cancer, according to results of a large population-based study.

Dietary folate may lower pancreatic cancer risk

Increased levels of dietary folate from food, but not from supplements, appears to reduce the risk of developing pancreatic cancer, according to results of a large population-based study of Swedish men and women.

Folate, also known as folic acid, is a B vitamin that is naturally found in fruits and vegetables.

Previous studies have suggested that folate may protect against colorectal and breast cancer, Dr Susanna C Larsson and colleagues noted in their report.

To see if folate protects against pancreatic cancer too, Larsson, from Karolinska Institute in Stockholm, and her group followed subjects enrolled in the Swedish Mammography Cohort or the Cohort of Swedish Men. Included were 36,616 women and 45,306 men between 45 to 83 years old in 1997, when they completed food frequency questionnaires.

After a follow-up of 6.8 years, 135 cases of pancreatic cancer had occurred. The investigators analysed the data, factoring in the influence of demographics, smoking, body mass index, diabetes, exercise and the amount of dietary fruit, vegetables, calories, carbohydrates and alcohol.

For subjects with the highest amount of dietary folate intake (350 micrograms per day or more) were 75 percent less likely to develop pancreatic cancer compared with subjects with the lowest amount of dietary folate (less than 200 micrograms per day).

However, there was no association between folic acid derived from supplements and pancreatic cancer risk - subjects who took folate supplements of 300 micrograms per day or more versus subjects who did not take supplements had the same risk.

Larsson's group theorises that the reason that dietary folate alone reduced the risk of pancreatic cancer may be that folate from food sources better represents long-term folate intake than does folate from supplements.

Another possibility, suggested by animal studies of high folic acid supplementation, is that high intake of folate from supplements may promote the progression of cancer if it is already there.

"Although our results suggest that increased consumption of foods naturally rich in folate may be beneficial," the authors conclude, "they do not encourage increased use of supplements for the prevention of pancreatic cancer."

Source: Journal of the National Cancer Institute

First Aid



Foreign object swallowed



X-ray showing a coin (a foreign object) lodged in the food tube (oesophagus)

If you swallow a foreign object, it will usually pass through the digestive system uneventfully. But some objects can lodge in the esophagus, the tube that connects throat and stomach. If an object is stuck in the esophagus, you may need to remove it, especially if it is:

- A pointed object, which should be removed as quickly as possible to avoid further injury to the esophageal lining
- A tiny watch- or calculator-type button battery, which can rapidly cause local tissue injury and should be removed from the esophagus without delay

If a swallowed object blocks the airway:

- Use the Heimlich maneuver to try to remove the object if the person is having trouble breathing.
- Call for emergency medical assistance.

To perform the Heimlich maneuver on someone else:

- Stand behind the person. Wrap your arms around the waist. Tip the person forward slightly.
- Make a fist with one hand. Position it slightly above the person's navel.
- Grasp the fist with the other hand. Press hard into the abdomen with a quick, upward thrust as if trying to lift the person up.
- Repeat until the blockage is dislodged.

To perform the Heimlich maneuver on yourself:

- Place a fist slightly above your navel.
- Grasp your fist with the other hand and bend over a hard surface - a countertop or chair will do.
- Shove your fist inward and upward.

Improved formula for oral rehydration salts

STAR HEALTH REPORT

The World Health Organisation (WHO) and Unicef announced a new formula for the manufacture of Oral Rehydration Salts (ORS). The new formula will better combat acute diarrhoeal disease and advance the Millennium Development Goal of reducing child mortality by two-thirds before 2015.

Diarrhoea is currently the second leading cause of child deaths and kills 1.9 million young children every year, mostly from dehydration.

The latest improved ORS formula contains less glucose and sodium (245 mOsm/l compared with the previous 311 mOsm/l). The lower concentration of the new formula allows for quicker absorption of fluids, reducing the need for intravenous fluids and making it easier to treat children with acute non-cholera diarrhoea without hospitalisation.

ORS use is the simplest, most effective and cheapest way to keep children alive during severe

episodes of diarrhoea. The ORS solution is absorbed in the small intestine, thus replacing the water and electrolytes lost. WHO and Unicef have jointly issued guidance for the production of the new ORS.

WHO and Unicef recommend that countries manufacture and use the new ORS in place of the previous formula.

According to Unicef and WHO, oral rehydration therapy should be combined with guidance on appropriate feeding practices. Provision of zinc supplements (20 mg of zinc per day for 10 to 14 days) and continued breastfeeding during acute episodes of diarrhoea protect against dehydration and reduces protein and calorie consumption to have the greatest impact on reducing diarrhoea and malnutrition in children.

The revised monograph for the new ORS formula will be published in the fourth edition of The International Pharmacopoeia.



Influence of family history on heart disease

DR MD HABIBE MILLAT

Background family history, a well-known risk factor for coronary heart disease, represents genetic, environmental, and behavioural elements, and the interactions between them.

If a family member (father, mother, brother, sister) has a history of early heart disease (before age 55 for men and before age 65 for women), you are at a higher risk for heart disease than someone with no family history of early heart disease. For heart disease, the relative risk ranges from 2.0 to 9.0 among persons who report a family history, depending on the type and number of relatives considered.

Having coronary heart disease in the family could be linked to an inherited tendency for high blood pressure or high blood cholesterol levels. Alternatively there may be unknown genes causing coronary heart disease which is not related to obvious inherited risk factors. They often relate to lifestyle habits that are passed from one generation to the next. But these factors only explain part of the problem.

In familial hyperlipidaemia (increased blood level of lipids), a high blood cholesterol levels run in the family. It means that you have inherited a faulty gene that affects the way that excess cholesterol is produced by your body. This increases your blood cholesterol level, which increases your risk of atherosclerosis (the narrowing or furring of the coronary arteries). If one parent has the gene then his or her children have

a 50:50 chance of inheriting it. If you have been told that you have familial hyperlipidaemia, it is important that you tell other members of your family so that doctors can measure their blood cholesterol levels and advise appropriately.

A family history of early heart disease is a risk factor you cannot change. However, if you do have heart disease in the family, it is very important to eliminate any other risk factors you may have, such as smoking, a diet high in saturated fat and salt, high blood pressure, high cholesterol, diabetes, or being sedentary or overweight.

Educate yourself about heart disease

Even if it runs in the family, reducing and controlling the risk factors will significantly reduce your risk of developing coronary heart disease. Talk to your relatives and find out everything you can about your family's history of heart disease. Eat an extra serving of fruits and vegetables, daily. Enjoy a brisk walk.

It is very important to tell your doctor if you have a family history of coronary heart disease. They should test your blood cholesterol levels and your blood pressure. Depending on the results, they may suggest that you make lifestyle changes or start taking medication.

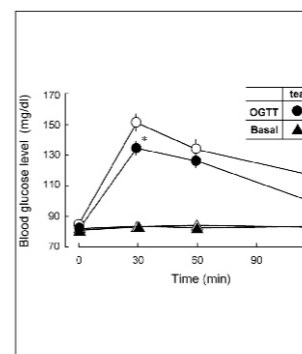
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Are you glucose intolerant?

We have all heard about the rise of diabetes, but a related disease called impaired glucose tolerance (IGT) has not received much recognition. IGT sufferers have a reduced ability to regulate sugar levels in their blood. "It's the same problem as diabetes but in a milder form," says Dr Gauden Galea, a public health physician at the regional office of the World Health Organisation in Manila.

Here is what you need to know: **Risk factors:** IGT is common among those who are overweight, who have family members with diabetes, who have history of heart disease and/or stroke, and who have high blood pressure. "Being Asian, male and older increases the risk," says Paul Zimmet, director of the International Diabetes Institute.

Diagnosis: It is diagnosed with an oral glucose tolerance test. A person fasts, then is given a drink containing 75 grams of glucose. Blood sugar is measured two hours later. "someone with



IGT will get higher levels of glucose over a longer period," says Galea.

Treatment: While IGT cannot be treated directly, people with IGT are encouraged to increase their level of physical activity, achieve a healthy weight and follow a healthy, balanced diet. Drugs can help slow IGT's development into diabetes.

If you think you are at risk for IGT, ask your doctor about having a glucose tolerance test.

Your Doctor



Dr Afzalur Rahman Associate Professor, National Institute of Cardiovascular Diseases (NICVD)

Dear doctor, I am a 43 years old man suffering from chest pain for the last couple of months. The pain increases with increased work load. It is noticeable that I am also hypertensive, but I don't take any medicine for the hypertension.

Please give me advice on my health issue. Thanks and best regards Selim Milon gmilon@hotmail.com

Answer:

There are varying causes of chest pain. The specific cause of chest pain is often difficult to interpret.

Causes of chest pain can vary from minor problems, such as indigestion or stress, to serious medical emergencies, such as a heart attack or pulmonary embolism.

As you are hypertensive and the pain increases with increased work load, it is most likely to be of cardiac origin.

So you need to consult a cardiologist to find the specific treatment option.

If there is no contraindication, s/he may suggest you some stress test like exercise tolerance test (ETT). The test will guide the further treatment pathway. Moreover you need to avoid the

modifiable risk factors for cardiac diseases like smoking, sedentary lifestyle etc.

You also need to check your cholesterol level and some other biochemical profiles as well.

It is not recommended to tell you the name of medicine without exploring the history and other clinical features. But it is important to continue some anti-hypertensive drugs and specific drug for your chest pain. So you must see a cardiologist for the clinical evaluation. Thank you.