

# Childhood tuberculosis getting more attention

STAR HEALTH REPORT

Tuberculosis (TB) in children is a neglected aspect of the TB epidemic. Even though TB is a preventable and curable disease, it continues to impact the lives and development potentials of millions of children.

According to the World Health Organisation (WHO), an estimated 1 million children became ill with TB globally in 2017 and out of these 35,000 were estimated to be in Bangladesh. In 2017 globally 233,000 children died of TB and about 96% of these deaths are in children who did not access any TB treatment. However, the actual burden of TB in children is likely to be higher given the challenge in diagnosing childhood TB.

Childhood TB still remains a major challenge for Bangladesh. The trend of missing cases is even more alarming in Bangladesh. According to the National TB Control Programme (NTP) statistics, 68% of the estimated child TB remained missing in 2018.

Infants and young children are more likely to develop life-threatening forms of TB than older children and adults due



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to their immature immune systems. Therefore, prompt diagnosis is extremely important.

With funding from the United States Agency for International Development (USAID), the Challenge TB Project in Bangladesh is supporting the NTP in many areas of active urban TB management including special focus on childhood TB identification, diagnosis and treatment.

The Challenge TB Project provided technical support to NTP to establish few specialised centres for diagnosis and

treatment of childhood TB at selected hospitals with funding support from USAID.

Setting up specialised child TB centre was an overdue fundamental step to address the problem. These facilities have been performing active case finding activities among the children visiting the outpatient department of the centre using an android mobile phone-based electronic screening tool.

These child-friendly specialised facilities are well-equipped with efficient specimen collection procedures and trained

staff for collection of specimens. The centres are linked with a dedicated child TB ward at the inpatient for admission of children who requires close treatment monitoring and also with in-house molecular diagnostic facility (called GeneXpert test) for TB. The GeneXpert test is a molecular test for TB, which diagnoses TB by detecting the presence of TB bacteria, as well as testing for resistance to the drug Rifampicin.

The availability of advanced diagnostic tests within the same hospital premises make

diagnosis of childhood TB easier and foster identification of more childhood TB patients. Also, the facilities serve as a referral centre for other public and private facilities, which help in bringing more patients to this facility for improved diagnosis and management.

In the era of sustainable development, the renewed emphasis in health and development work of the government of Bangladesh is now to ensure the well-being and quality of life of all of its citizens including children. Thus, the National Strategic Plan for TB 2018-2022 for advancing WHO's End TB Goal by 2035 in Bangladesh has included the prevention and treatment of childhood TB as a national priority agenda.

Further, the United Nation's Sustainable Development Goals (SDGs) include not only 'reducing child mortality' but also 'achieving universal and equitable access to health care for all'. Specialised child TB centre will create an effective platform to support diagnosing and treating more missing children with TB. It is a crucial stride in tackling childhood TB burden in Bangladesh.

## EVENT



PHOTO: COURTESY

### Child heart disease awareness event organised by Apollo Hospitals Dhaka

Apollo Hospitals Dhaka organised an awareness programme titled 'Heart Disease Can't Take the Smile Away' recently in Dhaka, says a press release. The main objective of this awareness programme was to create awareness about child heart diseases.

Dr Ratnadeep Chaskar, Chief Executive Officer; Dr Tahera Nazrin, Consultant - Paediatric Cardiology; Professor Dr A. Q. M. Reza, Senior Consultant and Coordinator - Clinical and Interventional Cardiology; Professor Dr Mohammed Ishtiaque Hossain, Senior Consultant and Coordinator - Paediatrics & Neonatology and Santanu Kumar Das, Director - Business Development from Apollo Hospitals Dhaka as well as Professor Dr Md. Abid Hossain Mollah, Head of the Department of Paediatrics, BIRDEM General Hospital and Ibrahim Medical College were present among other consultants and senior management of Apollo Hospitals Dhaka.

This event was aimed at reaching out and enlightening the general people about the importance of a child's having a healthy heart.

## HEALTH bulletin



### Children's higher weight status often underestimated

More than half of parents underestimated their children's classification as overweight or obese-children themselves and health professionals also share this misperception, according to new research presented at this year's European Congress on Obesity (ECO) in Glasgow, United Kingdom.

"Despite attempts to raise public awareness of the obesity problem, our findings indicate that underestimation of child higher weight status is very common", says Abrar Alshahrani from the University of Nottingham, UK, who led the research.

Results showed that over half (55%) of parents underestimated the degree of overweight in their children, whilst over a third (34%) of children and adolescents also underestimated their own weight status. Healthcare professionals shared this misperception, but limited studies prevented quantification. Parents of younger children were less likely to perceive their child as overweight, and were less accurate at judging the weight of boys than girls.

"Identifying weight problems in childhood and adolescence is a unique window of opportunity to have a lifetime impact on health", says Alshahrani.

## Thalassaemia: The present and future for Bangladesh

PROF WAQAR A KHAN

Thalassaemia is the most common congenital disorder in Bangladesh. It is estimated that nearly 14,000 thalassaemic children are born every year in our country. 10% of our population are carriers of the disease while in tribal population more than 30% are carriers. Awareness of the disease is very poor.

Awareness of the disease and carrier detection has been partially successful in preventing the births of thalassaemic children in some countries of the world, especially, where abortion is not legal. Prevention of births of thalassaemic children is the best solution. But prevention of births of thalassaemic children by creating awareness, dissuasion of marriage between carriers or identify carrier couples before marriage and to offer counselling to separate has a limited success.

Prenatal diagnosis and abortion of affected foetus have been most successful in preventing the births of thalassaemic children as seen in many countries of the world like Cyprus, Greece and Iran. Prenatal diagnosis is the way to know before birth whether the foetus has thalassaemia or not, and abortion advised if the foetus has thalassaemia but final decision are with the parents to make a choice.

Prenatal diagnosis procedure is done only in Dhaka and people and even doctors and finally, a significant number of gynaecologists and obstetricians are not aware of it. It is very important that awareness of the disease is disseminated to control the disease.

Nearly 99% of mothers seeking a prenatal diagnosis in DNA lab of Dhaka Shishu Hospital are those who already have one or two thalassaemic children. This situation will not improve unless gynaecologists test for carrier status when the couple first visits them and advice prenatal diagnosis if both the couple are carriers of the disease.

The government of Bangladesh has taken note of the magnitude of the problem and is recently creating awareness of the disease, which is a very commendable step. It is very important that besides creating awareness of the disease and carrier detection, the government must also simultaneously make facilities for prenatal diagnosis.

DNA lab should be immediately set up in each division with proper training of gynaecologists for collection of samples and training of molecular biologists or biochemists for DNA analysis.

In India Right of a person with disability disorders (RPWA) has recognised persons with

blood disorders (thalassaemia, Haemophilia and sickle cell disease) as persons with disabilities under the Act.

The first and foremost benefit of The RPWD Act 2016 is non-discrimination in service, and second most important benefit would be 'Reservation in Higher Education'. Extra facilities will also be given to these patients like more leave, time for transfusion etc. Bangladesh has also passed an act named 'Persons with Disabilities Rights Protection Act In Bangladesh 2013' where autism, physical disabilities, psychosocial problems, visual impairment, speech disability, intellectual disability, hearing disability, cerebral palsy, Down's syndrome has been included in this Act.

Thalassaemia sufferers are all time patients, going to the hospital every month or even earlier. They need to arrange blood from different sources, money to buy medicine and need to get admission in a hospital which itself is time consuming where there no thalassaemia centres. They are therefore entitled to get extra facilities to have a better quality of life.

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## Benefit from childhood pneumococcal conjugate vaccine extends to whole population

Use of pneumococcal conjugate vaccines (PCVs) has led to substantial reductions in invasive pneumococcal disease (IPD) in high- and middle-income countries. To assess whether similar benefits are seen in a low-income country, investigators analysed the effect of 10-valent PCV on nasopharyngeal carriage and IPD in children and adults in rural Kenya. The study was done among residents covered by the Kilifi Health and Demographic Surveillance System, an existing integrated surveillance system with data from 1999 to 2016. PCV10 was introduced in January 2011, delivered to infants at ages 6, 10, and 14 weeks and via a catch-up campaign that provided at least one PCV10 dose to children aged 12 to 59 months.

Incidence of IPD in children <5 years dropped rapidly after vaccine introduction and remained low; PCV10-type IPD per 100,000 population dropped from 60.8 prevaccine (1999 through 2010) to 3.2 postvaccine (2012 through 2016), and IPD caused by any serotype dropped from 81.6 to 15.3 per 100,000. Children <5 years had an 85% reduction in bacteremic pneumococcal pneumonia and a 69% decrease in pneumococcal meningitis. IPD also declined in those aged 5 to 14 years and ≥15 years. Incidence of vaccine-type IPD also decreased in infants too young to be vaccinated. IPD incidence caused by non-PCV10 type did not increase. After vaccine introduction, childhood admissions with radiologically confirmed pneumonia decreased by 48%.

Despite multiple studies showing benefits of PCV10 in higher-income countries, this is the first to document similar findings in a low-income country. The investigators did not observe an increase in nonvaccine-type infections; this will require ongoing monitoring.

/StarHealthBD

## 8 Ramadan healthy eating iftar tips for those who fast then feast

**01. Hydrate before eating**  
Drink plenty of fluids such as water, freshly squeezed juice, or milk. This will prevent dehydration and provide your body with the essential fluids it needs. Water remains your best source of hydration. Drink 1-2 glass of water before your meal and not during your meal to avoid delaying your digestion process. Be wary of Ramadan drinks because they contain a lot of sugar and calories.

**02. Break your fast with dates**  
Traditionally, dates are eaten at the start of your iftar meal. Because they are a nutritious burst of natural sugar they fuel your body with much needed energy. If you suffer from headaches during the fasting hours, most likely caused by low blood sugar, begin your iftar with 2 dates and replenish your sugar levels.

**03. Have a bowl of soup**  
Soups are an indispensable dish in iftar. They're rich in water and help you hydrate. Reach out for lentil, tomato, or vegetable soup and avoid cream-based soup. If you don't enjoy a warm soup during the summer months, cold soups and Gazpachos make a great alternative.

**04. Choose good carbs**  
Your iftar meal should contain a source of carbohydrates, preferably complex. These include brown rice, whole grain pasta or bread, potatoes or burghul. Complex carbs provide a more stable and sustainable source of energy in addition to fiber and minerals.

**05. Eat your greens**  
Vegetables are rich in vitamins, minerals, and fiber and provide so many nutrients in so little calories. The more colorful your salad, the more health benefits it holds. It also provides a feeling of fullness, ensuring you eat less on your main dish. Aim for 2 servings of vegetables per meal. One serving equals a 1/2 cup of raw or cooked vegetables or vegetable juice or 1 cup of leafy raw vegetables.

**06. Incorporate lean protein**  
At iftar, you should aim to eat high quality protein that are highly digestible and contain all the essential amino acids. Your body uses these to build and maintain muscle mass. Beef, milk, yogurt, eggs, cheese, fish and poultry are all complete high-quality proteins. Choose lean proteins to get the benefits with little saturated fats. Include fish, skinless chicken or turkey and low fat dairy to have as part of your iftar meal. If you're vegetarian, you can select other protein sources such as legumes, beans and nuts.

**07. Take it easy**  
Don't be in a hurry to finish your food. After being deprived of eating for an entire day, overloading on food may lead to indigestion and other gastric problems. Have a light iftar that includes reasonable food portions. Controlling the size of your portion is key to staying healthy and preventing weight gain. As a rule of thumb, don't exceed amounts you would have for a typical lunch or dinner meal.

**08. Avoid foods high in fat, salt and sugar**  
Whenever possible, stay away from heavy meals for iftar that have too much unhealthy fats, salt and added sugar. When cooking, make your favorite Ramadan recipes healthier by stewing, baking, roasting, steaming or grilling and avoid frying. Add herbs and spices instead of salt to flavor your meals. Finally, replace sweets and sweetened drinks with naturally occurring sugar in fruits, dried fruits and fruit salads.

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