

Zinc is crucial to fight against pneumonia

PROF MD SALIM SHAKUR

Deficiency of Zinc, an essential mineral leads children to an increased risk of developing pneumonia, the major killer of children under five, a recent research investigates.

Zinc is an important micro-mineral (trace mineral) essential for growth and development. Apart from growth, it is equally important for children to boost their body's defense or immune system. Zinc deficiency weakens immune system and therefore children are susceptible to various infectious diseases, predominantly pneumonia that kills more than 50,000 children under the age of five in Bangladesh.

A recently published study in "The Indian Journal of Paediatrics" revealed that Bangladeshi children suffering from pneumonia have significantly low body zinc as compared to the children who did not develop pneumonia.

A total 152 children between 6 months to 5 years were enrolled in



the study. Among them 35 children had pneumonia, 32 children were severely undernourished, 38 children were severely undernourished and 47 children were healthy well-

nourished children.

The study result showed that children suffering from pneumonia have statistically four folds less zinc in their body than healthy well-nourished children. The magnitudes of zinc deficiency were more profound in malnourished children who developed pneumonia as compared to well-nourished children healthy without pneumonia.

The published study also showed little children are more vulnerable to suffer from pneumonia than bigger one. The study showed children who are short-statured due to under-nutrition have significantly low zinc level. There is preliminary evidence from an ongoing study showing children who received zinc supplement for two months developed significantly fewer episodes of pneumonia during the follow up period of next six months as compared to the children who did not receive zinc supplement. Remarkable success was observed with about 67 percent reduction of

pneumonia in the study population. The study results will raise the important issue whether public health measures should be taken involving zinc supplement or food fortification with zinc to improve zinc status of our children particularly to vulnerable (undernourished) in order to improve their immunity.

The recommended dietary allowance (RDA) of zinc is 2-3 mg from birth to 3 years, 5 mg from 4-8 years and 8 mg/day for children aged 9 to 11 years; the RDA for adolescent and adult males is 11 mg/day. Primary dietary sources of zinc include animal products such as meat, seafood and milk. Ready-to-eat cereal contains the greatest amount of zinc consumed from plant products. Lack of zinc may help kill your baby. Make sure that your children are getting recommended amount of zinc and shield them against deadly germs that cause pneumonia.

The writer is Consultant and Head, Department of Paediatrics at United Hospital Ltd, Dhaka.



Offer a healthy heart to your valentine

DR MD RAJIB HOSSAIN

With the advent of Valentine's Day on this Sunday, millions of people are planning to give special gifts to their beloved. People sent flowers, red hearts, anonymous cards and offer a candle-lit dinner to surprise their valentines. On this Valentine's day, you can make an exception by giving the greatest gift — a healthy heart that lasts forever. With little changes in your lifestyle that keep your heart healthy you can offer the big gift.

Research has shown that the leading cause of heart disease is related to behavioural choices such as eating habits, exercise, tobacco use, alcohol consumption and stress.

Maintaining a healthy body weight is crucial for the prevention of coronary heart diseases. Physical exercise even walking is good for heart. Blood pressure should be checked at regular interval and focus on lowering pressure by decreasing salt and low calorie diet. Alcohol, tobacco products and secondary exposure to tobacco smoke are important driving force behind heart diseases. We should make pledge to avoid it on this very occasion.

Following a heart healthy diet rich in vegetables, fruits and whole-grains are equally important. Consume fish, especially oily fish, at least twice a week. Limit your intake of saturated fat and minimise your intake of beverages and foods with added sugars.

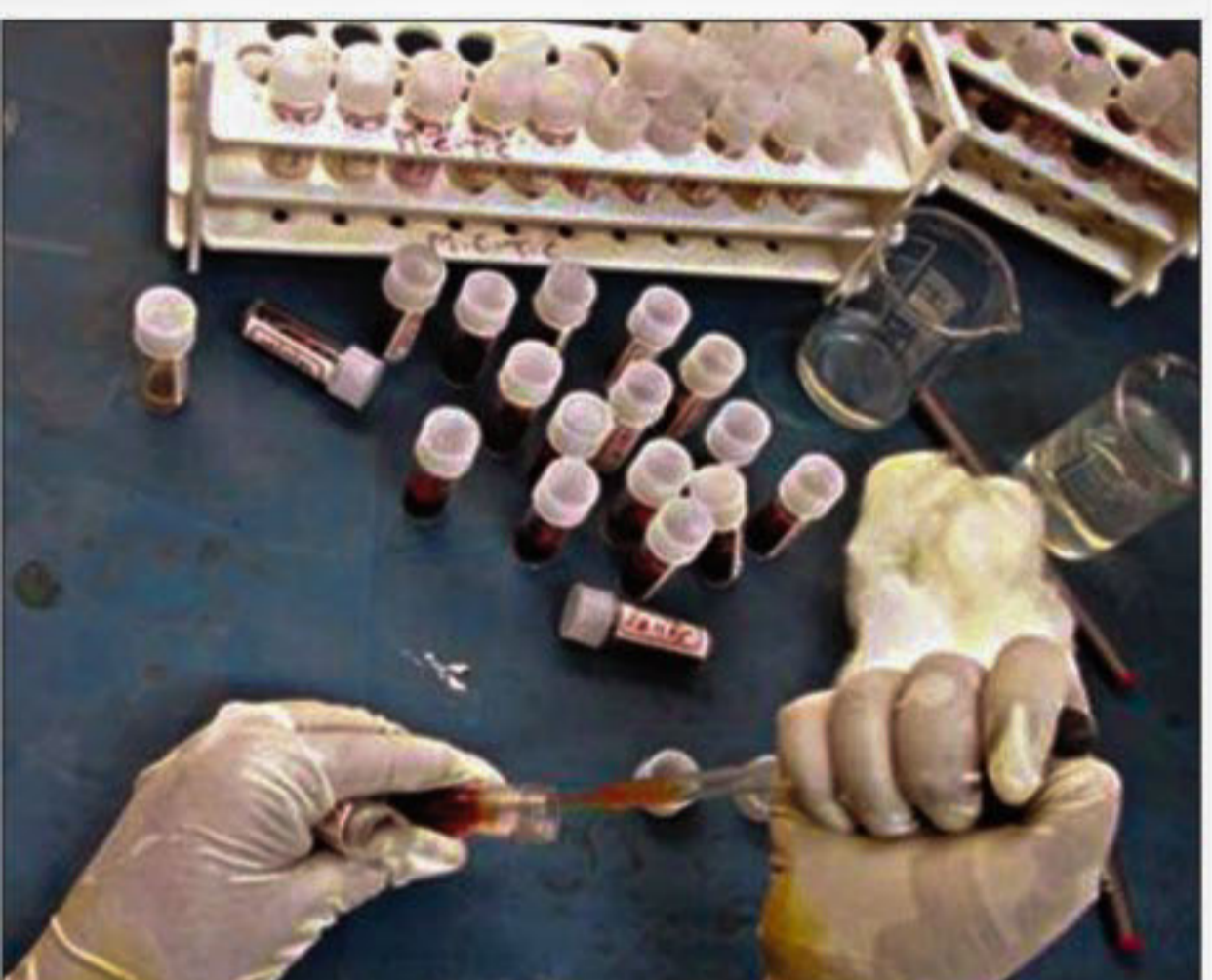
On this Valentine's Day, you can make the outstanding decision to change your lifestyle to give your beloved one, a healthy heart that creates love for life time.

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Research found breakthrough treatment of HIV/AIDS

Since the detection of HIV virus in 1983, scientists and researchers are trying hard to invent and explore effective weapons to fight with the deadly disease. AIDS takes away millions of lives as there is no specific treatment for cure or vaccine to prevent transmission of HIV. In quest to combat HIV/AIDS, a recent research has revealed breakthrough findings to protect body from infection.

The research team headed by Mojgan Naghavi, at University college, Dublin in Ireland have found that neurons (brain cells) can protect themselves against infections from HIV. A protein molecule named FEZ-1 uniquely made by neurons plays the key role. The protein appears to lock out the HIV



virus. They are pinning their hope to produce treatments to thwart HIV by using gene therapy or drugs to activate production of FEZ-1 in cells other than neurons, especially the white blood cells most vulnerable to infection by the virus.

Naghavi and her colleagues established the protective effects of FEZ-1 by blocking the gene that makes it in human neurons. This made the neurons vulnerable to infection. Likewise, the team blocked infection that would normally occurs in other types of brain cells, such as microglia, by genetically engineering them to produce FEZ-1. They are now hoping to achieve the same thing in macrophages, a type of white blood cell.

The article is compiled by Md Jakir Hossain, a student of Department of Genetic Engineering and Biotechnology at University of Chittagong.

Holistic approach for palliative care

PROFESSOR DR ABM F KARIM

Palliative care is an integrated approach of treatment for terminally ill patients that improves their quality of life through lowering sufferings and relief of pain. But it is not just only the treatment of pain and disease related symptoms. It involves comprehensive care with physical improvement as well as psychological council.

Unfortunately appropriate way of delivering palliative care is not followed in many cases. Some caregivers do not pay proper attention to them as they think death is inevitable and there is nothing to do with them. In fact, there are many things to do. Although we can not prevent death, we can help prevent their painful demise. We can give them much comfort at the end of their life so that they die like a normal human being. We can ease the intractable pain; we can enhance the quality of life and even can prolong the life span in some cases. For all this, we need to approach in right way.

Some physicians may say his/her last statement to a terminally ill patient as "I am trying for you, we have nothing more available to improve your situation". This type of statements may be uttered by any doctor for a dying patient aged or young when all known avenues of curative treatment are exhausted.

It is more disturbing, disheartening, disappointing than the truth embedded in the statement. Usually tears swell up in everyone's eye after hearing such statement. Whatever the case may be, I personally believe that such statements should be framed in a different manner. I would rather say, "we have given you enough of costly and toxic treatments. But the benefit is not yet remarkable. You are now suffering

from severe pain (and other symptoms according to nature of diseases). It is very important for me to try to relieve from these symptoms and from now, we shall focus on better treatment. After your troubles are relieved, I shall try to consider other treatment. I am now searching through the Internet the world's most up-to-date publications including this month to see whether any other effective treatment



is discovered for your situation anywhere in the world. If you would like to discuss anything with me, please go ahead while I write new medicine for you."

Usually the patient understands and realises. Sometimes not in the presence of the patient, the relatives may ask about the probable life span of the patients. I would say "No one can give a time table for death. I may give an indication like not more than 3 months or 6 months but please note that the religion does not allow any predictive

statement to be pronounced by any human. It is totally an affair of the Almighty, who decides on these matters of life and death."

Many doctors and specialists consider this as the fight against the inevitable, which is nothing but futile. They might increase the mental sufferings of the patients instead of relieving it. All doctors specially oncologists (cancer specialists) must learn the art of facing

the foreseeable and must not be the cause iatrogenic (caused by human) futile and fruitless sufferings to the patients and his/her relatives. The desire to die with dignity is cherished by everyone and should be considered as a human right for every dying patient.

The writer is Professor Emeritus and Former Chairman: Radiation Oncology, Vrije University Hospital at Amsterdam. He is presently an Advisor to Saarc Federation of Oncologists. Currently he holds the post of Chairman, Oncology Club and Editorial Board of Cancer Control Journal in collaboration with Moffitt Cancer Center, USA.

Know the signs of childhood cancer

DR ABU SAYEED SHIMUL

About 1 in every 600 children develops cancer before they reach the age 15. The cause behind childhood cancer is still relatively little known. But the overall cure rate for childhood cancer has significantly improved over the last 2 decades in association with clinical trials and the development of new treatments.

Compared to adult cancers, childhood cancers tend to have different characters and occur in different sites of the body. Common adult cancers such as lung, breast, colon and stomach are extremely rare among children. On the other hand, certain cancers are almost exclusively found in children, especially embryonal tumours which arise from cells associated with the foetus, embryo and developing body inside the mother's womb.

Cancer takes a child's strength, destroys organs and bones and weakens the body's defense against other illnesses. Among all age groups, the most common childhood cancers are leukemia (cancer of white blood cell), lymphoma (cancer of special body liquid lymph forming cells) and brain cancer. As children enter their teen years, there is also an increase in the incidence of osteosarcoma (bone cancer). The sites of cancer are different for each type, as are treatment and cure rates.

- Signs**
- Continued, unexplained weight loss
 - Headaches, often with early morning vomiting
 - Increased swelling or persistent pain in bones, joints, back or legs
 - Lump or mass, especially in the abdomen, neck, chest, pelvis or armpits
 - Development of excessive bruising, bleeding, or rash
 - Constant infections
 - A whitish color behind the pupil (need to be distinguished from childhood cataract by an ophthalmologist)
 - Nausea which persists for a long time or vomiting without nausea
 - Constant tiredness or noticeable paleness
 - Eye or vision changes which occur suddenly and persist for a long time
 - Recurrent or persistent fever of unknown origin

We should observe our child for any sudden, persistent changes in health or behaviour as listed above. Since most of the signs/symptoms of cancer can also be attributed to benign conditions, the diagnosis of cancer can be a long process. You must trust your own instinct and work as a team with your doctor.

One important message we should keep in mind that early diagnosis is the key to win over cancer. It is difficult to treat cancer once it spreads other parts of the body.

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Call for justice for people with leprosy

PROF PRAVAT CHANDRA BARUA

Although Bangladesh has made a commendable progress in control of leprosy, the disease still poses a considerable public health threat in certain areas. People with leprosy are cured significantly with successful medical treatment. But the stigma and social isolation becomes a major concern for thousands of people who live with permanent disfigurements caused by the disease. They face more extensive social and psychological adverse impacts than many people consider. But the problem is frequently overlooked and neglected.

There is urgent need to address the affected persons by providing proper care and rehabilitation. People face injustice from leprosy-related stigma and discrimination. Even though leprosy is now totally curable, thousands of people are experiencing rejection everyday from near and dear ones of their families, society and communities



they belong to. We must help them live with dignity and protect their rights.

The elimination goal was set by World Health Organisation (WHO) and that is less than 1 per 10000 populations. Bangladesh has achieved nationwide goal by the end of 1998, 2 years before the set target. It stands at 0.28 per 10,000 populations at the end of 2009.

Several areas like Dhaka and Chittagong Metropolitan, certain districts (Nilphamari, Bandarban, Khagrachari, Gaibandha), are still burdened with high number of patients with leprosy. They need particular attention in the context of treatment and stigma. Many people of that area believe leprosy is a curse. Widespread awareness in those communities is much needed. The rising awareness will motivate more people to seek treatment and will make a difference in the life of people who already living with leprosy. The awareness should not only aim at

treatment, but also to remove stigma related to the disease. Eight NGOs are assisting the Government in MDT (Multi-drug Therapy) services which are running in 31 districts (272 upazilas) of the country. There are 625 MDT Centers at upazila (sub-district) and lower level, 3 Government leprosy hospitals and 8 NGOs leprosy hospitals in Bangladesh are in action to provide treatment.

Such set up is sufficient to provide treatment but sometimes we need more than just proving free drugs. People who are living with permanent disfigurement and incurable by drug desperately need our assistance to live like a normal member of the society, to exercise their rights which are often violated. We need to ensure justice and protect their rights.

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