

DR MD RAJIB HOSSAIN

Air pollution (both indoor and outdoor) is a major environmental health problem that increases the global burden of diseases like respiratory infections, heart disease, lung cancer and birth defects.

Indoor air pollution is estimated to cause approximately 2 million premature deaths mostly in developing countries like Bangladesh. Urban outdoor air pollution is estimated to cause 1.3 million deaths worldwide per year. Experts urged for greater awareness of health risks caused by urban air pollution, implementation of effective policies and close monitoring of the situation to reduce global burden of diseases.

Dhaka, the capital of Bangladesh is one of the cities where level of air pollution is alarming — six times higher than the recommended level of World Health Organisation (WHO). In a recent report from WHO reveals that annual mean PM10 (an indicator of measuring air quality) in Bangladesh is 120 per cubic metre (µg/m³) with a level of 134 µg/m³ in Dhaka and 71 µg/m³ in Chittagong. These are much higher than the WHO recommended maximum level of 20 µg/m³. PM10 particles, which are particles of 10 micrometers or less, which can penetrate into the lungs and may enter the bloodstream, can cause heart disease, lung cancer, asthma, and acute lower respiratory infections.

According to a World Bank report, air pollution kills 15,000 Bangladeshis each

Let's breathe and move together for clean air



PHOTO: TAREQ SALAHUDDIN

year. Two-stroke automobiles, industrial emissions and bad civic practices are some of the factors causing air pollution in Bangladesh.

The lead content of dust in Dhaka is 10 times higher than that of standard level. The large number of children, street children, local streetwalkers and rickshaw pullers in Dhaka City are at particular risk from this air pollution.

Numerous health hazards due to poor air quality are evident now. Nearly 50 percent of pneumonia deaths among children under five are due to particulate matter inhaled from indoor air pollution. In developing countries like Bangladesh, exposure to pollutants from indoor combustion of solid fuels on open fires or traditional stoves increases the risk of acute lower respiratory infections and associated mortality among young children.

Indoor air pollution from solid fuel which is most common in rural Bangladesh is also a major risk Chronic Obstructive Pulmonary Disease (COPD), a slowly progressing disease characterised by a gradual loss of lung function and lung cancer in adults. Indoor exposures to dampness, dust mites and fungal allergens may account for 20 percent of asthma prevalence.

Air is essential to sustain life. But when it becomes polluted, it turns into a deadly weapon to kill lives, sicken human health. Let's breathe and move together for clean air.

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TRIBUTE

Quest to cure cancer

STAR HEALTH DESK

When a representative of the Nobel Foundation could not reach Dr Ralph M Steinman by telephone last Monday to deliver the thrilling news that he had been awarded a Nobel Prize in Medicine in 2011 for his breakthrough work in immunology, he sent him an e-mail about the honor. But Dr Steinman will never see the message nor learn of the prize. He died of pancreatic cancer 3 days before it was announced.

Dr Steinman, a scientist in Rockefeller University made himself into an extraordinary human lab experiment, testing a series of unproven therapies — including some he helped to create — as he waged a very personal battle with pancreatic cancer. His work had been part of an unorthodox experiment to save his life.

Dr Steinman's career-long quest had been to develop a vaccine against cancer for humans, having shown 20 years ago that such a treatment could be effective in mice. Usually, medical research proceeds at a glacial, thorough pace: cell studies lead to studies in small animals which lead to studies in larger animals, which eventually lead to small, highly-selective clinical trials in humans. But Steinman decided to make his own body the ultimate experiment. He had removed a piece of the tumour that would eventually kill him, and trained his immune cells to track down any hint of the tumour that might have escaped the surgery.

There was no good reason to expect that Steinman could fashion a cure for one of the world's most vicious cancers in time to save his own life. But it was easy to think that it was at least possible. The made-for-Hollywood story of the renegade scientist who fights the establishment to prove his discovery, and then uses it to cure himself, was powerful enough to compel hope. Hats off to Dr Steinman.



Dr Ralph M Steinman

HEALTH bulletin

Men more prone to type 2 diabetes

Men are biologically more susceptible of developing type 2 or adult onset diabetes. Men need to gain far less weight than women to develop the condition, according to a study from Glasgow University team.

Vitamin D could lower risk of developing type 2 diabetes

Scientists at the Helmholtz Zentrum München, a German research centre have shown that people with a good vitamin D supply are at lower risk of developing Type 2 diabetes while individuals with lower concentrations of vitamin D in their blood have a higher risk.

Healthy diet tied to fewer birth defects

Women who eat a better diet leading up to pregnancy are less likely to have babies with birth defects, according to a new study from Stanford University. Experts urge women who are pregnant or may get pregnant to eat a variety of foods, including fruits, vegetables and grains and take a vitamin supplement that contains folic acid.



Psychoeducation: A need of the time

Psychoeducation refers to the education offered to people who live with a psychological disturbance. Psychoeducational training involves patients with schizophrenia, clinical depression, anxiety disorders, psychotic illnesses, eating disorders and personality disorders, as well as patient training courses in the context of the treatment of physical illnesses.

Psychoeducation is still a newer word in Bangladesh. It is a specific form of education aimed to help a mentally ill person and his/her family. It helps to learn how to deal with mental illness and thus it prevents relapse of the disease. When a family is going through a tough time with mentally ill member(s), psychoeducation plays a crucial role to increase coping skills.

The aim of psychoeducation is to encourage the return of mentally ill people into community. Social get-together, community work and social acceptance will boost the self esteem of such people. A major group of young generation (child and adolescents) in Bangladesh is suffering from Psychiatric problems. If early intervention is taken and specific management is given, we can reduce the future disease



burden in our country.

Psychoeducation through schools, hospitals and media can be worthy. General people have a common idea about psychiatric medicine that all sleeping pills are mainly used in psychiatric treatment. While educating the mentally ill patients as well as their family members, physician has to clarify that these medicine used to treat the disorder are not the popular sedatives and the aim of the treatment is not to put the men-

tally ill to sleep all the time so that they do not make any problems in others life.

Psychoeducation helps the patient to learn about his/her disease process and help to manage the conditions. Once you know, you will never lose the grip.

The write up is compiled by Dr Nafia Farzana Chowdhury, a Medical Officer working in the Department of Psychiatry, Bangabandhu Sheikh Mujib Medical University (BSMMU). Email: nafiafarzana@hotmail.com

HEALTH TIPS

Coping with nasal congestion

Nasal congestion, commonly called a stuffy nose, can affect breathing, hearing and sleep. The U.S. National Library of Medicine suggests ways to ease nasal congestion in adults:

- Take a decongestant or antihistamine to help alleviate stuffiness.
- Run a humidifier or vaporiser to make the air more humid.
- Use a saline nasal spray.
- Drink more fluids, such as chicken soup, broth or hot tea.
- Keep your head elevated when you sleep.



Knowing for better living

In Bangladesh . . .

Dengue fever is more common in late July & incidence raises for the next 2-3 months !

Dengue is transmitted by Aedes mosquito

Use mosquito net to prevent mosquito bite

Don't allow unwanted water accumulation

Use only Paracetamol to reduce the fever

Consult your Doctor



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