

NATIONWIDE CAMPAIGN FOR MEASLES

## Protect all children from measles through vaccination

DR MD RAJIB HOSSAIN

Although there is safe and effective vaccine available to protect against measles, the disease still remains the fifth leading cause of death among the children under five years of age in Bangladesh. Millions of children mostly from the urban poor, street children, and rural hard to reach areas are not yet vaccinated against measles — a highly infectious viral disease. Unicef estimates about 25-33 per cent of young Bangladeshi children at risk. Ministry of Health and Family Welfare and Unicef have given the utmost importance on it and launched a two week nationwide measles campaign in order to eradicate the disease from the country.

The campaign scheduled from February 14-28, aimed at bringing 20 million children under vaccination against measles. This is the second largest initiative in Bangladesh after 2005-2006 campaign when about 35 million children were immunised throughout the country. During the campaign period, children aged 9 months to



less than 5 years will be immunised with free measles vaccine. Children who received the vaccine before or those who suffered from measles will also need to be immunised with a second dose which is recommended to ensure that the child is fully immunised.

The number of measles outbreak declined significantly in Bangladesh after the first major campaign. After the campaign, no

measles outbreak was reported except in 2008 and 2009. Although incidence of measles is declining, Bangladesh along with other countries of South-East Asia are still far away from reaching the target of reducing measles-death 90 per cent by 2010. According to WHO, still about 20000 children die annually from measles in Bangladesh. Health experts underscored the importance of large-scale vacci-

nation campaigns along with irregular campaign for a better progress.

Although measles deaths have dropped significantly, global immunisation experts warn of resurgence in measles deaths if vaccination efforts are not sustained. Measles is incredibly resilient and has a tremendous power of rapid comeback. In the USA, 55000 measles cases and more than 130 deaths occurred in between 1989 and 1991, a period when it came back virulently after successfully reducing of measles death.

Experts recommended that countries must continue follow-up vaccination campaigns every two to four years until their healthcare systems can provide two doses of measles vaccination to all children and provide treatment for the disease to eliminate the risk of resurgence.

Measles is a highly contagious viral disease affects mostly the children. It spreads through droplets from the nose, mouth or throat of infected cases. Initial symptoms, which usually appear 8-12 days after infection, include high fever,

runny nose, bloodshot eyes and tiny white spots (called Koplik's spot) inside of the mouth. Several days later, rash develops, starting on the face and upper neck gradually spreading downwards.

There is no specific treatment for measles and most people recover within 23 weeks. However, 1-5 per cent of children die of the complications of disease. Particularly in malnourished children and people with reduced immunity, measles can cause serious complications, including blindness, encephalitis (a dangerous infection of the brain causing inflammation), severe diarrhoea, ear infection and pneumonia.

All people should join the campaign to prevent unnecessary deaths and complications from measles. We have to make sure that all children receive the vaccine to reach the target of reducing death from measles, to achieve the Millennium Development Goal (MDG) 4 and allow children to enjoy their right to survive in a healthy condition.

E-mail: rajibsmc@gmail.com

## Women with epilepsy face more challenges than men

Although epilepsy similarly affects men and women, health issues and concerns faced by women living with epilepsy is different from men. Women face many unique challenges — from changes during the monthly cycle which may trigger seizures to concerns regarding pregnancy. Menopause, anticonvulsants, hormones, stress and mood disorders also affect in a different way in females.

Epilepsy, a brain disorder that causes people to have recurring seizures is influenced by female hormones — estrogen and progesterone. Both of these hormones interact with brain cells including those in the temporal lobe, a part of the brain where partial seizures often begin. Estrogen is an excitatory hormone, which makes brain cells give off more of electrical discharge. Progesterone, on the other hand, is an inhibitory hormone, which calms those cells down.

When the body is making more estrogen than progesterone, it can make the nervous system excitable. In other words, a woman could be at greater risk for seizures.

Many women develop their first seizures when they enter puberty. This is because before puberty, not many sex hormones circulate in body.

Seizures that are affected by a woman's menstrual cycle are called catamenial epilepsy. Some women have most of their seizures when there is a lot of estrogen in their body, such as during ovulation. Other women have seizures when progesterone levels tend to drop, such as right before or during their period.

Seizures may start around the last half of menstrual cycles and continue through the whole second half of the cycles. Women with epilepsy have more anovulatory cycles (cycles that do not release an egg) than women without epilepsy. Data suggest that as many as 40 per cent of menstrual cycles in women with epilepsy do not release an egg.

A woman's seizures might go away when she reaches menopause; this usually happens in women who have catamenial epilepsy.

If a woman can identify the role of hormones playing in her seizure patterns, it can help her treatment. Keeping a calendar of menstrual cycle and the days of having seizures helps; including notes about other factors that might be important, such as missed medication, sleep loss, stress or other illness. By sharing these records with the doctor, a woman can work together to manage her epilepsy more effectively.

The writer up is compiled by Dr Shagufa Anwar, General Manager, Business Development of Apollo Hospitals, Dhaka. E-mail: shagufa.anwar@apollohakha.com

## Occupation a key factor in men's lung cancer risk

Men who work in certain occupations continue to be at increased risk of lung cancer, new research from Italy shows.

In fact, about 5 percent of lung cancers in men are job-related, Dario Consonni of the IRCCS Ospedale Maggiore Policlinico in Milan and associates found.

While cigarettes are by far the most important cause of lung cancer, chemicals and other on-the-job hazards "play a remarkable role" in lung cancer risk, the researchers write in the American Journal of Epidemiology.

To provide updated information on these risks, they looked at the association between lung cancer and jobs either known or suspected to increase the risk of the disease in 2,100 people diagnosed with lung cancer and 2,120 healthy individuals matched by age, gender and residence.

For men, about 12 percent had worked in occupations listed as known lung cancer risks, compared to 6 percent of controls; these occupations included mining, metalworking, and certain types of construction work.

Men in the known to be risky occupations were 74 percent more likely to have been diagnosed with lung cancer. The strongest associations were seen for ceramic and pottery jobs and brick manufacturing, as well as for those working in manufacturing of non-iron metals.

The same percentage of cancer patients and healthy individuals — about one in five — worked in the occupations suspected to be associated with lung cancer, indicating no overall increased risk. But the researchers did find a "marked elevated risk" for gas station attendants, and for people working in leather tanneries, glass workers, and welders, although these were based on a small number of people.

About 5 percent of men's lung cancer risk could be attributed to occupation, the researchers found.

Among the 385 women included in the study, just three of the cancer patients and two of the healthy individuals worked in occupations known to be associated with lung cancer; this translated to a four-fold increased cancer risk, but because such a small number of women were exposed, this figure is "imprecise," the researchers note. They did find "suggestive" increases in cancer risk for female laundresses and dry cleaners.

Source: American Journal of Epidemiology

## Gallstone disease a risk factor of type 2 diabetes

Although stone disease has been associated with insulin resistance, its impact on the risk of type 2 diabetes is lacking. Using data from a prospective cohort study [European Prospective Investigation into Cancer and Nutrition (EPIC)-Postdam], German researchers have established that the presence of gallstones, but not kidney stones, is a predictor of future type 2 diabetes.



Researchers identified 849 incident cases of type 2 diabetes among a cohort of 25,166 participants. After adjusting for age, sex, smoking, alcohol intake, education and physical activity, subjects who reported gallstones (n=3,293) were at a significantly higher risk of type 2 diabetes (relative risk, RR 1.95), which remained significant following adjustment for obesity variables and hypertension.

However, the presence of kidney stones (n=2,468) did not influence diabetes risk.

Source: American Journal of Epidemiology

## HPV: The puzzling virus

ABU SIDDIQUI

The Human Papillomavirus (HPV) is considered as a major health threat for women worldwide. The majority of cervical cancer cases, by far, are thought to result from chronic infection with certain strains of HPV. The virus can be hidden for years from a woman's immune system with no apparent symptoms — then awaken and create the deadly disease. This is called shy virus that puzzled scientists for many years. In 1983, Dr Harald zur Hausen of Germany discovered the association of HPV with cervical cancer for which he was awarded the Nobel Prize in Medicine in 2008.

HPV infects predominantly the cervix (lower part of uterus) and also can affect vagina and anus. Although it causes cancer in women, it can lead cancers of the anus and penis in men. It can also infect the mouth and throat. Over 100 different types of HPV have been identified so far. Some HPV types cause warts, but do not cause cancer; whereas, other types cause cancer, but do not cause warts. However, the majorities of viruses are considered harmless and have no symptoms. Most infected individuals do not know that they are infected and are passing the virus on to their sex partner. Very rarely, a pregnant woman with genital HPV can pass HPV to her baby during delivery.

About 40 types of HPV are typically transmitted through sexual contact. Persistent infection with high-risk HPV types (HPV-16,18,31,33 etc.) different



from the ones that cause warts — may progress to pre-cancerous lesions and invasive cancer.

Most HPV infections in young females are temporary, 70 per cent of infections are gone in one year and 90 per cent in two years. But when infection persists, 5-10 percent of infected women develop pre-cancer, which can eventually progress to invasive cervical cancer. This process usually takes 15-20 years, providing opportunities for detection and potential treatment with high cure rates. There are several ways that one can lower the chances of getting HPV — practice of safer sex, faithful relationship and vaccines.

Visual Inspection using Acetic Acid (VIA) and Pap test are used to detect

abnormal cells which may develop into cancer. A cervical examination also detects warts and other abnormal growths. Abnormal and cancerous areas can be removed with a simple procedure, typically with a cauterising loop or cryotherapy. New HPV DNA tests are now available that is more sensitive than Pap or visual inspection.

Cervical cancer screening has reduced the incidence and fatalities in the developed world, whereas, substantial death tolls are still associated with HPV infections in the developing countries like Bangladesh where the cancer ranked number one among cancers that affect females.

The writer is an immunologist working in a multinational health care company in the USA. E-mail: abujisid@yahoo.com

### INTERVIEW

## Patient education key to cope with Thalassaemia

DR TAREQ SALAHUDDIN

Thalassaemia is the name of a group of genetic, inherited disorders of the blood (more specifically of the haemoglobin molecule inside the red blood cells). The comprehensive support to the Thalassaemia patients in Bangladesh is still below the line that pushes them forward to the lifelong miseries.

Recently George Constantinou, the Secretary of Thalassaemia International Federation paid a special visit to Bangladesh to observe the condition of Thalassaemia patients. During his short visit, he shared his views with Star Health.

George underscored on turning a different approach of the physicians to the Thalassaemia patients. He said, "The attitude of the doctors are very important. A patients must be compliant with his/her doctor to cooperate treating the condition."

George, who himself is a Thalassaemia patient, expressed that he saw many doctors who don't pay attention to the patients in that expected manner. The patients may not be aware of their condition. That is how they are struggling. Thalassaemia patients need to visit a



George Constantinou spending time with Thalassaemia patients.

doctor many times in his/her lifetime. So treating the patients holistically as a human being is very crucial. Otherwise, handling the disease is not possible. Due to the lack of this holistic approach, most sick people die of the disease.

George shared his own experience with his doctor at his childhood. Professor Bernadette Modell asked George at his first visit what he would like to be when he grew up. George said, "It was the

first time someone looked at me; it was my doctor — not my mother, not my father ... and first time I thought about myself that I can also grow up as a normal individual, I may have vision as well..."

George stressed on patient education the most. Unless the patients understand their condition, the purpose of investigations, progress of the disease, they may not cooperate with the doctor. Patients must be proactive, compliant, willing and capable to cope with the disease.

George urged the professional associations working on Thalassaemia in Bangladesh to help the Government running a dedicated and integrated approach to handle the disease. Unlike many other countries in the world, professional bodies in Bangladesh are dealing mostly with the treatment and different services like transfusion, drug administration and so on. George opined that they need to contribute something to patient education as well.

Also the Government needs to focus on some form of programmes focusing on the disease.

E-mail: tareq.salahuddin@thedailystar.net

### DID YOU KNOW?

## Extremely premature babies show higher autism risk

Children born extremely preterm may face a much higher-than-average risk of developing autism later in childhood, a new study suggests.

Researchers found that of 219 children born before the 26th week of pregnancy, 8 percent met the criteria for an autism spectrum disorder (ASD) at age 11. That compared with none of 153 classmates who were born full-term and included in a comparison group.

The ASD rate was far higher than that in the general population, which experts estimate to be somewhere between one and nine cases per 1,000 children, depending on how strictly the disorders are defined.

ASD refers to a group of developmental disorders that hinder people's ability to communicate and build relationships. The conditions range from severe cases of "classic" autism to Asperger's syndrome — a disorder in which a person has normal intelligence and verbal skills, but difficulty socializing and understanding subtler forms of communication, like body language and vocal tone.

This latest study shows not only a substantially heightened risk among children born very preterm, but also points to which of these children are most likely to be affected.

"The study shows an increased frequency of ASD, but it is mainly among children with other disabilities, such that the risk of it developing in children with no other problems is very low," explained Dr. Neil Marlow, a professor of neonatal medicine at University College London, in the UK, and one of the principle researchers on the study.

Medical advances have meant that more and more very premature and low-birthweight newborns are surviving. Still, they face increased risks of delayed development, learning disabilities and behavioral problems later on.

"We know that very preterm babies' brains develop differently to those of full-term babies after birth, and that this is associated with a high frequency of cognitive problems in childhood," Marlow expressed in a statement.

The impaired brain development in these children may account for the high ASD risk, the researchers speculate. And that, they say, means that autism may arise via different mechanisms in extremely preterm children compared with those who were born full-term — for whom, Marlow noted, genetics are believed to be key.

For parents of children born extremely preterm, the findings mean that they should be aware of the possibility that their child's learning or behavioural issues could be indicative of an ASD.

"Where a parent is worried about learning or behavioural problems in their very premature baby," Marlow said, "they should seek advice from a professional to see what the nature of these problems is."

Source: Journal of Paediatrics



A nurse holds the foot of a premature baby girl, born at 20 weeks, in a hospital in Colombia in 2007.