

Dengue set to peak, stay cautioned

DR MD RAJIB HOSSAIN

While the country is preparing to combat pandemic H1N1 influenza A virus, another outbreak of a virus called dengue is gradually escalating at an alarming level. City hospitals are seeing huge number of patients everyday. Health experts warned that if proper measures are delayed, the condition could be more fatal than that we are experiencing now.

On an average, around 15 dengue patients stay admitted in this hospital everyday with five to six fresh admissions daily since the end of July. Especially the children are the falling prey to the virus. Experts recommend that early recognition and prompt supportive treatment can substantially lower the risk of developing severe disease.

Dengue fever is caused by any type of four closely related dengue viruses and transmitted by the mosquito named *Aedes aegypti*. Human transmission takes place when the *Aedes* mosquito bites a healthy person and feeds on an infected person's blood.

The principal symptoms of dengue are high fever and at least two of—severe headache, severe eye pain (behind eyes), joint pain, muscle and/or bone pain, rash, mild bleeding manifestation (e.g., nose or gum bleed, easy bruising), low white cell count in blood etc.

People should consult a physician and undergo diagnostic tests if they experience these symptoms. Experts recommend people to go to a hospital immediately if any of the warning signs appear like—severe abdominal pain or persistent vomiting, red spots or patches on the skin, bleeding from nose or gums, vomiting blood, black, tarry stools (feces, excrement), drowsiness or irritability, pale, cold, or clammy skin, difficulty breathing etc.

Most cases are of classical dengue and the symptoms and signs are mild and cured with symptomatic treatment. Dengue Haemorrhagic Fever (DHF) which is a dangerous form of the disease is responsible for death. It is expected to strike as previously identified dengue fever patients had become susceptible to this disease. If a clinical diagnosis is made early, doctors



can effectively treat DHF using fluid replacement therapy. Adequately management of DHF generally requires hospitalisation.

There is no specific medication for treatment of a dengue infection. Physicians suggest taking rest, drink plenty of fluids to prevent dehydration, avoid mosquito bites while on fever. People suspected to have dengue should avoid certain analgesics drugs (pain relievers)—Acetaminophen, Ibuprofen, Naproxen, Aspirin or Aspirin

containing drugs, experts warned.

Dr Shankor Narayan Das, an Associate professor of Medicine at Mitford Hospital, Dhaka said that there is lack of sufficient public awareness and inadequate measures. He said, "There is no need to be panicked, but people should be aware of. A person bitten with one dengue strain becomes immune to it, but if the same patient is bitten by another strain, the chances of contracting a fatal infection increases."

"Our target should be

aimed at providing life-long protection and we need to raise awareness among households," he added.

There are not yet any vaccines to prevent the infection with dengue virus. The most effective protective measures are those that avoid mosquito bites. To prevent the spread of dengue fever, first we must prevent the breeding of its vector, the mosquito. It prefers to breed in clean, stagnant water easily found in our homes. Items that collect rainwater or to store water (for example,

plastic containers, 55-gallon drums, buckets, or used automobile tires) should be covered or properly discarded. Vases with fresh flowers should be emptied and cleaned (to remove eggs) at least once a week. This will eliminate the mosquito eggs and larvae and reduce the number of mosquitoes.

Proper application of mosquito repellents on exposed skin and clothing decreases the risk of being bitten by mosquitoes. Using door screens also reduces the risk of mosquitoes coming indoors. Moreover, mosquito nets can play a crucial role preventing us from the bites, especially the children.

All dengue patients must be kept under mosquito net until the second bout of fever is over and they are no longer contagious. The *Aedes aegypti* mosquito is a daytime biter with peak periods of biting around sunrise and sunset. It may bite at any time of the day and is often hidden inside homes or other dwellings, especially in urban areas. So we have to use mosquito net in those periods.

Ref: CDC

DID YOU KNOW?

Mom's obesity tied to daughters' early puberty

Consequences of obesity in women may extend years into their daughters' lives, study findings hint.

The researchers found that daughters of obese mothers, versus normal- or under-weight mothers, were about three times more likely to start menstruating before their 12th birthday.

Previous studies have shown overweight girls tend to enter puberty at an earlier age and children of obese women tend to be overweight themselves, Dr. Sarah A. Keim, of the National Institutes of Health in Bethesda, Maryland, and colleagues note in the journal *Epidemiology*.

In the current study, daughters of obese mothers were more likely to begin menstruation at a young age, even if they themselves were not overweight.

In the study, daughters of mothers who were obese were 3.3 times more likely to begin menstruating when younger than 12 years old, relative to daughters of women who were not obese.

Menstruation at age 12 was 2.7-times more likely among daughters of obese women. These associations held in analyses that allowed for mothers' height and other factors linked with early menstruation.

By contrast, the investigators found no early menstruation link in the daughters of women who were normal or under-weight when they got pregnant.

The researchers call for further investigations to explain these associations. For example, mothers and daughters may share diet and exercise habits.

Source: Epidemiology



Mitford Hospital makes a difference in cardiac care

Surgery facilities could make the centre self sufficient dealing with the complete range of cardiac patients

STAR HEALTH REPORT

When most of these hospitals are struggling to cope with poor settings dealing with the rising number of patients, Mitford Hospital makes a difference in cardiac care with their highly skilled cardiac team and well planned cardiac set up. Thus it is flourishing the image of government sector seeing more patients with cardiac ailments.

The department is serving more people these days with improved and advanced treatment options. The department had been pioneering radial angiogram (an improved method of angiogram through the artery of hands instead of legs) at regular basis for long time before many government and high tech private hospitals in Bangladesh.

Different types of challenging angiogram and angioplasty are being performed as regular basis here. Along with other cardiac services, the department has been performing on an average 5 angiograms every day. Recently, the department has performed primary PCI (Percutaneous Coronary Intervention) which is very useful and improved method to treat myocardial infarction or heart attack and to prevent other life threatening complications.

The cardiac team is lead by renowned interventional cardiologist Prof Dr Md Afzaur Rahman, who is very famous for his brilliant works in the country and abroad. Prof Rahman, who has

recently been selected as the international faculty member of Transcatheter Cardiovascular Therapeutics (TCT 2009 Conference) in the USA said that heart attacks are serious, but they need not be deadly. By ensuring early hospitalisation and prompt treatment, we can save the valuable lives and significantly reduce the number of mortality and morbidity. We need to ensure the lifesaving measures in all hospitals to reduce the unnecessary death and disability.

"Learning is another important thing that needs to be delivered to the people. We have to focus more on prevention strategy in the context of poor settings of a country like Bangladesh. The increase in coronary risk are more environmental than genetic, and can significantly be lessened by simple medications, changing our lifestyle like eating habits and regular exercise. We are doing better in cardiac care but still have to do a lot more for prevention and treatment", he added.

Although the cardiology department of Mitford Hospital signals that they are ready to give improved and latest medical treatment to all type of people, the hospital can not provide full fledged cardiac services due to the lack of cardiac surgery department. Since both cardiology and cardiac surgery are inter-related, they can not give proper services to people who need more surgical than medical treatment.

Often patient admitted here whose ultimate treat-

ment is surgery, need to seek the final treatment facilities at some other institutions like NICVD or other private hospitals. If the cardiac surgery department is established here, more people with surgical need can be served at the same setting more conveniently.

There is only one full-fledged government cardiac specialised center—the National Institution of Cardiovascular Diseases (NICVD) for the entire population in Bangladesh. Apparently a single center is quite insufficient in comparison to the need of whole people, especially for the poor and marginalised patients who cannot afford private healthcare.

We need to expand the cardiac care and set up more centers to serve large number of population. The tertiary centers like medical college hospitals can lessen the burden and effectively serve huge number of patients. If these centers can provide their services in the full range more patients can access healthcare in government setting. Private healthcare sectors in cardiac care are already booming, but the sky scraper medical expense make them unavailable for the poor.

Treatments of cardiovascular diseases are considered costly. But the disease can affect anyone irrespective of poor and rich. There is a need for increased government investment through national programmes aimed at prevention, control and improving treatment of cardiovascular diseases.

Prevention and control of human Rabies

DR M SALIM UZZAMAN

In order to create awareness against a neglected and fatal but preventable disease—Rabies, World Rabies Day was observed all over the world on September 28. Every year 50-60 thousand people die of rabies all over the world. Within Asia, 80 percent of cases occur in India, Pakistan, Bangladesh, China, Philippines and Thailand. People usually get rabies from the bite of a rabid animal like dog, cat, bat, fox etc.

Rabies infects the central nervous system, causing encephalopathy (brain disease, damage, or malfunction) and ultimately death. Early symptoms of rabies in humans are nonspecific, consisting of fever, headache, and general malaise and feels pins, numbness or itching at the bite site. As the disease progresses, neurological symptoms appear and may include insomnia, anxiety, confusion, slight or partial paralysis, excitation, hallucinations, agitation, hypersalivation, difficulty swallowing, hydrophobia (fear of water) and aerophobia (fear of air).

Death usually occurs within days of the onset of symptoms, although fatal rabies is almost 100 percent preventable disease with timely proper intervention. There is no treatment for rabies after symptoms of the disease appear. However, scientists developed an extremely effective new rabies modern tissue culture vaccine regimen that provides immunity to rabies when administered after an exposure (post-exposure prophylaxis) or for protection before an exposure occur (pre-exposure prophylaxis).

Pre-exposure vaccination is recommended for persons in high-risk groups, such as veterinarians, animal handlers and certain laboratory workers. In addition, international travellers, UN peace-keeping forces working in areas of enzootic animal rabies countries and other persons whose activities bring them into frequent contact with rabies virus or potentially rabid animals should be specially taken care of.

Post-exposure prophylaxis (PEP) is indicated for persons with possible exposures include animal bites, or scratches, abrasions, open wounds, or mucous membranes contaminated with saliva or other potentially infectious material or tissue. PEP should begin as soon as possible after an exposure.

Measures after a possible exposure

- Do vigorous washing of the wound thoroughly with soap and plenty of water for 10-15 minutes, and seek medical attention immediately. Then, apply any antiseptic or povidone iodine and ensure tetanus prophylaxis.
- Use of appropriate antibiotic (if necessary) to prevent wound sepsis.
- Avoid suturing, the wound(s) should not be dressed or bandaged unless

necessary.

- Active immunisation with Anti-Rabies vaccine as per doctor's advice.

Measures to prevent the spread of rabies

Though it is the responsibility of the local municipal cooperation/health department to control the number of stray animals in the areas, but as a good citizen we have some responsibilities.

- Teach children never to handle unfamiliar animals, wild or domestic, even if they appear friendly.
- Enjoy wild animals (monkeys, raccoons, skunks, foxes etc.) from afar. Do not handle, feed or unintentionally attract wild animals with open garbage cans or litter.
- Never adopt wild animals or bring them into your home.
- Do not try to nurse sick animals to health. Call animal control or an animal rescue agency for assistance.

There is an urgent need to plan a comprehensive national programme for rabies control based on basic elements like ensuring compulsory vaccination and licensing of the pets, elimination of stray dogs and cats population and strict implementation of quarantine regulations. We have to ensure that people affected by rabies get immediate treatment from skill physicians, not from the traditional healer.

The findings in this report indicate that, as during previous influenza pandemics, bacterial pneumonia is contributing to deaths associated with pandemic H1N1, the team of experts at the CDC and state health departments reported.

The CDC team noted that at first it did not appear that people who were seriously ill with swine flu or who died of it had secondary infections but doctors may have missed them.

Five of the patients who died, including a 9-year-old and an 11-year-old, had infections with the so-called superbug methicillin-resistant *S. aureus* or MRSA. None of the seven children who died had reported medical conditions that should put them at special risk of flu complications, although one was obese and one had Down syndrome.

The researchers cautioned that the patients whose cases were studied may not represent the nation as a whole. But like most of the victims of swine flu, they were young, with a median age of 31 and ranging from 2 months to 56 years.

Moore said people getting flu vaccinations should also ask about getting a pneumococcal vaccine.

REUTERS, Washington

Many people who have died of H1N1 swine flu in the United States have also had bacterial infections, health officials reported recently.

A study of 77 patients who died of the new pandemic H1N1 virus showed 29 percent of them had so called bacterial co-infections, the U.S. Centers for Disease Control and Prevention reported.

About half of these had *Streptococcus pneumoniae*, which can be prevented with a vaccine, the CDC said. It said doctors may be missing these infections in people severely ill with flu.

H1N1 is not any more deadly than seasonal influenza so far but it attacks a younger age group than seasonal flu does and because virtually the entire population lacks immunity, it can infect far more people at once than seasonal flu usually does.

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Speakers are seen in the inaugural session of the recently held 2nd National Health Writers' and Communicators' Convention held at the India International Centre, New Delhi, India. The convention aimed to bring together a mix of health writers and communicators from India and beyond, decision makers, medical professionals, civil society groups, academia, development professionals and other relevant stakeholders to discuss and clearly define the health issues.

Many swine flu deaths linked with second infection

REUTERS, Washington

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WORLD SIGHT DAY Eye health and equal access care

World Sight Day will be observed around the world by all partners involved in preventing visual impairment or restoring sight. It is an annual day of awareness to focus global attention on blindness, visual impairment and rehabilitation of the visually impaired will be observed on October 8. This year the focus is on eye health and equal access care.

Globally visual impairment is most prevalent in men and women 50 years and older; while the majority of eye conditions for this age group, such as cataract, can be easily treated; in some parts of the world there is still the need to ensure that women and men receive eye care services on an equal basis.

World Sight Day is the main advocacy event for the prevention of blindness and for "Vision 2020: The Right to Sight", a global effort to prevent blindness created by WHO and the International Agency for the Prevention of Blindness (IAPB).