# Dengue outbreak: where do we stand?

#### Dr Zubair Khaled Huq

An outbreak is a sudden occurrence of something unwelcome, such as disease. Dengue is a viral infection transmitted by the bite of an infected mosquito. Dengue fever is marked by an onset of sudden high fever, severe headache, pain behind the eyes, and pain in muscles and joints. Some may also have a rash and varying degree of bleeding from various parts of the body including nose, mouth and gums or skin bruising.

Symptomatic illness can vary from dengue fever to the more serious dengue haemorrhagic fever. Dengue haemorrhagic fever is a more severe form, seen only in a small proportion of those infected. Dengue shock syndrome is a dangerous complication of dengue infection and is associated with high mortality. Severe dengue occurs as a result of secondary infection with a different virus serotype.

Dengue and other mosquito-borne diseases like malaria, Zika virus, chikungunya, yellow fever, among others spread mostly during the monsoon and post-monsoon seasons.

People facing any of the symptoms must rush to a doctor and get the necessary tests done and follow what they are prescribed by the doctor. One should also take adequate rest and increase the intake of liquid. Always keep dengue infected patients covered with mosquito net to prevent spread. Use of mosquito net to protect uninfected persons, if possible, in the daytime.



Rapid and unplanned urbanisation, living conditions for the urban poor and lack of sanitation are all contributing to a surge in numbers of people catching vector-borne diseases. Various awareness drives and campaigns must be carried out on different platforms and health systems are being strengthened to deal with the rising numbers of dengue patients. This year, the dengue fever outbreak may become alarming in Bangladesh where there is panic all over due to COVID-19. While the dengue season generally peaks from May, the density of mosquitos in the capital has increased manifold compared to last year when the country witnessed the worst dengue outbreak in history.

The primary preventative measure to reduce dengue infections is the control of mosquito populations. The transmission of dengue requires mosquitoes as vectors. One practical and recommended environmental management strategy is to eliminate unnecessary container habitats that collect water such as plastic jars, bottles, cans, tires, and buckets in which mosquito can lay their eggs. When container habitats are removed and water storage containers are covered to prevent mosquitoes from getting inside them, mosquitoes have fewer opportunities to lay eggs and cannot develop through their life stages

Source reduction can be effective when performed regularly, especially when members of a community are mobilised and educated about vector control. Environmental management initiatives can also include major changes in a community, such as installing water systems with direct connections to residences and replacing wells and other water storage containers, which can be mosquito breeding habitats. Smallerscale environmental changes can also be effective. For example, mosquito populations can be reduced when all members of a community clear blocked gutters and street drains and keep their yards free of containers with standing

In Bangladesh, last year's dengue outbreak was unprecedented. But we have to understand that there is no alternative but to raise awareness in destroying the breeding grounds for mosquitoes to bring the dengue menace to an end.

Climate change and changing patterns of rainfall, humidity is leading to longer breeding spells for the mosquitoes and diminishing disease incubation time. This is leading dengue epidemics to become much more unpredictable in terms of when and where they occur, and their scale, overwhelming our already COVID-19 burdened health system.

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#### DID YOU KNOW?



#### Fasting shows no weightloss benefit over standard meals

Fasting for two thirds of the day does not lead to greater weight loss than eating meals throughout the day, according to a randomised trial in JAMA Internal Medicine.

Roughly 100 overweight or obese adults were assigned to time-restricted eating or consistent meal timing. In the time-restricted group, participants were advised to eat as needed from 12 p.m. until 8 p.m., and then fast for 16 hours until 12 p.m. the next day. In the consistent-meals group, participants were told to eat three structured meals across the day, with snacks as needed. There were no recommendations about caloric intake or physical activity.

At 12 weeks, mean weight loss did not differ significantly between the groups (0.94 kg with time-restricted eating and 0.68 kg with consistent meals). Most secondary outcomes, including changes in fat mass, lipids, and fasting glucose, also did not differ significantly between the groups. Of note, the time-restricted group lost more appendicular lean mass than the consistent-meals group.

The researchers conclude that the findings "do not support the efficacy of [time-restricted eating] for weight loss."

## HEALT Houlletin



# Radiotherapy following prostate cancer surgery can safely be avoided for many men

Most men receiving surgery for localised and locally advanced prostate cancer can have radiotherapy safely removed from their initial treatment, according to a systematic review and meta-analysis published in The Lancet.

The authors recommend that patients should be closely followed after surgery for treating localised and locally advanced prostate cancer. If the cancer shows early signs of coming back, men should be offered radiotherapy. They say that changing treatment policy in this way may offer the opportunity to spare many men radiotherapy and its associated side effects.

Dr Claire Vale, who led a systematic review and metaanalysis, from the MRC Clinical Trials Unit at University College London, UK, said: "Our findings suggest that following surgery, patients whose cancer is confined to the prostate, or has spread only to nearby tissues or organs, can safely be spared routine post-operative radiotherapy and its associated side effects. Radiotherapy need only be given to men if they show early signs that the cancer may be returning."

## Loss of smell to be recognised globally as a symptom of COVID-19

#### STAR HEALTH DESK

Four out of five people experiencing the recent loss of smell and/or taste tested positive for COVID-19 antibodies—and of those who tested positive, 40 percent did not have cough or fever, reports a new study in PLOS Medicine by Prof. Rachel Batterham at University College London and colleagues.

COVID-19 can cause loss of taste and smell, but the prevalence of COVID-19 antibodies in people reporting these symptoms is unknown, and the significance of loss of smell and/or taste as a predictor of COVID-19 is not well understood. To estimate the seroprevalence of SARS-CoV-2 antibodies in people with acute loss of their sense of smell and/ or taste, researchers enrolled 590 taste/smell in the previous month. Following verification of symptoms via a telemedicine consultation, 567 participants with smell and/or taste loss underwent a SARS-CoV-2 antibodies test.

78% had SARS-CoV-2 antibodies, and participants with loss of smell were almost 3 times more likely to have SARS-CoV-2 antibodies compared to those with loss of taste, suggesting that a loss of smell is a highly specific symptom of COVID-19. Of the 78% of participants testing positive for antibodies, 40% had neither cough nor fever. While the study had limitations, such as the self-reporting of smell/taste changes

and the lack of a control group, the researchers believe the evidence indicates that loss of smell should be taken into greater consideration in COVID-19 public health measures such as testing, case isolation, and treatment strategies.

These findings also have significant implications for policy makers globally, as most countries do not currently recommend self-isolation and testing based on acute loss of smell/taste. This study suggests that an over-reliance on cough and fever as the main symptoms of COVID-19 may be flawed and that loss of smell needs to be urgently recognised globally as a key symptom of COVID-19.

Prof Rachel Batterham, who led the study, said "Early self-recognition of COVID-19 symptoms by the members of the public, together with rapid self-isolation and PCR testing are vital in order to limit spread of the disease. Currently, most countries around the world do not recognise sudden loss of smell as a symptom of COVID-19.

Our findings suggest that people who notice a loss in their ability to smell every day house-hold odors such as garlic, coffee and perfumes should self-isolate and seek PCR testing. Loss of sense of smell needs to be recognised globally by policy makers as a key symptom of COVID-19."





### Evercare Hospital Dhaka celebrates World Heart Day

#### STAR HEALTH REPORT

The Paediatric Cardiology Department of Evercare Hospital Dhaka celebrated the "World Heart Day 2020" by continuing low-cost packages for underprivileged children with congenital heart diseases such as Patent Ductus Arteriosus (PDA), Atrial Septal Defect (ASD), and Ventricular Septal Defect (VSD).

Dr Tahera Nazrin, Clinical & Interventional Paediatric Cardiologist, Akhter Jamil Ahmed, General Manager, Business Development, Dr Azmeri and other doctors and staffs were present at the occasion with children having heart diseases.

The treatment is undertaken with state-of-the-art modern technology without any surgical procedure. During this COVID-19 pandemic time Dr Tahera counselled parents regarding personal hygiene and prevention of the corona virus.



# COVID-19

#### **Rumors and Misconceptions Unveiled**

### Can COVID – 19 be transmitted in areas with hot and humid climates?

 The COVID- 19 virus can be transmitted in any climate, including areas with hot and humid weather.

#### Can cold weather kill the new corona virus?

 There is no reason to believe that cold weather can kill the new corona virus or other diseases.

The normal human body temperature remains around 36.5 to 37 °C, regardless of the external temperature or weather.

The best and most effective way to protect yourself against COVID-19 is by maintaining physical distance of at least 1 metre from others and frequently cleaning your hands with alcohol-based hand rub or washing them with soap and water.

By doing this you eliminate viruses that may be on your hands and avoid infection that could occur by then touching your eyes, mouth and nose.

Public awareness by:

