# Dengue — an emerging threat to global health

STAR HEALTH DESK

The incidence of Dengue fever, a mosquito-transmitted viral illness has grown dramatically around the world. Over 2.5 billion people — more than 40 percent of the world's population — are now at risk of Dengue. World Health Organisation's (WHO) South-East Asia region that includes Bangladesh and the Western Pacific regions are the most seriously affected. The disease is now endemic in more than 100 countries. An estimated 500000 people with severe dengue require hospitalisation each year, a large proportion of whom are children. About 2.5 percent of those affected die.

The Dengue virus is transmitted to humans through the bites of infected female *Aedes aegypti* mosquitoes that lives in urban habitats and breeds mostly in man-made containers.

The infection causes flu-like illness, and occasionally develops into a potentially lethal complication called severe Dengue. Dengue should be suspected when a high fever (104°F) is accompanied by two of the following symptoms: severe headache, pain behind the eyes, muscle and joint pains, nausea, vomiting, swollen glands or rash. Symptoms usually last for 2–7 days and then resolve spontaneously in most cases.


PHOTO: AP

A mother comforts her son, who is suffering from dengue fever.

Severe Dengue characterised by severe bleeding is a potentially deadly complication due to blood loss, fluid accumulation in the chest, abdomen, breathing difficulty, organ impairment. Warning signs occur 3–7 days after the first symptoms in conjunction with a decrease in temperature (below 38°C/100°F) and include: severe abdominal pain, persistent vomiting, rapid breathing, bleeding gums, fatigue, restlessness, blood in vomit. The next 24–48 hours of the critical stage can be lethal; proper medical care is needed to avoid complications and risk of death.

To diagnose Dengue, laboratory investigations like platelet count or anti dengue antibody are recommended after 5 to 6 days.

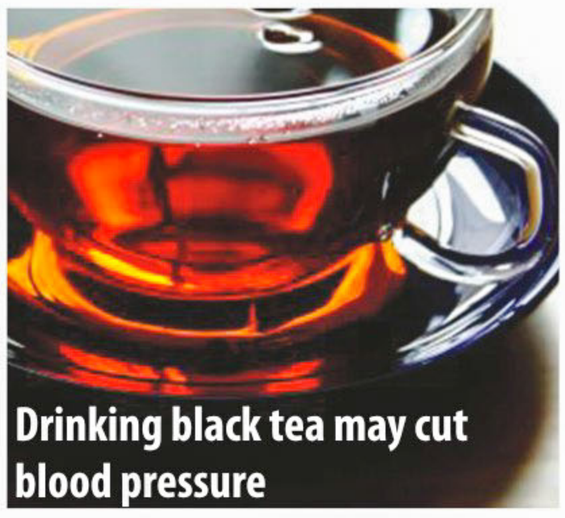
There is no specific but symptomatic treatment is provided for dengue fever. Maintenance of the patient's body fluid volume is critical to severe dengue care.

At present, the only method of controlling or preventing dengue virus transmission is to combat the vector mosquitoes. Vaccines to immunise against dengue are underway but currently unavailable. Destroy the breeding place of Aedes mosquito — clean storage water like earthenware jars, metal drums, concrete cisterns, discarded plastic food containers, used automobile tyres and other items that collect rainwater.

Experts urged to improve community participation and mobilsation for sustained vector control and apply insecticides as space spraying during outbreaks as one of the emergency vector control measures.

**Source: World Health Organisation**

## HEALTH *bulletin*



### Drinking black tea may cut blood pressure

People who enjoy drinking black tea throughout the day may get the added benefit of a slight reduction in their blood pressure, suggests a new Australian study published in the Archives of Internal Medicine. At the end of the study, researchers have seen that the tea drinkers' systolic blood pressure — the top number — fell 2 mmHg, and their diastolic blood pressure also fell about 2 mmHg. While a drop in blood pressure is generally good, a 2 mmHg drop is not significant enough to bring a person with high blood pressure out of the danger zone.

### Overweight linked to acne in teen girls

Overweight girls in their late teens were twice as likely as their normal-weight peers to report a lot of acne in a large new survey of Norwegian teenagers published in Archives of Dermatology.

# Physiotherapy improves leaky bladder

Urinary incontinence is the involuntary or unwanted leakage of urine. Stress incontinence (incontinence during physical exertion) is the most common form of urinary incontinence, affecting about one in three women of all ages, especially older and after repeated childbirth. It occurs when women cough, sneeze, or undertake physical activities like running and jumping. The physical forces push down on the bladder and force urine out. This is a socially embarrassing problem that is rarely talked about or acknowledged, but simply taking physiotherapy can help to get rid of the discomfiture.

Studies have shown that physiotherapy is cost-effective and successful in treating stress incontinence in both in male and female. Physiotherapy involves strengthening the pelvic floor muscles including bladder muscle and improving their endurance and coordination. The following are the ways how physiotherapy helps manage urinary incontinence.

**Strengthen the pelvic floor:** It is not always easy to do pelvic floor exercises properly.

**Strengthen abdominal muscles with pelvic floor:** Recent research has shown that the pelvic floor muscles activate automatically during abdominal muscles contractions. Generally, crunch or half sit up and bilateral straight legs raising exercise in lying posture can strengthen abdominal and pelvic floor muscles.

**Contract your pelvic floor muscles for three seconds, then relax the muscles for three seconds. Do this 10-15 times for several times a day. Although shown here while lying down, these exercises can be done during a variety of daily activities, such as sitting in a meeting, while stopped in your car at traffic light or when talking on the phone.**

**Retrain components of the reflex mechanism:** This is done by contracting pelvic floor muscles during walking, building through jogging which stimulate and retrain bladder control reflex circuitry. Learn voluntarily contraction of the pelvic floor muscles during lifting, coughing and changing postures.

**Improve with aerobic exercise:** An aerobic training program such as running, cycling or swimming can develop an enhanced vascular system supplying any damaged structures and nerves in the urogenital area.

**Recommendations:** If anyone suffers from even mild incontinence, s/he has to try to keep her pelvic floor muscles strong. S/he should not do anything that strains the pelvic floor muscles: avoid repetitive heavy lifting and do not get constipated, manage back and chronic cough problems and also should check with physician if any medication s/he is taking may contribute to incontinence.

Remember, pelvic floor exercises need to be a life long habit and try to get into a daily routing and do not bear down and do not hold your breath during exercises.

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## TIMELINE

# A short history of breast implants

**A breast implant**

Jean-Claude Mas, whose company Poly Implant Prothese (PIP) sparked a global health scare by using substandard silicone, was arrested shortly. The incidence has also triggered interest about breast implant. Following is a brief look at the history of breast implants.

Breast implants are pockets of liquid that are placed inside a breast to increase its size or adjust its appearance. There are two main kinds, containing either saline (salt water) or silicone, a squishy gel.

1895 - Austrian-German surgeon Vincenz Czerny, known as 'the father of plastic surgery', performs breast reconstruction on a woman at the University of Heidelberg.

1945 - After World War Two in Japan, prostitutes catering to the tastes of the U.S. military, begin injecting industrial silicone directly into their breasts. They previously tried goats' milk and paraffin.

1962 - Thomas Cronin and Frank Gerow invent the silicone breast implant. Texan Timmie Jean Lindsey becomes the first woman to have the procedure.

1976 - The U.S. Food and Drug Administration (FDA) regulates silicone breast implants, subjecting them to controls and performance standards.

1982 - The FDA places breast implants in the more rigorous class III category, because of "reports of adverse events in the medical literature."

1991 - Jean-Claude Mas establishes Poly Implant Prothese (PIP) based in southern France, near Toulon.

December 1991 - Mariann Hopkins wins $7.3 million from Dow Corning for health issues linked to her ruptured implants.

January 1992 - FDA calls for a voluntary moratorium on the use of silicone gel breast implants until safety has been reviewed.

March 1992 - Several major medical manufacturers including Dow Corning, Bristol-Myers Squibb and Bioplasty withdraw from the silicone implant market.

April 1992 - The FDA advises that silicone breast implants should only be used for reconstruction after surgery or to correct congenital deformities.

May 1995 - Faced by massive lawsuits, Dow Corning files for Chapter 11 bankruptcy; litigation was halted by the filing.

1996 - PIP begins selling saline-filled implants in the United States, but its failure to gain necessary pre-market approval in 2000 from the FDA to keep selling these implants cuts off that key market.

2000 - France lifts its ban on silicone implants.

December 2000 - The U.K. bans PIP hydrogel implants given to 4,000 women since 1994, finding the manufacturer's biological safety assessment of the product to be inadequate.

2006 - The FDA lifts its restrictions on silicone breast implants, clearing them for cosmetic use in women aged from 22.

2010 - Breast implantation is the most popular form of plastic surgery in the U.S. with 318,123 augmentations performed, 62 percent of which used silicone implants.

March 2010 - France's health regulator, AFSSAPS orders the withdrawal of silicone breast implants made by PIP from the market. PIP files for bankruptcy.

December 2011 - France's health minister announces that the 30,000 French women with PIP implants should have them removed and it will pay for the operations.

January 26, 2012 - Mas and CEO Claude Couty are arrested.

**Source: Reuters**