

Cheap blood drug could prevent maternal death globally

STAR HEALTH REPORT

An inexpensive and widely available drug could save the lives of 1 in 3 mothers who would otherwise bleed to death after childbirth, according to a major study published in The Lancet.

More than 300 women from 5 hospitals in Bangladesh took part in the global trial, which included 20,000 women in 21 countries, mainly in Africa and Asia, the UK and elsewhere.

The drug, called tranexamic acid (TXA), works by stopping blood clots from breaking down. The study found that death due to bleeding was reduced by 31% if the treatment was given within three hours. The findings also show it reduced the need for urgent surgery to control bleeding by more than a third (36%).

Severe bleeding after childbirth (known as postpartum haemorrhage or PPH) is the leading cause of maternal death worldwide. Postpartum haemorrhage is defined as a blood loss of more than 500 ml within 24 hours of giving birth. More than 100,000 women globally die each year from the condition, but this clot-stabilising drug has the potential to reduce the number substantially.

According to the World Health Organisation (WHO) and part-



ners, Bangladesh has a maternal mortality rate of 176 deaths per every 100,000 live births. In 2015 there were an estimated 5,500 maternal deaths in the country, and postpartum haemorrhage was the single biggest cause.

The London School of Hygiene & Tropical Medicine coordinated the study, which is called The WOMAN (World Maternal Antifibrinolytic) Trial. It was funded by The Wellcome Trust and UK Department of Health through the Health Innovation Challenge Fund, and the Bill & Melinda Gates Foundation.

Dr Kaosar Afsana, Director of Health, Nutrition and Population at BRAC (a leading international development organisation based in Bangladesh), is part of the WOMAN Trial committee. She said: "Post-partum haemorrhage is the prime cause of maternal deaths in Bangladesh. I am so excited about the results of the Woman Trial. Timely use of simple tranexamic acid will save many lives of mothers by averting unnecessary maternal deaths even in remote health facilities where there are no obstetricians or trained physicians."

Dr Afsana said that another research should be carried out in the community setting to explore the similar effect of the drug.

The results show that of the women given tranexamic acid within 3 hours, 89 died from bleeding compared with 127 given placebo (in addition to standard care). The researchers found no side effects from the drug for either mothers or babies. These findings provide the first comprehensive evidence on using tranexamic acid for post-partum haemorrhage and suggest it should be used as a frontline

treatment. Haleema Shakur, Associate Professor of Clinical Trials at the London School of Hygiene & Tropical Medicine and Project Director on the WOMAN Trial, said: "We now have important evidence that the early use of tranexamic acid can save women's lives and ensure more children grow up with a mother. It's safe, affordable and easy to administer, and we hope that doctors will use it as early as possible following the onset of severe bleeding after childbirth."

Almost all of the deaths from postpartum haemorrhage are in low- and middle-income countries. Although giving birth in a health facility increases the chance of surviving post-partum haemorrhage, women still die from the condition even within hospitals.

While the WOMAN Trial found that tranexamic acid significantly reduced death due to bleeding, it did not prevent hysterectomy. The researchers say this is because in low- and middle-income countries where blood supplies are limited, a hysterectomy is sometimes carried out immediately after the onset of very severe post-partum haemorrhage to save the mother's life. This means there is no time for tranexamic acid to have an effect.

PHYSIOTHERAPY

Role of physiotherapy in neck pain

MD GAUSUL AZAM RANJU

Neck pain is now common in Bangladesh. According to Global Health Data Exchange and the World Bank, every 1,639 people are suffering from neck pain with other pain among 100,000 population in a year. As stated in The Lancet, globally 330 million people have neck pain.

There are mainly 3 types of neck pain, Axial — due to musculoskeletal cause, Radicular — due to nerve root involvement and Myelopathy — due to the pressure/compression of the spinal cord. All of these can be acute or chronic.

Common symptoms associated with neck pain usually involves stiff neck, sharp pain, radiating pain, numbness and weakness, headaches, trouble with gripping or lifting objects etc.

Physiotherapy is the choice of treatment in this case. Following medical treatment, patients should take physiotherapy and physiotherapist should make a plan for appropriate treatment protocol. This is the most important factor for the patients to recover from this pain. If the patient needs to take any drugs, s/he must consult with his/her physiotherapist during the treatment.

To prevent neck pain, everybody should follow the appropriate body ergonomics in his/her daily life and if possible, it is better to consult a physiotherapist every 6 months.

We have to avoid misconception and increase awareness. Following proper and healthy lifestyle we can lead a pain free life.

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HEALTH bulletin



Obese people with type 2 diabetes are at increased risk of cognitive problems

A new study published in Diabetologia (the journal of the European Association for the Study of Diabetes) reveals that overweight and obese individuals with early stage type 2 diabetes (T2D) had more severe and progressive abnormalities in brain structure and cognition compared to normal-weight study participants.

Chronic T2D is already known to increase the risk of a range of health problems in multiple organs throughout the body. Complications in the brain caused by the disease may accelerate cognitive dysfunction, and even increase the risk of dementia.

Obesity is linked to an increased risk of T2D and can often precede its onset. Additionally, being overweight has been linked to metabolic dysfunction, which is independently associated with brain alterations, as well as carrying a risk of further exacerbating metabolic abnormalities arising from T2D.

The study found that grey matter was significantly thinner in clusters in the temporal, prefrontal, motor and occipital cortices of the brains of diabetic study participants.

Insulin patch pump: A new tool for diabetes care

DR SHAHJADA SELIM

Type 2 diabetes (T2D) is the most common type of diabetes in the world. T2D is typically treated with lifestyle changes, such as increased physical activity and improved diet, and the oral drug metformin. While insulin is rarely the first drug prescribed for a person with T2D, many people eventually require it to get the best blood glucose control possible.

Despite the promise of better control, however, many people are reluctant to start using insulin. Fear of weight gain, low blood glucose, injection pain and/or handling needles is often at the root of this reluctance. Even when people with T2D agree to take insulin, many regularly skip some doses.

Traditional insulin pumps are highly technical and have complex features. Such features require significant patient education and are unnecessary for many people with T2D.

The newer patch pumps, in contrast, are less technical, so while they may offer fewer insulin delivery options, they should be easier to learn to use. Patch pumps are also different from traditional pumps in that they adhere directly to the skin, so there is no tubing, and the patch itself is kept on for 24 hours, then discarded.

How it works: There are two patch pumps currently available in the United States. The OmniPod Insulin Management System was



the first to be marketed. But while it delivers insulin directly from a patch, with no tubing, in other aspect it is much like a traditional insulin pump in that it can be programmed for individualised basal rates, has a bolus calculator, stores insulin delivery data etc.

In 2010 the US Food and Drug Administration cleared Valeritas's V-Go, designed for adults with type 2 diabetes who require insulin. The V-Go is a disposable insulin delivery device that delivers a continuous, subcutaneous infusion of rapid-acting insulin. It sticks directly to the skin with a strong adhesive, allowing it to stick to the skin for 24 hours even when wet.

Pros and cons: Some positive aspects of the V-Go device include the elimination of multiple daily injections, the easy delivery of insulin, and the lack of electronics,

batteries, infusion sets, or a need to programme the device. People using a V-Go have insulin available all day without having to carry supplies such as vials, syringes, pens, or needles. Many users find it discreet and comfortable to use. Using the V-Go requires only one stick a day with a tiny needle, and it can be attached anywhere that insulin can be injected or infused, such as the abdomen or the backsides of the arms. One limitation that people trying the V-Go may encounter is the need for hands-on training and practice with the device to become comfortable with it. The V-Go is simpler than traditional pumps, but multiple steps are still needed to prepare the device for use, and mistakes are possible; for example, accidentally pressing the "needle release button" will render that patch pump unusable.

Who should try a patch pump? Patch pumps offer an alternative to a traditional insulin pump or syringes and pens for adults with type 2 diabetes who require insulin therapy. If you are having a hard time controlling your blood glucose level with oral medicines, or if you have already been prescribed insulin but are reluctant to take it, a patch pump might be a useful tool for you.

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Sanofi observed World Meningitis Day in Dhaka

With the slogan 24 Hours — Trust your instincts, a rally was held recently to raise awareness and also observe World Meningitis Day 2017 in Dhaka. Prof Dr Monzoor Hossain, Director, Dhaka Shishu Hospital and Mr Sayed AB Tahmeed, Director, Sanofi Bangladesh Ltd led this procession, says a press release.

Physicians, nurses and hospital staffs from Dhaka Shishu hospital joined the procession with placards and festoons while they walked past from Shisu Hospital to Shaheed Suhrawardy Medical College & Hospital in a bid to raise awareness about the disease which can be life threatening.

Meningitis kills or disables around 1.7 million people each year and some die within 24 hours of detection of this deadly disease.

Farrer Park Hospital starts its service in Bangladesh

The newest and promising healthcare service provider in Singapore, Farrer Park Hospital has formally started its journey in Bangladesh, says a press release. The hospital launched its office in Bangladesh for local patients with an inaugural event at the Dhaka Club. The Dhaka office of the hospital will provide patients and visitors with visa processing, ticketing and hotel booking services.

Mr. Lewis Ng, Senior Manager of Farrer Park Hospital said, "We are very excited to be able to extend our healthcare services to Bangladeshi patients. We have a team of expert physicians who are experienced in various fields."



Dengue is a viral infection spread by mosquitoes. It's widespread in many parts of the world.

In most people the infection is mild and passes in about a week without causing any lasting problems. But in rare cases it can be very serious and potentially life threatening.

How dengue is spread

Dengue is spread by infected mosquitoes, usually the Aedes aegypti and Aedes albopictus varieties. These mosquitoes bite during the day, most often early in the morning or in the early evening before dusk. Dengue isn't spread from person to person. You can get it again if you've had it before, as you'll only be immune to one particular variant of the virus.

Severe dengue

People who've had dengue before are thought to be most at risk of severe dengue if they become infected again. It's very rare for travellers to get it.

Signs of severe dengue can include:

- Severe tummy (abdominal) pain
- Bleeding gums or bleeding under the skin
- Cold, clammy skin
- Persistent vomiting and vomiting blood
- Breathing difficulties or fast breathing
- A weak but fast pulse

Treatment for dengue

There's no cure or specific treatment for dengue. Treatment involves relieving your symptoms while the infection runs its course.

The following can help:

- Take paracetamol to relieve pain & fever- avoid aspirin or ibuprofen, as these can cause bleeding problems in people with dengue
- Drink plenty of fluids to prevent dehydration - if you're currently abroad, only drink bottled water from properly sealed bottles
- Get plenty of rest

You should start to feel better in around a week, although it may be a few weeks before you feel your normal self again. Get medical advice if your symptoms don't improve.

