

An eye hospital for the marginalised people

STAR HEALTH REPORT

Standard Chartered Bank is collaborating with Friendship to perform 400 eye-cataract surgeries for people in the remote coastal areas of Bangladesh for the marginalised population who otherwise would not have any opportunity for the cure from mostly the preventable types of blindness.

To facilitate this, five camps were set up in the area utilising Friendship's floating hospital, the Rongdhonu Friendship Hospital (RFH). In the meantime camps have been completed in Kuakata (Patuakhali), Mongla and Chalna (Khulna) and Hatiya (Noakhali). Now the current one is in Kutubdia (Cox's Bazar).

Johra Khatun (72), could not see for several years. Earlier, on Friendship's ship, her operation was supposed to take place, but she was too scared to go through with it. Now she feels a lot braver, after the operation on the left eye. Though there is still a little pain, it is okay now. When the next ship arrives, the right eye operation will also be done.

Ahmed Noor (85), could not see through either eye, because of cataract problems. Kutubdia does



not have the facilities for an operation, and he would not be able to get treatment in Cox's Bazar either. Last year, he had a cataract surgery on his right eye, and since then has had absolutely clear eyesight. Now, he does not need any help to get around or go to the bathroom anymore. He has now come for the operation on the left eye.

Hasina Khatun (32), could not use either of her eyes, and as a result could not work in the family for the last two years. Her 9-year-old little girl has to do everything around the house. This was causing a lot of problems at home. After the local representatives of Friendship went for a visit, she had decided to come in for a cataract surgery

today. Hasina Khatun believes that the eye surgery will give her peace and happiness towards her daily life.

There are many more examples like these successful cases. Friendship hospital brought the smile on the faces of these marginalised people.

This year Standard Chartered is celebrating 15th year of their

"Seeing is Believing" project, which has helped 150 million people in 36 countries starting from 2003. About 400 cataract surgeries are going to be operated on Friendship's floating Rongdhonu Friendship Hospital. After starting operation in 2013, the Rongdhonu Friendship Hospital has provided healthcare to more than 165,000 marginalized people.

Standard Chartered Bank's corporate affairs chief Bitopi Das Chowdhury said, "Rongdhonu's staff have created a unique example by working to avoid a major public health issue, and Standard Chartered has been helping the blind people in 36 countries since 2003. I'm happy to be part of this project."

She added, "Seeing is Believing is our flagship programme, starting with the first cataract operation in 2005. In the last 15 years, 150 million people have benefited from this and since then 60,000 have had operations. This project is related to the capacity building. Banking and health are working alongside as well. Friendship understands this and has the opportunity to build capacity through their efforts."

HEALTH GADGETS

Can smartwatches detect atrial fibrillation?



A deep neural network using smartwatch data detected atrial fibrillation (AF) accurately in cardio-vascular patients but less so in ambulatory people.

AF is associated with increased risks for stroke and other thromboembolic complications. By identifying asymptomatic AF, clinicians might be able to improve outcomes by instituting earlier use of anticoagulation. The rapid adoption of smartwatches in the general population may serve as an opportunity for population-based AF detection. To develop and train a neural network machine-learning model to detect AF, researchers used heart rate and step count data from 9750 participants enrolled in the Health eHeart Study, who were each fitted with a commercially available smartwatch. Data were obtained via a publicly accessible mobile phone app; its manufacturer provided some funding.

The findings show the potential of smartwatches to passively detect AF. However, challenges remain in generalising from study results to ambulatory populations who are constantly moving and so providing countless data points for interpretation.

Newly approved software uses AI to detect diabetic retinopathy

The FDA has approved marketing of new software, called IDX-DR that utilises artificial intelligence to detect at least moderate diabetic retinopathy.

Clinicians first take digital images of the eye with the Topcon NW400 retinal camera and then upload the images to a cloud server with IDX-DR. Using an AI algorithm, the software determines whether "more than mild diabetic retinopathy" is detected or not. If it is detected, patients are referred to an eye care specialist for further evaluation and treatment.

The FDA says the system may be useful for clinicians not normally involved in eye care since they do not need to interpret the images.

In a study of 900 patients with diabetes, the software had 87% accuracy in identifying patients with more than mild diabetic retinopathy and 90% accuracy in classifying those who did not.

To help lower blood pressure, have patients measure it themselves

A trial supports self-monitoring over clinic readings for titrating antihypertensive therapy. Many physicians review patient-collected blood pressure (BP) readings when titrating antihypertensive medications, but evidence supporting this approach has been mixed.

British researchers randomised 1182 patients with uncontrolled hypertension (office BP, $\geq 140/90$ mm Hg, despite as many as 3 antihypertensives) to usual care (clinic BP readings), self-monitoring (twice-daily BP readings for 1 week each month mailed in; instructions to contact the physician for very high or very low readings), or telemonitoring (twice-daily BP readings for 1 week, submitted via monthly text messaging; prompts to contact the physician for very high or very low readings or elevated BP's).

At baseline, mean office-measured systolic BP was ≈ 153 mm Hg in all three groups. After 12 months, mean office-measured systolic BP was significantly lower with self-monitoring and telemonitoring than with usual care (137.0, 136.0, and 140.4 mm Hg, respectively); diastolic BPs remained similar in all three groups. The differences in systolic BP appeared to be driven by a significantly greater number of medications prescribed to the intervention groups than to the usual-care group.



HEALTH bulletin



Diet and lifestyle of both parents play a key role in health of offspring

Parents' diets and health can have profound implications for the growth, development, and long-term health of their children before their conception, according to a series of three papers published in The Lancet.

To help improve health in future generations, the authors call for a joint focus, including better guidance and support for individuals planning pregnancy, and increased public health measures to reduce obesity and improve nutrition. They suggest that behaviour change interventions, supplementation and fortification could lead to preconception health improvements.

"The preconception period is a critical time when parental health – including weight, metabolism, and diet – can influence the risk of future chronic disease in children, and we must now re-examine public health policy to help reduce this risk," says lead author of the series, Professor Judith Stephenson, UCL, UK.

Limb lengthening: Orthopaedic surgical focus

PROF DR MD MOFAKHARUL BARI

Limb lengthening or height increase with Ilizarov technique has been used successfully in both femur and tibia. Bilateral lower extremity lengthening has been used to increase stature.

With the ability to safely and effectively perform this procedure, an increased interest has been observed in a group of people who are unhappy with their stature and thereby wish for an increment in their stature. Patients with a psychological state of 'short person dysphoria' seem to feel an intense need to increase their height.

With the appropriate psychological screening patients can be identified for stature lengthening. Our long experience treating such a group of patients has been very positive. Safe and successful stature lengthening of 2" to 3" can be accomplished. The excellent result is an outcome of increased happiness and an improved self-esteem.

Lengthening stature in normally proportioned individuals with short stature but without dysphoria (dwarfism) requires a different strategy for lengthening than in patients with disproportion and dysplasia. Most patients with constitutional short stature (CSS) or low normal stature (LNS) require only modest increase in stature compared to the extreme amount of lengthening required by patients

with dwarfism. The lower limit of so-called short stature for Caucasian men is 5' 5" and Caucasian women is 5' 0". Patients with CSS and LNS also do not usually have pre-existing bone deformities.

We have found that patients who are the best candidates for stature lengthening are those who already have normal lives; they appear happy and motivated in other aspect of their lives but are having significant and frequent episodes of discontent due to short stature. Most importantly, they have realistic expectations from the outcome of surgical lengthening.

This is not a simple cosmetic operation. It is a procedure done in individuals who feel the need to undergo the surgery, but are otherwise

mentally healthy.

We strictly follow the world's best surgical lengthening technique – from Russia's Ilizarov Scientific Centre in Kurgan. Gradual controlled coordinated distraction as well as consolidation is mandatory. This Ilizarov technique is well established and has been used for the longest time. The usual goal for lengthening of stature for most patients with Ilizarov fixator is 2-3". This procedure one must still weigh the risks of undergoing a major surgical procedure versus the benefits of increasing one's stature by 2"-3". Proceeding with the surgery is a very personal decision.

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Sitting is Bad for Your Brain, Not Just Your Heart or Metabolism

Sitting too much is linked to changes in a section of the brain that is critical for memory, according to a preliminary study by UCLA researchers of middle-aged and older adults.

5 Keys To Prevent Brain Shrinkage

1. Exercise

If you have any hope of being a super ager, better get off the couch and exercise. And the sooner you start the better. Scientists have found that those who exercise during middle age suffer less brain shrinkage 20 years later than their inactive counterparts.

2. Mixing It Up

Neuroscientists say the brain is like a muscle, use it or lose it. Giving your brain a mental workout keeps it bigger and stronger and can help it grow new neurons and create new pathways well into old age. Flex that bad boy. Use your other hand, learn a language, work puzzles, start playing the guitar, try sleeping on the opposite side of the bed. But above all, avoid habits and boring routines.

3. Healthy Diet

4. Supplements/Probiotics

Just as vitamin B-12 is important in the foods we eat, B vitamin supplements can also battle shrinkage. A University of Oxford study investigated this by dividing 156 older adults into groups who took B vitamins daily and those who didn't over a period of two years. MRI brain scans showed that the vitamin B group had significantly less brain shrinkage, suggesting that B vitamins might help delay brain atrophy or even increase brain size.

5. Reduce Stress/Sleep Better

It's amazing how many health problems can be ameliorated with better sleep and stress management. True also with brain atrophy.

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