

Bringing back hope & dignity

Even profoundly deaf patients can hear after cochlear implant

STAR HEALTH DESK

Normal hearing is an essential requirement for the development of speech and personality in children. It is also important for an individual to perform his/her activities at an optimum level. Any alteration in this norm may lead to disability.

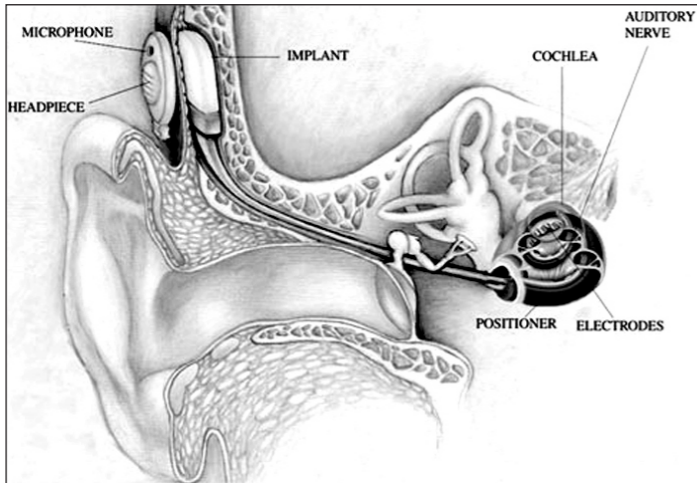
Worldwide, approximately one person in a thousand is born deaf. Almost an equal number of people born with hearing capacity develop deafness during their lifetime. About 13m people are suffering from variable degree of hearing disability of which 3m are suffering from severe to profound hearing disability in Bangladesh.

These people with hearing disability suffered a lot during their lifetime as there was no suitable remedy. But now-a-days cochlear implant brings them to a new world overcoming the disability and this new technology can make their life like other normal individuals.

What is cochlear implant?

Cochlear implant is an electronic device which is placed behind the ear to promote hearing capacity. In some cases of hearing impaired persons, inner ear is totally disabled but the auditory nerve may remain intact. It is possible to reestablish the hearing capacity by surgery using the existing nerves. This is simply called "bionic ear".

Who is best suited for a



Schematic diagram of Cochlear implant (Left). A child who gets back his hearing power by cochlear implant. (Right)



cochlear implant?

It is generally agreed that the best adult candidates are those who -

- Have severe to profound hearing loss in both ears
- Have had limited benefit from hearing aids
- Have developed verbal or pre-verbal communication skills
- Have ears free of infection
- Have inner ear properly formed
- Have auditory (hearing) nerve intact
- Have no other medical problems that would make the surgery risky
- Have a strong desire to be part of the hearing world and communicate through listening, speaking, and speech reading

Children can also be candidates for cochlear implants. Children as young as 14 months

of age have received cochlear implants and the potential exists for successful implantation at younger ages.

It is generally agreed that the best child candidates -

- Have profound hearing loss in both ears
- Have had little or no benefit from hearing aids
- Have developed verbal or pre-verbal communication skills
- Have ears free of infection
- Have inner ear properly formed
- Have auditory (hearing) nerve intact
- Have no other medical conditions that would make the surgery risky
- Are involved (when able), along with his or her parents, in all aspects of the informed consent process

•Understand (when able), along with his or her parents, their individual roles in successful use of cochlear implants

- Have (when able), along with his or her parents, realistic expectations for cochlear implant use
- Are willing to be involved in intensive rehabilitation services
- Have support from their educational program to emphasise the development of auditory skills

Result of cochlear implant

The device is safe and reliable. There is rarely a complication. It varies individual to individual and depends on age at time of deafness, duration of deafness, age at implant surgery, status of remaining auditory nerve fibres, training etc.

Prospect of cochlear

implant in Bangladesh

A good number of patients really need cochlear implant in our country. In the past we were not ready to accept the programme in our country due to lack of initiative and high price of the program. Recently cost (Price of the device evaluation, surgery, rehabilitation) of the programme is getting down.

If we can develop a center and equipped it with technology and skilled manpower (team) we can start the programme in our country successfully.

We need some trained manpower for this purpose like trained ENT surgeons, audiologists, speech therapists, psychologists, physiologists, specialists in neuromedicine, social workers,

and modern audiological diagnostic centers.

Modern science has already given a solution which is used in devolved countries for the treatment of profoundly deaf patients. Now-a-days, these facilities are available in our country.

Some leading ENT specialists are working hard to make the treatment available in our country in collaboration with internationally renowned British ENT surgeons. Several cochlear implants are going on at a specialized ENT hospital of SAHIC in the capital by the team of Hearing International, Bangladesh Chapter and Society for Assistance to Hearing Impaired Children (SAHIC) from December 4 to 19. A team from the United Kingdom is working with them accompanied by Dr Jonathan Osborn and Dr Pitter Princlny.

Dr M Abdullah, Head of ENT department of Sir Salimullah Medical College and Mitford Hospital, who is the President of Hearing International, Bangladesh Chapter expressed to The Daily Star that we have sufficient trained manpower and infrastructural support needed for cochlear implantation at home. But the professionals are working separately in their own fields. Now we need to unite them and improve our skill by organizing short course and workshops on cochlear implant.

Situation of TB in Bangladesh



- One third of the world population is infected with TB.
- More than 10 million people develop TB each year.
- 3 million people die of TB each year.
- TB is more prevalent in males than that of females.
- Most cases of TB occur in the 15-45 age group.
- Bangladesh is one of the top 5 high TB burden countries in the world.
- There is one new TB case every 2 minutes.
- There are more than 300,000 expected new cases of TB per year in our country.
- There is one TB death every 10 minutes.
- 70,000 estimated deaths in the country are due to TB per year.
- There are 0.1% HIV positivity rate in the country.
- National TB case detection rate is 46% while treatment success rate is 85%.

SOURCE: Keynote paper of the roundtable discussion organised by The Daily Star and BRAC.



MedExpo ended with hope and challenge

TAREQ SALAHUDDIN

The third International Medical Exposition (MedExpo) 2005 was held in the capital in December 9-11 with a call for improving the quality of healthcare services in our country. A total 43 companies participated in the exposition showcasing their products, services and special offers in 57 booths.

The participants were mainly of two categories - medical products & technology providers and medical service providers like private hospitals and clinics.

Manufacturers of various medical instruments and biomedical technology providers displayed the possibilities of utilising their cutting-edge technology in our country. They also offered attractive discounts on their products during the exposition.

Bangladesh Oxygen Company (BOC) was the sponsor while The Daily Star and Channel I were the media partners.

The notable feature of MedExpo 2005 was the number of participation of foreign hospitals increased from previous times. Renowned hospitals from Singapore, Thailand, India participated the exposition showcasing their healthcare services with some attractive offers and packages. Their offers are compliant and convenient to the tourists, for example, they offered some day-case services for less invasive procedures. All the hospitals have their referral centre in Bangladesh to consult their physicians about the history with clinical records of the patients prior to visit the hospital.

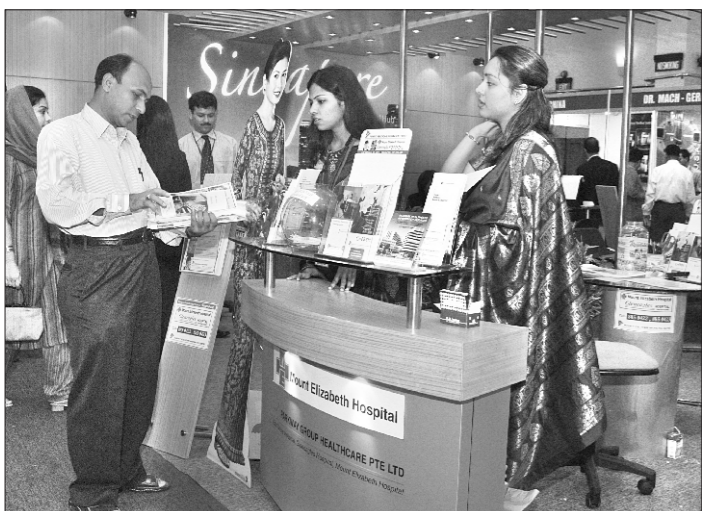
tal. They also offered some special packages on health screening services.

Several seminars were held on the sidelines of the show by the foreign doctors.

Mr Zahid Hassan Khan, Director of Bangladesh counterpart of Parkway Group Healthcare Private Ltd, which owns three state-of-the-art hospitals - Mount Elizabeth Hospital, Gleneagles Hospital and East Shore Hospital in Singapore expressed his view about the impact of emerging foreign hospital services in Bangladesh.

He said that these hospitals are offering some latest advancement in medical science like stem cell transplant for cancer and thalassaemia patients, living donor liver transplant for the end-stage liver patients etc. which is not possible in our country. So it is an opportunity for our people to access the foreign healthcare facilities easily that ultimately lowers the expenditure while seeking the service in abroad. Moreover there are also the opportunities to exchange idea and views with the foreign doctors and experts to improve the knowledge, skill and experience of our doctors.

So this is the high time for our doctors, local hospitals, clinics and institutions to introduce the latest medical facilities for our patients and bringing back the hope and dignity by improving their knowledge, skill and experience.



A stall of hospitals from Singapore at MedExpo showcasing their services and special offers.

Promoting nursing education is now a demand of time

STAR HEALTH REPORT

Nurses are front liners in providing long term care, home care, primary and preventive care, health promotion and public health.

Many unexpected health crises occur not only when technology fails but when a patient's conditions change and no one notices. A doctor who parachutes in for 5-minute visits once or twice a day may think a patient is stable or even improving. Sometimes, it is only the nurse at the bedside who knows whether the patient is recovering or teetering on the edge.

Better levels of nurse staffing result in a decrease in the average length of hospital stays. High-quality nursing care also helps to keep chronically ill patients out of the hospitals.

While the health care system is very dependent on nurses, their contributions receive little recognition in many areas. Nurses complain of a lack of recognition and professional power, which leads to unsatisfactory social relations at work. There is no respect for nurses who makes sacrifice.

Improving the image of nursing requires commitment, cooperation, mutual trust, respect and sustained action on part of all stakeholders. These include policy makers, health system planners, and the nursing professionals, with input from consumers of health care. Whether sheer necessity will prompt these needed interventions remain to be seen, but whatever happens,

the role of nurses in the development of healthcare will continue to be pivotal. They are the wheel and hub of health services.

A US law was passed earlier funding military operations and reconstruction, includes approval for 50,000 new visas for nurses and their family members. Since there is a recognised shortages of nurses in the US, the new law facilitates the immigration of



foreign nurses who are already certified by the Commission on Graduates in Foreign Nursing Schools, have passed the licensing examination for registered nurses, or hold a full and unrestricted licence to practice nursing in the state of intended employment. The shortage of nurses in the US and UK is a serious and growing problem. In Bangladesh, free market

forces, which might be expected to correct this shortage, have failed to do so for several reasons, the culture of nursing may not appeal to many because nurses has been perceived as having inadequate input into healthcare decision, policy and research and low pay. Moreover nursing curriculum in our country is not world standard that draws the opportunity for our nurses back to work in



foreign countries with local certification. Nurses have the right to migrate. It would be foolish to confine them to the countries of their training. However the value of professional exchange should be weighed against the overall health consequences in a given country. Recognising that the demand for trained nurses in the country,

the American International University, Bangladesh has developed a curriculum in consultation with various nursing council experts, health institutions, and non-government organisation has developed a full degree in undergraduate programme in nursing education, Bachelor in Nursing Science (BNS).

The curriculum focuses on developing professionals with the practical and technical competence ensuring quality delivery of health services in compliance with the standard of International Council of Nurses (ICN). The programme is designed for individuals who are seeking to prepare for a career in nursing.

Upon successful completion of the programme, students are eligible to apply for registration from the Council of Nurses and pursue higher studies at the post-graduate and PhD levels.

In recognition to the evolving nature of the national and global context and changing healthcare systems, critical thinking and creative problems are emphasised through the application of world class professional skills.

Experienced nurses are in demand for a wide range of job opportunities and enjoy both national and international job mobility.

This is a high time for our policy makers to take proper decision to upgrade our curriculum of nursing to world standard which is a demand of time that can contribute a lot to the national economy in return.

Nasal surgery may ease migraines for some

It seems that for some migraine sufferers, their headaches are caused - or at least worsened - when opposite surfaces within sinuses or nasal cavities touch. Now researchers have shown that surgical correction of these contact points can bring substantial relief for some such patients.

"We are very excited and think this procedure will change the course of treatment for migraine sufferers and other headache patients," lead researcher Dr. Fereidoon Behin told.

Intranasal contact points are believed to lead to the phenome-

non of referred pain, in the trigeminal nerve. In fact, mucosal contact headache is a newly added secondary headache disorder in the International Classification of Headache Disorders.

Behin, at Christ Hospital in Jersey City, New Jersey, and colleagues evaluated 21 patients who had severe migraines that did not respond to conventional treatment. All of the participants had intranasal contact points that could be seen on CT scans.

Also, when these contact points were treated with an anaesthetic lotion, all the patients

experienced a temporary reprieve in their headaches. They then underwent endoscopic surgery to correct the contact areas.

In the months after the surgery, the average number of days with headache experienced by the group fell from 18 to 8 days per month.

The average headache severity, measured on a 10-point scale, dropped from 7.8 to 5.6. Similarly, headache-related disability fell from 5.6 to 1.8.

In all, 18 patients had their headache scores improved by 25 percent or more. One patient had

a reduction of less than 25 percent and the remaining two had an increase in their headache score of less than 25 percent.

Altogether, nine subjects were pain-free at their last follow-up evaluation.

The researchers call for more studies, but conclude that for migraine patients with contact points seen on a CT scan, "surgery appears to improve outcomes."

SOURCE: Cephalgia, June 2005.

Facts about mumps

STAR HEALTH DESK

Mumps usually affects children and teenagers. When teenagers or adults get the infection it may be more severe - older boys are particularly at risk from orchitis (inflammation of the testes), which very rarely results in infertility.

Mumps is a viral infection of the parotid glands. These glands, which normally make saliva, are found either side of the face below the ears and over the jaw bone. The illness used to be common but is rarer now that immunisation with the MMR vaccine is routine.

It is spread in saliva or tiny droplets of fluid when someone coughs or sneezes. Those who have mumps are infectious from up to seven days before and up to ten days after the glands first start to swell.

The infection is not usually severe but there is a small risk of more serious complications, including meningitis, encephalitis (inflammation of the brain) and pancreatitis (inflammation of the pancreas).

Symptoms

Symptoms develop 14 to 24 days after exposure (the incubation period). The illness begins with fever, shivers, tiredness and painful swelling of the parotid glands (one side may be swollen initially but usually both glands are eventually affected).

They swell up and feel painful making it difficult for people to open their mouth, talk, eat and drink.

The swollen glands give the person a similar appearance to that of a hamster making the infection relatively easy to recognise. Children may complain of earache or difficulty eating and drinking - and sometimes, abdominal pain.

Possible symptoms of mumps infection include fever, malaise, sore throat, headache, parotid salivary gland swelling and pain on opening the mouth.

In as many as 30 percent of cases symptoms are so minimal that the infection goes unnoticed. Most people make an easy recovery. However, it can rarely cause unpleasant and painful complications.

Acute pancreatitis and inflammation of the ovaries

(called oophoritis) can also occur. Inflammation of the testicles (called orchitis) is painful and affects up to one in four men who catch mumps after puberty. Occasionally mumps orchitis may lead to infertility.

Complications may set in about one week after symptoms begin. In one in ten cases there will be signs of meningitis, while one in 5,000 have encephalitis. Symptoms include headache, neck stiffness, vomiting and dislike of light. Hearing loss may follow mumps but it is usually one sided and transient.

It is important to consult a doctor to confirm the diagnosis. Since mumps is a viral infection antibiotics do not help. Children may be treated at home with pain and fever-reducing syrups such as paracetamol. Give plenty of water but avoid fruit juice, which can stimulate the parotid gland to make saliva, which in turn can be painful. Children are infectious for up to seven days after the onset of swelling.

Any swelling of the parotid glands increases over two to three days and then subsides as the high temperature starts to fall. Painkillers ease the muscle aches and relieve the pain that comes with the swollen parotid glands.

Fortunately a safe and effective vaccination is available to protect people from developing mumps infection. This is combined with the measles and rubella vaccination and is called the MMR vaccination.

The first dose is given between the age of 12 to 15 months and the second booster between the ages of three and five. Immunisation provides lifelong protection and since its introduction the number of cases has steadily fallen. In time, if enough people are vaccinated, mumps infection and the possible problems it causes may become a thing of the past.