

Alzheimer's: A common ailment in old age

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Alzheimer's disease is a progressive condition that damages areas of the brain involved in memory, intelligence, judgment, language, and behavior.

Alzheimer's disease is more severe than the mild memory loss that many people experience as they grow older. It affects not only memory but also behavior, personality, ability to think, and the ability to function from day to day. Close family members usually notice symptoms first, although the person affected also may realise that something is wrong.

Cause
Alzheimer's disease is caused by changes or deterioration in certain areas of the brain that control thinking, communication, and behavior.

Symptoms

Memory loss usually is the first sign of Alzheimer's disease. Among people in their 60s and 70s, having some short-term memory problems does not necessarily mean that a person will develop Alzheimer's disease, especially if other people do not notice anything unusual. If you start having memory problems, share your concerns with your family and doctor.

What increases the risk
Advancing age is the main risk factor for Alzheimer's disease. Other factors that may increase the risk of developing Alzheimer's disease include family history of Alzheimer's disease, Down syndrome, smoking, head injury, elevated homocysteine levels, exposure to lead, zinc, aluminum.

When to call a doctor
Alzheimer's disease tends to develop slowly over time. If confusion and other changes in mental abilities come on suddenly, within hours or days, the problem may be delirium, a condition that needs immediate treatment.

Exams and tests
It is very important to rule out delirium as a possible cause of symptoms, especially if the symptoms came on suddenly rather

than gradually. Symptoms of confusion and memory loss can sometimes be caused by depression. Depression is a very common problem among older adults, but sometimes it is difficult to recognise. It often is managed successfully with medication and other treatment.

It usually is helpful to have a family member or someone in close contact with the person present at the appointment with a doctor. A family member may be able to provide the best information about how a person's day-to-day functioning, memory, and personality have changed.

Prevention
Recent research suggests that a person's risk of developing Alzheimer's disease may be lowered or the onset of the disease may be delayed by:
λ Increased intake of vitamin E and other antioxidants.
λ Increased intake of folic acid and vitamins B6 and B12 for people with elevated homocysteine levels.
λ Nonsteroidal anti-inflammatory

drugs (NSAIDs), such as indomethacin, ibuprofen, naproxen sodium, or aspirin.
λ Statins used to lower cholesterol.

Information for caregivers
Taking care of someone with Alzheimer's disease can be physically and emotionally draining, but there are ways to make it easier. One of the keys to successful home care is educating yourself. There is a lot you can do to make the most of the person's remaining abilities, manage the problems that develop, and improve the quality of his or her life as well as your own. Also remember that caregiving can be a positive experience for you and the person you are caring for.

If you are taking care of someone with Alzheimer's, one of the goals is to keep the person as healthy and safe as possible. A safe environment, good nutrition, regular sleep habits, good hygiene, and prompt care of other medical problems are important to the person's overall well-being.

Scaling up zinc treatment for young children with diarrhoea in Bangladesh



ICDDR,B PHOTO

Zinc treatment could save the lives of 30,000 to 75,000 children per year in Bangladesh

Diarrhoea is one of the worst diseases in developing countries, killing nearly 2 million children every year. Research has shown that zinc provides a very effective treatment for diarrhoea, especially among children under five years. Zinc treatment reduces the severity and duration of diarrhoea as well as the likelihood of future episodes of diarrhoea and the need for hospitalisation. Zinc treatment can save a child's life both as a treatment for diarrhoeal illness and by preventing future infectious illnesses.

In addition, zinc treatment seems to have a positive impact on pneumonia, which is another of the most common causes of death of children living in developing nations. Therefore, zinc treatment holds tremendous potential as a global public health intervention.

It has been estimated by ICDDR,B that zinc treatment could save the lives of 30,000 to 75,000 children per year in Bangladesh alone. If successful, zinc treatment may be rolled out to other countries and save many more

lives. Latest research estimates that, at a global scale, zinc treatment could save the lives of almost 400,000 children each year.

Why treatment?

Zinc is a micronutrient found in foods rich in protein such as red meat, poultry, nuts and dairy products and is essential for human growth and protection against illness and disease. Many people living in developing nations, such as Bangladesh, do not have access to sufficient amounts of zinc-rich foods. This results in zinc deficiency that can lead to growth failure and increased susceptibility to illness and death, especially among young children.

In an ideal world, people would eat all the right food and not need additional micronutrients or vitamins. However, many people are simply too poor to buy healthy food. Many are too poor to buy any food. There is no simple solution for this. In the absence of this ideal solution, there are projects underway worldwide trying to provide zinc to people through food fortification or daily supplementation.

Did you know?

Potassium, in any form, lowers blood pressure

Potassium citrate has similar blood pressure-lowering effects as the best-studied potassium compound, potassium chloride, according to a UK study.

Dr. Graham A. MacGregor said the important role of potassium in regulating blood pressure has been demonstrated in carefully controlled studies using potassium chloride and inactive "placebo" tablets. But it has not been clear, until now, how far other potassium salts lowered blood pressure.

"Increasing the consumption of foods high in potassium is likely to have the same effect on blood pressure as potassium chloride," the researchers said.

They compared the effects on blood pressure of potassium chloride or potassium

citrate in 14 adults with hypertension -- that is, with blood pressure readings above 140/90. The participants took one compound for 1 week, waited a week, and then took the other for a week.

Average blood pressure at the start of the study was 151/93. It fell significantly to 140/88 with potassium chloride and to 138/88 mm Hg with potassium citrate.

"Our short-term study shows that potassium citrate is as effective as potassium chloride, and this supports the evidence that the main effect of increasing fruit and vegetable intake on blood pressure is due to the increase in potassium intake," MacGregor said.

Source: Hypertension

Sinus and migraine often go together

New research indicates that migraines are fairly common among patients with sinus headaches.

Symptoms in sinus area are frequently reported during migraine attacks, but are not considered in making a diagnosis, Dr. Mary S. Richardson, of GlaxoSmithKline, Research Triangle Park, North Carolina, and colleagues reported. Underdiagnosis of migraine may be partly attributed to variability in the patient's symptoms, and migraines with sinus symptoms may be part of the problem.

The researchers examined the rate of migraine-type headaches in 2991 patients who experienced sinus headaches in the past. Of these subjects, more than 80 percent met the diagnostic criteria for migraines.

The most common sinus symptoms reported by

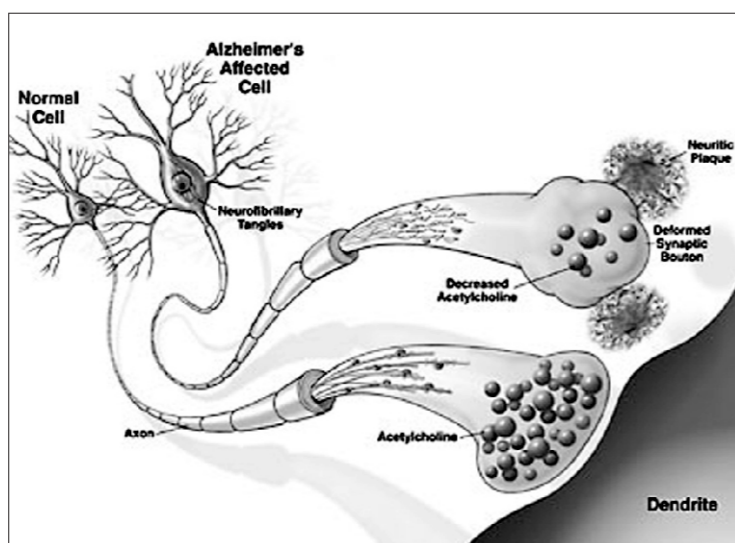
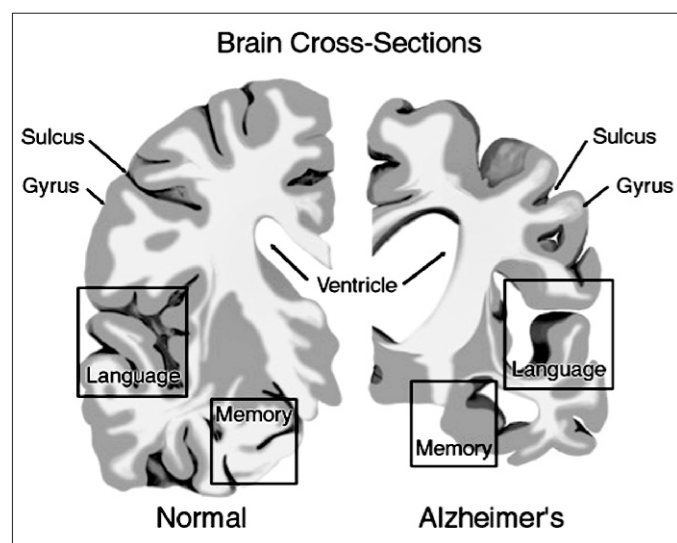
patients at screening were pressure, pain and nasal congestion.

Of the patients with migraine, 67 percent were dissatisfied with the medication they used to treat their sinus headaches.

"The results indicate that the presence of nasal (or eye) symptoms often considered to be features of 'sinus' headache should not automatically trigger a sinus diagnosis or exclude a diagnosis of migraine but should prompt assessment of the patients for migraine as well as sinus headache," Richardson and colleagues write.

"Accurate diagnosis of headache is essential for patients to receive appropriate therapy and to achieve an optimal treatment outcome," they conclude.

Source: Archives of Internal Medicine



Many lives would be saved by Emergency Medical Services

MAJOR GENERAL (RETD) ZA KHAN

Bangladesh is a hazard prone country. Almost every year our country experiences some natural calamity. Our effort to protect our people from the ravages of these cataclysmic natural calamities and to control the damage had been enormous. It will be heartening for us to note that the Cyclone Preparedness Programme (CPP) jointly pursued by the Govt of Bangladesh (GOB) and Bangladesh Red Crescent Society (BDRCS) is credited as a role model. The number of death or injuries due to cyclone has reduced to a meagre few hundred since late nineties. Loss due to damage at the aftermath of cyclones has also substantially been reduced. But what about the death due to road trauma or cardiac diseases?

According to a data released by World Health Organisation (WHO) in 2004, cardiovascular diseases alone account of 10 per cent of the disability adjusted life years (DALY) lost in low and middle-income countries. In an article published in the American Journal of Public Health Mr King E mentioned that injury accounts for 16 per cent of global burden of diseases and about 90 per cent of the total burden of injury occurs in low and middle income countries. His finding reveals that with the same severity of injury, the probability of survival is six times worse in developing countries. WHO apprehends that death due to road trauma will exceed 2 million per year globally.

We know for sure that we can reverse this situation only if we refurbish our existing medical facilities. To do so we need to identify where we are lacking. My focus for identification are:

- λ Absence of extended umbrella of Emergency Medical Service (EMS)
- λ Poor doctor to patient ratio
- λ Inadequate specialised emer-

gency care units/centers
λ Lack of core hospital attention due to inadequate number of paramedics and first aiders
λ Inadequate Ambulance car network
λ Absence of a nationwide single telephone number dedicated to EMS

λ Difficulties in identifying the municipal holding due to improper numbering and absence of simple road signs
λ Road congestion

λ Inadequate number of licenced paramedics. Even available paramedics are neither well trained to handle emergency cases nor are they equipped enough to treat such cases
λ Hospitals are not designed to handle sudden rush of casualties
λ Paramedics available are not volunteers and bulk of whom come from humble economic background. Therefore, they utilise their training mainly as a means of income generation and lacks spirit volunteerism

λ Lack of clear policy to define whether the paramedic could use Cardio Pulmonary Resuscitation (CPR) and life saving drugs, drugs for resuscitation or otherwise
λ Absence of fund allocation for EMS

There are yet many more areas that warrant our attention. There are areas of technical and technological sensitivity that would require experts to handle.

Today we talk of HIV/AIDS, tuberculosis, malaria or arsenic poisoning as major health hazards. These diseases do not cause death or incapacitation in a matter of a minute. These are preventable diseases that would need prolonged treatment and hospitalisation while road trauma or cardiovascular diseases kill or incapacitate people almost immediately. Hence in my pleading for focusing on EMS.

There are countries in the world that have separate department for EMS under health ministry while some have independent estab-

lishment for EMS, yet some have this in the private sector. Many of the injury related disabilities and deaths would be readily amenable to low cost measures such as simple changes in training, better organisation and planning of services and availability of right skills and the right equipment at right places.

WHO has mapped its health promotion and diseases promotion strategies and has accorded high priority to Primary Care Development. EMS meets the primary needs of the patient and can prevent the social disruption of transfer out of their local community for secondary or tertiary care.

Since the conceptualisation of EMS is recent, exhaustive research should be undertaken to work out strategies and to choose the appropriate tools and practitioners to help save lives that did not warrant death that soon. Following could be thought for our country:

- λ EMS be treated as long neglected sector to give priority allocation.
- λ Should be treated as a separate establishment under Ministry of Health.
- λ Extended network of ambulance service.
- λ Greater number of people from middle to higher income group be persuaded to take paramedic courses. This training may be considered to be made compulsory for all doing post graduation.
- λ Issuance of licence to the paramedic be treated more seriously as they will be allowed to provide treatment including IV and resuscitation.
- λ Triage post be established at various points on the highways and places that are difficult going - POL filling station could be thought to be used as Triage Post.
- λ A toll free single number telephone be introduced to make emergency calls.
- λ Calls that come from emergency call centers be received by hospitals in right earnest.

λ Hospitals be instructed to receive the patients as soon as emergency call centers requisition their services.

λ Municipal holdings be properly marked and streets be correctly sign posted to make identification easy.

λ People at large be made aware to allow safe and priority passage of ambulance cars while on move.

λ WHO be approached to help develop local EMS strategies and set priorities to address our local EMS needs.

λ Map quality EMS goals and guidelines and set target year to achieve the goals.

λ Use the World First Aid day to promote EMS to public.

λ WHO and NOO be encouraged to invest more money in coordination with the govt.

λ Since Red Cross and Red Crescent movement is already involved in Primary Health Care, they be encouraged and supported to add the task of saving human lives in health emergencies also in non-disaster situations.

λ A clear guideline with regard to resorting to Cardio Pulmonary Resuscitation (CPR) should be given when to start resuscitation, when to withhold and when to stop resuscitation. These are the questions that the guideline should address to as CPR quality has emerged as a critical factor. The knowledge to improve the CPR is there but its impact on public health could be large.

There are many more ways to improve and implement quality EMS. Bench marking quality EMS is a gigantic task. With benchmarks in EMS, one can make objective determinations of how one can measure up not just at the service level but also down to the individual technician up to the highest body level involved in EMS. Life saving telemetry from ambulance to trauma center can improve the quality of EMS without much extra cost. Ambulance equipped with telemetry facility can transmit ECG to hospital



emergency centre by radio to enable doctor to plan and prepare the treatment before the patient reaches the hospital. The development of paramedic units and mobile intensive care units can help rescue persons and can administer drugs, defibrillate patients and can perform other medical procedures in the field and en route to the hospital.

This is how many lives can be saved and many patients that

would have been incapacitated would be brought back to normal life. This is why EMS is so important.

The writer is the former Chairman of Bangladesh Red Crescent Society.

Discussion held on drug awareness

STAR HEALTH DESK

A discussion forum on drug awareness, abuse, rehabilitation and intervention was held on Tuesday last at a restaurant in the city. The forum was organized by 'Alo' an organization that promotes drug awareness.

Dr Yusuf Merchant, President of DAIRRC (Drug Abuse Information Rehabilitation and Research Center), a pioneer of in drug awareness, abuse and rehabilitation in India chaired the forum. The lively discussion program addressed various aspects of drug awareness, usage and DRE (Drug Rehabilitation Education) program amongst other relevant topics. Merchant spoke on the key areas that have helped his centre to become a successful institution, on the DRE (Drug Rehabilitation Education) and STEP drug prevention programmes he initiated in Bombay, and the general state of drug abuse worldwide. DAIRRC has achieved an 85 per cent success in rehabilitating drug abusers. Merchant spoke on the need to target young people from an early age before they are exposed to abusive substances like cigarettes.

The DRE programme trains college students to lecture school-goers to refrain from drug use. The STEP programme reaches out to the college students through stars such as Manisha Koirala, Sanjay Dutt and Madhuri Dixit to de-glamourise drug abuse.

Various groups from the physician, psychiatrist, educational institutions, rehab organizations like Apon, BRAC who work on the respective field in Bangladesh and others attended the forum.



12 weeks. One regimen slashed 500 calories from the dieters' normal daily intake and allowed no more than one serving of dairy and 500 milligrams (mg) of calcium per day.

The other diet also cut out 500 calories, but included three daily servings of fat-free yogurt, which brought participants' calcium intake to 1,100 mg -- in line with the recom-

ended intake for adults. By the end of the study, both groups had lost weight and body fat, Zemel's team found, but those in the yogurt group shed 61 percent more in fat pounds, as well as 81 percent more abdominal fat. They also held on to more lean, muscular body tissue compared with men and women in the low-calcium group.

Some studies have suggested that dairy products, independent of their calcium content, help trim fat from the middle. The reason, according to Zemel, may rest in the fact that dairy foods have certain compounds, including a high concentration of small protein particles called branched-chain amino acids, whose metabolic effects may promote fat loss while preserving muscle.

However, he said, yogurt is no magic recipe for melting fat, and as the weight-loss mantra goes, "calories count."

Source: International Journal of Obesity