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Telemedicine: Bringing healthcare to the outlying

ENGR MD JAHIDUL HASAN

Telemedicine is an upcoming field in health science arising out of the effective fusion of Information and Communication Technologies (ICT) with the medical science. It has enormous potential in meeting the challenges of healthcare. It may be as simple as to health professionals discussing medical problems of a patient and seeking advice over a simple telephone to as technical as sharing electronic medical records of clinical information, diagnostic tests such as E.C.G., radiological images etc. and carrying out real time interactive medical video conference.

About 70 percent of total population lives in rural areas whereas 75 percent of total qualified physician are practicing in urban areas. Many of the patients come from remote places to metropolitan and divisional cities to get the medical services. Also hundreds of physicians go to remote places to provide service once in a week in district and sub-district level in the private health centers. Rest of the days patients wait for their physicians for the next visit after one week. Most of the patients come to doctors without any previous health records.

Roads and highways are underdeveloped whereas well-



A change in size or shape

covered by telecom network and it is growing very fast. Hence being a potential place, it is a crying need for Bangladesh to adopt e-health and telemedicine services. Thus overall health services can be improved magically.

Many tools used in telemedicine system development and applications are chosen from simple and regular tools that we are used to practice in our professional life. The equipments are: telephone, television, videoconference, multimedia files, computer, server,

A change in skin texture

software, internet line, fax etc.

The practice of telemedicine is not only cost-effective to the patients but cost-beneficial to the society also. More and more doctors and patients are resorting to the use of telemedicine due to its advantages of convenience and cost-saving. The practice of telemedicine, however, has brought with it several complicated issues. These issues involve not only healthcare workers and consumers but the society, technologists and the lawmakers also.

In the traditional health service system the physician physically examines the patient which gives sometimes a mental satisfaction to the patient, but in the telemedicine service this is not possible. Ensuring health service system to the people, load shedding of electricity and reliability of the service might be challenges.

Again, community acceptance is an essential pre-requisite and can be ensured through strategically designed campaigns and appropriate media publicity. Overall, the comments were that if the proper services by the TMS continue and people feel about its advantages, and then there will be no risk.

There may be Internet Based Telemedicine Link (IBTL) established that will be cost effective and promote the idea of e-medicine.

Discharge (liquid) from one or

Initially, the whole setup will be a bit costly but in future, it will be on more cost-effective imageconstruction retaining standards, faster transmission facilities, synchronous video-conferencing between patient and doctor.

Expected benefits from telemedicine

The main objective of telemedicine is to cross the geographical barriers and provide healthcare facilities to rural and remote areas (health for all). So it is beneficial for the population living in isolated communities. Besides this, other advantages of telemedicine are:

- · Improving patient care and access to health care for rural areas and underserved areas
- · Reducing the time and expense of travel necessary to bring the patient to doctor or Vice versa
- · Giving physicians better access to tertiary consultation and to conduct remote examinations
- Reducing health care cost
- · Providing health care services of a physician or facility to larger audience
- · Reducing patient transfers to secondary and tertiary care centers

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Constant pain in your breast

Higher intake of vitamin E tied to lower dementia risk

REUTERS, New York

Older adults who get plenty of vitamin E in their diets may have a somewhat lower risk of developing dementia than those who consume less of the nutrient, a recent study published in Archives of Neurology suggests.

Researchers found that among 5,400 Dutch adults age 55 and older, the one-third who reported the highest vitamin E intake from food were 25 percent less likely to develop dementia, including Alzheimer's disease, over the next decade than the third with the lowest intakes.

The findings, reported in the journal do not prove that vitamin E itself protects the aging brain. Studies so far have come to conflicting conclusions as to whether vitamin E or other antioxidants may influence older adults' risk of dementia.

Researchers have been interested in whether antioxidants like vitamins E and C and beta-carotene might help stave off dementia because, in theory, their actions might interfere with the process of brain-cell degeneration.

Antioxidants neutralise unstable forms of oxygen called reactive oxygen species that can damage cells throughout the body. Reactive oxygen species are produced naturally in the body, as byproducts of metabolism; because the brain is an area of high metabolic activity, it is thought to be particularly vulnerable to accumulating oxidative damage over a lifetime.

However, studies so far have come to mixed conclusions as to whether older adults with a high dietary intake of various antioxidants have a lower risk of dementia. And clinical trials looking at the effects of antioxidant supplements have found no evidence that they cut Alzheimer's risk.

The researchers acknowledge that they cannot exclude the possibility that factors other than vitamin E explain the connection. Nor is it clear why vitamin E, but not vitamin C or beta-carotene, was linked to a lower dementia risk.

Food sources of vitamin E include wheat germ, nuts such as almonds and hazelnuts, vegetable oils such as sunflower and safflower oils, and some green vegetables, such as spinach and broccoli, margarine and butter.

It is unlikely that people could get too much vitamin E from food. However, high doses of vitamin E from supplements carry a risk of bleeding. Experts advise that adults consume no more than 1,000 mg of vitamin E per day.



such as puckering or dimpling both of your nipples or your armpit (like orange skin) Redness or a rash on the skin A lump or thickening that feels If your nipple becomes inverted A swelling in your armpit or around and/or around the nipple different from the rest of the (pulled in) or changes its your collarbone position or shape breast tissue

Know the alarming changes of breast

DR TASMIA TAHMID

Breasts change constantly throughout the life from puberty, through adolescence, the childbearing years, and after the menopause. Some changes are considered normal whether some may be a sign of diseases. Knowing the sign can help you from distinguishing between diseases and normal one. Here are some points noted to illustrate the changes — normal and abnormal. Before a period

From puberty onwards female hormone named oestrogen and progesterone are responsible for the changes you may notice in your breasts just before your period. The breasts may feel heavier and fuller. They may also be tender or lumpy. After a period this

breasts all the time. Many women also have breast pain linked to their menstrual cycle (cyclical breast pain).

During pregnancy

Breast changes can be an early sign of being pregnant. Many women feel a change in sensation in their breasts such as tingling and soreness (particularly of the nipples). This is due to increased levels of progesterone and the growth of the milk ducts.

When breastfeeding

Large amount of milk are produced to breastfeed a newborn baby, and the breasts can change size many times a day according to the baby's feeding pattern. Nipples can sometimes become sore and cracked, but this generally gets better over time. When breastfeeding stops, the breasts gradually go back to how they were before pregnancy, although they may be of different size and less firm than before. The alarming changes

These are the changes to every woman should look for and if there is in any doubt, get medical advice:

•A lump or thickening which is dif-

ferent to the rest of the breast tissue Continuous pain in one part of the breast or armpit

 One breast becomes larger or lower ·A nipple becomes inverted or changes shape or position

 Skin changes including puckering or dimpling Swelling under the armpit or

around the collarbone •A rash on or around the nipple

•Discharge from one or both nipples

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HEALTH TIPS

What may trigger a hernia

STAR HEALTH DESK

...... A hernia occurs when part of an internal organ bulges through a weak area of muscle. Hernias can affect men, women and children. The following are the typical cause of developing a hernia:

·Having chronic constipation, which causes a per-

son to push too hard during a bowel movement

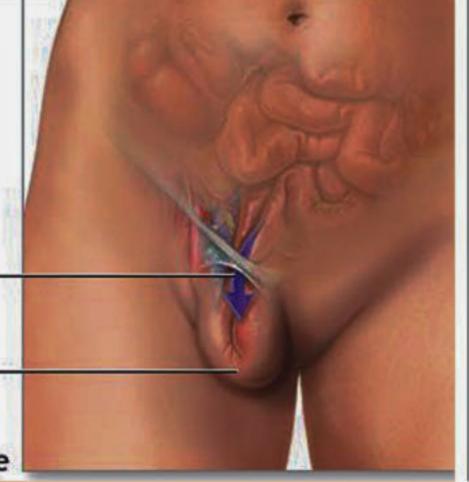
•Having a chronic cough Having cystic fibrosis

·Having an enlarged prostate and pushing to urinate

•Being overweight Lifting something heavy ·Having undescended testicles

Femoral hernia

Herniated intestine causing visible bulge



Autism: We care, we change!

DR RUBAIUL MURSHED

One decade has passed since the new millennium began, still lot of us are ignorant and sometimes unaware of the basic concept of Autism. It is good that Centre for Neurodevelopment and Autism in Children or CNAC has at last (at BSMMU) started its function in Bangladesh.

Autism is a developmental disability that typically appears during the first three years of life. It is the result of a neurological disorder that affects the normal functioning of the brain, impacting development in the areas of social interaction and communication skills.

Both children and adults with autism typically show difficulties in verbal and non-verbal communication, social interactions, and leisure or play activities. One should keep in mind that autism is a spectrum disorder which means it affects each individual differently and at varying degrees — this is why early diagnosis is so crucial. By learning the signs, a child can begin to benefit from one of the many specialised intervention programmes. A dynamic management approach may lessen the liability of this sickness.

Recently CNAC has started creating awareness and trying to train up concerned people while giving the public a chance to share their stories through different ways which includes their website as well. Today our Honourable Prime Minister is going to inaugurate their first international conference. Let's join and 'help change Bangladesh'.



How to change lifestyle after drug rehab

DR SAT PARKASH

Once you have completed drug rehab programme, there must be changes in your lifestyle. Below are some tips about what to expect and what those change should be: Aftercare support

You will spend a lot of time applying the newly acquired

life skills and coping skills that you learned in your treatment programme and this will keep you happy, clean and sober. This alone can keep you so busy that some family members may even feel neglected. These are an essential part of the recovery process. Keep in mind, many families find it difficult to understand why re-entry to society after an addiction treatment programme takes up so much of your time in a successful recovery. Have patience and explain all the hard work you are doing on your sobriety to them it will pay off in the long-run.

New rules

Rules are the cornerstone of the treatment process. While in treatment, you may have grown accustomed to following rules, and come to appreciate this level of structure. After returning home, you may even suggest new family rules, the most obvious being a ban on alcohol or drugs in your home.

Roles and responsibilities

Before you went into treatment, you may have neglected certain roles and responsibilities. Other family members may have pitched in to compensate. Now that you have completed treatment, you will probably be eager to participate in family life, and resume your family roles and responsibilities. Often this change in the family dynamic can be difficult at first. Don't worry it will get easier.

Communication

As part of the treatment process, you have learned to talk about personal issues, like relationships and feelings. Most treatment programmes stress the importance of open and honest communication. You will bring these lessons home, and encourage the rest of the family to talk and listen to one another. These conversations may be unsettling and unfamiliar at first. But open communication can help to solve problems and conflicts and, in the long-run, create a healthy home environment.

New people, places and things

While in treatment you will have learned to avoid people, places and things associated with your past drug abuse activities. This may affect your social life as a family, and may cause some conflicts in the home. Keep in mind that these challenges will be worth it in the long run.

Your feelings

Alcohol and drug abuse affects the whole family, and your feelings are important too. Make time for yourself, and talk to trusted family members and friends about your experi-

'Relapse' is when a person in recovery uses alcohol or drugs. It can be a one-time occurrence or it can last for an extended period of time. Family members can help a person in recovery by looking out for warning signs a return to old behaviors, hanging out with friends who are using, unexplained absences. If you feel as though you are going to relapse or already have, contact the counselor or the doctor and ask for help.

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