

ANTIMICROBIAL RESISTANCE

When healer turns into killer

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After the revolutionary discovery of world's first antibiotic Penicillin, Alexander Fleming along with the miracle cures warned about its danger of resistance and misuse in future.

"There is the danger", Fleming said on December 11, 1945, at the end of his Nobel lecture, "that the ignorant man may easily underdose himself and by exposing his microbes to non-lethal quantities of the drug make them resistant."

We did not pay heed to his warning to save the wonder drug rather we were just busy using the drug lavishly when we need it or even when we don't. Now the world is on the brink of loosing these miracle cures.

Antimicrobials are the drugs used to treat infections caused by bacteria, virus, protozoa and fungus. The emergence of drug resistant germs has been increased at an alarming level and has become widespread.

Bangladesh, already burdened by infectious diseases like TB, is loosing the major strength in the fight to control or



A microbiologist is checking the antibiotic sensitivity and resistance of a blood sample by culture.

eradicate infections. According to the World Health Organisation (WHO), at least 440,000 new cases of multi-drug resistant-tuberculosis (MDR) were detected last year and extensively drug-resistant tuberculosis (XDR) has been reported in 69 countries to date.

Latest antimalarial drugs have been reported to be ineffective as the malaria parasite is acquiring resistance causing havoc. A high percentage of hospital-acquired infections are caused by highly resistant bacteria such as Methicillin-

Resistant *Staphylococcus aureus* (MRSA) which are spread from one geographical location to another. Resistance is also emerging to the antiretroviral medicines used to treat people living with HIV, bird flu, H1N1 influenza.

Inappropriate use of antimicrobials drives the development of drug resistance. Both overuse, underuse and misuse of medicines contribute to the problem. "There is an antibiotic to treat every infection" is a common belief for many of us that leads to self medication with

antibiotics. People take antibiotic even in viral infections where antibiotic has no role. Sale/misuse of antibiotics should be restricted with the help of law and collaboration from prescribers, pharmacists and dispensers, pharmaceutical industry, public and patients, policy makers.

Moreover, lack of quality medicine, counterfeit drugs expose patients to sub-optimal concentrations of antimicrobials and thus create the drug resistance.

Animal husbandry is another source of drug resistance. Sub-therapeutic doses of antibiotics are used in animal-rearing for promoting growth or preventing diseases results in development of resistance which can spread to humans.

Antimicrobials are the precious gifts that have been thrown into dust after inapt use. Now, these have comeback as boomerang. The rate of development of resistance outpaces the development of a new antibiotic. If we fail to take strong action now, the world will be in grave danger when a minor infection will cost both physically and economically.

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PHYSIOTHERAPY

Recognition is yet due as it deserves

STAR HEALTH REPORT

Physiotherapy, an useful part of modern treatment are not getting proper recognition as it deserves and ignored in many ways. The subject has not yet been included in the recent proposed national health policy, according to the source of Bangladesh Physiotherapy Society (BPS).

BPS urged the government to formulate a complete guideline for physiotherapists and ensure their rights as healthcare professionals. For long, physiotherapists have been serving patients as an autonomous healthcare professional. Worldwide, it is proven that physiotherapy is a safe, curative, promotional and effective treatment option.

Along with infectious disease, Bangladesh is experiencing burden of non-communicable diseases (e.g. stroke, paralysis, obesity, diabetes, heart diseases) with increasing number of children living with autism. As a result, a major portion of our population is disabled somehow. This rate is increasing very quickly. Physiotherapy has the tremendous role in transforming people from the disable to active form.

The acting president of BPS, Dalilur Rahman said "Though the period of physiotherapy profession in Bangladesh is nearly 40 years, unfortunately there is no initiative from the government to form a Physiotherapy Council or even to include the profession in the national health policy. We strongly believe that it is a demand of time to include physiotherapy in the national health policy and take initiative to form physiotherapy council."

FIBROMYALGIA

Coping strategy for widespread body ache

Fibromyalgia is a disorder characterised by widespread muscle and bone pain and a heightened and painful response to pressure. Researchers believe that fibromyalgia amplifies painful sensations by affecting the way your brain processes pain signals.

The pain is a constant dull ache, typically arising from muscles and associated with problem in sleep, fatigue, memory and mood issue. To be considered widespread, the pain must occur on both sides of your body and above and below your waist.

One of the hardest things to accept may be that there is no cure for fibromyalgia pain. However, the coping strategies for getting through a bad day can range from simple frequent rest breaks throughout the day to watching a funny movie or talking with a favorite friend on the phone. Preparing a list of these strategies can help lessen the impact of fibromyalgia pain.

Find distractions — Identify activities that distract you from your symptoms. Examples include: Funny movies, quick-read books, outings with friends, favourite museums, and beautiful walking paths etc.

Relax — Set aside time for relaxation on your daily schedule. Add more relaxation time on days when your fibromyalgia symptoms flare. Relaxation techniques include:

Deep-breathing exercises: Breathe in slowly and deeply through your nose to a count of five. Hold the air in your lungs for

a count of five and then breathe out slowly through your mouth to a count of 10.

Progressive muscle relaxation: Tighten and then relax body parts one at a time, starting at either your head or your feet.

Meditation: Focusing on a single object or repeating a particular sound can help quiet your mind and relax your muscles.

Visualisation: Take an imaginary trip to a beautiful place. Use all your senses to experience the location as fully as possible. Feel the sun's warmth. Hear the birds.

The more often you use coping strategies, the easier it becomes. Different strategies work for different people. Something that's worked in the past may not work today, so be flexible and try the next thing on your list.

Source: www.mayoclinic.com



WEIGH LOSS SURGERY

Check your risk of regain after operation

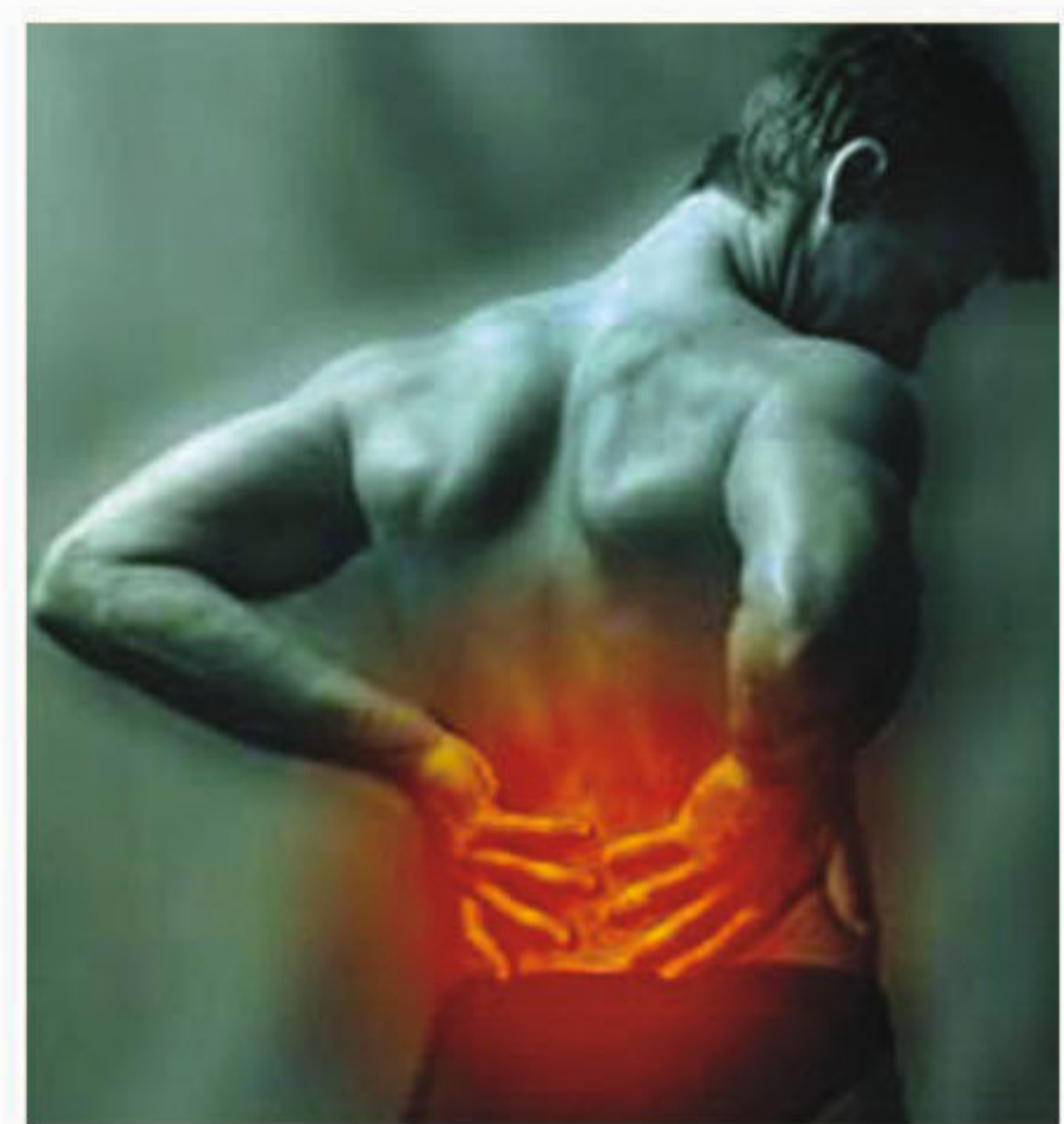
STAR HEALTH DESK

Scientists have developed a new risk calculator that predicts the risk of post-operative complications for patients who are undergoing bariatric surgery that involves reducing the size of stomach.

The risk calculator will help in surgical decision-making and will help patients better understand what they can expect during recovery in order to prepare for a bariatric operation.

Recent heart attack or angina, stroke, high blood pressure, use of blood thinners, limited ability to perform basic activities of daily living, higher weight and the type of bariatric procedure were found to be associated with increased risk.

Patients who are morbidly obese already face great health risks and bariatric surgery can be a life-saving option. But the risk calculator will aid patients in better preparing for their operation by understanding the true risks and benefits of a bariatric procedure.



Help prevent back injury

Even if your back feels well at the moment, you may be straining it if you have poor posture, perform awkward movements, are out of shape, or get overweight. Good body mechanics include reducing strain on your back when you lift heavy loads. The Nicholas Institute of Sports Medicine and Athletic Trauma offers these suggestions:

- Stand close to the object to be lifted
- Spread your feet wide apart to straddle the object
- Squat, bending your knees and hips, keeping your back in proper alignment
- Contract your stomach muscles
- Lift by using your leg muscles, not your back
- When lifting with another person, one person should say when to lift, walk and unload
- Do not twist as you lift. Instead, pivot with your hips and shoulders in line and shift your weight

HEALTH bulletin



Memory suffers due to stress

University of Edinburgh scientists have found that there is a link between stress and memory loss as the stress hormone impairs memory to a great extent. Earlier studies have shown that older people with poor memory showed shrinkage of the hippocampus, region in the brain which is involved with memory; such people also had higher levels of the stress hormone cortisol.

Source: Medindia

New method help identify heart disease during sleep

New research from the University of Gothenburg, Sweden, has revealed that a specially customised pulse oximeter machine attached to the finger can be used to detect changes in heart and vessel function while you sleep, and also identify patients at increased risk of cardiovascular disease.

In the study, researchers used a modified version of the pulse oximeter currently used to detect various sleep disorders during the night, such as apnoea.

The method may result in quicker and easier identification of patients at high risk of cardiovascular disease. It is hoped that it can also be used to assess the effects of treatment for cardiovascular disease, such as how weight loss and exercise can help prevent problems.

Source: Asian News International (ANI)

Knowing for better living

In Bangladesh ...

The incidence of typhoid fever is the highest in **April, August & December!**

Drink pure water

Avoid unhygienic food

Wash hands properly before preparing and eating food

Follow prescription strictly while taking antibiotic

Consult your Doctor



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