

Overcoming infertility with modern techniques

PROF FIROZA BEGUM

Childlessness may be a tragedy for the married couple and a of marital upset, personal unhappiness and ill health. Infertility often plays a major role in breaking the marital bridge and important cause of separation between partners.

According to the experts, infertility is considered when a couple is unable to achieve conception after one year of unprotected coitus. If you have been trying to conceive for more than a year, there is a chance that something may be interfering with your efforts to have a child.

Infertility may be due to a single cause in either you or your partner or a combination of factors that may prevent a pregnancy from occurring or continuing.

In any series of infertile marriage, the main etiological factor is found in the female in about 40 percent of cases; about 35 percent of the husbands concerned

have some degree of infertility. In 10-20 per cent of cases a combination of factors operates and rest has unexplained infertility.

In majority of cases female infertility is due to the obstruction in fallopian tube, loss of motility of tube, polycystic ovarian syndrome diabetes, thyroid disorder etc. Whereas in case of male, factor implies a lack of sufficient numbers of competent sperm, resulting in failure to fertilise the normal ovum. Other important causes are varicocele, genetic predisposition, occupational and environmental factor.

Sexual inadequacy is one of the important factors contributing to infertility. It is important to realise that the age of a woman is a factor to be considered and there should not be any delay in offering suitable treatment for the couple.

Over the past decades, there has been much improvement in the treatment of both infertile female



as well as the male. Assisted conception is one of them. It is the facilitation of natural conception by some form of scientific interventions.

In Bangladesh assisted reproduction technology has become a promising one. Technologies available in the country include IUI

(Intrauterine Insemination), IVF (In Vitro Fertilisation) and ICSI (Intra Cytoplasmic Sperm Injection).

In vitro fertilisation (IVF) is the most effective ART technique. IVF involves retrieving mature eggs from a woman, fertilising them with a man's sperm in a dish

in a laboratory and implanting the embryos in the uterus three to five days after fertilisation. IVF often is recommended when both fallopian tubes are blocked. It is also widely used for a number of other conditions, such as endometriosis, unexplained infertility,

cervical factor infertility, male factor infertility and ovulation disorders.

Intracytoplasmic sperm injection (ICSI) technique consists of a microscopic technique (micro-manipulation) in which a single sperm is injected directly into an egg to achieve fertilisation in conjunction with the standard IVF procedure. ICSI has been especially helpful in couples who have previously failed to achieve conception with standard techniques. For men with low sperm concentrations, ICSI dramatically improves the likelihood of fertilisation.

IUI technique attempts to assist the implantation of the embryo into the lining of the uterus. With this advancement it is possible to treat the vast majority of subfertile couple successfully and give them the child they so desire.

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An antidepressant may calm an irritable bowel

Antidepressants and psychological therapies, particularly cognitive behavioral therapy (CBT), appear to provide relief from irritable bowel syndrome, at least in the short-term, according to published studies.

Antidepressants appear to help calm irritable bowels independently of any improvement in coexisting depression, the researchers report in the journal Gut.

In an interview, Dr. Alex C. Ford, from McMaster University Medical Center, Hamilton, Ontario, Canada, said doctors "should consider" using antidepressants for people who fail other "first-line" therapies for irritable bowel syndrome, or IBS, which may include cramping, diarrhoea or constipation.

The causes of IBS are unclear and there has been debate whether it is mostly due to psychological factors or biological triggers, or perhaps a combination.

The trials included almost 800 IBS patients treated with antidepressants versus

placebo and almost 1300 randomised to psychological therapies versus control therapies or usual care.

Ford and colleagues found that the risk of IBS symptoms persisting with antidepressant therapy (versus placebo) was reduced by 34 percent.

Psychological therapies also similarly cut the risk of persistent IBS symptoms. "The data were more robust for antidepressants, as the trials we identified were of higher quality," Ford noted.

For both antidepressants and psychological therapies, "only four patients need to be treated to improve or cure one patient's symptoms," the investigators note.

The investigators think current guidelines on IBS management, which make either "conflicting or vague recommendations" for the role of antidepressant therapy in the treatment of IBS, "should be updated to include this important and novel information."

Source: Gut

Too much TV linked to higher asthma risk

REUTERS, London

Children who watch television for more than two hours a day have twice the risk of developing asthma, British researchers reported.

Asthma affects more than 300 million people worldwide and is the most common children's chronic illness. Symptoms include wheezing, shortness of breath, coughing and chest tightness.

A study published in the journal Thorax may help link asthma, estimated to account for one in 250 deaths globally each year, to obesity and lack of exercise, experts said.

"There has been a recent suggestion that breathing patterns associated with a sedentary behavior could lead to developmental changes in the lungs and wheezing illnesses in children," Andrea Sherriff of the University of Glasgow and colleagues wrote.

Sherriff and colleagues studied more than 3,000 children from birth until

nearly the age of 12.

The parents were questioned annually on wheezing symptoms among their children and whether a doctor had diagnosed asthma as they grew up. The researchers also analysed how much television the children watched.

The study found that 6 percent of children at around age 12 who had no symptoms of the disease growing up had asthma.

But children who watched television for more than two hours daily were almost twice as likely to have been diagnosed with the condition as those who watched less.

"The findings add to a wealth of evidence linking a lack of exercise and being overweight with an increased risk of asthma," Elaine Vickers of Asthma UK, who was not involved in the study, said in a statement.

"But this study is the first to directly link sedentary behavior at a very young age to a higher risk of asthma later in childhood."

Spreading messages of HIV/AIDS to the disadvantaged

ZAM KHAIRUZZAMAN

One of the vital factors for preventing against HIV/AIDS is to spread proper message to large number of population. It is estimated that about 56 million illiterate people of

the country are at great risk of HIV/AIDS transmission. Educating them to fight against HIV/AIDS is very challenging. How will such a large number of disadvantaged population will protect themselves from the deadly disease?



Dhaka Ahsania Mission (DAM) has designed an intervention targeting disadvantaged population. With the support from UNESCO, DAM has produced a package of user-friendly materials, brochures, leaflets and posters to make the message clear on HIV/AIDS prevention, disclosed its executive director M Ehsanur Rahman. He said that non-formal education (NFE) is an effective tool to prevent HIV/AIDS among millions of illiterate and semi-illiterate people. The materials may be used to impart essential HIV/AIDS education to them who have the right to know the fundamental facts about the disease, he said.

Rahman has appealed to the government to use NFE programme as a mass strategy to prevent transmission of the deadly disease into general population. Usually, general people feel shy talking about the issue. NFE, because of its scope for informal interaction, can be a media to share messages of HIV/AIDS and ways of prevention, he said.

The new package of strategies combines emphasis on life skill development and change in practices through participatory teaching-learning process and training to make informed decision.

The objectives are to

improve the quality of learning regarding life skills and HIV awareness for youth, to increase and enhance community support for HIV prevention activities and to increase the capacity of district and community level stakeholders to support HIV prevention activities.

In the mean time, workshops were held in six divisions of the country to identify essential learning needs and effective modes of learning. In addition, training manual and video materials on HIV/AIDS from different organisations have been collected to develop a pool of resource materials. An analytical report has also been prepared.

Based on this curriculum, moves are going on to develop an effective teachers' training manual and ICT material.

At present, through the Bureau of Non-formal Education of the government, a massive project titled Post Literacy and Continuing Education for Human development (PCEHD) is being implemented in various districts. The HIV/AIDS education package can be optimally utilised through this project to reach a large number of participants to contribute to the immense possibilities of combating HIV/AIDS.



What should we eat?

These days, throughout the world lots of urban people — both young and old are fat and growing ever fatter. Did you know that it's on the World Health Organisation's list of major global health risks.

A "new and striking" discovery in the western countries found that nearly 25 percent of women in their 50's had too much body fat to measure in the usual way, by grabbing a fold of skin with calipers that gauge the layer of fat underneath.

Last year there was a book published named, "What Are You Looking At?" — that describes itself as "the first fat fiction anthology" and its introduction says, "Fat has earned its way into the realm of human conditions that concern literary artists."

Well it does not mean our bodies do not need 'fat' or it does not have any beneficial effects! But undoubtedly, the risk is more than benefits at this moment.

This increases the risks of heart disease, diabetes, stroke and top of these — 'lost productivity'. People who are reading this article will be surprised to know that how fast calories add up, and unless they eat a lot of vegetables, how little food provides 2,000-3000 calories.

A small cone ice cream or a medium/large serving of French fries can have more than 400 calories, for example, a cheese sandwich more than 800 and chocolate sundae more than 1,000.

How much fat we should consume is controversial; it varies from person to person. But the Harvard nutritionists say that the problem is not so much the amount of fat that we eat but rather the kind of fat is very important. We need to know about different types of 'fat' properly and see what is good and what is bad.

Discouraging as it all may seem, the good news is that the Department of Nutrition at the Harvard School of Public Health has developed a 'Healthy Eating Pyramid'. A lot of people believe that this pyramid is trustworthy and simple guide to choose a healthy diet.

Its foundation is daily exercise and weight control, since these two related elements strongly influence our chances of staying healthy. The Healthy Eating Pyramid builds from there, showing that we should eat more foods from the bottom part of the pyramid (vegetables, whole grains) and less from the top (sweets, red meat, cheese).

A food guide pyramid for a healthy diet is built like this: At the tip are fats, oils and sweets, all foods that we should eat most sparingly. At the next level are milk, yogurt, cheese, meat, poultry, fish, dry beans, eggs and nuts, a food group that should be consumed in some form three times daily. At the next level of the pyramid are vegetables and fruits, which should be eaten about five times daily.

At the pyramid's base is a food group that includes bread, cereal, rice and pasta. 6 to 11 servings from this menu are recommended daily.



Vitamin D levels tied to dementia risk

Low blood levels of vitamin D may be associated with an increased risk for dementia, a British study has found.

Scientists measured blood levels of the vitamin in a representative sample of 1,766 people over 65 and assessed their mental functioning with a widely used questionnaire. About 12 percent were cognitively impaired, and the lower their vitamin D level, the more likely they were to be in that group.

Compared with those in the highest one-quarter for serum vitamin D, those in the lowest were 2.3 times as likely to be impaired, even after statistically adjusting for age, sex, education and ethnicity. Men showed the effect more strongly than women.

"The cause of dementia is not vitamin D deficiency,"

said David Llewellyn, a research associate at Cambridge University and the study's lead author. "It's a very complicated disease. But while further research is needed, vitamin D supplementation is cheap, safe and convenient, and may therefore play an important role in prevention."

According to background information in the study, which appears online in The Journal of Geriatric Psychiatry and Neurology, vitamin D receptors are present in a variety of cells, including neurons and the glial cells associated with them. That suggests that the vitamin may play a role in brain development and the protection of neurons.

Source: Geriatric Psychiatry and Neurology

Understanding alcoholism

DR SATPARKASH

Alcohol abuse is a condition in which a person drinks to the point that this habit interferes with his or her life. Alcohol dependence describes a more severe condition marked by physical symptoms and loss of control to the point, that maintaining the addiction to alcohol becomes the main focus of a person's life. The physical dependence on alcohol is continued despite the knowledge of its harmful consequences.

Physical dependence on alcohol is continued despite the harmful consequences. There is an inability to limit the drinking despite continued efforts. The person drinks more and more alcohol to achieve a particular state of mind (colloq. 'high'). He may also drink more to lessen depressive feelings, which are

worse when the person is not under the influence of alcohol. Signs of physical dependence include bodily changes, such as shakes, 'delirium tremens' (withdrawal symptoms), or sweats on cessation of drinking.

How does it occur?

Many factors may lead to alcohol dependence. These can include genetic factors, family environment, ongoing stress and self-medication for emotional problems such as depression or anxiety and the nature of alcohol. Grief, loneliness, depression, or boredom could lead to drinking late in life.

What are the symptoms?

Alcohol dependence can manifest itself in different patterns. Drinking may range from daily excessive drinking to binge drinking. Tolerance refers to the fact that many alcoholics drink ever-larger

amounts of alcohol before feeling or getting drunk. By the time one has progressed from alcohol abuse to alcohol dependence, it is necessary to consume the same to avoid withdrawal symptoms.

People who are dependent on alcohol may try to hide evidence of drinking and promise to give up the habit. They may drink stronger alcoholic beverages and have long periods of drunkenness. Alcohol dependents may have frequent episodes of blackouts — times when they do not remember what happened during the drinking episode.

Additionally, there may be problems at work (like disinterest, missing work). Interest in food is decreased. There may be mood changes (angry, irritable, violent) and personality changes (jealous, distrustful). People with alcohol dependence may

scarcely care for personal or social roles.

They repeatedly drive while drunk, and may hurt themselves or others. They are careless about their appearance, confused and have memory problems, losing the ability to think quickly or concentrate, and often have money problems.

Typical physical symptoms include nausea or tremors in the morning, stomach pain or ulcers, cramps or diarrhoea. They can have numbness, tingling or weakness in the hands and legs, red eyes, face, or palms.

The walk may be unsteady and the person may fall frequently. Alcohol is toxic to the brain, the heart, liver, kidneys, stomach and intestines, muscles, eyes and the sexual organs. This toxicity leads to many medical problems.

How is it treated?

The aim of treatment is to stop

the person from drinking alcohol completely, referred to as abstinence. People who are mild alcohol abusers can stop or reduce alcohol drinking on their own.

But people who have gone as far as becoming alcohol dependent must be assisted to become, and more importantly, remain abstinent. Relapse to drinking is common in the early period of recovery. The patient must be helped to limit these slips and get back to abstinence as soon as possible. Patients who are alcohol dependent may also go through a unique phase of denial — where they feel that they will be able to stop drinking whenever they want to. This prevents them from seeking professional help to sort out their problem.

Psychotherapy and social rehabilitation help in recovery. Family members should be included in the treatment

program. After immediate withdrawal from alcohol (detoxification), long-term rehabilitative treatment is needed. Initially hospital based treatment followed by outpatient treatment at de-addiction clinics is required. A support programme for rehabilitation plays a very important role in treatment.

One of the most important aspects of alcohol counselling and treatment is to learn the behaviour patterns that lead to drinking. It is important to recognise these patterns and change them. Health related problems can often be controlled or prevented by stopping drinking. However, severe damage to the liver or pancreas can be long-lasting and ultimately fatal.

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