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A response to HIV/AIDS

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AIDS posing a challenge to the mankind already claimed the lives of more than 23 million, killing about 3 million people every year. According to WHO report 2002, an estimated 42 million people throughout the world currently living with HIV. Another 70 million men, women and children may die of AIDS in next 20 years and 25 million children will be orphan by 2010.

According to the UNAIDS report 2002, approximately 13,000 people (including women and children) are carrying HIV infection in Bangladesh and experts opined the situation is below the level of concentrated epidemic (<1%). However, till December 2004, only 465 cases were officially reported. The significant under-reporting of cases is due to social stigma and country's limited voluntary testing and counselling capacity. The sero-surveillance studies have shown an increased HIV prevalence from 1.4% (2002) to 4% (2003) to 8.9% (2004) among injecting drug users (IDU) in central area of Bangladesh indicating rapid evolving of HIV epidemiology in the country.

Why is HIV situation alarming in Bangladesh?

Research on sex industries have identified approximately 200,000 sex workers in Bangladesh who are usually non-literate and whose customers represent all segments of society. Female sex workers have an average of 5-6 clients, the highest number of clients in commercial sex than any other counties in South-East Asia region. Moreover the floating prostitutes are present in large number though the precise distribution and prevalence is still unknown. A number of studies also found that a substantial proportion of young and single textile and garment workers supplement their low wages by occasional prostitution.

The occurrence of premarital and extramarital sexual activities including homosexual activities are also widespread in our country. Around 60% of youth have had sexual experiences before marriage. Extramarital sex exists in rural societies, particularly when husbands are absent for a long time. In addition, Bangladeshis are active in global gay scene. The behavioral surveillance data have shown that 60% of long distant truck drivers have sex with commercial sex workers about twice a month without having any knowledge on HIV/AIDS. The alarming reality is that the majority of men still do not use condom in commercial sex. Research points out about 98% of floating and 96% of hotel based sex workers do not use condom in their sexual encounters. About two-third of rickshaw pullers and truck driers surveyed reported that they never touched a condom in their lives. According to the behavioral surveillance report, Bangladesh is the lowest condom use country in the South-East Asia region.

Sexually transmitted infections (STI) act as a major co-factor of HIV transmission and serve as indicators of low condom use and other high-risk sexual behavior. Studies have shown high rates of STIs in various populations in the country. According to UNDP (2003), sex workers in Dhaka city have had very high rates of syphilis (60%), gonorrhoea (18%) and chlamydia infection (20%). A rural study found that 47% reported symptoms of reproductive tract infections, 56% had laboratory evidence infections, of which 23% were STIs.

The Department of Narcotic Control, Bangladesh and other research report stress that needle sharing continues to be routine among injecting drug users and the number of new injectors are increasing. The report pointed out that contrary to the common belief, injecting drug users are not isolated from the society; they have regular sex partners, they buy sex from women as well as other men, they sell blood, and they move between cities and injects. In another survey, 13% of sex workers reported having injecting drugs. This close interaction and networking can potentially spread the epidemic widely to the general population.

The Bangladesh economy relies on more than 1.5 million migrants mostly from neighboring countries, who spend much of the year away from their families, are known to be at increased risk of contracting HIV.

The BRAC response

BRAC initiated response against HIV/AIDS through conducting several studies on HIV/AIDS awareness in Matlab in late 1990s. Such studies showed a very little proportion of rural people knew about AIDS, and a few proportion of them knew about its transmission and prevention. During 1997-1999, BRAC carried out operation researches on behavior change communication, and identified pre- and extra- marital sexes, sexual abuse, low condom use and high rates of STIs with no/ very little treatment among Matlab population. In response to that, BRAC Research and Evaluation Division developed and tested a low cost, simple and culture sensitive HIV/AIDS awareness education module in Matlab. BRAC piloted the module in Mirzapur and Tangail districts during 1999 to 2001 for scaling-up. Thereafter in 2002, BRAC undertook a 4-year HIV/AIDS prevention programme in 5 divisions of Bangladesh targeting the high-risk and general populations.

BRAC HIV/AIDS education programme

The community based HIV/AIDS education programme was initiated in 2002 that aims to increase HIV/AIDS awareness among community people including adults and adolescents, internal migrants and brothel based commercial sex workers (CSW). The programme targets a total of 7.4 million people from Dhaka, Khulna, Chittagong, Sylhet and Barishal divisions with support from SIDA and government through Unicef as management agency. The programme has four main approaches encompassing the whole cycle of preventing HIV transmission from high-risk to general population through bridging community. The 4-components include, 1) mass awareness of HIV/AIDS in the community including couple education, 2) awareness raising among adolescents in secondary schools as well as in the community, 3) preventing HIV/AIDS among the high-risk populations comprising brothel based commercial sex workers, and 4) preventing HIV among internal migrants. It is noted that groups of stakeholders/ gatekeepers are also trained and sensitized on HIV/AIDS and the programme.

The programme for adults: BRAC provided training to 1,524 programme organisers (PO), and 2,300 community health workers (CHW) and extension workers, who in turn, disseminate information among community people on the basics of HIV/AIDS and on safer sex practices. The CHWs educate community peoples through one-to-one contact while visiting households. They specifically relay the information to married couples. The POs conduct group meetings, identify RTI and STI patients and refer them to the BRAC health centre (BHC) or GOB health facilities. The popular theater on HIV/AIDS conducted in each village act as a reinforcement tool for the awareness raising.

The programme for adolescents: The programme targets both out school and secondary school (class VIII X) adolescent boys and girls in the community. The two trained teachers in each class, one male and one female, are responsible to provide information on the basics of HIV and AIDS to the students. Each student would receive the orientation two-times a year. Personal hygiene and some issues of reproductive and sexual health problems are also a part of discussion. Questions can be asked anonymously through a question box.

Gonokendra pathagar and Kishori pathagar of BRAC education programme is used to reach the community based adolescents through peer education approach. Flip-charts, booklets and videos are used as BCC materials.

The programme for internal migrants: To halt the spread of HIV infection from high-risk to general populations, BRAC addresses the internal migrants like bus and truck drivers and helpers, and industrial workers as they are the potential clients of commercial sex. The program activities encompass awareness raising, condom promotion for safer sex practice and basic curative services for STIs. Peer education is the main employed method.

The programme for commercial sex workers: The programme targets brothel based sex workers with the aim to empower them to reduce risks and vulnerability through enhancing safer sex practices. BRAC initiated the HIV/AIDS awareness programme for the CSWs through group formation of 15-20 members in each. BRAC's trained Shastho Shebikas (SS) and trained volunteers from the group are responsible to educate them on HIV and AIDS and condom promotion for safer sex practices. The empowerment programme includes mobilisation, savings and consumption loan activities to support their livelihood during the lean and crisis period. BRAC frontline workers and volunteers contacted the sex workers through group meetings and one-to-one contacts. Condom demonstrations are conducted by the Shastho Shebikas in order to relay the correct use of condoms. Personal hygiene practices are also being taught. The volunteers also distribute condoms and keep track of how many are being used by the sex workers. Moreover, shasthya shebika provides limited curative services for ten general diseases. The Programme Organisers identify and treat the RTI and STI cases through syndromic management, and if necessary refer the cases to the BRAC health centres, government health facilities and other NGO clinics.

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Self-assessment and taking care of newborn by yourself

DR M KARIM KHAN

A normal healthy child is the best gift from Almighty Allah for a married couple. You can assess and take care of your newborn by yourself.

Look at the following points carefully --

λ A newborn should cry spontaneously soon after birth.
λ Should have pink color.
λ Should have heart/pulse rate more then 100 per minute.
λ Should have active movements of limbs.
λ Weight should be more then 2.5 kg.
λ After drying up the baby, wrap the baby with soft pre warmed cotton clothes.
λ Should pass urine and stool with in 24 hours but may be delayed up to 48 hours.
λ Newborn should be put to the mother's breast with in 30 minutes after birth. Please don't give any glucose water or honey to the baby as first food.
λ Bathing may be delayed for a couple of days and there after may be given every alternate day with Luke warm water and must be inside the room.
λ Initial 1-2 weeks baby will sleep 16-18 hours a day, which is normal.
λ Baby will loose weight about 10 per cent in 1st ten days and there after will start gaining weight every day by 15-25 kg.
λ Baby may develop jaundice on 3 rd day onwards which is called physiological jaundice and does not require any treatment except exposing the baby to the sun in the morning & in the afternoon for 20-30 minutes for 7-10 days. But if jaundice appear in the first 24 hours, is always pathological and pediatrician to be consulted immediately.
λ Keep the umbilicus of the newborn always dry and do not apply any drugs.
λ A newborn female baby may pass menstrual like bleeding 2-3 days after birth, which is normal , occurs due to withdrawal of influence of maternal hormone.
λ Don't worry and does not require any treatment.
λ On day 5 onwards if a baby passes urine more then 6 time a day means baby is getting enough breast milk and does not require any formula feeding.
λ If a neonate (First 4 weeks of life) cries unusually or become lethargic or if the baby is hypo or hyperthermia or not sucking well or have convulsion needs immediate pediatric consultation.

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How to keep your mind sharp: Preventive action

STAR HEALTH DESK

Keeping memory loss at bay as you age is not just about keeping your mind in shape, though that is a major component. You can maintain your sharp mind as you get older by making healthy choices that keep the rest of your body in top form. Follow these tips now to prevent memory loss later.

Exercise your mind

Just as physical activity keeps your body strong, mental activity keeps your mind sharp and agile. One way to do this is to continually challenge yourself by learning new skills. If you continue to learn and challenge yourself, your brain continues to grow, literally. An active brain produces new connections between nerve cells that allow cells to communicate with one another. This helps your brain store and retrieve information more easily, no matter what your age.

How can you challenge yourself? Try:

λ Learning to play a musical instrument
λ Playing Scrabble or doing crossword puzzles
λ Interacting with others
λ Switching careers or starting a new one
λ Starting a new hobby, such as crafts, painting, biking or bird-watching
λ Learning a foreign language
λ Volunteering
λ Staying informed about what's going on in the world
λ Reading

A mentally stimulating job, taking classes that interest you or even just reading more can help you maintain your memory longer as you age.

Stay physically active

Research links physical activity with slower mental decline. Exercise

increases blood flow to all parts of your body, including your brain, and might promote cell growth there. Exercise also makes you feel more energetic and alert. The best part is that you can make it fun. Pick an activity you enjoy, whether it's doing yardwork or walking your dog. Exercise for at least 30 minutes most days of the week.

Start by simply increasing your physical activity level. Walk extra distance. Take the stairs instead of an elevator. When watching TV, ride a stationary bike. Just get moving. Regular physical activity can help you think clearer, feel better and lower your risk of many diseases.

Develop healthy eating habits

Eat a diet rich in fruits and vegetables. Many of these contain antioxidants substances that protect and nourish brain cells. And antioxidants may help prevent cholesterol from damaging the lining of your arteries and slowing blood flow to your brain. Foods high in antioxidants include colorful fruits and vegetables, such as oranges, berries, broccoli, spinach, carrots, sweet potatoes and tomatoes. In most cases, you're far more likely to gain health benefits from eating whole foods than by taking supplements, in pill, capsule or other forms.

Drink alcohol in moderation, if at all

People who drink heavily for years can experience permanent brain damage due to poor nutrition, and they are at higher risk of developing memory problems and dementia.

Evidence shows that moderate alcohol consumption may prevent memory loss. But don't use this as a reason to start drinking if you don't already drink.

Manage your stress

Keep your stress to a minimum. When you are stressed, your brain releases hormones that can damage your brain if you are exposed to them for days at a time. And chronic stress can make you feel depressed or anxious feelings that can interfere with the way your brain processes memories.

Take a break. Even if you have only a few minutes to yourself, use it to breathe deeply and relax. Then look for long-term stress solutions, such as simplifying your life, getting some exercise or cutting out some activities.

Protect your head when exercising

Head trauma can increase your risk of developing Alzheimer's disease. People who participate in sports such as running and swimming, which have a reduced risk of head trauma, have lower rates of memory loss. Take precautions to protect your head; for example, wear a helmet when riding your bike.

Stop smoking

You can add memory loss to the long list of health problems that come from smoking. Smokers may have twice the risk of getting Alzheimer's disease as do people who have never smoked. Stop now it is never too late. If you quit smoking now, you can still reduce your risk of memory loss later in life.

Talk to your doctor

Discuss your concerns about memory loss with your doctor. He or she can look at your overall health and come up with other strategies for preventing memory loss as you age. For instance, if you have a family history of Alzheimer's disease, other strategies for preventing that disease might prove helpful to you.

Seeing your doctor regularly also means you will have routine medical exams to monitor your blood pressure, cholesterol level and blood sugar level. Also make sure your thyroid gland is functioning normally. These are relatively easy to check and are good indicators of what is going on inside your body.

Insight of drug coated stent for coronary angioplasty

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A gentleman on the way to office or wakes up from deep sleep with intense agonising pain in central chest and heaviness with a feeling of about to die, sweating, perspiration and collapsed. He was immediately taken to hospital and ECG showed his heart attack (Myocardial Infarction). Center had facilities of cardiac catheterisation laboratory; cardiologist attending the patient told him that they were planning for primary PTCA + Stenting with Drug coated stent rather than thrombolysis (as success of establishing blood flow to coronary is more). Patient may not understand what is stent or drug coated stent. This is a common picture of MI patient or their family member facing. Here, is brief introduction of it.

What is a heart attack?

A heart attack occurs when the blood supply to part of the heart muscle itself -- the myocardium -- is severely reduced or stopped. The medical term for heart attack is myocardial infarction (MI). The reduction or stoppage happens when one or more of the coronary arteries supplying blood to the heart muscle is blocked. This is usually caused by the buildup of plaque (deposits of fat-like substances), a process called atherosclerosis. The plaque can eventually burst, tear or rupture, creating a *snag* where a blood clot forms and blocks the artery. This leads to a heart attack. A heart attack is also sometimes called a coronary thrombosis or coronary occlusion.

If the blood supply is cut off for more than a few minutes, muscle cells suffer permanent injury and die. This can kill or disable someone, depending on how much heart muscle is damaged. Sometimes coronary artery temporarily contracts or goes into spasm. When this happens the artery narrows and blood flow to part of the heart muscle decreases or stops. A spasm can occur in normal-appearing blood vessels as well as in vessels partly blocked by atherosclerosis. A severe spasm can cause a heart attack.

What is cardiac catherisation?

This is a procedure done on the heart. In it, a doctor inserts a thin plastic tube (catheter) into an artery or vein in the arm or leg. From there it can be advanced into the chambers of the heart or into the coronary arteries.

Catheters are also used to inject dye into the coronary arteries. This is called coronary angiography or coronary arteriography. This is done to see if the arteries have blockage that could cause a heart attack. This test can measure blood pressure within the heart and how much oxygen is in the blood. It is also used to get information about the pumping ability of the heart muscle. Catheters with a balloon on the tip are used in the procedure called Percutaneous Transluminal Coronary Angioplasty (PTCA). Catheterisation is also done on infants and children to examine or treat congenital heart defects.

What is coronary angioplasty?

Coronary angioplasty is a procedure that opens blocked arteries and allows blood to flow to your heart muscle. Angioplasty is not surgery. It opens a clogged coronary artery by inflating a tiny balloon in it.

What is coronary artery restenosis?

Restenosis is the reocclusion, or reclogging, of a coronary artery following a successful intravascular procedure, such as balloon angioplasty or stent replacement, to reestablish adequate blood flow through the vessel lumen.

What is a stent and how is one used?

A stent is a wire mesh tube used to prop open an artery that has recently been cleared using angioplasty. The stent is collapsed to a small diameter and put over a balloon catheter. It is then moved into the area of the blockage. When the balloon is inflated, the stent expands, locks in place and forms a scaffold. This holds the artery open. The stent stays in the artery permanently, holds it open, improves blood flow to the heart muscle and relieves symptoms (usually chest pain).

When are stents used?

A stent may be used instead of -- or along with -- angioplasty. Stents are used depending on certain features of the artery blockage. This includes the size of the artery and where the blockage is. Stenting is a fairly common procedure; in fact, it now represents 70-90 percent of procedures.

What are the advantages of using a stent?

In certain patients, stents reduce the re-narrowing that occurs after balloon angioplasty or other procedures that use catheters. Stents also help restore normal blood flow and keep an artery open if it has been torn or injured by the balloon catheter.

Can stented arteries reclose?

Yes. Reclosure (restenosis) is also a problem with the stent procedure. In-stent restenosis is essentially tissue regrowth -- the body's overzealous attempt to heal the intima (innermost layer of vessel lining) where it was disturbed by the placement of the coronary artery stent. In response to vascular trauma, growth factors are produced. These growth factors stimulate smooth muscle cells to start dividing, a process known as neointimal hyperplasia. As the smooth muscle cells multiply, they push through the openings in the stent mesh and, over time, cause a narrowing in the stent lumen. In recent years doctors have used new types of stents called drug-eluting stents. These are coated with drugs that are slowly released and help keep the blood vessel from reclosing. These new stents have shown some promise for improving the long-term success of this procedure.

What precautions should be taken after a stent procedure?

Patients who have had a stent procedure must take one or more blood-thinning agents after the prescription of a cardiologist. For the next four weeks a magnetic resonance imaging (MRI) scan should not be done without a cardiologist's approval. But metal detectors don't affect the stent. Reassess the patency of stent at 6 and 12 month if possible.

Is there a way to minimise in-stent restenosis?

Until recently, cardiologists have had little recourse but to wait and see if restenosis occurs and then treat it. The new CYPHER® Sirolimus-eluting Coronary Stent and Paclitaxel-Eluting Stent -- described as a potential "breakthrough in interventional cardiology" -- is intended to minimize the risk of in-stent restenosis.

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Mayonnaise: A common cause of food poisoning?

Mayonnaise is a delicious food supplement which has a widespread use with various food items. It is sometimes heard that mayonnaise is a common source of food poisoning. Is this true?

Commercially produced mayonnaise is an unlikely cause of food poisoning. This is because it is made with pasteurised eggs, which are heat treated to kill harmful bacteria, such as salmonella. It also has a high level of acidity from ingredients such as vinegar or lemon juice which inhibits bacteria growth. Homemade mayonnaise, on the other hand, is made with raw egg yolks, which may contain harmful bacteria, and should be avoided.

Keep in mind that any food has the potential to cause food-borne illness. For example, harmful bacteria can be introduced into a food during harvesting or manufacturing or from unwashed hands during preparation. If a food sits out and is allowed to get warm, it provides a perfect breeding ground for such bacteria.

To keep your mayonnaise-based salads safe, follow these tips:

λ Wash all produce thoroughly with clean, cold water.
λ Use commercially made mayonnaise instead of homemade mayonnaise.
λ Refrigerate salads immediately after preparing them and keep them at 40 F until they are served to prevent the growth of bacteria.
λ Don't leave cold food out at room temperature for more than two hours.
λ When mayonnaise-based salads must sit out, put them in a shallow container surrounded by ice and replace the ice as needed.