Can Heart Attacks be Prevented?

Prof. Habibuz Zaman

THERE is a large body of accumulated evidence, which indicates that avoidance or cessation of the risk factors — tobacco smoking, high cholesterol levels in the blood, raised blood pressure, physical inactivity, obesity and uncontrolled diabetes — can lead to the prevention of coronary heart disease and heart attacks.

Did any of your parents suffer a heart attack ?

Are you a male nearing 40, or a female over 50 ?

Do you smoke regularly 30 or more cigarettes a day ?

Are you fond of rich food, full of saturated fats and cholesterol e.g. eggs, butter, cream, full cream milk, beef, mutton, brain or other organ meat viz liver, kidney, cooked with saturated fats like ghee or hydrogenated oils, (e.g. dalda), pastry, cake, sweets prepared from milk, chocolates, or similar products ?

Do you overeat — enjoying big meals to your heart's content and also have helpings of snacks in between ?

Does your occupation involve sedentary work for eight or more hours a day ?

Are you one of those, who do not care for a walk, or a game of badminton or any other form of regular physical exercise ?

Do you spend all of your leisure time watching television or heading in bed ?

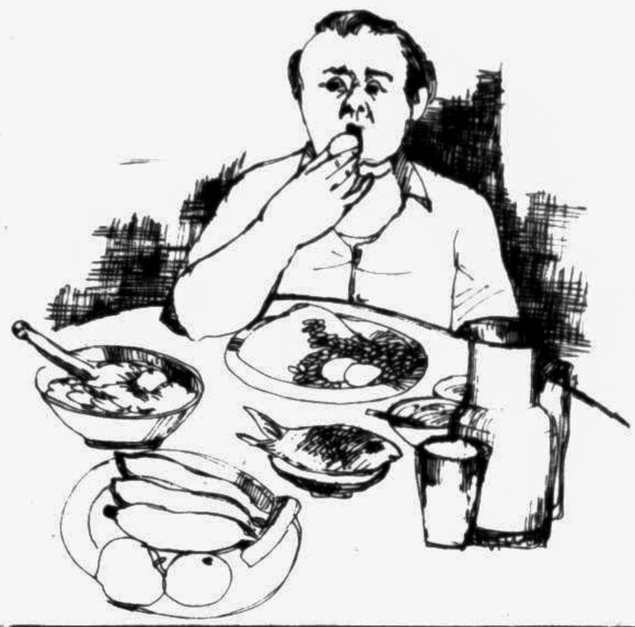
Are you obese and grossly overweight for your age and height (say over 154 lbs or 70 kg for an average Bangladeshi of medium build and 5 feet 4 inches height).

Do you have a raised blood pressure (over 150/90 mm Hg), which has remained uncontrolled over several years ?

Are you a known diabetic and have done nothing to control it ?

Are you a go-getter, competitive, hostile, ever ambitious, driving yourself hard to achieve more and more ?

Are you argumentative and excitable, rather than calm and composed ? do you have many sleepless nights ?



If your answers to most of the above questions are in the affirmative, I am afraid you have several risk factors for developing coronary heart disease (CHD). You may be a good candidate for the development of atheromatious plaques in your coronary arteries. These are channels, which carry blood to the heart muscle (myocardium). If these deposits of cholesterol keep on accumulating, your coronaries are pretty soon likely to get narrowed to point, when little or no blood and therefore oxygen will reach the heart muscle. Ultimately the heart muscle cells in small and large numbers, are going to die. At some point in time, scarring is going to occur inside one or more coronary artery, thus further narrowing the lumen.

Such a diseased state of the coronary artery predisposes to the formation of blood clots within the lumen of the artery (thrombus), thus completely shutting off the blood supply to a part of the heart. This leads to the death of the affected heart muscle (acute myocardial infarction) and the patient suffers a heart attack.

Myocardial (M.I.) is an acute medical emergency and the patient faces serious consequences including imminent death. In over 30 per cent of events of M.I. the patient may succumb to the very first attack. With prompt medical attention and care, others may recover, but they carry the risk of a subsequent attack. Even with the finest medical services as many as fifty per cent of cases of M.I. may have fatalities within the first year.

So you see, the risks you are taking are real and serious.

What can be done to prevent these risks ? Have any studies been carried out to prove the point ?

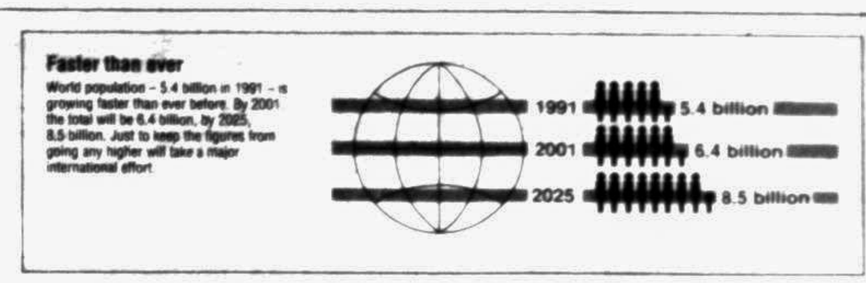
Can the withdrawal or cessation of these risk factors prevent heart attack in an individual, or reduce the mortality rate from CHD in a community ?

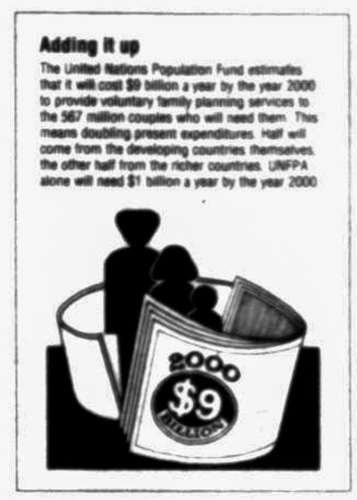
In fact several well controlled studies in different countries have established the nature and relative importance of these several risk factors, so that prevention of coronary heart disease is a reality and a proven public health measure, both at the individual and community levels.

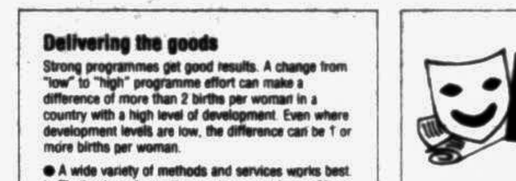
Interventions to control these risks have been eminent successful in a number of well known projects, involving sizeable populations.

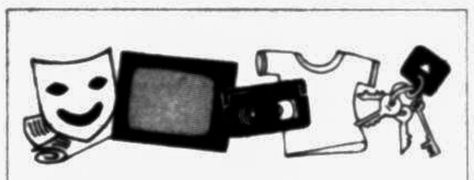
Family planning - strategy for survival

Extending family planning services during the 1990s will not only help people have the size of family they want – it will help keep population growth at levels the world can live with. More and better voluntary family planning services will be vital for development, and even survival, in the 21st century.









Real Men Use Contraception

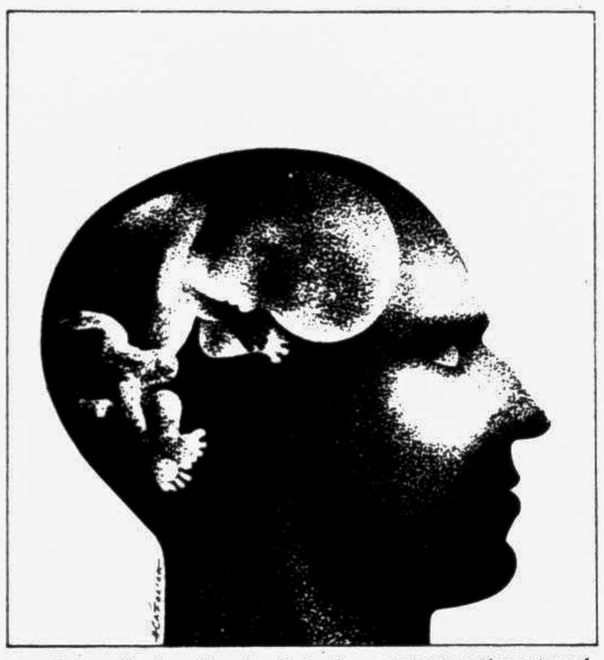
WHEN Francis Kofi Amoah and his bride decided to wait a year or two before starting a family his friends laughed at him. But he stood firm. For behind the decision were two personal experiences; that of growing up as one of nine children, and that of fathering an unplanned baby.

Kofi remembers the struggle his father and mother had to provide for them. 'Having put the older children through school, my parents found it increasingly difficult to care for the rest. We older children had to look after the younger ones as soon as we were out of school and earning.'

His second experience came when he was a polytechnic student and made his girlfriend pregnant. The woman was also at college and the pregnancy forced her to drop out of her course. After the birth of their daughter, Kofi's girlfriend was unable to go back to school and this led to their break-up. She wished to become a trader but needed capital to start. He was unable to provide it and eventually they drifted apart. He married another woman three years ago.

Kofi, 29, still has a bad conscience about the fact that he was the cause of his girlfriend's inability to complete her schooling.

And more especially he regrets his stubbornness about family planning. 'She used to talk to me about the need for contraception, but I refused to listen to her. We used no contraceptives at all. It was only after she became pregnant that I realised that she had been right and I should have listened to her.'



Targetting men: Many innovative and imaginative ideas are coming up to widen men's use of contraception - male methods of contraception account for only 15 per cent of use, compared with 85 per cent for female methods.

By the time Kofi and his fiancee set their marriage date, he had become a family planning enthusiast and a founding member of his local "Daddies Club", a family planning support group, set up in 1980 by the Planned Parenthood Association of Ghana (PPAG).

The couple decided to delay having a family, by using contraception. Kofi's friends teased him, and asked him what he would do if eventually they found they couldn't have a baby. Undaunted, Kofi and his wife stuck to their plan, and relied on condoms and contraceptive foaming tablets.

'Of course I had a prejudice against using condoms initially — like many Ghanaian men. But I got used to it,' explains Kofi. 'After all, there's no reason why a man should put the responsibility for contraception on the woman.'

Men are now an important target audience for family planning services, says the just-published State of World Population Report from the United Nations Population Fund. But many men are still prejudiced against using condoms. In Ghana, Francis Kofi Amoah tells Ajoa Yeboah-Afari just why he changed his views and became a keen advocate of male contraception.

Two years into their marriage, they decided to start a family. 'Because we waited until my wife was ready for it she was very fit during pregnancy and delivered the baby without any problems.'

The friends who had been teasing him were silenced. And then it was Kofi's turn to laugh at them, for another reason. 'During the time before the baby came, I was able to save some money and buy household items. So we had one problem less than other couples who had the care of a baby, or babies, to budget for. They started coming to me to ask how I was able to manage so well ...'

There was a time though that anything other than an early marriage, polygamy and a steady production of babies would have been unthinkable for Kofi. He was brought up to believe that a man 'proved his manliness by the number of children he could father'.

His village, Twifu Mampome, was a typical farming community. The more wives a man had the more children he would have to ensure a regular supply of, as Kofi put it, 'manpower' — that means women and children — to work on the farms. 'The husbands were only interested in being able to thump their chest and boast about the number of children from their loins,' explains Kofi, smiling.

'The husband would clear some land and share it among the wives and children to farm. Having done that, he washed his hands of them, provided no clothing, nothing. They were supposed to support themselves.'

It's six years now since Kofi helped set up a local branch of the Daddies Club at his workplace in Daboase. During the weekly meetings, PPAG staff give talks on family planning methods and general health care. Contraceptives are on sale.

Ghana has one of the higher population growth rates in the world at 3.2 per cent according to UNFPA/United Nations Population Fund, and so needs all the imaginative ideas it can get to encourage more people to plan their families. Daddies Clubs, some with T-shirts bearing a condom motif and the words 'Wear Me', offer innovative and practical ways for men to become involved. This is crucial, since each of Ghana's mothers will have to have many fewer children than the current average of 6.3 if population targets are to be met.

One consequence of this high fertility rate is that women have only short intervals between births and little time to recover from the previous pregnancy. According to Dr Mary Grant, a member of Ghana's ruling Provisional National Defence Council, this contributes to the maternal mortality rate of 1,000 per 100,000 live births — third highest in the world.

High population also leads to pressure on land, a factor that has brought a change in the attitude of villagers in Twifu Mampome. 'Now family planning is accepted,' says Kofi with a grin, 'because men realise they can't just collect wives and have children. The land is no longer available.'

'Now when polygamous couples look around and compare their children with those of parents who didn't have so many, they see that those others are better educated and do better in life than their own. Now all the village people recognize that it is quality not quantity that counts, and they embrace family planning.'

— UNFPA

Prescribing for the Elderly

Dider Hossain Bhuiyan

Old people, especially the very old, require special care and consideration from both the prescribers and the pharmacists.

Elderly patients are apt to receive multiple drugs for their multiple diseases. This greatly increases the risk of drug interactions as well as other side effects. Moreover, symptoms such as headache, sleeplessness, light headedness which may be associated with social stress as in widowhood, loneliness and family dispersal can lead to further prescribing, especially of psychotropics. The use of drugs in such cases can at best be a poor substitute for effective social measures and at worst pose a serious threat from adverse reactions.

In very old subjects, manifestations of normal again may be mistaken for disease and lead to inappropriate prescribing. For example, drugs such as prochlor perazine are commonly misprescribed for giddiness due to age-related loss of postural stability. Not only is such treatment ineffective but the patients may experience serious side-effects such as drug-induced parkinsonism, postural hypotension and mental confusion. Self-medication with laxatives and analgesics or with drugs prescribed for a previous illness may be an added complication. Discussion with relatives and a home visit may be needed to establish exactly what is being taken.

The ageing nervous system shows increased sensitivity to many commonly used drugs such as narcotic analgesic, benzodiazepines and as antiparkinsonian drugs, all of which must be used with great caution.

The most important effect of age is reduction in renal clearance frequently aggravated by the effects of prostatism nephrosclerosis, chronic urinary-tract infection. Many aged patients thus possess only meagre reserves of renal function excrete drugs slowly and are highly susceptible to nephrotoxic drugs. Consequently in an aged patient, the drug distribution and metabolism is greatly hampered.

Common adverse reactions.

Adverse reactions often present in the elderly in a vague and non-specific fashion.

Mental confusion is often the presenting symptom. Other common manifestations are constipation and postural hypotension. Many sedatives and hypnoties with long half-lives (t 50%) have serious hangover effects of drowsiness, Unsteady gait and even slurred speech and confusion. Those with short half — lives should be used as a substitute.

Diuretics that increases urinary output are overprescribed in old age and should not be used to treat simple gravitational oedema which will usually respond to increases movement, raising the legs and support stockings. A few days of diuretic treatment may speed the clearing of edema but it should rarely need continued drug theraphy.

Other drugs which commonly cause adverse reactions are antiparkinsonian drugs, antihypertensive drugs, psychotropics and digoxin; the usual maintenance dose of digoxin in very. Old patients should be 125 micrograms daily — (toxicity is common in 250 micregrams)

Drug induced blood disorders are much more common in the elderly. Thus therefore drugs with a tendency to cause bone marrow depression (e.g. co-trimoxazole) should be avoided whenever possible.

Guidelines

It is a sensible policy to prescribe from a limited range of drugs with which the prescriber is thoroughly familiar in the elderly. Dosages should generally be substantially lower than for younger patients and it is common to start with about 50% of adult dose. Some drugs like chlorpromide should be avoided all together.

Physicians should review repeat prescriptions regularly. It may be possible to stop the drug or reduce the dose to match deminishing renal function. Doctors should simplify regimens. Elderly patients cannot normally cope with more than different drugs and ideally these should not be given more than twice daily.

Full instructions on every prescription should be mentioned and the containers must be properly labelled with full directions.

The pharmacists should play a vital role in case of elderly patients. During dispensing the pharmacist asked to counsel the patient intensively.

It is the great responsibility for both physicians and pharmacists to give best heath services to the elderly patients.

South America Braces Itself for Cholera Epidemic

Governments in south America have sounded cholera alarm bells. An epidemic has broken out in Peru and cases have been reported from Ecuador and Bolivia. Movements of people, ships and produce from Peru have been restricted and the import of fish prohibited. International sporting events are being hit. Gemini News Service reports on an illness that strikes poor people who do not have access to clean water and public health information. by Frank Nowikowski.

CHOLERA has hit south America. The region is bracing itself for an epidemic of this infectious, and often fatal, disease which entered the subcontinent in Peru in January and claimed 200 lives in the first month.

The Peruvian government declared a state of emergency on February 19 when the epidemic had spread through one-third of the country with 50,000 reported cases of illness

The first case of cholera was detected on the January 23 in the Peruvian port of Chimbote, 360 kilometers northwest of Lima. From there it spread to the ports of Chancay, Casma and Callao. Soon the epidemic had reached the capital and extended throughout the whole country.

By the end of February only eight of Peru's administrative departments had not reported a case of cholera. The illness was then detected in neighbouring Ecuador and Bolivia. All South American governments have sounded alarm bells and mounted public health education programmes.

Movement of individuals, ships and produce from Peru have been severely restricted by neighbouring governments. The import of fish caught off Peru or landed anywhere by Peruvian boats has been prohibited.

Peruvian ships seeking to enter ports of other South American countries are being ordered to stay beyond 20 miles from shore and their crews forbidden to leave ship. The Peruvian-flagged ship Mar Argentino has been prevented from entering the Argentine port of Quequen, until it has been declared "clean."

International sporting events were hit, as players from and to Peru were grounded. The American Libertadores Cup was affected as Peruvian football players were banned from travelling abroad. Paraguayan footballers have refused to go to Peru.

It is believed the present cholera epidemic was brought by a sailor to South America from Asia, traditional starting point for the disease.

Greek historian Tucidides (471-402 BC) mentions a cholera epidemic in Athens. Epidemics are recorded in Indian texts a few centuries earlier.

There were reports of cholera epidemics in 1438 and 1629. One epidemic which started in the Ganges delta in India was documented as entering China in 1669.

The major pandemic (worldwide epidemics) of 1817 srarted in India and spread to East Asia then by sea to the Philippines, China and Japan, and overland to Asia Minor and Russia, but did not reach Europe.

Two years later cholera reappeared in Russia, entering from China and Mongolia. The epidemic spread to Germany and reached Britain in 1832 from where, through Canada, it spread to the Americas.

Another epidemic of cholera reached Europe from Egypt in 1840 and between 1863-66. It reached the United States between 1867 and 1873.

A pandemic which originated in India in 1879 entered Europe in 1883 through French Mediterranean ports. One victim was the Russian composer Tchaikovsky.

The last major pandemic was in 1908-9 and affected India, China, the Philippines and Europe. By that time two Germans, Maxmillian Pettenkofer and Robert Koch, had done much to identify the organism responsible for cholera, and the public health measures needed to stop the spread of the disease.

Cholera is a gastro-intestinal sickness caused by the ingestion of bacteria. It is characterised by vomiting and diarrhoea, abundant cramps, suppression of urine and general prostration.

There are many forms of cholera, some relatively mild types being labelled "European cholera" or "simply cholera". The present Peruvian epidemic is not of a very virulent strain, with a mortality rate of 0.05 per cent. But health authorities are bracing themselves for a second, more virulent, stage.

The most vulnerable are the poor in any society, who have no access to clean drinking water and food. For its survival and development the cholera bacterium needs water. It can survive up to 285 days in salt sea water down to a depth of 4.5 metres.

For this reason ships are being asked to empty their ballast tanks far out to sea before approaching ports.

The cholera bacteria in sea water contaminates plankton which forms the base of the food chain for many marine animals. At risk are humans eating fish caught in infected waters.

Poverty-stricken Peruvian towns do not have sophisticated sewerage systems. Raw sewage is dumped untreated not only into the ocean but also into rivers, from where poor people take their drinking and cooking water.

Cholera is an illness that strikes poor people who do not have access to clean water and public health in formation. Poor people also fall victim to the disease where strong, well-nourished people may ward it off.

Not everyone who ingests the cholera bacteria, succumbs to the illness. The acids in a normally healthy individual's stomach and intestines can destroy the bacillus.

In many South American countries, public health announcements on TV advise on how to disinfect drinking war by boiling or by adding chlorine, or washing hands and cooking food. *—GEMINI NEWS*