Weight loss is the key to control diabetes

DR MINATI ADHIKARY

Diabetes is growing as an epidemic throughout the world, and the epidemic are seldom controlled unless their causes are addressed. Obesity is strongly and causally linked to diabetes mellitus. Recent data suggests that the prevention of diabetes is feasible if weight management is addressed adequately in individuals at high risk. Weight management also has the potential to make a significant impact in those with established diabetes.

The most common definition of obesity is a body mass index (BMI) greater than 30kg/m. [BMI=weight in kg/(height in

The overall prevalence of self reported diabetes in the United States has reached 7.3 per cent, 15 per cent in people over 60 years of age, driven by epidemic obesity.

There is no room for complacency in Bangladesh.

In Bangladesh the prevalence of diabetes in age group above 30 years is estimated to be more than 2 per cent. Moreover obesity related diabetes in childhood, already common worldwide, has nowreached Bangladesh.

How could we prevent dia-

In a prospective study of 84941 female nurses in UK followed for 16 years, a combination of five modifiable risk factors related to dietary behaviour, physical activity, weight, and cigarette smoking was identified that was associated with a remarkable 91 per cent reduction in the risk of developing diabetes. Even with a family history of diabetes the risk reduction was 88 per cent. Therefore, it is expected that, most diabetes could be preventable,



largely irrespective of genetic background.

The mechanism of prevention of diabetes probably entails changes in both dietary behaviour and physical activity, for which weight loss is a surrogate indicator. Whatever the mechanism the message is that much could be done to prevent diabetes in individuals at high risk. If theory is to be put into practice in Bangladesh, however, where few general practitioners see a role for primary care in prevention of diabetes, a substantially

increased awareness of risk factors such as obesity and impaired glucose tolerance is needed. A bigger obstacle still is that lifestyle and body weight are far from being voluntary control, and so prevention of diabetes requires sustained cultural change.

The success of diabetes prevention studies begs a controversial question: should we pit greater emphasis on weight loss for patients with new diabetes? The traditional dogma is that people with diabetes cannot loose weight and so this is futile. However the regular support of a dietitian, practical help with physical activity, and behavioural change at home and at work the central tenets of successful weight management is absent from diabetes care. Weight loss at least 5-10 per cent would be a logical goal, alongside standard glycaemic (normal level of glu-

cose found in glucose) and cardiovascular targets, for many overweight people with diabetes. This would slow progression, reduce insulin requirements, allow withdrawal of treatment for some, and, most importantly, reduce mortality. Experience shows, however, that this is often beyond the reach of older patients; it may be more realistic for younger newly diagnosed patients, given appropriate support, and perhaps judicious use of anti-obesity drugs.

While the goal of a cure for diabetes remains some way off for most patients, prevention of diabetes and slowing of the natural history of the disease are clearly feasible. We should act on this important new evi-

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Thyroid disorders common with **Hepatitis C**

HEALTH AND SCIENCE BULLETIN

A major change in rural health service delivery was introduced in Bangladesh under the government's five year sector programme (1998-2003). Family planning services previously provided

through household visits by field workers and satellite clinics were transferred to new static community clinics. Data on use of services from an ICDDR,B surveillance area in Abhoynagar show that in a period of considerable change in service delivery, women switched to new sources of contraceptive supply and the overall contraceptive prevalence rate was maintained at about 60 per

cent. Within two years (2001-2002) community clinics became the source of contraceptives for about one-third of users, and a steady

The data suggest that where community clinics are made operational, women will use them and despite cultural constraints on mobility they have not become dependent on home-delivery of

increase in use of shops and pharmacies continued.

Community clinics play

significant role in

family planning

People chronically infected with hepatitis C virus (HCV) have a significantly increased rate of thyroid abnormalities, according to a new report.

contraceptives.

This association "implies that these patients should be screened for thyroid function on a periodic basis," lead author Dr. Alessandro Antonelli from the University of Pisa School of Medicine, Italy, told. "A substantial proportion -- 13 percent in our series -- have hypothyroidism, and thus might benefit from

treatment.' Thyroid involvement in HCV-infected patients has been reported previously. Antonelli and colleagues looked into this in a study of

630 patients with chronic hepatitis due to HCV infection.

Source: ICDDR.B

Significantly more HCVinfected patients than uninfected subjects or hepatitis B virus-infected patients were positive for anti-thyroid autoantibodies, the authors

Also, low thyroid function (hypothyroidism) was significantly more common among HCV-infected patients (13 percent) than among the comparison groups (3-5 percent).

A possible association of HCV infection with thyroid cancer and diabetes is also under investigation.

Source: American Journal of Medicine

Expected role of Bangladesh Parliament Members in fighting against HIV & AIDS



FARUK KHAN, MP

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) have now become the most dangerous silent killer in the world. At present more than 40m (four crore) people are infected by this disease in the world. In Asia-Pacific region, about 7.5m (75 lakh) people are infected out of which 2.5m (25 lakh) are between the age 15-24 years.

Although at this moment Bangladesh has less than five hundred "reported" (?) AIDS patients, WHO/UNAIDS estimate that Bangladesh has about 13000 HIV/AIDS infected people. However, the country has the potential to the many more HIV and AIDS infected people due to the following reasons:

 Absolute lack of awareness about HIV and AIDS among the people particularly in rural area tions:

 Proximity to India and regular very high visits between the people of Bangladesh and India. India has about more than fiftyone lakh HIV and AIDS patients and their number is increasing everyday. · Low use of condom among sex

workers and very high prevalence of needle sharing among Injecting Drug User (IDU) in

 Serious lack of HIV and AIDS testing facilities and safe blood transmission system in the coun-

· Social stigma and discrimination among People Living with HIV and AIDS (PLWHA) causing silent spread of the disease

among unaware people. Serious lack of coordinated efforts between government agencies and NGOs in their fight against HIV and AIDS.

· Poor socio-economic condi-

In such a grave situation, members of Bangladesh Parliament and Bangladesh Parliament Members Support Group (BPMSG) on HIV and AIDS, a nonpartisan group of parliamentarians should play a pioneering role. I thing the honourable MPs should do the following to raise awareness, monitor HIV and AIDS programmes, ensure justified use of funds and take action to reduce stigma and discrimina-

 The MPs should ask HIV and AIDS related questions in the "Question Time" to prime minister and ministers and the ministers should give prompt answers. The question time is telecast and broadcast live over TV and Radio and is a popular programme particularly in the rural areas. This will help raise awareness.

• MPs shall give notice on HIV and AIDS to ministers as per parliament rules of procedure (PROP) 62, 68, 71 etc thus act as catalyst to induce healthy parliamentary debate on HIV and AIDS in order to ensure governments accountability and monitor actions taken to fight HIV and

• Induce 'Parliamentary Standing

Committee on Health and Family Planning,' 'Parliamentary Standing Committee on Social Welfare,' 'Parliamentary Standing Committee on Women and Child Affairs' etc to monitor activities of government departments and agencies, NGOs and civil society groups working on HIV and AIDS and help them overcome their various bureaucratic and other problems. These standing committees should ensure that government departments submit progress report on their HIV and AIDS programmes to these committees half yearly and see the these reports are performance

Parliamentary Committee on Standing Committees should Public Accounts" and "Parliamentary Committee on Estimate" to closely monitor activities' of various' governmentdepartments, agencies and NGOs ' working on HIV and AIDS and see that the funds are being used properly, judiciously and are not being wasted on unnecessary seminars, workshops, foreign

• The MPs should bring bills to the parliament to help HIV and AIDS patients in treatment and fight stigma, discrimination and encourage the government and the opposition to pass the bill.

• The BPMSG and Parliamentary Standing Committees should sit with the NGOs working on HIV and AIDS, find their problems with the government departments and use their good office to solve the problems.

• The BPMSG and Parliamentary Standing Committees should sit with the pharmaceutical companies in Bangladesh producing Anti Retroviral Drugs (ARD) and help them solve their problems regarding raw materials etc and try to reduce the price of ARDs so that poor HIV and AIDS patients can buy drugs at cheaper cost.

• The BPMSG and Parliamentary Standing Committees should find, help and monitor activities of indigenous medicine producers and encourage their research on HIV and AIDS medicine.

organise workshops to raise the knowledge of MPs on HIV and

• In order to raise awareness among the people quickly, Bangladesh Parliament should declare one day, may be 01 June of every year as "Parliamentary AIDS Awareness Day" (PAAD). On this day, all MPs will be in their constituency and organise two discussions, public meetings, rallies etc along with the local government representatives, i.e. UP chairman, members etc. government officials, students, political and community leaders. In these gatherings the local MP should speak on the HIV and AIDS and other related issues and try to achieve "Total AIDS Aware Bangladesh (TAAB).

• The MPs should also make use of the "Upazila Development Coordination Committees" of which they are the Chief Adviser to raise awareness, monitor activities of government departments. agencies and NGOs working on HIV and AIDS in their constitu-

The present socio-religious condition in Bangladesh achieved due to the efforts of our past generations, our fathers, mothers, and grand fathers and grand mothers have greatly helped us to remain as a 'Low Prevalent' country in today's fast affected world of HIV and AIDS.

the same. Today due to fast changing socio-economic and religious conditions, the old social concept of large family is going away which tied us everyday together and prevented us from doing many unethical things. The religious leaders also in the past taught us self control and social righteousness where as today the religious teachings are more focused on violent acts and activities, which leads younger generation to frustration and unethical acts.

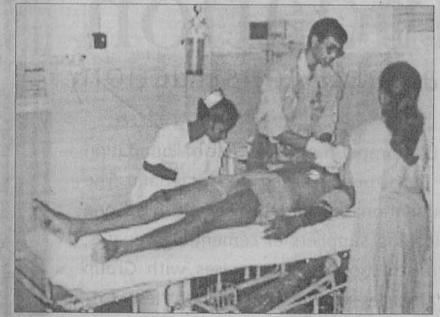
So, the time has come to act. We just put our heads together and 'act now' so that Bangladesh remains a 'low prevalent' country. We must realise Bangladesh may be a "Low Prevalent" but a "High Risk" country it is easy to act now and keep HIV & AIDS under control by raising awareness. If the country gets affected like Africa, India, Thailand etc, we will not be able to control the spread of HIV and AIDS. Experience from Africa shows, once out of control HIV and AIDS can infect people in terms of not ten or hundred times but thousand times. It can destroy in a short time decades of development in a labour intensive economy like ours. Our economy particularly the poor people who are generally infected will not be able to bear the cost of treatment.

The Bangladesh Parliament must lead from the front and help achieve a "Total AIDS Aware

Thyroid dysfunction can lead to hypocholesterolemia and

subsequent heart disease, infertility, muscle weakness, osteoporosis and in extreme cases, coma or death.

• Induce "Parliamentary Com-• The BPMSG and Parliamentary mittee on Public Undertaking," But things are not likely to remain Bangladesh" (TAAD). TIMELY EMERGENCY SURGICAL CARE



Each year one million people are losing their lives because of road traffic acci-

related complications. In these situations and in many others the ability to dents and more than half a million apply the correct emergency clinical women are dying from pregnancy procedures at the first referral hospital

CAN MINIMISE DISABILITY

is vital. Young people between the ages of 15 and 44 years account for almost 50 per cent of world's injury-related mor-

Road traffic injuries in men aged 15-44 years constitute the second highest cause of ill health and premature death worldwide, second only to

For women in low- and middleincome countries, the leading causes of death are haemorrhage, hypertension, sepsis, abortion and obstructed labour. Worldwide, 60 per cent of pregnant women and about 43 per cent of children under 5 years of age are anaemic, with the highest estimated prevalence in Africa and Asia.

Timely emergency surgical care can minimise disability among the injured survivors in disaster situations.

Often, these conditions require lifesaving, basic surgical and anaesthetic care that cannot be safely postponed until the patient can be transferred to a distant level of health facility.

Source: http://www.who.int

Scientists uncover how bee venom eases arthritis



Bee stings have long been known to relieve some of the symptoms of rheumatoid arthritis, but only now has the reason for this been clarified.

Bee venom contains a number of protein-like compounds, among them a substance called melittin. This substance appears to inactivate a key regulator of several inflammatory genes.

Dr. Jin Tae Hong, from Chungbuk National University

in South Korea, and colleagues note that bee venom had antiarthritic effects in both sets of

Both bee venom and melittin decreased the amount of three substances that cause inflammation and which are turned on and off by a cellular regulator called NF-kappa-B.

Further testing showed that bee venom and melittin bind to NFkappa-B, blocking its ability to turn on production of the inflammatory regulators.

"The extent of the inhibitory effects of melittin in most parameters is similar to or greater than those of bee venom itself," the researchers write, "suggesting that melittin may be a major causative component in the pharmacologic effects of bee venom."

Source: Arthritis and Rheumatism

Air pollution tied to lower birth weight

Pregnant women who live in author, Dr. Jennifer D. Parker. areas with high levels of air pollution may give birth to slightly smaller babies, according to U.S. government

researchers. A new study of more than 18,000 full-term infants born in California in 2000 found that a mother's exposure to fine-particle air pollution seemed to make a difference in her baby's birth weight and the infant's risk of being

below average in size. In the study, babies born to women who lived in areas with the highest levels of polluted area were 26 percent more likely to be small for their gestational age compared with infants born to women from low-pollution areas.

The absolute difference between these groups of infants was modest. Among women with the least exposure to fine-particle pollution, 8.5 percent had a baby who was small for gestational age. That compares with 9.2 percent of women with the highest pollution exposure.

Similarly, the difference between the groups as far as average birth weight was slight, noted the study's lead

For their study, she and her colleagues analysed data from air pollution monitoring stations in California and looked at birth records for 18,247 full-term infants whose mothers lived within five miles of a monitoring station during pregnancy.

The women were split into four groups based on their exposure to fine particulate matter and to carbon monoxide. Average birth weight was lowest in the group with the highest exposure to particulate matter, though the difference between this group and the group with the highest average birth weight amounted to 42 grams, or less than two ounces.

A limitation of breaking exposures into four broad groups like this is that it cannot determine anything about "extreme" exposures, Parker noted. It's unclear, she said, whether air pollution might have a greater impact on birth weight when a woman works amid car exhaust at a highway toll plaza, for example.

Source: Pediatrics, January 2005