Community-based Disability Prevention

by Rezaul Haque

NO less than 500 million people throughout the world live with some form of permanent disability that could have been prevented had some simple measures and the means, knowledge and awareness to carry them out been available. The continuing lack of these today means that millions more will become disabled who need not. Public awareness, concrete plans, and effective action backed by political will and funds, have to increase if people are to have access to a life free from disability, the fear of disability and the poverty such disablement exposes one to.

About 80 per cent of the world' s disabled people live in the developing countries; an estimated 150 million are children. According to the World Health Organisation, less than 3 per cent of disabled adults or children receive rehabilitation services of any kind; various estimates suggest that only one in every 100 disabled children in Asia and Africa attend school. This 'silent emergency' could be avoided through simple preventive measures.

The World Health Assembly has "called on all member states to initiate or strengthen comprehensive national programmes for disability prevention integrated into primary health care, taking into account all physically and mentally disabled people ..... to promote and co-ordinate the involvement of non governmental organisations in national programme for disability prevention" (54th World Health Assembly, May 1992).

An effective and positive response to this call has yet to be heard. The efforts in this direction have so far failed to ensure meaningful participation of those communities where both the causes and the effects of disability most strongly persist. In addition, the issue of disability prevention has generally been dealt with in isolation from wider health and socio-economic problems.

Bangladesh Scenario

The health, nutritional and socio-economic difficulties of Bangladesh are vast. These factors relate and interact with each other, aggravated by the problems of a rapidly growing population. Absence of awareness among the general population about the measures available for reducing these further worsens the situation. Child deaths in Bangladesh are 133 per 1000 live births, one of the highest in the region; 66 per cent of under fives are malnourished; only 47 per cent of school-age children reach grade five; the average number of births per woman is 4.8; for every 100,000 births, 600 women die from pregnancy related causes.

From different survey reports, it is estimated that between 8 to 10 per cent of the total population is suffering from some form of disability; about half-a-million multi-handicapped and 3 million disabled children live in Bangladesh. The total figure of disability is inevitably increasing with population growth and aging. A high proportion of households will soon have at least one disabled member.

A recent village survey, for example, found that 8 per cent of people were disabled; of these disabilities, 42 per cent were sight related, 26 per cent hearing related, and 18 per cent involved physical handicap. Many of the disabilities are congenial, but others are caused by accidents or disease. Approaches to disability are, however, complicated by families who ascribe disability to fate or supernatural forces. Due to resource constraints, disability is not a high priority for the government; where such services do exist, they are concentrated on institutional rehabilitation rather than on early detection and prevention. Disability on this scale represents not only a major health problem but also a prime factor in poverty and underdevelopment.

The nutritional status of pregnant women and children increases the prevalence of disabilities. Similarly, in some communities, lack of immunisation, and the resulting high incidence of diseases such as measles, polio, diphtheria, whooping cough, tetanus, and tuberculosis are responsible for childhood disabilities. About 80 per cent of all births in Bangladesh are attended by untrained family members or traditional birth attendants or local midwives whose lack of knowledge results in severe physical as well as mental disorders of the newly borns.

WHO and UNICEF, in collaboration with the government and some non-governmental organisations, have programmes for vitamin A and iodine supplementation in those communities where these causes of disability remain a major health hazard.

While some progress has been made in tackling some of the major causes of preventable disability, a viable comprehensive strategy is yet to be formulated for the large-scale prevention of disability. A community-based disability prevention approach needs to be adopted and integrated into the overall primary health care sector and national development plan.

Community-based Disability Prevention

Though estimates and definition vary, experts are unanimous in their conviction that, if a community approach was to be adopted, most disability could be prevented or reversed at the level of primary and environmental health. Given sustained national action, it should not be unrealistic in expecting to reduce by at least one-third the incidence of the major causes and the avoidable disability itself.

The Leeds Castle International Conference on the Prevention of Disability in September 1991 declared "Points have now been reached from which it should be possible for any country, with systematic action and the commitment of fairly modest resources, to achieve a sustainable reduction of not less than one third of the major causes of avoidable disability"

To this end, a United Nations Task Fore following-up the decade of Disabled Persons met in conjunction with the World Congress of Rehabilitation International and agreed to an advocacy campaign with the broad objective of reducing avoidable 'disability by one third by the year 2000. The achievement of this target is possible only with a community approach to the whole issue.

What is Community Approach ?

Community approach in this context means the prevention of avoidable disability through community action. This would involve commitment and active participation by all sections of society as well as the service delivery agencies in a comprehensive programme for eradication of the causes of disability. These groups and agencies should include community leaders, school teaches, youth groups, religious leaders, business communities, public representatives, local government agencies, NGO's, self help groups, welfare organisations, disabled people, etc.

Awareness raising, education, maternity and child welfare services should be integral parts of this comprehensive programme. It should also include meetings and training schemes for community leaders, health workers and midwives, and continuous publicity and practical demonstrations to alert the public to the causes of disability, including accidents at home, at work, and on the roads. Immunisation, vitamin-A supplementation, iodine fortification and the treatment of reversible disability should be the priority areas, while school health and screening services should also be included.

The programme should focus on those causes of disability which occur in greatest numbers and in relation to which there already exists appropriate and cost effective technologies of control. The emphasis should be on avoidable disability with priority for women, children and workers.

What Should People Know ?

* Cleanwater and sanitation can prevent the spread of diseases that can cause blindness or paralysis.

* Proper nutrition can prevent the malnutrition which decreases the ability of people to carry out normal activities. The intake of leafy vegetables rich in vitamin A, s can also prevent blindness in children.

* Immunisation can prevent the onset of diseases that cause paralysis, blindness, deafness or mental retardation.

* Pre-natal care promotes the health of the mother and decreases the chances that she may give birth to a child with disability.

* Appropriate care during labour decreases the possibility of birth injuries to the baby and possibly disabling injuries.

* Post-natal care for mothers and babies promotes proper nutrition, immunisation and early detection of conditions that could cause disabilities.

* Safety precautions taken within the home can prevent potentially disabling accidents.

* Safety precautions at work sites can prevent diseases and accidents that cause a variety of disabilities. These include the disabilities which result from respiratory dysfunctions, burns, amputations paralysis, eye injuries, hearing impairment and so forth.

Role of Mass Media

In creating public awareness and social mobilisation the media can and should play a vital role. The importance of the mass media in educating and informing people about the causes of disability and the possibility of preventing disability with the resources within their reach cannot be underestimated. Increasing access of the rural communities to radio, television and newspapers, and the rapid development and diversification of information technology, has made it possible to send messages to the remotest corners of any country. Mass media can effectively inform people within the shortest possible time. Nationwide campaigns and other programmes for disability prevention should therefore use the media on a massive scale.

Some Recommendations

(a) Information, education and communication

Identification, through a variety of means, of the relative proportion of the different forms of disability and their social and economic dimensions, promotion of public awareness of individual, corporate and state responsibilities concerning the prevention of accidents, violence against people, abuse of drugs as well as the control of communicable and endemic diseases and malnutrition. Promotion of public awareness of disability associated with child abuse, neglect, exploitation, and victimisation in situations of armed conflict; promotion of public awareness of mental disability; development of media and campaign activities on the prevention of causes of disability that support the right of people with disabilities to live; dissemination of information on disability related aspects of environmental and public health issues to lay persons, technicians, administrators and decision makers.

b. Promotion of health and safety through measures that include :

Improvement of ante pre and neo-natal care; training of traditional birth attendants and midwives in the prevention of obstetric trauma and the prevention and management of infections in the newborn, as well as the detection of congenial anomalies ; development of skills for prevention of disability through training among health care personnel, including traditional healers ; expanded provision for safe drinking water, water management and sanitation systems; encouragement of community sanitation and personal hygiene practices; expansion of immunisation coverage, with special emphasis on the control of measles and polio; strict control of the use of hazardous substances; adherence to established safety criteria for the disposal of garbage; promotion of healthy and safe working conditions for workers in the industrial, agricultural and construction sectors; noise control; emphasis on transport safety; encouragement of a rational use of drugs.

c. Special attention to the production and consumption of foods through such measures as:

Promotion of school and family food gardens to ensure adequate food supply to social groups at risk of being disabled as a result of deficiencies in total food intake and micro-nutrients; distribution of iodised salt; reduction of the risk of toxicity in the food chain.

d. Strengthening of assessment, management and referral covering, inter alia; early detection and management of congenial abnormalities, infections, conditions an injuries that can lead to disability; maintenance of records of children at risk of disability due to pre and post natal causes and follow ups for early detection; development of routine screening programmes for children; eye and ear camps for low income groups.

e. Improvement of access, particularly in rural areas, to timely surgical interventions through, for example: Development of basic surgical facilities using inter disciplinary teams; support for mobile teams to provide services to people with disabilities in remote communities.

Support for control of leprosy through long term public education combined with improved access to multi drug therapy, training and counselling.

Conclusion

There is no alternative to disability prevention because no nation can afford the huge social and economic cost of disability. Prevention is better than cure, and also cheaper. United and concerted efforts by all sections of society with the active participation of every community and the disabled people, can definitely change the existing situation. Developing countries such as Bangladesh can benefit greatly from a comprehensive, community based disability prevention programme supported by government, NGOs and international agencies. These institutions are all urged to come forward and help remove causes that contribute to disability.

The writer is Head of Research, Evaluation and Documentation of RDRS

Lavatories are No Joke

by Sue Downie and Tony Oliver

Cambodia is trying to promote both proper toilets and hygiene throughout the country. And, as Gemini News Service reports, the nation's top comedian has been enlisted in the fight against contamination and disease.

CAMBODIA's favourite comic star — a moustachioed Charlie Chaplin look-alike — has a new role that few would expect of a comedian: latrine promoter.

In a video produced by United Nations Children's Fund (UNICEF) Cambodia, Chap Chean is urgently in search of a lavatory. After a frantic but unsuccessful search, he decides to build his own. Everyone should do so, he proclaims, because "they are convenient, cheap and easy to construct."

Chap Chean is part of a campaign to promote both proper toilets and hygiene education in an effort to break the faecal contamination chain, it is a serious need in Cambodia.

A recent survey in four of the country's 21 provinces found that on average only 6 per cent of houses had a latrine; in one of the 12 districts covered there were none. In total, 13 per cent of the population has access to basic sanitation facilities.

Even many district hospitals and schools lack clean water and adequate sanitary facilities. With the country's high rate of sickness and death from water-related diseases, the need for improved water and sanitation facilities is obvious.

According to UNICEF's 1994 report on The State of the World's Children, 36 per cent of all Cambodians have access to safe water. By comparison, in neighbouring Thailand the corresponding figure is 77 per cent of the population while in Malaysia it is 78 per cent.

Since 1985, a rural water supply programme has been operating in 15 Cambodian provinces, where teams are drilling 2,000 wells a year. A sanitation programme was added in 1992 to help people install household latrines.

UNICEF covers a quarter of the latrine construction costs by providing the locally manufactured latrine pan and slab. The family is required to dig the pit, line it with locally made concrete liner rings and build a simple outhouse. The programme, which targets the poorest villages, is expected to install 10,000 latrines in 1994.

"There is much more interest now in constructing private wells and latrines," says UNICEF sanitation officer James Meiklejohn. "Three years ago you did not see this activity. People were trying to save their money for what they considered to be more essential necessities, such as food, or for renovating their houses."

Part of the increase in latrine construction is a result of a rise in disposable income, which has come with Cambodia's adoption of a market economy. An additional economic boost came from the massive United Nations peacekeeping effort, which involved 22,000 military and civilian personnel and the inflow of $2 billion.

Since the mid-1980s, UNICEF's master driller has provided on-the-job instruction to trainee drillers in support of the safe water effort. The teams drill about 18 to 20 wells a month; they get incentive packages, such as $5 a day per person (in addition to their civil servant salary of about $17 a month) if they drill more than 18.

Another water source, rain, is getting fresh attention. In a country with heavy rainfall, individual storage of rainwater may seem like an obvious solution. But virtually all the rain falls between May and October, and with the prevalence of mosquito-borne diseases such as dengue hemorraegic fever, storage requires careful planning.

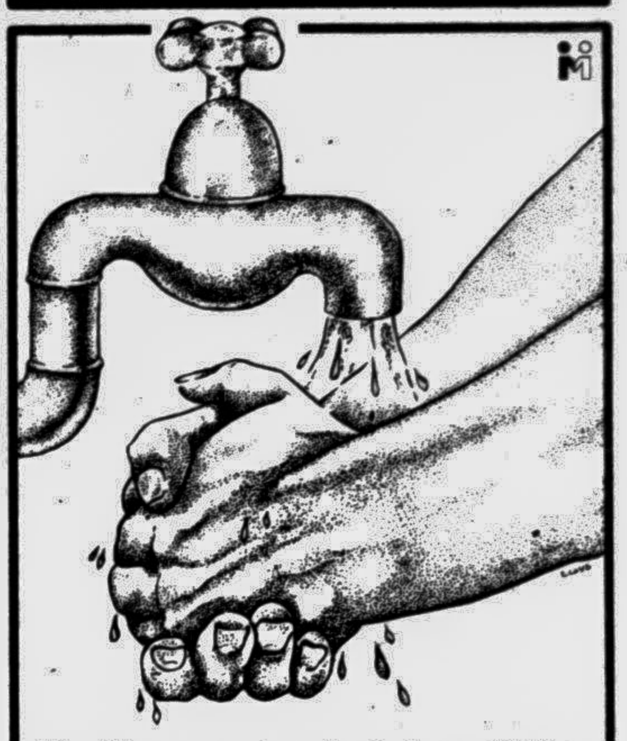
One means of storage under consideration is a ferro-cement tank with a mosquito-proof cover and a tap at the base; another is a large water jar. Both can hold about seven months' supply.

Use of family ponds as a source of water for washing, watering vegetable gardens and fish-farming is also being encouraged. Fish-farming has an added advantage: the fish eat the mosquito larvae.

— GEMINI NEWS

SUE DOWNIE is a correspondent for United Press International in Phnom Penh. TONY OLIVER is UNICEF Information Officer there.

Hygiene hierarchy



% with access to adequate sanitation

East Asia and Pacific	71
Middle East and North Africa	68
Latin America and Caribbean	66
Sub-Saharan Africa	35
South Asia	19

A New Lease of Life at Seven

by Lutfor Rahman Belayet

"YOU often raise voices against people who permanently settle abroad. Show me one good cause for which people capable of going abroad should live here. Patriotism? That alone does not always provide one with the basic necessities of life. This country, even after more than two decades of its coming into being, could not provide proper medical treatment for my son, for which I had to depend on neighbouring India. But during my long absence from Bangladesh — my business, children's education — everything have been greatly hampered," says an anguished Bashir Ahmed, Chairman, HRB Apparels and Mark Industries (Pvt) Ltd — the only industry in the country producing pharmaceutical machinery. Ahmed has recently returned home after staying seven months in an Indian hospital for the treatment of his only son Niaz Ahmed, aged seven, who was suffering from Acute Myeloid Leukemia (AML).

"It was first noticed in March, 1993. Niaz was often suffering from fever, throat and ear pains. Doctors here prescribed medicines for viral fever and infection but there was no progress. Niaz was taken to an ENT specialist who ordered for some tests of blood in the Combined Military Hospital (CMH). It was in March 17, 1993 that Niaz was reported to have been suffering from AML.

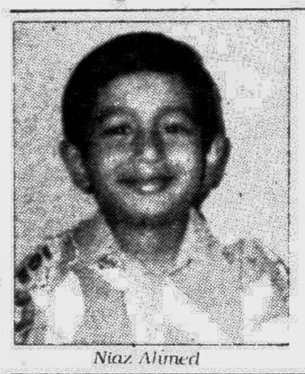
The medical report came as a bolt from the blue for Bashir Ahmed. He took Niaz to a renowned haematologist where Niaz underwent medical treatment for a week. He also needed three bags of blood but his condition deteriorated rapidly. The doctor told Ahmed that the patient's condition was almost hopeless and wanted his consent for further treatment which the doctor cautioned was 'highly risky'. Ahmed disagreed and wanted to know of any place where the treatment will involve less risk but the doctor could not tell him of any better place for treatment, even abroad. Based on the advice of some friends and relatives Ahmed went to the Bumrungpad Hospital in Bangkok on March 27. Doctors there had run some tests again and confirmed AML. They assured that Niaz's condition was not so serious as to be totally hopeless.

The first step in the medical treatment for AML is complete remission which is followed by Bone Marrow Transplantation (BMT). Niaz was treated with VAPA (Vincristine, Adriamycin, 6-MP, Ara-C) well known as cemotheraphy. He continued remission but could not tolerate more than three cycles of VAPA. By then Niaz would almost become petrified at the thought of hospitals.

"Cemotherapy is simply an intolerable mode of treatment. I doubt whether man can envisage such suffering even for an enemy," said Bashir Ahmed. So he was compelled to return home without completing the course of Niaz's treatment. Doctors advised him to continue maintenance course. But in Bangla-desh Niaz could not be persuaded to take even a single cycle of VAPA. All the motivational activities failed. Niaz was of course well. By this time Bashir Ahmed continued some treatments like homeopathy, spiritual aides of *Peers* and *Fakirs* etc.

But gradually Niaz developed a disliking for food, muscle and throat pains and a recurrent fever. He was admitted to a famous clinic of the country under a noted doctor. According to Bashir Ahmed this doctor was confused, pessimistic and was not sincere at all. "He would even sometimes forget his duty of treating my son. These doctors don't seem to be reliable at all," said Bashir. Patient's condition deteriorated, he relapsed in Bone Marrow but the doctor did not refer him anywhere else.

Bashir Ahmed was again thrown into a world of abysmal darkness and according to a friend's advice went to the Tata Memorial Hospital in India in December 25, 1993. Doctors here sympathesised with Niaz. Both of his hands became bruised due to infection from innumerable pushing of injections. They also noticed that wrong treatments like overdose, unnecessary medicine etc were applied by the doctors in Bangladesh. At this stage Niaz had febrile neutropenia and bilateral pulmonary consolidation which was treated with a broad spectrum of antibiotics (Ceftazidime & Amicacin). His blood counts recovered and bone marrow confirmed remission (2% blasts). Niaz's youngest sister Bushra Ahmed, 11, had identical HLA in the Lymphocycle testing and hence BMT was planned.



Niaz Ahmed

Bushra Ahmed

On February 20, 1994 the marrow from Bushra was transplanted under general anaesthesia. The total volume of marrow transplanted was 625 ml. The marrow was manipulated to remove RBCs using 10 per cent HAEs solution in the ratio of 1:4. After manipulation the volume was reduced to 387 ml which was infused through peripheral veins.

The patient did not have any side effects except for mild headache which responded to analgetics. He had mild rise in blood urea and SGPT otherwise his renal and hepatic functions were normal. There was no evidence of Hepatic Venoocllusive Disease (GVHD). His blood group changed from (O Rh + ve to A Rh + ve) and antibiotics was present in the blood. Cytogenetic analysis of marrow cells showed XX pattern. Niaz was brought home recently and he is quite well now.

Bashir Ahmed has had very bitter experience with the doctors of Bangladesh. During the long one and a half years of Niaz's illness, he had to go from doctors to doctors but everywhere he had noticed a commercial attitude, whereas in both Bangkok and India he received extremely cordial behaviour. "Their attitude is not commercial, rather humanitarian," Ahmed said. He had much words of praise for Dr S H Advani, Chief, Medical Oncology, Tata Memorial Hospital.

"He is a very sincere, energetic and courageous man and his motivational initiative has helped me remain courageous. Everyone is allowed to go to him at anytime," says Ahmed.

Dr Advani had high praise for Bushra Ahmed for her exceptional courage. The patient has got a new lease of life because of Bushra. This act may serve as an inspiration and motivation for others," he said in a written testimonial for Bushra Ahmed.

A large number of people have the same feelings as Bashir Ahmed has developed. We are still lagging far behind in medical science as is clearly seen. Common people have a lot of complaints against the physicians here. And not all of them are baseless. Are we to go abroad even for a good medial check up? But how many people can afford this?

It is high time that our own treatment facilities reach an international standard so that our ailing people wouldn't have to rush abroad for treatment and spend a huge sum of foreign exchange in the process or suffer an ignominious death for lack of treatment here.

Dentistry Among the Diabetic Community

by Dr Mahfujul Haq Khan

ORAL changes are frequent among the first symptoms of diabetes mellitus and may alert the doctor to the underlying disease.

To manage a diabetic patient it is imperative for a dental operator to know his patients beforehand by proper medical history and by possible modification in dental therapy to decrease medical risk to the patient. In the known diabetic cases, the dentists should consult the patient's physicians about the degree of control maintained by the patient through diet and/or medication prior to dental treatment.

Where the dental surgeon suspects diabetes in a patient, he shall immediately refer him to a physician for further examination and confirm the disease by screening test, distinguished through the symptoms of elevated blood sugar, urine sugar, high specific gravity of urine, presence of urinary ketone bodies and urinary casts.

Oral Manifestation

Uncontrolled diabetes may predispose to Xerostomia, glossodyria and increase in the severity of periodontal disease. The tongue is often red and accompanied by painful aches (glossophrosis) and in extensive cases the usual complaint of adults in the upper age group is that of a "burning mouth."

There is a tendency to formation of supra-gingival calculus with gingivae which are purplish and bleed easily. Periodontal diseases are also infectious in nature. They are initiated by bacteria in supra or subgingival plaque. These bacteria produce endotoxins, resulting in a destructive process involving collagenolysis, progressive destruction of the connective tissue fibers of the periodontal ligament, bone resorption with loss of alveolar bone housing around the root of the tooth and progressive deepening of the gingival sulcus or pocket (the space between the gingival collar and the tooth).

Treated diabetic patients do not suffer from greater than normal dental problems. Microbial plaque, particularly streptococcus mutans and sugar in the diet are two main etiological agents of dental caries and when these factors are controlled in the diabetic patients, the caries reduction is the same as in the non-diabetic.

Any oral surgical treatment performed in an unrecognised diabetic patient, who is not under any treatment will show poor wound healing and susceptibility to secondary infections.

Interaction of Dental and Medical Treatment

When it is discovered that a patient with advanced dental disease also has diabetes, dental treatment should be deferred in most instance until the systemic condition is brought under control. Acute infections, however, require immediate attention including drainage of acute abscesses and antibiotic administration. Teeth in a hopeless condition may now be extracted and residual infections eliminated.

Periodontal therapy may lower the insulin requirement and reduce fluctuating, difficult-to-control sugar levels to a more manageable state. Thus the treatment of periodontal disease may facilitate the practical regulation of diabetes.

Under good metabolic control and with enlightened dental care, the diabetic patients show no greater tendency to post dental surgical complication than the non-diabetic.

Dental treatment is in most cases a stressful event and, therefore, certain precautions in handling of the diabetic dental patients are advisable.

Dental appointments should take place during morning, generally about an hour and a half after breakfast and the morning insulin. Although those patients receiving intermediate and long acting insulin in the morning before breakfast may also be treated safely in the early afternoon, it is still preferable to perform the surgery in the morning so the patients can be monitored for food intake and post operative condition during the afternoon.

Dental Care for People with Diabetes

• Keep our diabetes under control. Once an infection gets started, diabetes can slow the healing process and long term infections can lead to loss of teeth.

• Dental check-up at least once every six months is an absolute must.

• Brush your teeth at least twice a day, once in the morning after breakfast and before going to bed at night. Use a soft brush (soft bristle) between the gums and the teeth in a vibrating motion.

• If you find that your gums bleed while you are eating or brushing your teeth, have a dental check-up to determine if you are in the beginning stage of an infection.

• Treatment for advance dental surgery should be delayed until better control is established, but acute infection such as abscesses should be treated.

• Poorly controlled diabetes should have dental surgery in a hospital.

(The writer is an oral and dental surgeon.)