

World Health Day: 'Road safety is no accident' Promoting a community-based approach

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ROAD Traffic Injuries (RTIs) is a major threat in public health and hence is a social and economic burden worldwide -- Bangladesh is no exception. It is estimated in 2002 that road crashes killed 1.18 million people and injured about 20-50 million or more, which is more than 2.1 per cent of global mortality (WHO, 2004). Globally RTIs are projected to rise by 2020 from 9th in 1998 to 2nd leading cause of disability-adjusted life years lost in developing countries and 3rd in developed countries (WHO, 2001). RTIs are the world's number one cause of death among young people between 16 and 24 (ITC, 2003). It is a silent, hidden and unrecognised epidemic.

Bangladesh has one of the highest road accident fatality rate -- higher than 73 deaths per ten thousand registered motor vehicles whereas in developed countries it is below 5 (NRSSAP'02-'04). But data constraints and wide-spread under reporting of accidents prevent understanding the real magnitudes of the road accident problems. Actual situation is even worse. National loss due to road accident is estimated to be about 15 billion taka (US\$ 300 million) every year. 53 percent of road accident victims are pedestrians, the percentage often rise up to 70.

Numbers of BRAC staff and programme participants become casualties of road accidents every year. And as the government called upon BRAC to contribute in its endeavour to reduce road accidents in Bangladesh, BRAC has taken up a Community Road Safety Programme in 2001. Education of school students through textbook lessons, capacity development of local NGO and staff, development theatre, awareness campaign at accident prone communities and action research on road safety are major activities of the programme.

The study

"Now I walk on the right side of road and feel safer than before. I have learnt this from BRAC's theatre staged at our courtyard and from poster on walking rules. I have told my friends and relatives to follow these walking rules. You please follow walking rules and tell others to do it", said Josna on Road Safety Day (27 January 2004) at Betila, Manikganj. Today about 66 percent residents of Betila walk on right side of road facing oncoming traffic knowing that it is safe. During community appraisal, only 5 percent did so. Besides, over 90 percent of Betila community now have correct knowledge on safe walking and crossing.

This article presents the experiences and lessons learnt from a community based action research titled 'Promoting Road Safety Through Community Education Programmes' carried out jointly by BRAC and Transport Research Laboratory (TRL), UK at Betila, a rural area in Bangladesh. The main objective of this study was to produce community based programmes to help documenting a "Good practice guidelines" for conducting similar activities within the country and other developing countries with a view to improve road safety and thereby quality of life. It emphasised participation of community in the identification, prioritisation, planning, designing and implementation of road safety campaign.

The local road safety situation was understood and possible countermeasures were identified through observation of local pedestrian behaviour, in-depth individual interview and household screening survey of road users and a series focus group discussion with different segments of community and stakeholders. To cope with local situation and community demand, a certain amount of flexibility has been followed throughout the project cycle. Further the methods and tools and interventions were used in a conjunctive way. The impact of road safety campaign was evaluated through observation and questionnaire survey.

Community profile

Considering the vulnerability of

Tragic death of Billal

Billal aged 6 nick named Dulal was an affectionate local child. Their house was adjacent to the road. Billal's maternal uncle together with aunt came to see Billal at their house with some banana and called him to come and take those. At that moment Billal was playing with his friends on the opposite side of road. He began to cross the road to meet his uncle. A tempo coming from Baleertek bus station at high speed hit Billal and threw him about three metres away. Billal got serious injury on his head and different parts of his body and breathed his last on the way to Manikganj Hospital.

the rural road users especially the pedestrians, the project preferred to conduct this research in a rural area of Bangladesh. A set of selection criteria like a low-income rural community living beside a highway, where road accident, occur repeatedly and accident data indicate a treatable problem etc. were prepared to identify the feasible community. The ward Betila of Betila-Mitora

What cause accidents?

The community has identified the following problems that cause road accidents at Betila.

Problems in road design	Narrow road
	Absence of road markings and signs
	Insufficient space at junctions, bus station, no bus bay
Poorly maintained road	Broken road surfaces and bridges
Inadequate options for pedestrians	Hawkers, shopkeepers and rickshaw drivers obstructing road side
	Insufficient walking space at road side
	No footpath
Pedestrian behaviour	Lack of knowledge on walking and crossing rules
	Gossiping/sitting / lying/sleeping on road and roadside
	Children playing /running on road/roadside
Improper use of road	Allowing domestic animals on road/roadside
	Drying straw/goods/wastes on road
	Roadside shops, tree/bamboo/bushes/ plantation
Behaviour	Passenger's behaviour
	Driver's behaviour
Law enforcement	Lack of awareness about using vehicle, getting down from running vehicle, pressure on driver for speedy driving
	Reckless/overspeeding/dangerously overtaking/ driving carelessly
Law enforcement	Driving without skill, helper driving vehicle
	Poorly maintained vehicle
Law enforcement	Overloading, drunk, driving without light, use of high beam light, fake licence, non-observance of traffic laws, talking while driving.
	Absence of traffic police and collection of toll from drivers

Union Parishad of Sadar Upazila under Manikganj District was selected finally. Betila has 652 households with population of 3063 people -- half of them literate. The old Dhaka-Aricha road, 12 feet wide and featured by too many road bends, broken surfaces, bridges with high gradients, roadside canal and without any pedestrian facilities has gone through Betila.

Campaign materials

A Flip Chart focusing mainly on pedestrians with road safety messages and trainer's instructions has been prepared in Bengali as IEC material. Besides two posters with safe walking and crossing rules have been developed in consultation with professionals, stakeholders and community.

Community interventions

Road safety theatre: A total of three theatres focused on pedestrians including children and local road encroachers have been produced and staged at courtyards and local school grounds from mid-September to December 2003. The theatres depicted true stories of accidents in which pedestrians were killed. Performers communicated and demonstrated safe pedestrian practices in between acts of the play. 300 to 500 strong audiences attended each theatre staged at night. The majority of the audience were women and children. People especially children showed lot of enthusiasm.

Courtyard meeting: For the convenience of local people especially women, courtyard and door-to-door counselling on safe use of road was conducted. No structured time and place were followed for this intervention. It was conducted very informally yet turned out to be very effective. This intervention was very useful and interactive for those who found it inconvenient to come out at public places to sit together and participate in road safety lessons.

School counselling: All students of local schools were brought under this campaign. Road safety counselling with demonstration and practices through using road safety Flip Chart were conducted to disseminate messages on safe use of road. The school-based campaign was found very effective for rapid awareness. During monitoring of pedestrians' behaviour, almost all students have been found to walk by the right side of road.

Road safety practices: To assist children and old people for using road safely, drivers to park vehicles at proper places, motivate people for not drying/keeping goods on road etc. Community Traffic Wardens (CTWs) both female and male

were engaged from the local unemployed poor. The CTWs visible on road in green aprons with BRAC logo were given a daylong training on their duties and responsibilities. This initiative accepted by the community with great appreciation produced very good results in ensuring good pedestrian practices and proper use of road and roadside.

Community group for sustainability: The project has mobilised a group of interested and motivated people from local community through repeated meetings and information sharing. A workshop was organised at project area office on 21 December 2003 with participation of local elites, heads of local institutions, local government representatives, NGOs, stakeholders and local volunteers. The participants compromising local community group agreed to cooperate and take initiatives for continuing the improved road safety even during the post-intervention period.

Road Safety Day: Road Safety Day was jointly organised by the local community group and BRAC on 27 January 2004. All activities of the project were visualized in a stall at Palora school ground. A discussion

session was conducted where local accident victims and their family members narrated their plights after accident. The members present agreed on the dire consequences of road accidents and reiterated their will to make the community more aware of rules and practices on safer use of road.

Key messages

- &Walk on the right side of road or on footpath
- &Don't cross in front of or behind a parked vehicle
- &Don't play on or near road
- &Don't gossip or gather on road or roadside
- &Don't use road to keep goods and animals
- &When walking at night wear or carry something visible by drivers
- &When walking with a child hold its hand

Lessons learnt

Betila is a successful road safety education campaign, which has focused mainly on pedestrians. The key learnings of this project are:

- & Road safety campaign becomes effective if community is involved in identification of the problems and designing of countermeasures.
- & Adopting locally preferred and appropriate programmes renders rapid mobilisation of community for road safety campaign.
- & Road engineering facilities are important to reduce pedestrian fatalities caused by road accident
- & Provision of pedestrian facilities through road engineering measures is generally viewed as not feasible by road authorities
- & The local accident-incidents revealed human behaviour as the major factor behind accidents (92%) so road safety awareness campaign needs to be conducted for improving road users' knowledge, attitude and subsequent behaviour.
- & Interventions should not be structured and predetermined; keeping it flexible to suit local conditions helps make awareness campaign effective.
- & Emphasis should be given on local knowledge, skills and capacity of local people.
- & Community's commitment to improve road safety is important for a successful campaign.

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All health information to keep you up to date

Fighting arthritis

It is not always true that arthritis is a natural part of ageing. This means, you are not too young to have arthritis. Now doctors believe that at the outset it could be persistent and painless. You may be still in your 20's or 30's or even younger at that time. Lot of common and serious forms are found in children and young adults. Believe it or not, there are more than 150 different types of arthritis. But most of us are aware about Osteoarthritis (noninflammatory) or Rheumatoid arthritis (inflammatory) or sometimes Gout (metabolic disturbances). In fact, what is arthritis? It is a common name for a variety of diseases which affect the muscles joints and skeleton. It is also known as musculoskeletal disorder. It is the result of inflammatory or degenerative processes involving the joints. Patient with arthritis can have severe pain, swelling, stiffness and limitation of movement or deformity.

Arthritis is not uncommon in this region; millions of our countrymen have some form of arthritis. We don't have scientific statistical data; but according to medical practitioners, it could be one of the most common chronic diseases in the country. It is interesting that the term arthritis differs from the term 'rheumatic disease' in that arthritis is a disease of joints, while 'rheumatic disease' may also affect other organs.

Rheumatoid Arthritis (RA) is an autoimmune disease affecting women three times more than men. It can develop gradually, or can start with a sudden, severe attack. Most commonly, it develops between the age of 25 and 50. But it is not uncommon in either children or elderly people. With an inflammation of the joints along with over production of synovial fluid, there could be swollen and painful joints. Ultimately damage to the cartilage can cause joint deformities. This form of arthritis usually has a subacute presentation with symmetric involvement of multiple joints. Although joints of the hands and wrists (morning stiffness is important) are most commonly affected, but it could also involve knees and other joints including temporomandibular joint (of interest to the dentist).

When RA was given its name in the 19th century, those who experienced from it had little to think other than spending a life in a wheelchair. Even in 1950's a small number of treatments were available other than aspirin or cortisone. In our day the most useful treatments are combination therapies. Although researchers have revealed a genetic marker, but not all RA sufferers have the marker, which makes them wonder whether RA is a single disease. At the time of initial diagnosis, disease modifying treatment should be promptly implemented to minimise the likelihood of disease progression. It is advisable to contact a specialist (medicine, if possible rheumatologist) doctor. Sometimes it may be confused with Osteoarthritis. To make the diagnosis straightway, laboratory tests (especially ESR, and to identify an antigen called rheumatoid factor or RF) and X-rays are important.

But it is important to know that rheumatoid factor is not specific for RA as patients with other rheumatic conditions (SLE, Sjogren's syndrome) may have positive RF. As well as up to 25 per cent of patients with clinical RA have no positive RF. But 'MRI' will be a useful tool to diagnose this painful condition; and it is possible in our country. All you need is a knowledgeable expert. The management usually involves a combination of health education, medication, weight loss, exercise depending upon the form of arthritis and your situation, rest and understanding of how to protect the joints.

Osteoarthritis (OA) results from wear and tear on the joint cartilage and secondary mechanical distraction of the joint. At least 33 per cent of adults between the ages 25 and 75 have radiographic evidence of osteoarthritis. Most of the time you will not believe anything is wrong until you're in your 40's, from time to time in 50's and start to feel that the problem may be affecting your bones. Although trauma could be an underlying cause for osteoarthritis, then again according to some studies, most of the cases usually result from ageing. The most common sites to develop are the small joints of the feet, the knees, and the vertebral column.

The management usually involves a combination of health education, medication, weight loss, physical therapy, rest and understanding of how to protect the joints. The goals for the osteoarthritis sufferers are to prevent disability, delay progression and reduce pain which is described as deep aching, aggravated by joint use and relieved by joint rest. Some tips to keep your joints cartilage as healthy as possible: Keep moving (but avoid high-stress activities that pound on knees or hips). Stay slim and build muscle.

Inflammatory arthritis can result from crystal deposits commonly known as gout and pseudogout. Gout is an acute arthritis usually involves a single joint. It primarily affects men over the age of 40. The onset of the attack is abrupt, and symptoms peak within 24 hours. Although great toe is the classic site of involvement, but ankles, wrists and knees could also be involved. Weight reduction, exercise, proper diet for and proper medication are important interventions for people with gout. Today, there are many kind of medications that people take when they develop arthritis. Some are commonly used for pain and some have to be prescribed cautiously. But try to remember that when the regular medication is started, full blood count, liver, kidney and urine testing for protein must be performed routinely. The time schedule for these tests depends on what type of drugs one is taking. So don't forget to ask your doctor on this issue.

Days are changing, newer medicines and managements are making life more comfortable. Although these types of diseases are always very tricky, but doctors are hopeful - it is becoming easier more and more to manage this unwanted problem. Just keep in your mind: FIGHTING AGAINST ARTHRITIS -- SOMETHING CAN BE DONE.



Poster on walking



Poster on road crossing