

CHILD DROWNING IS A SILENT KILLER

Let's break the silence

MD RAJIB HOSSAIN

A four-year-old Tanim went to the riverside to play and fell down into the water. His companions rushed back home to inform his mother. She rushed to the site and called for help. A local youth jumped into the water to rescue the child. But it was too late. After half an hour's search the dead body was found.

Obviously it is painful. But we experience these sort of terrible events very often. Death by drowning happens so quickly that a child may die before anyone helps him/her.

A comprehensive research reveals that drowning is the single leading cause of death among children aged between 1 and 17 years. The Bangladesh Health and Injury Survey (BHIS) showed that almost 17000 children drown every year in Bangladesh, while 46 everyday.

More children die because of drowning than that of any other injury or of non-injury related killers like pneumonia, malnutrition or diarrhoea. Yet deaths due to drowning have gone relatively unnoticed. As a result drowning prevention and management remain almost non-existent.

The BHIS finding shows that the greatest number of victims are children between the ages of one and four years. Those who are just learning to walk face the highest risk of all. When a busy mother notices that her toddler is not by



her side is often too late.

The child need not wander far, most deaths happen very close to home. Three quarters of all child drowning take place in water less than 20 metres from their houses. The youngest usually die in water less than 10 metres away.

All water sources are dangerous equally and rivers, ponds, lakes claim many lives. Greater numbers die in drainage ditches or puddles and even in household water such as tubs, buckets, water drums and

so on. Babies may drown into water even at one inch deep.

The drowning death toll peaks at one year old. It falls steeply once children reach the age of five years as after that they learn how to swim.

Usually drowning occurs while children are engaged in playing and there remains lack of adequate supervision. Busy mothers with a large family are often unable to look after their little ones.

In most drowning cases, chil-

What kills children in Bangladesh?

Drowning	28%
Pneumonia	20%
Malnutrition	13%
Diarrhoea	13%
Meningitis	7%
Road traffic Accidents	6%
Diarrhoea & Pneumonia	4%
Suicide	4%
Animal bite	4%
Septicemia	1%

Source: Unicef

Whenever young children are swimming, playing or bathing in water, make sure a grown-up person is watching them — that means the supervisor should not read, play cards, talk on the phone, mow the lawn or do any other distracting activity while watching children.

Awareness raising

Making the families aware of the risks is another tool to prevent the unexpected cases. A drowning-checklist could be given to mothers so that they become alert to the risk factors.

Barriers around water

Establish fences or other types of barriers between children and water sources. Encourage families and communities to devise their own safety measures where water is present.

Keep small children away from buckets containing liquids; specially 5-gallon industrial containers are a particular danger. Be sure to empty buckets when household chores are done.

Swimming and water safety

Make parents aware of the need to teach children for their water safety skills and knowledge. Support the efforts of the parents through a nationwide early childhood swimming programme.

It is the high time to design and implement comprehensive prevention programmes that will save many lives.

PERSPECTIVE: TREATMENT OF DIARRHOEA

Which one is more important — Zinc or ORS?



DR M KARIM KHAN

Diarrhoea is a major cause of morbidity and mortality in children in developing countries like Bangladesh. The mainstay of treatment of diarrhoea is oral rehydration saline (ORS).

ORS prevents dehydration, corrects electrolyte imbalance and reduces the morbidity and mortality in diarrhoea.

Zinc is an important micronutrient. The effect of zinc therapy in diarrhoea is as follows:

1. Bhandari N et al assessed the impact of daily zinc supplementation on the incidence of severe and recurrent diarrhoea in a double blind randomised controlled trial. They found that the incidence of diarrhoea during follow-up was lower in the zinc supplemented group as compared with the placebo group as well as the there was decreased incidence of prolonged diarrhoea in the zinc supplemented group.

2. Roy SK et al demonstrated in a double blind randomised controlled trial that children with diarrhoea receiving zinc in addition to multivitamins had lesser stool output and shorter duration of diarrhoea

3. A study from India by Sazawal et al has shown a 7% reduction in the proportion of episodes lasting more than seven days if zinc supplementation was given within 3 days of the onset of diarrhoea

4. Another study from India has reported that children receiving 40 mg of elemental zinc daily during acute diarrhoea responded with a shorter duration of diarrhoea than a control group

5. In Mexican preschool children, zinc supplementation reduced diarrhoeal morbidity

6. In a study in Bangladesh, weekly zinc supplementation over a period of 1 year reported fewer incidents of pneumonia and diarrhoea in the zinc group than the control group

7. Bhatnagar et al demon-

strated that zinc with ORS reduces stool output and duration of diarrhoea in hospitalised children in a randomised controlled trial in 287 children

8. In a study in Kolkata, India, zinc supplementation to low birth weight infants reported lesser diarrhoeal episodes in the zinc supplemented group versus the placebo group suggesting a beneficial impact on the incidence of diarrhoea among low birth weight infants

9. In a study in Turkey, mean duration of diarrhoea was shorter in the zinc supplemented group as compared to the placebo group

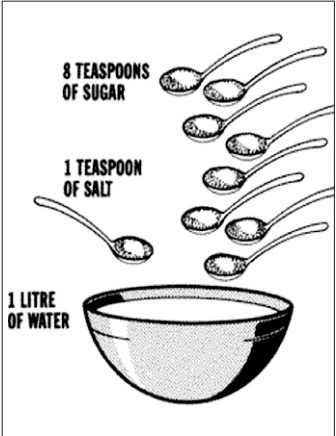
10. Another study from India demonstrated that there was reduction in diarrhoeal morbidity in zinc supplemented group whether given daily or in a weekly schedule

11. Studies conducted at the ICDDR,B from basic to applied research, have helped to build an evidence base for integrating zinc treatment into current child health practice and policies. This is supported by the revised, joint WHO/Unicef recommendations to include zinc in the management of all acute or persistent cases of diarrhoea in children under five years of age.

Clinical Management of Acute Diarrhoea 2004 (WHO and Unicef joint statement) state that in addition to ORS, zinc supplementation should be given for 10-14 days in dose of 20 mg/day (10 mg/day for infants under six months) to curtail the severity of the acute diarrhoea and prevent further occurrences in the ensuing 2-3 months.

There is sufficient evidence to recommend zinc in the treatment of acute diarrhoea as adjunct to oral rehydration saline. However ORS remains the mainstay of therapy during acute diarrhoea and zinc has an additional modest benefit in the reduction of stool volume and duration of diarrhoea as an adjunct to ORS.

ICDDR,B has a research based project on Zinc, SUZY, Scaling Up Zinc Treatment For



Young Children on diarrhoea.

The ultimate objective of the SUZY project is to implement a zinc treatment scheme that will reach all children, but most importantly those in greatest need — the poor and undernourished.

After many years of research, ICDDR,B decided that the effectiveness and benefits of zinc as a treatment for childhood diarrhoea have been sufficiently proven.

The SUZY project will provide zinc treatment for diarrhoea on a large scale, targeting the entire under-five-year-old population of Bangladesh. It has been estimated that zinc treatment could save the lives of 30,000 to 75,000 children per year in Bangladesh alone.

On a global scale, the addition of zinc treatment to the management of childhood diarrhoea could save the lives of almost 400,000 children each year.

But in recent days, by the virtue of media campaign of zinc supplement, more emphasis has been given on zinc therapy than ORS.

Recently I received few patients of acute watery diarrhoea with severe dehydration. While taking history, I found that mother of the children gave zinc tablet to their kids everyday and they forgot about giving ORS. These less educated or illiterate mother by watching TV think that zinc supplement is a new regimen to treat diarrhoea and simply forget to give ORS.

So my humble suggestion to the advertising companies is to put emphasis on ORS in the advertisements mentioning that ORS is the mainstay of diarrhoeal treatment and zinc is the supplementary therapy.

Hope concerned authority will take the matter in to cognizance.

Dr M Karim Khan is an Associate Professor of Paediatrics in Community Based Medical College (CBMC) Mymensingh. [E mail- mkarim_khan@yahoo.com]

Meeting to highlight burden of meningitis and pneumonia

Hib and pneumococcal disease — two major causes of life-threatening meningitis and pneumonia in south asian children

TAREQ SALAHUDDIN

Ever year the deadly diseases meningitis and pneumonia kill an estimated 2 million children globally under the age of 5 years. Of these deaths, many occur in Africa and Asia. Experts met in Bangkok last week and focused on two major life-threatening causes of pneumonia and meningitis: the bacteria Haemophilus influenzae type B (or "Hib") and streptococcus pneumoniae. Both pneumonia and meningitis are vaccine-preventable.

The urgent need for a sustained effort to accelerate the prevention of meningitis and pneumonia formed the core of discussions amongst leading researchers attending a Ministry of Public Health and WHO meeting. With Hib and pneumococcal diseases estimated to be responsible for up to 1.4 million child deaths globally each year - local efforts to measure the scale of the problem in Asia are gaining momentum.

"Effective surveillance of meningitis and pneumonia has helped us to better understand the mag-



Thai Ministry of Public Health and WHO hosted meeting of leading researchers to highlight burden of meningitis and pneumonia on March 29, 2007 in Bangkok, Thailand.

nitude of the problem and help evaluate the impact of available vaccines", commented Dr Jean-Marie Okwo-Bele, Director, Department of Immunisation Vaccines and Biologicals, WHO.

Sadly children with HIV/AIDS are up to 40 times more likely to get pneumococcal disease than children without HIV/AIDS, and in countries where rates of HIV/AIDS are high, Hib and pneumococcal diseases place an additional burden on national

health systems.

Dr Rana Hajieh, The Hib Initiative, Project Director added: "systematic surveillance is critical to making evidence-based decisions for the introduction of pneumococcal and Hib vaccines. We could save millions of children's lives and make a significant move towards meeting a key UN Millennium Development Goal of reducing child mortality by two thirds by 2015".

Dr Orin Levine, Executive

Director, GAVI's PneumoADIP commented that now is an incredibly exciting time for those working in pneumococcal disease prevention. Through sustained financing from GAVI and an Advanced Market Commitment (AMC) vaccines are going to be reaching the children who need them as early as 2008.

Dr Samir Saha, Professor of Microbiology of Institute of Child Health, Dhaka presented the Bangladesh story on recent

success in surveillance network in the press briefing session. In an answer to a question, he said that the main obstacle to introduce the vaccines in developing countries was the lack of adequate political commitment. He stressed on the partnership among scientists, politicians, donor community and other bodies to save the lives of the children.

The Pneumococcal and Hib Surveillance Network Investigators meeting was sponsored by the World Health Organisation, GAVI's PneumoADIP and the Hib Initiative and brought together experts from a number of Asian countries including, amongst others, Bangladesh, India, Indonesia, Republic of Korea, Mongolia, Nepal, Sri Lanka, Thailand and Viet Nam.

The importance placed on this meeting reflects the global community's increasing focus on meningitis and pneumonia, and the urgent need for a global solution.

DID YOU KNOW?

Childhood obesity triggers early puberty

REUTERS, Chicago

Childhood obesity in the United States appears to be causing girls to reach puberty at an earlier age, for reasons that are not clear, a study said.

The report from the University of Michigan's Mott Children's Hospital said a multi-year study following a group of 354 girls found that those who were fatter at age 3 and who gained weight during the next three years reached puberty, as defined by breast development, by age 9.

"Our finding that increased body fatness is associated with the earlier onset of puberty provides additional evidence that growing rates of obesity among children in this country may be contributing to the trend of early maturation in girls," said Dr Joyce

Lee, the lead author.

"Previous studies had found that girls who have earlier puberty tend to have higher body mass index, but it was unclear whether puberty led to the weight gain or weight gain led to the earlier onset of puberty," she added.

"Our study offers evidence that it is the latter," Lee said.

Earlier studies have found that U.S. girls are reaching puberty earlier than was the case 30 years ago, a time span during which rates of childhood obesity also increased, the study said.

In the study girls were classified as at risk for being overweight if their body mass index (a measurement of weight related to age and height) was between the 85th and 95th percentiles, and defined as overweight if the measurement was greater than the 95th percentile.

The researchers said that 168 of the girls were classified as being "in puberty" by the age of 9 and nearly two dozen reported having their first menstrual period by two years later.

Higher body mass index scores at all ages had a "strong association with earlier onset of puberty, the authors said.

The study was published in Pediatrics, the journal of the American Academy of Pediatrics.

"Earlier onset of puberty in girls has been associated with a number of adverse outcomes, including psychiatric disorders and deficits in psychosocial functioning, earlier initiation of alcohol use, sexual intercourse and teenage pregnancy and increased rates of adult obesity and reproductive cancers," the study said.



Your Doctor

Prof Dr Abdus Sadir
Head of the Department of Skin and VD
Sir Salimullah Medical College
Mitford Hospital, Dhaka

matologist. They did not really make any difference.

Is there any means by which I can get rid of the problem?

Regards
Mahbuba Sharmin Shila
Baridhara, Dhaka.

Answer:
Oily skin can be very frustrating and it is a common complaint that no skin products are very much effective.

The problem is likely to relate hormonal factors and may improve or settle completely over years. In fact, there is no magical cure for oily skin. Regular care and appropriate treatment of oily skin can go a long way in keeping it clean and blemish free.

Wash your face with special soap prescribed by your dermatologist. Massage with upward and outward direction. Washing with warm water may help to dissolve skin oil. It is a good treatment for oily skin. But do not use very hot water as it can strip the essential oil of your skin. You may use Ketoconazol shampoo to get your scalp fresh and healthy.

Topical vitamin derivatives

with ingredients prescribed by dermatologists is effective to tackle sensitive oily skins. Some antibiotic creams and lotions are also helpful in treating blemished oily skin. Here are some tips to get rid of oily skin:

·Take a diet rich in proteins with plenty of leafy vegetables and fresh fruits.

·Restrict sugar, fat containing and junk foods. Supplement your food with wheat grain, nutritional yeast, whole grains, beans and nuts.

·Drink plenty of water to keep the skin hydrated and flush out toxins.

·White or pink clay masks gently cleanse oily skin of excess oil. The darker brown clay masks are stronger and more effective on very oily skins. If it goes in vain, then you need exploring your hormone level. Usually estrogen containing pills are prescribed in abnormal cases. There are also therapy like photo-therapy, injection etc. For this, you should go to a dermatologist to get proper treatment guideline.

Good luck.

Send health related queries (either in English or Bangla) to Your Doctor, Star Health, The Daily Star, 19, Karwan Bazar, Dhaka 1215 or e-mail your problem to starhealth@thedailystar.net