

Home treatment of pneumonia safe and effective

STAR HEALTH DESK

Treating children with severe pneumonia at home is just as effective as treating them in hospitals, a new study has found. The study results could significantly change the way the illness is managed in developing countries, saving a significant number of lives every year and taking pressure off health systems.

The research, conducted in Pakistan by researchers from the Boston University School of Public Health and supported by WHO and the U.S. Agency for International Development (USAID), is published this week in *The Lancet* medical journal.

It involved 2037 children with severe pneumonia who were randomly assigned to get either injectable antibiotics in a hospital or antibiotic pills at home. The trial was the first to compare the outcomes of hospital treatment of severe pneumonia with home-based treatment, and the results demonstrate the safety and

efficacy of treating it with oral antibiotics outside of a hospital setting.

Pneumonia is the largest single killer of children under five around the world. Almost four children die from pneumonia every minute. About 60 percent of pneumonia cases in the developing world are caused by bacteria and can be treated with antibiotics, whereas most cases of pneumonia in developed countries are viral.

In the study, there were 87 (8.6%) treatment failures in the hospitalised group, and 77 (7.5%) in the group treated at home. Of the five children (0.2%) who died during the study, four were in the hospitalised group and one was at home.

This study confirmed the findings of three other trials in Africa, Asia, Europe and Latin America, which showed that oral antibiotics were just as effective as injectable antibiotics in treating hospitalised children with severe pneumonia.



Far-reaching implications

"The potential impact of these results is enormous," said the article's co-author Dr Shamim Qazi, Medical Officer with the WHO's Department of Child and Adolescent Health and Development.

"Effective management of pneumonia is critical to improv-

ing child survival. Being able to treat children with severe pneumonia safely and effectively in their own homes would be of huge benefit to both families and health systems, by reducing the need for admission to hospital. We will be updating WHO guidelines in 2008 to reflect this new evidence."

"This confirmatory research in Pakistan, when implemented into programmes around the globe, will increase access to critical care in disadvantaged communities and support the potential to diagnose and treat severe pneumonia by community health workers," said Dr Alfred Bartlett, Senior Advisor for Child Survival, USAID. "These findings promise to build upon an existing approach endorsed by WHO and Unicef, for treatment of non-severe pneumonia, that is already contributing to the achievement of the Millennium Development Goals."

The current guidelines advise health workers to provide oral antibiotics for cases of non-severe pneumonia and to refer severe and very severe cases to hospitals for treatment with antibiotics by injection. However, many children with severe pneumonia who are currently referred for admission to a hospital either die before they reach there or are so sick by the time

they arrive that nothing more can be done to save them.

A small number of cases of very severe pneumonia (around 2-3% of all pneumonia cases) will still require treatment with injectable antibiotics in a hospital.

Families in the poorest countries, where the majority of children are affected by pneumonia, may not have easy access to hospitals. In-patient treatment may not be an option for parents who cannot leave their homes to accompany the sick child. In addition, children with severe pneumonia are vulnerable to infections as a result of weak immunity and could be at increased risk in crowded hospital wards.

A community-based approach would bring treatment to people's homes, so that children with pneumonia can be identified and begin treatment before the onset of life-threatening complications.

Source: WHO

Nepal radio breaks taboos to fight HIV/AIDS

GOPAL SHARMA, Reuters

Ignoring social taboos in this conservative nation, a Nepali radio programme on safer sex is spreading awareness against HIV/AIDS and offers life-saving advice to young people who are vulnerable to the disease.

Confined only to a few towns six years ago, "Chatting with my best friend", a youth-friendly programme about serious day-to-day issues like sexual health and HIV/AIDS, has expanded to cover much of this mountainous nation.

Many Nepalis are now glued to the weekly, hour-long programme.

"Initially we got letters complaining against the discussions on use of condoms, sex or sexual organs," Binayak Aryal, a producer for the programme, said.

He informed social attitudes had now changed since the programme began in 2001 and it is now aired through 35 hugely popular FM stations as well as the state-run Radio Nepal.

"Now there is a change. Even parents and school teachers advise the young people to listen to the program about sexual health."

Nepal, where millions live in remote villages, has long had a conservative attitude to sex. For example, homosexuality is taboo and "unnatural sex", as it is termed by the law, can fetch up to one year in jail.

Hosts of the hour-long programme chat about how injecting drugs and unsafe sex cause HIV and seek to promote the use of condoms for safety in a youth-friendly language.

"It also imparts life skills to the youth dealing with emotion, stress and communicating issues that can't be discussed with parents," said Nirmal Rijal, Nepal unit chief of the San Francisco-based aid group, Equal Access, which produces the programme with Unicef support.

According to official estimates about 70,000 of the Himalayan nation's 26.4 million people are living with HIV.

Many of them have no access to information about the disease and do not talk about their problems openly in families for fear of being stigmatised in the majority-Hindu nation.

"Any problem or issue can't be solved by pushing it under the carpet," Rijal said.

"Without talking, these issues remain a taboo. It is something that needs to be discussed."

Rijal said his agency received about 1,500 letters every month from listeners who openly write about their problems and ask for remedies.

One anonymous listener, who had tested HIV positive, wanted to know whether he should conceal the disease or make it public and how, according to Rijal.

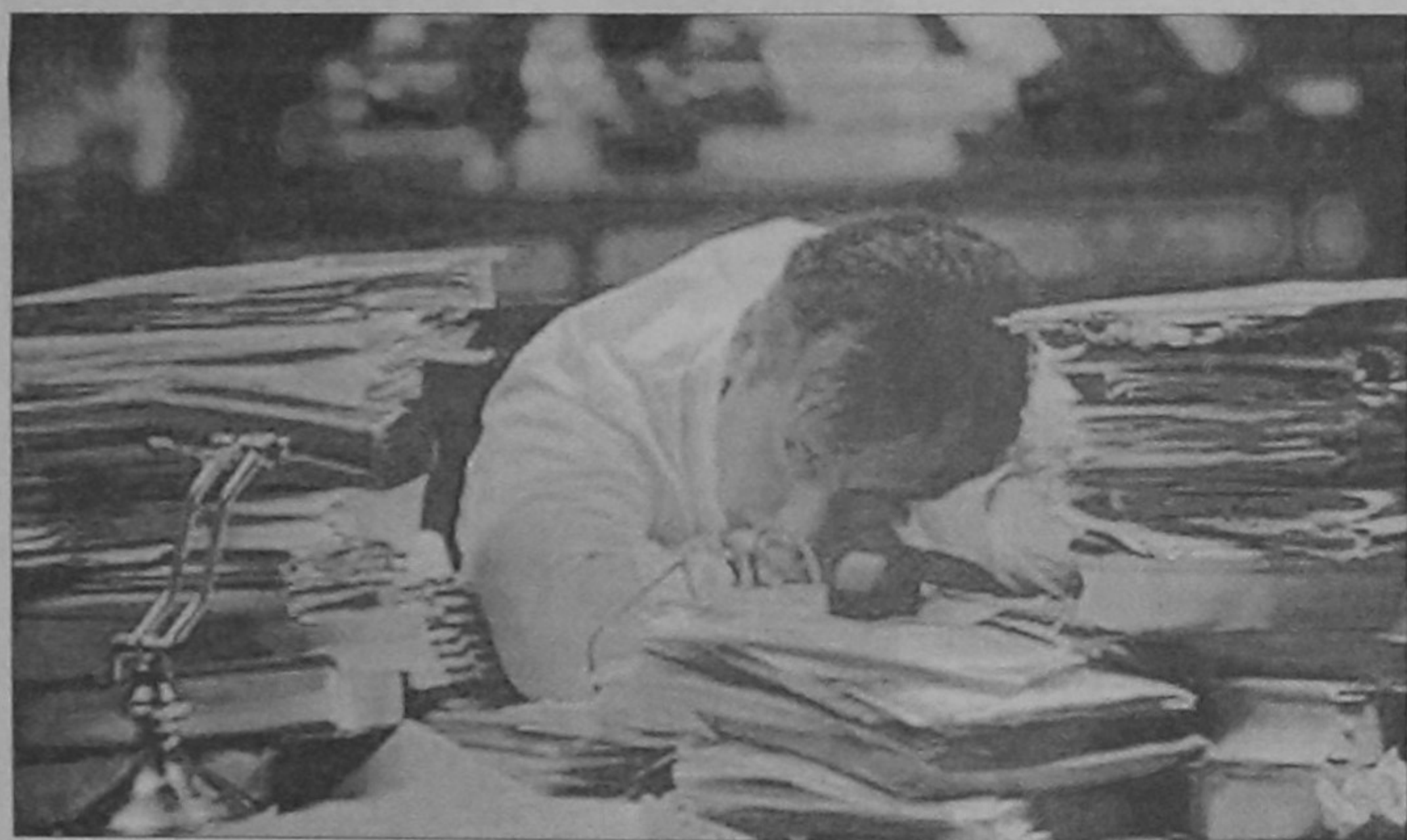
"It talks about different options and ways to communicate their problems but offers no clear-cut solutions," he said of the programme.

"The final decision about what to do is up to them." Somelisters agreed.

"Initially it was embarrassing to listen to the program in the family. But now I think it is okay because it discusses some of the problems we face in practical life," said Srijana Khatiwada, 27, a university graduate.

STRESS RELIEF CORNER

Five steps to combat stress



DR MOHAMMAD RAKIBUL HASAN

Crrrrrring! Someone is ringing the door bell impatiently. Hurdled Tania's mom opened the door. It was Tania. Tania's mom could assume that something was wrong with her daughter. She looked quite upset and tormented. "What happened, Tania?" asked her mother. No reply. Again she asked with a soft voice. Tania shouted to her mom, "Oh, just leave me alone!" and slammed her room's door.

Well, this is quite common among the teenagers. Stress!

Almost everyone feels it, expresses it in their own ways. Sometimes we scream, sometimes we yell or bang something, or even hit someone. But does it solve much? Is there something that can really work out the problem?

D'Arcy Lyness, an American psychologist, suggests trying the five following ways to feel better when you are stressed.

1. **Get support:** When you need help, look for someone who really cares about you. Talk to a senior whom you trust, such as a parent, other relative, or a

coach. And do not forget about your friends! They might be worried about the same test or have had similar problems, such as dealing with a divorce or the death of a beloved pet.

2. **Don't freak out!** It is easy to let your feelings go wild when you're upset. Notice your feelings. Name them - for example, "I am so angry!" And find a way to express them. Do breathing exercises, listen to music, write in a journal, play with a pet, go for a walk or a bike ride, or do whatever helps you shift to a better mood.

3. **Don't take it out on yourself:** Sometimes when kids are stressed and upset they take it out on themselves. But that is not a good idea. Remember that there are always people to help you. Don't take it out on yourself. Be kind to yourself and ask for the helping hand or pat on the back that you need - and deserve - to get you through the tough situation you are facing.

4. **Try to solve the problem:** Well, now you are calm and you have support from adults and friends. It is time to get busy with your problem. You need to figure out what the problem is. Even if you cannot solve all of it, maybe you can begin by solving a part of it.

5. **Be positive - most stress is temporary:** You may not believe it when you are in the middle of a stressful situation, but believe it - stress does go away, often when you figure out the problem and start working on solving it. Remember, these five steps are not magic - and you might have to do some steps more than once, but they do work. And if you can stay positive as you make your way through a tough time, you will help yourself feel better even faster. Doesn't it feel really good when stress is gone?

The writer is a Postgraduate Student (M Phil, Part I) in the Department of Biochemistry at BSMU. E-mail: m36rakib@yahoo.com

Be relaxed. Anxious people have higher heart risk!

Heart attacks may not be reserved for the hostile and driven among us - anxious, fearful people also have a higher risk, U.S. researchers reported recently.

They found men who scored the highest on tests of anxiety were 30 to 40 percent more likely than the others to have a heart attack.

The findings held even when standard heart risks such as diet and smoking were factored in, psychologist Biing-Jiun Shen and colleagues at the University of Southern California in Los Angeles reported.

"What we're seeing is over and beyond what can be explained by blood pressure, obesity, cholesterol, age, cigarette smoking, blood sugar levels and other cardiovascular risk factors," Shen said in a statement.

"Older men with sustained and pervasive anxiety appear to be at increased risk for a heart attack even after their levels of depression, anger, hostility and Type A behavior are considered."

So-called Type A personalities include people who are ambi-

tious, assertive and often those who are hostile as well.

Shen and colleagues said they analysed data from a study of 735 men. They took psychological tests in 1986, when they were still in good health, and then followed for 12 years.

Those who scored in the top 15 percentile for anxiety were more likely to suffer heart attacks later, the researchers found.

"The physiological reactions of anxiety are very similar to signs and changes that are thought to lead to myocardial infarctions," Shen said, referring to heart attacks.

"Look at what happens when you are anxious. Your body reacts as if it is in danger. It is the fight or flight response. The reactions are very similar to those brought on by anger or a Type A personality that have been observed in earlier research."

Nervous men can lower their risk of heart attack, Shen added.

"The good thing about anxiety is that it's very treatable," Shen said.

Source: Journal of the American College of Cardiology



4 health changes can prolong life 14 years

People who drink moderately, exercise, quit smoking and eat five servings of fruit and vegetables each day live on average 14 years longer than people who adopt none of these behaviors, researchers said.

REUTERS, London

People who drink moderately, exercise, quit smoking and eat five servings of fruit and vegetables each day live on average 14 years longer than people who adopt none of these behaviors, researchers said.

Overwhelming evidence has shown that these things contribute to healthier and longer lives, but the new study actually quantified their combined impact, the British team said.

"These results may provide further support for the idea that even small differences in lifestyle may make a big difference to health in the population and encourage behavior change," the researchers wrote in the journal *PLoS Medicine*.

Between 1993 and 1997 the researchers questioned 20,000 healthy British men and women about their lifestyles. They also tested every participant's blood to measure vitamin C intake, an indicator of how much fruit and vegetables people ate.

Then they assigned the participants - aged 45-79 - a score of between 0 and 4, giving one point for each

the healthy behaviors.

After allowing for age and other factors that could affect the likelihood of dying, the researchers determined people with a score of 0 were four times as likely to have died, particularly from cardiovascular disease.

The researchers, who tracked deaths among the participants until 2006, also said a person with a health score of 0 had the same risk of dying as someone with a health score of 4 who was 14 years older.

The lifestyle change with the biggest benefit was giving up smoking, which led to an 80 percent improvement in health, the study found. This was followed by eating fruits and vegetables.

Moderate drinking and keeping active brought the same benefits, Kay-Tee Khaw and colleagues at the University of Cambridge and the Medical Research Council said.

"Armed with this information, public-health officials should now be in a better position to encourage behavior changes likely to improve the health of middle-aged and older people," the researchers wrote.

Health Events



Children took part in an art competition at Fine Arts Institute of Dhaka University recently organised by Club Excel, an organisation working for better management of childhood asthma in order to raise awareness and improve childhood asthma care in the country. Eminent artist Rafiqun Nabi is distributing award to a winner of the competition. Prof Abul Barq Alvi of Fine Arts Institute and Shakib Lohani, President of Club Excel are also seen in the photo.

Checklist to identify severe illness in infants

REUTERS, Hong Kong

Medical experts have compiled a checklist of seven signs that mothers and healthcare workers can use to identify severe illnesses in newborn infants requiring urgent treatment in hospital.

Around 4 million babies around the world die each year before they are a month old, and three-quarters of them die in the first week of life - mainly from bacterial infections, birth complications and prematurity.

In an article published in the *Lancet*, the researchers said the list can help identify serious illnesses in infants under two months and bridge a gap in a previous checklist that did not cover infants in their first week of life.

"Anyone looking after children, mothers, should know that if children are not feeding well, it



is a sign of serious illness, they should take it to care," said Martin Weber of the World Health Organisation in Jakarta.

"It seems very simple, but these are messages we need to

promote more widely. If the baby is not moving spontaneously and only doing so when you touch it, that should alert you that the baby has problems," Weber told.

The seven clinical signs are:

- history of difficult feeding
- history of convulsions
- movement only when stimulated
- breathing rate of 60 breaths per minute or more
- severe chest indrawing
- over 37.5 degrees Celsius
- under 35.5 Celsius

Weber and colleagues started off with a checklist of 31 signs that first-line health workers used to identify severe illnesses in 8,889 infants brought to clinics in Bangladesh, Bolivia, Ghana, India, Pakistan and South Africa.

These assessments were compared against decisions made by pediatricians. Weber's team later found the assessments were reliable even after the list was narrowed down to seven points.

Weber stressed that mortality figures can only be reduced if proper healthcare is available to these children.