

# Feature Health

## Depression: 'The Common Cold of Mental Illness'

**L**ATELY some efforts have been made to educate people through various media on depressive illness. Still it is felt that there is not enough awareness among our people about the nature and treatment of a disorder that afflicts millions. The illness is so pervasive that it is called "the common cold of mental illness".

The most disturbing news about depression is that it is increasing. As its most basic level, depression is a disorder of the mind that depletes the will and creates a sense of hopelessness and despair. It is not to be confused with the everyday blues that most people encounter at one time or another. Clinical depression is something else, a full tumble into the void. It can last for months and recur over years, with — at its worst — devastating effects.

A depressed person feels powerless and apathetic, with no energy or skill to change his situation, and worst of all, the desire to do so.

Depression is an emotional state that permeates one's perceptions, attitudes, and thoughts. When one is depressed, everything one does appears dull and meaningless, the energy and drive are sapped, the simplest task be-

comes an ordeal of immense proportions. Positive emotions, such as compassion, affection, humour, love, joy and empathy may seem blunted or totally absent. The predominant feelings may be morbidity with thoughts of death and dying as well as irrational or excessive sadness. The depressive feels oppressed by his own failure to cope with the world, but this seeming worthlessness, powerlessness, and guilt. Drawing inward, buried under the weight of all the thousands of minor and major tasks, required to keep one's life in order, it becomes an immense effort to stay functional.

Although it is almost always treatable, with a combination of anti-depressant drugs and psychotherapy, one in five victims seeks help. Often people do not recognize or acknowledge that they are suffering from a clinical disorder. And the danger is that the longer depression goes untreated, the more likely it is to become chronic and seriously damaging. Victims may lose jobs, friends, spouses.

For generations the condition was thought to be purely a state of mind, but in recent years there has been significant progress in understand-

ing its causes. Depression is generally divided into two distinct types: reactive and endogenous. Reactive depression is a state created by or connected to some external event such as a divorce, hospitalisation, retirement, a son or daughter moving away and so on. Endogenous depression is not triggered by any external event; it is an illness that simply overwhelms the sufferer without any recognisable outside cause.

Theories about depression may be divided into four different approaches: genetic, bio-chemical, psychological, and sociological.

A geneticist may say that a tendency towards depression is an inherited trait, due to a genetic defect passed down from generation to generation. Current biochemical theories of depression all agree that a depressed state can be caused by an imbalance of certain chemicals within the brain, specifically substances known as neurotransmitters. Those substances implicated are norepinephrine, serotonin, dopamine, and acetylcholine — all of which are neurotransmitters that characteristically seem to decrease with age and

produce a depressive state.

The sociological interpretation of depression is one in which depression is seen in large part as a cultural phenomenon created by the behaviour patterns and attitudes that are characteristic of our technological, highly stressful and youth-oriented society.

Psychologically, depression is seen as a mental disorder that may be due to a low or damaged ego; an inability to deal with and release oneself from sadness and loss; repressed hostility, guilt and rage, a lack of self-mastery and self-control; an ability to deal with major life changes; and a negative self-concept.

Some of the treatments available for depression include:

(i) Drugs: The drugs used generally fall into four categories, tranquilizers, stimulants, tricyclics and MAO inhibitors.

(ii) Electroconvulsive or ECT therapy, commonly called shock therapy, is used particularly in institutional settings. This treatment is generally successful in reducing the symptoms of depression often in cases where other treatments fail.

(iii) Psychotherapy provides a wide variety of treatment for depressives. A psychoanalytic treatment would work on helping the patient understand and let go of repressed anger, hostility, and guilt and on increasing ego strength.

Thus drugs, electroshock and psychotherapy are the conventional methods by which depression is treated. It is for the professional psychiatrist to decide which particular treatment is suitable in a given case.

The article is concluded with a short description of the common symptoms of depression:

- Feelings of sadness, hopelessness.
- Insomnia, early awakening, difficulty getting up.
- Thoughts of suicide and death.
- Restlessness, irritability.
- Low esteem or guilt.
- Eating disturbance — usually loss of appetite & weight.
- Fatigue, weakness, decreased energy.
- Diminished ability to think or concentrate.
- Loss of interest and pleasure in activities once enjoyed.
- Chronic pains that fail to respond to typical treatment.

## Drug Testing in Need of Surgery

**I**NTERNATIONAL pharmaceutical companies carry out million of scientific procedures every year on laboratory animals. As the industry says, animal experiments are essential for developing new drugs and assessing their safety before they go into human clinical trials. But the number of tests is inflated by the fact that any company seeking to launch a drug on the world market has to duplicate some procedures unnecessarily, to meet regulatory requirements in different countries.

A reduction in animal testing is just one of the benefits expected to come out of negotiations now under way to harmonise drug licensing requirements around the world.

Successful harmonisation will reduce substantially the time and costs incurred in commercialising drugs worldwide. That will help the pharmaceutical industry, as it faces growing pressure from governments to contain medical costs during the 1990s. Patients should benefit too from faster access to improved medicines.

There are no global estimates for the total savings likely to come from bringing all drug licensing requirements into line. But the Centre for Medicines Research (funded by the UK pharmaceutical industry) recently looked into on particular issue: the duration of animal toxicity studies. It concluded that, apart from carcinogenicity testing, there was no safety advantage in continuing toxicity tests for longer than six months.

The European Community has already adopted a six-month duration for toxicity testing but the US and Japan insist that animal tests continue for 12 months. The Centre for Medicines Research estimates that if the rest of the world comes into line with the EC on just that one requirement, the industry will save \$100m a year — and use 35,000 fewer laboratory animals.

There has been some progress over the past decade as a result of informal contact between national regulatory agencies, reinforced by pressure from the industry. And in Europe the EC is forcing the

national agencies to adopt common requirements, as part of its 1992 programme.

But the first formal international conference on harmonisation will be held in Brussels in November. It is being organised jointly by the EC, the US Food and Drug Administration and the Japanese Ministry of Health and Welfare, and by several trade associations representing the international pharmaceutical industry.

Total harmonisation would mean that a company would need to carry out only one set of scientific tests, animal experiments and human trials, in order to apply to register a new drug anywhere in the world. In practice some differences in clinical requirements may survive because medical practice and social conditions vary so much in different parts of the world. If one country insists on special clinical requirements, however, these must be based on rational criteria. Japan will no longer be able to insist that any new drug be tested on Japanese patients before it can be considered for approval.

The Ministry of Health and Welfare in Tokyo has long been notorious for maintaining very different standards from the rest of the world — less to protect Japanese patients than to protect Japanese drug companies from international competition. But that attitude has changed remarkably over the last five years or so, as the Japanese companies have sought to expand overseas.

**A**BOUT 30 million people in the world are blind, and a further 30 million have severely impaired vision. As the world's population grows, so does the number of people who are visually handicapped.

There are blind people everywhere in the world, but 90 per cent live in developing countries, particularly in poor rural areas and city slums.

In fact, people in developing countries are ten-times more likely to become blind than those in industrialised countries like Britain.

Why? Much of the world's blindness is related to poverty. A poor diet, lack of clean drinking water, medicine and sanitation makes people particularly prone to eye diseases.

In the developing world lack of money and health personnel, or poor transport and communications, mean that people go blind from conditions which in industrialised countries would be cured or improved.

In sub-Saharan Africa for example there is only one ophthalmologist (eye doctor) per million people. Britain has one per 20,000.

That means that many people are not diagnosed early enough to save their sight, or are not able to have surgery when they need it.

## Beating Blindness, a World Challenge

Around 80 per cent of the 1.5 million blind children in the world live in Africa or Asia. Most of this blindness could have been prevented with the right diet, and immunisation against measles.

So what is the cause of blindness in adults and children in developing countries?

One common factor is cataracts. They are the major reason for blindness in adults all over the world — including industrialised countries like Britain. In much of Africa and Asia they are responsible for half of all blindness.

A cataract is when the normal crystalline lens (see figure 2) in the eye becomes opaque. The cataract stops light entering the eye resulting in gradual loss of vision. Cataracts give the pupils a white cloudy appearance. The condition usually develops in both eyes over a period of time.

The cause of cataracts is not yet known, and there is therefore no way of preventing

them. However we do know that they are usually related to age — the older a person is, the more likely he is to develop cataracts. Most people with cataracts are over 50 years-old.

**Operation**

This means that as life expectancies increase, more and more people will go blind from cataracts.

Cataracts can frequently be treated with a relatively simple operation taking 15 to 20 minutes. In developing countries the operation can cost as little as \$8 with the help of funds from organisations such as the Royal Commonwealth Society for the Blind, also known as Sight Savers.

Sight Savers also provides medical equipment, and trains ophthalmic medics and other personnel who can run permanent or temporary clinics, enabling people to be diagnosed — even those in remote villages.

Nearly three million people have been saved from cataract blindness in this way. With the help of special cataract spectacles they are able to see well again.

Another common cause of blindness worldwide is trachoma. It is an infection associated with poverty, overcrowding, an inadequate water and sanitation system, and a hot dry climate. It is passed by contact with the fingers or clothes of an infected person, and by flies that carry the disease.

Trachoma causes itching and inflammation. A person can suffer from it once and not be blinded. But getting infected several times can mean scarring of the upper eyelid and cornea, (see figure 2) often resulting in severely impaired vision.

Antibiotics, as well as clean water and health education, are the answer to beating trachoma. In severe cases surgery may also be necessary.

The ODA sponsors Sight Savers and other voluntary organisations who set up clinics in developing countries. Medical teams treat whole families with antibiotic ointment. This is important as the infection spreads quickly through a community, and children under ten are particularly susceptible.

**Antibiotic**

Without access to the Sight Savers clinics many more people would go blind from trachoma. Antibiotics are expensive, and many communities in the developing world have little access to clean water supplies.

Shortage of trained eye care workers is the major problem in treating glaucoma sufferers too.

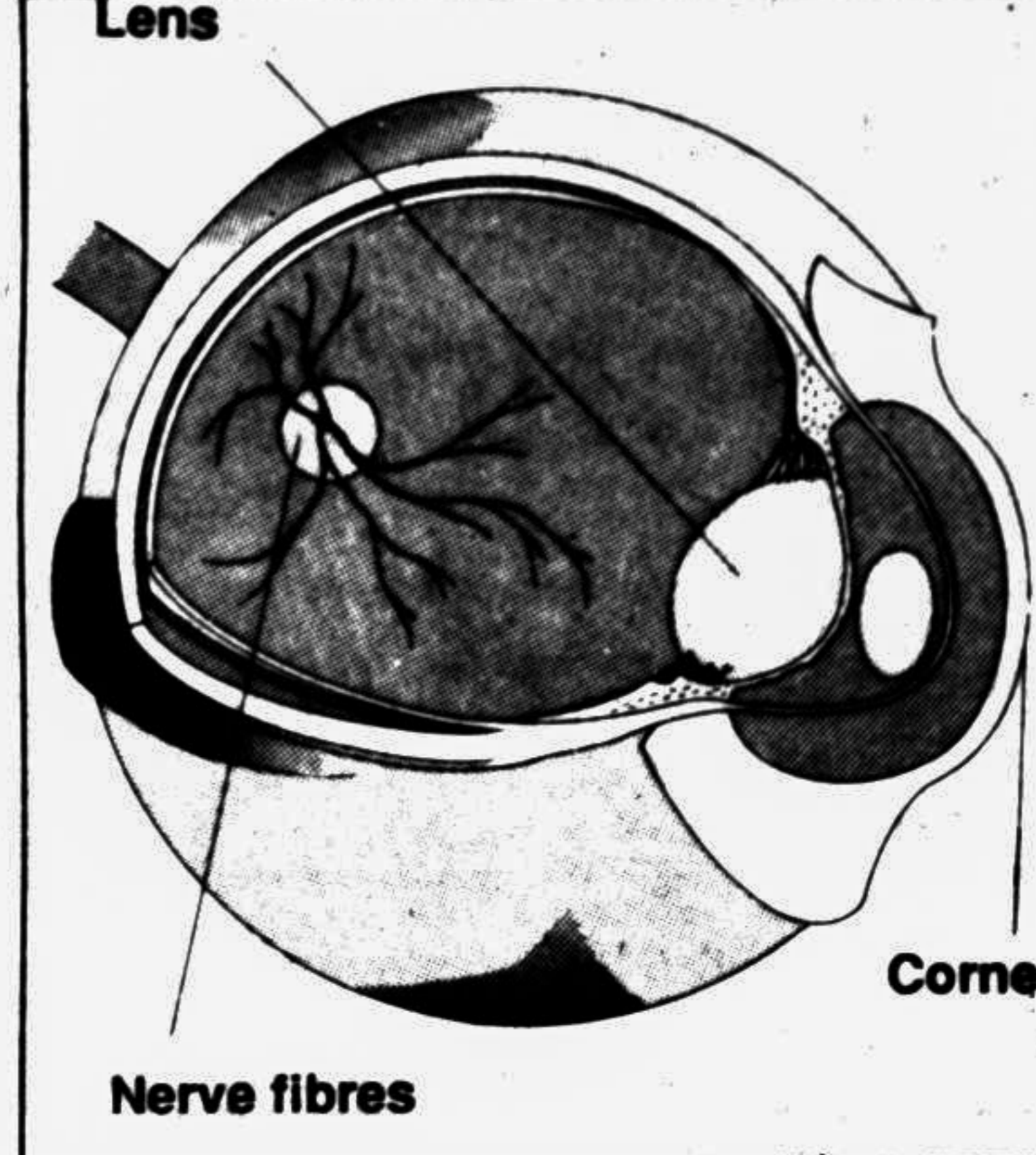
Glaucoma is the loss of vision caused by the effects of increased pressure inside the eye. High pressure can damage the optic nerve fibres (see figure 2).

The cause of glaucoma is fluid not draining away effectively from the eye.

**Diagnosed**

Glaucoma is difficult to diagnose, and in the developing world where there is a shortage of trained eye care medics, the condition is often only spotted when one eye is blind and the other already damaged.

A simple operation can control the progression of the condition, and Sight Savers provides equipment and training to help more people benefit from the operation.



Eye disorders and blindness can also be caused by a variety of injuries due to everyday activities or accidents. These injuries are known as trauma. In developing countries trauma can often be the result of sand or dust in the eyes.

If eye injuries are not treated promptly, serious complications can arise. Trained personnel who recognise just how to deal with the injury, as well as clean water and local anaesthetic drops, are essential.

For many poor or isolated communities in developing countries these essentials are not available.

Trauma is a common cause of blindness in children all over the world. Measles and malnutrition also play a major role in blinding children.

Children between the ages of one and six are vulnerable to blindness from vitamin A deficiency. And blindness is not the only result. Sadly more than 50 per cent of children blind through vitamin A deficiency will die if they do not receive good medical attention.

**Supplements**

Sight Savers says much childhood blindness could be prevented if all communities in developing countries had good access to healthcare, vitamin A supplements for young children, and immunisation against measles.

Much adult blindness too could be avoided or reduced if only more trained health workers, equipment and other resources were available. — CD.

## Wonders of the Vegetable Bin

**S**IX ordinary foodstuffs that medical researchers think have potent effects on cholesterol and cancer

**CELERY.** Long valued (for their low calorie content) as diet food, the green stalks may be even better for the heart. Researchers at the University of Chicago reported April that rats experienced a 12% to 14% drop in systolic blood pressure and a substantial reduction in cholesterol levels after four weeks on a celery diet. The rodents were injected with a tiny amount of celery extract a day; a 68-k human would have to gobble four large stalks for the same proportionate intake. Stalks, however, unlike extract contain lots of undesirable salt. The cardio-friendly ingredient in celery is a compound called phthalide that may also exert a mild sedative effect on humans.

**BROCCOLI.** This member of the cabbage family is rich in a little-known substance called indole carbinol, which breaks down estrogen, a hormone that seems to promote the development of certain breast tumors. Scientists believe about a cup of broccoli every other day could contain enough indole carbinol to prevent the growths. So far, research has shown a pronounced effect on mice; preliminary studies are being carried out on 50 women who are

at high risk for such cancers. Broccoli and its relatives also contain beta carotene, a substance that could help ward off lung, throat and bladder cancer. The same compound may also reduce the risk of heart attack. Researchers at Harvard Medical School report that men with clogged arteries who were fed beta carotene supplements suffered half as many heart seizures and strokes as did men given placebo pills.

**GRAPEFRUIT.** Researchers think pectin, the gelling agent found in the peel and white membrane that surround

inhibit the body's production of prostaglandins, hormone-like substances that can contribute to the formation of tumors.

Tests on animals have been promising, but human trials have not yet been conducted. Linolenic acid could also be a potential weapon against asthma, arthritis and psoriasis. Europeans and Canadians consume lots of flaxseed in their bread and cereals. Few US manufacturers back with the grain.

**GARLIC.** The "lowly stinking rose" may lower blood pressure slightly and help prevent blood clotting, like aspirin. A recent German study showed marked reduction in blood fats, including cholesterol, among people who consumed the equivalent of one clove of garlic a day. The active compounds are probably the same sulfur derivatives that give garlic its distinctive odor. Other studies suggest that sulfur compounds may suppress the development of stomach cancer in humans and breast cancer in laboratory animals.

Garlic does not have to be eaten raw, but deep frying and high heat could destroy its active ingredients. If the idea of fresh garlic is just too malodorous, a German-based company markets a tablet form, which it claims is scent free.

**SOYBEANS.** A mainstay of Asian cuisines, soybeans can be boiled, canned or processed as bean curd (tofu). Last year researchers at the Bronx Veterans Affairs Medical Center and the Mount Sinai School of Medicine in New York City found that lecithin, which is abundant in soybeans, may help prevent alcoholic cirrhosis of the liver.

Isoflavones in the beans have been shown to prevent liver cancer in animals by breaking down toxic agents that can cause the malignancy. A strong word of warning about soy: it also contains protease inhibitors, which have been linked to the development of pancreatic cancer — J.H.

**I**NFANT deaths in Nepal have fallen sharply, largely due to immunisation.

Yet, despite the high political commitment of the government, the immunisation campaign's success remains limited to some districts only.

Almost a quarter of Nepal's children die before their fifth birthday. For those who live, more than half suffer from mild to moderate malnutrition, and an equal number are disabled.

The expanded immunisation program, first launched in 1977, was intensified recently to help achieve universal child immunisation at a minimum of 70 per cent coverage by 1990 to stop infant deaths that could be prevented.

"Nepal has had a lot to contribute to the progress achieved in global immunisation in the last 10 years and, given the political will, should be contributing more in the coming decade," says UNICEF, the United Nations Children's Fund.

By 1988, all six vaccinations required for children under the age of one were available in each of Nepal's 75 districts. Immunisation coverage went up considerably in the five years between 1985 and 1990. In 1985, the coverage was only 20 per cent of the eligible population. Data received from 55 districts indicate that the national average for BCG had reached 98 per cent while those of DPT and oral polio vaccine had reached 82 per cent and 81 per cent, respectively. Measles coverage stood at 69 per cent.

The progress results were announced to coincide with a decision to open the new regional office of UNICEF in the Nepali capital in what the government sees a bigger role for the UN agency in promoting child health and development in South Asia.

The regional office would cover Bangladesh, Bhutan, India, the Maldives, Nepal and Pakistan, which together with Sri Lanka, make up the South Asian Association for Regional Cooperation (SAARC).

The decision was conveyed to Prime Minister Krishna Prasad Bhattarai by visiting UNICEF regional director for

## Immunisation Campaign Successful in Nepal

South and Central Asia, Dr. Karl Eric Knutsson.

UNICEF has been working in Nepal since 1960 and has provided substantial assistance with the main focus on bringing down child and infant mortality rates through health, nutrition and education.

The regional office here appreciates the high level of commitment by the new government installed following the movement for the restoration of multi-party democracy last year, officials said.

"The intended global targets for children and development present a challenge which demands concerted international action," Prime Minister Bhattarai said.

"As an active member of the United Nations, Nepal proposes to participate fully in its programs for the Fourth Development Decade," he said, adding that it was in this spirit that Nepal ratified the Convention of the rights of the Child

**No Excuse...**

HIGH POPULATION GROWTH CAN HAVE ADVERSE POLITICAL, SOCIAL AND ECONOMIC EFFECTS ON A SOCIETY.

A STUDY BY THE POPULATION CRISIS COMMITTEE SHOWS THAT MANY COUNTRIES WITH SERIOUS POPULATION PROBLEMS HAVE FAILED TO MAINTAIN STABLE GOVERNMENTS WITH GOOD RECORDS ON CIVIL AND POLITICAL RIGHTS. MANY, TOO, FAIL TO DELIVER ADEQUATE BASIC SERVICES LIKE HEALTH AND EDUCATION.

POPULATION INCREASE, ALONG WITH MIGRATION, CAUSES GAPS IN FOOD SUPPLY AND CONTRIBUTES TO CHANGES IN THE GLOBAL CLIMATE.

BECAUSE LAND HAS BEEN OVERUSED, AS MANY AS 500 MILLION PEOPLE NOW LIVE IN ABSOLUTE POVERTY.

THE CHAIN OF PROBLEMS EXTENDS TO OTHER AREAS—HOUSING, WATER, AND SANITATION.

THERE IS A NEED TO STOP THAT CHAIN OF MISERY.

DEPT/NEWS

last August.

UNICEF provides a US \$49 million grant assistance to improve health, education and water supply in Nepal for 1988-92. One of its main objectives is to reduce infant mortality rate from 113 per thousand to 90 per thousand during the period.

Emphasis recently has been on women as potential mothers and income earners. The new strategy paper gives priority to problems of mother and children in all the SAARC member states.

The State of the World's Children reports says that the immunisation program in Nepal has greatly contributed to reduce the infant mortality rate from 187 in 1960 to 125 in 1989.

"Given the geographical constraints and the lack of adequate transport, educational and communication infrastructure of the country, the progress achieved in this field was close to a miracle," says Alireza Mahallati, chief of health and nutrition at UNICEF, Kathmandu.

The immunisation program has not been as successful in some districts as in others. The state-run news agency reported that four persons died of measles at Bhujung village in northwest Nepal's Lamjung district. Many people have complained of lack of treatment facilities.

UNICEF says the most important factor for its success in some districts was the high level of political commitment which persuaded external donors to provide more assistance for the immunisation program.

The plan of operation is aimed at reducing the under five mortality rate from the estimated 165 in every thousand in 1986 to 140 in every thousand by 1992, at accelerating universal child immunisation, and at achieving 75 per cent coverage of women aged between 15 and 44 years with tetanus toxoid immunisation by 1992.

Another important factor was the creation of public awareness about the dangers that children are exposed to in the absence of immunisation.