

Can We Afford 140 Million?

By Nasrin Sobhan

Bangladesh has achieved some success in its birth control programme, but the situation calls for the adoption of drastic measures, unless we want to be faced with major economic and social disaster.

Dhaka it is a common sight to see a ragged woman on the street with two small children walking beside her, a baby in her arms and another baby obviously on the way. Such a woman would be grateful to be taught a quick, safe and effective way to practise birth control. She can rid herself of the burden of endless childbearing with its accompanying poverty, ill-health, malnutrition and general misery, and ensure a better life for her child at the same time.

Babies in China are spared the miserable fate of the majority of Bangladeshi babies. The average Chinese baby is well-fed and well-clothed. When he grows older he can look forward to schooling and a steady job. He will never have to stand on the streets and beg, or hunt for a job where there are none to be had, or die prematurely of malnutrition or disease. One of the reasons for his better standard of living is that he is an only child, a result of China's vigorous and stringent family planning programme.

There are many dimensions to family planning programmes: organisational infrastructure, a sufficiency of trained personnel and family planning clinics throughout the country, availability of, and access to materials and funds for the agencies involved in family planning, efficient distribution methods and storage facilities for contraceptives, and adequate education of the population by way of publicity via the media of television and radio, and counselling programmes for young couples and persons of childbearing age.

However, a large part of the success of any family planning programme must be attributed to the birth control methods offered by the government.

In China the most commonly used methods of birth control include pills, different types of IUDs and condoms. However, there are now a number of other techniques

which are being researched and used.

Among the new contraceptive methods offered to women are:

1. Norplant or sub-dermal implantation, where 6 pieces of the compound levonorgestrel are implanted under the skin of the arm. The implant is effective for approximately five years. There can be amenorrhoea and irregular bleeding in some cases, but it is a popular method both in China and Indonesia.
2. Female sterilisation by the occlusion method. A mix-

injected once a month. They are normally used in combination with oestrogen to prevent bleeding. Research is underway to increase dosages so as to render them effective for longer periods.

4. Long lasting oral pills, taken once a month.

5. Ru 486 or abortion pill, to be used the morning after. The research on these pills has been completed. They will be issued as soon as clearance is obtained from the Ministry of Health to be put into use.

6. The morning-after or post-coital pill, used with nor-

cities, and are able to meet only during holiday periods.

Abortion by the vacuum suction method is also widely available.

Recently, there has been increased research and emphasis on male contraceptive methods. These methods have the advantage of being simple, effective and safe. It is the opinion of experts in Bangladesh that they are particularly significant in their potential for use in Bangladesh.

1. The first of these is a new procedure called the non-scalpel vasectomy. A pointed clamp is used to puncture the scrotum and the vas is ligated. Since there is no surgery, the patient is able to walk out of the clinic and resume normal life immediately. A thousand sets of these instruments have been presented to the Bangladesh government for use in the family-planning programme. Experts believe that this method can be both effective and popular.

2. Chemical occlusion: a semi-solid polymer is injected into the vas. The substance solidifies in the vas and prevents the passage of sperm. The polymer, which is sometimes found to have toxic side effects, is soon to be replaced by a silicon rubber compound. Research is still being conducted into this technique, and a limited number of subjects have been tested. WHO is interested in organising a workshop to popularise this method. It is fairly safe, and there have been reports of a 100% recovery rate after removal of the silicon plug.

3. A long-acting testosterone injection which can be taken once a week. This product is still in the clinical trial stage. WHO is into its 2nd year of research, part of which is aimed at altering the compound so that it can be given once a month.

4. Male anti-fertility drug Gosypol. This is still being studied because gosypol (-) has been found to have toxic side-effects.

While the importance of effective planning and imple-

mentation at government level cannot be overemphasised, it is also imperative to have an efficient monitoring system to oversee the birth control programme and to ensure its success at all levels from the villages. The monitoring agency at the lowest level could be the union council itself, or a committee set up by the council, which would be responsible for encouraging the population to follow the family planning directives of the government. The Grameen Bank policy, which has proved so effective in other areas could be used as the model for a system of incentives where unions achieving a successful lowering of the birth rate would be rewarded with money for development projects, and other forms of assistance.

In China, for example, part of the monitoring process is carried out by old ladies in every neighbourhood committee, who have lists of the names of all women of childbearing age in the area. They go round the houses every month to check if the women have had their menstruation on schedule or not. If not, appropriate measures are taken to ensure that the goal of the single-child family is adhered to.

Bangladesh has a population of 114 million in an area of approximately 55,000 square miles. It is estimated that by the end of the century the population will have reached 140 million. For a country of this size, and bearing in mind the pressing nature of its economic problems, any further growth in the population would be nothing short of catastrophic.

Bangladesh has achieved some success in its birth control programmes, but the situation calls for the adoption of drastic measures, unless we want to be faced with major economic and social disaster on an unprecedented and unmanageable scale.

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The Day Maria Took a Hypnotic Toffee

Long-distance buses in Colombia carry signs warning people not to accept refreshments, liquor and sweets offered by strangers. Colombians take the warning seriously.

They know that even the smallest toffee offered by a fellow-traveller could be drugged with scopolamine — or burundanga, as the hypnotic drug is known locally.

In recent years there have been more than 6,000 cases of Scopolamine intoxication in the country's largest cities. In several instances the alkaloid has caused death or permanent disability.

Normally scopolamine poisoning is not fatal. In most cases on record people given the drug are swiftly reduced to a helpless trance, as if by hypnosis, and their power to resist is obliterated.

In this zombie-like state they can be manipulated at will by criminals and robbed with ease in full view of the public without arousing suspicion.

Early one morning Maria Jimenez, a shopowner in the western city of Cali, left home in a fashionable middle-class district and was about to enter her car when a man approached her. He handed her a sheet of paper — and that is the last thing Maria remembers.

She came to 24 hours later in a Cali clinic. A passing driver had found her sitting by a road in a state of amnesia. After Maria returned home, she found it had been stripped of everything of value.

On visiting her bank she found that while under the influence of scopolamine given her by the thief she had called there and withdrawn all the money in her account. The case had gone. Presumably, under hypnosis brought on by scopolamine, she had meekly handed over the money to the man who drugged her.

The case remains unsolved. One reason is that Maria cannot remember the appearance of the thief who accompanied her to the bank and instructed her to withdraw her savings. Amnesia is a characteristic of scopolamine intoxication.

In a sense, Maria, whose surname has been altered in this report, was fortunate. She made a full recovery. Under scopolamine, she could have lost the contents of her shop if

the thief had ordered her to take him there.

She would almost certainly have handed over her merchandise to the man because people hypnotised by scopolamine obey instructions blindly without appreciating the consequences. To the casual observer, their behaviour appears relatively normal.

As in so many cases, it is still a mystery how the thief administered scopolamine to Maria. Possibly he numbed her with a paralysing gas spray before giving her a drugged sweet or soft drink. Some thieves jab their victims with a syringe, filled with an anaesthetic.

Scopolamine began to

burundangueros are the street-corner refreshment stalls, common in Colombian cities. Motorists often stop their vehicles at the stalls to buy a beer and — as in Maria's case — that is the last thing they remember.

They are sold drugged drinks or snacks and when they recover, find both cars and wallets have vanished. A popular Colombian television comedian, Fercho, lost his car this way.

The burundangueros are also active in red light districts, sports stadiums, passenger terminals and buses. Travellers are drugged either before entering a long-distance bus or during the journey. After being robbed they are left

Colombia is notorious as the world's largest exporter of processed cocaine. In the Andean republic itself not cocaine but another drug, scopolamine, presents the greatest threat to the public. Gemini News Service explains why Colombians fear the hypnotic drug used with devastating effect by criminals.

by Peter Nares

attract the attention of Colombian doctors 25 years ago after a party of boy scouts camped out in the hills near Bogota. One ate the fruit of a wild plant and within minutes began acting wildly. His face turned red and his speech was incoherent.

Doctors discovered he had eaten the fruit of the Andean plant, the borrahero, the intoxicant that contains scopolamine. Criminals began to harvest the plant and isolate its alkaloid element. Today they are on the black market for modest prices.

Thieves administer scopolamine mixed with tranquilisers because if swallowed the drug can make people aggressive. There is little evidence to support Colombian press reports that scopolamine thieves can hypnotise people merely by blowing drugged cigarette smoke into their faces.

In any event, the burundangueros, as the thieves are dubbed, do not have to resort to such James Bond-style methods. They just have to catch people offguard for a second or two in the street or in buses and give them a drugged refreshment.

A favourite haunt of the

comatose in the vehicles. Usually, they recover within 24 hours to a week. But not always. One young woman, drugged on a bus journey to the western city of Pasto, died. A major dose of scopolamine can be fatal. Even an average dose can result in death if the drug is ingested by the elderly, diabetics, or people with coronary ailments.

Crime aside, scopolamine — or hyoscyne as it is also called — is used by doctors for its hypnotic powers. In the treatment of patients, it is often combined with morphine.

But when abused, the alkaloid can cause psychiatric disorders. One soldier given a drugged drink now has the mental age of a five year old where before he had been a model soldier.

The borrahero plant is not exclusive to Colombia, but it seems to be the only country in which scopolamine is used for criminal purposes.

GEMINI NEWS
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A healthy Chinese baby (top) and a hapless Bangladeshi mother with her malnourished children.



ture of quinine and carbolic acid is injected into the fallopian tubes. This causes corrosion of the tubal epithelium, and prevents pregnancy. This procedure is however, almost impossible to reverse.

3. Once a month injectables for women. In this process certain contraceptive drugs such as megestrol acetate are

ephystron. These are oral pills with a higher dosage, and are used daily for two weeks. These are distributed widely in the factories and other workplaces, and are also available in pharmacies and shops. They are not only effective, but are in great demand in China especially in cases where couples live and work in separate

Corneal Opacity Blinding 30,000 Children a Year

Md. Manirul Islam Khan

THE human eye is a marvellous example of the work of the creator god. It allows us to understand the world around us in colour and in space. It gives knowledge of shape and distance. We communicate, navigate and appreciate the wonder of God's creation with our eyes.

One of the key parts of the eye is the cornea that almost unique piece of human tissue which is completely transparent. It is the window of the eye, the place through which

we look out. It is surrounded by the white sclera and supported behind by the black iris, which gives it a generally black look. Certain things can damage this window beyond repair. Things like nutritional deficiency, infections measles for instance, or trauma — a thorn or stick injury can make it opaque.

Prof. Ahmed Sharif said at a recent seminar corneal opacity is the cause in nearly half of the one million blinds of Bangladesh. Moreover, thirty thousand children are becoming blind each year in this country due to diseases of the

cornea. Malnutrition, repeated episodes of diarrhoea and Vitamin A deficiency related to measles, have been identified as major causes. But poverty, illiteracy, and superstitions which are widely prevalent in our society are definitely the underlying reasons of this widespread morbidity.

Many programmes have been undertaken to prevent blindness in the country. But unfortunately, blindness related to corneal opacity have often been overlooked. The Sandhani National Eye Donation Society was the first organisation to come forward

and take up measures for its prevention.

Prof. Sharif also said initially we tried to find out the magnitude of the problem. On the basis of over experience, we established an effective organizational set up. The society has been successful in promoting posthumous eye donation movement, resulting in a very encouraging number of eye pledges. They would remain as the potential sources of corneas in future. Besides, the number of corneas that have been collected and transplanted is also quite satisfactory. Health education pro-

grammes for the prevention of blindness have also been taken up.

Prof. M. A. Majed said at the seminar of the National Eye Donation Society of Shandhani it is a matter of grave concern that each year thousands of our children are blinded due to nutritional causes.

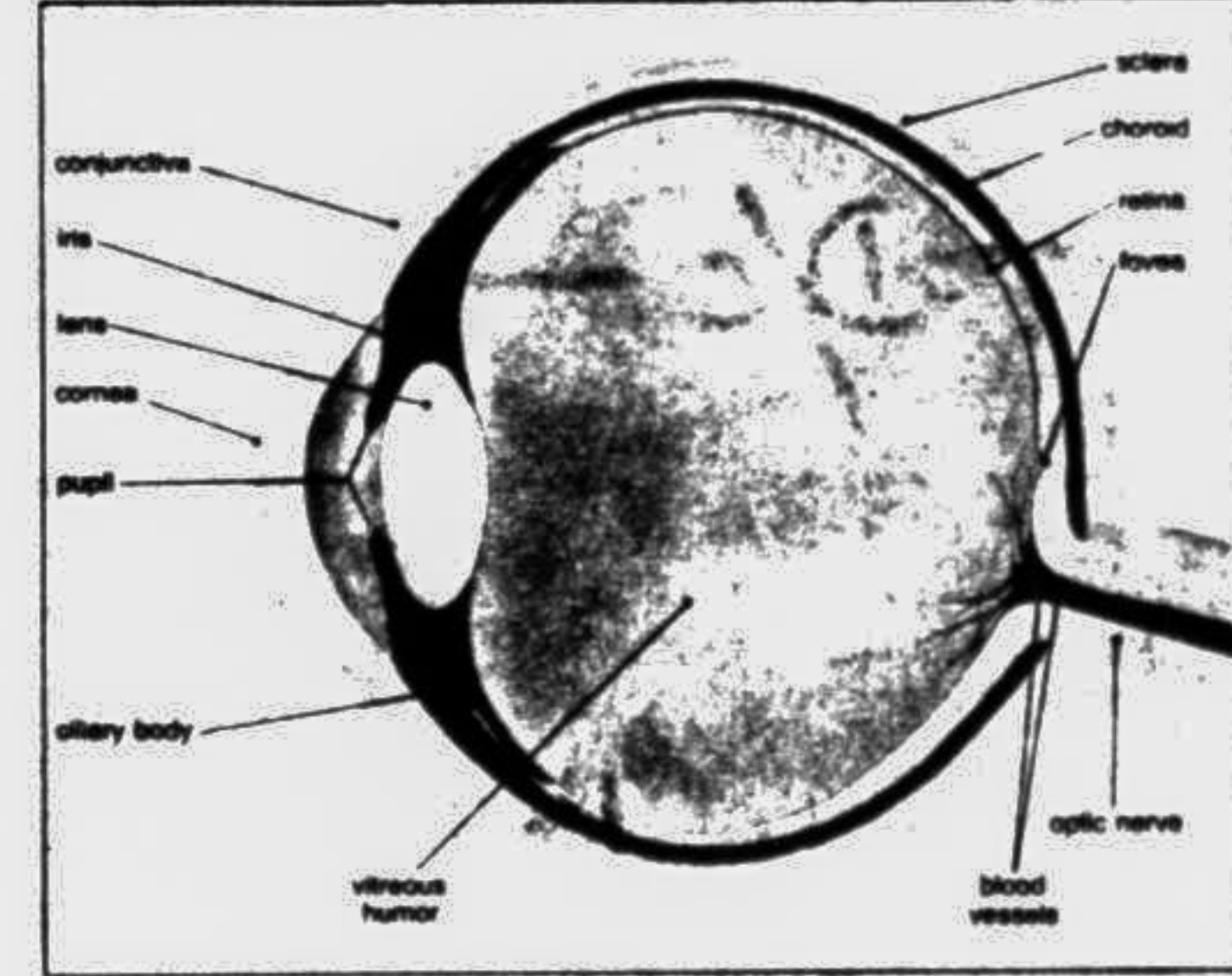
The only substitute for a damaged human cornea is another healthy one. About 90% cases are successful in improving vision.

There is no bar to donation of eyes in any religion. After burial, the human body gets decomposed and gradually ab-

sorbed in the soil. If such a body can be reformed during resurrection it is only logical to think why a person who has performed such a noble sacrifice should not get his eyes back at that time.

Shandhani National Eye Donation Society has collected about three hundred corneas from 1984 till 1990.

Many eminent personalities of our country have pledged their eyes to our cause and eyes have also been collected from some of them after their demise.



SOON A VACCINE AGAINST LYME DISEASE?

German researchers have recently discovered a weak point in the pathogen of a severe tick-borne disease.

Research work at the Max Planck Institute for Immunobiology in Freiburg is providing reason for hope that soon a vaccine might be available against Lyme-Borreliosis, which is transmitted by ticks, and whose pathogen is the bacteria Borrelia burgdorferi.

This step forward was achieved by researchers around Dr. Markus Simon in the department of Cellular Immunology, which is headed by Professor Klaus Eichmann.

Researchers were able to detect and isolate individual protein structures on the surfaces of the bacterial pathogens, and then use them as "molecular targets".

Furthermore, in animal experiments they have already developed an effective vaccine against this disease, which has proven to be so treacherous to mankind.

For only in every second case does a ring-form redness, an erythema, begin spreading after a bite from an infected tick. Symptoms such as fever, cramp-like pains in the joints,

night sweat and fatigue frequently appear only after weeks.

These symptoms are often ascribed to other causes in so far as inflammations of the dura mater, the cardiac muscle or the nerves do not appear, as is the case in especially serious conditions.

Finally, in the chronic state the disease looks deceptively like rheumatism or gout with the corresponding cramp-like joint pains.

After having been identified for the first time in the American town of Old Lyme in the seventies, it is evident today that the disease, at least in the Federal Republic of Germany, is being diagnosed more and more frequently.

According to studies, on average three percent of all citizens are already supposed to have been infected.

Naturally, before the vaccine is developed, the only remedy is caution. Whoever is bitten by a tick should definitely seek medical attention whether a reddening appears around the bite or not. —GRS.

The Way to Save Babies from Death by Pneumonia

Accurately timing the rate at which an infant breathes could be far more useful in diagnosing the deadly disease of childhood pneumonia than listening to the child's chest with a stethoscope.

So says Professor Vijay Kumar, former head of the department of paediatrics and community medicine at India's Postgraduate Institute of Medicine in Chandigarh, and now a consultant for the World Health Organisation (WHO). He was talking in Colombo, where a WHO global programme for controlling respiratory infections in children was unveiled.

Acute respiratory disease constitutes one of the major killers of children. Four million die each year. Most deaths take place in what is euphemistically called the developing world — and more than 70 per cent are due to pneumonia or lung infection.

In the Third World, unlike in the developed world (where virus infections are more common), over two-thirds of these pneumonias are caused by bacteria such as streptococcus and haemophilus. Both are amenable to antibiotic therapy.

Most pneumonia deaths can be prevented if the disease is recognised early and treated properly. The WHO meeting aimed to update paediatricians working in city hospitals and general practitioners and health workers practising on the periphery.

It is vital that a child's illness is recognised early as a potentially dangerous pneumonia so that the child is taken to a doctor in time and

started on a proper course of treatment.

Kumar's most important message was that one does not have to wait for a laboratory test or a chest X-ray or even a stethoscope to be put on the

child's chest to diagnose pneumonia. The important criteria are:

- * An increased respiratory rate — based on the fact that a child with lung infection breathes more rapidly than

normal:

- * Indrawing of the muscles between the ribs — caused by the increased respiratory effort required to suck air into the infected lungs.

such programme.

After a year the number of deaths from pneumonia was 8.1 per 1,000 children under five in the intervention area and 17.5 in the other villages. The drug used to treat

death from pneumonia, so even milder cases in this age group the best managed in hospital.

The other important fact brought out at the WHO meeting is that most children

The 60-second life saver

Timing a child's breath rate can be a means of early diagnosis of pneumonia

4 million child respiratory deaths per year

Healthy child's breath rate

0-2 months:	60 bpm (breaths per minute)
2-12 months:	50 bpm
1 year and over:	40 bpm

Source: WHO

Four million babies die of pneumonia every year — most of them in the developing world. Nearly all deaths can be prevented if the disease is recognised early and treated properly. A distinguished Indian professor says that to do this, accurately timing the rate at which an infant breathes is far more useful in diagnosing pneumonia than listening to the child's chest with a stethoscope. Gemini News Service reports on a number of ways to save children's lives. By Sanjiva Wijesinha

Based on such criteria, a health worker in the village, or even a sick child's own mother, would be able to detect early that a child has pneumonia. Being aware of the initial signs of this deadly disease, they will easily know when a child needs medical attention.

It naturally follows that they should be armed with the knowledge of where the child should be taken for appropriate treatment.

In fact, the number of deaths due to pneumonia could be lowered with better community knowledge of the disease and the availability of a very cheap drug, according to a study reported in the British Medical Journal The Lancet.

In 1988 the Society of Education, Action and Research in Community Health introduced a programme of intensive health education, improved child care and immunisation into 58 villages in central India and compared them with 44 other Indian villages where there was no

pneumonia, co-trimoxazole, costs 2.5 US cents a child per year. The study showed that giving people in the community adequate health information and then making them responsible for seeking health care, would pay dividends.

As far as practical advice to parents and health workers is concerned, the normal values for respiratory rates in children should be:

- * Child under two months — 60 breaths per minute
- * Child between two and twelve months — 50 breaths per minute
- * Child over one year — 40 breaths per minute

If a sick child is breathing at a faster rate than this, the child needs an oral antibiotic. In addition to rapid respiration there is also chest indrawing, it is better to hospitalise the child and begin a course of antibiotics by intramuscular or intravenous injection.

Children under two months are the most susceptible to

with coughs do not need antibiotics. All they need is normal feeding, increased amounts of fluids, warm sweet drinks such as lemon tea, coriander water etc. to soothe the throat — and observation to make sure they do not develop the features of pneumonia.

So the take home message from WHO is this: to detect early pneumonia in children, counting a child's respiratory rate (with a watch or stopwatch) is more useful than waiting for a doctor to examine the child's chest with a stethoscope or an X-ray.

Once the stopwatch has detected the child needing treatment for pneumonia the next step is equally important. The child must be taken to a doctor — one preferably armed with a stethoscope — so that treatment with an appropriate course of antibiotics can begin.

GEMINI NEWS
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