Non-drug Therapy for Hypertension

by Major Md Shamsul Hoque

HYPERTENSION is a very common condition and is an acute public health problem all over the world. It is a secret threat to human health, causes innumerable sufferings and death, even in apparently healthy individuals. In 95 per cent of cases of hypertension, the cause or causes are not clearly identifiable.

Hypertension is usually symptomless and popularly known as a silent killer and has established risks of cardiovascular, cerebrovascular and renal diseases. Majority of the patients have diastolic blood pressure ranging from 90-110 mm Hg. It has been observed that many patients do live well without drugs and some, inspite of drug therapy, do not keep well. Treatment of blood pressure is an important part of prevention and which is indicated when endorgan gets damaged. The plan of treatment should include regularly reviewing the prognosis till the patient feels better.

No drug is free of side effect, so many problems like untowards drug reaction could be avoided by not starting antihypertensive treatment.

Recently, a research on non-drug therapy in hypertension has been carried out at Combined Military Hospital, Dhaka Cantonment. A total of 20 patients with no complications were selected and hospitalized for a duration of two weeks. All the hospitalized patients had to follow a strict regimen as under:

— *Walking on a treadmill set with progressive increase in distance and decrease in time.*
— *Progressive relaxation therapy.*
— *Deep breathing exercise and meditation.*
— *Low sodium diet less than 2.5 g common salt, per day*
— *Daily calorie intake was up to 2000 k cal.*

The aim of the research is to

— ease the suffering of the apparently hypertensives.
— reduce the unnecessary drug use.
— give a economically productive and socially desirable life.

The preliminary findings indicate that in control situation, the aims are achievable. Two weeks were enough to control hypertension with no drug.

The followings are the important findings

Mean age 39.70 (Range = 26 to 55 years)

	Average Initial	Final
Weight (Kg)	62.70	61.17
Systolic Blood pressure (mm Hg)	158.50	126.30
Diastolic blood pressure (mm Hg)	107.05	81.30
Serum Electrolytes		
Sodium (m Mol/l)	139.75	124.14
Potassium "	4.32	4.74
Chloride "	99.93	98.52
Lipid Profiles		
Serum Cholesterol (mg/dl)	219.83	218.28
High density lipoprotein "	57.97	60.35*
Low density lipoprotein "	123.15	122.42
Serum Triglycerids "	166.28	148.29
Serum B-lipoprotein "	485.40	463.15
Serum total Lipids "	846.00	808.11
Others		
Urea (mg 3 d l)	28.32	30.11*
Creatinine "	1.25	1.13
Sugar (F) "	99.73	94.58

*Post exercise increase

Malaria Mosquito Becomes Invincible

by Mahesh Uniyal

Attempts to eradicate the mosquito carrying the debilitating fever have been unsuccessful and experts believe malaria control programmes can only aim to keep the disease from spreading.

INSECTICIDE-resistant mosquitoes and "smart" germs are foiling efforts to eradicate malaria in developing countries.

Experts say there is no 'magic bullet' cure for the debilitating mosquito-transmitted fever that has become the Third World's most serious public health problem.

Every year over 100 million people contract malaria, and over a million die annually from it, says the World Health Organisation(WHO). About 90 per cent of malaria cases and 80 per cent of the deaths occur south of the Sahara in Africa.

Eradication is an unrealistic goal and malaria control programmes — a mix of anti-malarial drugs and personal protection measures — can only aim to keep it from spreading , according to experts at an international meet here early this month.

Malaria is transmitted by the female mosquito. Experts have identified some 70 species which carry the parasite.

But all attempts to kill the malaria-carrying mosquitoes have been unsuccessful as it is a hardy survivor and quickly develops immunity against insecticides.

In several Asian countries, the resurgence of malaria in the mid-1970's was directly due to increased mosquito resistance to DDT, the most commonly used pesticide, experts say.

Mosquitoes multiply very easily. Rain water in discarded containers and even water that has collected on the hoof prints of cattle are sufficient for mosquitoes to spawn.

Unlike smallpox which was eradicated with the development of an effective vaccine, malaria control was marked by initial success, particularly in South and South-east Asia. But subsequent attempts to control, the disease have resulted in failure.

"Malaria is more complicated because the potential for transmission and the effectiveness of control measures varies with the different characteristics of the plasmodium (parasite), climate and physical environment, and the habits of people vary from place to place," says Peter I. Trigg of WHO.

Experts say that the parasite has a remarkable capacity for adapting to drugs. In several regions in South-east Asia, more than half the cases of falciparum malaria (cerebral malaria), which can be fatal, can no longer be cured with mefloquine, which has only been in use since 1984.

Since the discovery of quinine in 1820, researchers have been on the trail of a foolproof drug to kill the malaria parasite.

Mefloquine and halofantrine are some of the more recent ones that indicated promising results.

Recently, medical researchers have been excited by the rediscovery of an ancient Chinese cure based on the herbal plant called artemisia annua or sweet wormwood.

Artemisinin, or qinghaousu in Chinese, the substance extracted from the herb, clears the blood of malaria parasites faster than any other anti-malarial drug, experts say. Its is especially effective against cerebral malaria. Testing for international registration is in the final stage.

The search for the elusive 'magic bullet' hinges on the successful development of a malaria vaccine. A Colombian scientist, Manuel Patarroyo, has developed a vaccine that is reported to be only 50 per cent effective.

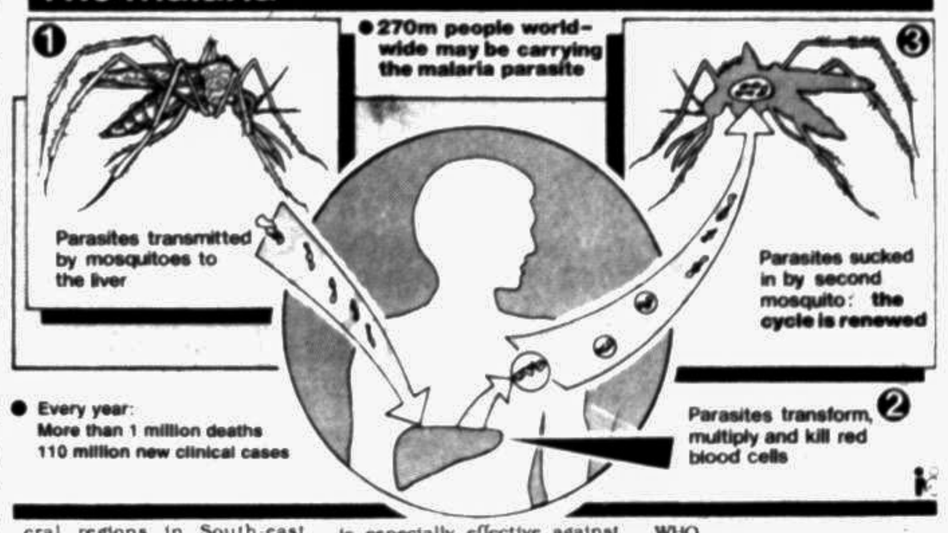
Experts say that the ideal vaccine must attack all stages of the parasite's growth with in the human body. Moreover, the parasite is in the bloodstream only for 15 seconds and cannot be attacked after it enters the blood cells.

Scientists are experimenting with biological pesticides which kill the mosquito larvae. Indian researchers have developed two bio-pesticides which attack the mosquito larvae but do not harm useful insects like honey bees and silk worms.

Larva-eating fish have also successfully been introduced on an experimental basis in India, Burma, Nepal and Thailand to prevent mosquitoes from breeding, according to WHO.

India's indigenous medicine systems and the Peruvian Indians were the first to advocate the use of the bark of the cinchona tree, from which quinine is extracted, for treating malaria.

However, it was only late in the 19th century when the malaria parasite was discovered and the female mosquito identified as its carrier that systematic control became possible through drugs and insecticides.



Low Quality Drugs Pose Threat to Million's Health

LAST month, US President George Bush and the presidents of six Latin American countries held their second 'Drug Summit' in two years to step up efforts to crack down on the international traffic in illegal drugs.

In contrast, there seems to be little enthusiasm for vigorous international action on the other drug menace — the legal (and sometimes lethal) trade in pharmaceuticals.

The World Health Organisation (WHO) calls it the "deepening drug crisis", and says it has gripped much of the developing world.

This crisis has two faces. On the one hand, half the world's roughly five billion people do not have regular access to the most essential drugs. As a result, millions, mostly children, die every year while many more suffer disease-ridden lives.

On the other, transnational drug companies aggressively and unethically market tens of thousands of different kinds and brands of drugs — many of them expensive, wasteful and at times harmful — in countries desperately short of essential medicines.

Since the 1970's, when the WHO put out its first essential drugs list, several international initiatives have been launched to promote the use of cheap, effective generic drugs.

Also, proposals for an international code on drug marketing were raised in the 1980's to check the abuses of global drug companies.

Advocates of such reforms fear, however, that the momentum for change may be petering out.

"There has been a very definite change in the climate from 1980 to 1990," says Goran Sterky, international health care and research expert of the Karolinska Institute in Sweden, who visited Manila recently. "The international economic and political situation of today is not conducive for multi-lateral action on this issue."

Attention is now focused on the World Health Assembly set for May where delegates from over 100 countries are expected to take up, among others, the WHO report on its revised drug strategy and action programme on essential drugs.

But consumer groups and health organisations batting for tighter controls on the marketing practices of pharmaceutical companies are likely to be disappointed.

In his report on the action programme on essential drugs, WHO Director General Hiroshi Nakajima downplayed the effectiveness of government regulation.

"Although control of marketing, presentation and types of medicines can play a role in preventing irrational use, other more complicated interventions are probably required for greater overall effect," the report said.

Nakajima stressed instead the need to "raise consumers' knowledge and encourage discriminating attitudes."

Sterky noted this reflects the enhanced political and economic influence of international big business and the transnational drug companies in a world that has grown weary of state intervention and is now friendlier toward private enterprise.

This shift is felt very keenly in Latin America, where eight countries have agreed to the drug companies' demand for increased patent protection. There are plans to open up national drug procurement systems to foreign firms.

"Four year ago, this was unthinkable in Latin America," said Nadine Gasman of the Latin American Health Group. "Now, it is a fact in eight Latin American countries and I guess there will be pressure to do it in all."

Health action groups fear this trend will abort a reform process that has barely started. Though over 100 countries have adopted essential drug lists, the WHO says many have not used the lists effectively.

And though the WHO has been discussing on and off an international marketing code for medical products since the late 1960's, no such code seems likely to be approved soon.

This lack of international action is taking place while the drug crisis is worsening, says Alfredo Balasubramaniam of the International Organisation of Consumers of Malaysia.

Poor countries, which account for 75 per cent of the world's population, consume less than 20 per cent of the world's pharmaceuticals, according to the WHO.

Nearly 300 dollars per person is spent on medicines in the world's rich countries, while the average is five dollars in poor countries.

Studies indicate that while the number of people with access to essential drugs is increasing, the relative percentage of the world's population without access may be growing.

Meantime, poor countries continue to be flooded by thousand of brand-name drugs, which Balasubramaniam said, were "irrational, ineffective and useless." — IPS

Closing Health Gap for Minorities

by Dr Hatim Kanaaneh

BAREFOOT children play on a rocky, unpaved road until their mother calls them into their tin shack. A public health nurse has arrived for her weekly visit to the village, which lacks medical facilities.

This is a common enough scene in the developing world; it is also a typical sight in many industrialised countries with disadvantaged ethnic minorities.

In Israel, for example, children in the Arab village of Husseinych live in Third World conditions, while down the road, children in the Jewish city of Karmiel have solid houses, good paved roads and all the medical services they need for a healthy life.

The Galilee Society for Health Research and Services, a non-government organisation formed in 1981 by Arab medical professionals, is dedicated to closing the heath gap between Arab and Jewish citizens of Israel.

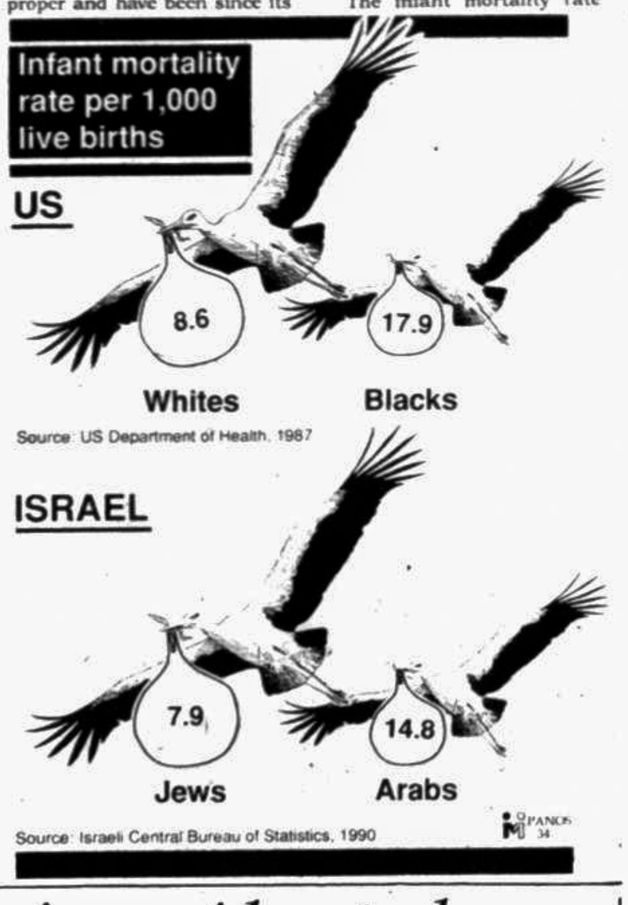
The Society, based in the Arab village of Rama in northern Israel, runs the mobile clinic that takes Siham, a public health nurse, to villages such as Husseinych.

The group has been an effective health-care advocate at the local and national levels. Recently it set its sights higher and initiated a global effort to address the common health concerns of minorities in industrialised countries .

It hopes to establish a permanent base in Geneva, from which to liaise with the World Health Organization (WHO) and other relevant United Nations bodies, to influence the international health agenda and priorities.

Palestinian Arabs comprise 18% of the Israeli population. They are citizens of Israel proper and have been since its establishment in 1948, which distinguishes them from Palestinian residents of the occupied territories in Gaza and the West Bank.

The infant mortality rate among the Israeli Arab community is almost twice that of the Jewish population. In some Arab villages, only one-third of the children have been fully immunised.



Defining the Arab community's situation as that of an ethnic minority in an industrialised country, the Galilee Society found common ground with other groups around the world.

It realised that many others fall into the same category: Aborigines in Australia, Maoris in New Zealand, native communities in Canada and the United States, Latino and African Americans, and immigrant populations in Europe.

Blacks in South Africa, a disadvantaged majority, also belong in this group.

All live in countries that have the means and the ability to meet their medical needs, and yet the health of their communities more often resembles that found in less developed nations.

Like Arabs in Israel, these groups also have difficulty making their voices heard, both nationally and internationally.

A critical stepping stone for the Galilee Society's global initiative was the programme launched 15 years ago by the WHO: Health for All by the Year 2000. The Society sought to organise a conference last year around a variation on this them: "Health-for-Minorities by the Year 2000: Closing the Gap."

The Gulf War forced cancellation of the conference as originally scheduled. But last August, 35 representatives of minority groups in 15 industrialised countries gathered in Nazareth to discuss issues of common concern.

Participants focussed particular attention on the question of justice, noting that health is a human right, albeit one that is relatively neglected.

"Health should be as indivisible as wealth is divisible," said Gwyn Morgan, the European Community's ambassador to Israel, in an address to the conference.

Other topics included:

- the minimal involvement of minorities in national and international health planning
- the low social and economic status of minorities
- health systems' adherence to rigid medical models.

An international follow-up committee was established to draw up a charter and build on the momentum created by the conference. The Galilee Society was asked to act as interim secretariat until a permanent structure — and the Geneva desk — is set up.

Now the group is looking forward to 1993, when the UN Year of Indigenous Peoples will offer another platform to publicise their message and promote their goals. — PANOS

Treating the Unborn with Foetal Therapy

Foetuses have become patients for a small but growing number of doctors who have begun treating unborn babies endangered by life-threatening conditions even while they are growing in the womb.

Doctors are now routinely giving blood transfusions to anaemic foetuses, providing saline infusions for foetuses with urinary problems, and have even attempted to correct anatomical defects of the foetus in the uterus by surgery.

Although experimental foetal surgery in laboratory animals advanced dramatically during the eighties, the techniques are being applied to human babies only with a great deal of caution.

Medical intervention on the foetus primarily consists of two basic techniques: closed needle manipulation used in foetal diagnosis and transfusions, and open surgery.

Pioneering work on foetal surgery has been done by a group at the University of California in San which had by the middle of 1991 operated on 28 foetuses between 18 and 28 weeks old for life threatening problems such as congenital diaphragmatic hernia and blockage of the urinary duct.

Indian doctors are still only experimenting with the foetal surgery, but other foetal therapy procedures like transfusions and saline amnioinfusions are fast becoming routine clinical practice.

A group at the All India Institute of Medical Sciences in New Delhi performed the first foetal blood transfusions in the mid-eighties. The transfusions are given to severely anaemic babies who will not survive without treatment.

Fresh blood is infused via a needle inserted into the umbilical cord of the baby through a procedure called intrauterine intravascular transfusion. Success rates have been good, says Dr Kamal Buckshee, head of the obstetrics department at the AIIMS. But many of the babies we get are highly anaemic and have other complications as well, she said.

A common problem found in India is intrauterine growth retardation caused by various conditions that lead to a decrease in the amniotic fluid contained in the amniotic sac. The lack of the amniotic fluid makes diagnosis of the foetal condition difficult and the baby itself cannot grow properly in the uterus, doctors say.

The infusion of normal saline in a process called amnioinfusion helps correct this by artificially creating extra amniotic fluid, doctors from the Guru Tegh Bahadur Hospital in New Delhi said at the symposium. The GTB group has so far provided amnioinfusion to 15 babies during the past eight months.

The AIIMS group has also conducted two foetal surgical operations — one for a bladder obstruction, and the other for a condition called hydrocephalus in which fluid begins to accumulate in the skull of the foetus preventing the normal growth of the brain.

Foetal tissue heals fast and there is no scarring. The University of California researchers have found that the younger the foetus is at the time of surgery, the less likely he or she is to be born with surgical scars.

These are advantages in operations on the unborn, but doctors says any surgical procedure on foetuses must be approached with caution. This is a major operation and the mothers carrying the babies undergo two operations — one involving the foetus and then a cesarean because normal delivery is not possible after foetal surgery, a GTB scientist told the symposium.

A report in the Indian Journal of Paediatrics said fetal surgery should be confined to those patients whose death can be predicted to occur before 24 weeks and where surgery offers the only chance of survival.

(PTI Science Service)

Nepal's Family Planning Aborted

When a Kathmandu housewife, a mother of two young children, visited a gynecologist for sterilisation, her request was politely turned down.

Since then, the woman has had her fourth abortion — by the same doctor. "I do not mind having an abortion but is it rather too expensive," she says.

Abortion, illegal in the Hindu kingdom, is a booming business among Nepal's low-earning gynecologists.

"On a normal day I handle about 10 cases," one such doctor says, requesting anonymity. " I bet that is what they also do in about 10 private clinics in the capital."

The practice thrives, it seems, because of the failure of the kingdom's family planning programme.

The population clock, presented to Prime Minister Girija Prasad Koirala by United Nations Development Programme (UNDP) Resident Representative Jerrold Berke to mark World Population Day last July, showed Nepal's population to be 19.9 million.

The population growth rate of 2.7 per cent — one of the highest in Asia — means that Nepal's population will double in 27 years. The fear is that the population would not stabilise even at 40 million despite the best of efforts.

Government itself views the fertility rate as "too high." The plan is to reduce the total fertility rate (TFR, or the average number of children a woman is likely to have throughout her childbearing years) from six at present to 2.5 by the year 2000.

"Anarchy will prevail in the country and schools and hospitals will become disorganised if a population explosion is not averted," said former prime minister Krishna Prasad Bhattarai.

It is a formidable task. The average age of marriage is 17.1 years but most girls are married by age 16 and soon start having children.

The United Nations Population Fund (UNFPA) and the International Planned Parenthood Federation (IPPF) have been helping the Family Planning Association of Nepal (FPAN) to promote contraceptive use, but with little success.

The population time bomb ticks for Nepal as family planning programmes fail to produce results

Only 14 per cent of the population uses contraceptives although in some rural villages, the usage rate is higher than the national average.

The Family Planning and Maternal Child Care Project, which has received a major chunk of the health budget for the last two decades with focus on sterilisation, has produced no results except an impressive red-brick building that now houses the health ministry.

"Disappointing" results of family planning programmes were noted in the recent annual review of National Priority Projects under the National Planning Commission.

Acceptance of permanent methods of contraception, for example, was only 58 per cent of the target.

Nepal's strategy has gradually shifted from birth control to maternal and child health.

The attention comes none too soon. One estimate says over 2,000 Nepali women become pregnant each day. Of these pregnancies, 67 end in birth failure.

Of the live births, 196 die on the first day after birth, 71 on the second day, 35 on the third day and 21 on the fourth day.

A major cause of death is neonatal tetanus. Most mothers in Nepal give birth in dark and smoky thatched huts assisted by family members and the sudeni (traditional birth attendant). As noted by the United Nations Children's Fund (UNICEF), few sudenis use antiseptic dressing on wounds. After using often-rusty household knives or scissors to cut the umbilical cord, they treat the wound with urine or cow dung.

Thousands of children also die annually from diseases like diarrhoea and water-borne diseases. Most of the deaths can be prevented through cheap interventions like sugar-and-salt liquids given at home to dehydrated children with diarrhoea.

Generally, health services are poor. Immunisation services against smallpox, typhoid, polio, diphtheria and tetanus have yet to reach most children.

— Depthnews Asia