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OBJECTIVES

Swasth Hind (Healthy India) is a monthly journal published by the Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, New Delhi. Some of its important objectives and aims are to:

REPORT and interpret the policies, plans, programmes and achievements of the Union Ministry of Health and Family Welfare.

ACT as a medium of exchange of information on health activities of the Central and State Health Organisations.

FOCUS attention on the major public health problems in India and to report on the latest trends in public health.

KEEP in touch with health and welfare workers and agencies in India and abroad.

REPORT on important seminars, conferences, discussions, etc. on health topics.

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In this issue

	<i>Page</i>
Immunization programme in selected States—an analytical study <i>Dr Badri N. Saxena, Dr R.N. Gupta, Dr (Smt.) Kuhu Maitra, Dr A.K. Ganila, Dr A.R. Chaurasia & Dr L. Ramachandran</i>	161
Private medical practitioners and immunization programme <i>Dr R.N. Basu</i>	166
Bleeding nose <i>Dr Dharam Paul</i>	169
Forty-sixth World Health Assembly closes	171
International Day against Drug Abuse and Illicit Trafficking	175
World No-Tobacco DAY observed—Making Society Tobacco-free	178
World declaration and plan of action to attack hunger and malnutrition	180
Lathyrus sativus and lathyrism—an update <i>Ramesh V. Bhat & M. Kaladhar</i>	182
Awards on family welfare presented	186
World Environment Day focusses on poverty	190
Book review	III cover

Articles on health topics are invited for publication in this Journal.

State Health Directorates are requested to send in reports of their activities for publication.

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IMMUNIZATION PROGRAMME IN SELECTED STATES

—An Analytical Study

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The Indian Council of Medical Research (ICMR) undertook two diagnostic studies in selected States to understand the lacunae and bottlenecks of the immunization programme before devising alternative strategies. One study looked mainly into the organizational and functional aspects of the programme, and the other into the qualitative coverage of immunization, its effects and perceptions of the community about immunization. This report deals with the 'Analytical study of existing Immunization Programme in Selected States' conducted between November 1987 and June 1988.

IN the overall efforts to reduce infant and child mortality and also maternal mortality, high priority has been given by the Government of India to the immunization programme of children and pregnant mothers and this has been emphasised adequately in the recent national health policy.

While an expanded programme of immunization (EPI) had been introduced almost a decade ago aiming at optimum coverage of immunization among all children below five years of age against T.B., Poliomyelitis, Diphtheria, Pertussis and Tetanus, it has been envisaged that a universal programme of immunization (UIP) should replace the EPI in a phased manner with a focus on complete and total coverage of all infants with the recommended schedule of immunizations against six diseases (T.B., D.P.T., Polio and Measles) and also complete immunization of all pregnant mothers with T.T. Since, the progress of the programme of immunization on the whole (EPI or UIP) was not found satisfactory in some States, the situation was reviewed by a group of experts in April 1987 at the Indian Council of Medical

Research (ICMR) Headquarters and it was considered necessary to conceptualise and test out alternate strategies to improve the coverage and logistics, etc. However, it was felt by the representatives of the Ministry of Health and Family Welfare in the meeting that some diagnostic studies if undertaken immediately would be helpful to understand the lacunae and bottlenecks of the programme before deliberating and planning for alternate strategies.

Therefore, the ICMR undertook two diagnostic studies in selected States. One study looked mainly into the organisational and functional aspects of the programme and the other into the quantitative coverage of immunization, the effect of immunization and the perceptions of the community about immunization.

The first study was entitled as "Analytical study of existing immunization programme in selected States", and the other study entitled as "Assessment of coverage and knowledge, attitude, practice of the immunization programme in different States of the country".

This report deals with the analytical study of existing immunization programme in selected States between November 1987 to June 1988.

OBJECTIVE

The overall objective of the study was to ascertain and investigate the processes of planning, implementation and monitoring of the immunization programme in individual States with a systemic approach.

METHODOLOGY

Eight States were selected by random sampling for conducting the survey. The States selected were Bihar, Rajasthan, Madhya Pradesh, Uttar Pradesh, Maharashtra, Kerala, Meghalaya and Himachal Pradesh. In these States, two districts each were selected randomly one with UIP and the other without UIP and from each district two PHCs, and two sub-centres of the these PHCs were randomly selected.

The methods used were interviews with officials and health functionaries, and the observation of the working arrangements (equipment, supply, records, etc.) at different levels. An attempt was also made to ascertain the awareness in the community regarding the immunization programme. Semi-structured schedules were used for the interviews and check lists were used for observation.

This study was done by a team of public health and social science experts.

RESULTS

The salient findings for each State are presented here under these heads: 1. Planning and staffing, 2. Training, 3. Implementation, 4. Cold Chain Maintenance, and 5. Records and Registers.

1. Planning and Staffing

The policy followed in all the eight States is fully in line with the policy of the Government of India. The guidelines provided by the

Name of State	Name of District
Rajasthan	Sikar Jaipur
Bihar	Bhagalpur Moonger
Maharashtra	Poona Ahmednagar
Kerala	Trivandrum Quilon
Uttar Pradesh	Sultanpur Pratapgarh
Himachal Pradesh	Shimla Solan
Madhya Pradesh	Sagar Raisen
Meghalaya	East Khasi West Khasi

Government of India are being followed in all the States.

Uttar Pradesh: There is no separate immunization officer either at the State level or at the district level in U.P. The Additional Director for MCH & FP is in-charge of the immunization programme at the State level. The overall planning is done by the Additional Director. At the district level the CMO is in-charge of the programme assisted by the Deputy CMO (health) and is responsible for programme planning. The Deputy CMO (Health) monitors and supervises the programme. At the PHC level there is no specific planning.

Madhya Pradesh: In Madhya Pradesh the State immunization officer (of the rank of Joint Director) is in-charge of the programme. The post of district immunization officer, is vacant in many districts, due to procedural delays. District Health Officers are in-charge of the programme at District levels were the posts of district immunization officers are vacant. Only the Block Medical Officers are responsible for the programme implementation. However, the other Medical officers (Sector M.O.s) at the PHCs are not fully involved.

Meghalaya: In Meghalaya planning is done by the Director of Health Services with the assistance of one Administrative officer. However, there is no proper planning for systematic coverage. Clear cut instructions and guidelines for the planning at peripheral level are not issued from the State level. There is no separate immunization officer at this level. At the District level the posts of immunization officers are vacant. District Medical Officer (Health) (DMOH) is in-charge of the programme at the District level (there is so much shortage of officers that one officer is looking after six posts). Supervisory visits by the District official are not adequate. At the PHC there is a shortage of Medical Officers and Lady Health Visitors. Mostly the L.H.V.s meet the ANMS only on the days of review meetings.

Himachal Pradesh: In Himachal Pradesh the overall planning for the programme is done by the Assistant Director who is in-charge of the immunization programme. He issues necessary guidelines regarding the strategy, techniques, monitoring, cold chain maintenance and allots targets on the basis of population data available from the census figures without any consultation with the

lower officials. There is no separate immunization officer at the State level. Many posts are vacant at the district and PHC levels. At the District level the District health Officer (DHO) is in-charge of the programme. In some districts, District Family Planning Medical Officer (DFPMO) is in-charge who is not oriented in community Health.

Rajasthan: In Rajasthan the political support to the programme is limited. At the State level the Director of Health Services is in-charge of the programme assisted by the Deputy Director MCH. There is no immunization officer. At the district level the Deputy Chief Medical and Health Officer is in-charge of the programme. At PHC level the senior most Medical Officer is in-charge.

Maharashtra: In Maharashtra political support for the programme is visible. Additional Director of health Service is the overall in-charge of the immunization programme. The implementation part of the programme is looked after by the Deputy Director of Health Services. At the district level the District Health Officer (DHO) is directly responsible for supervision and monitoring. DHO with the assistance of ADHO and Public health Nurse (PHN) supervises the programme. At the PHC level the senior most Medical Officer is in-charge of the immunization activities. There is no delay in releasing funds.

Kerala: In Kerala the political support is encouraging. Funds are being released without any delay. At the State level the DHS is in-charge and Deputy Director MCH is executive in-charge of the programme. Besides, a Cold Chain Officer and a Technical Officer have been posted. At the district level Immunization Officer is assisted by the District MCH officer and District Public Health Nurse in supervision of the immunization programme at the

PHC level. The Senior Medical Officer is in-charge for the immunization programme at the PHC level.

Bihar: In Bihar the Director Health Services (DHS) is the overall in-charge of the programme assisted by the Deputy Director Immunization. Many posts created under UIP are lying vacant. The Chief Medical Health Officer is directly responsible for the programme at the District level. There is no system of supervision at this level by the state authorities. The senior most Medical Officer is in-charge of the programme at the PHC level.

2. Training

Uttar Pradesh: In U.P. some of the CMOs and the PHC staff to some extent have been trained. The training given to the PHC staff was not adequate. Due to improper and lack of effective training, the PHC staff were not able to maintain the cold chain system properly. They were also not able to prepare the syringes satisfactorily.

Madhya Pradesh: In Madhya Pradesh except for B.C.G. workers all other workers were trained in immunization. Few District Officers and Block Medical Officers have been trained. The sector Medical Officers have not been trained at all for want of funds.

Meghalaya: In Meghalaya no formal training has been given specifically for this programme. Training of the district and PHC staff was about to commence.

Himachal Pradesh: In Himachal Pradesh training of all the staff has been completed. However, refresher training is required for improving sterilisation of equipments, cold chain maintenance and also for improvement in recording and monitoring system.

Rajasthan: In Rajasthan Training of the staff involved in the

immunization services at the State level is more or less satisfactory. Though the status of training is good at district level there is no system of reorientation training. Training of the PHC staff has been given only in UIP districts and not for EPI and PHC staff. It has been presumed that as and when the districts come under UIP the training will be given.

Maharashtra: In Maharashtra key staff upto district level has been trained. Only 50% of the PHC in-charge Medical Officers and Paramedical Staff have been trained. Training at the district level is satisfactory.

Kerala: In Kerala Training has been given to a satisfactory level to all the concerned staff at the state, district and PHC levels.

Bihar: In Bihar training is very poor at all levels. Even the Deputy Director in-charge of the immunization programme had not been trained. The PHC staff had not been trained at all and only the Medical Officer in-charge has been trained. At the district level only the Chief Medical and Health Officers had been trained.

3. Implementation

Uttar Pradesh: In U.P. implementation gets considerably delayed due to bureaucratic procedures. At PHC level there is no idea about actual coverage for any programme based on house to house survey. Immunization is given only in sub-centres, and not in villages. The review, at the district level as well as at the PHC is done only with reference to the targets set at the State Level based on the census figures.

Madhya Pradesh: In Madhya Pradesh, area is divided into intensive area and non-intensive area. ANMs are responsible for intensive area and male health workers for non-intensive area. ANMs are advised to fix either clinic days or market days for immunization at the sub-centre location. There is

very much adhocism in this strategy. Eligible couple (E.C.) Registers or Birth Registers are not used at the time of immunization for ensuring complete coverage.

Meghalaya: In Meghalaya there is no clear guideline about the strategy to be adopted at the peripheral level for complete coverage of population for immunization. The house visits by the workers are very irregular. Registration of births and antenatal mothers are poor. There is no planned programme for mass communication.

Himachal Pradesh: More importance is given to Family Planning than immunization in Himachal Pradesh. There is no definite approach for giving immunization. In some centres it is given during sub-centre clinics and in some places it is only during home visits and at other places by mixture of both the approaches. Both Medical Officer and staff have no idea of the birth rate and expected number of children. Card system has been introduced but not followed uniformly.

Rajasthan: In Rajasthan team approach (also called camp approach) has been adopted. Information, Education and Communication (I.E.C.) activities are very poor at all levels. The M.E.Os and Media Officers have not been involved. At the time of immunization of the child, the workers did not give the detailed information about the immunization. There is no field staff in towns for giving immunization. To a certain extent Medical Colleges are involved in the programme.

Maharashtra: In Maharashtra implementation in urban areas is not satisfactory, since there is no specific infrastructure for this purpose. Immunization is given through camp approach in villages as well as in PHCs. Drums of autoclaved syringes and needles are taken by the health supervisors from PHC to immunization site.

Vaccine is not supplied to sub-centre. I.E.C. activities are quite satisfactory. Medical colleges are being involved but not to an effective level.

Kerala: In Kerala the programme is being extended to district after district steadily and perfectly according to the schedule. Immunization work is carried out through camp approach on fixed days. Medical Officer and L.H.Vs take part in the immunization programme. Educational materials like posters are supplied and used in the PHCs. Immunization programme in towns is not satisfactory.

Bihar: In Bihar, funds are not released in time. There is no specific strategy to provide immunization. Immunization is done through camps as well as through static clinics. Involvement of Medical College is not satisfactory. I.E.C. activities are very poor. Media Officers are not being involved. I.E.C. materials are dumped in stores. There is no system of indenting and supply of vaccine. The children who are aged more than one year are being immunized. Proper attention is not given to sterilisation of syringes and needles. In general the programme implementation is in poor shape.

4. Cold Chain Maintenance

Uttar Pradesh: In U.P. Cold Chain Maintenance at the state level is satisfactory and there is a system of keeping stocks on regional basis where walk-in-coolers have been provided. However, arrangements for Cold Chain Maintenance at district level are not satisfactory. At the PHC level preservation of vaccine was not according to the instructions. Many of the refrigerators supplied to the PHC are not out of order. There was shortage of vaccine carriers.

Madhya Pradesh: In Madhya Pradesh Cold Chain Maintenance was fairly adequate. A mechanic is

posted at the district level who has not been trained. Generally Cold Chain arrangements at district level and PHC level are good. Enough vaccine carriers are available but there is not enough provision for ice.

Meghalaya: In Meghalaya Cold Chain facilities are adequate as far as refrigerators are concerned but there is no adequate provision for ice to be given with the vaccine carriers.

Himachal Pradesh: In Himachal Pradesh there is no technically trained person to look after the cold chain system. Refrigerators are not adequately supplied and those already supplied are also not working satisfactorily. In general cold chain maintenance is not satisfactory.

Rajasthan: In Rajasthan Cold Chain facilities at different levels are not adequate.

Maharashtra: In Maharashtra Cold Chain facilities at the State level are sufficient and being maintained well. Ice lined refrigerators have been supplied to PHCs. 80% of the ice lined refrigerators are out of order in the State. Vaccine carriers, ice packs have been received by the State as per allotment. Frequent checks are being carried out to find out the potency of the vaccine. Cold Chain Maintenance at District and PHC levels is satisfactory.

Kerala: In Kerala Cold Chain facilities at all levels are satisfactory. There is a cold chain officer to supervise the cold chain system. Vaccine is supplied from the state level to districts under proper cold chain system.

Bihar: In Bihar Cold Chain system is extremely poor throughout the State. Generators have not been provided. Recording of temperature is not practised. At the state level walk-in-coolers is far away from the Public Health Institute which is vested with the responsibility of storing and supplying vaccine to various districts. In the observation it was

found that vaccine was supplied in thermocol without ice packs. Equipments supplied for Cold Chain system are lying idle. There is no system for the repair of the cold chain equipments.

5. Records and Registers

Except in Kerala, the maintenance of records in all other States is very poor. Neither the E.C. registers nor Birth registers are maintained upto date. A one time a year enumeration of children below one year of age is done for immunisations coverage. This ad-hoc listing of children has various defects in it. A high percentage of babies (6 months onwards in age) are listed and given immunisation at a later stage. Children missing from the village at the time of enumeration are not covered. Children who have come temporarily from other places receive incomplete doses because they get back to their own villages before the 2nd and 3rd dosages are due.

In the reports submitted only the number of dosages of immunization is given and information on the number of children due for immunization is always not available.

DISCUSSION AND RECOMMENDATIONS

1. Despite the sanction for immunization officers at State and District levels, these posts are not filled up in many States due to bureaucratic procedures. However, the absence of a separate officer does not in any way affect the implementation of the programme. What has to be ensured is to vest the responsibility of the immunization programme with the MCH Officers or those dealing with community health having public health background. It is not at all advisable to run it as a vertical programme. It should be an integral part of the MCH programme.

2. Delay in sanctioning and releasing of funds from State level in many of the States has affected the programme. Since the fund is from the Government of India specially earmarked for this programme, there is no further need for processing it at the State level; it has to be released as soon as it is received from the centre. According to every official interviewed the budget allocation is satisfactory.

3. Targets are allocated on the basis of estimated population or figures available from the previous census. The monitoring and review of the programme in almost all the States is carried out only with reference to the targets allotted to the workers, at PHC's and at District levels. The review is not based on any community based survey and registers. A major lacuna in the programme in almost all the States is that the targets are fixed from the top level without consulting the personnel in the field. There is no grassroot planning to access the exact number of children due for immunisation. The general practice in all the States is to have a team approach in the field and to do a one point of time enumeration to list out the children below one year and to carry out the immunization. This is a very faulty practice because a large percentage of the babies are not immunised at the appropriate age; and a number of children who were not in the village at the time of enumeration are missed; children from other places who have been listed in the enumeration will get only incomplete doses. The correct practice would be to update the E.C. register and Birth registers and to keep a watch on the age of the baby and give it the immunisation at the proper time according to the recommended schedule. If this is done, the workers will have the realistic targets and will also be

sure that all infants in the area are covered for immunisation at the appropriate time. The practice of giving immunisation very late for the babies should be strongly discouraged. It is not a question of fulfilling the targets but ensuring the immunization of every baby within the time limit of its age.

The same applies to Tetanus Toxoids for pregnant mothers. It is the antenatal register which has to be maintained upto date and to be used as the base for planning and monitoring the immunization.

The review of the programme, at the PHC or district level should be done according to the total number of children (new borns) covered for immunization and according to the number who have been completely immunized, instead of basing it on the total number of doses given.

4. One of the reasons attributed in one State for not giving training to Medical Officers was that there was no fund to pay T.A. & D.A. In States where such problems exist the training can be organised at the PHC level instead of getting them to district level.

5. In many of the urban areas there is no information for MCH and immunization programme. Required number of Field Staff should be sanctioned and posted for this purpose.

6. To enable the workers to understand the purpose of the programme more meaningfully they should be encouraged to register fresh cases of immunizable diseases in their area during periodical visits and maintain data on the incidence of these diseases. It will also enable the authorities to judge the effectiveness of the programme.

(Contd. on Page 179)

PRIVATE MEDICAL PRACTITIONERS AND IMMUNIZATION PROGRAMME

DR R.N. BASU

The private medical practitioners can be considered as active partners in the delivery of immunization services in urban areas. People, on their own choice, select their own physicians and pay for their services. Expanded Programme of Immunization (E.P.I.) should not disturb this system, rather support the immunization activities of the medical practitioners, says the author.

PPRIVATE medical practitioners, mainly paediatricians in metropolitan towns, have realized the importance of preventive health services especially immunization and nutrition for development and survival of children. They used to administer DPT and polio vaccine to children as a part of private practise, before introduction of national Expanded Programme of Immunization (EPI) in 1978. At that time, in addition to medical practitioners, selected non-governmental organizations (NGO) and medical college hospitals were the main sources of vaccination in the urban areas.

Though the immunization services are now available in all health facilities throughout the country free of cost, the role of medical practitioners still remains important. In metropolitan towns, a

substantial number of vaccinations are provided by private medical practitioners in their chambers. Various vaccination coverage surveys have revealed the important role of private practitioners in providing immunization services to the clients.

The practitioners can be considered as active partners of immunization service delivery in the towns. There are many areas where the relationship between government, NGO and private sector can be strengthened to achieve the common goal, that is, protection of children against vaccine preventable diseases. The expertise and goodwill of private medical community can be favourably used for EPI.

Service Delivery

In towns, several clinics, drug shops, nursing homes, publicize

about the availability of some immunization services with them. Some practitioners have included vaccination along with child health or ante-natal care. There is a private system in which vaccines are procured and sold. Except B.C.G. vaccine, all other vaccines, indigenous or imported, are available in chemist's shop. The practitioners prefer single or small dose vial and store at their chambers. In some cases clients are asked to purchase it. Many of them use disposable syringes and needles. They follow their own immunization schedule and note the date of vaccination in the prescription paper or cards provided by pharmaceutical concerns. They charge fee for vaccines and services from the clients.

Some concern is expressed by EPI project on the this system, regarding the quality of services.

These may be classified under four categories.

(a) **Immunization Schedule:** EPI project desires that every one, including private doctors, follows the national immunization schedule, which has been prepared considering the epidemiological situation in the country. Practitioners serving in elite group of metropolitan city advocate M.M.R (Measles Mumps Rubella) vaccine and five doses of oral polio vaccine.

(b) **Vaccine Handling:** The potency of vaccine administered may be doubtful, because of possible breaks in cold chain requirements. The cold chain maintenance for vaccine quality has been found to be the weakest link.

(c) **Use of Vial:** Vaccine vial, once opened, should be used up on the same day. In case of reconstituted vaccine, like measles, has to be used within six hours. Due to small attendance and large size of the vial, the tendency exists to reuse opened/reconstituted vial.

(d) **Sterilization of Syringes and Needles:** A sterilized syringe and a sterilized needle has to be used for each injection. Disposable syringe should never be re-used. Boiling for 20 minutes or steam sterilization is prescribed by the E.P.I.

(e) **Maintenance of Record:** No record is maintained in private clinics.

People, on their own choice, select their physicians and pay for the services. E.P.I should not disturb this system, rather support the immunization activities by medical practitioners. Technical orientation can be arranged for those who offer immunization services. Certain facilities can be provided to them to encourage to participate in

this programme. One such facility is availability of vaccines free of cost to the practitioners, on certain conditions, which may be

(a) follow national technical guidelines on vaccine administration, dosage, and storage.

(b) submit a report on number of vaccinations performed during collection of vaccines (on a prescribed form).

(c) Charging clients only for service and not for vaccine.

Government officials may visit the private centers to assist in quality maintenance, E.P.I project may give recognition to these practitioners.

Advocacy for Vaccination

Medical personnel are considered as the best educators and most appropriate time for education is during their services. There are many practitioners, who may not be involved in vaccine administration, but as a family physician may enquire the vaccination status of the children and women under their care. All personnel, irrespective of his specialty and place of work, should enquire if the newborn (children under one) and women (especially pregnant women) have received vaccination. This informal enquiry will act as an advice to the clients, and will be of great value in motivating the families. His advice is generally listened to.

To take advantage of a large number of physicians in the country and to use them as advisors to general public, E.P.I Project has to inform them the services available, and the place and time of availability. Referral service by the medical practitioners have to be encouraged.

Reporting of Diseases

The disease reduction target of E.P.I has now been quantified. The goal is to reduce measles incidence by 90% from the base-line level, and eliminate neonatal tetanus by 1995. Poliomyelitis is planned to be eradicated by the year 2000. This requires strengthening of disease surveillance, with emphasis on routine reporting system. Medical practitioners can be important and reliable source of information on vaccine preventable diseases. If a simple system of reporting these diseases from medical practitioners to the programme implementation authority can be arranged, this will help in identifying high risk group and taking appropriate action.

Organizational Activities

There are several professional societies namely, private Medical practitioners' Association, Medical Association, paediatricians Association, etc. Each organisation can decide the role they like to play to promote national immunization programme. On the basis of experiences in different States, few options may be considered.

(a) The organization may collect vaccines from the State E.P.I Officer and distribute to their members for use. They will submit the report on performance every month and get re-supply. The organization takes responsibility for following the standard procedures by each member and ensuring quality service. In Goa, B.C.G vaccine, which is not available in shops, is supplied to practitioners through Indian Medical Association (I.M.A.).

(b) The organization may participate in special programmes with government or other N.G.Os like Rotary/Lion Clubs. This may be in the form of organizing vaccination campaign on selected days (holidays) on pre-determined Area/site. The I.M.A played a vital role in implementation of Patna urban immunization drive, which could mobilize vast political, administrative, professional and media support, the services of which has led to similar efforts in other urban areas. A significant feature of Patna experiment was the successful networking of around 700 private practitioners under the banner of I.M.A and creation of 37 permanent immunization centres at

the rate of one each per municipal ward.

In the country's first national immunization campaign in 1990, 100,000 members of Rotary club worked alongwith members of I.M.A and Indian government officials during three designated "Sishu Suraksha Diwas" (Baby Protection Days) in October, November and December. Rotarian doctors took leadership and demonstrated that they could work in slums. Their volunteers brought in slum children and women and got them registered in the immunization session.

(c) The organization may request their members to find out some

time from their busy schedule in sending data on vaccine preventable diseases collected from among those who come for advice from them. These will not be reflected in any statistics unless the practitioners report these cases. Indian Academy of paediatrics has taken leadership in disease surveillance.

(d) The professional societies can provide information to their members on the latest developments in the immunization programme and offer special workshops and orientation courses. They can encourage publication of articles on appropriate subjects in their journals. □

A Cure for Breathlessness

Breathlessness among the not-so-young can be countered by a device that strengthens the respiratory muscles within six weeks.

Dr Alison McConnell from the department of human sciences at Loughborough University of Technology in the English Midlands says she is "very optimistic" that her new respiratory muscle trainer can reduce what is not a product of old age but simply a result of reduced activity.

The small device is put in the mouth and has the effect of providing resistance to breathing in. In this way it is possible to strengthen the respiratory muscles.

Tests have shown that six weeks of such muscle training, three times a day for 10 minutes, is sufficient to reduce breathlessness. Among the most breathless, improvements of up to 80 per cent have been observed.

Already two medical equipment manufacturers and a sports company have shown interest and Dr. McConnell believes the muscle trainer could be commercially available within the next two years.

—Medical News from Britain



BLEEDING NOSE

DR DHARAM PAUL

Parents and patients tend to exaggerate the loss of blood but when it is severe, it may require blood transfusion. Such severe cases of bleeding nose may turn serious and should be treated in a hospital.

BLEEDING from nose is a common emergency attended in the Hospital Casualty. Though isolated cases with bleeding nose are encountered in all seasons, it is a common occurrence in summer. This common condition affects all age groups.

There are so many causes of bleeding nose. Children are in the habit of putting fingers in nose which results in profuse bleeding. Sometimes children put some foreign bodies in the nose which lead to formation of stone in nose or causes infection resulting in Sinusitis. This may be an unsuspected cause of bleeding from the nose.

Infectious diseases like measles, chickenpox, influenza, nasal diphtheria, whooping cough, scarlet fever, rheumatic fever, pneumonia, dengue fever, malaria, typhoid, leech as parasite in nose, anaemia and bleeding disorders are some of the other causes of bleeding nose.

An old man having recurrent bleeding nose should have his

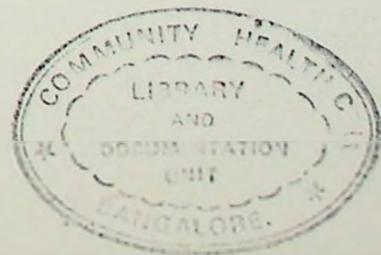
blood pressure checked up. In old age due to thickening of the wall of blood vessels the blood pressure is increased. Epistaxis in old age can be due to cancer of the nose, sinuses, heart diseases and kidney ailments.

A blow on the nose may cause some bleeding. This is transient but may be severe especially if the blow results in fracture of the nose.

At high altitudes, nose bleeding is common due to extreme climatic conditions and reduced atmospheric pressure.

There is an apparent relationship between bleeding nose and the menstrual cycle in women. Nose bleeding is found to occur more frequently during any period of decreased hormonal secretion.

Inhaled caustic substances, irritant vapours, Vit C and Vit K deficiency are other conditions incriminated in nose bleeding. Very serious bleeding can occur in angiofibroma of nasopharynx.



In general, parents and patients tend to exaggerate the loss of blood but when it is severe, it may require blood transfusion. Such severe cases of bleeding nose may turn serious and should be treated in a hospital.

Important tips to avoid and/or check bleeding nose

Children should be discouraged from putting fingers in the nose and advised to avoid nose picking.

As first aid measure to control bleeding nose, make the patient comfortable in sitting position and ask him to pinch the nose for 5 minutes. The attendant should rub the ice on forehead and cheeks of the patient. In most of the cases, bleeding stops with this procedure. The cases which don't respond, needs meticulous personal and family history, and detailed investigations of blood. Blood tests may reveal cancer of blood or

bleeding disorders and also give a rough idea of how much blood loss has occurred.

Moderate bleeding is beneficial to a patient of high blood pressure but constant record of blood pressure is quite imperative.

Everyone has had a nose bleed at sometime or the other and most of us on several occasions, but in only a few cases it is necessary to ask for medical aid. Sometimes bleeding from the nose stops by a natural process of blood clotting.

Hospital Admission

If there is profuse bleeding, pressure is easily applied by putting ribbon gauze soaked in vaseline mixed with antibiotics in the nose. This procedure is called Anterior packing. The pack is left in nose for 48 hours. On removal, if the bleeding continues it is repacked.

Now a days various thin rubber bags (inflatable bags) have been devised to apply pressure as an alternative to avoid packing. The

deflated rubber tampon is easily inserted in the nose and about 10 c.c. of air is injected for exerting pressure but they are less effective.

The other method is to clean the nose, determine exact site of bleeding and cauterise the bleeding point either by chemical or by electrical method.

Whatever method is adopted, these patients are best admitted to a hospital and kept under sedation sufficient to make them drowsy. Relatives should not be allowed to visit and overcrowd the patients surroundings.

The above measures will control the great majority of epistaxis but a few cases will continue to bleed, which may require blood transfusion.

In convalescent period, the patient should be given a course of iron therapy until the haemoglobin level is acceptable. □

ANNOUNCEMENT

HEART CARE FOUNDATION OF INDIA

HEART CARE FESTIVAL-93—DEC. 9-19, 1993

World Congress on Clinical Cardiology WORLDCON-93 and ECHOVISION '93
Official Congress of International Society for Cardiovascular Ultrasound.
December 9-11, 1993 at Siri Fort Auditorium. Eminent Faculty. No registration
Fee. PERFECT HEALTH MELA '93, Dec. 11-19, 1993 Talkatora Garden, New
Delhi. Mass awareness programme. Unique Medical Exhibition for Doctors
and Public. For details contact : *Dr K.K. Agarwal, Vice President, B-95, Defence
Colony, New Delhi. Phone : 4631398 Ph/Fax 6839603.*

FORTY-SIXTH WORLD HEALTH ASSEMBLY CLOSES

US \$1.8 Billion Budget Adopted

The Forty-sixth World Health Assembly was held from 3-14 May, 1993 in Geneva at the Palais des Nations. Over 1400 delegates from 172 countries attended the Assembly—the governing body of the World Health Organization. The Assembly re-elected Dr Hiroshi Nakajima as Director-General of the W.H.O. During its proceedings, the Assembly adopted a number of resolutions on major issues of public health and on the structure and working practices of W.H.O. We publish here a brief report on the proceedings of the Assembly and its recommendations.

THE Forty-Sixth World Health Assembly held from 3-14 May, 1993 at the Palais des Nations in Geneva adopted by consensus a US\$ 1.8 billion budget for the global work of the World Health Organization in the next two years.

The regular budget for 1994-95 amounts to US\$ 822,101,000, made up of assessed contributions from WHO's 186 Member States. In addition, those States and other contributors will provide extrabudgetary funding, estimated to amount to almost US\$ one billion, for the same period.

The main components of the regular budget are health system infrastructure (US\$ 272.2 million) programme support (US\$ 202.8 million), health promotion and care (US\$ 145.2 million) and disease prevention and control (US\$ 103.9 million).

More than 1400 delegates from 172 countries attended the Assembly—the governing body of

the World Health Organization—held under the Presidency of Mr Claes Ortendahl, Director-General of the National Board of Health and Welfare of Sweden.

On 5 May, the Assembly re-elected Dr Hiroshi Nakajima as Director-General of the Organization. Dr Nakajima had been nominated for a second five-year term of office by the WHO Executive Board in January 1993.

The Assembly then went on to debate and adopt a number of resolutions on major issues of public health and on the structure and working practices of WHO.

These included the following :

AIDS

A resolution co-sponsored by over 40 countries calls on the Director-General to undertake a study on the feasibility and practicability of a United Nations Programme on HIV/AIDS. This would be a co-sponsored programme involving other United

Nations including the United Nations Development Programme, UNICEF, the UN Population Fund, UNESCO and the World Bank. The resolution identifies four areas for particular attention. These are the anticipated growth and consequences of the pandemic over the next two decades; the likely level of resources available for actions in relation to HIV/AIDS over the next decade; the practical arrangements for establishing such a programme, including management systems and structures; and the need to have global leadership for a coordinated international response to the pandemic.

Eradication of Poliomyelitis

According to this resolution, the goal of global eradication of poliomyelitis by the year 2000 is achievable, but only if there is a continuing acceleration of national immunization programmes as planned. It confirms WHO's commitment to the eradication of

poliomyelitis as one of its highest priorities for global health work. The basic WHO strategy is to improve disease surveillance, strengthen laboratory services and increase immunization coverage of children all over the world.

Tuberculosis

Tuberculosis remains one of the most important causes of death and the already serious tuberculosis situation is rapidly worsening in both developed and developing countries. This resolution urges Member States to take rapid action to strengthen their national programmes against the disease and urges the international community to continue its support for improved TB programmes at national, regional and global levels.

Control of Malaria

The Assembly recalled that malaria threatens 2200 million people—about 40% of the world population—causing often severe clinical illness in over 100 million people, and that more than one million die of it annually, hampering socioeconomic development and severely affecting the overall health status of populations. It endorsed the World declaration on the Control of Malaria, made at the Ministerial Conference on Malaria, held in Amsterdam last October, which promulgated a global control strategy for country-specific action founded on a realistic appreciation of needs and means. The Assembly's resolution requests the Director-General to reinforce WHO leadership in malaria control, and to pursue efforts in the progressive improvement and strengthening of local and national capabilities for malaria control and research through the health infrastructure.

Dengue Prevention and Control

Aware that epidemic dengue is an increasingly serious problem, with a dramatic rise in cases and a high risk of rapid and serious outbreaks, the Assembly urged Member States to strengthen national and local programmes for the prevention and control of dengue, dengue haemorrhagic fever and dengue shock syndrome. The

resolution requests the Director-General to establish, in consultation with affected Member States, strategies to contain the spread and increasing incidence of this disease.

Emergency and Humanitarian Relief Operations

The alarming increase in disasters, both natural and man-made, and their effects on health and health services, led the Assembly to reaffirm WHO's coordinating role within the United Nations for health and related aspects of humanitarian assistance, and to request WHO to prepare for and provide relief and rehabilitation in emergencies. Member States are called on to increase the allocation of resources in their health budgets for emergencies. The resolution also calls on the international community to respond to consolidated appeals launched by the United Nations system in response to emergencies by giving greater consideration to the provision of funds for health services and rehabilitation.

Health Assistance to Specific Countries

The Assembly expressed its appreciation to the Director-General for his continuous efforts to strengthen the Organization's capacity to respond promptly and efficiently to country-specific emergencies. A separate resolution referred to the consequences of the recent disaster caused by the "Storm of the Century" in Cuba earlier this year, which severely affected the population, agricultural and industrial activities, and in particular health services. The Assembly requested WHO to extend the necessary assistance to the Republic of Cuba in order to help overcome its present crisis in the health care sector. It called upon all Member States to contribute towards this objective.

Increased Support Under the Programme of Intensified Cooperation with Countries in Greatest Need, in particular for the African Countries

The Assembly recognized that many developing countries, particularly in Africa, are struggling under the strain of structural adjustment programmes, the debt

burden, falling prices of commodities, the depreciating value of their currencies, the rapid deterioration of their health care infrastructure, as well as the burden of disease and the rising cost of health care. It therefore adopted a resolution appealing to all Member States, bilateral and multilateral development agencies, other organizations of the United Nations system and nongovernmental organizations to continue and to intensify their support for developing countries, particularly in Africa, in the implementation of their health-for-all strategies. The resolution also requests the Director-General to focus efforts on the health priorities of African countries and to mobilize the necessary resources to support their efforts to attain health for all.

WHO Global Strategy for Health and Environment

This resolution warns that sustainable development is possible only when special attention is given to health and environment-related matters. It calls on Member States not only to collaborate closely with WHO for the attainment of environmentally-sound and sustainable development, but also to establish, where these are lacking, coordinating mechanisms to ensure collaboration among all sectors with responsibilities for health and environment, including non-governmental organizations. WHO is asked to carry out prospective studies on potential environmental hazards to human health, and to establish alliances with financial and other organizations to ensure that health goals are incorporated into their programmes on environment and development. WHO, in collaboration with the United Nations Environment Programme (UNEP) and the International Labour Office (ILO), is invited to proceed with the organization of an intergovernmental meeting on chemical risk assessment and management.

Maternal and Child Health and Family Planning for Health

A resolution on this subject, submitted by a group of African countries and Lebanon, was adopted, highlighting the importance of eliminating harmful traditional

practices and other social and behaviourally obstacles affecting the health of women, children and adolescents. The resolution calls for the elimination of practices such as child marriage, dietary limitations during pregnancy and female genital mutilation, all of which restrict the attainment of the goals of health, development and human rights for all members of society.

International Conference on Nutrition : Follow-up Action

The Assembly adopted a resolution endorsing the World Declaration and Plan of Action for Nutrition that emerged from this conference, held in Rome last December, and requesting the Director-General "to reinforce WHO's capacity in all relevant programmes". The Director-General is also requested to "give priority to least developed, low income, and drought-affected countries, and to provide support to Member States in establishing national programmes, especially those concerned with nutritional well-being of vulnerable populations, including women and children, refugees and displaced persons".

Non-proprietary Names for Pharmaceutical Substances

Acknowledging with satisfaction the increasing contribution of generic products to national drug markets in both developed and developing countries and aware of the increasing use of pharmaceutical brand names that are very similar to international non-proprietary names, the Assembly adopted a resolution requesting Member States to ensure that international non-proprietary names used in the labelling and advertizing of pharmaceutical products are always displayed prominently. It also called on the Director-General to intensify his consultations with governments and representatives of the pharmaceutical industry on ways of reducing to a minimum the problems arising from drug nomenclatures that may create confusion and jeopardize the safety of patients.

WHO Response to Global change

This report by a WHO Executive Board Working Group, due to be debated by the Board next week, is

a major initial step in a process of reform within WHO. It contains ideas and draft recommendations on WHO's mission and governance, the role and operation of headquarters, regional and country WHO offices, coordination with other organizations in the United Nations system, budgetary and financial considerations, technical expertise and research. The Assembly resolution expresses confidence "that the implementation of the action proposed in the report will improve the effectiveness of the Organization's operations". The Director-General will report on progress to the Forty-seventh Assembly.

Health and Environmental Effects of Nuclear Weapons

Noting "the continued threat to health and the environment from nuclear weapons" and "mindful of the role of WHO as defined in its constitution to act as the directing and coordinating authority on international health work (...) and to take all necessary action to attain the objectives of the Organization", the World Health Assembly decided by a vote of 73 to 40, to "request the International Court of Justice to give an advisory opinion on the following question": "In view of the health and environmental effects, would the use of nuclear weapons by a State in war or other armed conflict be a breach of its obligations under international law including the WHO Constitution?" The Assembly requested the Director-General to transmit this resolution to the International Court of Justice "accompanied by all documents likely to throw light upon the question".

Referring to the Principles of Medical Ethics relevant to the role of health personnel, particularly physicians, in the protection of prisoners and detainees against torture and other cruel, inhuman or degrading treatment or punishment, the Assembly expressed deep concern over alleged systematic breaches in these principles by some medical personnel. It adopted a resolution urging parties to armed conflicts to refrain from all acts that prevent or obstruct the provision or delivery of medical

assistance and services. The resolution also requests the Director-General to advocate strongly the protection of medical establishments and units to all parties concerned and to liaise closely in this regard with the United Nations Secretary-General and his Under-Secretary-General for Humanitarian Affairs, the Office of the High Commissioner for Refugees (UNHCR), the United Nations Children's Fund (UNICEF), the International Committee of the Red Cross (ICRC), the International Federation of Red Cross and Red Crescent Societies (IFRC) and with competent organizations of the United Nations system, and other International and non-governmental organizations concerned. □

Natural Disaster Becoming More Destructive

The goal of the Decade for Natural Disaster Reduction was to establish on effective partnership between the United Nations and the international community, Secretary-General Boutros Boutros-Ghali told the opening of the Second Session of the Special High-level Council of the International Decade on 25 January.

Natural disasters were becoming more destructive and more costly, he noted. In 1991 alone, the economic cost of disasters was estimated at some \$ 44 billion, with more than 160,000 people losing their lives, he said.

—UN Newsletter

AIDS

WHO ESTIMATES OF HIV INFECTION TOPS 14 MILLION

LATEST estimates released on 21 May 1993 by the World Health Organisation reveal that an estimated 14 million people have been infected by HIV, the human immunodeficiency virus which causes AIDS. By the year 2000, WHO estimates that between 30 and 40 million people will have been infected by the virus.

The worst affected area is sub-Saharan Africa where WHO estimates that over eight million people have been infected. Of this total, about half to two thirds were in east and central Africa, an area which accounts for only about one sixth of the total population of the sub-Saharan region.

The cities of central and east Africa have so far borne the greatest burden, with as many as one out of every three adults infected, but the virus is increasingly following roads and rivers into the countryside, and spreading to southern and western Africa.

Reports from Nigeria, a country with almost one fifth of sub-Saharan Africa's population, indicate that HIV has begun to spread throughout the country. For example, HIV prevalence rates of up to 15-20 percent were found among groups of female sex workers.

As HIV continues to spread, the numbers of AIDS cases in Africa are increasing. Already, an estimated one and three quarter million men, women and children in sub-Saharan Africa have developed AIDS, two-thirds of the global figure. The cumulative total of AIDS cases in Africa is expected to exceed five million by the end of this century.

But the most alarming trends of HIV infection are in South and

South East Asia, where the epidemic is spreading in some areas as fast as it was a decade ago in sub-Saharan Africa. WHO estimates that over one and a half million HIV infections have occurred in adults in the South and South-East Asia regions. While the majority of reported infections appeared in two countries—India and Thailand—high rates of HIV spread into specific populations have been seen elsewhere in the region.

"While Africa suffers the explosion of AIDS cases as a result of infections ten years ago it is in South and South-East Asia that we are seeing an explosion of infection today," says Dr Michael Merson, Director of the WHO Global Programme on AIDS. "We can soon expect more new infections in Asia than in Africa. And as the second epidemic—the epidemic of AIDS—takes hold in Asia as it has in Africa, we can anticipate that individuals, families and communities will be affected in the same tragic way we are already seeing in parts of Africa."

There is mounting concern for other newly infected areas. Latest estimates show that over one and a half million adult HIV infections have occurred in Latin America and the Caribbean since the epidemic began. The future course of the epidemic in the region depends very much on how fast and how far the virus spreads in Brazil, which already has more AIDS cases than any country outside Africa apart from the United States.

The epidemic has taken hold in the Middle East and North Africa where WHO estimates that more

than 75,000 infections have so far occurred. These figures are of particular concern because although only limited information is available for this region, reports suggest the presence of other sexually transmitted diseases and injecting drug use—factors which expose people to the risk of HIV infection.

Current developments in Eastern Europe and Central Asia may also spur the rate of transmission in the region. At the moment it is estimated that 50,000 adults have been infected with HIV. However, economic crisis, rising unemployment, ethnic and religious conflict, the displacement of civilian population and the disruption of families encourage the kinds of behaviour that spreads HIV. Of equal concern, drug use and prostitution are on the rise.

In East Asia and the Pacific, WHO estimates that by late 1992 over 25,000 infections in adults had occurred. The limited data available indicate that the 663 cumulative AIDS cases reported by January 1993 represent reasonably accurately the current status of the epidemic in most of East Asia and the Pacific.

"Parts of the world face a catastrophe because of AIDS," says Dr Merson. "Fortunately a decade of experience has taught us how we can prevent people becoming infected with HIV, we know we can avoid thousands, even millions of deaths in adults at the prime of their lives; we can prevent the needless and appalling tragedy of AIDS babies and AIDS orphans. But, we must have financial and political commitment on a massive scale if we are to slow down this epidemic."

—W.H.O.

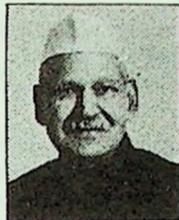
SWASTH HIND

INTERNATIONAL DAY AGAINST DRUG ABUSE & ILLICIT TRAFFICKING

26 JUNE



PRESIDENT
REPUBLIC OF INDIA



MESSAGE

The scourge of drug abuse and illicit trafficking in narcotics poses an extremely grave threat to the health and well-being of all human-kind. The nexus between drug abuse and various illegal activities which can undermine the very existence of civilized society is equally a matter of growing concern. The government and non-government agencies who are working in this field have, therefore, to pursue a well-coordinated approach to tackle this serious problem.

On the occasion of the International Day Against Drug Abuse and Illicit Trafficking, let us resolve to substantially intensify our efforts to combat and eliminate this menace to the progress and prosperity of humanity. I wish every success to the endeavours of all those who are engaged in this important task.

S. A. Sharma

June 3, 1993 (SHANKER DAYAL SHARMA)



PRIME MINISTER
REPUBLIC OF INDIA



MESSAGE

In the contemporary world, the illicit trafficking and abuse of drugs has emerged as one of the major threats to the quality of human life. Its proliferation is particularly ominous for developing countries which are still struggling to overcome their basic problems of poverty, hunger and disease. There is now a global awareness that the problem has to be tackled through concerted measures to curb the supply of dependence producing drugs and reduce their demand.

I am happy that on the International Day Against Drug Abuse and Illicit Trafficking, the Ministry of Welfare has launched a nation-wide campaign to inform the people about the ill-effects of drug abuse on the individual, the family and the society at large.

I wish every success to all those engaged in this humanitarian task.

P.V. Narasimha Rao

June 18, 1993

(P.V. NARASIMHA RAO)

CAUSES OF DRUG ABUSE

Most of the addicts start taking drugs out of curiosity to have some pleasure, often under the influence of their friends and peer group. Others take them to overcome boredom, fatigue, depression or frustration. Lack of affection or love from and understanding with near and dear ones might also force a person to take to drugs. Their easy availability, no doubt, results in largescale drug abuse.

HOW TO PREVENT DRUG ABUSE

AS A PARENT

- * Communicate openly with your child. Be a patient listener.

JULY 1993

- * Keep yourself interested in your child's activities and friends.
- * Share problems at home. Talk about your child's problems, teach them to handle them.
- * Do not abuse alcohol and drugs yourself. Set an example.
- * Keep track of prescribed drugs in your home.
- * Learn as much as you can about drugs—be forearmed.

AS A TEACHER

- * Talk to your students informally and openly.
- * Discuss with them dangers of drug abuse.

175



Secretary-General
United Nations



MESSAGE

In the post cold war era, the international community faces a number of new and difficult challenges to peace and security. None is more insidious, or more far-reaching, than illicit drug production, trafficking and consumption. Hardly a country, ethnic group, or community has been spared its effect.

Energetic, coordinated international action is needed to tackle this global menace. New approaches are needed. Until recently, international efforts concentrated mainly on supply reduction. While there must be no lessening of efforts for the other areas of drug control, the emphasis must now shift to demand reduction.

Demand reduction should be part of comprehensive, balanced, preventive approach. Just as in the field of international peace and security, the value of preventive diplomacy in averting conflict is now generally recognised, so preventive action must become a crucial element in the long-range goal of eliminating drug abuse.

This International Day — whose theme is "Prevention of Drug Abuse through Education", is intended to increase international awareness of the menace of drug abuse. Drug abuse prevention must become a worldwide activity aimed at reaching every nation, society, community, family, school and business. Everyone has a role to play in the fight against illicit drugs and their misuse.

In the view of the United Nations, substance abuse education should now be taught in all schools. It should be fully integrated into public and private, religious or secular school curricula, with the emphasis on health and overall personal well-being. Educational programmes play a critical role in the overall fight against drug abuse. For those who have started to use drugs, appropriate educational treatment can provide a pathway to successful intervention and treatment. It can increase the misusers' awareness of the dangers of drug abuse and help them to make the choice to stop. Awareness-raising is also critical in helping parents and educators to understand the nature of particular situations, and how to respond. The response will, of course, vary according to the cultural values expressed by each society.

The United Nations has laid the foundations for a more effective and truly global strategy in drug abuse control. The United Nations International Drug Control Programme is the vanguard and coordinator of drug control activities in the UN system, and the focal point for the UN Decade against Drug Abuse (1991-2000). One of the main responsibilities of the Programme is to ensure that the emphasis on prevention is part of a balanced approach.

The scourge of drug abuse challenges the ability of the international community to work effectively together; it can be tackled only by international cooperation. A clear strategy is in place. But it will succeed only if the efforts of every national, regional and international body are combined. I therefore call on all Governments, international organizations, and the civil society at large to move vigorously into concerted action.

BOUTROS BOUTROS-GHALI

- * Keep yourself interested in your students' interests and activities.
- * Encourage them to volunteer information of any incident of drug abuse.
- * Talk about the problems of adolescence. Guide your students on how to handle them.
- * Help them examine career options, set goals.
- * Learn as much as you can about drugs—be forearmed.
- * If you come across anything suspicious, inform the police, even anonymously.
- * Advise addicts to seek treatment from Govt. hospitals or counselling/de-addiction centres funded by the Ministry of Welfare, Government of India.

AS A CITIZEN

- * Remain alert to requests to keep/carry narcotic drugs.
- * If you notice poppy or other cannabis plants/crops inform the nearest law enforcement authority.

Say 'yes' to life,
say 'no' to drugs!

THE FIGHT AGAINST DRUGS

THE CHALLENGE

- * The number of registered addicts in our country has reached a staggering figure of 9.34 lakhs. If unregistered addicts are also added, the figure will be truly alarming.
- * Drug addiction leads to: ruin of the individual, break-up of the family, increase in crime and affects the fabric of society.
- * This is probably the major threat facing young people in our cities. Drug taking is also a contributory cause of AIDS.

THE APPROACH

- * Prevention and reduction. (Ministry of Welfare)
- * Control of Supply. (Narcotic Control Bureau)
- * Suppression of Illicit Trafficking. (Narcotic Control Bureau)
- * Treatment and Rehabilitation. (Ministry of Welfare)

PLAN OF ACTIVITIES OF WELFARE MINISTRY

- * Community based action for identification.
- * Drug Abuse awareness and education.
- * Motivation, Counselling, Treatment, Follow-up.
- * Training for volunteers.
- * Assistance to non-governmental organisations.

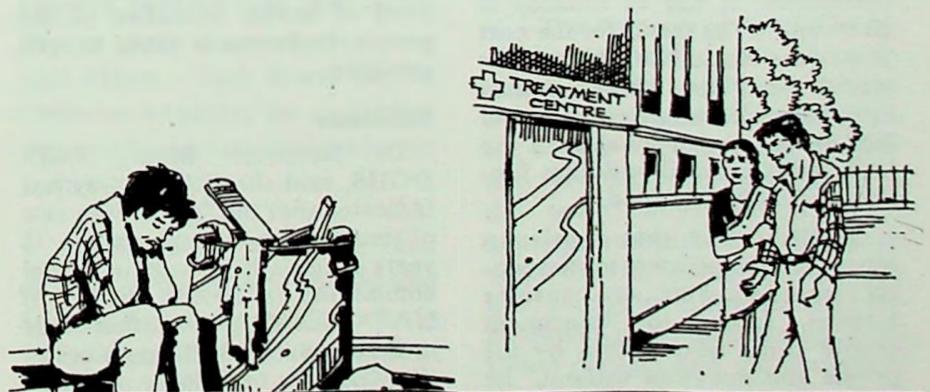
NON-GOVERNMENTAL ORGANISATIONS

- * NGOs which are close to the potential and actual abusers of drugs are the best agencies for drug awareness, prevention and rehabilitation programmes.

ACHIEVEMENTS

- * Mass awareness through print, outdoor, electronic and traditional media.
- * Government of India has assisted 167 NGOs for setting up 142 counselling centres, 97 De-addiction centres and 15 After-care centres.
- * Till now 2,67,921 addicts have been de-toxified.
- * Budgetary support has been increased three fold by the Government for drug abuse prevention and rehabilitation programmes from Rs. 4.6 crore in 1990-91 to Rs. 13.8 crore in 1993-94.
- * Preparation of a Drug Control Master Plan for a 7-year span (1994-2000) has been entrusted to a multi-disciplinary task force.

**Drug Abuse,
Life Abuse!**



WORLD NO-TOBACCO DAY OBSERVED

MAKING SOCIETY TOBACCO-FREE

THE Central Health Education Bureau in collaboration with the Govt. of National Capital Territory of Delhi observed the World No-Tobacco Day on 31st May 1993. The venue was Nehru Homoeopathic Medical College and Hospital, New Delhi. Eminent people from the World Health Organization, Govt. of India and representatives from voluntary organizations participated. The theme of the symposium was "Health Services: our window to a tobacco-free world."

Inaugurating the symposium, Dr D.B. Bisht, Director, Programme Management, SEARO, WHO said that tobacco "is an intoxic drug which leads to cancer and other respiratory diseases. It is hazardous to consume tobacco through *pan* and *pan masala*, particularly by the young people. Mortality and morbidity rate in the country is very high due to the use of tobacco and smoking."

Dr Bisht stated that "65 per cent cases of cancer are avoidable and preventable if use of tobacco is given up." The theme for the next year of the World No-Tobacco Day would be "The media against tobacco" which would enforce total ban on the use of tobacco in the U.N. buildings and buildings funded by UNO, he added.

Dr Bisht said that legislation alone was not sufficient to stop people from smoking or consume tobacco. Indeed, the "enactment should come from within by the people and not from without," he added.

Dr Bisht said that the "knowledge of the art of communication is essential to convince people to quit smoking. Each health professional should also become a communicator to make the society tobacco free," he said.

Death from smoking rising

Dr V.P. Varshney, Director, Health Services, stated that smoking was killing 2 million people a year — three times as many as is the 1960's — and the death toll was rising steadily. Of these, 1.5 million people died in India every year, he said.

Dr Varshney said that there were about 30 brands of *pan masala* now on sale in the country. They contain tobacco which was extremely harmful especially for children and pregnant women.

Delhi Administration has banned smoking in hospital premises and workplaces that fall under its jurisdiction. Similar action should be taken by the Central Govt. and other depts., he said.

Dr Varshney emphasised the need of health education of the people to persuade them to quit smoking.

Indicators

Dr Narendra Bihari, OSD, DGHS, said the ICMR study has indicated that the "prevalence rate of smoking among males above 15 years of age is 90 per cent in a rural community in Meerut district of UP." According to another study undertaken in 1981-82 in an urban situation, the prevalence of smoking was found to be 59.5 per cent

among males of above 15 years of age. These indicators show the prevalent situation in the country.

Smoking is responsible for deaths due to cancer, cardiovascular diseases, respiratory diseases, peptic ulcers, pregnancy-related complications while passive smokers, with ill-health conditions like asthma, bronchitis, cold and other allergies are prone to more serious reactions of Environmental Tobacco Smoke (ETS).

The ETS causes sudden infant death syndrome. Irritant effects on eyes, nose and throat, respiratory tract infections had increased the risk of death from lung cancer and coronary heart diseases by 20 per cent. Such revelations make it imperative for the health profession to strive for making non-smoking a social norm which would eventually lead to the goal of a tobacco-free society, he said.

Dr Narendra Behari exhorted the health personnel, particularly medical doctors to set an example and abstain from smoking in order to protect their patients and their colleagues from the risks of passive smoking.

Non-communicable diseases rising

Dr I.C. Tiwari, Adviser (Health) Planning Commission, said that India has made many achievements in the field of health. The life expectancy has gone up from 31 years in 1947 to 58 years today. Many communicable diseases have either been eradicated or controlled. Smallpox and plague are non-existent. Malaria is under control. Leprosy is to be controlled by 2000 AD, he said.

But, non-communicable diseases, he said, are causing a great alarm. As we control communicable diseases we have to fight against the non-communicable diseases right from the time a mother is carrying a baby in the womb. For, passive smoking of tobacco among women carries the risk of cancer of the cervix. Besides, oral cancer closely follows it, Dr Tiwari said.

Beedi smokers, he said, carried 6 to 8 times higher risk of tobacco related diseases compared to cigarette smoking, he said.

The practitioners of the Indian Systems of Medicine who being closer to community, especially in rural areas, could help a great deal in health education of the people by persuading them against smoking, he said.

Parallel programmes

Dr Suraj Varma, a surgeon representing Cancer Society of India

SWASTH HIND

SWASTH HIND, May 1993, devoted the theme of the World No-Tobacco Day — 31 May, 1993 Health Services — Our window to a tobacco-free world was released by Dr Narendra Bihari, O.S.D., DGHS, New Delhi. The issue was hailed by all with a thunderous applause. It has been “brought out very well” and it carries “informative and thought-provoking articles” was the opinion of a cross section of the VIPs, professionals and others who were present during the symposium on the theme that was organised at the Nehru Homoeopathic Medical College and Hospital, New Delhi on 31 May, 1993.

said that the non-governmental organizations were running the parallel programmes with the Govt. in this field.

Screening in the north-east part of the country has revealed that 15 per cent of cancer is contributed by the lifestyles adopted. *Beedi* smoking is responsible for 4 per cent deaths.

Awareness

Dr V.P. Mehta, Delhi branch, Indian Cancer Society emphasized the need to create awareness among people to stop smoking. Diseases like lung and oral cancer were caused due to the ‘mad’ use of tobacco.

Dr Mehta emphasised on eating fibrous foods for good health.

Dr V.S. Wadhwa, Director, CHEB, proposed a vote of thanks.

—M.L. MEHTA

(Contd. from Page 165)

7. In states like Himachal Pradesh workers show interest but they are not given adequate guidance in the maintenance of cold chain and maintenance of proper registers. Supervision at all levels should be strengthened. In some States, State officials seem to be satisfied with the programme without having made any field visits. The Medical Officers and Health Visitors rarely visit the field in some States.

8. In some States mechanics are posted to maintain the cold chain at district level but they are not effective partly due to their indifference partly due to the bureaucratic delays. Such delays can be overcome by getting the equipment repaired by private companies on contractual basis.

9. Sterilization of needle and syringes at the sub-centre level and in the field are not satisfactory. It is recommended that the sterilization should be done at the PHC

level by autoclaving and the syringes and needles should be taken to the field in sterilised kits.

10. The awareness in the community about the need for immunization is fairly adequate. But the details of immunization schedule are known only in small percentage. People are more keen about the polio immunizations than other immunizations. I.E.C. activities have to be strengthened to give complete information about all immunizable diseases, immunization dosages and the timings of immunization. □

INTERNATIONAL CONFERENCE ON NUTRITION

WORLD DECLARATION AND PLAN OF ACTION TO ATTACK HUNGER AND MALNUTRITION

THE International Conference on Nutrition, bringing together ministers of agriculture and health in a "World Nutrition Summit," was held in Rome from 5-11 December 1992. It concluded after adopting a World Declaration expressing determination to eliminate hunger and reduce all forms of malnutrition.

The six-day conference of over 160 governments and around 160 international and non-governmental organizations—jointly sponsored by the UN Food and Agriculture Organization (FAO) and the World Health Organization (WHO)—also called on the United Nations to consider urgently the issue of declaring an International Decade of Food and Nutrition to help achieve the objectives of the Declaration.

"Hunger and malnutrition are unacceptable in a world that has both the knowledge and the resources to end this human catastrophe", the Declaration states. "We recognize that globally there is enough food for all; inequitable access is the main problem.... We pledge to act in solidarity to ensure that freedom from hunger becomes a reality"

The ICN was hailed by the Director-General of FAO, Mr. Edouard Saouma, and the Director-General of WHO, Dr Hiroshi Nakajima, as a landmark conference.

In a closing statement, Mr Saouma said the Conference "opened a new area for dialogue and concerted action on a crucial problem for the future of mankind."

"At a moment when the spotlights of the entire world are focussed on the drama of hunger provoked in both Africa and Europe by nature and the folly of man, this Conference allowed us to take a new look at the fundamental issues of food and nutrition."

However, he added, "the answers could only be found through profound reflection and unfailing determination."

Referring to the adoption by consensus of the World Declaration and the accompanying Plan of Action for Nutrition, Mr. Saouma said they "constitute an irreplaceable reference for the conception and elaboration of strategies, policies and national programmes" related to food and nutrition.

Dr Nakajima said: "Together, as partners in a planetary pact, we can achieve our objectives. Each one of us has a role to play, whether we are representatives of governments or of international, bilateral or nongovernmental organizations. Each has his or her own expertise to contribute. This goes hand in hand with intensified endeavours to mobilize resources from the international community."

"Rome was not built in a day. Our alliance to achieve nutritional wellbeing will take time to bear fruit. Yet with this Declaration and Plan of Action we are the architects of a new world nutrition order. With this blueprint in hand, we have a unique opportunity which we must not lose. We must fulfil our responsibility, indeed our moral obligation, to lift

the burden of malnutrition, in all its hideous forms, from the newborn infant, our young children, our mothers, our elderly—from all humanity."

On food aid, the Declaration says it may be used to assist in emergencies and provide relief to refugees and displaced persons, to support household food security and community and economic development. According to the Declaration, countries receiving emergency food aids should be provided with sufficient resources to enable them to cope with future emergencies, but care must be taken to avoid creating dependency.

"We reaffirm our obligations as nations and as an international community to protect and respect the needs for nutritionally adequate food and medical supplies for civilian populations situated in zones of conflict. We affirm in the context of international humanitarian law that food must not be used as a tool for political pressure. Food aid must not be denied because of political affiliation, geographic location, gender, age, ethnic, tribal or religious identity."

The Declaration states: "We all view with the deepest concern the unacceptable fact that about 780 million people in developing countries—20 per cent of their population—still do not have access to enough food to meet their basic daily needs for nutritional well-being.

"We are especially distressed by the high prevalence and increasing

numbers of malnourished children under five years in parts of Africa, Asia and Latin America. Moreover, more than 2000 million people, mostly women and children, are deficient in one or more micronutrients; babies continue to be born mentally retarded as a result of iodine deficiency; children go blind and die of vitamin A deficiency; and enormous numbers of women and children are adversely affected by iron deficiency."

"Hundreds of millions of people also suffer from communicable and non-communicable diseases caused by contaminated food and water. At the same time, chronic non-communicable diseases related to excessive or unbalanced dietary intakes often lead to premature deaths in both developed and developing countries."

According to the Declaration, poverty and lack of education are the primary causes of hunger and undernutrition. Slow progress in solving nutrition problems reflects the lack of human and financial resources, institutional capacity and policy commitment in many countries needed to assess nutrition problems and to implement programmes to overcome them, it says.

The Declaration calls for basic and applied scientific research and food and nutrition surveillance systems to identify factors that contribute to the problems of malnutrition, and to identify how to eliminate these problems, particularly for women, children and aged persons.

"In addition nutritional well-being is hindered by the continuation of social, economic and gender disparities; discriminatory practices and laws; floods, drought, desertification and other natural calamities; and many countries' inadequate budgetary allocations for agriculture, health, education and other social services," the Declaration further states.

"Wars, occupation, civil disturbances, natural disasters, as well as

human rights violation and inappropriate socio-economic policies, have led to tens of millions of refugees, displaced persons, war-affected non-combatant civilian populations, and migrants who are among the most nutritionally vulnerable groups. Resources for rehabilitating and caring for these groups are often extremely inadequate and nutritional deficiencies are common."

"All responsible parties should cooperate to ensure the safe and timely passage and distribution of appropriate food and medical supplies to those in need, in accordance with the Charter of the United Nations."

The Declaration says that nutritional well-being of all people is a pre-condition for the development of societies and should be a key objective of progress and human development. It must be at the centre of socio-economic plans and strategies.

Policies and programmes must be targeted towards those most in need. The Declaration went on "We must support and promote initiatives by people and communities, and ensure that the poor participate in decisions that affect their lives."

The right of women and adolescent girls to adequate nutrition was considered crucial and their health and education must be improved, the Declaration stresses. Women should be given the opportunity to participate in the decision-making process and to have increased access to, and control of, resources.

The Declaration seeks to promote active cooperation among governments, multilateral, bilateral and non-governmental organizations, the private sector, communities and individuals, "to eliminate progressively the causes that lead to the scandal of hunger and all forms of malnutrition in the midst of abundance."

While recognizing that each government has the prime responsibility to protect and promote food security and nutritional well-being

of its people, the Declaration stressed that low-income countries should be supported by the international community, including an increase in official development assistance in order to reach the accepted United Nations target of 0.7 percent of GNP of developed countries as reiterated at the United Nations Conference on Environment and Development.

In addition to the Declaration, a Plan of Action was also adopted at the Conference. It contains a wide range of detailed strategies and is a basis for national plans of actions which individual countries aim to revise or prepare before the end of 1994.

Based on world-wide consultations in preparation for the Conference, actions to be considered by governments in their efforts to improve nutrition are: incorporating nutritional objectives, considerations and components into development policies and programmes; improving household food security; protecting consumers through improved food quality and safety; caring for the socio-economically deprived and nutritionally vulnerable; and promoting breast-feeding.

The Conference was attended by almost 1400 delegates from over 160 countries and was addressed on its opening day, on 5 December, by His Holiness Pope John Paul II, who stressed the effects of what he described as "the paradox of plenty" in which so many millions suffered and died from hunger and malnutrition in a world which produced enough food for all.

The chairperson of the Conference, Madame Simone Veil, member of the European Parliament and its former President and former Minister of Health of France, told the closing session of the Conference:

"I wish that the message of hope expressed here will be heard outside this forum and will find a response during the coming decade for the concrete realization of the commitments we have all made here." She hoped that as a result of progress stemming from the Conference, hunger and malnutrition could be eliminated in a peaceful world. □

LATHYRUS SATIVUS AND LATHYRISM

—An Update

RAMESH V. BHAT & M. KALADHAR

THE disease Lathyrism had attracted attention since ancient times. Sleeman in 1833 provided the first authentic record of outbreak of lathyrism in India. Since then about 40 outbreaks have been described in India. During the last three decades, outbreaks of lathyrism have been recorded not only in the Indian States of Maharashtra and Madhya Pradesh but also in other developing countries like Bangladesh, Nepal and Ethiopia.

The disease has been attributed to consumption of the pulse *Lathyrus sativus*. An unusual aminoacid, β -N-oxalyl Amino Alanine (BOAA) has been isolated from *Lathyrus sativus* seed, characterized, synthesized and proved to be responsible for causing neurological manifestations in a variety of experimental animals including primates. Lathyrism is the first human neurodegenerative disorder linked to an exogenous excitatory aminoacid, BOAA.

There has been a resurgence of interest in lathyrism all over the world as exemplified by the organization of three International Symposia on the subject at Pau France (1985), London (1989) and Dacca (1992). An International Network for the improvement of *Lathyrus sativus* and the eradication of lathyrism has been established.

Agricultural aspects

In India, lathyrus is mainly cultivated in Madhya Pradesh. However, it is also cultivated in Uttar Pradesh, Bihar, West Bengal, Maharashtra, Gujarat, Karnataka and Andhra Pradesh. While the production of lathyrus in Madhya Pradesh during 1970s was about 300,000 tonnes, it had declined to about 150,000 tonnes during late 1980s. Besides India, it is also cultivated in Bangladesh, Peoples' Republic of China, Nepal, Pakistan, Ethiopia, Canada and France.

Work on genetic improvement of *Lathyrus sativus* by evolving a variety with low BOAA content has been progressing in several countries. A low toxin variety P24 was identified in India and released in 1973-74. A variety which has as low as 0.01% BOAA has been identified in Bangladesh. The Canadian germplasm LS 8246 has a BOAA content of 0.03%. Work is in progress in Indian Agricultural Research Institute, New Delhi on genetic manipulation of *Lathyrus sativus* plant to produce a toxin free variety.

Social and economic aspects

Lathyrus was traditionally considered as poor man's crop, being cultivated in drought-prone areas as an 'insurance crop'. It used to

be given to landless agricultural labourers by the landlords in lieu of wages. The prices of lathyrus were much lower than other foodgrains. However, during recent years, the scenario has changed considerably. A KAP study undertaken by the Marketing and Business Associates on behalf of the Government of Madhya Pradesh in 1989 indicated that the consumption of lathyrus in rural areas of Madhya Pradesh is continuing though, at a reduced level compared to 10-15 years ago. The reasons for continued consumption cited were, its comparatively less cost, better taste and satiety value.

In States like Andhra Pradesh, Karnataka and Maharashtra, lathyrus is cultivated and utilized locally in the preparation of 'dal' or for preparing certain savouries. In a study in Bhandara district (Maharashtra), the surveys conducted by the National Nutrition Monitoring Bureau had revealed that among the 108 households surveyed, 11 households were consuming lathyrus as 'dal'. The consumption was 52 gm/CU/day on an average and the maximum consumption in a family was 113 gm/CU/day. The price of lathyrus is generally about 50% more than that of wheat and about 40% less than that of chickpea. During recent

years. the increase in prices of pulses is generally more than other foodgrains and there is a lucrative trade of adulteration of chickpea flour with lathyrus flour in various parts of the country.

Chemistry and biosynthesis of *Lathyrus sativus* Neurotoxin(s)

The major toxin from *Lathyrus sativus* seeds, implicated in human neurolathyrism is β -N-oxalyl aminoalanine (BOAA). The toxin, also referred to as ODAP (Oxyalyldiaminopropionic acid) was first isolated in 1963. The content of BOAA in *Lathyrus sativus* seed, varies from 0.2 to 1.0 gm per cent.

The biosynthetic pathway of the toxin and the enzyme involved is still obscure. The enzymatic oxalylation of β -L-diaminopropionic acid (DAPRO) to BOAA has been demonstrated, although DAPRO itself could not be detected in *Lathyrus sativus*. Recent experiments utilizing 0-acetyl-(^{13}C) serine (OAS) revealed significant incorporation of the label into isoxazoline derivatives (B1A) and BOAA. The identification of the particular enzyme involved in opening the isoxazoline ring of B1A leading to formation of DAPRO is crucial since, development of toxin-free strain of *Lathyrus sativus* is not possible without interfering with the specific gene transcription for this particular enzyme.

Neurotoxicity of BOAA-A. Experimental studies

BOAA was observed to be a potent neuroexcitant and found to be toxic to a variety of animal species, viz., immature rat, mice and chicks, ducklings, baby pigeons, young guinea pigs, pups, monkeys, horses, sheep and goats. Early studies of acute neurotoxicity in chicks, rodents, ducklings and

baby pigeons revealed that adult animals do not develop toxicity due to BOAA while the young ones display neurological symptoms.

Recently, by feeding diet containing *Lathyrus stivus*, or alcoholic extracts of *Lathyrus sativus* pulse supplemented with BOAA or diets supplemented with BOAA alone at higher levels, symptoms of neurolathyrism were successfully induced in cyanomalous monkey. Affected monkeys showed a variable combination of fine tremor, periodic myoclonus—like jerks, mild to moderate increase in muscle tone of leg muscles, and striking hind limb extensor posturing. The motor-neuron disease of lathyrism type was also developed in horses, sheep and goats by prolonged feeding of *Lathyrus sativus*. The dose of BOAA required to cause neurological symptoms in experimental animals varies from species to species. While in susceptible species like horse and sheep 0.04 to 0.1 gm of BOAA per kg. body weight is needed, for animals like monkeys 1.1 gm per kg/body weight is needed.

Mechanism of action of BOAA

BOAA is an excitotoxin which is capable of over stimulating and destroying nervous cells. In the convulsing young rat, depletion of glycogen and high energy phosphate levels and an increase in inorganic phosphate and lactate levels could be observed along with enhanced protein degradation and ammonia production. The transport of excitatory amino acid glutamate, into synaptosomal preparations were found to be inhibited by BOAA. It was speculated that the neuroexcitatory actions of BOAA are mediated by increasing the effective glutamate levels in the synaptic junctions or alternatively BOAA could bind to glutamate receptor and mimic the effects of glutamate. It has also

been demonstrated in mice that BOAA administration causes degenerative changes in retina, hypothalamus and the arcuate nucleus, similar if not identical, to glutamate induced pathology.

Studies conducted at NIN in Wistar rats, revealed that when BOAA is administered during gestational period, a significant alteration in the neurotransmitter amino acids viz., glutamate, GABA and glycine concentrations occurs in the early post-natal period. These observations are indicative of transport of BOAA from the mother to the foetus, which was also supported by detection of radioactivity in the brain of foetuses from mother rats who were administered ^{14}C -labelled BOAA. Interestingly, the brain dopamine levels of the young ones were decreased due to BOAA treatment. This observation becomes significant, since in adult rat brain, BOAA has no effect on brain dopaminergic system, while its analogue BMAA (β -aminomethyl) is a potent neurotoxin of dopaminergic neurons. Thus the neurotoxic effects of BOAA on the developing brain, need to be further examined.

Isomeric forms of BOAA in relation to neurotoxicity

BOAA occurs predominantly (95%) as the β -form in *Lathyrus sativus*. Under certain conditions, it has been shown to spontaneously isomerize to the α -form, a reaction that might also occur during the preparation of 'dal' from *Lathyrus sativus*. Investigations revealed that α -BOAA is neither acutely nor chronically toxic. It was suggested that differences in the mode of cooking and hence in the extent to which such isomerization occurs, may contribute to the known variability of *Lathyrus sativus* seed toxicity in different geographical locations. The

observations on the isomerization of β -form on cooking need to be confirmed by other studies.

Metabolism of BOAA: Information on absorption and metabolic fate of BOAA in the body is scanty. It was reported that in squirrel monkey, BOAA was found to be metabolically inert and does not undergo any transformation. It was also observed that in adult rat, chick and rhesus monkey, no metabolite of BOAA could be detected either in tissues or in urine. However, from recent studies carried out on humans, it is suspected that BOAA is metabolized in the body.

Detoxification: It has been observed that under laboratory conditions by parboiling the seeds or by the hot water treatment and discarding the excess water, it is possible to remove most of the toxins from *Lathyrus sativus*. However, such detoxification procedures were not found to be practical by the rural population subsisting on lathyrus. Establishing commercial facilities for detoxification of lathyrus was not successful.

Human studies on neurolathyrism

Two forms of lathyrism viz., the latent and established have been described in humans. The fully established cases were clinically characterized by spasticity and varying degrees of paraparesis. The latent form of the disease observed in apparently normal people can be identified only by careful neurological examination. The signs include exaggerated knee and ankle jerks, ankle clonus and extensor plantar reflexes. Spasmodic muscular contraction of calf muscles is the earliest recorded symptom in affected individuals. Other symptoms include weakness, heaviness and stiffness of the limbs, muscle cramps, tremors, coarse involuntary movement of upper extremity, etc., Minimally

affected individuals could run with knock-knees or walk slightly altered gait. The more severely affected have typical scissors gait.

Lathyrism is an irreversible form of upper-motor neuron disease involving pyramidal tract. Unfortunately, detailed histopathological information is still scanty in humans. A study carried out in Unnao district (U.P.) in 1976 by ITRC, Lucknow, revealed subclinical lathyrism. A follow-up study indicated that those who could not avoid eating lathyrus, subsequently developed full blown lathyrism. Similarly, during the outbreak of lathyrism in Bhandara district (Maharashtra) in 1975, it was observed that in patients with lathyrism cessation of consumption, particularly in the early stages of disease, resulted in distinct improvement of the condition. These observations emphasize the need for those who are already at risk for totally refraining from consumption of lathyrus.

A recent visit to Medak district in Andhra Pradesh and Bidar district in Karnataka revealed that lathyrus is cultivated all along the banks of the river Manjira. A few typical cases of neurolathyrism were detected in the villages Pulkurti and Vallur of Medak district. This confirms the earlier observations that whenever lathyrus is cultivated and consumed, cases of lathyrism do occur.

Legislations

In 1671, Grand Duke of Wurtemberg issued an edict prohibiting the use of lathyrus in bread. It was prohibited in France in 1829 and in Algeria in 1881. In India, in May 1870, the Government prohibited the cultivation of lathyrus in Allahabad district, but the order was withdrawn in August 1874. Legal suits claiming damages for

the occurrence of crippling disease in humans and animals due to consumption of *Lathyrus sativus* were settled in France, England and India during 19th century.

The various State Governments of the Indian Union (except the State of Bihar, Madhya Pradesh, West Bengal) are implementing the provisions of the PFA Act pertaining to prohibition of sale of *Lathyrus sativus*. Such a provision was first made by the Central Government in 1961. The Nepalese Government in 1992 banned the import and export of *Lathyrus sativus* 'dal' and flour under the Import-Export (Control) Act.

The Madhya Pradesh Government in a notification issued on 15th December, 1983, imposed a ban on giving *Lathyrus sativus* 'dal' to farm labourers in the form of wages. The Supreme Court while disposing a Writ Petition No.153 of 1982 (Jyoti Prakash vs State of Madhya Pradesh) directed the Planning Commission to make an investigation on the problem of lathyrism. The report prepared at that time agreed with the assumption that regular consumption of lathyrus 'dal' in whatever form results in lathyrism and the cultivation of *Lathyrus sativus* be banned and "should not be used for consumption".

Risk assessment

It is now unequivocally established that the pulse *Lathyrus sativus* contains a potent neurotoxin capable of causing toxicity to humans and a variety of experimental animals. It is also beyond any doubt that consumption of the pulse in 'comparatively large quantities' for as short as 15 days to 1 month by human leads to spastic paraplegia. Active surveillance of the disease to detect cases of either subclinical/latent or active stage of neurolathyrism in

most of the states in India is not being pursued since it is yet to be classified as a reportable disease. Data generated from such an active surveillance coupled with data on intake of *Lathyrus sativus* are essential to arrive at appropriate conclusion on the safety of *Lathyrus sativus* as is consumed by population groups. If small amounts of lathyrus are consumed for prolonged periods by humans would it pose any risk to human health? What is the safe level of BOAA in *Lathyrus* which will not cause toxic effect with either prolonged consumption or with higher consumption level for over a short period? To what extent differences in the methods of cooking modify the seed toxicity of *Lathyrus sativus*?

Epidemiological evidences hitherto gathered, specially during outbreaks that have occurred in the past, do not throw much light on these aspects. On the other hand, we do not have unequivocal evidences either in experimental animals or humans to indicate that

consumption of 'small quantities' of lathyrus (as dal) is safe and would not result in any neurological damage.

Even after considering the socio-economic compulsions, it would be reasonable to suggest the continuation of the ban on sale of lathyrus for the following reasons:

(1) It would be feasible to cultivate alternative crops such as bengal gram and lentils in areas endemic to lathyrism.

(2) Efforts are underway to evolve varieties of lathyrus low in toxin content. Such a variety could be popularized for cultivation.

(3) The price of the lathyrus often fluctuates according to the price of the other pulses, and if the ban on sale is lifted, the price of lathyrus is bound to increase.

(4) In the Medak district of Andhra Pradesh and Bidar district of Karnataka, as a consequence to the ban on the sale of *Lathyrus*

sativus, the cultivation of this pulse on the banks of river Manjira has reduced, consumption by humans has decreased, and frank cases of lathyrism minimised.

(5) There is an isolated report of a child in the district of Bilaspur, developing lathyrism during early 1990s as a result of eating lathyrus as 'dal'.

(6) It would not be possible to suggest logistic mechanisms to ensure consumption of only detoxified 'dal' or only in small quantities exclusively for the preparation of 'dal'.

Conclusion

Since it is now well established that BOAA is a powerful neurotoxicant and excitotoxin, it would be undesirable to expose population groups to this toxin even at very low concentrations. Under these circumstances, it is suggested that the provisions of PFA Act pertaining to *Lathyrus sativus* should be fully implemented in all the states of the Indian Union.

—Nutrition News,
April 1993

Success for Ovarian Cancer Screening

A new method of screening women for ovarian cancer is claimed to be able to detect the disease some 18 months before the symptoms show.

Until 10 years ago, screening was ineffective but it has since been found that over 80 per cent of women with clinically diagnosed ovarian cancer have increased levels of what is known as the CA 125 tumour marker substance in their blood. And ultrasound has been successfully used to measure the size of the ovaries.

Now, an investigation of these two developments by Dr Ian Jacobs, a gynaecologist at Adenbrooke's Hospital in Cambridge, eastern England, has concluded that a combination of CA 125 and ultrasound has produced a useful two-stage method of screening.

To date, 22,000 volunteers, all over 45 and post-menopausal, have been screened in this way. Of these, 340 had raised levels of CA 125 and 41 of them had an abnormal ultrasound scan. When operated on, 11 of the 41 were found to have ovarian cancer while most of the remainder had benign disorders or cancers of other organs.

Dr Jacobs and other researchers in Britain and the US are now working to develop new tumour makers that can increase the sensitivity of the present test from 50 per cent to nearer 80 per cent.

—Medical News from Britain

THE Vice-President, Shri K.R. Narayanan, gave away awards to individuals and institutions in recognition of their work on population control at a brief function held on 26th March 1993 at Hotel Ashok, New Delhi.

Of the 14 entries selected for the awards for promotion of family welfare for 1992, eight were bagged by the electronic media, three by the organised sector and three by voluntary organisations. The awards have been instituted by the Department of Family Welfare to give an impetus and bring forward the best promotive work in population control.

Addressing the gathering Shri Narayanan said the population problem was progressively becoming uncontrollable and complicating every other problem faced by mankind. "We have to resort to scientific, technical, social and economic methods to control the staggering growth rate and make all facilities available and acceptable to the masses", he observed.

Media and men have proved to be the main stumbling block in the country's population drive, according to Vice-President K.R. Narayanan.

Psychological resistance to the use of family planning methods was only from the men folks, he said.

He regretted that the media too had not given adequate attention to this crucial issue. This was clear from the fact that there were not enough entries from the print

Awards on Family Welfare Presented

medium and the first prizes had to be withheld in the categories of feature films, short video films, radio jingles, radio features and songs, since "no entry was found up to the desired standards".

Underlining the importance of family planning, Shri Narayanan said it was but appropriate that the present generation of Indians was a "condomed generation". The use of condoms was essential both for preventing unwanted baby births and also for fighting AIDS. The Governments at the Centre and in the States, the voluntary bodies and all concerned must use condom to this dual purpose with success.

While the desirability of the family planning methods was being propagated, not enough was being said about their acceptability, the Vice President noted. He pointed out that ancient scriptures were replete with references about various methods used in the past to contain the baby boom. The present population was the proof of their not being successful, and now it was time to utilise technology and social and economic measures to meet the challenge.

Also speaking on the occasion, the Union Health & Family Welfare Minister, Shri B. Shankaranand, emphasised on the need for greater determined effort to

bring down the birth rate. According to him, deep rooted customs, traditions and socio-cultural beliefs were the root cause for large family size and increasing population which were creating not only environmental hazards but ecological crises as well.

Shri Shankaranand called for a national consensus in support of family welfare programmes with willing participation of all sections of the society. "Provision of contraceptives and other services alone would not suffice. It was necessary to improve information, education, inter-personal communication" he added.

Also present on the occasion were the Deputy Minister for Health & Family Welfare Shri Paban Singh Ghatowar and the Labour Minister, Shri P.A. Sangma. Shri Sangma in his brief address said rather than stressing on one-child family norm, the need was to ensure good quality of citizenship.

The Awards and the Awardees

First prize was not given in several categories to set a precedent for high quality of work. Following are the lists of prize winners in different categories:

FEATURE FILMS

Ist Prize: No entry was found upto the Rs. 1 lakh desired standard.

IIInd Prize: Awarded to film DHURI
Rs. 50,000 Producer & Director:
MS. KUCKOO MATHUR

Synopsis: DHURI - revolves round two characters, Bimla and Angoori. The film portrays the problems of early marriage, frequent births and the population issues illustrated by comparing the life style of the two characters.

SHORT VIDEO FILMS (Half an hour Documentary)

Ist Prize: No entry was found upto the desired Rs. 1 lakh standard.

IIInd Prize: Awarded to film WARIS
Rs. 50,000 Producer: NANDINI TYAGI
Director: BRIJ BHUSAN

Synopsis: WARIS highlights the obsessions with the male child preference. It revolves around the theme that girls can also carry the family name.

SPECIAL JURY AWARD (for short video films)

Rs. 15,000 Awarded to DO GULAB
Producer: RAMESH G. NAWANI

Synopsis The film depicts the theme that it is futile to go on having too many children in the vain hope of a male issue. A limited number of children make life happy, gender of child not withstanding.

SPECIAL MENTION BY JURY (For short video films)

PRERNA

Producer: Confederation of Indian Industry (CII).
Director: Puneeta Roy.

Synopsis: Depicts the laudable work done by various business houses seeking to improve the quality of life of its employees by emphasising small family and doing service in internalising family limitation message.

RADIO Jingles (30 Seconds)

Ist Prize: No entry was found upto the Rs. 50,000 desired standard.

IIInd Prize: To be shared by:
Rs. 20,000 MUNNA YA MUNNI
By Dr. Abha Mishra and
HAATH MEIN JEEVAN BIMA
By Sh. Sardari Lal Babbar

Synopsis: Munna Ya Munni conveys family welfare messages with distinct appeal as a composite piece of music.

Haath Mein Jeevan Bima presents family welfare message through the medium of aesthetically pleasing musical composition.

RADIO FEATURE (15 Minutes)

Ist Prize: No entry was found upto the Rs. 1 lakh desired standard.

IIInd Prize: To be shared by:
Rs. 35,000 YEH BHI KHOOB RAHI AND
JAGRITI By Shri Vinod Rawal and
Shri Kishan Bhutani

The Feature Yeh Bhi Khoob Rahi has an absorbing format with a participative potential centering round the theme of family welfare.

The Feature Jagriti endeavours to bring about awakening towards present day socio-economic realities.

SONGS (3 MINUTES)

Ist Prize: No entry was found upto the Rs. 60,000 desired standard.

IIInd Prize: GORI TERA PAON BHAARI
Rs. 35,000 By Rakesh Pandit

The Song: Gori Tera Paon Bhaari—an imaginatively rendered composition in lilting tune focussing on care during pregnancy.

SPECIAL JURY PRIZE BETA HO YA BETI
(Rs. 10,000)
By Shri Satish Babbar

The Song: Beta ho ya Beti revolves round the theme that a daughter is as worthy as a son through the format of a touching melody.

VOLUNTARY ORGANISATIONS

Ist Prize: **TRIBHAWAN DAS FOUNDATION, ANAND (GUJARAT)**
Rs. 1.5 lakhs

For their excellent contribution for providing MCH and immunisation services and for their noteworthy initiatives in generation of awareness on population issues including environment through electronic media in Kheda district of Gujarat. The Foundation contributed significantly towards providing family planning services, holding meetings/seminars/workshops and organising press coverages on population issues.

IIInd Prize: **MAHARASHTRA AROGYA MANDAL, PUNE**
Rs. 1 lakh

For best contribution in providing family planning, MCH and immunisation services. The Mandal provided new thrusts in awareness generation, logistics support and gaining access in remote rural areas and slums in and around Pune and in motivational work.

IIIrd Prize: **JYOTHI SANGH, AHMEDABAD**
Rs. 50,000

For their significant contribution in services delivery in family planning, MCH and immunisation. The sangh undertook training schemes for motivating and energising workers, besides themselves working in slum areas of Ahmedabad.

ORGANISED SECTOR

Ist Prize: **TATA IRON AND STEEL CO. (TISCO), Jamshedpur.**
Rs. 1.5 lakhs

For outstanding work in providing MCH, Immunisation and family planning services in Jamshedpur and surrounding areas. Was instrumental in generating large scale awareness on population issues through campaigns and harnessing electronic and print media. Their song on population, "Aao Milker Gayen, Aage Kadam Badhayen", broadcast over AIR and Doordarshan proved immensely popular. "Parvati", the video film on the status of girl child adds another dimension to their initiatives.

IIInd Prize: **STEEL AUTHORITY OF INDIA (SAIL), New Delhi**
Rs. 1 lakh

For doing commendable promotional work in family welfare, MCH and immunisation services through their innovative campaign approach. Were instrumental in wide press coverage and also organised Essay Competitions etc. in SAIL's various steel plants at Bhilai, Bokaro, Rourkela, Durgapur, Salem etc.

IIIrd Prize: **NORTHERN COAL FIELDS LTD. SINGRAULI (Madhya Pradesh).**
Rs. 50,000

For best work in providing family planning services and organising family planning camps, made commendable contribution in other spheres especially electronic and print media and providing MCH and immunisation services in Singrauli Coal Fields.(MP). □

Tokyo : World's Largest City

Tokyo has replaced Mexico City as the world's largest city, according to United Nations estimates.

The top 10 cities are Tokyo with 25 million population, Sao Paulo with 19.2 million, New York with 16.2 million, Mexico City with 15.3 million, Shanghai with 14.1 million, Bombay with 13.3 million, Los Angeles with 11.9 million, Buenos Aires with 11.8 million, Seoul with 11.6 million and Beijing with 11.4 million. This ranking is based on estimates and projections from the United Nations Population Division.

World Urbanization Prospects, 1992, published both as a wall-chart and statistical volume, contains estimates and projections of the urban population of each country, as well as city data.

Readers wishing to obtain a copy of one of these publications may write to the Sales Section, United Nations, New York, NY 10017, United States. □

—Population Headliners,
April 1993

Hopes for mental illness sufferers

At least 52 million people in the world suffer from severe mental disease such as schizophrenia or severe depression. In addition, some 155 million are estimated to suffer from neuroses, about 120 million from mental retardation, and 100 million from affective disorders. Epilepsy is estimated to affect some 50 million others, and dementias to affect about 15 million. These figures provided by WHO (Division of Epidemiological Surveillance and Health Situation and Trend Assessment) show that countries are facing an imperative need to help the mentally ill and their families, which means providing care to at least an estimated 300 million people.

New insight into mental illness and prospects of better treatment are emerging from two WHO research projects, the biggest of their kind ever mounted. One project, supported by the Laureate Psychiatric Research Centre in Tulsa, Oklahoma, USA, as well as centres in ten countries, is a study of the long-term course and outcome of schizophrenia. A sequel to the WHO International Study of Schizophrenia which began in 1968, it will provide information about the course and outcome of illness in some 3000 people who were given the diagnosis of schizophrenia 15-25 years ago.

Schizophrenic illnesses are ubiquitous, appearing with similar incidence in different cultures, and have clinical features that are more remarkable by their similarity across cultures than by their differences. They are influenced by genetic, developmental, and environmental factors whose exact nature, interaction and relative importance have yet to be identified. The existing evidence suggests that treatment needs to be directed at both the social and biological aspects of mental illness. Patients in developing countries seem to have on the whole a more favourable course and outcome than their counterparts in the developed world. One of the aims of the study is to help explain the reasons for this difference.

The second major WHO study, which is now nearing completion, is investigating the types and frequency of psychological problems seen in primary health care in 14 countries. It began in 1989, and by 1992 some 25,000 patients aged 18 to 65 had been screened in general health services to identify people with symptoms of mental disorders. The patients were classified in different categories according to the symptoms, and, after being interviewed and diagnosed they are

being followed up over a period of one year. It is expected that the results obtained in the study will lead to action programmes for the extension of mental health care into general health care in several countries, and provide the necessary knowledge and helpful techniques that are applicable worldwide.

WHO's mental health programme includes many other research activities and has a much wider focus—ranging from psychosocial aspects of health care in general to rehabilitation of people with chronic mental and neurological disorders—in recognition of the fact that mental health activities are able to improve greatly the health of populations. It has been formulated through a process of consultation within WHO, with other United Nations bodies, with governments, the scientific community and various nongovernmental organizations. It relies for its implementation on a network of collaborating centres in more than 60 countries, expert advisory panels, nongovernmental organizations and various governmental agencies in WHO's Member States. □

—World Health

World Environment Day Focusses on Poverty

THE relationship between poverty and the environment was highlighted by the United Nations Environ Programme (UNEP) in connection with the observance of the World Environment Day (5 June). The Day—celebrated internationally each year on the anniversary of the opening day of the United Nations Conference on the Human Environment which was held in Stockholm in 1972. (See Secretary-General's message on next page).

According to UNEP information on the Day, nearly one fourth of humanity lives in absolute poverty, with 400 million people obtaining only four fifth of the food they need. Half of all people in developing countries do not have safe water to drink and 25,000 people die from waterborne diseases every day.

Setting forth the rationale of the day's theme, UNEP Executive Director Elizabeth Dowdeswell states that "the poor use fewer resources, create less waste and do less harm to the global environ-

ment than the rich". Wastefulness, over-consumption remains the "single most powerful threat to the world's environment".

There is a threshold of poverty, however, below which the poor, too, become disproportionately destructive, she explains. "There comes a point when present survival means destroying resources which could have nurtured poor for years. The most vivid image of this is the farmer eating his next year's seed grain."

The worldwide observance of the Day included special school programmes, public marches, community clean-up campaigns, tree plantings, a volunteer collections of recyclable paper, as well as other workplace, community and political action to promote environmental awareness.

This year, the main international celebrations were held in Beijing where a special ceremony recognized the outstanding contributions of a number of individuals and organizations to the protection of the environment.

They included urban activists, scientists, journalists, architects, business leaders and small farmers, who received UNEP's Global 500 Roll of Honour award for 1993. This year the Roll of Honour included a new special award for youth to be presented to nine young people, between the ages of 6 and 2.

The UNEP encourages individuals to take part in World Environment Day by buying wisely, consuming less, using water sparingly and using environment-friendly products.

"The world has the ability to end absolute poverty" according to Ms. Dowdeswell. "We must find the will and mobilize the necessary means match our abilities or else this poverty and degradation will continue to affect us all." Not until the poor are given the means and opportunity to break out of the vicious circle in which poverty holds them, will real development become a possibility, she states.

It was at the Stockholm Conference in 1972 that the decision, was taken to form UNEP, to be a catalyst for improved environmental policies throughout the international community and to coordinate those policies within the United Nations system. World Environment Day has been celebrated in past years in all regions of the world, including a commemorative event held during the United Nations Conference on Environment and Development in Rio de Janeiro last year.

—UN Newsletter

ANNOUNCEMENT

INDIAN SOCIETY OF HYPERTENSION

1. 15th Scientific Meeting of the International Society of Hypertension, Melbourne (Australia), March 19-26, 1994.

Contact: *Dr. Shailendra Vajpayee, President, Indian Society of Hypertension, Govt. Medical College, Surat-395 001, Gujarat. Phone: Off. 46130, (Res.) 41371, Fax: 91-261-652338.*

2. "HYPERTENSION AND HEART RESEARCH IN DEVELOPING COUNTRIES" (A Satellite symposium of ISH 1994 Melbourne Meeting) BOMBAY, March 14-15, 1994.

Contact: *Dr. K. G. Nair, President, Organising Committee, 206, Doctor House, Pedder Road, Bombay-400 026, Phone: 3865008, Fax: 91-22-467780.*

Grim WHO

Report on

World's Health

Tropical diseases, acquired immunodeficiency syndrome (AIDS) and diabetes were growing problems which left no room for complacency, the World Health Organisation (WHO) said in its report on the State of the World's Health for 1985 to 1990. Cholera had spread to the Americas for the first time this century; pulmonary tuberculosis was increasing — stimulated by the human immunodeficiency virus (HIV) — and there were more cancer cases in the developing world than in developed countries.

At the same time, childhood diseases such as measles and poliomyelitis had decreased due to better immunization programmes, and cardiovascular disease had waned in developed countries because of health education. The overall death rate was decreasing globally, while life expectancy was increasing, the report said. However, gains had been overshadowed by epidemics of diseases such as cancer, heart disease, stroke and diabetes in the poorest countries. Those diseases had previously afflicted mainly the industrialized countries.

Meanwhile, the World Health Assembly in Geneva had called for an end to such harmful traditional practices as child marriage, dietary limitations during pregnancy and female genital mutilation. Those practices prejudiced the health, development and human rights of all members of society, it said.

SECRETARY-GENERAL'S MESSAGE ON WORLD ENVIRONMENT DAY

FOLLOWING is the text of the message of Secretary-General Boutros Boutros-Ghali, on the occasion of World Environment Day, 5 June:

"Last June in Rio de Janeiro, the largest ever gathering of world leaders explicitly acknowledged that protection of our common environment is an urgent requirement, and that continued destruction of our environment can no longer be tolerated.

"After years of environmental neglect, the crisis facing us has now been recognized. There is a new awareness of the peril in which we have already placed ourselves, and of the danger, towards which we are rapidly heading. If we are to succeed in preserving a viable planet for future generations, co-operation and commitment must now characterize our efforts.

"The challenges that confront us are increasingly being measured in global rather than in national terms. Environmental destruction or harm in one country—depletion of the ozone layer, destruction of the world's forests, the spread of dangerous toxins and contaminants—affects the health of the entire planet.

"At Rio, in a consensus unique in the history of international relations, the world's leaders agreed on the steps that now must be taken.

'Agenda 21' outlines a plan and a concrete approach to creating environmentally sound and sustainable development.

"In concrete and practical terms, sustainable development means a commitment to finding and using resources that are renewable, and a more careful management of those resources that are non-renewable. It means choosing products and production processes that avoid an adverse impact on the environment. It means a greater willingness by business to take environmental factors into account. It means respecting biological diversity in agriculture, and avoiding the excessive use of harmful, energy-intensive chemicals. It means eliminating public subsidies that encourage the liquidation of our natural environmental heritage. It means addressing the acute poverty that leads parents to wish for ever more children as a buffer against the insecurities of old age. It means using preventive diplomacy to avoid the destruction of war and the waste engendered in the preparation for war.

—UN Newsletter

The Assembly also marked the fifth anniversary of the WHO's declaration to eradicate poliomyelitis by the year 2000. Some 81 per cent of the world's infants were being vaccinated against the disease, and not a single case resulting from the wild polio virus had been

detected in the western hemisphere in the last year. However, Bangladesh, China, India, and Pakistan accounted for 71 per cent of reported cases of poliomyelitis in 1991 and reporting in much of Africa was considered unreliable.

—UN Newsletter

EFFECTIVE PREVENTION COULD HALVE NEW HIV INFECTIONS

— Says World Health Organization

THE World Health Organization (WHO) says that effective HIV prevention in developing countries could reduce the number of new adult HIV infections during the rest of this decade by 9.5 million — halving the number of new adult infections. This would mean over four million fewer infections in Africa, over four million less in Asia and a reduction of about a million infections in Latin America.

Speaking in Berlin at the opening of the IXth International Conference on AIDS, on 6 June 1993 Dr Michael Merson, Director of the WHO Global Programme on AIDS, said such a reduction in new infections could be achieved if all developing countries implemented a basic HIV prevention package now:

"We must waste no time in scaling up those interventions that work. This means implementing, worldwide, a prevention package which should include the promotion and distribution of condoms; the treatment of conventional STD's because of their role in facilitating HIV transmission; AIDS education in schools and through mass media; promotion of condom use by prostitutes and their clients; maintenance of a safe blood supply and needle exchange programmes for injecting drug users. But, let me emphasize that WHO is not advocating a standard blueprint for prevention. The best mix of interventions must be adapted for the local context and adjusted to local constraints."

Based on an analysis of the cost of existing programmes WHO has

calculated that comprehensive prevention in the developing world would cost between \$ 1.5 and \$ 2.9 billion a year (1990 US dollars). The sum is not unreasonable: \$ 2.5 billion is a fraction of the cost of Operation Desert Storm and would hardly buy one can of Coke for every person in the world.

Dr Merson says that an annual \$ 2.5 billion price tag for HIV prevention should not be regarded as current spending but as an investment for the future:

"It is an investment on which the returns would be huge. WHO calculates that investing this amount from now to the year 2000 would save close to 90 billion dollars in direct and indirect costs from AIDS by the turn of the century. The main impact of prevention will be seen later, well into the 21st century — both in financial terms and in the incalculable yield of diminished human suffering."

WHO estimates conservatively that 13 million adults and around 1 million children have been infected by HIV since the start of the pandemic. At present WHO estimates that about half of all HIV infections so far have occurred in young people 15—24 years old. This means since the start of the pandemic at least 6 million youngsters have been infected with HIV through unprotected intercourse or needle sharing. And there is enormous potential for further spread among youth, particularly since 800 million live in

developing countries, where the pandemic is expanding the fastest.

At the same time, more and more people infected 5—10 years ago with HIV are developing AIDS. Since the last International Conference in Amsterdam, AIDS cases have increased by half a million. The cumulative world total of AIDS cases is now more than 2.5 million — 20% higher than in 1992. Today the majority of the AIDS cases are concentrated in Africa, Europe and the USA, where the pandemic is oldest. Five to ten years from now, AIDS will be claiming far more lives in Latin America and Asia. Faced with such an alarming situation, it is time to act now, says Dr Merson:

"AIDS is a grim reality, not a myth. It's time to do what works, not just in pilot projects but countrywide, worldwide", says Dr Merson. "To respond to AIDS in the developed world, we must commit ourselves to realistic prevention programmes and a true partnership with people living with HIV and AIDS. To combat the pandemic in the developing world, will take exactly the same commitment and an annual investment of \$ 2.5 billion. I appeal to world leaders to help mobilize these resources — from national budgets, non-governmental organizations, the private sector. We can afford AIDS prevention. We cannot afford to neglect it."

—W.H.O.

SWASTH HIND

BOOK REVIEW

SURGERY AND ANAESTHESIA AT THE DISTRICT HOSPITAL

A series of three handbooks that can help doctors acquire
safe, standardized—and life-saving—surgical skills

Anaesthesia at the District Hospital

This first handbook was produced to assist doctors who lack formal training in anaesthesia and yet find themselves called upon to provide anaesthesia, particularly in the emergency care of the critically ill. To this end, the book concentrates on a selection of tried and tested techniques, procedures, and equipment capable of producing good anaesthesia despite the primitive conditions often found in small hospitals. Particular attention is given to the use of draw-over anaesthesia as the technique of first choice for inducing general anaesthesia in small hospitals.

"....full of extremely valuable information and advice....clear, precise, and easy to read....many young doctors working in difficult circumstances in the district hospitals of developing countries will be immensely helped...."

—British Journal of Anaesthesiology

"....superb....beautifully clear, concise, informative and understandable.... The author and publishers have done the 'Second World of Anaesthesia' a great service by producing this book...."

—Anaesthesia and Intensive Care

1988, 143 pages (English and French)

Sw.fr. 20-/US \$ 18.00

In developing countries: Sw.fr. 14.-

General Surgery at the District Hospital

This second handbook provides a guide to general surgical procedures suitable for use in small hospitals. The book describes and illustrates standard procedures for essential operations, including

- abscess drainage
- skin grafting
- suturing
- tracheostomy
- laparotomy
- appendicectomy
- resection of the small intestine
- colostomy
- sigmoidoscopy
- anal fissure and abscess treatment
- herniorrhaphy
- bladder catheterization
- hydrocoele
- circumcision
- vasectomy
- intussusception.

Paediatric surgery is covered in a separate section.

"....an invaluable practical guide for doctors working in remote areas....each procedure is described in a clear, concise and easy to follow format....excellent diagrams....well worth buying...."

—British Journal of Clinical Practice

1988, 230 pages (English and French)

Sw.fr. 30.-/US \$ 27.00

In developing countries: Sw.fr. 21.-

Surgery at the District Hospital: Obstetrics, Gynaecology, Orthopaedics, and Traumatology

The final handbook covers essential surgical procedures for treating the major complications of pregnancy and childbirth and for managing traumatic injuries, including fractures and burns. Gynaecological procedures commonly required in small hospitals are also covered.

The book opens with six chapters describing essential procedures for treating the major complications of pregnancy and childbirth and for preventing maternal deaths. Life-threatening emergencies, such as obstructed labour and ruptured ectopic pregnancy, are covered together with more general obstetric procedures commonly needed during or after delivery.

Gynaecological operations form the focus of four chapters, which describe general gynaecological procedures, techniques for female sterilization and IUD insertion, and procedures for obtaining biopsy or cytological samples from the endometrium, cervix, and vulva. The remaining 14 chapters describe essential techniques in orthopaedics and traumatology.

1991, 207 pages (English; French in preparation)

Sw. fr. 25./US \$ 22.50

In developing countries: Sw.fr. 17.50

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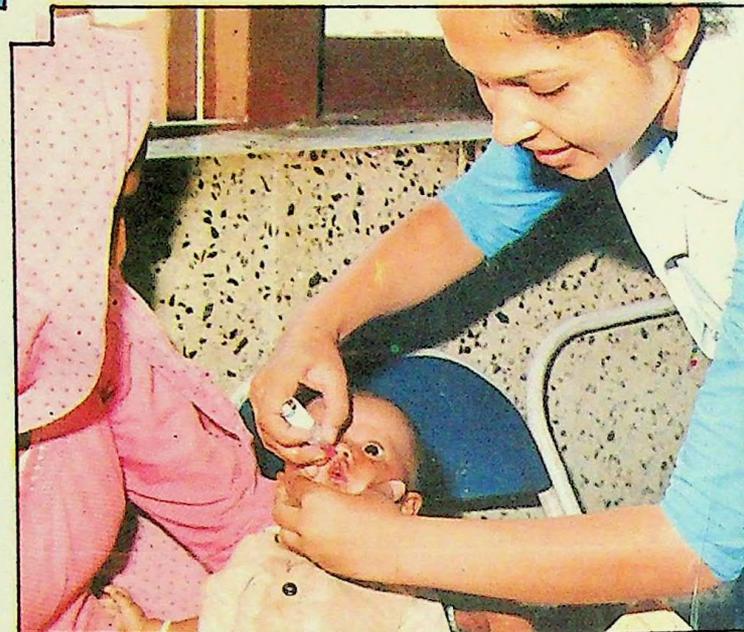
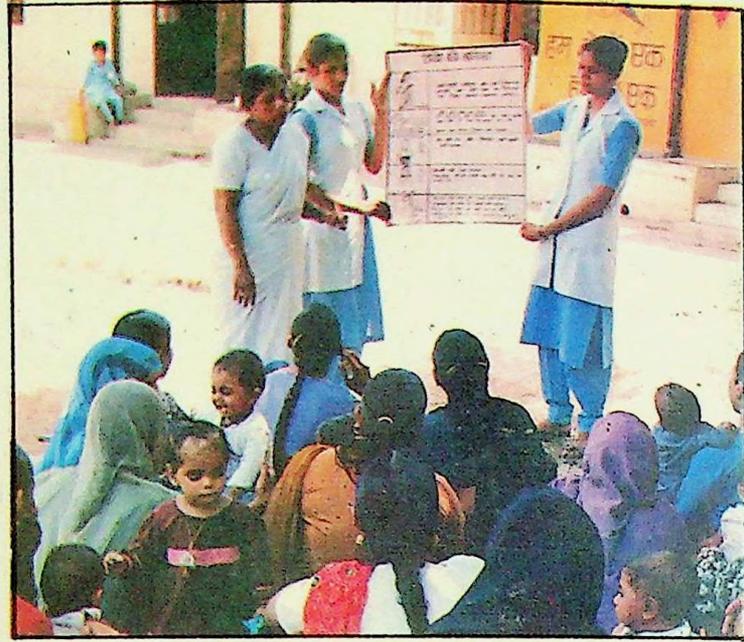
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