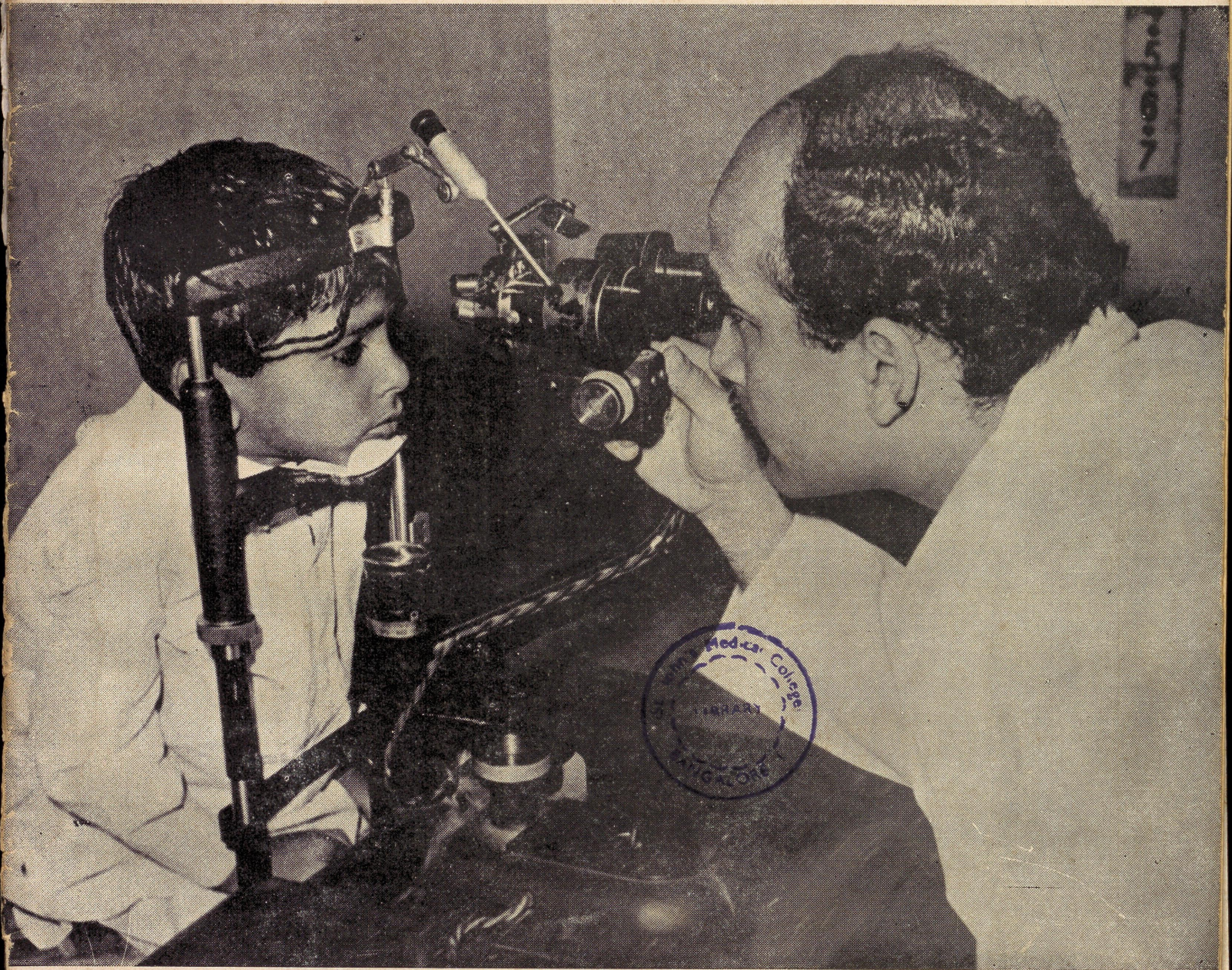


19
1972

Swasth hind

SEPTEMBER 1978



- PRIMARY HEALTH CARE IN INDIA
- RESTORING SIGHT TO CURABLE BLIND
- MALARIA—A THREAT TO ALL

A demonstration of ACCI's deep involvement with your health is its massive Rs. 62.6 million pharmaceutical plant at Ennore, Madras.

ACCI's pharmaceutical plant is designed to manufacture a number of speciality drugs—right from the bulk chemicals to the finished products. Some of these drugs are internationally acclaimed for their efficacy in combating serious diseases. For example, "Atromid-S" and "Inderal" for the control and treatment of heart

disease; "Mysoline", a broad-spectrum anticonvulsant, outstandingly effective in the treatment of epilepsy; "Fluothane", a break-through in inhalational anaesthesia; "Savlon", "Hibitane" and "Cetavlon"—broad-spectrum, non-toxic antiseptics, superior in formulation and efficacy. "Tetmosol" for the prophylaxis and treatment of scabies and "Nilverm", a highly successful drug for the treatment and control of worm infestation in animals.

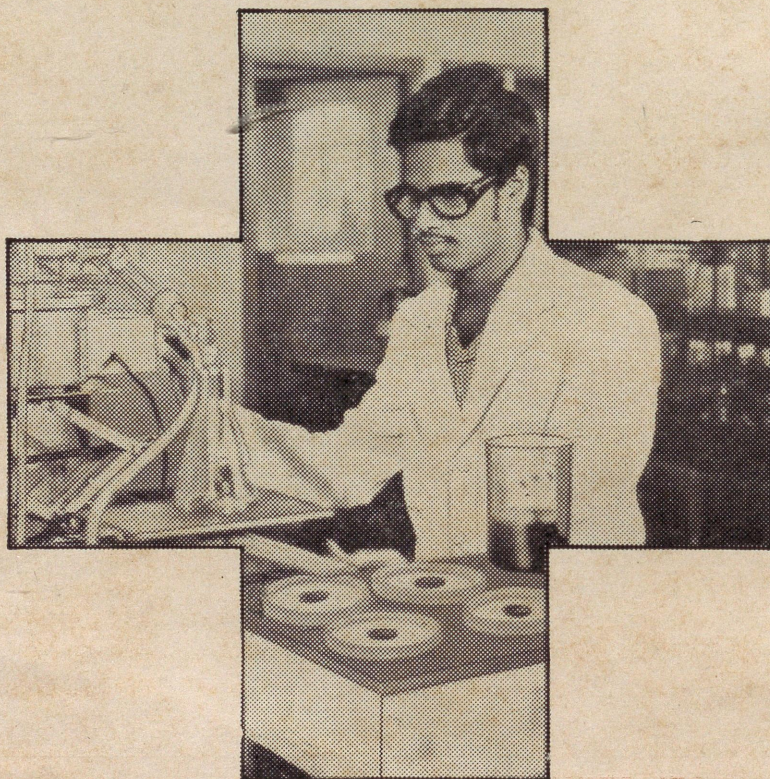


The Alkali and Chemical Corporation of India Limited

Pharmaceuticals Department
Ennore Express Highway
Ernavoor Ennore
Madras 600 057.

Regd. Office:
34 Chowringhee Road
Calcutta 700 071.

Growing proof of ACCI's commitment to your better health.



SAA/ACCI/2997

Swasth hind

Bhadra-Asvina
1900 Saka

Volume XXII No. 9
September, 1978

In this issue

- 210** Primary health care in India—concept and implications
Dr B. C. Ghoshal
- 217** Restoring sight to the curable blind
Prof Lalit P. Agarwal
- 221** Health care and community action
Dr G. Donoso
- 224** Malaria—a threat to all
Dr S. Pattanayak
- 230** Health in Parliament
- 233** Health education workshop on kala-azar
- 235** Andhra Pradesh : Hospital health education
- 237** New challenges before naval medicine
- 238** Community health workers' page—tuberculosis and B. C. G. vaccination

Editor : **N. G. Srivastava**
Asstt. Editor : **D. N. Issar**
Sr. Sub-Editor : **M. L. Mehta**
Photo credit : **M. Y. Khan**
Cover design : **S. L. Chaudhary**

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

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

The contents of this Journal are freely reproducible.

Due acknowledgement is requested.

The opinions expressed by the contributors are not necessarily those of the Government of India.

SWASTH HIND reserves the right to edit the articles sent for publication.

Editorial and Business Offices

Central Health Education Bureau
Kotla Marg, New Delhi-110002.

Single Copy . . . 25 Paise (\$0.25 or 9 d.)

Annual Subscription . . . Rs 3.00 (\$2.50 or 9 sh.)

(Postage Free)

PRIMARY HEALTH CARE IN INDIA

—Concept And Implications

DR B. C. GHOSHAL

Primary Health care aims to integrate all the elements necessary to make an impact upon the health status of the people at the community level. Such an approach should be an integral part of the national health care system.

IN India and many other developing countries, the health services are not keeping pace with the changing population either in quantity or quality.

There is to-day an enormous imbalance between supply of services and the steady increase of the volume and the complexity of health needs. The imbalance is more marked in developing countries like ours; there is a great imbalance between rural and urban health services. If this trend persists, the gap between supply of health services and the health needs of population will continue to grow wider and become increasingly difficult to close.

Concept of health service coverage

Health service coverage is the outcome of an effective and organized supply of basic health services including environmental sanitation and water supply that meets the needs of the entire population. These are provided on a continuing basis, in a form acceptable to the population. And they afford access to various levels of the health care system for maintenance of health of an individual and the community. The concept of health coverage goes beyond the limits of mere numerical ratios between services provided and population. It implies the recognition of dynamic relationship bet-

ween the needs and aspirations of the population as expressed in its demand for services on the one hand and the available resources and their technological and organizational combination that constitute the supply to meet their demands on the other. Hence the final form of coverage will vary from one region or a State to another, and from one community to another depending on the varying health needs and characteristics of the socio-economic development. The objective of various health institutions and programmes must finally converge towards the common goal of universal coverage. And efforts to attain it must make the services more acceptable to population and not be confined to mere satisfaction of demand as it arises. The achievement of universal coverage poses a real challenge, further magnified by the urgency to speed up action to achieve it.

Health policy must be included in the overall Development Plan. The resultant programme will then give high priority to the health needs of the deprived and other population living in 'social poverty'. This can be defined as combination of unemployment, under employment, illiteracy, poor housing, poor sanitation, malnutrition, ill-health and social apathy and above all

consequent lack of will and initiative to make changes for the better.

Supply of services

If the goal of universal coverage is to be attained through primary health care, the services must be constant with the basic needs of the community and be acceptable to it. In the rural community of India there are two sources of services—(i) existing traditional practitioners of medicine, traditional healers, bone setters, herbalists, *dais*, private practitioners; (2) institutional health system provided by the government through primary health centres, sub-centres, rural hospitals and dispensaries. The former, *i.e.*, the traditional systems of medicine co-exist with the latter, but in certain cases, the traditional system is the only source from which the curative health needs of the community are being met. The traditional health system usually focusses on curative care and the traditional birth attendant (*dai*) on child-birth. The formalized traditional systems of medicine are the Ayurveda, Unani and Siddha, Homoeopathy and Tibetan system. Non-formalized traditional healers are herbalist, bone setters, and traditional birth attendant. In the case of the formalized system, definite training programme by institutes are offered. The other traditional practitioners obtain training

from their fore-fathers by serving as apprentices. These systems rely upon the locally available herbs and drugs. They are deeply rooted in local culture and, therefore, accepted and supported by the community. Their utilization in primary health care will make it easier to link the traditional and Government institutional health system. However, the Government health system has to bear the major responsibility for safeguarding the health of the rural masses. The consensus is that these are still unable to meet the health care needs of the entire population.

What was wrong with the conventional health system?

The conventional health system is hospital-based and disease-oriented. It is entirely dependent on borrowed foreign technology leading to over-sophistication, thus making it ill-suited to the needs of rural community. Health services are viewed as an end in themselves. They are inaccessible to a large population in physical, social, cultural and financial terms.

Concept of primary health care

What is primary health care? The word 'primary', implies that there are secondary and tertiary aspects of health care which immediately connotes 'cure orientation towards health'. Health is a total concept. It cannot be split into primary and non-primary aspects.

Health is also a positive approach as opposed to disease. All efforts, therefore, towards prevention of disease and the promotion of positive values of health should, therefore, be deemed as primary aspects of health care. And all efforts for treatment of a person once he has succumbed to a disease should be treated as secondary aspects of healthy care.

Primary health care is taken to mean a healthy approach which integrates at the community level all the elements necessary to make an impact upon the health status of the people. Such an approach should be an integral part of the national health care system. It is an expression or response to the fundamental human needs of how can a person know of and be interested in the actions required to live a healthy life and where can a person go if he/she needs relief from pain or suffering. A response to such needs must be a series of simple and effective measures in terms of cost, technique and organization, which are easily accessible to the people in need and which assist in improving the living conditions of individuals, families and communities. These include preventive, promotive, curative and rehabilitative health measures and community development activities.

Principles in primary health care approach

This approach can be summarized by the following general principles which should be adhered to if primary health care efforts are to be successful.

(i) Primary health care should be shaped around the life patterns of the population, it should serve and should meet the needs of the community.

(ii) Primary health care should be an integral part of the national health system and other echelons of services should be designed in support of the needs of the peripheral level, especially as this pertains to technical supply, supervisory and referral support.

(iii) Primary health care activities should be fully integrated with the activities of the other sectors involved in community development

(agriculture, education, public works, housing and communications.)

(iv) The local population should be actively involved in the formulation and implementation of health care activities so that health care can be brought into line with the local needs and priorities. Decisions upon that should be based upon a continuing dialogue between the people and the services.

(v) Primary health care should use an integral approach of preventive, promotive, curative and rehabilitative services for the individual, the family and the community. The balance between these services should vary according to community needs and may well change overtime.

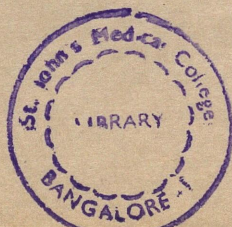
(vi) Health care offered should place a maximum reliance on available community resources, especially those which have hitherto remained untapped, and should remain within the stringent cost limitations that are present in each country.

(vii) The majority of health intervention should be undertaken at the most peripheral practicable level of the health services by workers most suitably trained for performing these activities.

Development of primary health centres

On 2 October, 1952, Community Development Programme was launched as the first integrated Rural Development Programme for an all-round development of the rural areas. 5,400 primary health centres (PHCs) were recommended in each of the community development block.

Paucity of resources placed limitations in accepting the recommendations of the Bhore Committee *in toto*. However, after Independence,



Rural Health Scheme Showing Good Results

The Rural Health Scheme is being implemented satisfactorily in most of the States and Union Territories. According to the reports received in most of the cases, the Scheme is showing good results and the persons joining the Scheme are generally very keen about their work.

This information was given by Shri Jagdambi Prasad Ladav, Union Minister of State for Health and Family Welfare, in the Rajya Sabha on 19 July, 1978.

Recently, an extensive evaluation study has been carried out in the Primary Health Centres spread over in the implementing States. This study has revealed some encouraging trends and achievements under the Scheme.

Three batches of Community Health Workers, numbering about 42,000, have already been trained

under this Scheme. The training of the fourth batch of over 14,000 Community Health Workers has also started from 1 July, 1978.

The Minister further stated that some variations in the degree of the understanding of the Scheme at different levels have been noted. Also the objectives, roles and responsibilities envisaged for different levels of personnel have been understood differently. Some difficulty in the selection of Community Health Workers was also noticed at the initial stage. Some problems were encountered in matters of training, training materials, training contents, payment of stipend, honorarium, etc. The Government is very much conscious of these problems and has initiated measures to remove them. The problems mentioned above were noticed more in the initial stage of the introduction of the Scheme but have been declining fast.

steps were taken to establish one PHC in every community development block each with a coverage of about 80,000 population.

The PHCs were conceived to function as nucleus to radiate primary health care services in the rural areas, through its sub-centres with operational responsibilities in the fields of medical care, control of communicable diseases, maternal and child health including nutrition and family welfare, environmental sanitation, school health, collection of vital and health statistics and health education. These centres function as first anchor against disease and ill-health in rural areas. Medical

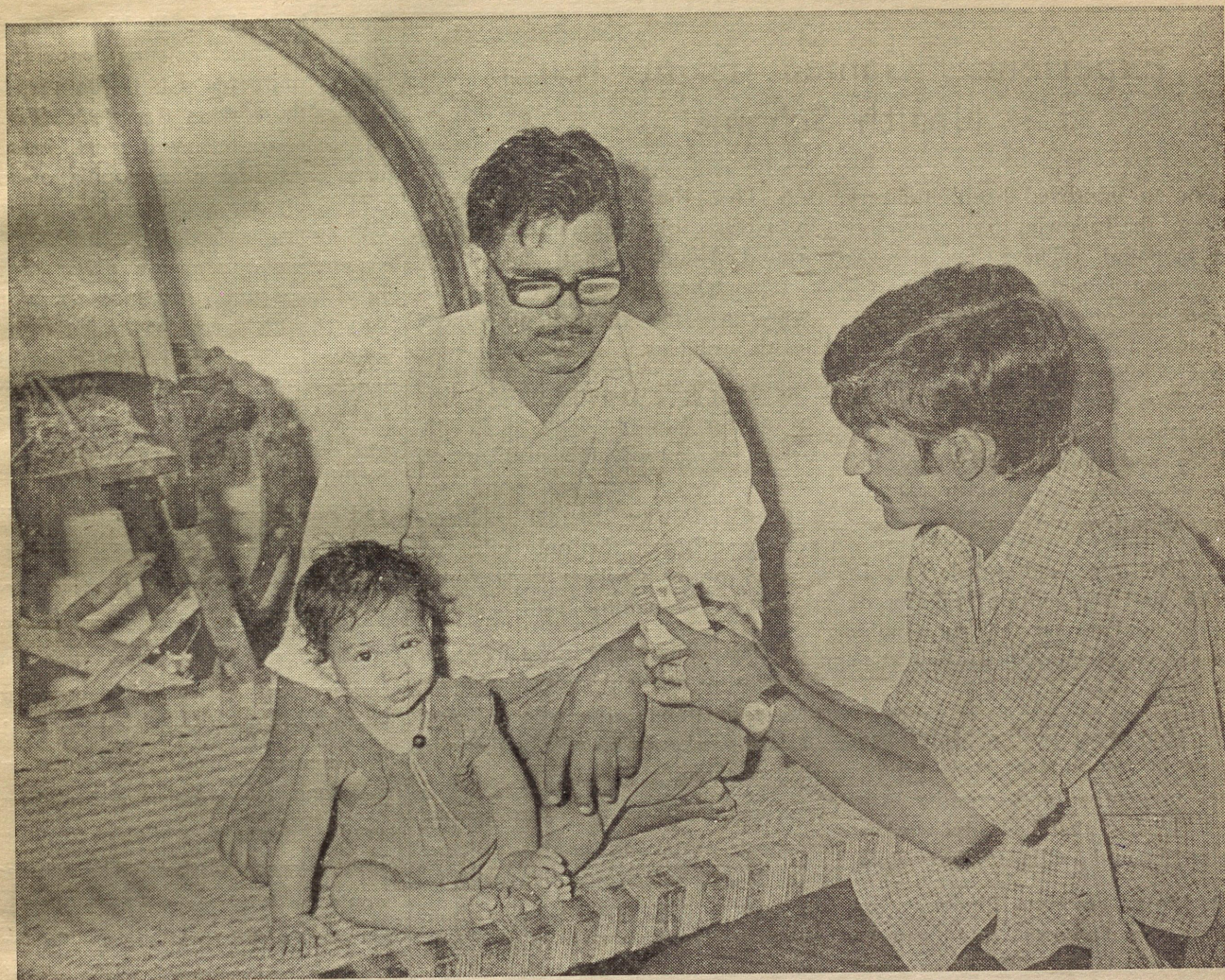
relief in such centres is designed mainly as an institutional service. The out-patient department renders diagnostic and therapeutic services for minor and moderate ailments. Four to six beds attached to them are used for observation and emergency services. It may be pointed out that PHCs are neither equipped nor expected to treat cases requiring sophisticated diagnostic facilities, surgical procedures or long period of hospitalization. Since PHC is not completely self-sufficient, it is organically linked up with institutions at higher level, i.e., Tehsil, Taluq and District hospital or centres where laboratories, X-ray and specialist services are available

which function as referral centres for PHCs.

The Health Survey and Planning Committee (Mudaliar Committee)—1961, while studying the progress achieved in establishing PHCs recommended, among others, expansion and strengthening of district hospitals and introduction of mobile teams of specialists to provide necessary supervisory and consultant facilities at the periphery.

In a concerted drive to extend primary health care to the rural out-reaches as many as 5,380 PHCs and more than 38,000 sub-centres have been set up in the country since Independence covering a population of about 438 million (1971) in 5,247 community development blocks. Very little progress has been made towards the development of referral hospitals. Moreover, the hospitals opened or upgraded were mostly situated in the urban areas. This is perhaps due to the fact that the first preference in the development of medical care facilities had gone to the urban areas because of historical background and logistic advantages. This has resulted in heavy concentration of health services and manpower in the urban areas. It has, therefore, now been decided that one out of every four PHCs be upgraded to 30-bedded rural hospitals to provide with both generalized and specialized services in medicines, surgery, anaesthesia, obstetrics and gynaecology.

Even though PHCs have been established throughout the length and breadth of the country, they have not been able to cover the whole population under their jurisdiction. It is reported that the sphere of service of the PHCs did not, by and large, extend 2-5 miles



MINI FAMILY MAXI HAPPINESS—A community health worker explaining the benefits of family welfare as a part of his tasks under the rural health scheme.

radius. Non-availability of the trained staff has come as a challenge in implementing the programme effectively. This is due to the centres being located in the interior places where communication facilities are inadequate and basic amenities, such as, living quarters, water supply, sanitary and recreational facilities, etc., are either totally absent or woefully inadequate. In addition, many persons posted at these centres are not oriented to the situation prevailing in the rural areas and thus fail to identify themselves with the goals and aspirations of rural community. There exists a distance between the health workers and the

villagers with no agency to provide an effective linkage between these two partners of progress. A number of health programmes whose success depend on such an understanding consequently have failed to penetrate in the rural areas. This has limited the effective functioning of PHCs.

Besides PHCs, some National Health Programmes were introduced in the country. These were implemented at the field level by the staff of each programme individually. All such functionaries under various National Health Programmes were working as unipurpose health

workers. There was no coordination between the workers. Because various health programmes were launched at different times with their own staff. Though this approach has resulted in proliferation of staff, it also yielded some results. But at the village level, whatever the intrinsic value of health personnel, the isolated and independent activities are not enough to make provisions of primary health care in an integrated manner to the rural population.

A further integration occurred in 1973 by introducing the multipurpose workers programme as recom-

Experiences Gained From Rural Health Scheme

For an improved health delivery system, the following basic premises are essential. These experiences have been gained during the implementation of the Rural Health Scheme.

1. That the majority of health problems of this country lie in the village and poorer sections of the city where the vast majority of our population lives.
2. That the cultural factors in health and the cultural affinity of health workers to the community they serve is more important than technical expertise.
3. That most of the health problems at the village level—promotive, preventive and curative—can be tackled at that level, by workers trained from the villagers themselves.
4. Most common illnesses are simple to diagnose and can be treated effectively with cheap and safe drugs, especially when detected early; neglected, they become complex and expensive problems.
5. That the medical profession, by virtue of their cultural background, training and aspirations cannot understand or function effectively in the context of village health problems.
6. That in a country of our size no matter how intricate a health system is devised, the problem of supervision of workers continues and will always remain. Under these conditions, the only effective supervision of workers must come from the community itself.
7. The community must become fully aware of their health problems and understand the roles of the various workers who will be responsible to them.
8. The public as well as the medical profession confuse illness with health, which are diametrically opposite. The ancient belief that health is a positive stage of physical, social and mental well-being which is so well-emphasized in our indigenous systems of medicine must be revived.

mended by Kartar Singh Committee by a progressive conversion of unipurpose workers.

Multi-purpose approach

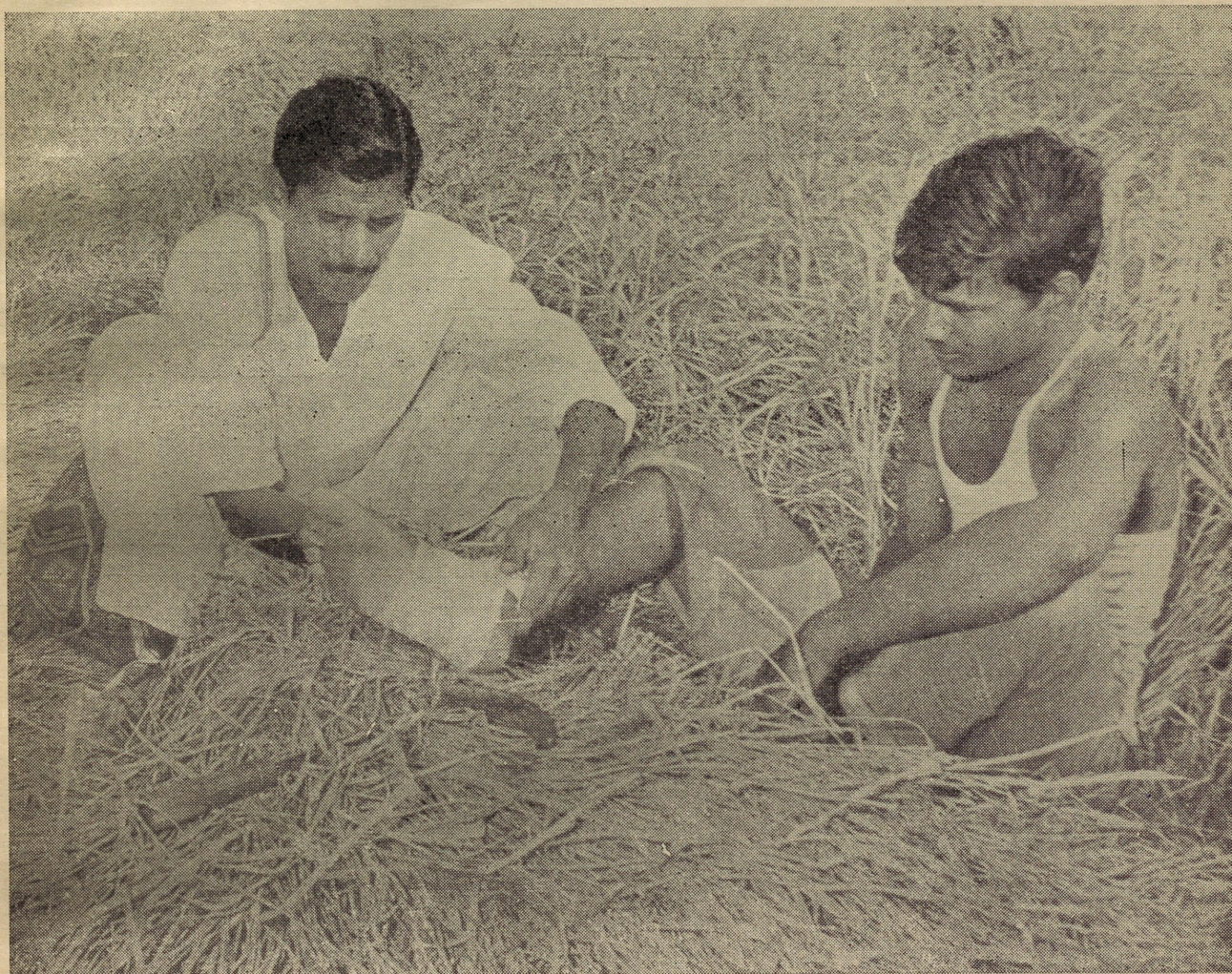
The evolution of the Multipurpose Workers' Scheme under Health and Family Welfare is based on various approaches experimented to provide the primary health care services to rural population. This scheme attempts to reduce the traditional stratification observed at administrative and operational levels of various health programmes. The policy and strategy involves a ra-

tional utilization and adjustment of available manpower to achieve a reduction in the area coverage of peripheral workers and entrusting each of them with the responsibilities of rendering comprehensive primary health care to the rural community.

To implement it, the existing unipurpose workers are now being trained in the multipurpose approach. Under this scheme, male unipurpose health workers like basic health workers, vaccinators, family welfare health assistants, etc., will

be designated as health workers (male). The existing auxiliary nurses midwives will be designated as health workers (females). Each of such workers will work in an area consisting of a population of 57,000. Four such workers (male) will be supervised by a health assistant (male) who are either sanitary inspectors, smallpox supervisors, health inspector, malaria inspectors, etc., and four health workers (female) will be supervised by health assistants (female) who are either health visitor/public health nurse. The team of one male and one female health workers will provide a package of primary health care, including treatment of minor ailments, to the population of their respective areas with the arrangement of referring cases to health assistants and primary health centres. The provisions of Rs. 2000 per sub-centre for drugs would be made available to these multi-purpose workers. The scheme would be implemented in a phased manner in the rural areas. So far, training programme under multipurpose workers scheme has been completed in 92 districts of the States.

The Shrivastav Committee on 'Medical Education and Support Manpower' in 1975 reviewed the whole situation and recommended the speedy implementation of the multi-purpose workers scheme, and introduced the three-tier plan for health care of the villagers, with the community health workers in the village providing the base. It also proposed the plan for reorienting the medical education towards the needs of the country, emphasis being placed on the community care rather than hospital care.



A HEALING TOUCH—Providing first-aid to the villagers is one of the tasks of the community health workers.

Community health workers scheme

On 2 October, 1977 (25 years after launching of the community development programme), the Government of India launched a Rural Health Scheme, beginning with the training of community health workers (CHWs) in 777 selected PHCs spread over the country. Structured around the central philosophy of placing 'people's health in people's hands', the scheme envisages the basic provision of one CHW for every village or community with a population of 1000. India has 5,80,000 villages served by 5,380 PHCs. The scheme is programmed to train 5,80,000 CHWs,

selected by the respective villagers to be in position by 1981.

The Rural Health Scheme starts with the CHW, who is from the village, selected by the community, willing to serve it and enjoying its confidence. This volunteer trainee, during his three months' training period, is taught the basic elements of health care and family welfare. The major stress is on promotional and preventive health, with simple curative and first-aid components added, health education, simple referral capabilities and familiarity with traditional health practices prevalent in the locality. He functions as an important agent of social

change bridging the cultural and communication gap between the profession and the masses.

The multi-purpose workers' programme implementation is being toned up to progress a little ahead of the programme to provide an effective organizational and referral framework. It is envisaged that by the end of the Sixth Plan period, there will be one male health worker and one female health worker for every 5,000 of the population. The integrated health care programmes of the various components of health, family welfare, nutrition, maternity and child health,

etc. will be through these personnel specially trained for the purpose.

Traditional system of medicine and health care pattern in the country, especially their preventive and promotional aspects, have been incorporated in the Rural Health Scheme.

The PHCs would serve as neighbourhood hospitals with referral linkage to 'intermediate' and district hospitals. To reorient medical education towards the needs of the country and the community care, three PHCs are being attached to each of the 106 medical colleges.

The concept of integral health is taken up in the full context of integrated rural development. A close working collaboration is maintained with the social welfare department and the Rural Development Department of the Ministry of Agriculture.

Introduction of the CHW scheme in the rural areas however, is not expected to replace the existing and proposed system of delivery of health services to the rural population. These workers on the other hand

NATIONAL COMMISSION FOR IYC IN INDIA

The National Children's Board, which was recently reconstituted by the Government of India with Prime Minister as its President, will be the National Commission for IYC in India. It will plan, review and supervise the programmes and activities connected with "1979 International Year of the Child."

are expected to supplement the activities of health worker. They will create an agency which is close to the people and create a pattern of medical and health services which are qualitatively better and remain within the financial resources of the country which are likely to be available in the near future.

The main feature of the policy is to make the health care delivery system need-based and to effect a transfer of larger portion of available resources to the rural areas. There is every reason to believe that instead of a dilution of health care, a positive enrichment and a stepping up the quality of life is likely to occur, because of the additional cultural and environmental

inputs into the preventive and promotive spheres of health.

While a great deal is said about the need for the involvement of the people in the health services, this concept needs functional support. The most effective means of community involvement is to hand over the responsibility for the health services below a certain level to the community through their representative bodies, such as, the *Gram Panchayat and Panchayat Samities*.

Achievements

As envisaged, about 30,000 CHWs have been trained in two different batches and are working in the field with their kits, medicines and manuals. They are mainly devoting their time in educating the community to promote the health status of the people through utilization of the preventive and promotive programmes and participation of the people themselves, especially for improvement of environmental sanitation and health education.

It is envisaged that by 1981-82, as many as 5,80,000 CHWs will be trained to provide primary health care to 500 million people residing in the villages.○

SEMINAR ON ENGINEERING AND HEALTH CARE

The Instrument Society of India is sponsoring the 2-day Seminar on 11-12 November, 1978 at Mysore. Top medical and other experts will deliver lectures on topics like pacemaking, CCU, Neuro Physiology, Neurosurgical Techniques, Neuropsychiatry, Behaviour Therapy, Management of Health Care Institutions, Aviation Medicine, Nuclear Medicine, Physical Medicine, Occupational Health, Noninvasive Techniques, etc. Film shows, popular lectures and exhibition are the other features. Registration fee is Rs. 100/- per delegate. For details contact T. G. Krishna Murthy, Co-ordinator, Engineering and Health Care Seminar, Instrument Society of India, C.I.S.L. Building, Indian Institute of Science, Bangalore.



RESTORING SIGHT

TO THE CURABLE BLIND

To combat the problem of blindness and visual impairment, the Government of India has launched a "National Programme for the prevention of Visual Impairment and Control of Blindness". This Programme envisages to encourage promotive, curative and rehabilitative aspects of the problem.

PROF. LALIT P. AGARWAL

Loss of sight is one of the greatest tragedies that could befall a human being. This human tragedy is further compounded with the economic repercussions not only on the individual afflicted but also on his family and imposes a particularly heavy burden on the society at large.

According to the latest studies, in India alone, there are about nine million people blind and about 45 million visually impaired but short of blindness. The various factors responsible for the visual impairment in India are almost the same as in other countries of this region. It was noted that cataract is responsible for about 55 per cent of the total blindness followed by trachoma infections (20 per cent), smallpox (three per cent), malnutrition (two per cent), injuries (1.25 per cent), glaucoma (0.5 per cent) and others (18.25) per cent which include congenital disorders, uveitis, retinal detachment, tumours, diabetic and hypertensive retinopathies, nervous system diseases, etc. Cataract, the corneal blindness due to infections, etc., glaucoma and squint are some of the conditions which can be classified under curable blindness.

In 1974, the International Assembly of the World Council for the Welfare of the Blind in Brazil, while pledging support for concerted international action to prevent blindness declared "we affirm that it is a primary obligation of governments and of the international community to prevent blindness and to conserve sight and that the incompatible faculty of sight should not be needlessly denied to any human being". Following this declaration, the Government of India accepted this concept and in 1975 contributed to the thought that "One of the basic human rights is the right to see. We have to ensure that no citizen goes blind needlessly or being blind does not remain so if by reasonable deployment of skill and resources sight can be prevented from deteriorating or if already lost, can be restored."

Two phases

The Government of India has launched a National Programme for the Prevention of Visual Impairment

and Control of Blindness. Under this broad-based scheme, the Government has planned measures which will encourage promotive, preventive, curative and rehabilitative aspects of the problem. The scheme has got two phases—(i) Temporary and (ii) Permanent.

The temporary phase consists of establishment of 80 mobile units in the country to cater 400 districts. These mobile units basically aim at providing health education to the community for promotive and preventive facets of the problem and provide curative measures for curable blindness. This concept of providing eye care by establishing eye camps has come to stay, not only in India but in some other countries with excessive ocular morbidity, especially cataract problem. These mobile units will conduct eye camps in remote areas, function as comprehensive eye health care camps, deliver curative services for diseases like cataract and glaucoma, and teach the community in preventive measures. One mobile unit is to cater about five districts, i.e., covering a population of about 1.5 to 3.00 million. It is estimated that one unit will be able to conduct, on an average, 25 camps in a year, i.e., five camps per district. At each camp, about 100 to 150 operations for cataract and glaucoma are expected to be performed. Similarly, the patients shall be examined and treated for ailments requiring immediate surgery in eye care. Community will also be surveyed for early detection and visual defects. Cases which could not be attended to at the camps will be referred to the different referral centres identified for the purpose. The establishment of the mobile units will facilitate providing the comprehensive eye health care services to the people in remotest areas who are not yet able to take benefit of the health care services available in the urban areas.

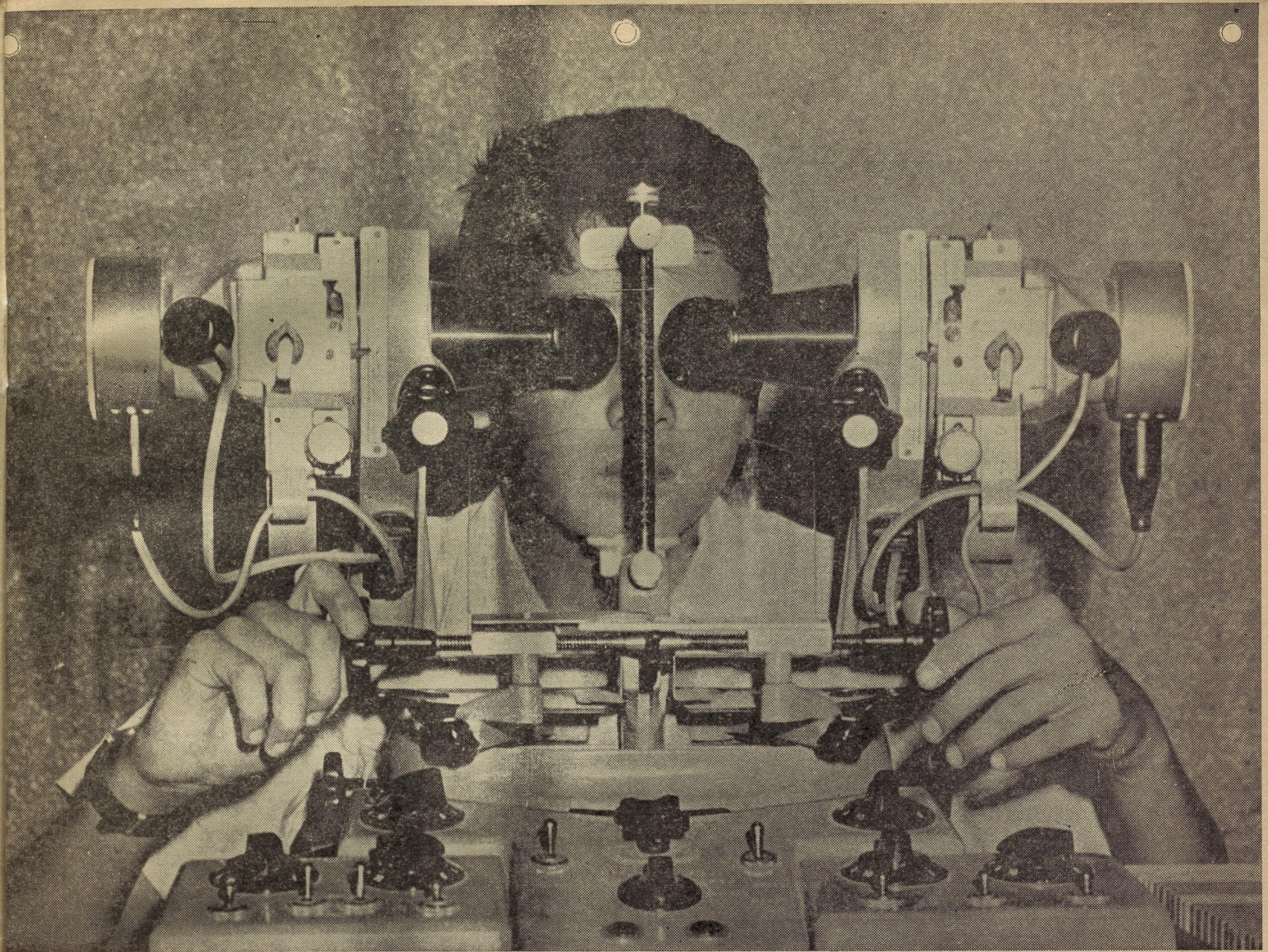
Permanent infrastructure

The plan envisages development of permanent infrastructure for comprehensive eye health care that will include a three-tier system of delivery to the community.

(i) *At the peripheral level tier*—Primary Health Centres (PHCs) will be strengthened to provide first line of ophthalmic care services. Trained ophthalmic assistants or technicians will be posted at each of the PHC and necessary diagnostic and treatment for all common eye diseases will be provided. The community will be attended to for common eye diseases like infections including trachoma. They will be screened for glaucoma and tested for glasses. Cases requiring treatment services of eye specialists will be referred to the services developed in the intermediate sector or the central sector. At present, there are more than 5,000 PHCs. It is hoped that in a period of six to seven years, these peripheral services would be available at each of these centres.

(ii) *Intermediate level tier*—At the intermediate level, the strengthening and providing eye health care services at the Taluka or sub-divisional level and district level is envisaged. There are about 2,000 sub-divisional hospitals and about 400 district hospitals. Under the plan, each district hospital will be provided with at least one ophthalmic surgeon and one ophthalmic assistant/technician and equipped with necessary ophthalmic equipments required for treatment and diagnostic purposes. The ultimate aim is that each district hospital should have two ophthalmic surgeons and two ophthalmic assistants/technicians alongwith other para-medical staff.

At the taluka level, it is proposed that once district level services are



TIMELY CHECK-UP SAVES FROM DARKNESS—Various factors are responsible for visual impairment, which if detected early, can be remedied. Photo shows eye exercise being done to correct vision.

developed they should subsequently be developed and at each of these hospitals at least one ophthalmic surgeon and one ophthalmic technician assistant be provided, in phases.

It is also proposed that each district should have at least 175 beds provided at the various hospitals including the district, the sub-division/PHCs and these beds should be suitably distributed in the district.

Eye departments of the district hospitals/Taluka and sub-divisional hospitals will have the competence to deal with the curable blindness,

trachoma, etc. It will also work as referral for cases referred from mobile units or from PHCs.

Central level tier

Central tier of services will consist of medical colleges, the institutes of ophthalmology and a National Centre. The central tier of ophthalmic care services are expected to provide attention to the patients requiring specialized care.

There are 106 medical colleges and six institutes of ophthalmology in various States and the Dr Rajendra Prasad Centre for Ophthalmic

Sciences at New Delhi.

The National Plan envisages that the ophthalmic departments of the various medical colleges be gradually strengthened with suitable number of faculty members and eye beds. Necessary ophthalmic equipment is also proposed to be provided. By the end of March 1979, about 17 medical colleges are identified for strengthening of their ophthalmic departments into comprehensive community eye health care departments. Rest of the medical colleges will be taken up in phases.

The six regional institutes have been identified for strengthening and

High Priority For Family Welfare— Prime Minister Tells Chief Ministers.

The Prime Minister, Shri Morarji Desai, has addressed a special communication to all Chief Ministers on 14 July, 1978 requesting them to pay active attention to the programme of Family Welfare. The Prime Minister had written to the Chief Ministers earlier on 9 May also drawing their attention to the importance of a vigorous and result-oriented implementation of the Family Welfare Programme.

In his latest communication, the Prime Minister has impressed upon the Chief Ministers that "we must ensure that no erosion takes place in our economic gains on account of unlimited population growth."

"It seems to me that despite all the stress being laid on this programme, it has not generated the zeal and enthusiasm required for its success. We cannot allow this state of affairs to continue without jeopardy to all our developmental efforts. I would, therefore, like to emphasize once again that it is necessary to pay personal attention to the monitoring of the performance of this programme. I am distressed to know that in some cases, doctors were reluctant to undertake sterilization operations even though persons had voluntarily offered to undergo them. If doctors have any apprehensions of the possible inquiries being held in the event of cases resulting in complications, they should be

assured that they would enjoy the same protection which the law affords to them in their profession except in those cases where there is proof of neglect of duty.

"The family planning programme should, therefore, receive full attention of all Departments and at all levels and should not be left only to the functionaries of Health and Family Welfare Departments. For this purpose, you should ensure that all Departments integrate this activity into their scope of normal work.

"I want to review the performance of this programme from time to time. I would, therefore, be thankful to you if you would hold monthly meetings to review the work and write to me about the progress being made in this work." ○

they will be developed as regional institutes of ophthalmology. These institutes are expected to provide super specialities in the sub-branches of ophthalmology and high level of expertise. These institutes will work as referral centres from the district hospitals.

The six Regional Institutes of Ophthalmology will have at least 250 eye beds in each of these institutes and about 21 faculty members for all sub-specialities of ophthalmic sciences. It is at this level that sophisticated surgery for curable blindness like that due to corneal involvement treatable by keratoplasty retinal detachment, etc., will be taken up.

The Plan also envisages development of an apex organization of national character for community eye health care in the country. The Dr Rajendra Prasad Centre for Ophthalmic Sciences established at New Delhi is already providing the required services and has been identified by the Government of India as an apex organization under the programme. All the sub-specialities of the ophthalmic care will be developed or strengthened as the case may be at this Centre. About 325-350 beds will also be provided.

The National Plan developed by the Government of India found international support. At the International WHO meeting on the Prevention of Blindness held in Baghdad in March, 1976, it was recog-

nized that (a) the value of mobile units (including eye camps) has been fully demonstrated, and (b) there is a need for adequate referral services at the intermediate and central levels.

Both these components have been included in the Indian National Plan. It will adequately tackle the problem of curable blindness.

The intermediate and the central tier of infra-structure will also conduct research in quest of more practicable and economical field methodology for delivery of comprehensive eye health care including curative treatment. Here, the ophthalmic institutions, research centres or the specialized hospitals have an essential role to play. ○

Health Care And Community Action

DR G. DONOSO

At the Thirtieth World Health Assembly in 1977, Dr Halfdan Mahler, Director-General of WHO, said that "the main target for WHO to aim for in the forthcoming decades should be the enjoyment by all of a level of health that will be conducive to a high social and economic productivity, and this should be achieved before the end of the century". In most of the developing countries, health for all by the year 2000 will not be achieved unless effective low-cost health care is put into practice, and untapped manpower and other resources available at the community level are made use of.

Among the underserved populations of the world who live in the villages of developing countries and in the slums of these countries' rapidly growing cities, children under five years of age are no doubt the most underserved of the underserved, as evidenced by their high mortality rates. In fact, in most developing countries, of every two persons that die, one is a child under five. It is thus among such children and, by extension, their pregnant or nursing mothers that the greatest health gap to be bridged by the year 2000 exists. By then, there will be 1200 million mothers and children under the age of five in the less developed countries; so the sooner we start bridging the gap the better.

A low level of health is often directly linked to poverty, which in turn stems from unequal distribution of wealth and resources. In rural areas, the low productivity and weak purchasing power of most families tend to be perpetuated or aggravated by such problems as inequitable land tenure or ownership; limited availability of water for irrigation; overpopulation; lack of economic incentives, markets and credit; and wasteful agricultural practices. Some of these inequities are deeply embedded in the traditional power structures of the countries concerned and most

of them are of formidable magnitude. In urban slums, poverty—and hence poor health—is aggravated by rural migrants flooding into the cities at rates well beyond the capacity of industry and other employers to provide jobs or other means of livelihood. Better health for all therefore cannot be conceived as being separate from a more just socioeconomic development, of which it is at once a cause and consequence a means and an end.

The primary health care approach

WHO's Sixth General Programme of Work, which covers the years 1978 to 1983, recognizes the need for developing countries to undertake flexible and realistic health planning. Responding to resolutions adopted by World Health Assemblies since 1973, this programme identifies as one of its major challenges the need to divert resources from conventional disease-oriented curative programmes, which tend to benefit only a privileged few, to community-health preventive programmes, designed to improve, day by day, the health status of the underserved many.

An essential component of primary health care is the idea of community participation and self-reliance. In the words of Dr Mahler.

The primary health care approach represents a reformulation of some of the most basic tenets of public health. It is a return to the idea that health is a vital element in the growth and development of individuals and communities that it is a basic human right, and that its promotion goes, far beyond the provision of medical care. The approach aims at promoting community and individual self-reliance in health, and it implies that people should act to improve their own health rather than rely on others to do it for them.

In this spirit, WHO, in close collaboration with UNICEF and nine Member Countries, carried out a study on how communities can help themselves in

organizing health care activities, the results of which have been issued.

Although primary health care places maximum reliance on the resources made available by the community itself, these must be supplemented by essential supplies, technical supervision and training, and a system for the referral of severe cases to district hospitals or other higher health care centres. However, in the view of WHO, the very design of these higher echelons and their primary objective should be to support and serve primary health care.

Basic primary health care planning

At the outset, primary health care requires the definition of a kind of programme suited to existing community resources, which can be expanded upon when additional resources become available and when community organization improves as the perception of the benefits to be gained becomes more widespread. This initial programme should give high priority to the most pressing health needs of the family, and aim at providing maximum protection through simple technologies that are easily available and can be administered promptly by someone nearby. In addition, emphasis should be placed on activities that have a proven impact on reducing sickness and death and are low in cost.

The temptation of many central planners and administrators is to include far too many actions in the "packages" they propose, making them unrealistic in relation to the resources available to the community, and often also unrealistic in terms of the supplies, training, and supervision essential for their support. There is obvious need, therefore, for the community itself to tailor its programmes (in consultation with the established health care system) according to its problems and the resources that it can in reality make available. This planning, from the bottom upwards, changes the problem of how to "deliver" services into how can the populace "reach out" to the appropriate health services. And reaching out often means working through the labyrinth of the population's own social system and beliefs, and using traditional wisdom along with new knowledge on the causes and effects of health and disease.

An example of the techniques applicable in primary health care is oral rehydration for diarrhoeal diseases in children, especially those under 3 years of age. These diseases are directly associated with malnutrition and are a major cause of death in this age group in deve-

loping countries. The treatment is both simple and effective, and is aimed at the prevention of dehydration. No antibiotics or drugs are usually needed, a mixture of salts and glucose in water in the right proportions and prompt action by the sick child's parents (following the advice of a community health worker) being all that is required.

Training community health workers

The most obvious obstacle to the delivery of such a programme is the lack of manpower to perform the simple activities involved. Many approaches have been tried, but basically they should rely on local people from and chosen by the community, who are specially trained to carry out the activities of the programme and act as promoters of community organisation around the banner of "better health for all". It is this capacity of the community to organize itself, breaking out of its own passivity, that is so fundamental to primary health care. Community organization, with the assignment of clearly defined responsibilities to identified persons, is a key to success, especially so for work on environmental health, such as chlorination of wells, refuse disposal, etc.

But it is not enough to have a trained community health worker; his or her work and advice have to be accepted by the community. For example, although the technique for controlling dehydration in acute diarrhoeal diseases of children is simple, it can only be effective if families learn of it and then follow the advice given by the community health worker. Often it takes some time before the community perceives that health workers are really useful and before the latter acquire sufficient status and trust. The continuous training and supervision of community health workers are essential to improve their technical abilities and their standing in the community. In the same way, essential supplies provided by the higher levels of the health care system are basic to success, although much use can be made of locally produced traditional medicines.

Training health professionals

In order to move health resources away from hospitals and into the community where they can be more equitably utilized, a drastic change is needed in the training of medical and other health professionals. WHO is meeting this need by assisting in the development of national curricula for doctors, nurses, and midwives that expose under graduate students to community health care in addition to training them in a hospital-based health system. Examples of this deve-

lopment are national committees for the drafting of community-oriented curricula for undergraduate training in maternal and child health. Subjects must more and more be learnt in and from the community itself, with the students studying health and disease, not only in hospitals or outpatient clinics but also in the villages and slums where people live.

The place of the costly-to-train medical professional in the health care system will require rethinking. It is sad to see a doctor or nurse attempting to apply western-type curative medicine to 100 patients in two hours, as happens all too frequently in the local health centres of developing countries. The professionals themselves fully realize that this cannot have any positive or permanent effect on the health of the people they are trying to serve. Accordingly, a reallocation of the functions within the health team is a basic requirement if the doctors and nurses are to be able to devote their time and their hard-won knowledge to the more health-efficient tasks of supervision, training, community organization for health, and treatment of patients referred to them from the community, leaving the majority of routine health functions to auxiliary personnel specifically trained to perform them.

In the field of family health, the WHO programme is fundamentally geared to the three most important and interrelated factors causing high morbidity and mortality in young children and their mothers, i.e., malnutrition, infection, and the consequences of repeated and closely spaced pregnancies. It has the following priorities:

- Preconceptual, prenatal, natal and postnatal care
- Family planning
- Promotion of healthy growth through protecting the child's nutritional state during his first five years of life
- Treatment and prevention of infections in both mother and child
- Promotion of family self-reliance in health care through health education.

To serve these priority areas, WHO is collaborating with its Member States in a number of programmes for:

(1) Improving support from the central level by giving the needs of family health in the community the highest place in health planning and in the administration and allocation of resources.

(2) Training the necessary manpower through emphasis on "teaching of the teachers", i.e., those who will train community health workers and auxiliary per-

sonnel, and through developing guidelines, curricula, handbooks, and manuals, especially adapted to work being done in the community.

(3) Improving the treatment and prevention of acute diarrhoeal disease by encouraging expansion of coverage beyond the rehydration centres in urban areas to the family itself as an essential component of health activities at the community level.

(4) Making available information and services for fertility regulation and information for referrals on infertility.

(5) Encouraging improved care during pregnancy childbirth through the training of auxiliary and traditional midwives, and by setting up criteria for the identification of high-risk mothers and newborn infants likely to need the attention of more highly trained health personnel.

(6) Promoting improved nutrition as part of family health through such programmes as—better diets for severely malnourished children and other children at risk, and for pregnant and lactating women to improve their nutritional status and help prevent low birth weights in their babies, collaborative studies on breast feeding, use of simple anthropometric methods to monitor the nutritional state and growth of the child during its critical first years of life, and control of xerophthalmia and nutritional anaemias.

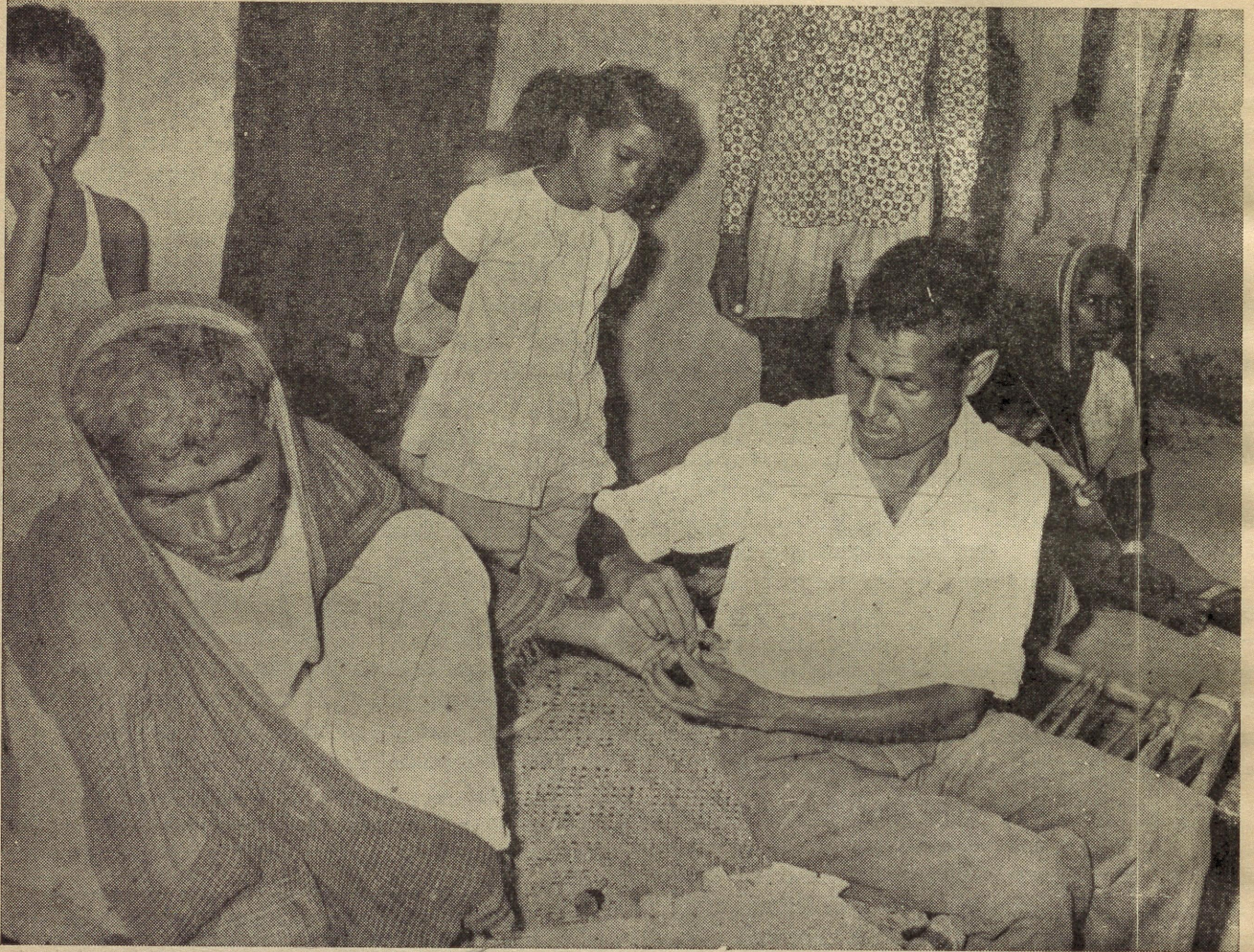
(7) Promoting health and nutrition education aimed at breaking the links between malnutrition, infection, and uncontrolled childbearing.

(8) Working with UNICEF to promote expanded programmes of immunization against preventable childhood diseases and tetanus infection in mothers, using techniques that do not impose unrealistic demands on existing health care systems.

To conclude, I would like to quote David Morely when he sums up the main factors that conspire against health reaching the poor:

Although three-quarters of population in most developing countries live in rural areas, three-quarters of the spending on medical care is in urban areas, where three-quarters of the doctors live. Three-quarters of the deaths are caused by conditions that can be prevented at low cost, but three-quarters of the medical subject is spent on curative services, many of them provided for the elite at a high cost.

But the picture is changing. Primary health care, to which WHO is strongly committed, holds the promise that by a drastic reallocation of national resources to support those available in the community, health for all by the end of this century will truly be possible. *Courtesy WHO Chronicle* ○



MALARIA

— A Threat To All

DR S. PATTANAYAK

Soon after attaining independence, India launched a relentless war against a number of communicable diseases. The first to come under this were the dreaded diseases—malaria, small-pox, leprosy and tuberculosis.

The country has today attained the smallpox-free status. But the malaria has once again raised its ugly head after notable progress achieved in 1965.

THE National Malaria Eradication Programme, since its inception in 1958, had brought about a phenomenal reduction in malaria incidence and deaths by 1965. Malaria cases were reduced to one lakh during 1965 from 7.50 crores in 1952 and there was not a single death due to it in that year. This had also paid rich dividends to the country worth several crores of rupees in different fields like industry, agriculture, land projects, etc.

Recently, the malaria eradication programme has faced major setbacks. The incidence of malaria has risen to 64.67 lakhs in 1976. Apart from the rising incidence, there were a few deaths due to malaria reported since 1974. The table shows the incidence of malaria since 1964.

<i>Year</i>	<i>Table</i>	<i>Cases (In lakhs)</i>
1964		1.12
1965		1.00
1966		1.48
1967		2.78
1968		3.74
1969		3.48
1970		6.94
1971		13.22
1972		14.28
1973		19.30
1974		31.67
1975		51.66
1976		64.67
1977	(Provisional)	45.66

The reasons for the setbacks are many and can be classified as administrative, financial and technical. Another reason is the complacency that has set in amongst the workers.

The return of malaria is a threat to all of us. The social and economic losses caused by this disease

Blood examination being done under a microscope to detect suspected malarial parasites.



are enormous on account of its diverse effects on the health of the people in agriculture, industry and development projects.

To overcome the financial, administrative and operational bottlenecks in the way of malaria eradication, a modified plan of operation is being implemented since 1 April, 1977.

The objectives of the modified plan are:

- * To prevent deaths due to malaria and to reduce period of sickness.
- * To maintain industrial and agriculture progress.
- * To retain the achievements gained so far.

To gain the above objectives, the Government has decided to strengthen the three important aspects of the eradication programme, namely, Government's efforts, research and training in malaria and people's participation.

(a) Government's Efforts

This is in terms of increasing the inputs like man, money and material for the programme. Till recently, nearly 75 per cent of the health budget of the Union Government was being spent for the control of malaria. At present, this allocation is being doubled so as to provide insecticides and anti-malarials to the areas which are badly affected with malaria. The staff required for undertaking intensive work is also being augmented.

(b) Research and training in malaria

With the continued use of insecticides and drugs many problems are coming up which need concentrated research activities. In some places, the malaria carrying mosquitoes now no more rest on the wall

surface to get the dose of DDT, and fly out straight from the house after biting individuals. The problem of resistance of malaria parasite to drug is an urgent research problem. Research is in progress to develop a vaccine against malaria so that like smallpox malaria can also be eliminated. The preliminary results appear to be encouraging, but it is still in experimental stage.

The programme needs a large number of trained personnel. So the training in malariology has been intensified, to meet the need.

(c) People's participation

Malaria is a man made problem. Unless the people actively participate in the programme, the Government's efforts will not be sufficient to control and eradicate malaria. No community health programme can achieve its desired results without the co-operation and active participation of the people. They have to shoulder responsibility for their community's health and ensure that they utilize the available services effectively.

For the successful implementation of NMEP as people's programme, the participation of the community in the following way is necessary:

In rural areas, the insecticidal spray is the main stay of the programme. In those areas where mosquitoes are resistant to DDT, alternative insecticides like BHC and malathion are sprayed. Two rounds of DDT spray are required during transmission season every year between May to September.

POINTS TO REMEMBER

About Spray

- * All the rooms of the house including cattle-sheds are to be sprayed.

- * Calendars, photos, and other wall hangings, etc., are to be removed and the walls are sprayed completely.

- * All the eatables and fodder are to be kept covered during spray, and people should help the spray team to cover their food and fodder.

- * All the houses of the village are to be sprayed; otherwise mosquito can come from unsprayed house and the purpose of spray will be defeated.

- * After the spray is done one should not mud-plaster or whitewash the walls for a period of two-and-a-half months so that the effect of spray is not lost.

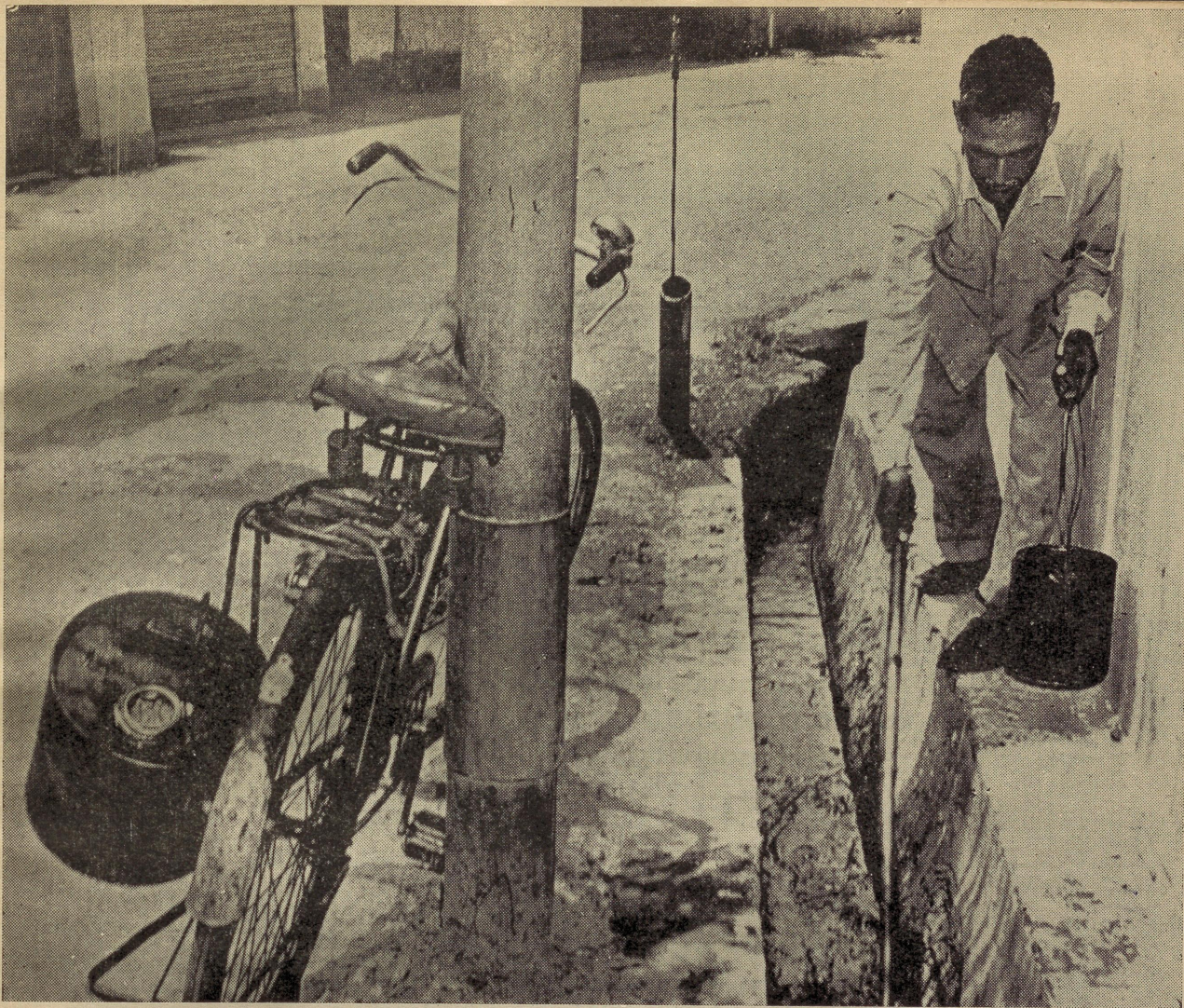
- * Village youth can come forward and take initiative to get all the houses of their village sprayed. They may also take up voluntary spray work under the guidance of malaria supervisors.

About surveillance

- * The people should accept the services rendered by the surveillance workers, who visit their houses every fortnight. Every fever case should be reported to the health authorities.

- * Village Panchayats have an important role to play in the implementation of NMEP in the villages under their jurisdiction. During spray season the Panchayat can undertake to provide volunteers for spray operations. For this, necessary technical guidance will be provided by the local primary health centre staff or District Malarial Organization. They can also help in improving the drainage and filling of ditches with the help of villagers.

- * Drugs distribution centres and fever treatment depots can be established by Panchayats to provide chloroquine tablets to fever cases according to the dose schedule. Drugs and other materials will be supplied to them by the Government free of cost. The dose of



MAN-MADE PROBLEM—People's participation can help eradicate malaria. Village sanitation, DDT spray, improved drainage, filling up of ditches, removal of stagnant water etc., are essential to prevent mosquito breeding.

chloroquine tablets according to age is as under:

Chloroquine		
Age Group	Dose in Mg.	Dose in tablets
0—1 year	75 mg.	1/2
1—4 years	150 mg	1
4—8 years	300 mg.	2
8—14 years	450 mg.	3
14 and above	600 mg.	4

It may be noted that the drug should not be taken on empty stomach. In some places, there is a wrong belief that at the height of fever this drug should not be taken, which is not true. Remember one single dose of chloroquine is sufficient to cure malaria fever.

People can do much to prevent the outbreak of malaria and protect themselves and their families from this disease. Here are a few facts about malaria and the steps to prevent it;

1. Malaria fever is caused by a tiny parasite which is carried from a malaria patient to a healthy person by a female mosquito of the species—

Anopheles This type of mosquito breeds in clear stagnant water collected inside and outside the house.

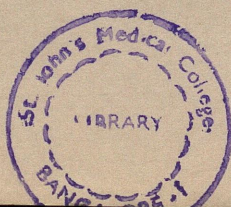
2. Malaria fever generally comes with chill and rigor and is periodic.

3. Any fever can be malaria. Blood test will confirm whether the fever is malaria or not. Get your blood examined and take chloroquine tablets, if you have fever.

4. If the blood is positive for malaria then take five day radical treatment with Primaquine under supervision of the malaria worker.

5. Do not allow any water to collect in an around the house. This will help prevent mosquito breeding.

6. All the cisterns, pitchers, buckets, etc., are to be emptied once a week to prevent mosquito breeding.



15th AUGUST

Day of Rejoicing—Day of Rededication to Values and Ideals.

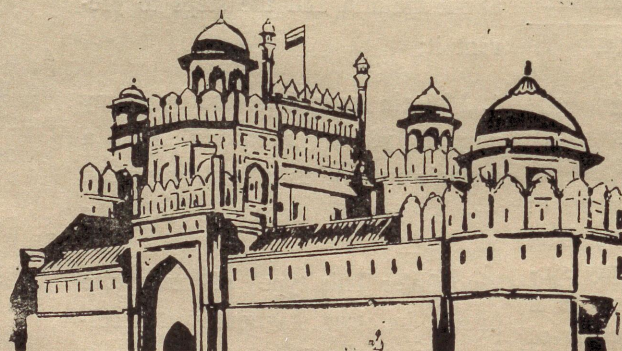
On this Day We recall:

- The historic struggle for freedom under Mahatma Gandhi's leadership;
- The sacrifices and sufferings of millions of our countrymen;
- The consolidation of freedom, integration of the country and laying of the foundations of economic development.

Today We resolve:

- To banish unemployment, sickness and illiteracy from our midst;
- To provide our people in the 5,76,000 villages with the minimum needs of drinking water, health, education and roads;
- To take the weaker sections of society along the path of socio-economic development as equal partners.

On this 31st anniversary of Freedom let us resolve to build the India of Gandhiji's dreams. Let us strive to wipe every tear from every eye.



davp 78/211

Fifty Lakh Primary School Children To Be Immunized

A programme of immunization of primary school children against diphtheria and tetanus (DT) is being initiated all over the country. This is in addition to the DT vaccine programme of children in the age of 3 to 6 years. This programme, to be implemented in a phased manner during 1978-79, will be extended and further expanded during 1979-80, which is the International Year of the Child.

Plan of Operation

About 50 lakh primary school children, in the age group—6-8 years—will be covered under this programme from October 1978 to March 1979. It is assumed that of these 50 lakh children, 45 lakh did not receive DPT vaccine immunization; hence will require two doses of DT vaccine. The remaining five lakh children will receive only one dose.

Children of the first two classes in primary schools both in urban and rural areas will be covered under the expanded immunization programme.

In the rural areas, the programme will be implemented through primary health centres (PHCs). The services of the erstwhile National Smallpox Eradication Programme

staff, already trained in immunization, will be utilized as also those of other health workers in the PHCs.

In urban areas, the programme is to be implemented through the School Health Services and Municipal Health Services. Assistance of voluntary organization may be useful.

Responsibility for the programme

State EPI officers will be responsible for covering 50 lakh primary school children under the programme. They will organize the procurement and distribution of DT vaccine to the periphery, supervise field operations and collect the data.

The Government of India will supply the additional DT vaccine free of cost besides syringes and needles in special cases. However, other necessary equipment for sterilization of syringes will be the responsibility of the State EPI officers who will ensure that these are available. Till the additional vaccine syringes and needles reach, the EPI officers will obtain DT vaccine from the State family welfare officer (SFWO), who has been supplied DT vaccine for MCH performance. The supply from the SFWO will be replaced in due course.

During October 1978, the immunization in the schools will commence. Each school, which have previously been identified and the names of the children recorded, will be visited by the staff who will be inoculating for the purpose of starting vaccination.

Each school will be visited at least three times at an interval of four to eight weeks to ensure that the second dose of DT vaccine is given at the correct time, and also to immunize any of the children left on previous visits.

During November, 1978, rest of the 50 per cent of the vaccine will reach State EPI officers for distribution to districts and PHCs. The programme will continue up to 31 March, 1979.

The EPI officers will maintain a detailed record of schools showing the name of the school, village, name of the child and age of the child and date of the first and second dose of DT. They will send a report of the progress to the EPI section of the Directorate General of Health Services.

The State EPI officers are to involve primary school teachers, and give adequate publicity about the benefits of this programme for the success of the programme. @

7. Do not allow water to collect in empty discarded tins and tyres and other containers.

8. In the urban areas, overhead tanks, room cooler, air-conditioners,

etc., are to be emptied regularly once a week to avoid mosquito breeding.

The basic point to attack malaria is that every one of us should face

this gigantic challenge and help the programme to achieve the goal, i.e., malaria eradication from our country.

HEALTH IN PARLIAMENT

This section carries answers to the questions on health raised in both the Houses of Parliament—Lok Sabha and Rajya Sabha

LOK SABHA

SIDDHA SYSTEM

Shri Jagdambi Prasad Yadav, Minister of State for Health and Family Welfare, stated in the Lok Sabha on 4 May, 1978 that two Post-graduate Departments in Siddha, one in Maruthuvan and one in Gunapadam, were functioning in the Government College of Indian Medicine, Palayamcottai (Tamil Nadu), since 1972, under a Centrally-sponsored Scheme.

The following Research Institutes/Centres for Research in different aspects of Siddha System of Medicine were functioning under the Central Council for Research in Indian Medicine and Homoeopathy:

1. Central Research Institute (Siddha), Madras-29.
2. Drugs Standardization Research Unit (Siddha) at Capt. Srinivasa Murti Research Institute, Madras.
3. Literary Research Unit, Siddha Palayamcottai.
4. Survey of Medicinal Plants Unit at Government College of Indian Medicine, Palayamcottai.
5. Literary Research Unit (Siddha) T.M.S.S.M. Library, Thanjavur.
6. Clinical Research Unit (Siddha) at Arignar Anna Hospital for Indian Medicine, Madras.

He added that no evaluation had been made in terms of manpower, buildings and other facilities in regard to any of the systems, viz., Siddha, Ayurveda, Unani and Homoeopathy. The manpower available was estimated from the number of practitioners of these systems enrolled on the Registers of the State Boards/Councils for the respective systems.

He said that Siddha System had not been ignored and sufficient funds had been provided for post-graduate studies and research activities as needed for its development.

In another reply he said that the classical works in Siddha system were included in the Documentation

and Reference Services of the Central Council for Research in Indian Medicine and Homoeopathy.

The main objective of the Indian Medicine Pharmaceutical Corporation Limited, which had yet to be established is to undertake the manufacture of Indian medicines. Initially, the Corporation would manufacture genuine Ayurvedic and Unani medicines and at a later stage the Corporation would also undertake the manufacture of Siddha medicines.

MOBILE DISPENSARIES

Shri Yadav stated that during the Fourth Five Year Plan five Mobile Training-cum-Service Hospitals were set up by the Ministry of Health and Family Welfare as a pilot project. Under this project, each of these Mobile Training-cum-Service Hospitals was given to the States of Maharashtra, Rajasthan, Gujarat, Tamil Nadu and Uttar Pradesh and attached to the following medical colleges. 1. Medical College, Aurangabad (Maharashtra); 2. Medical College, Ajmer (Rajasthan); 3. Medical College, Baroda (Gujarat); 4. Medical College, Madurai (Tamil Nadu), and 5. K. G. Medical College, Lucknow, (U.P.).

During the same Plan, the Ministry of Education and Social Welfare decided to establish 17 such Mobile Training-cum-Services Hospitals known as "Chittaranjan Mobile Hospitals" at the rate of one per State which had at least one medical college. However, against 17 only 13 were established.

The States which established these hospitals were Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Kerala, Karnataka, Maharashtra, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

This scheme was, however, discontinued during the Fifth Five Year Plan.

Some State Governments had mobile dispensaries/health units for rural and tribal population. These States were Gujarat, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, Tripura, Dadra and Nagar Haveli and Mizoram.

He added: It is now proposed to provide mobile clinics to each of the 106 medical colleges in the country with a view to re-orienting medical education and also to enable the members of the faculty and students of these medical colleges to participate in health services to the people in the rural areas. To each of these medical colleges, three Primary Health Centres will be attached. One mobile clinic will be meant for one Primary Health Centre area.

NUTRITION PROGRAMME

Shri Yadav informed the House that (a) two health-based nutritional programmes were in operation in Central sector. They were:

1. Prophylaxis against Nutritional Anaemia among children (1—12 Years).
2. Prophylaxis against blindness among children (1—5 years) due to Vitamin 'A' deficiency.

(b) (i) The deficiency of iron and folic acid in the daily diet causes nutritional anaemia. The scheme is meant to prevent this type of anaemia by giving the iron and folic acid in the required dosage to children who are more vulnerable to develop the deficiency. Children

living in economically backward areas, tribal areas and drought affected areas, urban slums are given preference.

(ii) Children in the age group of 1—5 years in the areas chosen on the basis of low nutritional status in general and Vitamin 'A' deficiency signs in particular are given the benefit of the scheme for prevention of blindness due to Vitamin 'A' deficiency diseases. In this case also, the broad criteria of economic backwardness and tribal areas are applied.

IMMUNIZATION OF CHILDREN

Shri Yadav stated in the Lok Sabha on 15 May, 1978 that the Central Government had sponsored the following immunization schemes for children and pregnant mothers.

1. Immunization against diphtheria, whooping cough and tetanus for children below five years of age. When a combined vaccine against the three diseases is used, it is called triiple vaccine.
2. Immunization against diphtheria and tetanus for older children. Whooping cough was not a serious problem among children above five years of age.
3. Immunization against tetanus for pregnant mothers.

There were no schemes for prevention of polio among children and jaundice among mothers, sponsored by the Government of India.

RAJYA SABHA

CANCER PATIENTS

Shri Jagadambi Prasad Yadav, Union Minister of State for Health and Family Welfare, informed the Rajya Sabha on 26 April, 1978 that cancer was not a notifiable disease and as such it could not be said with any amount of certainty as to whether incidence of cancer was on the increase in the country. However, increased number of cancer cases were seen in different hospitals, but this could be due to better facilities of diagnosis and treatment or perhaps due to real increase of incidence.

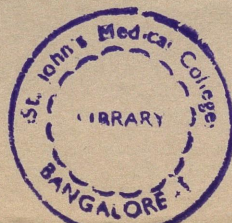
AYURVEDIC PHYSICIANS FOR PHCs

Shri Yadav stated that under the Community Health Workers' Scheme, the State Governments had been advised to appoint the third additional doctor in those primary health centres when the above

scheme had been introduced. This additional doctor was to be selected from among the Indian or Homoeopathic system of medicine. In the first stage, this scheme had been introduced in 726 primary health centres.

INSTITUTIONS FOR FAMILY WELFARE

The Ministry of Health and Family Welfare provided Central assistance for research in methods and medicines for family welfare to the Indian Council of Medical Research, the Central Council of Research in Indian Medicine and Homoeopathy and the Central Drug Research Institute, Lucknow. Out of this Central assistance, the Indian Council of Medical Research and the Central Council of Research in Indian Medicine and Homoeopathy, gave grants to other institutions also for carrying out this work.



He said, "The National Institute of Health and Family Welfare which is a autonomous organization under the Ministry of Health and Family Welfare also carries out research work for family welfare. Besides, some institutions for this research work received financial assistance from the World Health Organization with the concurrence of the Government of India."

NEW HOSPITALS IN DELHI VILLAGES

Shri Yadav stated on 3 May, 1978 in the Rajya Sabha that subject to the availability of free land to be provided by the Gaon Sabha concerned, it was proposed to establish 100-bedded rural hospitals, at an estimated cost of Rs. one crore each at the following places tentatively: (1) Purth Khurd, (2) Chhattarpur, and (3) Jaffarpur.

The site for location of the hospitals in two more villages was yet to be finalized.

Apart from this, two 100-bedded hospitals were also proposed to be constructed at the resettlement colonies of (i) Mangolpuri, and (ii) Khichripur.

A Plan provision of Rs. 30.00 lakhs had been made during the current financial year for the construction of these hospitals. Action regarding procurement of land had been initiated and so far 20 acres of land at village Jaffarpur and 10 acres of land each at the resettlement colonies in Mangolpuri and Khichripur had become available. Negotiations are in progress for the allotment of land for the remaining hospitals.

PRESCRIPTIONS FORM VAIDS AND HAKIMS

Shri Yadav stated in the Rajya Sabha on 10 May, 1978 that the Fact Finding Mobile Clinical Research Units of the Central Council for Research in Indian Medicine and Homoeopathy have been making efforts to contact traditional Vaidas and Hakims as well as villagers for the collection of prescriptions available with them. These Units have so far collected about 1,200 such prescriptions. These units are functioning from the following centres.

1. Kurukshetra, 2. Varanasi, 3. Jamnagar, 4. Vidisha, 5. Cherethuruthi, 6. Patiala, 7. Bhubaneshwar, 8. Calcutta, 9. Jaipur, 10. Jhansi, 11. Jogindarnagar, 12. Vijayawada, 13. Nagpur, and 14. Bangalore.

The prescriptions collected from different sources were being ledgerized so that they could be taken up for trial whereafter the same would be made available for use to the common man.

HEART DISEASES

"No country-wide survey regarding the incidence of heart diseases has been conducted. There is however

a clinical impression that heart diseases are on increase in most of the developing countries including our country. The number of cases seen in the intensive care units, cardiology departments and nursing homes are many more than seen a decade earlier. This could be due to increased awareness, extended and better diagnostic facilities as well as an increase in the life-span of our population. A study was conducted by the All-India Heart Foundation among business executives. This showed a high percentage of Ischaemic Heart Diseases and Hypertension.

"Better diagnostic and curative facilities are being provided by the Hospitals.

"There are several reports supporting Yoga Therapy for relief/cure for various types of heart diseases. Experts have expressed opinion that some Yoga exercises, particularly "Shavasana" can play a vital role in the management of the disease.

"Government supports the efforts at further research for Yoga Therapy for the prevention and cure of this disease". This information was given by the Minister of State for Health and Family Welfare in Rajya Sabha on 10 May, 1978. ○

71 Years of Health Care

Alembic Chemical Works Co., Ltd.
Baroda—390 003.

Leading Manufacturers of

**Antibiotics,
Ethical Pharmaceuticals
and Home Products**

HEALTH EDUCATION WORKSHOP ON KALA-AZAR

A three-day workshop on health education on kala-azar was organized jointly by the Central Health Education Bureau (CHEB) and the National Institute of Communicable Diseases (NICD) from 13 to 15 July, 1978 at the NICD premises in Delhi. Dr B. Sankaran, Director General of Health Services, inaugurated the workshop. Representatives from the Directorate General of Health Services, All India Radio, Directorate of Advertising and Visual Publicity, Ministry of Railways, State Health Directorate of Bihar, CHEB and NICD participated.

Dr B. Sankaran, in his inaugural address, cautioned the participants against any complacency in controlling kala-azar. He said that the border areas in several districts of West Bengal, Uttar Pradesh and Orissa should be carefully monitored. With the available knowledge, he said, it was not difficult to control the disease in Bihar. Dr Sankaran stressed the need to educate the people about the origin, causation and transmission of kala-azar. The NICD, he said, was organizing courses to revive this technology; but adequate response was not forthcoming from the medical colleges and sophisticated institutions to meet the desired needs.

Earlier, in his welcome address, Dr R. K. Sanyal, Director, NICD, giving a brief resume of the kala-azar situation in Bihar, said that prompt measures were taken in the four worst affected districts of Samastipur, Sitamarhi, Muzaffarpur and Dharbanga to control the disease. To reduce the number of cases and deaths still further, he said, there was a greater need to augment health education activities and actively involve the public in the kala-azar eradication programme.

Dr S. Pattanayak, Director, National Malaria Eradication Programme, reiterated the need for whole-hearted cooperation of the public and the various institutions in eradicating communicable diseases from the country.

Panel and group discussions

The first and second plenary sessions were chaired by Dr S. Pattanayak, and Dr D. P. Bannerjee, Chief Malaria Officer, Patna, respectively on 13 July, 1978.

The papers presented at the first session were (i) causation and clinical aspects by Dr R. K. Sanyal, (ii) entomological aspects and spread by Dr B. L. Wattal, (iii) epidemiology of current outbreak and magnitude of the problem by Dr C. K. Rao, and (iv) control measures by Dr T. K. Ghosh.

Shri M. G. Oswal, DADG, CHEB, during the second plenary session, spoke on the methods of health education, inter-personal communication and the education of medical profession, patients and health workers in relation to kala-azar control.

The participants were split into three groups on 14 July, 1978, for suggesting recommendations for strengthening health education through (i) mass media, (ii) inter-personal communication, and (iii) medical practitioners, patients and health workers.

The group reports were presented at a plenary session on 15 July, 1978 under the chairmanship of Dr S. K. Sengupta, ADG(PH), Directorate General of Health Services. The suggestions given by the participants were adopted.

Valedictory address

In his valedictory address on 15 July, 1978, Dr P. P. Goel, Adviser (Health), Planning Commission, stressed the need for vigilance in the Government's endeavour to bring kala-azar to the zero level. During his visit to Patna last year, he said, he found that the number of kala-azar cases examined and the figures provided never tallied. He said that there should not be any lack of interest in the diagnosis and treatment of kala-azar cases. He said he was happy to find that during this short period of one year, the magnitude of the problem had been considerably reduced. With this zeal and vigour, there was no reason why kala-azar should remain a problem, Dr Goel said.

Recommendations

The Workshop made the following recommendations:

1. Vigorous attempts be made with the coordination of the Ministry of Information and Broadcasting

CANCER : KILLER No. 2 IN DEVELOPED COUNTRIES

Cancer in spite of vast efforts in many countries remains one of the leading causes of death, second only to heart diseases. Put into numbers, this means that throughout the world each year about five million people die of cancer. 1.4 million deaths occur in Europe. In developing countries, too, the successful control of communicable diseases

moves cancer up on the list of major public health problems.

The deaths place an emotional and economic burden on family members, whose total number, health officials say, range between 12 to 15 million.

Recognizing the gravity of this situation, the World Health Organization is increasing its

effort to plan a global strategy for international cooperation in cancer research and in cancer control, in which every country must play its part.

But a national anti-cancer campaign can only be effective if the national health services know, through statistics, as precisely as possible the nature and extent of the cancer problem in their own country, and whether control measures are having an effect.

to educate the people on the prevention, cure and control of kala-azar which has reappeared in Bihar. The Ministry of Information and Broadcasting (All India Radio, Patna, Muzaffarpur, Bhagalpur and T.V. station, Muzaffarpur) may be requested to direct its various media units in Bihar to mount a special campaign regarding DDT spray during the first fortnight of September, 1978, so as to create awareness about the disease and its control.

2. The services of community health workers in Bihar may be fully utilized for the education of the public so that the cases are immediately reported and DDT spray is accepted.

3. The State Health Education Bureau should be re-established in Bihar to meet the urgent need of health education requirements with special reference to kala-azar.

4. Baseline survey be undertaken to determine the social, cultural, psychological and economic factors as well as the knowledge, beliefs and practices of the people to identify the right media and contents for different group situations.

5. A follow-up workshop may be organized in Bihar involving all the concerned departments/officers to work out the educational strategy for active involvement of the community in kala-azar control.

6. Various aspects of kala-azar be included in the curriculum of different training courses for various categories of workers conducted at the CHEB.

7. CHEB may send its officers to State Health Head-quarter and other selected places in Bihar, as and when asked to organize training course for different catego-

ries of workers in health education methods in kala-azar.

8. A booklet in Hindi on different aspects of kala-azar be prepared for the para-medical personnel of Bihar by NICD and CHEB. Publicity material in the form of folders, pamphlets, etc., may be developed through the CHEB to educate the people regarding spray operation and treatment of cases.

9. A film and some filmstrips on kala-azar may be produced on priority basis.

10. Cinema slides may be prepared by the field publicity unit of the Ministry of Information and Broadcasting based on the content provided by NICD and CHEB to educate the people.

11. Periodic independent evaluation should be undertaken to determine the impact of the various action programmes and to effect modifications as and when needed. The concurrent evaluation presently being conducted by NICD may be continued.

12. The Director General of Health (Railway) be requested to spread the following message through a public address system in major railway stations in Bihar:

(i) Kala-azar has re-appeared in Bihar. It is a fatal disease, if not treated.

(ii) In case of fever beyond two weeks, report to the nearest Government doctor and take free and full treatment as suggested by the doctor and get cured.

(iii) Sandflies transmit kala-azar. Get your house sprayed with DDT to kill them.

—IJD
○

Andhra Pradesh

HOSPITAL HEALTH EDUCATION

SHRI A. Chandrasekhar, Second Secretary to the Government of Andhra Pradesh, Medical and Health Department has said that "a beginning, at least now, should be made to introduce health education component in hospitals." Also, there should be a periodical review to find out any lacuna and take further steps to strengthen it he said.

Shri Chandrasekhar was inaugurating the State Level Workshop on Hospital Health Education organized by the State Health Education Bureau, Medical and Health Directorate, Andhra Pradesh at the Regional Health and Family Welfare Training Centre, Hyderabad, on 8 June, 1978.

He said that Multipurpose Health Worker was the best agent to impart health education to the masses. Health education, he said, should be introduced in school curricula, and scouts, N.C.C. and voluntary organizations should also take up health education work.

Dr Shanti Narayan Mathur, Director of Medical and Health Services, in his presidential address said that of the two hospitals selected in the State, health education component had been introduced at the Government Hospital, Nampally the other Hospital is Osmania General Hospital, Hyderabad. Headquarters Hospitals at Eluru, Cuddapah, Anantapur and Rajahmundry are the other hospitals, where the scheme was proposed to be implemented but no progress was made in this regard.

Dr T. John Phillip, Assistant Director of Medical and Health Services, said that as a follow-up of the World Health Organization Workshop, the present State Level Workshop, the first of its kind, had been organized for the Superintendents of Teaching Hospitals and District Headquarters Hospitals, so that they could provide leadership in implementing health education in all the hospitals.

Dr C. V. Ramani, Additional Director of Medical and Health Services, said that because of the absence of health education in hospitals, the public were not availing of the hospital services to the fullest extent.

Dr (Kum) S. A. Pandit, Deputy Assistant Director General, Central Health Education Bureau, New Delhi, said State Health Education Bureaux played an important role in the preparation of health education

materials and training of personnel, which needed financial and material support.

Dr H. S. Nayak, Field Representative, UNICEF, said that health education was a continuous process, but not a one-time affair.

Dr S. L. Sagar, Assistant Director of Medical and Health Services (Planning and Evaluation), said that every person working in a hospital was a health educator. However, he felt, the Nurse was best suited to the task; hence she should be exposed to health education.

Dr H. Hassan, Principal, Regional Health and Family Welfare Training Centre, spoke on the process of communication in hospital health education.

Health Education at PHC level

Shri A Chandrasekhar also inaugurated another State Level Workshop on Health Education at Primary Health Centre Level on 12 June, 1978. The two-day workshop was attended by all the District Medical and Health Officers and District Health Educators in the State besides the three Regional Directors of Medical and Health Services, Additional Directors of Medical and Health Services and the Programme Officers of the Directorate.

Shri Chandrasekhar said the workshop had an added significance since it related to the rural masses, who constitute 80 per cent of our population. Health worker, he said, should identify himself with the people and should always set a good example.

Dr (Kum) S. A. Pandit said that the Central Health Education Bureau had selected 54 primary health centres from 14 States and five Union Territories for organizing systematic health education programme.

Delivering the valedictory address, Dr C. H. Piya-ratna, Regional Adviser on Health Education to the World Health Organization, South-East Asia Region, New Delhi, urged the district health authorities to make all efforts to introduce health education at the primary health centres.

Dr M. C. Appa Rao, Additional Director of Medical and Health Services (Communicable Diseases), said that the multipurpose health workers should identify themselves with the people and win their confidence.

—Dr T. John Phillip

○

WHO And UNICEF Conference To Discuss Better Health Care

The International Conference on Primary Health Care co-sponsored and organized by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) will be held in Alma-Ata, capital of Soviet Kazakhstan, from 6 to 12 September, 1978.

The Conference is the first to be convened on a world scale to address the issues of how better health care can be provided for all the world's peoples. The Conference was called for in a resolution by the Governing body of the WHO, the World Health Assembly, in May 1975. The UNICEF, through a decision of its Executive Board, subsequently joined with WHO as a co-sponsor, and an invitation by the Soviet Union to act as host was accepted at the May 1976 meeting of the World Health Assembly.

The objectives of the Conference are: an exchange of experience and information on the development of primary health care, within the framework of comprehensive national health systems and services and over-all national development; the promotion of primary health care; the preparation of report, including recommendations, to Governments which will be submitted to the World Health Assembly and UNICEF's Executive Board.

A key area of the Conference will be to see how health can promote the broad range of development activity. Programmes in agriculture, water resources development and education, for example, can all be involved in raising awareness and providing technical inputs for improved health care—both for specific groups like children and the general population.

The report notes that primary health care involves promotional, preventive, curative and rehabilitative services, centres on communities, their determination of local needs and their participation in programmes. It is a concept relevant to all countries, developed as well as developing.

* * * *

A three-day joint UNICEF/WHO Media Workshop on Primary Health Care was held from 2-4 August 1978 in New Delhi. Shri J. P. Yadav, Union Minister of State for Health and Family Welfare delivered the inaugural address. It was to focus attention on the above conference.

First Workshop on Medical Mycology

The National Institute of Communicable Diseases, Delhi is conducting its first Workshop on Medical Mycology for three weeks starting from 1 November, 1978. The object is to train laboratory personnel in Medical Mycology for teaching and research institutions and for service hospitals. The admission to the workshop is limited to 15 participants only. The programme will include lectures/panel/group discussions for 40 hours and practicals and field exercises for another 68 hours.

All the Directors of Health Services may intimate the Medical Superintendents of General Hospitals under them in their respective States.

The nominee should possess medical degree (MBBS) or M. Sc (Microbiology/Biological Sciences) or M. V. Sc. and with at least two years in microbiology or mycology laboratory/clinical departments engaged in the treatment and diagnosis of mycological disorders/surveillance and control of communicable diseases.

The participants will be paid travel/per diem cost at the following rates by the National Institute of Communicable Diseases.

1. First Class to and fro railway fare.
2. Per diem at the rate of Rs. 35/- per day for the days of stay and days of journey exclusive the day of arrival back at their duty stations. No incidental charges or road mileage will be admissible.
3. The local participants will be paid per diem at the rate of Rs. 12/- per day for attending the workshop at the Institute and Rs. 35/- per day for field trips (out of station).

Suitable candidates may be nominated, giving the following details of the candidates as early as possible but not later than 15 September, 1978—(1) Name, age and complete address; (2) Qualifications; (3) Post-graduate qualifications, if any; (4) Present employment and nature of work, and (5) Particulars of previous training, if any, at the N.I.C.D. (Formerly Malaria Institute of India).

The selected candidates will be informed by this Institute under intimation to the sponsoring authority.

Further information is available from the Director, National Institute of Communicable Diseases, 22 Sham Nath Marg, Delhi-110054.

NEW CHALLENGES BEFORE NAVAL MEDICINE

THE Chief of Naval Staff, Admiral J. Cursetji, has appealed to the medical scientists to find out solutions to the new challenges faced by the "sea-farers of to-day and tomorrow". For, "Man is now increasingly aware that the resources of the land are limited and he has to turn to the seas and sea-bed to supplement his requirement of food and minerals".

The role of sea was no longer merely "confined to trade and commerce, or to movements between shores of different nations". Even to beat the energy crisis, there had been serious projections for converting energy from seas into power, he said.

Admiral Cursetji was inaugurating a two-day Symposium on Naval Medicine under the Medical Branch of the Indian Navy on 18 March, 1978 in Bombay.

The men of navy had to spend "sustained periods" under water at great depth either in a diving suit or submersible vehicles. The medical scientists, therefore, had to "study the physiological and psychological aspects to give confidence to the operator (of submarines) that he can do his work without injury to his health and without impairing his efficiency", he said.

Similarly, solutions to the newer problems like human fatigue arisen from maritime reconnaissance, where the aircrafts were to be flown at low altitudes in extremely hot and humid climate, had to be found out.

Environmental pollution, he said, threatened the very existence of man himself. In the case of unchecked pollution of harbours and seas, naval medical officers should educate the people on the inherent health hazards.

Lieutenant-General, BDP Rao, Director General, Armed Forces Medical Services, said specific recommendations be made to meet the problems.

Vice Admiral R. K. S. Gandhi, Flag Officer Commanding-in-Chief, Western Naval Command, was happy to know that medical officers of the Service were working with the civilian scientific community to find out solutions for navy's medical problems.

Surgeon Real Admiral, Director of Medical Services (Navy) hoped symposia would help evolve solutions and thus foster research activities in the field of marine medicine.

Surgeon Commodore, N. N. Kattariya, Command Medical Officer, Western Naval Command, in his welcome address said the activities of the three Arms of the Navy had expanded manifold during the last decade. And the medical problems encountered were numerous.

The highlights of the Symposium were a guest lecture on 'Man and His Environment' by Dr B. B. Gaitonde, Director, Haffkine Institute and Director, Medical Education and Research, Maharashtra and a "Workshop on Decompression Sickness", a disease associated with

diving, compressed air work, aviation, tunnel, construction and various other under-water activities. This disease is characterized by gas bubble formation in the blood stream.

In another scientific session on "Under-water and submarine medicine", problems of gas poisoning in submarines, life support Systems in under-water vehicles, decompression sickness in submarine escape and the ENT problems of submariners were discussed.

During a session on "Diving Medicine" papers on man in the sea—today and tomorrow, aquatic dermatoses, high pressure nervous syndrome, etc., were presented.

NO HEALTH CERTIFICATES FOR A & N ISLANDS VISIT

Passengers and crew leaving for Andaman and Nicobar Islands from the mainland (India) by air or sea are now not required to carry smallpox and cholera certificates as travel documents which had hitherto been required during the medical examination at the time of departure.

Under the subject, 'Ship Board Medicine', five papers were discussed, one being on "asbestos—an occupational hazard faced by asbestos workers."

Dr K. G. Nair, Director-Professor of Medicine, Seth G. S. Medical College, Bombay dealt on 'Interpretation of exercise stress testing'.

TUBERCULOSIS AND BCG VACCINATION

This is fifth in the series of the feature. The Community Health Workers have, among others, to educate the community on preventive, curative, promotive and rehabilitative aspects of communicable diseases. Tuberculosis eats into the vitals of a nation. Every effort should be made to control this disease. Given below are a few tips to meet the challenge of tuberculosis.

TUBERCULOSIS is widely prevalent in India, and is one of the foremost health problems. There are nearly ten million persons suffering from this disease. Many of us have some knowledge about this disease, its causation, its course, its prevention and treatment. But generally, a large segment of the people do not know much about this disease, not even the elementary facts.

Here are a few questions and answers which give considerable facts about the disease—its nature, mode of spread, preventive measures and treatment facilities.

Who can catch tuberculosis?

Any one can catch tuberculosis. The disease is no respecter of persons. Young or old, rich or poor, man or woman, can catch tuberculosis. Tuberculosis is a highly infectious disease.

Is a person born with tuberculosis?

Tuberculosis is not hereditary. No one has T.B. at birth—even the children of parents suffering from tuberculosis are free from it at birth. They may catch the infection and develop the disease after contact with persons suffering from the disease.

What causes tuberculosis?

Tuberculosis is caused by a tiny germ which can be seen only under a microscope. It is found mainly in the sputum of the patients. When a tuberculosis patient coughs, sneezes or spits, lakhs of these germs are released into the air. Breathing in of the air contaminated by these germs, especially in ill-ventilated rooms, may cause tuberculosis.

How can one suspect T.B.

In its early stages, tuberculosis may not reveal any signs and symptoms. One can have T.B. even without being aware of it. However, you can suspect TB. If you have cough that persists for days, constant feeling of tiredness, gradual loss of weight and appetite, constant pain in the chest, and occasional cou-

ghing up of blood-stained sputum. Of these, cough persisting for more than two weeks is the most predominant symptom.

What to do in case of tuberculosis?

If you have these symptoms, consult a competent doctor or report immediately to the nearest primary health centre or dispensary. If you are far away from such a medical institution or a doctor, please inform the multi-purpose health worker or the health assistant of your area about your symptoms when they visit your village. Request them to take your sputum for examination.

Can tuberculosis be cured?

Yes, tuberculosis can be cured, if detected early and treatment started quickly. Proper examination including X-ray and laboratory tests by a competent doctor can detect tuberculosis early. The presence of T.B. germs in the sputum of the patient is the surest sign of the disease.

Tuberculosis can be effectively treated, if one takes advice of a competent doctor and follows his instructions. The medicines prescribed by the doctor should be taken continuously and regularly till the doctor advises to stop it.

Where are facilities for diagnosis?

Facilities for detection of tuberculosis are available in the nearest medical and health institutions, be it a T.B. clinic, primary health centre, a hospital or a dispensary. In each district, a District T.B. Centre has been established which organizes T.B. case-finding and treatment in all the medical and health institutions in the district. Such primary health centres, etc., will refer you to the District T.B. Centre for X-ray and other investigations, if considered necessary. All services are provided free of charge.

Where is tuberculosis treated?

Treatment also can be carried out by the nearest T.B. clinic, primary health centre, hospital or



BCG VACCINATION FREE AND HARMLESS—All young persons, especially infants and children, need BCG vaccination. It protects from tuberculosis. Photo shows a child being BCG-vaccinated.

dispensary in the home of the patient. All medicines for treatment are supplied free of charge for the full period of treatment.

What are important facts for treatment?

1. The prescribed medicines must be taken continuously and regularly till the doctor advises you to stop. The medicines should not be stopped if the patient is relieved of symptoms after taking medicines for a short time. This is very important.
2. Admission to a T.B. hospital or a sanatorium is not necessary except for certain serious or problem cases. In such cases, the doctor himself will advise and arrange hospitalization.
3. Ordinary balanced diet is good enough for the patient. Good food, bed rest, etc., are not that important.
4. Except for a short period of rest to be decided by the treating medical officer, the patient can continue with his normal occupation. There is no need for any dislocation of family life or work schedule.
5. Infectious patients will be advised on how to avoid spread of the disease to others in the family or neighbourhood. But the most important thing is

to take the prescribed medicines regularly. This will make the infectious patient non-infectious in a few weeks.

Can you prevent tuberculosis and how?

Yes, you can prevent tuberculosis by taking necessary precautions. Avoid living in ill-ventilated rooms with those suffering from tuberculosis.

Persuade all persons having symptoms of cough, pain in chest, fever, spitting of blood, etc., to go to the nearest health or medical institution for a check up.

Another factor necessary to avoid the disease is to keep the resistance of your body at a high level. Careful living, balanced diet, hygienic environment, proper exercise and rest ensure this resistance.

The natural resistance can be further increased by preventive vaccination with BCG. Infants and children particularly need this preventive vaccination.

What about spitting?

Spitting here and there is a very bad habit. When you cough or sneeze, use a handkerchief or a clean cloth to cover your face.



HAVE YOU GOT PHOTOGRAPHS ON CHILD ACTIVITIES?

Please send photographs on the various aspects of child health, personal hygiene, nutrition, immunization, play, recreation, education and other activities for publication in Swasth Hind. Photographs should be of 6" × 8", black and white glossy in print. Selected photographs when published will be given due credit. Please write your name and full address while sending the photographs.

Editor, Swasth Hind,
Central Health Education Bureau,
Kotla Road, Temple Lane,
New Delhi-110002.

A tuberculosis patient should spit in a particular spittoon or container. The best way to dispose of the sputum is to burn it or empty it into a water closet. The cloth or handkerchief used while coughing should be burnt or boiled in water for 15 to 20 minutes before using it again.

How to protect children from tuberculosis?

B.C.G. vaccination protects them.

What is BCG vaccination?

It is preventive inoculation. It helps the vaccinated person in being protected against tuberculosis.

Who needs BCG vaccination?

All young persons, especially infants and children, need BCG vaccination.

All others who are in contact with tuberculosis patients like nurses, attendants, etc., may also require this vaccination, irrespective of their age.

BCG can protect an infant or a child only if given before being infected by a tuberculosis patient. Therefore, the vaccination should be given as early in life as possible, preferably within the first year of life.

How is BCG vaccination given?

BCG vaccination is given in the superficial layer of the skin over the upper arm (shoulder) of the child. The vaccination is practically painless.

What happens after vaccination?

No change is seen for some days at the place where vaccination is given. But in three or four weeks' time (and in some cases, even within a week) a small but painless swelling may develop at the site of vaccination. In some cases, this may increase slightly in size and may become soft, and discharge a drop of pus. This is a sign which shows that the vaccination has taken. It does not require any treatment, and it heals on its own accord in a short time.

Where can you get BCG vaccination?

You can get your infants vaccinated by the multi-purpose health workers and auxiliary nurse-midwives (ANMs) of your locality in rural areas. BCG vaccination can also be had at tuberculosis clinics, paediatric hospitals, maternity centres and well-baby clinics in any town or city.

REMEMBER

- * Tuberculosis is a highly catching disease and is caused by a germ called tubercle bacillus.
- * Tuberculosis is not hereditary.
- * Mostly a patient suffering from the disease spreads tuberculosis.
- * Tuberculosis is preventable and curable.
- * Persistent cough is an important symptom of tuberculosis.
- * T.B. clinics, general hospitals, primary health centres, dispensaries, etc., provide facilities for free diagnosis and treatment.
- * Modern anti-tuberculosis drugs are very effective.
- * Treatment should be continued for the minimum period prescribed by the doctor.
- * BCG vaccination protects against tuberculosis.
- * All infants and children should be vaccinated with BCG as soon after birth as possible. ○

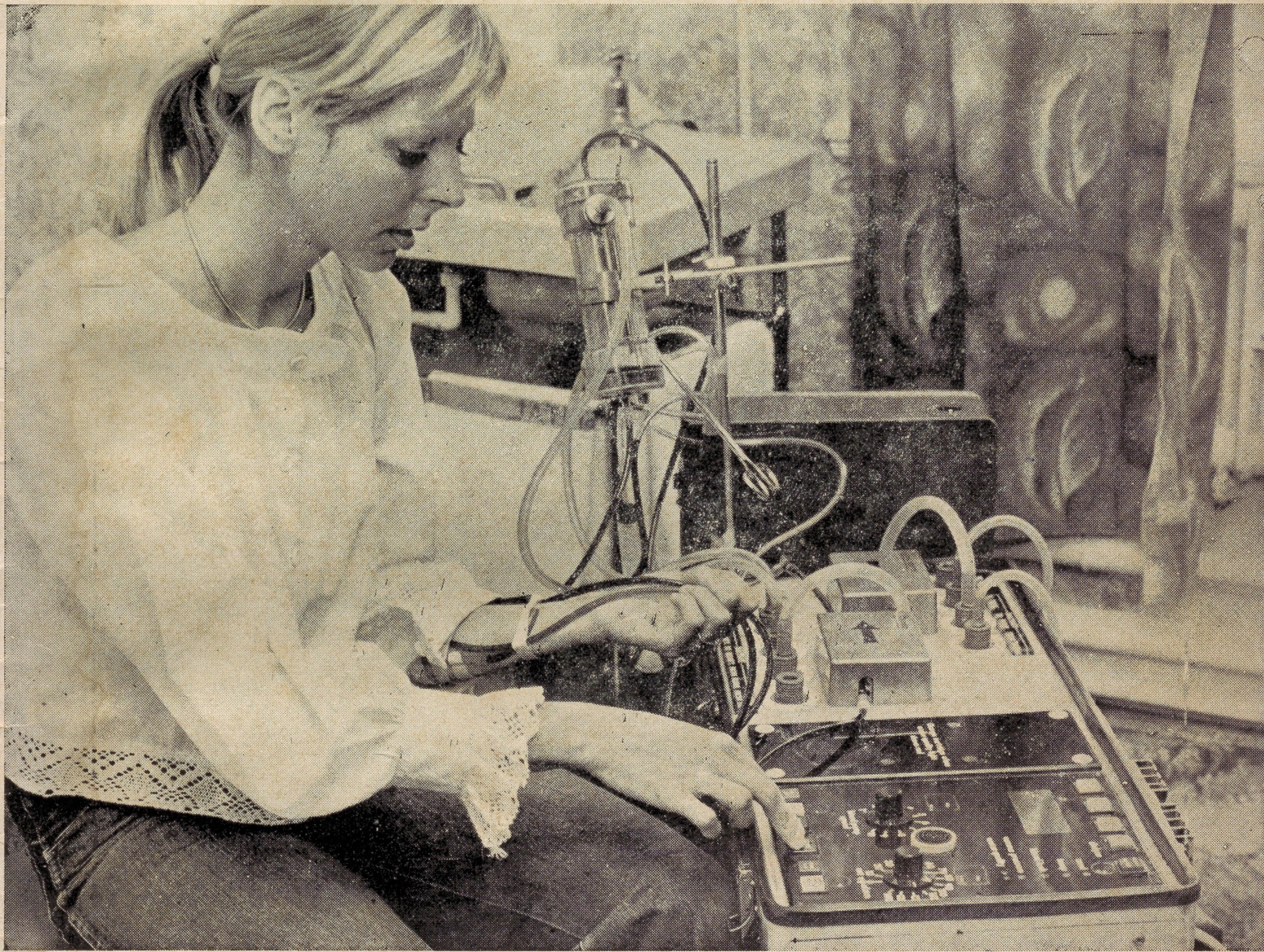
OUR CONTRIBUTORS

Dr B. C. Ghoshal
Assistant Director General (Rural Health)
Ministry of Health and Family Welfare
Nirman Bhavan, New Delhi-110011.

Prof. Lalit P. Agarwal
Adviser (Ophthalmology)
Government of India
and
Chief Organizer,
Dr Rajendra Prasad Centre for Ophthalmic Science
Ansari Nagar, New Delhi-110016.

Dr G. Donoso
Regional Adviser on Nutrition
WHO South-East Asia Regional Office
Indra-Prastha Estate
New Delhi-110002.

Dr S. Pattanayak
Director
National Malaria Eradication Programme
(National Institute of Communicable Diseases)
22 Sham Nath Marg
Delhi-110054.



SUITCASE SIZE KIDNEY MACHINE FOR TRAVELLERS

Some kidney disease sufferers will now be able to travel away from home with this new portable dialysis machine which will give them all the vital blood cleansing treatment they need for up to two weeks.

It was developed by the Lodge Moor Hospital at Sheffield (Northern England) to help those patients who usually have to be treated at a hospital several times a week or, if they are fortunate, at their homes. The machine, which weighs only 15 kilogrammes and is contained in its own special suitcase, is believed to be smaller and lighter than any other available. It is easily transportable, fits neatly into the boot of a car or on a railway luggage rack, and can be used by the patient in any room which has an electrical point and a cold water supply.

It has been designed to stringent British health service standards. (Photo: BIS).

OUR SPECIAL NUMBERS

Swasth Hind is bringing out special Numbers on Health subjects from time to time. A list of the recent numbers of these special numbers is given below. Price of each issue is 25 Paise. Please send your order to The Editor, Central Health Education Bureau, Kotla Road, New Delhi-110002 with money in advance.

- | | |
|-------------------------------------------------------------|------------------------------------------------------|
| ○Haryana Health Services†
March 1976 | ○World Health Day†
April 1977 |
| ○World Health Day†
April 1976 | ○Rural Health Services
June 1977 |
| ○Health Services in Pondicherry
May 1976 | ○Hospital Health Education †
August 1977 |
| ○Smallpox Zero†
June 1976 | ○Ayurveda
September 1977 |
| ○Health Education
Sep.—Oct. 1976 (combined;
Paise 50) | ○Rural Health Scheme
October 1977 |
| ○Children's Day†
November 1976 | ○Children's Day
November 1977 |
| ○Health Education in States
January 1977 | ○Mentally Retarded Children
December 1977 |
| ○Habitat India†
February 1977 | ○Homoeopathy
Jan.—Feb. 1978 |
| ○Sexually Transmitted Diseases†
March 1977 | ○World Health Day
March—April 1978 |
| | ○Expanded Programme on Immuni-
zation
May 1978 |

†These issues are out of stock.