DEVELOPING
RURAL HEALTH TOGETHER

GOVERNMENT OF PAKISTAN
AND
UNITED STATES AGENCY
FOR INTERNATIONAL DEVELOPMENT
DEVELOPING
RURAL HEALTH TOGETHER

Health Technicians Training School - Sukkur.

GOVERNMENT OF PAKISTAN
AND
UNITED STATES AGENCY
FOR INTERNATIONAL DEVELOPMENT
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Mr. Ghulam Ishaq Khan
President of Islamic Republic of Pakistan
I am pleased to learn that the thirteen Health Technicians Training Schools, being constructed with the assistance of USAID, are soon to be made operational. This will meet, to a significant degree, the pressing need of imparting pre-service training to those who are to serve in the Rural Health Centres and Basic Health Units throughout the country.

The success of any public health programme depends heavily on the availability of trained manpower, in which we continue to be deficient. The new training schools will make a significant contribution towards removing this deficiency. This, in turn, will mean better and wider medical cover to our poor and rural population.

These schools will also render invaluable services in the field of female health, as Female Health Technicians are also to receive training here. The role that this training will play in reducing infant and maternal mortality rates in Pakistan can be well imagined.

I would like to take this opportunity to thank USAID for its help in the establishment of these schools. I wish a good beginning to the schools and success to their training programme.
Mohtarma Benazir Bhutto
Prime Minister of Islamic Republic of Pakistan
Any health system depends for its success on the availability of qualified and trained health technicians and other mid-level medical workers. They are almost indispensable for meeting the growing health requirements of our rural population whose access to fully qualified doctors and hospitals is severely restricted. I am therefore pleased to learn that a number of health technicians schools have been commissioned throughout the country to fill in a void in our health system.

These schools have been set up as part of the policy of my government to provide primary health care to our people, the primary health care programme under which a large number of technicians will be trained aims at meeting the needs of the people at a cost they can afford.

Its strategy is to use simpler techniques and utilize existing resources for improving the health status of the people within a short period of time. It also aims at delivering service at the door steps of the needy to save them from the inconvenience of travelling long distances through inhospitable terrain for seeking basic medical care. This indeed is the objective of the Peoples Party’s Health Policy.

I congratulate those who have initiated and completed the construction of these health technician schools. We are also indebted to the USAID for their support in the construction of these schools. I wish the health technician schools success and all those associated with the primary health care project good luck in their noble mission.
MESSAGE OF THE
AMBASSADOR
OF THE
UNITED STATES

Robert B. Oakley

The American people, through the USAID program, are pleased to support the Government of Pakistan in its efforts to improve the health of its peoples. We congratulate the Government on the progress it has made in extending health services throughout the country.

Prime Minister Bhutto is committed to improving the welfare of the nation's people, and we are eager to help this commitment become a reality. Better primary health care, especially for women and children, is vital to this effort. Further, a healthy population is essential to a nation's prosperity and economic productivity.

Improving primary health care in Pakistan requires that health facilities be available even in the rural areas. Mid-level health workers -- particularly female workers -- must form the core of the health system in these facilities. They are the front line in providing education, promotion and services for life-saving measures such as child spacing and safe child-birth. They also provide protection and sound treatment for life-threatening infectious childhood diseases. Until recently, Pakistan has faced an acute shortage of facilities and has not had the means to train mid-level female health workers.

The Primary Health Care program is a joint effort of USAID and the Government of Pakistan to meet these urgent needs. Thirteen Health Technician Training Schools with their hostels and residences were built and equipped around the country at an average cost of Rs. 11 million each. The graduates from these training schools will provide primary health care to Pakistan's villages, serving as a link between their communities and the medical system. The training program also helps increase the number of female paramedical personnel in Pakistan. The schools are managed by a principal who is a senior physician and tutors who are medical officers. Some 3,000 health technicians including 1,000 women, will be trained by the end of the project.

The United States of America is a proud partner in the effort to sustain important gains in primary health care and child survival. The children born today will build the Pakistan of tomorrow.
It is gratifying to know that most of the 13 permanent Health Technician Schools have been completed and are ready to start functioning.

The Government has embarked upon provision of essential health care through a well established Primary Health Care Programme. Rural Health Centres and Basic Health Units have been built at an unprecedented speed. Now more than 85% of the villages have either the facilities of Rural Health Centres or Basic Health Units. These health facilities can be made operational at an optimum level only through the provision of well trained health manpower along with other requirements.

I hope the 13 Health Technician Training Schools will prove a milestone in the development of Primary Health Care in this country. These schools will produce health technicians who are going to man the rural health facilities i.e. Rural Health Centres and Basic Health Units.

I would like to place on record my sincere appreciations for the assistance provided by USAID, in the construction of these Health Technician Training Schools. I would also like to extend my good wishes for the success of these schools.
MESSAGE FROM DIRECTOR GENERAL HEALTH

I extend my good wishes on the occasion of commencement of Health Technician Training Schools. It is going to be a milestone in the history of development of rural health services in Pakistan.

The Government of Pakistan is trying its best to provide optimal health care to its population. We need an army of health workers throughout the country who will provide health care to the people particularly in the rural areas. I am certain that Health Technician Training Schools will help us in meeting the training requirements of these health workers.

Given the devotion and commitment which is very vivid in the shape of development of these schools amongst the provincial departments, Federal Ministry of Health, and the USAID, I am confident that we will be able to achieve the objective of extending Primary Health Care to a large number of people. May I congratulate each and every one involved in the construction of Health Technician Schools and wish them success in other ventures in the Primary Health Care Programme in Pakistan.

MESSAGE FROM SECRETARY HEALTH

I am glad to learn that 13 Permanent Health Technician Training Schools are near completion and are going to be made functional in the near future. It is a pleasure to convey my best wishes at the occasion of the opening of these schools.

Training of health manpower is essential in every field. Our Primary Health Care Programme in Pakistan aims at provision of essential health care to the maximum number of people in the shortest possible time, particularly in the rural areas. The Rural Health facilities consisting of Rural Health Centres and Basic Health Units have been created with the highest priority. The success of these facilities in the provision of Primary Health Care to the people will depend on staff which is well trained and motivated to work even in the remotest corners of the country.

We hope that the 13 Permanent Health Technician Training Schools built with the assistance of the USAID will be greatly instrumental in the development of the rural health services in the country. The Health Technicians who will graduate from these schools will be the backbone of the rural health services.

I would like to extend my best wishes to each and every one who has been associated with the implementation of the Primary Health Care and particularly with the development of Health Technician Training Schools. May God make this venture a great success. AMIN.
Primary Health Care in Pakistan has been understood to provide curative and some preventive services through Basic Health Units, Rural Health Centres, Dispensaries and Maternal and Child Health Centres. However, the Alma Ata Declaration (1978) enunciated Primary Health Care to provide, at the community-level, health-education, promotion of proper nutrition, adequate supply of safe drinking water and basic sanitation, maternal and child health care including child-spacing, poliomyelization, prevention and control of locally endemic diseases, appropriate treatment of common diseases and injuries, and lastly, provision of essential drugs.

Creation of hospital beds and their maintenance is far more expensive than the preventive measures which can produce very tangible results. There was been no major program in preventive health except Malaria and Tuberculosis Control Programmes. Pakistan was declared smallpox free on 18th December, 1976. Environmental sanitation is carried out by sanitary inspectors, supervisors and sanitary patrols. Supply of safe water is the responsibility of Public Health Engineering Departments and child-spacing is with the Population Welfare Division. Distribution of wheat, dried skimmed milk and butter received under the World Food Programme was started through the “primary health care” network in 1976 and the items are targeted to needy expectant and lactating mothers and preschool children. Education about processed weaning foods is given to the recipient families.

The health situation analysis in 1981 highlighted major problems of vulnerable group mothers and their children. The Holy Prophet (Peace be upon him) said:

“All creatures are children of God, and most beloved of Him is he who does most good to His children.”

Children constitute the most important segment of the population of each and every country and they need special care and protection. Pakistan has a child population of 46 million out of which 17 million children are in the age group of 1 to 4 years. Almost 3.5 million children are being added each year. About 10% children die before the age of one year and another 10% die before reaching the age of 5 years, thus Pakistan loses about 700,000 children every year. The major causes of infant and child death are diarrhoeal diseases, neonatal tetanus, acute respiratory infections, malaria, measles, diphtheria, polio, pertussis and tuberculosis.

Provision of complete primary health care (PHC) is a long term objective but special components of PHC can be identified as follows:
1. Acceleration of the expanded programme of immunization (EPI) against six preventable diseases of childhood to reduce mortality and morbidity of poliomyelitis, measles, diphtheria, pertussis, tetanus and tuberculosis and to accomplish the goal of Universal Child Immunization by 1990.

2. Promotion of Oral Rehydration Therapy as a life saving strategy, against all cases of diarrhoeas, thereby effecting a reduction of child deaths by 10% annually. Both private and public sector companies should be involved in production, marketing and distribution of ORS.

3. Provision of antenatal and postnatal care of pregnant and lactating women by Trained Birth Attendants (TBAs).

4. Immunization of all childbearing-age women with doses of Tetanus Toxoid to cut down drastically the incidence of neonatal tetanus, a major cause of neonatal death.

5. Development of the control of acute respiratory infections (ARI) programme, including steps to permit peripheral health workers to use appropriate drugs for treatment of ARI.

6. Involvement of professional bodies and N.G.O’s in national health programmes.

7. Concerted and intensive efforts to impress the dire necessity of child spacing, and involving males in the Family Welfare Programme.

8. Revision of strategies for control of Malaria by using modern technology, viz, biological control of vectors, and prompt treatment of cases, to reduce the parasite reservoir; obtaining community-participation; and stress on personal prophylaxis. Research efforts in the development of Malaria vaccines be strengthened.

9. Investigative programmes designed to improve the nutritional status of children should be given highest priority as malnutrition has a direct bearing on child-survival.

10. Recognition of Iodine Deficiency Diseases in mountainous areas of the country where the target population is estimated as 4.5 million, and development of control measures, viz lipiodal injections on extensive scale, which cover the whole target population, along with promotion of iodized salt in these areas as a permanent solution to the problem. Lipiodal injections are scheduled to be completed by 1990.

11. Eradication of Guinea Worm diseases by 1990 as the National Survey has determined that only 400 villages have been found to be affected (i.e. a population of 300,000).

Conceived, planned and financed by the Government of Pakistan in 1982 the Accelerated Health Programme identified the following areas:
ATTAINMENT OF PLAUSIBLE RESULTS IN HIGH PRIORITY PRIMARY HEALTH CARE COMPONENTS.

1. Immunization of children under 5 years of age against six preventable diseases.

2. Oral Rehydration Therapy. (ORT — the use of ORS or oral rehydration salts).

3. Training of Traditional Birth Attendants.

The results are as under:

<table>
<thead>
<tr>
<th>Services</th>
<th>Number</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed centers</td>
<td>1884</td>
<td>4165</td>
</tr>
<tr>
<td>Outreach units</td>
<td>3578</td>
<td>3941</td>
</tr>
<tr>
<td>Mobile teams</td>
<td>128</td>
<td>145</td>
</tr>
</tbody>
</table>

Health Education and motivation campaigns for both Expanded Programme of Immunization and Control of Diarrheal Diseases have been of immense help in raising the immunization coverage from 2% to the present high coverage of nearly 80%.

Disease reduction of 65% is recorded for poliomyelitis and 80% for Measles.

Reduction of neonatal tetanus rates still needs more effort through immunizing pregnant ladies with Tetanus Toxoid as only 32% were given Tetanus Toxoid.

Diarrhoeal diseases showed a reduction of 41%, ORS is being used in 48% of cases of diarrhoea but antibiotics and antidiarrheals are still being given. There is, however, improvement in cutting down harmful practices viz discontinuing breast feeding, holding back of food and liquids and insufficient knowledge of ORS.

Successful implementation of Accelerated Health Programme has resulted in saving 100,000 lives annually and has prevented about 40,000 disabilities every year.

TRAINED MANPOWER

Senior level managers (2), Midlevel Managers (853), Supervisors (1046), Vaccinators (9087), Cold Chain Repair Technicians (22).

PRODUCTION OF VACCINES:

This is the most vital component of the programme and a most cost-effective public health tool. Sophisticated technology has been acquired in the processing as well as basic manufacture of Polio and Measles Vaccine with the collaboration of CIDA. Bacterial fermentors and ancillary equipment provided by USAID’s Primary Health Care Project will augment the production of bacterial vaccines for which technology is already available at the National Institute of Health.

All this has been possible because of the commitment of the Government of Pakistan. The Ministry of Health has always given unrelenting support.

The most spontaneous assistance and meaningful collaboration from worthy donors like WHO, UNICEF, USAID and CIDA went a long way towards success of the three components of Primary Health Care.
Mothers are taught by health technicians the importance of measuring growth so they learn to seek medical help early when their children lose weight.

Handwashing prevents diarrhoea and other infections. A Health Technician helps a mother teach her child healthy sanitary habits.
Undernutrition is a result of poverty, chronic infections and poor feeding habits. The Balochistan Health Department runs a feeding program for undernourished children at a BHU where children are introduced to nutritious foods.

Female technicians and PHC staff counsel a mother on how to feed her malnourished, dehydrated child.
Pakistan is a party to the Alma Ata Declaration made at the International Conference on Primary Health Care in 1978. This declaration promotes a primary health care strategy which would provide low-cost but adequate health care for all before the turn of the century. The primary health care concept is founded upon the principles of community involvement and self-reliance, equal access to health care, priority for preventive services, appropriate technology and a multisectoral approach.

The Government of Pakistan is continually expanding health services to the country's rural population. Over the last decade, the United States Agency for International Development (USAID) has contributed to this effort through an on-going 30 million dollar Primary Health Care Project (PHC) and the preceding Basic Health Services Project.

The goal of the Primary Health Care Project is to improve the coverage and quality of essential rural health services in Pakistan. With project support, the provincial health departments have introduced management systems in rural health facilities, developed the training programme for mid-level health workers called Health Technicians (HT) and implemented the Expanded Programme for Immunization (EPI) and Oral Rehydration Therapy (ORT) components of the Accelerated Health Programme (AHP).

The inputs described below (and shown on the adjacent pie chart) support the management, training, EPI, and ORT programs:

The goal of the Federal Ministry of Health is to provide one BHU in each Union Council for 5,000-20,000 population.
PRIMARY HEALTH CARE PROJECT
ACTIVITIES
(in U.S. dollars)

TOTAL: 30 million
A Health Technician student watches a mother prepare ORS solution for her dehydrated child.

1. Long-term technical assistance worldwide for Control of Diarrheal Diseases and other child survival interventions;

2. Twelve Pakistani professional staff (6 training specialists and 6 management analysts) assigned to the four provincial Basic Health Services Cells in Peshawar, Karachi, Quetta and Lahore; and to Rawalpindi and Multan;

3. Short-term technical assistance for the baseline health survey on knowledge, attitudes, and practices (KAP) in selected rural health center communities; the revision of the training curriculum for health technicians; development of an operations manual; development of health information systems; introduction of microcomputers; nutrition; and components of the national Control of Diarrheal Diseases Programme including ORT communications campaigns, ORS supply system, and training of physicians and paramedics in case management of diarrhoea;

4. Commodities including vaccine production and immunization equipment; bicycles, motorcycles, and vehicles for AHP; school vehicles, equipment and furniture; training and health education materials; and...
A Medical Officer's workshop to discuss standard treatment and management issues.

5. Short term training courses in U.S.A. and opportunities for tours to observe primary health care approaches in other countries.

PHC PROJECT ACTIVITIES

The PHC Project provides support in five areas; 1) Management; 2) Training; 3) Program Operations; 4) Research and Evaluation; and 5) Accelerated Health Programme. The provincial Directors of Health Services and their staff played key roles in the progress made in all five components.

1. Program Management: A number of workshops and working group meetings have been held to discuss management of rural health facilities with medical and district officers. Improved patient records, abstract register of diseases, drug-inventory control, and essential-drug lists have been introduced in rural health facilities as a result of these workshops and working groups. A monitoring system based upon standard protocols for essential services is being tested for Basic Health Services. These essential services include the Expanded Programme for Immunization, Oral Rehydration Therapy for dehydration, nutrition, maternity care, and treatment for acute respiratory infections, malaria and tuberculosis. In an attempt to make supervision more effective, the monitoring system provides monthly reports on staff levels.
on availability of supplies critical to these services and on quality of clinical treatment in all health centers in the district. Microcomputers will be introduced gradually for existing information systems to give decision-makers rapid feedback on problems and actions taken to solve them.

To date approximately 600 medical officers have received training for program management. A standard curriculum for management training will improve integration of primary health programs. An Operations Guide for rural health facilities is being developed.

2. Training: Sufficient doctors have now graduated from Pakistan’s medical schools to enable posting of doctors in Basic Health Units. Previously, technicians provided all health care services at Basic Health Units. Now their role is to provide health education and community health services for the villages served by their health facility, to follow-up patients in the community, and to teach mothers about vital actions such as proper care during pregnancy, appropriate infant feeding, and oral rehydration therapy to prevent deaths due to dehydration.

With the extension of Basic Health Units in the remotest corners of the country, appropriate training for Health Technicians has become a major priority. Thirteen schools are being constructed throughout Pakistan to establish the Health Technicians training program. The training curriculum for health technicians was revised to teach community health. Regular periods of placement at rural health centers are arranged to provide practical learning experience.

3. Program Operations: Vehicles, registers, basic medical kits, and health education materials were supplied to health workers, training schools and rural health centers.

4. Research and Evaluation: A baseline Knowledge, Attitudes and Practices (KAP) survey conducted in 1983-84 showed a need for PHC services such as ORT, nutrition, and sanita-
USAID procured 33 million single use syringes and needles for EPI in 1988.

Microscopists are being trained, at district level, to prepare and read acid fast bacillus stains for diagnosis of tuberculosis.

USAID supports training of microscopists at provincial level to decentralize the system of malaria diagnosis. Previously, malaria smears were taken to central laboratories for examination. Many patients never returned to the health centers to receive a full treatment for malaria. Others were treated radically without slide results whether or not they had malaria.

tion. Recurrent costs for health care were studied in order to seek alternative means of financing primary health care in Pakistan. A mid-term evaluation, which was conducted in November 1985, recommended that the project focus resources on priority national programs, that management and supervision systems be developed to improve quality of health care in rural health centers, and that the role and potential for community health workers be studied.

5. Accelerated Health Program
   a. Expanded Program of Immunization (EPI): Over $6 million of commodities were procured to help the Ministry of Health maintain EPI coverage for the six vaccine-
preventable diseases, namely, measles, tuberculosis, polio, diphtheria, tetanus and pertussis and for acceleration of tetanus toxoid immunization for married women. A four party Articles of Agreement for EPI 1986-1988 period was signed by W.H.O., U.S.A.I.D., UNICEF and the Government of Pakistan to achieve EPI coverage targets and improve investigation and surveillance of disease outbreaks.

b. Control of Diarrhoeal Diseases: Project and PRITECH funds are being used to finance a KAP study about diarrhoea and ORS use and for ORT communications campaigns including the production of 2 million pictorial leaflets for distribution with ORS packets. The National Institute of Health is also coordinating the establishment of Diarrhoeal Treatment Units for training physicians at teaching hospitals and district hospitals. Paramedics and private practitioners will also receive training in proper case management of diarrhoea. ORT corners are being established in rural health facilities. An ORS logistics system, CDD surveillance system and a management information system are also being developed.

All the project components are building a health delivery system which provides preventive and curative care to the rural population.
### SOME MAJOR ACCOMPLISHMENTS OF THIS PROGRAM

<table>
<thead>
<tr>
<th>Accomplishment</th>
<th>Details</th>
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<tbody>
<tr>
<td>11 Health technician training schools and hostels in Sindh, Punjab and NWFP, fully equipped and furnished; the remaining two schools in Balochistan will be completed in December 1989.</td>
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<td>1500 health technicians trained and working, 22 percent of whom are female;</td>
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<td>35 motorcycles provided for Senior Health Technicians;</td>
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<tr>
<td>A three-volume curriculum revised and being translated into Urdu for teaching community-health skills to mid-level health-workers;</td>
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<td>459 health technician students currently enrolled of whom 40 percent are female;</td>
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<tr>
<td>600 medical officers given training in management of rural health centers;</td>
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<tr>
<td>Standard treatment guidelines developed for prevalent life threatening diseases;</td>
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<tr>
<td>Developed management systems for Basic Health Services and automated information systems for priority primary health care programs;</td>
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<tr>
<td>Development of a widely tested logo for Oral Rehydration Therapy (ORT) which provides a standard symbol for this much needed child-saver;</td>
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<td>2 million pictorial ORT leaflets distributed nationally;</td>
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<td>ORS packets designed with pictorial instructions on packet;</td>
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<tr>
<td>ORT radio spots broadcast for one year from sixteen stations around Pakistan; three promotional spots on ORT broadcast on television regularly; and</td>
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<tr>
<td>Commodities, totalling 5.2 million dollars, provided to the Expanded Programme for Immunization which now reaches over eighty percent of children 12-23 months old in Pakistan. These include 33 million syringes with 1000 destruction devices; 586 motorcycles; 130 vehicles; a vaccine delivery van, and 10,000 bicycles given for EPI.</td>
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<tr>
<td>Vaccine production equipment totaling 1.4 million dollars provided for manufacture of bacterial vaccines.</td>
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In 1960 the Government of Pakistan decided to establish a National Institute Health Center in the newly established capital of Pakistan. In 1967, the Institute was formally inaugurated by the President of Pakistan, Field Marshal Mohammad Ayub Khan. In 1979, due to fast expansion, modernization and automation of the laboratory, the Government of Pakistan (GOP) decided to give it a status of Autonomous Body under the Ministry of Health, Special Education and Social Welfare, GOP.

NIH is very active in the promotion of Primary Health Care activities especially Immunization and Control of Diarrhoal Diseases. Under EPI, NIH is currently involved in collaboration with WHO, USAID and CIDA in establishing units for vaccine production such as Polio, Measles and Tetanus Toxiod to produce vaccine for the target population which is children under 5 and women of child bearing age. Along with vaccine production, NIH is involved in EPI public awareness campaign which has been successfully achieved and nationwide training of medical and paramedical staff to keep up the continuity of EPI in the rural and urban areas.

Under the Control of Diarrhoeal Diseases programme, NIH in collaboration with WHO, UNICEF and PRITECH is in the process of establishing Diarrhoeal Training Units in the teaching hospitals of the major cities of the country. The DTUs are running courses for doctors and paramedical staff emphasising proper case management of children with diarrhoea, treatment through use of ORS only and proper nutrition.

Beside the above two programs, NIH is also very active in the control of ARI, Iodine deficiency, and guinea worm eradication program.
HEALTH TECHNICIANS' TRAINING SCHOOLS IN PAKISTAN
"Health for all by the year 2000" is to be achieved through providing low-cost primary health care services at the community level. In Pakistan, there has been a shortage of physicians serving in rural health facilities. In 1977, the Ministry of Health began training a new cadre of mid-level health workers, Medical Technicians (MT), who in the absence of physicians could provide emergency and basic health services in villages.

This program began modestly since resources were limited. Recruitment of matriculate females was difficult and supervisors were unfamiliar with the role of MTs. Classes for MTs were held in one or two rooms of a hospital building or a training school for Lady Health Visitors. Training materials and equipment were limited, standard accommodation was not available, and field experience was difficult to arrange for the students.

In 1982, the Government of Pakistan, began plans for thirteen training schools around the country as shown on the map. These institutions have permanent staff who have worked closely with the Primary Health Care Programme in the provinces. The new schools provide an optimal environment for training mid-level health workers.

From 1982-1988, sufficient physicians have graduated to employ medical officers for all Rural Health Centers and Basic Health Units. Now the technicians can serve as health auxiliaries with an important community health role rather than as a substitute doctor with insufficient training for complicated health problems.
Hands on training: students preparing and tasting ORS.

The former Director General of Health at an inaugural session of a workshop to orient in-service health technicians to new curriculum.

Hence their training curriculum has been revised to focus on identifying community needs, practical ways to improve health and meeting needs using local resources. Students learn, for example, to construct pit latrines, run nutrition programs, and to promote oral rehydration therapy for dehydration from diarrhea.

Mid-level health workers are the backbone of a health system since they provide patient follow-up in the community and perform the health education and simple preventive measures which highly skilled physicians do not have time to do. Health Technicians receive eighteen months of practical, clinical and community health training. The sophisticated training for physicians takes four to six years. Training physicians to carry out health services which can be better provided by health auxiliaries is not cost-effective. Health technicians, if adequately trained and properly supervised, will make a major contribution as part of a health team to improve maternal and child health in rural Pakistan.

Learning to recognize malaria parasites.
Students also learn basic clinical procedures such as measuring blood pressure, doing simple laboratory tests to diagnose anaemia, malaria or tuberculosis, detecting high-risk pregnancies for referral and giving immunizations according to schedule.

Project-financed vans have made regular field assignments and supervision possible. During rotation at the Basic Health Units or in the community, students learn about community health survey techniques, the potential role of village leaders in mobilizing resources for health, and training and supervision of community Health Workers.

Seventy percent of Pakistan's population are women and children. Childbearing women and children are the most vulnerable groups for common preventable health problems. However, because so many health workers are male, women do not easily ask for their advice. Therefore the provincial health department, in cooperation with primary health care staff have made major efforts to achieve a significant increase in female students from 22 percent in 1985 to forty percent in 1987. Workshops to introduce the new role for about 1100 in-service health technicians in all four provinces have been completed. The workshops oriented technicians to primary health care concepts and skills necessary to provide primary health care services at the community level.
Provincial Health Departments, with collaboration of Federal Ministry of Health and USAID assistance, have built thirteen schools that will provide standard training for health technicians nationwide. These schools are located as follows:

Punjab:
- Sialkot, Jhang, D.G. Khan, Bahawalpur, Attock.
- NWFP
- Abbottabad, Peshawar, D.I. Khan.

Balochistan
- Quetta, Khuzdar.

Sindh
- Mirpurkhas, Sukkur, Hyderabad

The design of each center is...
similar with an academic building, a male hostel, and a female hostel. There are two to four residential quarters for tutors and one for the Program Training Officer.

School building: The school building has an auditorium which seats up to 200 people and serves as the main lecture hall equipped with audio visual equipment. There are smaller classrooms for group interaction, a library, a laboratory and administrative offices.

Hostel: The hostels house 25 to 50 students. Each room accommodates two students and has a study area. Security of the students was a priority during the design of the school. Project funds are being used to build and improve compound walls. The compound is patrolled by government chowkidars. Each Hostel will have a live-in resident supervisor. Program Training Officers live on the compound and are available to solve security problems.

There is a kitchen for regular group meals and a small pantry that allows students to prepare light meals. Each hostel also has a modern laundry room. There is a dining room in each hostel, a central open-air courtyard, a lounge for recreational activities, and a visitors room for private meetings with family.

The next generation of health workers will leave these modern schools with training in new approaches to providing life-saving services to their communities.

Permanent Training Center for Health Technicians
Students preparing meals

Students practicing what they teach: handwashing

Self learning in the Library

Room in females' hostel.
Diarrhoea and dehydration are the most common health problems in Pakistan. Mothers are educated to use ORT as the method for rehydrating young children. Intravenous drips are recommended only when the child is in shock or very severely dehydrated.

A Medical Officer showing a mother how to give rehydration solution orally to her dehydrated child.

After being taught, the mother gives the solution in small spoonfuls until the child is no longer thirsty. The mother is given ORS packets to take home for future use.

The mother learns about the importance of weight gain and feeding from female health officers supervising the ORT corner.
Complications from diarrhoeal diseases killed one third of the approximately 700,000 children who died in Pakistan in 1987. This makes diarrhoea the number one killer of Pakistani children under five years of age. The main cause of death resulting from diarrhoea is dehydration combined with malnutrition.

Due to the importance of the problem presented by diarrhoea, Control of Diarrhoeal Diseases (CDD) along with the Expanded Program of Immunization (EPI) and the training of traditional birth attendants (TBAs) are the main components of Pakistan's Accelerated Health Program (AHP). The National Institute of Health (NIH) is responsible for coordinating policy and training for the CDD and EPI programs, but the provincial health department implement these programs according to provincial plans.

Pakistan's CDD program has been an Oral Rehydration Therapy (ORT) program with primary emphasis on production, distribution and promotion of Oral Rehydration Salt (ORS) packets. The government distributes approximately 10 million packs of ORS a year to families of children under five. A survey conducted jointly by the Government of Pakistan, UNICEF, USAID and CIDA in 1988 reports approximately 700,000 children Rehydration Salt (ORS) packets. The government distributes approximately 10 million packets

Health worker teaching mothers about preparation of Oral Rehydration Salts (ORS). It is very important that children suffering from diarrhoea continue to drink plenty of fluids - at least two liters a day. The ORS helps replenish the body's chemicals, which are lost in diarrhoea.
that 71 percent of the families with children under five had in their homes a packet of ORS which had been delivered to them by the EPI outreach workers. The push now is to teach mothers how to mix and administer correctly the ORS solution.

The key people to reach with knowledge to prevent death due to diarrhoea are caretakers of young children. The only way to decrease morbidity and mortality of children is through the transfer of health knowledge to the community. Families can prevent diarrhoea among children only through proper hygiene, sanitation and feeding.

Caretakers of children can provide first treatment for diarrhoea/dehydration and decide when children need to be taken to the health facility. The national CDD program has thus been following a three-pronged approach which consists of mass distribution of ORS packets through the health system, particularly EPI workers, education through mass media and training of health-care providers.

The Government program has been disseminating the following messages to the general public:

- Start using ORS every time the child gets diarrhoea;
- Continue breastfeeding and feeding the child with diarrhoea;
- Watch for the signs of dehydration. Take the child to a health facility if you notice any of the danger signs;
- Take the child to a health facility if diarrhoea lasts more than three days;
- Prevent diarrhoea by keeping the environment clean, washing hands, and feeding the child fresh and clean foods. Breastfeed; avoid bottle-feeding and the use of soothers.

Since recognition and use of ORS are high, the present focus of the PHC Project assistance to the CDD program is on training health providers and mothers on the correct preparation and administration of ORS, the necessity for continued feeding during diarrhoea and about the dangers of using anti-diarrhoeal and anti-motility drugs for treating diarrhoeal infections. Preventive, high impact measures such as hand-washing and breastfeeding will also be emphasized by the CDD program.
DIARRHOEA REMAINS THE NUMBER ONE KILLER OF PAKISTANI CHILDREN

Out of the 200,000 children under five who die in Pakistan every year of diarrhoea related diseases, most die because they are dehydrated as a result of water and electrolytes lost during diarrhoea. Dehydration when combined with malnutrition, accounts for most diarrhoea-related deaths. This tragedy is no longer acceptable because science has found a simple and inexpensive solution which can save most of these children: Oral Rehydration Therapy (ORT), meaning feeding children home liquids and ORS solution, continued breastfeeding and feeding during diarrhoea to prevent and/or treat dehydration.

USAID'S COOPERATION WITH THE NATIONAL CONTROL OF DIARRHOEAL DISEASES (CDD) PROGRAMME

Because diarrhoeal disease is the number one killer of Pakistani children, USAID, through its Primary Health Care Project, is contributing approximately 4 million dollars for training of various levels of health workers and communications designed to transfer the ORT technology to families. Funds for the Diarrhoea Training Unit (DTU) effort represent a little under one forth of total funds allocated for CDD.

PROBLEM WITH CURRENT DIARRHOEA TREATMENT

Scientific research has proven that Oral Rehydration Therapy plus feeding is the most effective and safest treatment for most diarrhoea patients. However, health facilities and physicians in
Pakistan still treat patients who are not severely dehydrated with IV which can cause complications and is expensive. Physicians often prescribe antidiarrhoeal and antimotility drugs which are either useless or harmful to children. Often physicians prescribe antibiotics for diarrhoea patients who do not need them. Wrong treatment of diarrhoea is a major cause of malnutrition and death of Pakistani children.

Physicians and health workers often fail to spend time educating mothers. Thus, the same children keep returning to health facilities with diarrhoea and dehydration which could have been easily prevented at home.

**DIARRHOEA TRAINING UNITS (DTUs)**

The Government of Pakistan, in collaboration with USAID, WHO and UNICEF, is launching a nation-wide Diarrhoea Training Unit project. The initial phase of this project is being funded by USAID's Primary Health Care Project and is expected to become the centerpiece of the training strategy for the new Child Survival Project.

Pediatrics departments in eight major hospitals attached to medical schools have started DTUs in the four provinces: Sandeman Hospital, Quetta; Mayo and Lahore General hospitals in Lahore; Children's Hospital in Islamabad; Lady Reading and Hayat Shaheed Hospitals in Peshawar; Jinnah Postgraduate Medical Centre and Dow Medical College in Karachi. Ultimately each division will have at least one DTU which will be in either a teaching or a divisional hospital.

Each DTU will assist approximately five other hospitals or major referral centers per month to establish diarrhoea treatment Units or Oral Rehydration corners. This assistance will involve training of one physician from each hospital in the major DTU, provision of basic ORT equipment and minor repairs to the health facility, and follow-up assistance with implementation and on-the-job training of staff in the health facility.

**WHAT IS NEW ABOUT THIS DIARRHOEA TRAINING EFFORT?**

The major difference between this effort and previous diarrhoea training programmes is that the course emphasizes practical experience, and in this case, training is only a part of an integrated system meant to ensure that health facilities will provide their diarrhoea patients the most modern and up to date treatment available.

Another key aspect of this effort is the emphasis given to transferring...
Weight is an important indicator of health. LHV's teach all health professionals to weigh each child seen in the Diarrheal Training Unit.

The technology of prevention, oral rehydration and feeding from the health system to the family through education of parents. The only way to ensure the survival of most children who are dying as a result of diarrhoea is to teach parents how to prevent and treat diarrhoea at home and seek medical care when needed.

A PIONEER EFFORT: PAKISTAN'S LEADERSHIP IN THE WORLD

Pakistan's DTU approach is a pioneer effort: for the first time in the world, there is a nation-wide integrated program which combines assistance to health facilities in terms of facility and treatment assessment, supply of equipment, hands on training of medical personnel, education of mothers, follow up assistance and on the job training in the health facilities. Thus, the measure of success of the DTU programme will be improved treatment in health facilities, rather than just numbers of people trained. This scheme also formalizes the cooperation between medical teaching colleges and provincial health departments.

WHAT IS A DIARRHOEA TRAINING UNIT?

A Diarrhoea Training Unit is a major medical center of excellence which has the following major functions:

1. Providing its diarrhoea patients the most up to date treatment: Oral Rehydration Therapy plus feeding for most patients and I.V. treatment to severely dehydrated patients;
2. Educating parents in the prevention of diarrhoea and dehydration and home management of diarrhoea;
3. Assisting other hospitals or major referral centers assigned to it by the provincial or federal government with:
   - assessment of their facilities and treatment;
   - training of their staff in scientific diarrhoea management;
   - minor repairs and construction;
   - basic Oral Rehydration equipment;
   - follow-up to ensure that these centers provide their patients correct diarrhoea treatment;
   - education of mothers
4. Research oriented towards improving patient care,
5. Collection of patient data to improve service delivery.

HOW DOES THE DTU FUNCTION

Each DTU has a team consisting of a director who is the head of the Department of Paediatrics, a physician and a lady health visitor who are responsible to act as the
link between the medical school and the provincial government. This team, along with provincial health officials, conducts the pre-training assessment of health facilities, the hands-on training programme for physicians, and the follow-up to assist with implementation and with on-the-job training of other medical and paramedical staff in health facilities assisted by the DTU. The DTU team has a vehicle to ensure its mobility.

**COOPERATING AGENCIES**

USAID, through its Primary Health Care project, is funding salaries of one physician, one LHV and one driver per DTU, vehicles, training, minor construction and basic Oral Rehydration Therapy (ORT) equipment in up to 200 health facilities in the four provinces within the next six months. USAID, through its PRITECH project, WHO and UNICEF are providing teaching materials and technical assistance to the DTU project.

*Lady Health Visitor teaches fathers about the prevention and treatment of diarrhoea using poster produced with PRITECH/USAID assistance.*
Pakistan has made tremendous progress in immunizing its children, increasing coverage by 25 times over the past five years. A 1982 evaluation of the immunization programme in Pakistan, showed that only two percent of children under five had been immunized. In response to this finding, the Accelerated Health Programme (AHP) was launched in 1983. In addition to immunization, the AHP included Control of Diarrhoeal Diseases and training of traditional birth attendants. By February 1988, a nationwide review sponsored by WHO, Government of Pakistan, and other donors found 81% of children 12-23 months of age were fully immunized and at least 23% of married ladies of child-bearing age had been given a minimum of 2 doses of tetanus toxoid vaccine. The National Institute of Health estimated that 53% of infants and 80% of children 12-23 months old have been fully immunized.

Reasons for EPI Success:

There is general agreement that the strong political and financial commitment, the active involvement of political, national and community leaders and outreach workers, and the use of mass media to promote the importance of immunization were key to this remarkable achievement.

The EPI program recognized that each province is different and should approach the problem of immunizing its children in ways which suited local needs. Each province used different strategies. Punjab started with a massive campaign involving over 5,000 vaccinators. NWFP adopted an approach in which immunizations
given by outreach teams were part of its 5-year health plan. Sindh used ‘crash’ cycles in collaboration with a number of non-governmental institutions. Balochistan relied on mobile teams to reach its proportionately small population of 5 million scattered over 50% of Pakistan’s land. However because of this logistic challenge, adequate coverage has not yet been accomplished in Balochistan.

Three-Pronged Approach

The approach consisted of fixed centers, outreach and mobile teams. Fixed centers are located in existing health facilities in heavily populated areas serving the population within a five km radius. There are over 2000 fixed centers which offer immunization six days a week.

Outreach teams serve a population within 5-8 kilometers of the fixed centers. The teams are composed of 2-4 male vaccinators, some of whom use motorcycles and bicycles. There are over 4000 outreach teams.

There are over 175 mobile teams which are used in some provinces to cover remote populations. These teams comprise 4-6 vaccinators who work exclusively for EPI. They can operate without resupply for 4-6 days. Accommodations for mobile teams are provided by local leaders. In order to maximize community participation, scheduled visits are pre-arranged and an advance party selects sites and arranges for publicity/public motivation.

Training:

District Health Officers and Assistant District Health Officers were trained in mid-level management of EPI. The training of peripheral level health workers, such as vaccinators, motivators and supervisors was carried out at district level. Training sessions were also held for ‘cold chain technicians’.

Traditional birth attendants were trained as motivators in the community.

Curriculum:

The EPI training is based on standard modules prepared by the World Health Organization. It was modified to include other components of primary health care such as control of diarrheal diseases and information, education and communications. The EPI curriculum is now being used in all the public health nursing and medical technicians training schools throughout Pakistan.

Information, Education, and Communication:

Interpersonal contact and mass media were used for communicating the EPI message. Commercial advertising agencies developed various television commercials and health educators in the provinces wrote radio scripts and newspaper advertisements. Only one series of
Regular inter-provincial meetings helped improve EPI coverage.

Communication materials, however, was developed, pre-tested and finally evaluated with the target audience. The “Uncle Sargam” puppet show characters were utilized for television, print and taped mass education purposes. An independent evaluation of the television spots shows that almost 90 percent of people who watched television saw the immunization spots. Puppet shows were used to transmit health messages. Booklets using the same puppets were developed and used in schools. Cassettes and illustrated traditional poetry booklets based on these puppet shows were produced to reinforce the message.

Posters, pamphlets, banners and billboards showing the WHO logo for EPI were also used. Year planners with immunization messages and T-shirts and pens were produced for special events. The Pakistan Post Office Department issued postal stamps, cancellation seals and posters with immunization messages.

Current Focus of the EPI Program:

Currently the EPI program aims to improve the coverage of married women with tetanus toxoid vaccination which prevents neonatal tetanus, a leading cause of mortality among newborns. In addition, a major effort will be made to increase overall coverage in Balochistan and some areas in Sindh where coverage lags behind. Disease surveillance will also be improved.

Students visit Static Vaccination Centre.
MESSAGES FROM PRIMARY HEALTH CARE PROGRAM DIRECTORS

I am fortunate to work in the Primary Health Care Programme of Pakistan since its inception.

USAID's technical as well as financial assistance contributed a lot towards the successful implementation of the various components of this programme. Among the achievements made possible by USAID assistance are the construction of 13 permanent Health Technicians Training Schools along with hostel and residential staff quarters and the revision of Health Technicians training curriculum.

The Expanded Programme on Immunization (EPI) and Control of Diarrhoeal Diseases (CDD) programme, the key components of Primary Health Care, are undeniably low-cost but high impact programmes. They hold great promise for improving child-survival through reduction in morbidity and mortality on account of six EPI-targeted and diarrhoeal diseases. Having established their credibility, the two programmes can gainfully spearhead other Primary Health Care interventions in an integrated manner.

For us in Pakistan, the implementation of EPI and CDD, especially under the umbrella of the Accelerated Health Programme, has been a rewarding experience. The success of the programme has received wide appreciation within the country and abroad.

It is a pleasure to work as a team with the Primary Health Care Project staff, both at the Federal and Provincial level. This team approach makes a real impact and brings greater community participation in our work.

I wish all success to the Programme.

It was made possible through unwavering political support, unprecedented financial outlay by the Government of Pakistan, devotion and dedication of Provincial Health functionaries and by ensuring community participation through health education.

Motivation campaigns launched through the electronic media, printed material and face-to-face communication by our health workers, especially members of outreach teams, were the strategy for health education.

Timely and unfailing support by partners in programmes, namely World Health Organization, United States Agency for International Development, UNICEF, Canadian International Development Agency and Rotary International supplemented our efforts by bridging the formidable gap in resources.

Dr. Mohammad Zafar Ahmed, Deputy Director General Health, Basic Health Services Cell, Ministry of Health, Islamabad.

Colonel Mohammad Akram Khan, National EPI/CDD Project Manager, National Institute of Health, Islamabad.
National Institute of Health, Islamabad, is the scientific arm of the Ministry of Health. It was created as an autonomous body to look after the scientific aspect of health activities and to monitor health delivery programme at the National level.

NIH has many health programmes for the entire country. We have the EPI programme, control programme for diarrhoeal diseases, control programme of respiratory diseases, control programme on iodine deficiency in northern areas, eradication programme for guinea worms. We supervise and back up all such programmes. We also produce the vaccines, most of which meet the entire needs of the country. We carry out research to improve the technique and technology of vaccine production. We have a very strong Nutrition Division which is responsible for education of the masses on nutrition and survey and study of the requirement of food particularly of children.

All our plans are very ambitious. All we need is support in terms of adequate finances and most important of all, trained manpower. For institutions like this, highly qualified and dedicated manpower is very essential.

Our achievements are quite satisfactory on the whole but we have yet to go a long way.

Role of USAID, in giving whole hearted support to the development of health strategies of Government of Pakistan, is laudible. The twin engine approach of Expanded Programme on Immunization (E.P.I) and control of diarrhoeal diseases by Oral Rehydration Therapy (O.R.T) has been exploited fully to reach the child and mother in every nook and corner of the country, and could make an integrated approach in the overall P.H.C. package.

I wish further close collaboration between National Institute of Health and USAID to benefit from available and improved health technologies, to the attainment of Health for All (H.F.A) by the year 2000.

 Lieutenant General Dr. Syed Azhar Ahmed
Former Executive Director National Institute of Health, Islamabad.

Major General (Retd) M.I. Burney
For a developing country like Pakistan where 70-80% of population is living in the rural areas, primary health care activities involving community leaders in public health activities are very important. Through this programme, efforts are being made to take preventive health activities to the door steps of the rural population who cannot afford to avail the curative facilities available in our big, modern and well-equipped hospitals. The programme of Primary Health Care Project in Pakistan is the only long-awaited solution to solve health problems of our rural population.

It gives me great pleasure to send a message on the occasion of the inauguration of the newly constructed Health Technicians School at Sukkur, under the auspices of Primary Health Care Project in Pakistan, being sponsored by USAID.

USAID has helped the provincial government in establishing 3 such schools - An achievement, which will go a long way in correcting the imbalance in our health educational programmes, which have so far suffered from a bias in favour of higher medical education.

In Sindh Province under the Basic Health Services Project three Health Technicians Schools are functioning where every year 150 health technicians are trained. The services of these trained para-medics are utilized in the Basic Health Units and Rural Health Centres throughout the province.

I wish the sponsors and organizers of this effort all success.

Dr. M. Akbar Khan, Secretary of Health, Government of Balochistan, Quetta.

Mr. Ahmed Maqsood Hameedi, Former Secretary Health, Government of Sindh, Karachi.
Primary Health Care constitutes an integral part of the Government's strategy to improve the health and well-being of the rural population.

One of the main objectives of Primary Health Care is to introduce a significant change in public behaviour, actively involving the people in solving health problems at a grass-roots level.

Primary Health Care is the practical approach to making essential health facilities universally accessible to individuals and families. This has to be done in an acceptable and affordable manner and with full participation of the community.

The Government of the NWFP aims to provide one Basic Health Unit for each Union Council by the year 1990 and to staff them with well-trained doctors and health technicians.

The Government of Pakistan accords health a priority. It is hoped that the implementation of this policy will help achieve the target: "Health for all by the year 2000".

Dr. Sher Ali Khan, Former Secretary Health, Government of NWFP, Peshawar.

Mr. Mohammad Pervez Masud, Secretary Health, Government of Punjab, Lahore.
Mid-level health workers are the backbone of the health system. With proper training and supervision, they enhance the work of physicians and surgeons in improving the health status of the nation. Doctors alone cannot provide all necessary services, therefore, the new curriculum developed for health technicians is much appreciated in our prevailing health conditions.

The three Health Technicians Schools constructed and equipped by USAID in Sindh under the Primary Health Care Project, will go a long way in helping the government fulfil its target of “Health for all by the year 2000”.

The Health Technicians being trained at these schools constitute an important category of health worker, engaged in delivering important services through Basic Health Units.

Dr. Iqbal Ahmed Khan, Director of Health Services, Balochistan.

Dr. M. Sajjan Memon, Director Health Services, Sindh.
Primary Health Care is the major approach for providing health services to a large section of the rural population.

We have made significant progress in providing immunization, nutrition, oral rehydration and Mother & Child Health services through trained workers and community participation and involvement.

The revised curriculum for training of Health Technicians addresses community needs and is appropriate to the present needs and situation. All Medical technicians in the Province are being oriented to the new revised Health Technician's curriculum.

I am grateful to USAID for taking the lead in arranging for training for mid-level health workers and training of in service Medical Officers in the country.

The establishment of five permanent Health Technician Schools at D.G. Khan, Sialkot, Attock, Jhang and Bahawalpur will go a long way in removing the shortage of mid-level health workers in the rural areas of the Punjab.

I once again thank USAID for providing the technical support and funds in upgrading the Health Care System through the construction of these schools, training of medical officer and their support to the efforts of the Government of Pakistan in the Immunization and Control of Diarrhoeal Diseases Programs.

Dr. Sardar Ali, Director Health Services, NWFP.

Dr. Mohammad Mazahir Ali Hashmi
Director General Health Services, Punjab.
The Primary Health Care Programme focuses on the approach of working with people rather than for them. This approach will assure greater community participation and increase interest and involvement with PHC activities.

Islam advocates equality regardless of social status or wealth. Provision of Basic Health Services to all persons, rich or poor, urban or rural, is a basic principle that is applicable in the Primary Health Care Programme.

Dr. Sanaullah Malik, Project Director, Basic Health Services Cell Balochistan.

Dr. Rasool Bukhsh Memon, Project Director, Basic Health Services Cell, Sindh.
Primary Health Care aims to expand and improve the quality of health services in the rural areas by training and developing a significant number of Health Technicians and Community Health Workers. Also, its emphasis is to strengthen the management and supervisory skills of the health personnel working in the rural health facilities. In NWFP significant progress has been made to train the Health Workers in Primary Health Care activities.

The objective of mitigating the miseries of millions of ailing rural masses is substantially divine. The Pakistan Government and United States Agency for International Development joined hands to achieve this objective which has materialized to a visible extent.

May Almighty Allah grant us courage and strength enough to carry on this mission diligently and successfully. Ameen.

Dr. Nisar Ahmed, Former Project Director, Basic Health Services Cell, NWFP.

Dr. Abdul Irshad Butt, Former Project Director, Basic Health Services Cell Punjab.
The Primary Health Care programme attempts at promoting health by preventing illness through simple measures. Mobilizing necessary resources and using the available vaccines in immunizing children against 6 communicable diseases, Pakistan got worldwide recognition for its accomplishment. I think that professionals and lay people need to become familiar with these simple measures and make use of them.

Success of Primary Health Care lies in availability of properly trained and motivated manpower. The Primary Health Care Project and Health Department, Punjab are working together through a Management Training Institute for Doctors and Health Technicians Schools to train doctors, health technicians and other paramedicals for successful implementation of ‘HEALTH FOR ALL BY THE YEAR 2000’.

Dr. Ellahi Bukhsh Somroo, Former Director of Health Services, Punjab.

Dr. Mohammad Ayub Sulayria, Director, Management Training Institute for Doctors, Lahore Punjab.
As someone associated with the development and implementation of Basic Health Services and Primary Health Care programmes in Pakistan for almost ten years, it gives me special satisfaction to know that the first of thirteen paramedical schools is being inaugurated.

I am sure that the opening of these schools will significantly contribute to meeting the health manpower needs in the country.

It is gratifying to know that the USAID is bringing out a brochure on Primary Health Care in Pakistan. Primary Health Care Programme has been launched in Pakistan with the assistance of USAID and other international organizations with the objective to provide basic health services to maximum number of people in the shortest possible time.

Health Education is the key for the success of Primary Health Care Programme. Therefore, it has been made an important component of the Primary Health Care Programme. USAID has been providing assistance in the development of Health Education Programmes in Pakistan. I hope the contribution of USAID in development of Health Education will go a long way in the promotion of health for the people of Pakistan.

Dr. Mushtaq A. Chaudhary, Deputy Director General Health, Ministry of Health.

Mr. Abdul Sattar Chaudhry Health Education Adviser Ministry of Health, Special Education & Social Welfare Government of Pakistan.