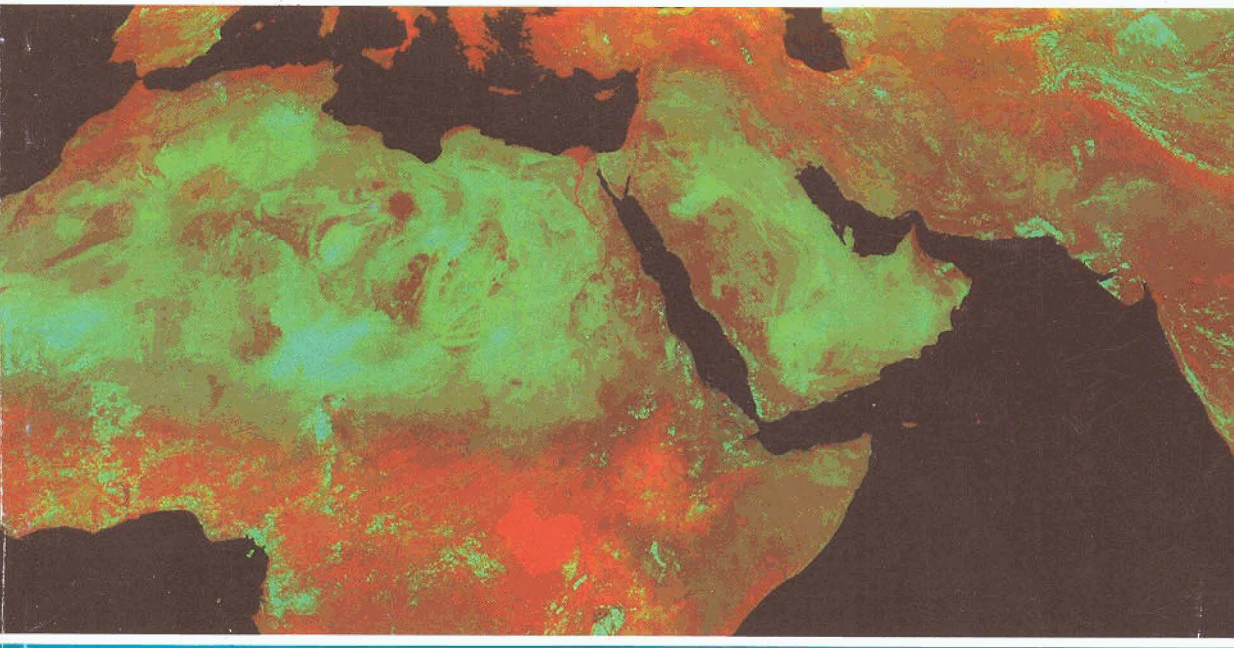
The Work of WHO in the Eastern Mediterranean Region

Annual Report of the Regional Director

1 January - 31 December 1995



WORLD HEALTH ORGANIZATION
Regional Office for the Eastern Mediterranean

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COVER: Remote sensing image of the area of the world that includes the Eastern Mediterranean Region.

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Corrigendum

Regional publications issued during 1995

In lines 3 to 5 of the caption to the photographs of regional publications issued during 1995 (placed between pages 68 and 69), delete the translated title of the Arabic publication "The Amman Declaration ... No.5" and substitute the following: "Islamic ruling on male and female circumcision. Health Education through Religion Series, No.8".

Country statistical profiles

In Table 1. Demographic and socioeconomic data (page 141), in the row pertaining to Kuwait, the population figure should read 1.6; the crude birth rate should read 24.3; the crude death rate should read 2.2; and the adult literacy rate should read 85 with the year 92.

In Table 5. Health status (life expectancy and mortality) (page 145), in the row pertaining to Kuwait, the infant mortality rate should read 10.8

REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN

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Agenda item 4

THE WORK OF THE WORLD HEALTH ORGANIZATION IN THE EASTERN MEDITERRANEAN REGION—ANNUAL REPORT OF THE REGIONAL DIRECTOR FOR THE YEAR 1995

Contents

Figures

GSP	Good storage practices
HACCP	Hazard analysis critical control point
HFA	Health for All
HIV	Human immunodeficiency virus
HSIS	Health statistical information systems
HSR	Health systems research
IAPB	International Agency for the Prevention of Blindness
ICD-10	International statistical classification of diseases and related health problems
ICN	International Conference on Nutrition
IDD	Iodine deficiency diseases
IFAD	International Fund for Agricultural Development
ILO	International Labour Organisation
IMEMR	Index Medicus for the Eastern Mediterranean Region
INSTAND	Institute for Standardization and Documentation in Medical Laboratories
IPCS	International Programme on Chemical Safety
IsDB	Islamic Development Bank
ISESCO	Islamic Educational Scientific and Cultural Organization
JICA	Japan International Cooperation Agency
JPRM	Joint Government/WHO Programme Review Missions
KAP	Knowledge, attitudes and practices
MCH	Maternal and child health
MDT	Multi-drug therapy
MZCP	Mediterranean Zoonoses Control Programme
NCCP	National cancer control programme
NDPs	National drug policy
NFP	National focal point
NGO	Nongovernmental organization
NHIS	National health information system
NID	National immunization day
NTP	National tuberculosis programme
OPV	Oral poliovirus vaccine
PAOSHC	Prototype Action-Oriented School Health Curriculum
PAPCHILD	Pan-Arab Project for Child Development
PHC	Primary health care
RCC	Regional Consultative Committee
RDTRCOH	Regional Demonstration, Training and Research Centre for Oral Health

RF/RHD	Rheumatic fever and rheumatic heart disease
RIS	Regional information system
ROPME	Regional Organization for the Protection of the Marine Environment
SMIS	Supply management information system
STD	Sexually transmitted disease
TDR	UNDP/WHO/World Bank Special Programme for Research and Training in Tropical Diseases
TLM	Teaching/learning materials
TT	Tetanus toxoid
UICC	Union internationale contre le cancer (International Union Against Cancer)
UNAIDS	United Nations Programme on AIDS
UNCED	United Nations Conference on Environment and Development ("Earth Summit")
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
USAID	United States Agency for International Development
USI	Universal salt iodization
WHO	World Health Organization
WFP	World Food Programme

INTRODUCTION

In presenting my Annual Report for 1995, which reviews a year of great variety, with its occasional setbacks, I am pleased at the steady progress of public health in this Region. Countries that had already achieved a reasonably good level of health, as shown by several indicators, managed to climb even higher, with a number of them successfully reaching their targets of elimination or eradication of target diseases. Other countries with less favourable circumstances, and those caught in the grip of strife and upheavals, also have often managed to show some progress, albeit uneven. This awareness of the importance of the health sector must be built upon and developed in the march towards health for all, particularly during this period of economic constraint which places increasing pressure on health care services.

This is the bright side of the picture. However, I cannot but express my deep concern about the financial situation of WHO and its budgetary system. The almost total dependence of the Organization on just a few countries has resulted in WHO being held hostage and threatens the sustainability of many programmes supported by WHO.

Health economics and health care financing are figuring more frequently in the regional programmes of collaboration with Member States. In view of the fact that hospital care in some countries consumes a substantial proportion of the health care budget, there is a trend in some countries in other Regions to downsize hospitals. It is, however, essential to study the situation carefully for, with the exception of a few countries, there are not enough hospital beds in the Region. Where downsizing is an option there may be other considerations that can be taken into account, apart from the financial ones. Thus, the introduction of technology that permits an increase in day surgery, whereby a patient leaves the hospital in the course of one day, and early discharge may be influential factors. At the same time, there should be adequate support services available in the form of community care and home visits. Increases in efficiency and reduction in overlap and waste should not be such as to place the patient at risk.

The development of human resources for health remained an important area of concern during 1995. It is, however, heartening to note that the countries of the Region are intensifying efforts in human resource policy and management and in the development of an effective relationship between medical education and health care delivery systems. The Ministerial Consultation on Medical Education and Health

One aspect of human resources policy concerns the quantity and quality of nurses in the Region. Nurses are important members of the medical team but they have not always been appreciated as such. In some countries excess numbers of highly skilled and expensively trained physicians may find themselves doing the job of nurses, of whom there are insufficient numbers. This not only wastes resources, it also creates dissatisfaction. Thus, the importance of the nursing profession has begun to make an impression on national human resources policy. In 1995 the Regional Advisory Panel on Nursing met and proposed regional standards and future directions for basic and post-basic nursing education which not only stress the importance of raising the level of education and quality of entrants to nursing schools, but will also help to ensure that nursing graduates are themselves mature and able to fully appreciate their responsibilities by the time they start to practice. This in itself will do much to raise their status. From its side, WHO has embarked on a series of activities aiming at raising the quality of curricula and teaching materials for nurses. Model prototype curricula have been developed for the Region and the Regional Office has set up working groups to develop a series of high-quality nursing textbooks in Arabic.

The concept of quality assurance is now accepted in the Region as an important element in health care in general. Following the discussions and resolutions of the Forty-second Session of the Regional Committee in October 1995, the Regional Office initiated activities to establish and upgrade quality assurance for the various elements of primary health care and, in particular, in the fields of laboratory and blood transfusion services and drugs, including traditional medicine.

Reproductive health, adolescent health and women's health received considerable attention during 1995 culminating in the Fourth International Conference on Women held in Beijing. The recommendations made at that conference are being highlighted within the cultural and religious norms of countries in the Region.

The ageing of populations in the Eastern Mediterranean Region is an area that countries are increasingly concerned to address. On the one hand, the fact that people are living longer in many countries is welcome and indicative of improved standards of living and of health care; on the other, it now becomes all the more important to plan for the demographic transition. A global strategy for health care of the elderly has been developed and EMRO has played an active part in contributing to this. I am pleased to note the increasing number of countries showing interest in developing national policies for the welfare of the elderly and the Regional Office is working on an outline of a model national policy to be finalized at an intercountry consultation in 1997.

All this is of importance. However, we must also look at the long-term, and at life as a whole. The promotion of a healthy lifestyle is not limited to one particular age or stage of life; it should begin at birth, indeed before birth, and continue throughout life, so that as many of the elderly as possible may enjoy a healthy old age.

As one of the most serious factors affecting a healthy life, smoking received special attention during 1995. The Regional Office continued its technical and financial support to national efforts to develop national plans on tobacco or health and I was encouraged by the many activities undertaken in celebration of World No-Tobacco Day.

Another important factor related to health is the environment. At the Second Conference on Health, Environment and Development, held in Beirut, Lebanon, the Beirut Declaration on Action for a Healthy Environment was adopted. World Health Day, 1996, was celebrated with the theme of healthy cities.

In the area of disease prevention and control, there was justifiable concern in 1995 at the emergence of new infectious diseases and the resurgence of infections increasingly resistant to drugs. The potential for concern was recognized at the Forty-first Session of the Regional Committee in 1994. In 1995, a regional conference on emerging and resurging diseases was held in Cairo to review the situation. The conference endorsed the regional plan for prevention and control of these diseases. This plan will be presented at the Forty-third Session of the Regional Committee. Of resurgent diseases, tuberculosis is of particular importance in view of its increasing incidence and the growth of factors facilitating its spread. Fruitful efforts were devoted in 1995 to promoting and implementing in countries of the Region (both through training and through review of national programmes) directly observed treatment, short-course (DOTS), an initiative which has been proven to cure tuberculosis patients.

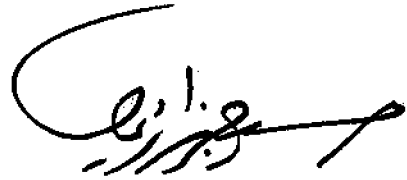
The resurgence of malaria continues also to be a source of great concern in the Region. It is an important cause of morbidity and mortality and the development of drug-resistant strains and insecticide-resistant vectors taxes our best efforts. The problem is compounded by the fact that over 95% of cases occur in five countries of the Region which suffer from either poverty or political instability or both, factors which hinder both proper planning and implementation of control measures. Nevertheless, significant progress has been made in implementing the regional plan, which stresses early diagnosis and treatment, as well as preventive measures such as the use of insecticide-impregnated bed nets.

Progress towards the eradication of poliomyelitis continued to receive priority attention by all Member States, as reflected in the fact that national immunization days were carried out in 18 countries and that surveillance systems for acute flaccid paralysis are now being developed throughout the Region. However, routine immunization coverage with at least three doses of oral poliovirus vaccine is still below target in some countries. The situations in these countries were reviewed at an intercountry meeting and specific recommendations made that would bring them up to the levels necessary to achieve the target of polio eradication.

The year 1995 witnessed a number of emergencies in the Region as a result of wars and natural disasters. WHO efforts were directed towards minimizing human suffering. Emergency preparedness, particularly in the face of the potential for epidemics, has been instrumental in preventing the spread of disease and in limiting the seriousness of the outcome.

These are just some of the areas of our joint collaboration during 1995. More detailed information and data on WHO collaborative programmes and activities are included in my *Annual Report* covering the period 1 January to 31 December 1995, which follows.

Finally, I would like to thank the governments of the Region for their collaboration and support during the past biennium. Together we shall continue to strive to achieve health for all by the year 2000, focusing equally on advance in technical areas and on the ethical dimensions of health policies.



Hussein A. Gezairy, M.D., F.R.C.S.
Regional Director for the Eastern Mediterranean

EXECUTIVE SUMMARY, 1995

1 Governing bodies

- The Forty-second Session of the Regional Committee was held in Cairo, Egypt under the chairmanship of H.E. Dr Ali Abdel Fattah (Egypt) from 1 to 4 October 1995.
- Important resolutions adopted by the Regional Committee concerned health systems management; promotion of quality assurance of health care; prevention and control of blindness; ethics of medicine and health; and leprosy.
- The Nineteenth Meeting of the Regional Consultative Committee (RCC) was held in the Regional Office, Alexandria on 25 and 26 August 1995. Among the topics discussed were health care for adolescent girls; quality assurance and its application in primary health care services; health legislation; cancer prevention and control; and health policy and planning.

2 Health policy and management

- Development of the Joint Programme Review Mission (JPRM) module was one of the major applications developed and integrated into the Regional Information System (RIS). The module was used in 1995 by the JPRM teams to plan regional and country activities.
- Full use of e-mail by Regional Office staff and access to the Internet was achieved in 1995.
- Nationals were trained on computerized packages such as EPI INFO and the teaching/learning materials database.
- The country version of the Regional Information System (MINI-RIS) software package was fully developed in 1995 and was installed in some WHO Representatives' (WRs) Offices. Telecommunication and e-mail link with four WRs' offices was established.
- WHO and the UNICEF Regional Office for the Middle East and North Africa shared technical expertise for their joint programmes.
- Collaboration between WHO, UN agencies (especially UNICEF), nongovernmental organizations and others resulted in the successful implementation of second and third rounds of the nationwide mass immunization campaign in Afghanistan. Extensive work was also successfully carried out for polio eradication.
- The Regional Office continued to develop effective collaboration with AGFUND, the Islamic Development Bank (IsDB) and the African Development Bank (AfDB). AGFUND's Administrative

Committee approved US$220 000 to fund two projects in the area of environment health.

- A network was created for health policy and health economics for the Maghreb countries following an intercountry workshop in Rabat, Morocco.
- The Eastern Mediterranean Advisory Committee on Health Research (EM/ACHR), at its 18th session in Riyadh, Saudi Arabia, reviewed the progress of the regional research programme during the previous two years as well as the visit of the Task Force for Health Research to Lebanon and the Syrian Arab Republic.
- The Regional Office supported eleven research proposals received during 1995 from seven Member States to a total of US$125 000.
- Support was provided to Palestine in the drawing up of health legislation.
- The Regional Office participated in the activities of the Global Task Force on Health and Development, established by WHO headquarters, Geneva, to review the interrelationship between health and development and to emphasize the role of women in promoting national health and overall socioeconomic development.
- The Regional Office established a technical unit for Women in Health and Development.
- The district team problem-solving (DTPS) technique was introduced in two countries, was evaluated in three countries and the guidelines for DTPS workshops were translated into national languages.
- The regional programme of health economics and health care financing was strongly promoted.
- Technical support was provided in the restructuring of ministries of health. Yemen was supported in its national planning exercise.
- The regional programme on emergency preparedness and humanitarian action was strengthened and a technical officer was appointed. A questionnaire was prepared and distributed to Member States to establish a regional database on country emergency preparedness programmes.
- The WHO Representative's Office for Afghanistan, through its eight sub-offices inside the country, continued to provide emergency health assistance to the local population, returnees and displaced people. WHO, in collaboration with the Ministry of Public Health, has developed and designed a regionally based health emergency relief programme, specific to each region.

- With WHO mediation in early 1995, all warring factions in Afghanistan agreed and observed a "health cease-fire" during which the second and third rounds of the mass immunization campaign were successfully completed.
- In an effort to boost WHO-supported activities in countries under emergencies, the Regional Director visited Afghanistan and Iraq. All possible efforts are being made to maximize support to these countries.
- Support was provided by WHO to Iraq in rehabilitating the chlorine plant in Basra, strengthening malaria control activities and conducting a study on the impact of 12 infectious diseases over a period of five years.
- WHO continued to provide support to Somalia in control of diarrhoeal diseases, including cholera, provision of essential drugs and laboratory equipment and supplies, training, rehabilitation of blood banks, and control of tuberculosis and malaria.
- WHO participated in the international effort to arrange a period of tranquillity in Sudan which allowed for the conduct of important health activities including malaria control and child survival interventions.
- Strengthening of national health statistical information systems (HSIS) and of monitoring and evaluation of health-for-all strategy implementation progress continued to be of priority. Particular focus was placed on national capacity building in the use of available data at district level and of the tenth revision of the *International statistical classification of diseases and related health problems* (ICD-10).
- Decentralizing the repair and maintenance of medical equipment to the governorate level has been supported in a few Member States. Technical cooperation among countries of the Region was established between Bahrain, the Syrian Arab Republic and Yemen.
- Support was provided to Egypt, Jordan and Qatar in strengthening their medical emergency services through the formulation of national plans, health manpower development, and provision of essential supplies and equipment for medical emergency services.
- The Regional Office continued in its support for country health and biomedical information programmes.
- The first issue was published of the *Eastern Mediterranean health journal*, a high quality peer-reviewed journal covering health issues of interest to the Region. A total 301 works were published by the Regional Office in Arabic, English and French,

including 61 publications or reprints, 87 documents and 14 periodicals.

- The WHO Arabic Publications programme completed work on the final draft of the fourth edition of the Unified Medical Dictionary and publication is due by the end of 1996. Over 140 000 entries and subentries will be available, as both conventional text and on CD-ROM.
- The Regional Office continued to encourage and support the use of national languages in health literature in the countries of the Region, while an increasing volume of translation, editing and revision work in the three working languages of the Region was undertaken.
- Good use was made of local resources for printing and some countries in the Region were also assisted in making use of these resources.
- A survey was launched of health and biomedical libraries in the Region, with the aim of developing a data bank on information resources available in health and medical institutions. The Regional Office supported subscriptions to the *ExtraMED* and *ADONIS* systems and installed in the Regional Office library the WHOLIS database, which includes all WHO material and is updated bimonthly. In-country training was provided on computer-based library and information systems, including CD-ROM technology and *MEDLINE*. A project was launched to arabicize the Medical Subject Headings List of the National Library of Medicine.
- The number of journals, periodicals and priced new publications distributed free of charge throughout the Region increased by 71% over 1994, to 41 180 copies. The Regional Office sought also to enhance publications sales and achieved a three-fold increase over 1994, with total sales of US$324 754.

3 Health systems and services development

- Technical support was provided for the development of a national health systems research programme in several Member States.
- Efforts continued in developing primary health care infrastructures. The basic minimum needs (BMN) approach is gaining momentum and is expanding in the Region. Joint programmes were developed with the International Fund for Agricultural Development (IFAD), WHO headquarters, UNDP, UNICEF and nongovernmental organizations.
- The BMN kit (an operational manual) has been distributed to all Member States and interested institutions. An Intercountry con-

sultative meeting was held in Amman in December 1995 to foster further exchange of experience and review possible evaluation tools.

- The "catchment area" as an operational planning unit to judge equity of distribution of service and accessibility to health care is being implemented in various forms in several countries.
- Health centre reform was initiated in Iraq to introduce decentralization and self-reliance.
- The experience of selected countries in primary health care referral systems was reviewed at an intercountry consultative meeting held in Lahore, Pakistan, in April 1995.
- Promotive activities for quality assurance in primary health care were started.
- Activities were intensified in the area of human resources policy and management in response to changing priorities within the Region. The *Manual for human resources policy analysis*, which was developed and tested in two countries in the Region, was distributed to all countries. Member States were urged to start country activities aimed at the formulation of national plans for human resources policy and management.
- A task force met to develop an outline of a national system of continuing education for health personnel for use by Member States.
- The Regional Office continued to emphasize the need to develop postgraduate training. By the end of 1995 the number of WHO-supported postgraduate training programmes was 13.
- The Regional Office continued to support activities aimed at the development of a close relationship between medical education and the health care delivery system. A Ministerial Consultation on Medical Education and Health Services, held in Cairo, made recommendations aimed at strengthening and formalizing the relationship between these two important sectors.
- Collaboration among educational development centres (EDCs) was promoted in order to improve health personnel education. Consultants in curriculum development, teacher training, research methodology, evaluation and community-oriented medical education were assigned to countries.
- The teaching/learning materials database program was completed and distributed to concerned Member States.
- The Regional Advisory Panel on Nursing convened in Tunisia in September 1995 to propose regional standards and future directions for basic and post-basic nursing education. The need for 12

years of education prior to entrance to nursing schools was stressed.

- A number of Member States initiated actions to establish and strengthen nursing units in Ministries of Health. Others have taken steps to develop national plans of action and many have taken steps to improve basic nursing education.
- In an initiative to develop a series of nursing textbooks in Arabic, the Regional Office convened three working groups to develop a framework for an introductory textbook on nursing and for textbooks on community nursing and psychiatric nursing.
- The number of fellowships awarded increased in 1995. The decline in the average duration of fellowships continued; 73% of all fellowships awarded were of less than two months' duration and placement within the Region also increased, to 60%.
- The 12th National Fellowships Officers' Meeting in Amman discussed a number of issues related to administration and evaluation and came up with important recommendations.
- The Regional Office continued to support the establishing and upgrading of national networks of health laboratory services with emphasis on the peripheral level in support of primary health care, epidemiological surveillance and environmental monitoring.
- Emphasis was placed on continuing education programmes and supervision, which are essential to maintaining competence and acquiring new skills as technology develops. Diagnostic manuals in national languages, especially for the peripheral and intermediate levels, were prepared in a few countries.
- The Regional Office continued to support attempts to produce reagents locally, and supported a few countries in the procurement of reagents.
- Quality assurance continued to be a priority; efforts have been made to establish and upgrade quality assurance programmes in 16 countries. A number of health laboratories in the Region were twinned with laboratory institutes in Europe. Consultations on establishing a Regional network on resistance to antimicrobial agents and on drug interferences in medical laboratory testing were held in the Regional Office.
- Activities to develop blood transfusion services in the Region, and which are being strengthened by a WHO/AGFUND collaborative project, were aimed at provision of safe blood, blood components and blood products based on voluntary regular non-remunerated blood donation. The two regional training centres in Amman, Jordan, and in Tunis, Tunisia were designated as WHO

Collaborating Centres. Intercountry workshops on transfusion medicine and on distance learning materials for safe blood and blood products were held in Amman, Jordan.

- The Regional Office supported Member States in strengthening their commitment and capacities for implementing their national drug policies and for making essential drugs available which are safe, effective, of good quality and accessible at affordable cost. Iraq received extensive support in rehabilitating its local drug production through necessary supplies and raw materials. Training was provided to Egypt in pharmaceutical production. Several Member States updated their drug legislation and regulations as well as good manufacturing practices (GMP) rules.
- Several countries conducted national seminars for drug inspectors. Many Member States received technical and material support or training in aspects of drug quality control. Several Member States are in the process of improving facilities for vaccine production and quality control.
- The Regional Office supported the inclusion of the essential drugs concept in the curricula of schools of medicine and pharmacy and in paramedical training institutions. Countries continued to be encouraged to establish national drug information centres for promotion of rational use of drugs and distribution of reliable, unbiased drug information.
- Guidelines were developed for the formulation of national policies for traditional herbal medicines and a format for monographs of herbal medicines. Member States were encouraged to develop their national quality assurance systems for controlling the medicinal plants industries. A consultative meeting on rational use of traditional medicines was held in Cairo.

4 Promotion and protection of health

- Control of iodine deficiency disorders continued to be an area of high priority in a number of countries in the Region, with universal salt iodization as the major approach. The first regional meeting for salt producers was held jointly with UNICEF and resulted in the formation of a Regional Association of Iodized Salt Producers.
- A joint consultation with UNICEF, hosted by the Islamic Republic of Iran in Teheran in September 1995, developed strategies for the control of iron-deficiency anaemia.
- Support continued to be provided to Member States to review and strengthen their existing food legislation and they were encour-

aged to participate actively in the work of the *Codex Alimentarius* Commission.

- There was a significant global shift towards recognizing the importance of reproductive health as an essential component of general health. A regional workshop in Lahore in December 1995 with senior representatives from Member States discussed the conceptual and programmatic framework of reproductive health and measures for integrating the reproductive health care approach into the national health care system.
- Adolescent health, especially of girls, attracted increasing attention among health decision-makers in the Region. An intercountry consultation in Nicosia, Cyprus, in September 1995 outlined the approaches which need to be taken if countries are to respond to the special needs of adolescent girls.
- Women's health received unprecedented global attention through two international conferences, in Cairo in 1994 and in Beijing in 1995, in both of which the Regional Office took active part in formulating empowerment rights of women within the cultural and religious norms of countries in the Region.
- Aging and health is rapidly emerging as a high priority area in most countries. The Regional Office is in the process of compiling country information bases for developing an outline of a national policy for the welfare of the elderly.
- WHO played an important catalytic and promotive role in development of occupational health services in 18 countries of the Region. In collaboration with academic institutions and nongovernmental organizations, it cosponsored and collaborated technically in activities organized by Ain-Shams University, Alexandria University, the Arab Institute for Occupational Health and Safety and the Gulf Cooperation Council.
- All countries have now developed their own health education materials and have given high priority to health education activities, including school health curricula. The Regional Office financially and technically supported seven national training workshops for primary school teachers in different countries.
- A consultative meeting was conducted in Khartoum, Sudan, in 1995, in collaboration with UNICEF, UNESCO and ISESCO, to design a guide on appropriate evaluation techniques for the Prototype Action-Oriented School Health Curriculum.
- World No-Tobacco Day on 31 May 1995 was widely celebrated throughout the Region. The Regional Office technically and financially supported the second workshop on Tobacco or Health

of the International Union Against Cancer in Beirut, Lebanon in April 1995. A Consultative Meeting to develop an action plan on Tobacco or Health was held in the Regional Office in December 1995.

- The Regional Demonstration Training and Research Centre for Oral Health, a WHO Collaborating Centre in Damascus, Syrian Arab Republic, continued to play an important role by organizing several training courses in planning and management of oral health programmes. An *Oral health newsletter*, in both English and Arabic, is now produced to disseminate information on oral health.
- An intercountry meeting on the progress of national mental health programmes was held in Casablanca, Morocco, in May 1995 at which an improved version of a data collection system, which could serve as a database for monitoring and evaluation of health programmes, was approved.
- A model evaluation system of mental health programmes was designed and was used in the Islamic Republic of Iran, in collaboration with the Government, to evaluate the present status of the mental health programme there.
- The Public Information Unit provided Member States with information packages for special events such as World Health Day and World No-Tobacco Day. Other activities included the organization of an art competition for schoolchildren in the Region and the production of regional films on special occasions. It also organized a Consultation on Tobacco Control.
- Environmental stress is, increasingly, playing a role in the health of people in the Region. The Regional Office, with the financial support of AGFUND, UNDP, Capacity 21 and WHO headquarters, continued to promote the preparation of national action plans for health and environment.
- The Second Conference on Health, Environment and Development, held in Beirut, Lebanon, in November 1995, adopted the Beirut Declaration on Action for a Healthy Environment, in which countries of the Region pledged to prepare action plans for health and environment by 1999 and asked WHO to prepare a regional action plan and a regional investment plan for health and environment, model legislation, and a regional treaty on environmental health protection.
- WHO continued its collaboration with AGFUND on water supply and sanitation. A major Regional Conference, held in Beirut, Lebanon, recommended measures to help countries in the greatest need. WHO also collaborated with the Islamic Develop-

ment Bank on prevention of leakage and water conservation. WHO projects have provided effective support, particularly in Afghanistan and Yemen.

- The healthy cities and healthy villages concepts gained further popularity as more and more countries began associated projects. A joint WHO/UNEP meeting on Supportive Environments and Healthy Cities resulted in the Bahrain Declaration. The First Healthy Village Conference was held in Isfahan, the Islamic Republic of Iran. AGFUND has agreed to provide financial support for an intercountry healthy village project.
- The Regional Office continued in its efforts to promote chemical safety and national capacity building in the safe use of chemicals. A training course on the safe and judicious use of pesticides was conducted in Kuwait. A manual on safe use, diagnosis and treatment for poisoning, produced by WHO/IPCS, was translated into Arabic with support from the Regional Office and the Ministry of Health, Kuwait.
- The regional initiative on the use of insecticide-impregnated bednets has been very successful. In 1991 only two countries were using this method; now it is being tested and used on a large scale by several additional countries.
- CEHA's regional environmental health information network (CEHANET) continues to expand its information services to Member States and to strengthen their national networking capabilities.

5 Integrated control of diseases

- Significant progress was achieved in the eradication of dracunculiasis in Sudan and Yemen. Pakistan completed the second year of pre-certification surveillance in former dracunculiasis-endemic areas. It is hoped that Pakistan will be the first country in the world certified by the International Certification Commission on Eradication of Dracunculiasis.
- The Forty-second Session of the Regional Committee adopted a resolution on the elimination of leprosy as a public health problem by the year 2000. The leprosy-endemic countries reviewed their national plans with emphasis on early case detection, wide coverage with multidrug therapy and disability prevention in order to reach the elimination target in time.
- Substantial progress towards eradicating poliomyelitis was made in the Region. Surveillance systems for acute flaccid paralysis improved greatly, and there was a continued decrease in the number of reported cases of poliomyelitis. Eleven Member States reported zero cases, and seven of them reported zero cases in at

least three consecutive years. Eighteen Member States have conducted national immunization days achieving above 95% coverage of children under five years of age. Most Member States have established national certification committees and a regional commission has been established.

- Although cases of neonatal tetanus continued to occur frequently in some Member States, seven countries have reached the elimination target. Many countries started the implementation of the high-risk area approach together with strengthened routine activities.
- A continual decline in the incidence of measles was observed, although cyclical epidemics are still occurring in most Member States. The countries of the Arabian peninsula decided to improve measles control activities in a coordinated manner with the aim of measles elimination by the year 2000.
- Member States which had achieved high immunization coverage rates were able to sustain these coverage rates. However, a continued decrease was observed in the coverage rates of some Member States. Average regional coverage rates were slightly higher than in 1994. Target diseases of the Expanded Programme on Immunization (EPI) showed a continued declining trend despite the fact that the surveillance system had greatly improved in most Member States. Hepatitis B immunization is now integrated into the national immunization programme in 15 Member States.
- Computerization of EPI data, including both coverage and incidence, within the countries and between the countries and the Regional Office, was planned and implementation was started through intercountry training courses.
- The acute respiratory infections programme focused on further planning and consolidation of national programmes, giving particular emphasis to enhancing case management training of doctors, nurses and community health workers, improving communication activities through focused ethnographic studies, combining the activities of acute respiratory infections and of diarrhoeal diseases programmes within countries where possible, and improving evaluation of progress of the programme through use of new WHO household and health facility survey protocols, and of focused programme review methodology.
- All countries in the Region continued accelerated implementation of diarrhoeal diseases control activities giving priority to training and educational efforts. It is estimated that in 1995, as a result of an increased use of oral rehydration therapy, over 100 000

deaths associated with acute diarrhoea were prevented in children below five years of age.

- Cholera outbreaks or epidemics occurred in at least seven countries, with large epidemics being reported in four of the seven. The Regional Office organized a regional cholera coordination meeting at which responsible officers from 20 countries were updated on the global and regional situations and shared experiences on cholera preparedness and control measures. Another meeting was organized jointly by the Regional Offices for the Eastern Mediterranean and for Africa for six neighbouring countries of the Horn of Africa in order to harmonize national strategies and ensure better coordination of the intercountry cholera control activities.
- Tuberculosis remains one of the major public health problems in the Region with an estimated incidence of 745 000 cases in 1995. Steps were taken to strengthen national tuberculosis programmes and to implement the highly effective strategy of directly observed treatment, short-course (DOTS).
- A programme was launched for control of emerging infectious diseases and re-emerging diseases with drug-resistant pathogens at a regional conference which adopted a regional plan for the prevention and control of emerging and re-emerging diseases. A meeting of relevant WHO Collaborating Centres in the Region developed a plan for strengthening the diagnostic capabilities of these centres, as well as their role in the recognition and control of epidemics of communicable diseases. The first workshop of a series for training of trainers in communicable disease surveillance and preparedness for epidemics was conducted and a regional network on resistance to antimicrobial agents is in the process of maturation.
- Viral hepatitis received increasing recognition as a serious health problem in the Region. In response to a decision of the Regional Committee in 1995 requesting the Regional Director to convene a scientific meeting on viral hepatitis, particularly hepatitis C, a group of scientists from countries of the Region, WHO and the international scientific community met in Cairo in November 1995. Regional Office support included developing a prototype for surveillance of this disease, formulating practical guidelines for prevention and control, and provision of technical and material assistance for epidemiological studies to elucidate risk factors of transmission in the Region.
- Efforts continued to strengthen national epidemiological surveillance systems through in-depth review of the existing ones,

assistance in initiating implementable surveillance in areas where it did not exist, and a structured programme for training master trainers in surveillance.

- Efforts to reduce the transmission and prevalence of schistosomiasis through chemotherapy, health education and environmental management have been successful in many endemic areas. Significant progress was achieved in those countries with sustainable control activities.
- Significant progress was achieved in the study of the epidemiology and control of leishmaniasis. National efforts to control leishmaniasis were strengthened through the practical implementation of the results of small grant projects on leishmaniasis supported by WHO.
- The strategy to control intestinal parasitic diseases has been adopted by the national programmes with emphasis on health education, mass chemotherapy and environmental management. A regional workshop focused on the development of national plans of action.
- Acquired immunodeficiency syndrome (AIDS) continued to spread, with more new cases reported in 1995 than in any of the previous years. The prevalence of human immunodeficiency virus (HIV) infection is increasing among patients with sexually transmitted diseases and among prostitutes, while it has declined considerably among recipients of multiple blood transfusions. The Regional Office continued to provide technical and financial support to national AIDS programmes and increased its support to nongovernmental organizations. Control of sexually transmitted diseases was given greater priority, with emphasis on syndromic case management. The Regional Office provided support for preparation of national control plans for sexually transmitted diseases, development of guidelines and training of national staff.
- The Regional AIDS Information Exchange Centre continued to produce and distribute a large number of information materials and guidelines on AIDS and other sexually transmitted diseases. The World AIDS Day theme for 1995 was "Shared Rights, Shared Responsibilities" and was observed in all countries with the participation of various sectors and organizations.
- WHO's Global Programme on AIDS ceased to exist from 31 December 1995 and has been replaced by UNAIDS. The Regional Office has increased the regular budget allocations for sexually transmitted diseases and AIDS to a number of countries.

- The process of reorientation of programmes in accordance with the Global Plan of Work for Malaria Control for 1993-1999 continued satisfactorily, as judged by the Regional Working Group on Malaria Control which met in Alexandria in October/November. Malaria-free status was maintained in the countries that had achieved interruption of malaria transmission. However, the situation remained grave in Afghanistan, Djibouti, Somalia, Sudan and Yemen. WHO extended all necessary support to these countries. The incidence of malaria was reduced by 30-40% in the north-eastern governorates of Iraq affected by an epidemic of vivax malaria.
- The first meeting of the Regional Advisory Panel for the prevention of blindness was held in Rawalpindi, Pakistan, in March 1995 to develop strategies for primary eye-care and community-based eye health services.
- Prevention of blindness was discussed at the Forty-second Session of the Regional Committee and a resolution urging Member States to intensify activities was adopted, with special focus on cataract surgery.
- The second intercountry workshop for control of cardiovascular diseases was held in Nicosia, Cyprus, in December 1995. National coordinators and focal persons from several countries reviewed progress and developed guidelines for the primary prevention of cardiovascular diseases and for developing national action plans on tobacco control.
- A regional training course on diabetes management was held in March 1995, in collaboration with the International Diabetes Federation and the Diabetes Association of Pakistan, for training of nationals responsible for such activities.
- The draft protocol for standardized data collection for the prevention of congenital anomalies, focusing on areas of high priority, such as parental age distribution and consanguinity, and prepared by the Regional Office, was discussed and expanded during a regional consultation in November 1995.

6 Administrative services

- The minimum target of 40% recruitment from unrepresented and under-represented nationalities was reached in 1995, while the percentage of Professional staff who are women, at 17%, represented no change over the preceding year and remained well short of the overall goal of 30% to have been achieved by September 1995.

- The percentage of Professional long-term staff in the EMR who were nationals of the Region was 66%, while the proportion of short-term consultants who were nationals of the Region was 45%.
- The financial implementation of the regular budget available for obligation for the biennium ending at 31 December 1995 was 100%.
- During 1995, the government of Egypt allocated a piece of land in Cairo for the construction of a new Regional Office; at the end of the year administrative procedures to finalize the legal aspects of this allocation were still in progress.

GOVERNING BODIES

1. Governing bodies

1.1 World Health Assembly

The Forty-eighth World Health Assembly approved in May 1995 the Programme Budget for 1996-1997, with the lowest-ever overall increase of only 2.5% over the preceding biennium. The Assembly called for a revision of the International Health Regulations, and requested the establishment of strategies to improve recognition and response to new, emerging and re-emerging infectious diseases. The Health Assembly requested a review of the continuing appropriateness of the Constitution, and asked the Director-General to elaborate a new global health policy. The Auditor-General of the Republic of South Africa was appointed External Auditor for the biennia 1996-97 and 1998-99, and the scale of assessments for 1996 and 1997 was decided. As from the opening of the Health Assembly, the voting privileges of five members in arrears of payment of assessed contributions were suspended. The Assembly resolved to initiate a process of biennial budgetary transfers from global and interregional activities to priority programmes at country level, beginning with 2% in 1998-1999. The Assembly raised from 40% to 60% the target for vacancies in posts subject to geographical distribution to which should be appointed nationals of non- and under-represented countries and those below the mid-point of the desirable range; finally, it endorsed the establishment of the joint and cosponsored United Nations Programme on AIDS (UNAIDS).

Management actions as well as subsequent meetings of governing bodies resulted in an evolution in the status of some of the issues described above, as follows:

- The Eastern Mediterranean Region received a budgetary increase of only 0.87% for 1996-1997; and an overall contingent implementation reduction of 10% was applied to the Programme Budget of the entire Organization for 1996-1997 owing to a shortfall in receipt of assessed contributions;
- A new Division of Emerging and Other Communicable Diseases Surveillance and Control was established at headquarters to strengthen national and international capacities to respond to new, emerging and re-emerging infectious diseases. In EMR, a high-level meeting was held to contribute to the development of a strategy to deal with these diseases;
- The ninety-seventh session of the Executive Board (January 1996) set up a special group to report to the ninety-ninth session (January 1997) on WHO's mission and functions and to advise on any provisions of the Constitution that might need further examination with a view to possible revision;
- Voting privileges were restored to four of the five members whose privileges were suspended; for the EMR country concerned, additional payment is, however,

required to avoid becoming again the object of World Health Assembly concern in this respect in 1996;

- It has been agreed by the ninety-seventh session of the Executive Board (January 1996) that the 2% transfer of resources in 1998-1999 from the global and interregional programme to country programmes be allocated one-half for including HIV/AIDS activities in the mainstream of WHO programmes; and the other half for the control of diseases in the countries of greatest need.

1.2 Executive Board

The Executive Board met in January and May 1995. Dr K.A. Al-Jaber (Qatar) was a Vice-Chairman for the January session. The countries from the Region designating members to the Board in January 1995 were Kuwait, Morocco, Pakistan, Qatar and the Syrian Arab Republic. In May 1995, Qatar and the Syrian Arab Republic were replaced by Bahrain and Egypt.

The Board awarded the Dr A.T. Shousha Foundation Prize to Dr Ibrahim Mohammed Yacoub (Bahrain); and the United Arab Emirates Health Foundation Prize jointly to the Child Survival Project of Egypt (Egypt) and Dr Abdul Rahman Abdul Aziz Al-Sweilem (Saudi Arabia).

The Board established an ad hoc group to consider options for nomination and terms of office of the Director-General. The Board also endorsed the WHO communications and public relations policy and, in addition, undertook through sub-groups, reviews of a number of specific programmes. The Board requested the rapid implementation of the WHO worldwide management information system and approved the development team report on programme development and management.

Since its 1995 sessions, the Executive Board, at its ninety-seventh session (January 1996), considered the report of the ad hoc group referred to above and agreed on eligibility criteria for candidates nominated to the post of the Director-General and the nomination procedures. The Board would also recommend to the Forty-ninth World Health Assembly (May 1996) that the term of office of the Director-General be five years, renewable once.

1.3 Regional Committee

The Forty-second session of the Regional committee was held in Cairo, Egypt from 1 to 4 October 1995, under the chairmanship of H.E. the Minister of Health of Egypt, Dr Ali Abdel Fattah.

Representatives from 22 members participated in the deliberations. Representatives from United Nations agencies and observers from the Tartarstan Republic of the Russian Federation, the League of Arab States, the Organization of African Unity, the Health Ministers' Council for the Gulf Cooperation Council States, the Islamic Development Bank and a number of nongovernmental and national organizations also attended.

HE Dr Ali Abdel Fattah, Minister of Health, Egypt, chairing the Forty-second Session of the Regional Committee for the Eastern Mediterranean, Cairo, October 1995

The Regional Directors of WHO/EMR and UNICEF/MENA hold annual meetings to discuss and follow up on collaborative meetings.

Signature of agreements with nongovernmental organizations

HRH Prince Abdel Aziz Bin Ahmed Abdel Aziz Al Saud, President of IMPACT, and Dr Hussein A. Gezairy (left) and HE Dr Naguib S. Ghaniem, Minister of Health, Yemen (right) sign a protocol in Sana'a for the prevention of blindness in Yemen, January 1996.

Dr Abdulaziz Al Twaijri, Director-General of ISESCO, and Dr Hussein A. Gezairy sign an agreement in Alexandria for joint programmes in health education and rehabilitation of handicapped children, April 1996.

The opening session was addressed by H.E. the Minister of Health of Cyprus, Mr Manolis Christofides, Second Vice-Chairman of the Forty-first Session of the Regional Committee; Dr Hiroshi Nakajima, Director-General of WHO; Dr Hussein A. Gezairy, Regional Director of the Eastern Mediterranean; and H.E. the Minister of Health of Egypt, Dr Ali Abdel Fattah.

The Committee adopted ten resolutions, among which were those concerning the decision by the Government of Egypt to grant a piece of land in Cairo for the seat of the Regional Office; quality assurance of health care; health systems management, blindness, leprosy and ethics of medicine and health.

The Regional Committee nominated Lebanon to serve as a member of the Management Advisory Committee of the Action Programme on Essential Drugs and the Islamic Republic of Iran to serve as a member of the Joint Coordinating Board of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases. It also agreed that the Region take over the responsibility for nominating candidates for the Dr A.T. Shousha Foundation Prize and Fellowship.

In 1996, the Dr A.T. Shousha Foundation Committee approved its revised statutes, and the Foundation Committee will henceforth meet simultaneously with the Sessions of the Regional Committee for the Eastern Mediterranean to nominate two candidates for selection by the Executive Board.

1.4 Regional Consultative Committee

The nineteenth meeting of the Regional Consultative Committee was held in the Regional Office on 25 and 26 May 1995. Its recommendations concerning the health of adolescent girls, quality assurance, health legislation, cancer and health policy and planning were endorsed by the Forty-second Session of the Regional Committee in October 1995.

The twentieth meeting of the Committee was held in Beirut, Lebanon in May 1996. The report of the meeting is covered by an item of the agenda of the Forty-third Session of the Regional Committee.

HEALTH POLICY AND MANAGEMENT

2. Health policy and management

2.1 General programme development and management

WHO programme development

Activities of the managerial process for WHO programme development during 1995 included reprogramming of remaining funds for the biennium 1994-95, Joint Programme Review Missions for programme formulation for the biennium 1996-97, the meeting of the Regional Director with WHO Representatives and Regional Office staff as well as the regular meeting of the Regional Director with Programme Directors, meetings of the Regional Management Development Committee, meetings of the Regional Director with the Regional Office staff and divisional meetings, etc. Support was also provided in all technical matters to Member States in all priority national programmes.

Joint Government/WHO Programme Review Missions (JPRMs)

The seventh round of JPRMs was carried out in two steps during 1995. During the early part of the year reprogramming of the remaining 1994-95 funds had been carried out at country level. Programme formulation missions for the biennium 1996-97 took place during October/November 1995. A new philosophy of programme formulation was adopted focusing on country priorities and goals with reasonable targets directed towards producing specific products through clearly defined activities and activity components. The guidelines for the JPRMs were thus adjusted and amended to fulfil the above philosophy. A computer package was prepared for each country's JPRM. This package included a new format for the plans of action for each specific programme reflecting the targets, products and activities necessary to deliver the programme. It is expected that the application of this new format of JPRMs will improve implementation and management of programmes at national and WHO levels. It will also help in better evaluation of programme results and impact.

Meeting of the Regional Director with WHO Representatives and Regional Office Staff

The 12th meeting of the Regional Director with WHO Representatives and Regional Office staff took place from 17 to 20 September 1995.

The main topics discussed included: World AIDS Day; the *Eastern Mediterranean Health Journal*; the fiftieth anniversary of WHO; the UNAIDS Programme—present status and future perspectives; poliomyelitis eradication; regional health database; the status of financial implementation, 1994-95; the programme budget for 1996-97: outcome of the Forty-eighth World Health Assembly

budget review and implications for JPRMs; the establishment of the United Nations Office for Project Services (UNOPS); evaluation of WHO-sponsored national training activities; status of environmental health strategy and plan of action for environmental health in EMR countries; the seventh round of Joint Government/ WHO Programme Review Missions (JPRMs); review of the implementation of the regional information system in the Regional Office and WRs' Offices; the role of the WR in coordinating UN support to countries during emergencies; World Bank support in the field of health; and basic minimum needs in Pakistan.

It is expected that the recommendations made during that meeting will enable the WRs to carry out their functions at country level in a better manner, more coordinated with the Regional Office.

Profiles

Country programme profiles were received from different countries and reviewed by Programme Directors and Regional Advisers for compilation of Regional Programme Profiles. Some of these profiles were used for briefing and preparations for JPRMs. They were also used for briefing of consultants visiting countries.

Informatics support

Strengthening of the Management Information System in the Regional Office was a prime objective in 1995. In addition to enhancing and introducing new features and capabilities of the Regional Information System (RIS), applications were developed to facilitate information management.

One of the major applications developed and integrated into the RIS was a module for Joint Government/WHO Programme Review Missions (JPRMs). This was used in 1995 by the JPRM teams to plan regional and country activities. The development of a Supply Management Information System (SMIS) started in 1995, and this was expected to be fully functional by mid-1996. SMIS will facilitate the work of the Logistic Support Unit and will be fully integrated with the RIS and the Inventory System. Development of specific applications for the AFI system, Inventory System. HST and TLM continued during 1995.

The switch-over to client/server technology started in the Regional Office during 1995. The services of a commercial company were used to study and analyse the current networking set-up and to provide guidelines on the gradual migration to a client/server environment. The Regional Office acquired a major part of the hardware and software necessary for this migration.

Computer operating systems and applications were standardized in the Regional Office. Network users have access to all local area network (LAN) resources in addition to the standard desktop applications. Optical imaging technology was introduced during the year with the aim of computerization of the Registry and archiving system, in addition to optical imaging of important documents issued by the Regional Office.

Full access to the Internet was achieved by leasing a line to the national Internet node and providing the necessary hardware and software for the purpose.

Training started in 1995 of all staff members in the Regional Office on computer operating systems and applications—the standard text processing, spreadsheet and database management systems.

Training was also provided to national staff on computerized packages for some of their applications: training on EPI/INFO was conducted in collaboration with WHO headquarters, and training on use of the TLM database was also provided.

The country version of the Regional Information System software package (MINI-RIS) was fully developed in 1995. The package has been installed in some of the WRs' Offices and necessary training provided to staff of those offices. In 1996, other offices will be provided with this package. Those offices that already have the package will receive, on a monthly basis, an updated version of data relevant to the country in order to keep the WHO Representative informed of the budget and implementation situation.

Telecommunication and e-mail links with WRs' Offices started in 1995. Four offices have already established an e-mail link, and it is expected that others will do so in 1996.

As part of the Select Agreement, WRs' Offices were considered part of the Regional Office family for software licensing.

Training was provided to staff of some WRs' Offices on the computerized Imprest Account System, after installation of the system.

The Regional Office continued to provide support to Member States in evaluating their application requirements and in giving advice on technological solutions to meet their requirements. EMRO responded to the requests received from Member States, which covered all ranges of informatics equipment (entry level, mid-range and high-end computer systems) with a growing demand for networking, ranging in size from a small local area network to an enterprise network with wide area network extensions.

Regional Director's development programme

The Regional Director's development fund has been a very effective and useful element in supporting priority development programmes of Member States which could not be financed from WHO regular country budgets. It enabled many Member States to secure additional extrabudgetary funds for such priority programmes from other UN and non-UN agencies. The main areas of support from this fund included: medical education, health services, including support to the ministerial consultation on the subject, and support to postgraduate training in public health, paediatrics, medicine and surgery and also to distance learning; vaccine production and quality assurance; promotion of the basic minimum needs approach and the minimum standards of health care approach; care of the elderly, women's health and

development, tobacco control and the prototype action-oriented school health curriculum; research on malaria; introduction of insecticide impregnated nets; healthy cities and healthy villages; and national immunization days.

External coordination and resource mobilization for health

During 1995, collaboration between the Regional Office and the UNICEF Regional Office for the Middle East and North Africa has taken the form of sharing fully the technical expertise of joint programmes of the two offices. The Regional Directors of the two offices meet every year to review ongoing fields of collaboration and exchange views on areas of future collaboration.

One of the notable results of collaboration between WHO, UN agencies—especially UNICEF—NGOs and others was the successful implementation of second and third rounds of the nationwide mass immunization campaign in Afghanistan in early 1995. Activities related to polio eradication were carried out successfully.

A significant amount of money was pledged for regional polio eradication activities by Rotary International and CDC during the meeting of the interagency coordination committee.

The Regional Office was also successful in mobilizing funds to support country and regional programme activities. Of particular importance were funds raised for malaria control, environmental health and water supply, nutrition and emergency and humanitarian assistance in several countries of the Region.

As a follow-up of the resolution of the Regional Committee and the recommendations of the Regional Consultative Committee on resource mobilization, the Regional Office strengthened collaboration with developmental banks and AGFUND.

Collaboration with the African Development Bank

The fourth African Development Bank (AfDB)/WHO Annual Review Meeting was held in Abidjan, Côte d'Ivoire, 9-11 October 1995, at which EMRO was represented by the WHO Representative to Morocco.

The completion report of the Bilharzia III project in Egypt is expected to be finalized by mid-1996. It is expected that the Regional Office will participate in phase IV. For the "rural rehabilitation appraisal" project in Sudan, EMRO's assistance will be requested when funds are made available by the Bank for developing the "management of health facilities" component. It is expected that the Regional Office will participate in the appraisal mission. In Morocco, the ongoing project activities (PHC in 10 provinces) were reviewed. The WHO Representative in Morocco participated, to help facilitate the smooth implementation of project activities.

Collaboration with the Islamic Development Bank

Following the discussions between the Regional Director for the Eastern Mediterranean and the President of the Islamic Development Bank (IsDB) on strengthening of collaboration between EMRO and the IsDB in November 1994, a sum of US$60 000 was provided to cover the cost of a training course on leakage detection held from 4 to 8 June 1995, in Alexandria, Egypt, and the Regional Workshop on Water Conservation and Reuse: Practical Approaches and Strategies, which was held in CEHA, Amman, Jordan, from 4 to 7 March 1996.

Collaboration with AGFUND

The AGFUND Administrative Committee approved, at its 34th meeting held in Riyadh on 4 December 1995, an amount of US$220 000 for training on health and environment with special reference to mothers and children in eight countries and the healthy villages programme for improvement of the health of women and children in 10 countries.

Staff development

Support for skills training for staff in the Regional Office and in the field continued. Increased attention was paid to developing a core of talent in the Regional Office to conduct in-service training of senior general service staff (secretaries and administrative assistants) from the Regional Office and staff in WHO Representatives' Offices in order to improve their efficiency.

A major effort was begun to advance the computer skills of all staff. In addition, staff were supported in improving their language proficiency (Arabic, English and French).

Following the decision of the Regional Director to carry out the testing of the proposed new WHO Staff Performance Appraisal System, all staff members in the Regional Office were briefed on the new system; and supervisors in the Regional Office were trained in supervisory and appraisal skills in February 1996. This new appraisal system is already implemented in the Regional Office.

2.2 Public policy and health

Formulation of health policy

Convinced of the role of health economics in resource mobilization and in the improvement of the efficiency of health systems, several Member States planned to develop and strengthen their national capabilities in health economics.

During 1995, four consultants were recruited in health economics and health care financing to help develop proposals for health insurance (Oman, Qatar) and promote economic principles in health management (Libyan Arab Jamahiriya).

Four fellowships in health economics were awarded in 1995 to Morocco and Palestine. Efforts were made to identify training institutions within the Region for capacity-building in health economics.

Training materials in cost analysis were translated into Arabic and distributed to Arabic-speaking countries.

A network was established for health policy and health economics for the Maghreb countries, following an intercountry workshop in Rabat, Morocco, aimed at promoting the regional programme on health economics/health care financing.

Research policy and strategy coordination

Eastern Mediterranean Advisory Committee on Health Research

The Eastern Mediterranean Advisory Committee on Health Research (ACHR) held its 18th session in Riyadh, Saudi Arabia, from 20 to 22 March 1995. The Committee reviewed the progress of the regional research programme during the previous two years, as well as the visits of the Task Force for Health Research to the Syrian Arab Republic and Lebanon. A report on the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, and a report on the 32nd session of the global ACHR held in 1995 were discussed. Several scientific papers were presented: health research in the ministry of health—the Saudi Arabian experience; the dissemination and utilization of research results; viral hepatitis C and E; viral hepatitis in Pakistan; ethical considerations in health research; and psychological aspects of hereditary diseases and genetic counselling.

Following discussions, 35 recommendations covering the above subjects were adopted, with special emphasis on the following:

- countries should establish national review committees for health research, give due attention to training in research methodology in undergraduate and postgraduate curricula and provide better relationship between ministries of health and universities for better implementation of research programmes;
- national research agencies should be actively involved in the dissemination of research results at national, regional and international levels;
- WHO should establish and strengthen networking between research centres in the Region;
- the Eastern Mediterranean Region should also have an ethical review mechanism at the Regional Office, and guidelines should be developed and disseminated to Member States;
- appropriate priority should be given in research projects implemented in the Region to epidemiological studies, attitudinal research, effectiveness of different interventions and formulation of ethical and legal aspects of genetic disorders;
- wherever possible, research related to mental health and noncommunicable diseases should include genetic aspects of the diseases;

- TDR Research Capability Strengthening should continue to provide funds for EMRO/TDR/CTD small project grants.

Task force on health research

A task force composed of two members visited the Libyan Arab Jamahiriya, 3-14 June 1995, to develop a health research policy and strategy with emphasis on priority issues and prepare a national plan of work for the implementation of the research strategy. The task force was also to identify ways of augmenting resources needed for implementing the research strategy at the national level. The task force made several recommendations, with emphasis on the establishment of a national council for health research, which should be responsible for the development of the national health research policy and planning, promotion, coordination, monitoring and evaluation of health research, with special emphasis on health systems research.

Research support

A sum of US$125 000 was provided by the Regional Office to support 11 research proposals received during 1995 from seven countries: Egypt (3), Jordan (2), Lebanon (1), Morocco (1), Sudan (1), the Syrian Arab Republic (1) and Yemen (2). The subjects involved were: risk factors of coronary heart disease in Egypt and Jordan; epidemiological study of hepatitis E in the Syrian Arab Republic; incidence and determinants of low birth weight in children among urban women delivered in Sana'a City Hospital; prevalence and control of rheumatic heart disease in Yemen; body iron status in preschool children in Sudan; dietary patterns and obesity in Lebanon; study of possible effects of iodized salt on the taste, colour and consistency of pickles in Jordan; analysis of antibodies response in the diagnosis and therapeutic follow-up of tuberculosis infection in Morocco; early biological diagnosis of cancer in certain groups of the Egyptian population at risk of malignancy; and folk medicine in semi-bedouin tribes of Awlad Ali in Beheira governorate in Egypt.

Eleven research projects on malaria control were supported by joint EMRO/CTD/TDR small project grants.

Two research proposals from Morocco entitled "Study of epidemiological, organizational and institutional determinants of tuberculosis morbidity in Morocco" and "Setting up of a national biological and clinical observatory for the surveillance of viral hepatitis in Morocco", costing US$138 000, were funded by USAID.

WHO collaborating centres

Two WHO collaborating centres were designated during the year, and another two were in the process of being designated, bringing the total number of WHO collaborating centres in the Region to 52 (see Annex 5). The four new concerned were:

- The Blood Transfusion Centre, Amman, Jordan (as a WHO collaborating centre for transfusion medicine)

- The National Centre for Blood Transfusion, Tunis, Tunisia (as a WHO collaborating centre for transfusion medicine)
- National Lactation Management Centre, Teheran, the Islamic Republic of Iran (as a WHO collaborating centre for research and training in breast-feeding)
- Department of Medical Information, College of Physicians and Surgeons, Karachi, Pakistan (as a WHO collaborating centre for research and training in educational development of health personnel).

Formulation of health legislation and promotion of health ethics

During 1995, technical support was provided to enable countries to develop and update their health legislation.

Assistance was provided to the Ministry of Health in Palestine to draw up a new health legislation for rebuilding its national health system. Consultants on health legislation were also assigned to countries to review the existing legislation and advise on specific technical areas such as communicable diseases, food hygiene and pharmaceuticals.

Reflecting the importance of bioethics in health development, a technical paper on ethics of medicine and health (EM/RC42/8) was presented to the Forty-second Session of the Regional Committee.

Based on the recommendations of the Regional Consultative Committee, a regional approach to develop and strengthen bioethics will be designed.

Promotion of the role of women in health and development

The role that women can play in the promotion of national health and socioeconomic development has been well recognized by WHO.

A special unit for Women in Health and Development has been established in the Regional Office. The main objective of the programme is to promote the role of women in national health and socioeconomic development programmes.

Activities were started to:

- identify suitable areas for women's participation in national health and socioeconomic development,
- mobilize women's organizations in support of national health and socioeconomic development,
- develop appropriate means and approaches for effective participation of women in national health and socioeconomic development, and
- increase community awareness of the role of women in national health and socioeconomic development.

The Regional Office actively participated in the activities of the Global Task Force on Health and Development, which was established by WHO headquarters to review the interrelationship between health and development and emphasize the role of women in promoting national health and overall socioeconomic development.

2.3 National health policies and programme development and management

Health management support

Most countries in the Region consider improving managerial process as a priority in health system development. Several fellowships were awarded to train health professionals in management techniques and training institutions within the Region were used in this respect.

The Islamic Republic of Iran, the Syrian Arab Republic and Yemen are planning to develop national training centres in health management and provide management courses within established diploma programmes.

More attention was paid to train mid-level managers, using learning-by-doing through a problem-solving approach; the district team problem-solving (DTPS) technique was introduced in Morocco and Yemen.

The guidelines for DTPS workshops were translated into national languages: the Farsi version will be used in workshops planned for Afghanistan and the Islamic Republic of Iran.

An evaluation of DTPS was carried out in Oman, Sudan and Tunisia. The participants expressed considerable interest in this approach, which has gained acceptance among health professionals. This approach is perceived as a managerial tool, a means to strengthen the national information system, as a microplanning exercise and a contribution to strengthen the decentralization of health systems based on primary health care.

Health systems management, with special sections on health legislation and hospital management, was the subject of technical discussions at the Forty-second Session of the Regional Committee in 1995. Action was taken to implement the recommendations of the Committee contained in the resolution on the subject (EM/RC42/R.5).

Health planning

During 1995, the Regional Office was restructured and a new Division of Health Policy and Management was established. The main objective of the new division is to provide technical support to ministries of health in the areas of policy reform, institutional development and developing and updating their health legislation systems. The Regional Office collaborated with ministries of health in all the above areas.

Attention was paid to the strengthening of policy formulation and planning capabilities at various levels of health systems. Capacity-building in health policy and planning was considered to be of importance.

As many countries were faced with difficulties in financing health systems at a time of growing expectations, the Regional Office provided assistance by promoting the regional programme of health economics and health care financing.

The Regional Office supported ministries of health in developing and strengthening national capabilities in policy formulation, updating of HFA strategies and implementing policy reforms.

Technical support was provided in the restructuring of ministries of health. Yemen was provided assistance in implementing its national planning exercise.

Seven fellowships were awarded in health policy and planning to candidates from Morocco, Pakistan, Palestine and Yemen.

The recommendations of the first intercountry meeting on strengthening of health planning capabilities in the Eastern Mediterranean Region were sent to Member States. These recommendations stress the need for capacity-building in health planning at various levels of the health system and for the introduction of strategic thinking in health planning.

In view of the importance of microplanning at the district level to strengthen decentralization in line with HFA strategies, Morocco and Yemen were supported in carrying out district team planning and evaluation exercises.

Logistical support to country programmes

This programme provides the logistical support necessary for the procurement, shipment and delivery of project supplies and equipment required in direct support of WHO country and intercountry programmes within the Region. It also monitors the receipt of supplies and equipment and, where required, maintains project inventories.

Procurement of supplies and equipment during 1995 from all sources of funds amounted to US$20 453 342 and is reflected, by broad category, in Figure 2.1. Of this amount, supplies and equipment worth US$3 359 087 were obtained through local purchases in countries of the Region.

Twenty reimbursable purchases, amounting to US$1 358 438, were made for Member States.

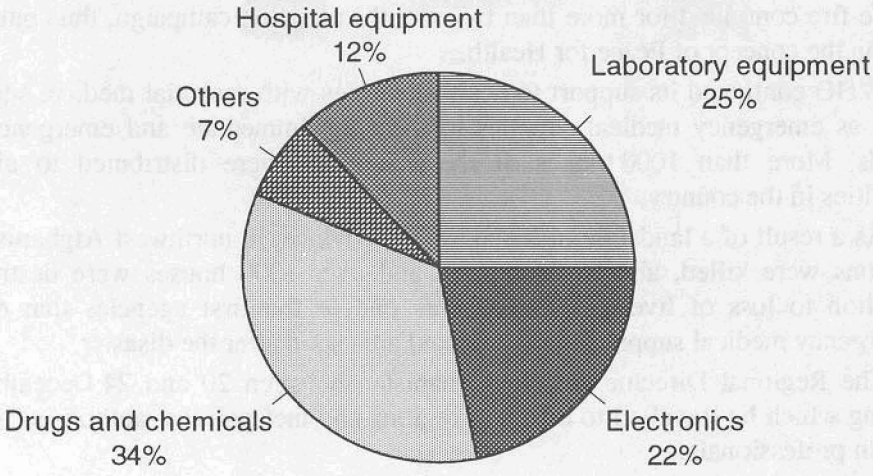
Emergency preparedness and humanitarian action

The regional programme on emergency preparedness and humanitarian action was strengthened during 1995 by the appointment of a technical officer. As a start in establishing a regional database on country emergency preparedness programmes, a questionnaire was prepared and distributed to Member States. A few countries in the Region have established well functioning emergency preparedness programmes.

In the Islamic Republic of Iran, active cooperation was established between the Environmental Health Department of the Ministry of Health and Medical Education and medical universities in the development of a national programme for emergency preparedness and response, in collaboration with the responsible task force in the Ministry of Interior.

A research project was implemented in Borujen district, in central Iran, with community participation in rural and urban areas for prevention of accidents and

FIGURE 2.1 Procurement of supplies and equipment by WHO/EMRO during 1995 by major category



Value of total procurement: $20 453 342 (all sources of funds)

epidemics of diseases. WHO assigned a consultant to provide technical support and plan future activities.

The Regional Office participated in a number of interregional meetings to review the different chapters of the WHO manual on emergency preparedness. The chapter dealing with logistics support during emergencies was prepared by EMRO. Inputs from the regions were consolidated and the final draft was discussed and approved in these meetings. Efforts were made during 1995 to strengthen interregional collaboration and exchange of experiences, particularly between AMRO and EMRO.

The WHO Representative's Office in Afghanistan, through its eight suboffices in the country, provided emergency health assistance to the local population, returning and displaced people, throughout 1995. WHO's assistance included the provision of emergency medical supplies and equipment, rehabilitation of health facilities, especially casualty units and provincial hospitals, training of health workers, assistance to disabled people, control of priority diseases such as malaria, tuberculosis and diarrhoeal diseases, support for health information systems and primary health care, and rehabilitation of piped water systems.

The regionalization of health services was further strengthened during the year. WHO, in collaboration with the Ministry of Public Health, designed and developed a regionally-based health emergency relief programme, specific to each region which enabled the Ministry to initiate response with the help of local authorities and communities.

Through WHO mediation in early 1995, all warring factions agreed upon and observed a cease-fire, known as the Health Cease-fire, during which the second and third rounds of the mass immunization campaign were successfully completed. The cease-fire continued for more than two months after the campaign, thus putting into action the concept of Peace for Health.

WHO continued its support to health facilities with essential medical supplies as well as emergency medical supplies to meet the immediate and emergency health needs. More than 1000 tonnes of these supplies were distributed to all health facilities in the country.

As a result of a landslide in Badakhshan Province, in northwest Afghanistan, 350 persons were killed, about 500 injured and over 1000 houses were destroyed, in addition to loss of livestock. WHO was one of the first agencies that delivered emergency medical supplies to the affected area soon after the disaster.

The Regional Director visited Afghanistan between 20 and 24 December 1995, during which he travelled to different regions and met political authorities and local health professionals.

WHO, both at headquarters and the Regional Office, is making all possible efforts to provide the maximum possible emergency and humanitarian assistance to Iraq, where the situation is grave as a result of war and sanctions; the infrastructure is almost non-existent and resources are extremely scarce. During 1995, WHO's efforts included rehabilitation of the chlorination plant in Basra, strengthening of malaria control activities, conducting a study on the impact of five years of sanctions on the epidemiology of 12 infectious diseases, the effects of sanctions on health status and streamlining demand and activities to optimize the use of resources and to strengthen coordination with other UN agencies.

The Regional Director visited Iraq. Through his contacts with Member States, NGOs and other donors, the Regional Director enlisted their assistance for badly needed supplies and essential drugs for the country.

A Health Donor Committee was established in Yemen under the chairmanship of the WHO Representative, including members from different bilateral and UN agencies (UNICEF, UNFPA, WFP and UNDP). This committee meets regularly to provide and coordinate support.

WHO established good epidemiological surveillance activities in the affected governorates, including field surveillance, health education for the community, training of health workers, etc., aiming at the control of epidemics of waterborne diseases. Despite the adverse situation in those areas (including breakdowns of water supplies and sewerage), the efforts proved to be successful. These activities were supported by WHO, Italy and Japan and by the contribution of insecticides and equipment by Tifa (a commercial pesticide application equipment supplier).

WHO has been involved in emergency relief operations in Somalia since January 1992. During 1995, WHO continued to provide support to different

programmes, such as control of diarrhoeal diseases including cholera, provision of essential drugs and laboratory equipment and supplies, training, rehabilitation of blood banks, control of tuberculosis and malaria.

WHO established a central warehouse for pharmaceuticals in Mogadishu and four satellite warehouses. This activity continued to provide basic essential drugs to some 123 health-care units.

Despite the fluctuating security situation, a significant increase in WHO-supported training activities was possible during 1995. Increased training activities included those for the diagnosis and treatment of malaria, diarrhoeal disease treatment, family health awareness and water and sanitation.

The focus of WHO activities in Sudan was on attempts to curb the deleterious effects of major life-threatening diseases in the country, with special reference to war-affected populations in the south, and the internally displaced populations around large towns and in the vicinity of Khartoum. Priority was given to the control of malaria, kala-azar and HIV/AIDS.

WHO technically supported the formulation of a national malaria control strategy in response to the UN resolution (A48/L.41 of 28 November 1994) on "Emergency assistance to Sudan", through participation in the Presidential Committee on Malaria set up for the purpose and through assignment of consultants.

During 1995, the Regional Office participated in an international effort to arrange a period of tranquillity in the country; this enabled the conduct of important health activities, including malaria control and child survival interventions, such as immunization and oral rehydration.

Many of the activities in the south were arranged by the WHO Juba suboffice.

WHO is the executing agency for the UNDP-funded project, "Strengthening the Capacity of the Ministry of Health in Emergency Preparedness and Response". Major achievements of the project included the setting up of a structure for emergency preparedness and response (EPR) at the central level, the establishment of a reliable communication system, preparation of a "Health Sector EPR Manual", preparation of guidelines for EPR and nutrition, and state-level nutrition surveys.

WHO Representatives' Offices

During 1995, sixteen country offices were maintained in the Region. Nearly all of them are headed by a WHO Representative and many physically located within ministries of health. The role of these offices has been to provide policy support to ministries of health; to give impetus to the health leadership role of WHO within the UN system; to manage WHO technical cooperation at country level; to promote health issues in other sectors and ministries; to mobilize resources; and to coordinate health sector responses to emergencies. The continued improvement of means of communication with these offices has enhanced their ability to more effectively mobilize the Organization's resources in support of country level action.

2.4 Biomedical and health information and trends

Health situation and trend assessment

The strengthening of both health statistical information systems (HSIS) and monitoring and evaluation of HFA strategy implementation progress continued to be among the priorities of the programme during 1995.

Health statistical information

During the year under review, considerable efforts were directed towards HSIS enhancement at country as well as regional levels.

In addition to the continuing collaboration with almost all countries in the Region towards the review and strengthening of data generation and data processing within national HSIS, particular emphasis has been placed on national capacity-building in the use of available data at the district level on one hand, and on the use of the tenth revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) on the other. To this end, four national workshops on district team problem-solving aiming to train national health staff at the district level as to how to use available data through a managerial process exercise, were organized in Morocco, Oman, Tunisia and Yemen; two national courses were organized in Qatar and Sudan which were attended by about 50 participants from medical records services.

The Regional Office continued to support the review and improvement of national HSIS through consultants, and national capacity-building through local training courses and fellowships:

A total of 12 consultants were assigned to Afghanistan, Egypt, the Islamic Republic of Iran, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, Sudan, the Syrian Arab Republic and Yemen. The Regional Adviser on Health Situation and Trend Assessment took part in some of these assignments relating to the review of NHIS, training on the application of ICD-10 in coding of mortality and morbidity data, and the use of available data through the district team problem-solving technique.

Support was provided to the organization of about 50 national training courses and workshops on health statistics and informatics with a large number of participants in Afghanistan, Egypt, the Islamic Republic of Iran, Jordan, Morocco, Oman, Qatar, Saudi Arabia, Sudan, the Syrian Arab Republic, Tunisia and Yemen.

Twenty-eight fellowships were awarded to candidates from Bahrain, Egypt, Lebanon, Morocco, Palestine, Qatar, Saudi Arabia, Sudan, the Syrian Arab Republic, Tunisia and Yemen.

In addition, WHO provided during 1995, essential supplies and equipment (mainly computers and software) for the enhancement of health statistical information services in Afghanistan, Djibouti, the Islamic Republic of Iran, Kuwait, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, the Syrian Arab Republic and Tunisia.

At the regional level, the updating of the regional health database now available on the EMRO local area network was continued, using the latest available data provided by Member States. An improvement of the database through new informatics technology is being carried out. Other activities included:

- the preparation and organization of the Second Regional Course on ICD-10 in Teheran, attended by 11 participants from Bahrain, Egypt, the Islamic Republic of Iran, Iraq, Pakistan and Tunisia;
- participation in the meeting of the Council of the Arab Economic Unity on Health Statistic Development in Cairo;
- participation in the PAPCHILD Technical and Coordinating Committee and expert group meetings held in Beirut and Cairo; and
- contribution to the preparation of a draft "Guideline manual on how to revise/develop a national health statistical information system"—to be reviewed by the second meeting of the Regional Panel on Health Information Systems to be held in June 1996.

Monitoring and evaluation of health-for-all strategies

The Regional Office contributed to the preparation of the third evaluation of the health-for-all (HFA) strategy implementation to be carried out during 1996-97.

EMRO participated in the interregional meeting on revision of indicators and procedures for monitoring and evaluation of progress in the implementation of HFA strategies. The Regional Office also contributed to both the revision of HFA indicators, procedures and mechanism for HFA monitoring and evaluation process, and to the improvement of the Common Framework to be used for the preparation of the third report on evaluation of health-for-all strategies implementation.

Health and biomedical information support

The Health and Biomedical Information (HBI) Division is composed of six units: Publications and Documents, WHO Arabic Publications Programme, Language Services, Production Control, Health Literature and Library Services, and Distribution and Sales.

The programme has both support and substantive components. As a programme of "health information support", HBI is responsible for providing support to all WHO programmes in the Region: translating, editing and issuing publications and documents in Arabic, English and French; translating and typing correspondence; keeping staff informed about activities, policies and programmes of their Organization, as well as providing them with health literature and library services.

The substantive side of the programme is reflected in the establishment of country HBI programmes, with associated networks of national focal point (NFP) libraries and health and biomedical information focal points. These programmes have been gaining budgetary allocations over the years. Some 19 countries now have NFP

libraries, 17 have HBI focal points and 15 currently have country budgets for the programme.

With the increasing importance of information content and information technology, and as the Region joins in the global approach to an information superhighway, HBI's technical advice to Member States on the adoption of technological options for information access and dissemination is becoming increasingly important. Efforts have been made to ensure that HBI staff are as well-informed as possible about these new developments, which have the potential to provide quick, timely, accurate and valid information to all researchers and others needing health and biomedical information in the Region.

Publications and Documents

The Publications and Documents (PBD) Unit provides editorial services for the publishing programme and related activities. This includes publications, documents, periodicals and other items of health-related literature. In addition to the publishing programme, editorial services are provided for the Regional Director's presentations and messages, for technical discussion papers, proceedings of meetings of the Regional Director with WHO Representatives and the Regional Office staff, of the Sessions of the Regional Committee for the Eastern Mediterranean and for other meetings.

Reports of intercountry meetings, workshops, etc., are edited for eventual distribution to participants and the national authorities concerned.

The following items of health and biomedical information were issued in 1995: 61 publications or reprints, 87 documents, 14 periodicals, 5 kits, 7 posters and 127 other items of health-related literature (see Annex 4). Most notably, the first issue was published of the *Eastern Mediterranean Health Journal*, a high quality peer-reviewed journal covering health issues of interest to the Region.

PBD also carried out the briefing and debriefing of short-term consultants with respect to the assignment report and executive action document that each consultant prepares as a part of his or her assignment. In 1995, 174 executive action documents were edited and prepared for presentation to the governments concerned.

The composition of the Publications Committee has been revised to include seven members acting in a personal capacity with the Assistant Regional Director as Chair. The Committee met four times during the year, approving one proposal for publication and discussing matters relating to the production, printing, distribution and sales of Eastern Mediterranean Region publications. It also introduced the idea of workshops for medical writing in the Region.

The unit continues to expand its computer publishing facilities in collaboration with Production Control, with the acquisition of more powerful hardware and software and is investigating the possibility of electronic publishing and other non-traditional media.

WHO Arabic Publications Programme

The WHO Arabic Publications (WAP) Programme is responsible for the translation into Arabic of a selection of WHO publications that are considered to serve the health interests of the Eastern Mediterranean Region and its Member States. The translation jobs of the Unit are mainly done by external translators under contractual service agreements. The programme also undertakes the editing of original publications written in Arabic.

Work on the final draft of the fourth edition of the Unified Medical Dictionary has been completed. All the material (over 140 000 entries and subentries) was coded and converted into a database format, and programmed for retrieval and production on CD-ROM. The computerized text, programmed in collaboration with the Arab League Documentation Center, allows for producing specialized subdictionaries covering 72 individual subjects in General Sciences, Basic Sciences and Clinical Sciences. The proofreading of the text and finalization will be carried out in 1996.

Work on translation into Arabic, revision and proofreading of WHO publications/documents continued, and a number of WHO documents, publications and journals were issued in Arabic, including: Cost analysis in primary health care—a training manual for programme managers; The treatment of malaria; Promoting the development of young children with cerebral palsy—a guide for mid-level rehabilitation workers; Essential elements of obstetric care at first referral level; Manual on diabetes mellitus in primary health care; Treatment of tuberculosis: guidelines for national programmes; The initiative for the global eradication of poliomyelitis, a guide for clinicians; General surgery at the district hospital; *Safe motherhood* newsletter, and *Bridge* newsletter.

Special mention should be made of the fact that the Regional Office, in cooperation with headquarters, encourages and supports the use of national languages in health literature in the countries of the Region. Translations of WHO publications into Farsi, Urdu, Pashto, Greek, Turkish and other national languages of the Region are being promoted and financially supported.

Language Services

During 1995, Language Services continued to undertake an increasing volume of translation and revision work in the three working languages of the Region (Arabic, English and French), as well as editing in Arabic and French.

Among the regular activities of the unit was the translation into Arabic of all Regional Committee documentation, including the technical discussions and technical papers, which were also translated into French. The unit also prepared the Arabic version of the Regional Committee report. Among the periodicals translated regularly into Arabic by the unit were the *Eastern Mediterranean Region Drugs Digest* and the Arabic texts of the *Eastern Mediterranean Health Journal.*

Production Control

The entire production activity of the Regional Office is the responsibility of the Production Control (PRC) Unit, which undertakes the printing and production of publications and documents, etc. It also caters for requests from countries of the Region to print or reprint WHO material or material prepared by them and cleared by the Regional Office.

The Production Control Unit has developed the use of advanced technology for design and desktop publishing, and the outcome has been a number of attractive and high quality covers and efficient layouts for regional publications. Good use was made of local resources for printing and, with support from Production Control, some countries in the Region (for example, Jordan and Pakistan) were assisted in making use of these resources.

Support was provided to the Regional Office and the countries of the Region in activities related to publishing. PRC also responded to a large number of requests for typesetting, printing and reprinting. In 1995, the number of purchase orders issued to cover typesetting, desktop publishing, printing, reprinting and binding reached 304. In addition, 97 contractual services agreements (36 for translation, 3 for autorevised translation, 14 for editing, 37 for various library requirements and 7 for other activities) were issued.

Health Literature and Library Services

The Health Literature and Library Services (HLT) Unit launched a survey of health and biomedical libraries in the Region, with the aim of developing and maintaining a data bank on information resources available in health and medical institutions.

Document delivery services were also fostered through the use of specially designed CD-ROM textual systems. Subscription to *ExtraMED* and *ADONIS* systems was supported. A total of 16 *ExtraMED* subscriptions was supported in nine countries including one in the Regional Office library for searching and training purposes. One subscription was supported for *ADONIS* to allow document delivery to selected countries. International coupon systems for photocopying and documents delivery were adopted to support exchange and use of library materials. The Unit has been distributing its list of serials holdings and some of its databases in electronic formats to enable identification of articles and delivery. The WHOLIS database, which is provided by WHO headquarters, was installed and is available for searching over the Regional Office local area network. This database includes all WHO material and is updated bimonthly.

On-site training was provided for some countries on computer-based library and information systems; other national staff were trained through visits by HLT to EMR countries, especially on CD-ROM technology and the use of the *MEDLINE* database.

CD-ROM continued to be an important area for support: in addition to 11 subscriptions for the library itself, the library entered 93 subscriptions for 21 databases for medical libraries in 14 countries in the Region.

At the Regional Office a CD tower has been installed, which allows for 16 databases to be concurrently accessed by all network users. Efforts have been concentrated to develop regional databases that can form the nucleus of bibliographical library services. These include the development and maintenance of databases for the *Index Medicus for the Eastern Mediterranean Region* (IMEMR), the library catalogue, journals holdings, CD-ROM subscriptions and the List of Basic Sources. Three of these databases are now accessible on the local area network in the Regional Office.

A database was also developed for the *Unified Medical Dictionary*, which now contains over 140 000 medical terms in English and their equivalents in Arabic. The network version of the UNESCO CDS/ISIS arabicized package has been used to manage these databases.

A project was launched in 1995 to arabicize the Medical Subject Headings List of the National Library of Medicine. This has been considered a priority by the Regional Office.

The fourth and fifth cumulations of IMEMR covering the period 1987-90 were merged, processed and published as one volume ready for distribution. Work continued in 1995 on indexing and editing material for the next cumulation of IMEMR which will include the 1991-95 citations thus making it a current contents database, rather than a retrospective index of journals from the Region. It is intended to publish this cumulation in electronic formats: on CD-ROM and over the network.

Work was completed on the seventh edition of the *List of basic sources in English for a medical faculty library*. This list recommends relevant, low-cost and up-to-date textbooks and periodicals in the fields of public health and medicine. In collaboration with headquarters, work started in 1995 to provide and install the WHO Representative's (WR) Documentation Module in WRs' Offices. It is expected to have the module installed in 1996 in most of the WRs' Offices.

HLT has provided technical backstopping to a number of countries in the Region in the areas of national HBI planning, assessment of needs and presentation of technical papers in seminars and meetings. Four participants from Egypt, Djibouti, Lebanon and Morocco, supported by EMRO, participated in the Seventh International Congress on Medical Librarianship, which was held in Washington, DC.

In 1995, HLT took over the responsibility of procuring health literature material (CD-ROM databases, journals, books) for the Regional Office (including the library), country projects and WRs' Offices.

In early 1996, the library was moved from an external location to the main building of the Regional Office.

TABLE 2.1 Summary of 1995 sales

	No. of copies sold			Value (US$)			
	HQ titles	EMRO titles	Arabicized texts	HQ Direct Sales income		Funds-in-trust	Total
				HQ titles	EMRO titles	FT	All sources
Allotment	17 940	10 022	789	232 651	39 783	16 324	288 758
Cash	737	2 444	2 605	19 509	10 770	5 717	35 996
Total	18 677	12 466	3 394	252 160	50 553	22 041	324 754

Distribution and Sales

This was a record year in terms of both free distribution and sales of WHO publications. During 1995, the Distribution and Sales (DSA) Unit provided a comprehensive coverage of all new publications to every Member State. A total of 41 180 copies of journals, periodicals and priced new publications were distributed free of charge throughout the Region. This represented an increase of 71% on the 1994 figure of 24 000 copies. In addition, 17 announcements of new publications were developed, and 8474 leaflets were distributed throughout the Region, as compared with the 1994 figures of nine announcements and 2000 leaflets.

Although the emphasis continued to be focused on increasing the dissemination of WHO publications through free distribution, DSA has also been engaged in enhancing the sales of these publications. A sales figure of US$324 754 was achieved in 1995—almost three times the sales total for 1994 (US$111 750). Table 2.1 provides a breakdown of sales figures for HQ publications, EMRO publications and arabicized publications.

Epidemiological surveillance

The important role of epidemiological surveillance in monitoring health events and planning health programmes and response measures was repeatedly stressed by the Regional Office during the year, both as regards disease surveillance in general, and infectious diseases in particular.

National surveillance systems in many countries were reviewed and analysed by WHO consultants and staff members, in terms of their structure, process and output, to identify the main constraints. Of the several constraints identified, the most important one facing surveillance in the Region is the shortage of trained health personnel at all levels in the health system. To address this problem, a plan was prepared to train national trainers in disease surveillance, and a workshop for training of trainers in communicable diseases surveillance and preparedness for epidemics was held in Alexandria, Egypt, in December 1995.

A module for training in communicable disease surveillance was developed for use in this workshop, which was attended by 22 participants from 15 countries in the

Region. The main purpose of the workshop was to acquaint the participants with the essential components of a national surveillance system and to develop their skills in using the module for national training courses. In addition, the workshop was used to develop the capability of the participants in designing, modifying and operating a surveillance system capable of meeting national objectives. A similar workshop took place in May 1996 to train trainers from the remaining countries.

Several national courses were supported by WHO for training in epidemiological surveillance using national expertise, and WHO technical expertise where necessary.

Support was provided through 13 fellowships to six countries for training in epidemiology and epidemiological services.

In addition to these efforts, the Regional Office encouraged countries to develop guidelines for national surveillance and to issue surveillance newsletters or epidemiological bulletins. These were good feedback mechanisms. It is satisfying to note that many countries were publishing epidemiological bulletins regularly. The first issue of a newsletter by Lebanon appeared in 1996, with the collaboration of EMRO.

Another aspect of strengthening surveillance in several countries is to ensure the participation of the private sector in the process; to assist in accomplishing the objective, the Regional Office plans to convene a consultation in 1996 to formulate an implementable plan for the involvement of the private sector in national surveillance systems. The Regional Office also supported the meeting of the Regional Epidemiological Association, which was attended by a significant number of epidemiologists from the Region.

HEALTH SYSTEMS AND SERVICES DEVELOPMENT

3. Health systems and services development

3.1 Organization and management of health systems based on primary health care

Health system research

The Regional Office provided technical support for the development of national health systems research (HSR) programmes in Cyprus and Yemen. An organizational structure for a health systems research unit adapted to local needs was suggested.

A consultation meeting on health systems research was held in Bahrain from 24 to 27 December 1995 to develop and propose a national health research policy and strategy with emphasis on HSR, decide on the most suitable structure for the promotion of health research and on the research priorities in the area of health and discuss and agree on coordination mechanisms for health research.

In the Islamic Republic of Iran, two courses on research methodology were conducted in 1995 by a national temporary adviser: one for mid-level managers and the other for senior experts.

The Director of the Office of Research Policy and Strategy Coordination at WHO headquarters visited Morocco in November 1995 to advise the government on supporting/strengthening the National Institute of Health Systems Research.

Primary health care support

Efforts continued during the year to develop primary health care (PHC) infrastructure and to create an environment conducive to achieving the goal of health for all (HFA) through the PHC approach. In order to meet the quest of countries to ensure sustainable coverage by health interventions, innovative approaches, such as basic minimum needs (BMN) and "accelerating PHC", were introduced and used by some countries of the Region. Being based on a sound scientific foundation, PHC is promoting the quality assurance approach to ensure effectiveness and efficiency of health care systems.

The basic minimum needs approach

Currently, about half of the countries in the Region are embarking on the basic minimum needs approach. The status of BMN programmes varies from one country to another. The overall assessment is that BMN is gaining momentum and is expanding.

An important indicator of the success of the BMN approach is its ability to replicate itself in the country. It is heartening to note that in most countries where

BMN started before 1994, new areas launched BMN activities. Table 3.1 shows this replicability of BMN in many countries, including Somalia (despite the difficult situation in that country).

The BMN concept had spread to more countries (now 12 countries have BMN programmes or use BMN methodology); more districts and villages than before are adopting this approach.

TABLE 3.1 BMN replicability in 1995

Country	Model area	Replicated	Remarks
Afghanistan	Social preparation	—	—
Djibouti	Dorale and Douda villages	—	Operational in 1995
Egypt	Kormella (rural) and Naga El Arab; both in Alexandria	South Metras (Alexandria) South Shobra and Damanhour (Beheira)	—
Iran, Islamic Republic of	Kharaji, Moousi-Abad and Kharestan	In the form of healthy villages	Using BMN as a methodology
Iraq	Social preparation in Babil Governorate	—	TSA in end-1995
Jordan	Swaimeh	12 more villages	—
Morocco	Social preparation in Al Jadida Governorate	—	Started at end-1995
Pakistan	Jabbi village in Nizam Pur in Noshera district	4 more villages	Kasur district in Punjab was selected recently
Somalia	Lower Shebelle	4 more villages in different parts of Somalia	Total of 51 villages at present; despite political unrest BMN programmes are ongoing
Sudan	Al Gezira area		
Syrian Arab Republic			BMN methodology is suggested in accelerating HFA
Tunisia	Awlad Dhaifalla in Ein Drahm district	Henshir El Gallah in Gafsa	Partners are "Women's Union of Tunisia" and "Solidarité Social"
Yemen	Dhi Sufal area in Ibb Governorate		BMN concept is incorporated in the cooperative movement in the country

The following countries are not included in the table as they have not yet embarked any BMN model areas: Bahrain, Cyprus, Kuwait, Lebanon, the Libyan Arab Jamahiriya, Oman, and the United Arab Emirates.

BMN, as an approach, had been used in an adapted form in the Syrian Arab Republic for accelerated and integrated PHC and, in Egypt and the Islamic Republic of Iran, in healthy villages. This is an indication that BMN tools and elements and methodology could be disseminated for use in similar developmental and public health initiatives.

BMN became known to other organizations and is recognized as a comprehensive approach. Several joint programmes were developed during 1995 with the following partners:

Somalia	IFAD (International Fund for Agricultural Development) is supporting a project in Wenla Weyne
Yemen	WHO headquarters (with funds from donors)
Morocco	UNDP is interested in partnership with WHO
Egypt	UNICEF is working with WHO and national authorities in BMN promotion.

At the country level, national partners also varied:

- Ministries of health were always involved in all BMN programmes.
- Other central, national and local authorities, for example governors are also becoming involved, either as the main responsible executing agency or together with MOH (examples are in Egypt, Tunisia and Yemen).
- Communities played a pivotal role in ensuring the success of BMN programmes in most countries.
- NGOs are partners in BMN projects in Egypt, Jordan and Tunisia.

In 1995, teams from Egypt, the Islamic Republic of Iran and Pakistan visited the Noor Al Hussein Foundation (NHF) in Jordan—a nongovernmental organization—which is actively involved in BMN promotion.

- The BMN project in Alexandria, Egypt, received visiting teams from Jordan and Morocco.
- Through a WHO grant, the Noor Al Hussein Foundation is providing technical support to Yemen in developing BMN tools, elements and methods.
- Following a review, a standard BMN survey methodology was widely disseminated for incorporation in urban and rural settings.
- The BMN kit (a reference operational manual introducing the various aspects of BMN and guiding those interested in knowing and applying BMN tools, elements and methodologies as well as concepts) was distributed to all Member States and interested institutions.

In order to meet the numerous requests received from countries that wished to study BMN experiences, the Regional Office supported a BMN training centre in Jordan and provided facilities. This training centre allows for a continuing relationship between regional offices, countries and other training centres. The courses offered by the Centre will be tailored to meet the needs and pace of BMN

development of interested countries. The centre will also facilitate networking among Member States in BMN matters.

An intercountry meeting was held in Amman, Jordan, from 24 to 27 December 1995 to foster further exchange of experience and review possible evaluation tools.

Development of district health systems

The "catchment area"—the area from which patients come to a health unit—concept is being implemented in various forms—in some countries as an operational planning unit to judge equity of distribution of service and accessibility to health care. The catchment areas in Bahrain, Djibouti, Jordan, Kuwait, Oman, Pakistan, Qatar and Yemen, coincide with the administrative divisions of the countries. In other countries (Cyprus, Egypt, the Islamic Republic of Iran, Saudi Arabia, Sudan and the United Arab Emirates), the "catchment population" concept is being implemented using population rather than geography to define catchment.

In some countries, private agencies and NGOs are determining the catchment areas and/or population (Afghanistan, Lebanon, Somalia); in others (Morocco and Yemen) with nomadic populations, there is a different form of service.

Health development structures

Preparations were under way in the Syrian Arab Republic to accelerate PHC in selected districts through local organizations such as the Youth Union.

In Lebanon, local NGOs are important partners in providing health services in the country. In Saudi Arabia, "health friends" are involved in improving the performance of PHC centres.

District health infrastructure and services

The development of the PHC infrastructure at the district level was provided using different initiatives. National training activities for the development of human resources for PHC were decentralized in Afghanistan and Pakistan.

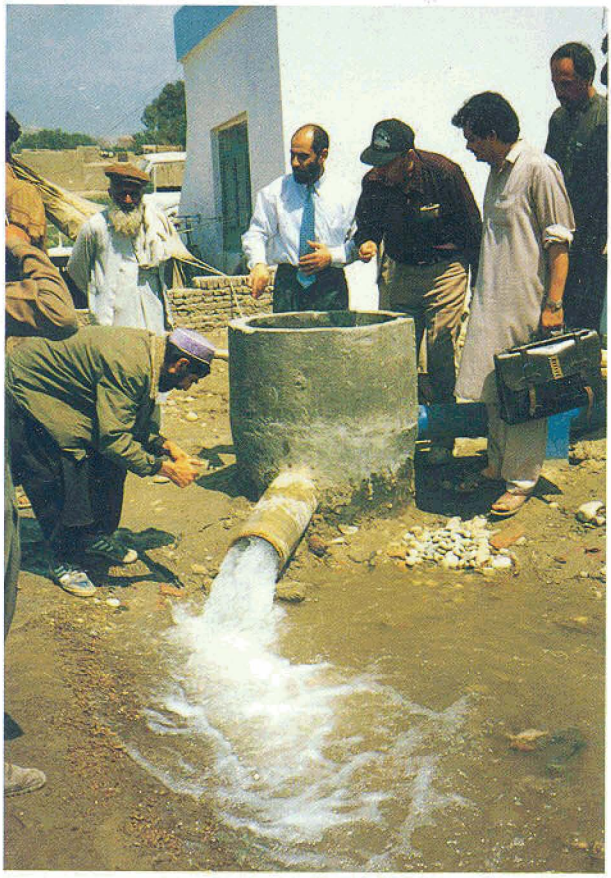
Integration of PHC elements and acceleration of HFA were implemented in the Islamic Republic of Iran and launched recently in Jordan, the Syrian Arab Republic and Yemen. Strengthening of capabilities at the district level of PHC managers continued in the Libyan Arab Jamahiriya, Oman, Tunisia and Yemen.

Integrating the training of PHC workers at the district level was planned in Afghanistan, Iraq and Somalia. In Iraq, health centre reform is taking place to introduce decentralization and self-reliance.

A handbook for PHC workers at the health centre level was prepared in Lebanon. This is a quick reference text, covering the concept of PHC, PHC programmes at the health centre level, the job descriptions of PHC directors at governorate and *qada* (district) levels, as well as the health centre physician, dentist, midwife, nurse health inspector and the officer in charge of the health centre. This manual, developed with assistance from WHO, is an important step towards implementing the PHC strategy.

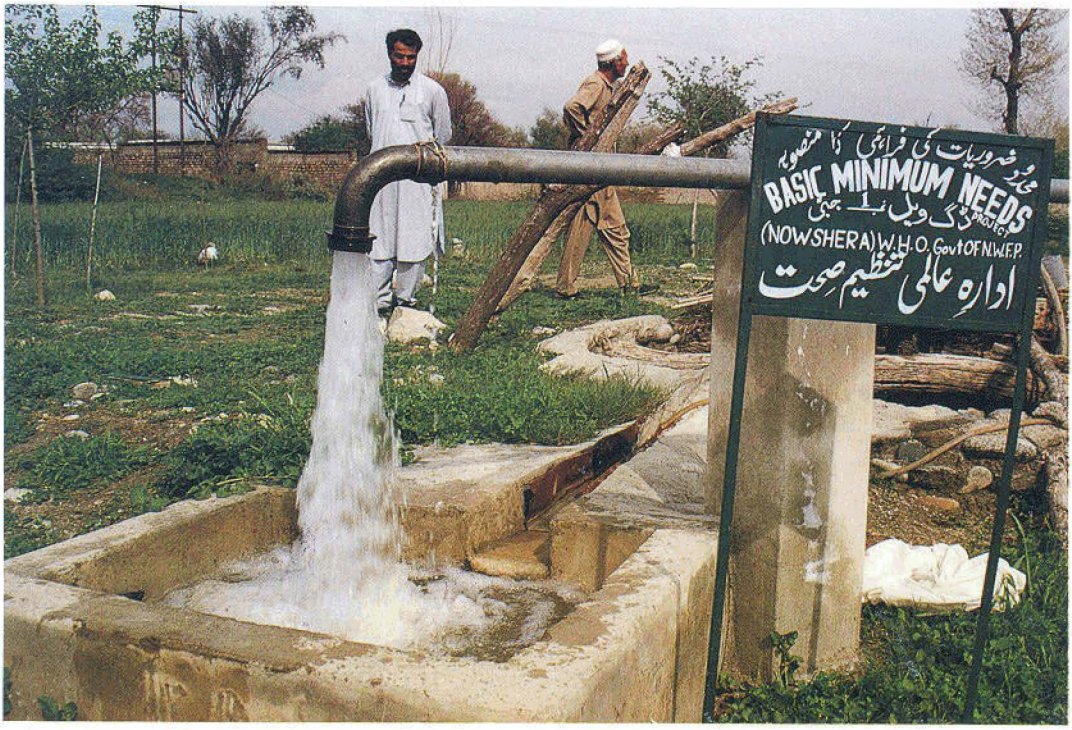
The Regional Director and the Mayor of Kandahar inaugurate the newly refurbished Department of Infectious Diseases of Mirwais Nika Hospital, Kandahar, Afghanistan, December 1995.

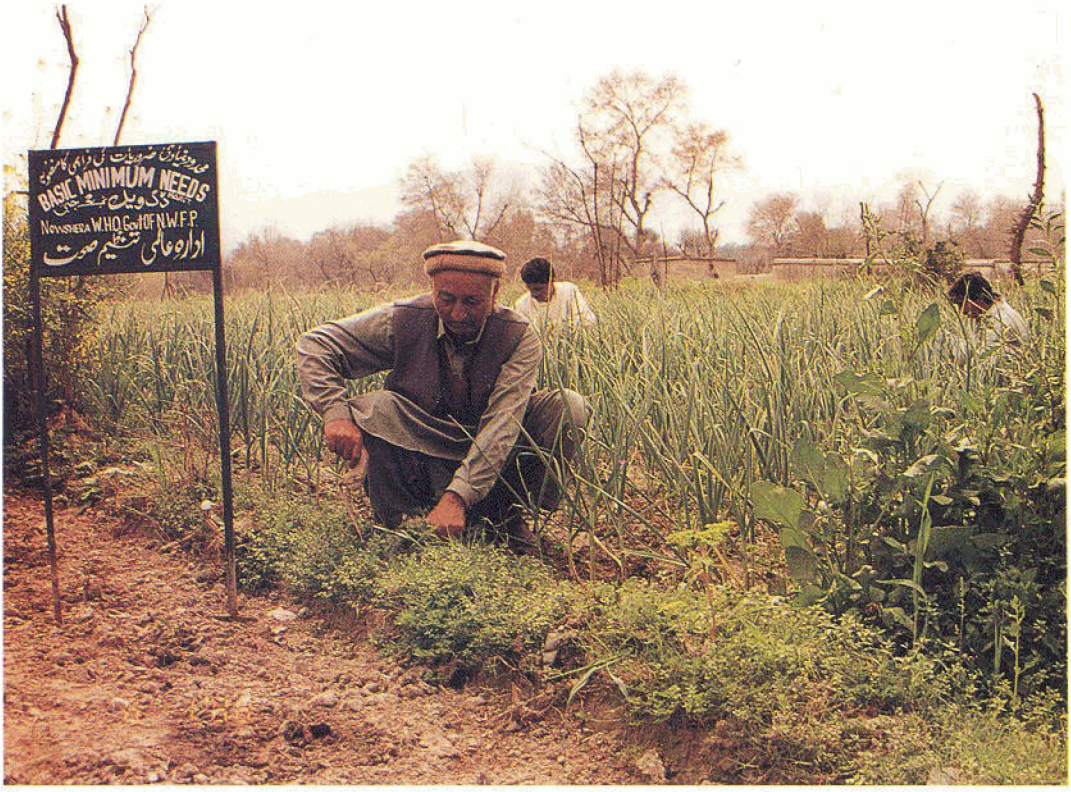
Professor Burhanuddin Rabbani, President of Afghanistan (right), receives the WHO Deputy Regional Director during an official visit to Afghanistan, and welcomes Dr Ashour Gebreel, WHO Representative, (below) in the presence of Dr Barakzai, Minister of Health, in April 1996.



Basic minimum needs programmes

Basic minimum needs programmes sustain health development. Support for villagers in rural Pakistan in reclaiming arid lands is one way of improving local health.





The basic minimum needs programmes also support community schemes to improve nutrition and animal health which, in turn, lead to better opportunities for income generation.

Referral support to PHC

The district health level, in order to function effectively, must have an efficient and effective referral system. The experience of selected countries in the referral system of PHC was reviewed at an intercountry consultative meeting held in Lahore, Pakistan, from 9 to 13 April 1995.

The functional components of the referral system (community, physical infrastructure, health care providers, communication, management information system, resources and finance, and administration and organization) should be analyzed in the context of community involvement, technology, research and equity.

The experience of some countries in referral support to PHC was reviewed in relation to regulations, technical guidelines, training, and research. It was found that the referral system is not always congruent to the expanding levels of care (in, for example, Jordan, Lebanon, Pakistan and Yemen). In Lebanon, the cost of referral cases consumed a substantial amount of the health ministry's budget. In 1993, a study in Kuwait showed that the cost of a specialist visit was Kuwaiti dinars (KD) 5–8, compared to the cost of an ambulatory care visit of KD 2.62. This meant that those bypassing the PHC system represented a considerable expense to the national health care system. Some countries (for example Egypt and Saudi Arabia) promulgated policies and/or legislation regarding referral support to PHC.

With multiple providers of health care, including the private sector, regulations and guidance should be provided to ensure vertical and horizontal referral. In Saudi Arabia, a plan for organizing referral system, adopted in 1988, yielded rational and increasing utilization of PHC services.

In Oman, there is an extensive well-equipped network of subcentres, health centres, hospitals and teaching institutions coupled with the decentralized *wilayat* health system. Standard referral forms have been developed. However, there is excessive demand for referral to hospitals. In other words, achieving high accessibility to health care in a short period in Oman has led, at the same time, to a high demand for secondary care.

Research on referral support to PHC

Several studies on referral support to PHC were undertaken. In Jordan, a joint teaching-cum-research project in Al Sareeh Comprehensive Health Centre (ACHC) was developed by the Ministry of Health and the Department of Community Medicine at the Faculty of Medicine of the University of Science and Technology in Irbid. The ACHC was developed as a referral centre covering a catchment population of 40 000 and is supporting three PHC centres. The improved basic and specialized services in ACHC are strengthening the confidence of the community in the PHC system and a rational use of secondary care is being seen. A comprehensive document on the findings obtained and lessons learned from this experience will be prepared. The partnership of the University and Ministry of Health in this process is worth mentioning.

The hierarchy of the health care delivery system in Pakistan has six tiers, with inadequate harmony of referral between the levels. A small-scale study undertaken in two hospitals revealed that 25-28% of the patients came from outside their expected catchment areas. It was considered that the health care of 44-77% of those attending the two hospitals could have been dealt with adequately at lower levels.

In Oman, it was found that only 41% of hospital visits required referral to specialty clinics and the rest were general practice and emergency visits. It was concluded that a more efficient referral system should remedy the over-utilization of the open system of PHC and save up to 20% of health resources. The optimum target is to reduce the number of visits from 7 to 5 per capita per year.

Primary health care review and studies

A three-year research and development project to achieve health for all by the year 2000 through the district health system was launched in Brujen District in the Islamic Republic of Iran, where four cities or city zones and 44 villages were benefiting from this project. The project consisted of 14 elements pertaining to PHC and HFA covering a wide range of areas, such as training of female health volunteers in order to involve them more, improving administration and logistics, and economics of health. The project also covered activities related to the integration of some programmes, such as tuberculosis, brucellosis, mental health, oral health and occupational health. In addition to these activities, healthy cities and sanitation in the villages were also incorporated in the project, making use of the experience of the Islamic Republic of Iran in these two programmes. In order to meet other priority activities in the Brujen district, the project included elements to increase public awareness for emergency preparedness and response, improve drug supply and nutrition as well as provide education to married men (to enlist their support to family welfare programmes).

The implementation of this project was carried out jointly by medical universities and other related sectors operating at the district level.

The results of the study were being analyzed and a report will be produced.

Other promotional activities of PHC

Home health care. A meeting on home health care was held in Cairo in October 1995 to discuss the subject in the context of cultural heritage of the Region. The meeting highlighted the different issues pertaining to home health care, and also suggested some operational activities and directions for action to promote and operate home health care as one of the strategies to achieve HFA. A document was being prepared on the subject.

Study visits on PHC. Several study tours, involving 57 fellows, were arranged to the Islamic Republic of Iran to observe the PHC system in operation in that country.

PHC experience documentation. The Regional Office, in collaboration with UNICEF, supported the Ministry of Health in Oman in documenting its experiences

and lessons learned from PHC. This publication will be used by the Ministry of Health officials at different levels, teaching institutions and international organizations, to research and improve health care in the country.

Support to secondary and tertiary care

Several countries focused on the strengthening of secondary health care in 1995. Orientation of hospital staff to PHC management was imparted in Bahrain, the Libyan Arab Jamahiriya, Morocco, Tunisia and Yemen. It was expected that the establishment of a new unit for Health Management Support in the Regional Office would strengthen the technical support provided by WHO to Member States in the area of secondary and tertiary care.

Appropriate technology and its maintenance

Morocco, the Syrian Arab Republic and Yemen launched several organizational initiatives at central and governorate levels to improve logistics of health services. The three countries also embarked on decentralizing the repair and maintenance of medical equipment to the governorate level.

Central workshops, database and communications were strengthened in Morocco, Oman and the Syrian Arab Republic to improve the management of medical equipment. Technical cooperation among countries of the Region started between Bahrain, the Syrian Arab Republic and Yemen.

Standard specifications and total quality management of medical equipment were reviewed in the Syrian Arab Republic, in collaboration with the various related medical, industrial, teaching, legislative, trading and planning institutions.

Five manuals on medical equipment, such as ECG, anaesthesia, X-ray, were produced as reference guidelines for physicians and technicians of hospitals.

Preventive maintenance plans were implemented in Egypt and are planned for Iraq.

Fellowships were awarded to train technicians and managers of repair and maintenance workshops. The Regional Office promoted the use of centres of excellence in the Region (Bahrain, Cyprus and the Syrian Arab Republic) for training and provision of technical expertise.

Support was provided to Egypt, Jordan and Qatar in strengthening their medical emergency services through formulation of national plans, development of health personnel, and provision of essential supplies and equipment for medical emergency services.

3.2 Human resources for health

Human resources policy formulation, planning and management

The year 1995 marked the intensification of activities in the area of human resources policy and management in response to changing priorities within the

Region. Copies of the *Manual for human resources policy analysis,* developed by headquarters and tested in two countries in the Region, were distributed to all countries. Countries were urged to start activities aimed at the formulation of national plans for human resources policy and management. A number of activities including national meetings, workshops and consultation on the subject, are scheduled for the first half of 1996.

In response to country needs in the area of continuing education of health personnel, a task force met in the Regional Office from 24 to 27 July 1995, to review and follow up on the progress since the first regional meeting on continuing education held in 1992, and to develop the outline of a plan of action for strengthening continuing education activities in the Region. The task force developed an outline of a "national system of continuing education for health personnel" for use by Member States. During 1996, the Regional Office will extend support to those countries that wish to develop their national systems for continuing education.

The Regional Office continued to emphasize the need to develop postgraduate training in public health and other specialties, particularly in countries that lack the resources for such activities. By the end of 1995, the number of WHO-supported postgraduate training programmes rose to 13—three each in Sudan and the Syrian Arab Republic, two in Jordan and five in Yemen. Some of the programmes were subjected to intensive evaluation by WHO consultants for their content and impact on the health care system, and the results of the evaluation process was, on the whole, positive. During 1995, the Regional Office completed the development of a training manual for a postgraduate training programme in community medicine. The development of similar training manuals for other specialties is planned for the 1996-97 biennium.

WHO continued to support activities aimed at the development of a close relationship between medical education and the health care delivery system. It is realized that both systems are interdependent and could benefit technically and financially from a close relationship. In this area, the Regional Office supported and actively participated in the Eastern Mediterranean Regional Conference on Medical Education held in Al Ain, United Arab Emirates, from 29 January to 1 February 1995. As a sequel to this meeting and in response to its main recommendation, a high level Ministerial Consultation on Medical Education and Health Services was organized by EMRO in Cairo from 4 to 6 December 1995. The consultation made important recommendations aiming at strengthening and formalizing the relationship between the two important sectors of medical education and health services. The Regional Office is planning a follow-up meeting during 1996 to monitor developments in the implementation of the recommendations of the consultation and will provide technical support to national initiatives in this area.

General fellowships

The number of applications for fellowships received increased to 972 in 1995, as against 729 in 1994 and 655 in 1993.

There was a sharp increase in the number of fellowships awarded in 1995 (734), compared to 1994 (421); the increase was evident in certain countries—particularly Afghanistan, Bahrain, Morocco and the Syrian Arab Republic (see Table 3.2).

The decline in the average duration of fellowships continued in 1995, when it was 2.94 months, against 3.43 in 1994 and 3.93 in 1993. In 1995, 72.5% of all fellowships awarded were of less than 2 months' duration (Figure 3.1).

TABLE 3.2 Fellowships awarded during 1994 and 1995

Country	1994	1995
Afghanistan	8	30
Bahrain	4	27
Cyprus	17	12
Djibouti	8	12
Egypt	62	95
Iran, Islamic Republic of	72	89
Iraq	18	29
Jordan	12	34
Kuwait	4	2
Lebanon	7	7
Libyan Arab Jamahiriya	6	9
Morocco	23	57
Oman	4	11
Palestine	0	29
Pakistan	37	18
Qatar	0	3
Saudi Arabia	7	23
Somalia	0	2
Sudan	15	34
Syrian Arab Republic	53	117
Tunisia	41	54
United Arab Emirates	2	5
Yemen	21	35
Total	421	734

Placement within the Region also continued to increase. In 1995, 60% of the fellowships were placed for training in countries within the Region (Figure 3.2). Internal (in-country) fellowships decreased slightly (from 13.3% in 1994 to 11.9% in 1995).

FIGURE 3.1 Distribution of fellowships by duration of study, 1994–95

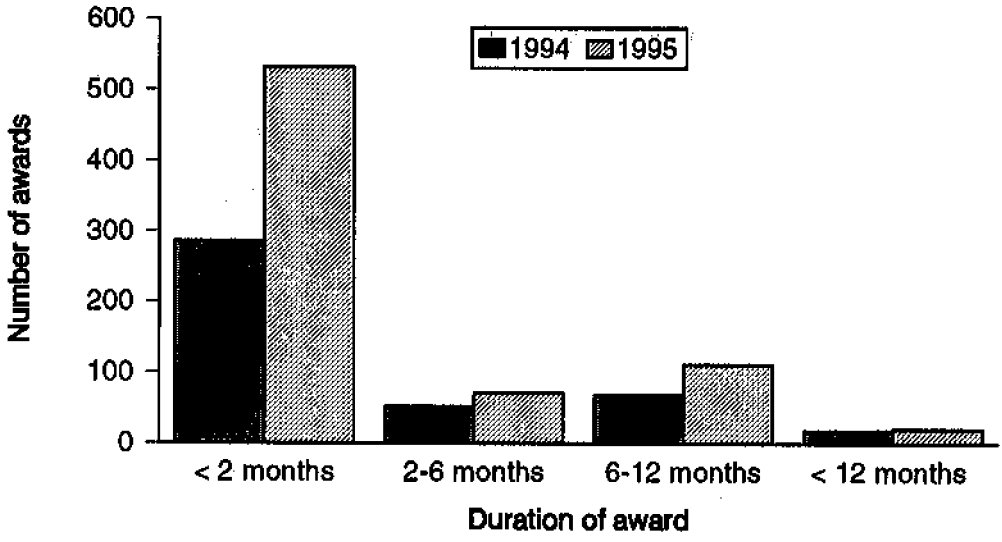


FIGURE 3.2 Distribution of fellowships by location, 1993–95

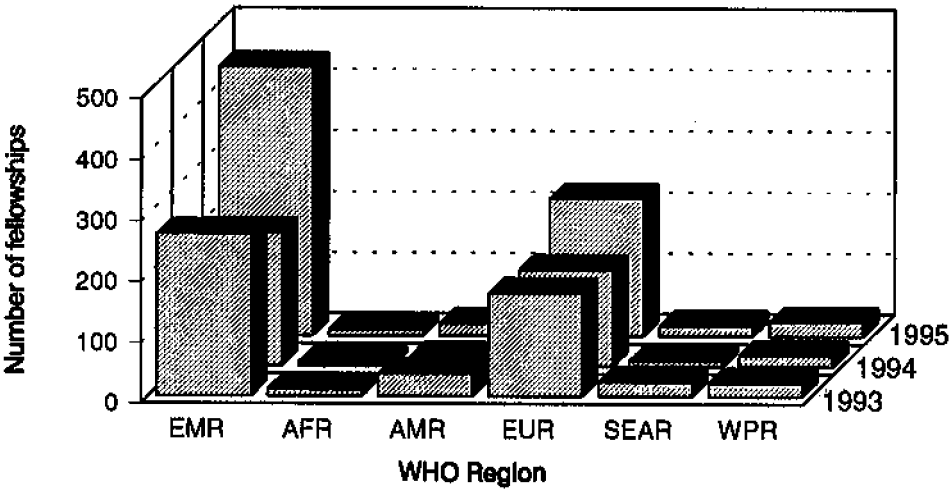
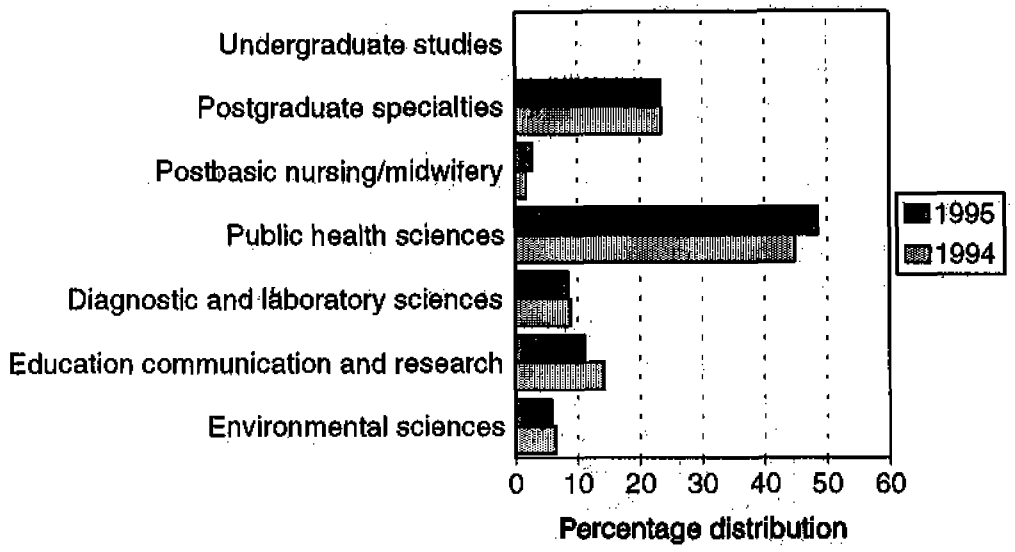


FIGURE 3.3 Distribution of fellowships by subject of study, 1994 and 1995



The distribution of fellowships in 1995, by area of study, showed little change from that in previous years (Figure 3.3).

The twelfth national fellowships officers meeting held in Amman, Jordan, from 13 to 16 November 1995, brought together 19 participants from the Region, as well as representatives from WHO headquarters, the Department of Health of the United Kingdom, and the WHO Regional Offices for Europe and, for the first time, the Americas.

A number of important issues related to the administration and evaluation of the fellowships programme were discussed. Some of the recommendations arising out of the meeting were:

- The need to link fellowships, through a careful analysis, with management and development of national human resources policies and strategies;
- To give preference to national training activities, which are cost-effective in training a large number of fellows, they build up the capabilities of national institutions, and they are in line with WHO policies and country priorities;
- To propose that four weeks should be the minimum period for a fellowship;
- To encourage development of training courses in national languages;
- To increase fellowship opportunities for nurses and midwives;
- To have English-language tests tailored to meet the needs of the WHO regional fellowships programme.

Development of medical sciences education

Educational development activities

Efforts were directed towards promoting collaboration among educational development centres (EDCs) for improving health personnel education and health care delivery systems. The Pakistan College of Physicians and Surgeons in Karachi, and the Medical School of Gezira, Wad Medani, Sudan, submitted proposals to WHO for their educational development centres being considered for designation as WHO collaborating centres.

The following three intercountry workshops held in 1995 brought together participants from the countries of the Region during which discussions and recommendations were focused on priority areas.

- Meeting of directors and managers of the educational development centres, Tunis, 22-25 May 1995, to promote the role of the EDCs, within the country and within the EMR, and to support the role of WHO collaborating centres in areas related to educational development of human resources;
- Group meeting on the application of the manual entitled *Workload indicators of staffing needs*, held in Cairo, Egypt, 5-7 June 1995;
- Workshop on the application and use of a computer-based HRH supply and requirements projection models for planners of human resources for health and policy-makers, held in Amman, Jordan, 1-8 October 1995.

Consultants in areas of curriculum development, teachers training, research methodology, construction of examination tools and evaluation, community-oriented medical education and problem-based learning were assigned to the Islamic Republic of Iran, Morocco, Pakistan, Qatar, Saudi Arabia and the Syrian Arab Republic.

The Educational Development Centre of Shaheed Beheshti Medical School in Teheran, the Islamic Republic of Iran, launched an M.Sc. programme in health personnel education. Short-term consultants were provided to deliver lectures.

In the field of promoting the use of national languages in medical education:

- Arabic reference books and textbooks relevant to undergraduate medical students were procured from different publishers in Arab countries and distributed to medical faculties with a view to promoting awareness about the availability of such publications and their utilization in medical education;
- the Regional Office supported the Arab Centre for Medical Literature (ACML), Kuwait, to hold a meeting in Kuwait from 8 to 10 April 1996 on Arabicization of Medical Education. The support included travel costs for 50 participants from Arab countries and 50 packages of WHO publications to be distributed during the meeting; and
- Arabic textbooks on nutrition and on community medicine are nearing completion. It is hoped that both the publications will be ready for distribution in 1996. The Arabic translation of Guyton's *Physiology* will be also ready in 1996.

An English-Arabic teaching/learning material database program was completed and distributed to countries. This program enables educational institutions to develop and exchange databases of teaching/learning materials relevant to health personnel education.

Development of nursing and paramedical resources

The response to the resolution of the Forty-first Session of the Regional Committee (EM/RC41/R.10) on the need for national planning for nursing and midwifery development in the Region was varied. A number of countries initiated action to establish and strengthen nursing units in ministries of health; some took steps to develop national plans of action and many to improve basic nursing education. Only two countries initiated action to enact legislation to control the quality of nursing and midwifery services. It should be noted that only three countries have nursing and midwifery legislation. This is an area that deserves considerable attention from Member States if the quality of nursing is to be improved.

In an effort to provide Member States with guidelines on nursing education, the third meeting of the Regional Advisory Panel of Nursing was convened in Tunis, Tunisia, during September 1995 to propose regional standards and future directions for basic and post-basic nursing education. The members of the Panel stressed the need for 12 years of education prior to entry into nursing schools. They also focused on ways and means for streamlining the number of nursing education programmes that are responsible for producing various categories of nursing personnel. The guidelines included minimum standards required in relation to the numbers and qualifications of teaching staff, educational resources, the curriculum and teaching/learning environment and evaluation. Model prototype curricula were also prepared for consideration by those responsible and involved in nursing education in Member States.

Several countries were reviewing the quality of their nursing services and were developing systems of quality improvement. During 1995, technical assistance was provided to Kuwait and the United Arab Emirates for the review and implementation of their quality assurance systems. The study on nursing, midwifery and paramedical personnel, initiated during the previous biennium in Lebanon, was completed. The data related to the practice of nursing pointed very clearly to the need to develop quality improvement programmes for nursing practice—a situation frequently encountered in many other countries.

In Bahrain, a situation analysis was undertaken to explore the possibility of starting a post-basic nursing education programme in occupational health nursing. While a large number of countries did have occupational health programmes, with the increasing interest shown by many countries in productivity, the role of occupational health nurses in workers' health promotion and prevention becomes

crucial. Yet this area has not been receiving sufficient consideration, and nurses are usually sent outside the Region for training in occupational health nursing.

In Egypt, the School of Nursing of the National Institute of Cancer initiated an one-year post-basic programme in cancer nursing. The programme will provide the country (and eventually the Region) with well-qualified nurses who could contribute to cancer control programmes. The curriculum, which was developed with technical assistance from the Regional Office, focuses on prevention, treatment/management, care, pain relief and rehabilitation of cancer patients and their families.

In an initiative to develop a series of nursing textbooks in Arabic, the Regional Office set up three working groups to develop outlines for textbooks on "Introduction to Nursing", "Community Nursing" and "Psychiatric Nursing".

Paramedical personnel resource development

In response to requests from some countries, the Regional Office took the initiative to strengthen training as well as performance of various categories of health care providers. Member States were asked to nominate focal points for establishing a viable network of individuals who would participate in implementing and evaluating the various aspects of this initiative. Three targets were identified for the coming biennium—one dealing with establishing a database about paramedical personnel, the second focusing on basic education and training and the third dealing with improving the performance and management of these categories.

Activities were also being undertaken to collect relevant information about various categories in order to identify the main issues and problems that needed to be addressed in the preparation of a regional strategy and a plan of action.

3.3 Essential drugs

Ensuring availability and rational use of drugs

During 1995, efforts continued to achieve the targets of the Eighth General Programme of Work. In this regard, the Regional Office assisted Member States in strengthening their commitment and capacities for implementing their national drug policies (NDPs) in an effort to make the available essential drugs safe, effective, of good quality and accessible at affordable cost. The overall aim is to improve the accessibility of health care services at all levels of the national health care system. The Action Programme on Essential Drugs at WHO headquarters collaborated with the Regional Office in attracting extrabudgetary support to programmes in eight countries in the Region. Similarly, the Drug Management and Policies Unit at headquarters continued its collaborative support to the Regional Office in its activities, through extrabudgetary funds, in the installation the software modules developed.

The main areas that received priority are described below.

National drug policy and master plan development. Support was provided to countries in the development of comprehensive master plans for the national pharmaceutical sectors to facilitate the implementation of NDP activities. Moreover, this plan provides a framework for policy-makers and administrators to follow up on the pharmaceutical policies within their national health policies.

Most countries developed their NDPs and several others (Djibouti, Jordan, Lebanon, Palestine) committed themselves to developing their drug policies.

A consultative meeting on operational research as a component of NDP was held in Teheran, the Islamic Republic of Iran, in November 1995.

Computerization of national pharmaceutical systems. In line with the global revised drug strategy, Cyprus, Morocco, the Syrian Arab Republic and Tunisia, in collaboration with the Division of Drug Management and Policies at headquarters, were actively involved in the development of applied software packages for drug registration, drug quality control, and drug management and inventory control.

During 1995, the WHO Model Software for Drug Registration was installed in Bahrain, Egypt, Lebanon, Morocco and Yemen. The Module for Drug Inventory Control was finalized and would be used in Lebanon, Morocco and Yemen to strengthen the administration of central medical stores. The Module for Drug Quality Control was extensively tested in collaboration with Cyprus and the Syrian Arab Republic.

National list of essential drugs. The basic component of an NDP is the national list of essential drugs, which should be reviewed at regular intervals. Most countries have developed their national lists of essential drugs, which were selected based on pharmacological, therapeutic and economic principles. During 1995, Afghanistan and Egypt developed multilevel lists, while Tunisia and Yemen updated their existing lists, and Djibouti was in the process of finalizing its list.

Drug quantification. Member States were encouraged to implement an appropriate methodology for drug supply/drug quantification for the public sector.

Sudan continued to conduct refresher courses for drug supply officers and storekeepers. WHO staff in Somalia were planning training courses in drug supply management based on their particular situation. A basic list of drug supplies was prepared to cover PHC. The distribution of donated drugs was coordinated in Somalia by WHO staff. WHO activities, especially in drug supplies and stores management, were supported by active involvement of international NGOs. Afghanistan and Lebanon received additional support to build up their national capacities in drug procurement, storage and distribution. Training in pharmaceutical management was provided in Djibouti, Pakistan and Yemen.

Promotion of the concept of rational use of drugs. The regional Essential Drugs Programme supported the inclusion of the essential drugs concept in the curricula of schools of medicine and pharmacy and in paramedical training

institutions. Member States were encouraged to update their curricula of schools of medicine and pharmacy by introducing clinical pharmacology and clinical pharmacy.

Afghanistan, Egypt, Iraq, Pakistan, Saudi Arabia, Sudan and Tunisia organized in-service training courses and workshops on improving prescribing and dispensing practices for professional and mid-level medical staff. Nongovernmental organizations in Afghanistan, Pakistan, Sudan and Somalia supported essential drugs activities mainly by conducting training courses on rational use of drugs.

An intercountry university workshop on introduction of essential drugs and of rational prescribing concepts into university curricula was held in Jeddah, Saudi Arabia, in March 1995. Participants from the United Arab Emirates also attended this workshop.

Support was provided to Afghanistan, Egypt, the Islamic Republic of Iran, Lebanon, Pakistan and Sudan to enable them to participate in a training course on problem-based teaching of pharmacotherapy developed for schools of medicine, held in Groningen (The Netherlands) in August 1995.

Establishment of national drug information systems. Support was provided to countries for the establishment of national drug information centres to promote the rational use of drugs and the distribution of reliable, unbiased drug information.

WHO provided Member States with various publications on drug information, such as the *Eastern Mediterranean Region Drugs Digest* (published by EMRO), *WHO Pharmaceutical Newsletter*, *WHO Drugs Information* and the *Essential Drugs Monitor*.

Member States were encouraged to update and publish regularly their national drug formularies. Afghanistan was drafting its national formulary.

Information, education and communication. All Member States of the Region have the major problem of poor communication between health professionals and patients and irrational prescribing and dispensing at all levels of health care as well as self-medication. Sudan was actively involved in information, education and communication (IEC) activities for schoolchildren and adults to increase public awareness of drug use. Tunisia was in the process of developing IEC activities for the general public.

Promotion of regional self-sufficiency in essential drugs and vaccines

The availability of drugs could be increased by achieving self-reliance in the manufacture of drugs. During 1995, Iraq received extensive support in rehabilitating its local drug production capability by obtaining necessary supplies and raw materials. Training was provided to Egypt in pharmaceutical production.

Efforts to strengthen production of high quality vaccines in the Region continued throughout 1995, particularly in Egypt, the Islamic Republic of Iran and Pakistan, whose national authorities are the main vaccine producers in the Region.

In Egypt, a workshop was held in March 1995 to review all the studies carried out for almost three years on various aspects of vaccine production, quality assurance and quality control. The workshop made several recommendations, and WHO, UNICEF and USAID are closely following the implementation of these recommendations with the government of Egypt.

Extensive efforts continue in Pakistan in developing quality assurance of the vaccine production. In addition, WHO has provided supplies and equipment worth nearly US$500 000 to enhance national capabilities to produce poliomyelitis vaccine. Similar support was extended to the Islamic Republic of Iran, in particular equipment to enhance DPT vaccine production.

EMRO continues to emphasize the need for independent national quality control authorities in all countries of the Region, in particular in those producing vaccines.

3.4 Quality of care and health technology

Ensuring quality, safety and efficacy of drugs and biologicals

National quality assurance systems. Sustaining the mechanisms of quality assurance is an integral part of an NDP, and emphasis was placed on activities such as updating drug legislation and regulations, implementing good manufacturing practices (GMP), as well as good laboratory practices (GLP), good storage practices (GSP), strengthening national quality control and drug inspection systems.

Since 1994, UNDP, in collaboration with WHO, has been implementing a project on developing the national quality assurance system of the Syrian Arab Republic.

Establishment of a legal framework for GMP. Lebanon, Sudan and Yemen updated their drug legislation and regulations, as well as good manufacturing practices rules.

In line with the global initiative to combat the import, export and smuggling of spurious, counterfeited or substandard pharmaceutical preparations, many countries in the Region were in the process of implementing guidelines related to the WHO Certification Scheme on the Quality of Pharmaceutical Products Moving in International Commerce.

Ensuring drug quality. Regulatory enforcement is dependent on the existence of an effective pharmaceutical inspectorate system and an adequate quality control laboratory. During 1995, Jordan, Pakistan and Sudan conducted national seminars for drug inspectors on drug quality assurance issues in the field of drug manufacturing. Fellowships were provided to strengthen drug inspection to Egypt, Jordan, the Libyan Arab Jamahiriya and Palestine.

Quality control of drugs. A number of countries received technical assistance, material support or training in various aspects of drug quality control. Lebanon was assisted in the preparation of a comprehensive plan for establishing a national drug quality control laboratory. Tunisia improved its drug control capacity by moving to a newly constructed building. A review was made about the quality assurance system

in the Libyan Arab Jamahiriya. Sudan was rebuilding its capacity in drug quality control. Yemen received additional support to complete the establishment of various sections of the national drug quality control laboratory. Egypt, the Islamic Republic of Iran, Kuwait, Saudi Arabia, Sudan and Tunisia received training or technical assistance in conducting bioavailability/bioequivalence or stability studies.

Quality control of biologicals. Egypt, the Islamic Republic of Iran, Jordan, Pakistan and Tunisia were in the process of improving and maintaining adequate facilities for vaccine production and quality control. Technical assistance, training or material support was provided.

A consultative meeting on quality assurance of vaccines involving vaccine production countries was held in Pakistan in July 1995.

Promotion of appropriate traditional medicine

Traditional medicine

During 1995, the regional Traditional Medicine Programme developed guidelines for the formulation of national policies for traditional herbal medicines. A format was developed for drafting monographs on traditional herbal medicines included in the regional core list of medicinal plants.

Member States were encouraged to develop their national quality assurance systems for the medicinal plants industries in their countries.

Egypt and Pakistan were provided support in their operational research studies on the use of herbal remedies.

A consultative meeting on the rational use of traditional medicines was held in Cairo, Egypt, in April 1995.

Development of health care quality assurance system

Quality assurance of PHC received special attention during 1995. A working paper was presented to the nineteenth meeting of the Regional Consultative Committee held in the Regional Office on 25-26 May 1995, and the subject of quality assurance of health care was also on the agenda of the Forty-second Session of the Regional Committee held in Cairo in October 1995. It is gratifying to note that quality assurance was included in the proposed programmes of collaboration for 1996-97 biennium by many countries.

Table 3.3 summarizes the situation of various activities in relation to quality promotion, monitoring and improvement in the Region.

The promotion phase related to quality assurance of PHC, as well as the level of action undertaken, varied in the Region. This is also true as regards the monitoring and improvement phases of PHC quality. It is noted that in promoting PHC quality, most countries are starting with limited pilot projects as vertical programmes (Egypt, the Islamic Republic of Iran, Jordan, Kuwait, Morocco, Qatar and the United Arab Emirates).

TABLE 3.3 Quality of PHC—summary of experiences in the Region

Country	Quality promotion	Quality monitoring	Quality improvement	JPRM 1996-97 accounts for QA/PHC
Afghanistan	N/A	N/A	N/A	—
Bahrain	Pilot project		Diabetic care services	—
Cyprus	National plan	Ministry of Health		Yes
Djibouti	N/A	N/A	N/A	
Egypt	Ministry of Health, nongovernmental organizations, NHIS	Ministry of Health	Pilot hospitals	Yes
Iran, Islamic Republic of	Lot quality assurance	District level	West Azerbaijan project	—
Iraq	N/A	N/A	N/A	Yes
Jordan	National	Ministry of Health	Selected hospitals in governorates	—
Kuwait	National	Ministry of Health	Selected health facilities	Yes
Lebanon	Private		Selected hospitals	—
Libyan Arab Jamahiriya	N/A	N/A	N/A	Yes
Morocco	Public Health Institute	Ministry of Health	Selected facilities	—
Oman	N/A	N/A	N/A	Yes
Pakistan	N/A	N/A	N/A	Yes
Palestine	National	Ministry of Health	Selected facilities	Yes
Qatar	National	Supervision	Selected facilities	Yes
Saudi Arabia	National	Supervision guidelines accreditation of some facilities	All PHC centres and selected hospitals	Yes
Somalia	N/A	N/A	N/A	—
Sudan	N/A	N/A	N/A	Yes
Syrian Arab Republic	N/A	N/A	N/A	
Tunisia	N/A	N/A	N/A	Yes
United Arab Emirates	National	Ministry of Health	Hospitals	Yes
Yemen	N/A	N/A	N/A	—

In Saudi Arabia, the programme was implemented in all PHC centres with the PHC Department in charge of all promotive activities in the Kingdom. In addition to this, several hospitals were involved in promoting their quality services through an accreditation system.

In Cyprus, PHC quality has a cost-effective rationale through a proposed national health insurance scheme yet to be developed.

In Bahrain, the pilot project on diabetes acts as a spearhead in the introduction of quality assurance at the health centre level.

In Egypt, the Ministry of Health was embarking on a cost-recovery project in selected hospitals that should provide lessons, methodologies and tools to be used for the whole health care system. It is noted that the National Health Insurance Scheme was studying methodologies to promote, monitor and improve quality of care. Recently, the Egyptian Society for Quality Assurance, an NGO, was established to promote quality of health care in the country.

In the Islamic Republic of Iran, the concept of Lot Quality Assurance, which is based on the statistical phenomenon of binomial distribution, was being piloted in the province of Western Azerbaijan as a means of monitoring and improving the quality of service.

In Jordan, an extensive hierarchy reaching from the centre, the Ministry of Health, through the governorate level to the district was developed in selected parts of the country. This is linked with pilot projects in some district hospitals.

In Kuwait, Palestine, Qatar and the United Arab Emirates, some district hospitals are already using quality assurance techniques and methodologies.

In Lebanon, a few private hospitals were using quality assurance and, through it, mediating with the Ministry of Health for a catchment area capitation scheme. In such a scheme, each resident of a catchment area pays a mandatory flat fee and receives a full range of health care in return. This scheme has some similarity to "health management organization" experience.

Health laboratory technology support

WHO continued to support countries of the Region in establishing and upgrading their national networks of health laboratory services in a harmonious and integrated manner, with a proper referral system and with emphasis on the peripheral level in support of primary health care. Continuous improvement of health laboratory services is one of the Regional Office's top priorities, as it is a way of meeting the requirements of providing support to medical care, epidemiological surveillance and environmental monitoring.

A regional plan of action was formulated by the directors of health laboratory services in the Region at a meeting in Rabat, Morocco, in November 1988, and amendments were made to the plan at a further meeting in Nicosia, Cyprus, in June 1994. Following these meetings, countries in the Region continued to improve

their microbiological facilities in health laboratory networks and to establish basic virology units within their laboratory departments. The aim is to strengthen the role of health laboratories in disease prevention and control by ensuring disease detection and early identification of epidemics. Health laboratory facilities need to be improved in order to offer services to the Vaccine Preventable Diseases Control and Immunization Programme (VPI). In order to help improve the microbiological services and enhance the establishment of an appropriate referral system, the Regional Office prepared technical guidelines on the collection and transportation of microbiological specimens.

Difficulties were encountered in some countries that were either affected by prolonged United Nations sanctions or civil war.

The upgrading of health laboratory services continued to be based on the regional plan of action for health laboratory improvement and establishment of quality assurance programmes. Emphasis was laid on continuing education programmes and supervision, which are essential to maintain competency and acquire new skills as technology develops. The Regional Office awarded fellowships covering different disciplines of health laboratory sciences and supported national and intercountry training courses and workshops. Attention was also paid to the importance of interaction between "performers" of laboratory testing and "users" of laboratory results, as well as proper utilization and cost-consciousness, with improved test-requisitioning behaviour. The role of medical schools was considered and emphasized during the visits of WHO staff to countries and at intercountry workshops.

In order to enhance the developmental process, methods were standardized and catalogues of test availability compiled, or were being compiled in many countries, during 1995. Diagnostic manuals in national languages, especially for peripheral and intermediate levels, were prepared in a few countries. Interruption of services due to lack of reagents is a problem for many countries, and to overcome the problem, the Regional Office continued to promote and support the attempts by nine countries in the Region to produce reagents locally, especially simple reagents. Assistance was provided to a few others to procure reagents.

Quality assurance continued to be a top priority. Remarkable national efforts were and are being made to establish and upgrade quality assurance programmes in 16 countries in the Region. Ten countries were participating in the International External Quality Assessment Scheme of different disciplines of laboratory medicine. The Regional Office continued to support these national efforts by all means, including the involvement of international scientific organizations, local and overseas training and assignment of WHO consultants. The Regional Office recognizes that health laboratory management is an essential element of quality assurance and, therefore, supports the upgrading of managerial skills of health laboratory staff.

The reference laboratory in Teheran, the Islamic Republic of Iran, was nominated as a regional training centre for quality assurance in health laboratories. This centre is twinned to one of the international institutions, namely the Institute for Standardization and Documentation in Medical Laboratories (INSTAND) in Germany. The Regional Office assisted in setting up a workshop in the reference laboratory in Teheran to train trainers in quality assurance in health laboratories on clinical chemistry, microbiology, immunology and haematology.

EMRO and INSTAND agreed to establish a three-week training course on quality management and quality assurance in Germany in order to contribute to the development of quality assurance programmes in developing countries.

A number of health laboratories in the Region were twinned with well-known laboratories in Europe: the Poisons Control Centre, Tunis, Tunisia, with the Poisons Control Centre, Brussels, Belgium; the Reference Health Laboratory, Teheran, the Islamic Republic of Iran, with INSTAND; and the Salmaniya Medical Centre Laboratory, in Manama, Bahrain, with the Medical Laboratories, Karolinska Hospital, Stockholm, Sweden. Other similar arrangements are under way.

One of the activities that received special attention during the year was the strengthening of poison control centres. An intercountry seminar on setting up of poisons control centres and the use of the INTOX package (developed by the International Programme on Chemical Safety, IPCS), was conducted in Hammamet, Tunisia, from 6 to 9 June 1995. The seminar was attended by representatives from 15 countries, at which the present situation was reviewed. Different aspects of establishing and strengthening of poisons control centres were presented and discussed. Recommendations and a plan of action for developing national poisons control centres were formulated.

Surveillance of antimicrobial resistance is one of the important elements of the regional plan to address emerging diseases. A consultation on establishing a regional network on resistance to antimicrobial agents was held in the Regional Office, Alexandria, from 19 to 23 November 1995 at which guidelines on antimicrobial resistance surveillance were prepared. This consultation was held after a situation analysis followed by designation of national focal laboratories in 18 countries to be part of the regional network. (The establishment of such a network is included in the regional plan formulated by the directors of health laboratory services at their meeting in Nicosia, Cyprus, in 1994.)

Another consultation on drug interferences in medical laboratory testing was held at the Regional Office from 17 to 21 December 1995. One result of this consultation, will be a manual entitled, *Unexpected results in laboratory medicine: Analytical interference.*

In order to support the developmental process in laboratory services, the Regional Office continued its efforts to prepare manuals and guidelines on various priority areas. The following manuals were under preparation: *Selection of basic equipment*

for laboratories with limited resources; *Unexpected results in laboratory medicine: Analytical interference*; and *Guidelines on antimicrobial resistance surveillance*.

Health imaging technology support

Provision of film-badge services and thermoluminescent dosimetry to countries of the Region, in collaboration with the International Atomic Energy Agency and WHO headquarters, continued during the year. The Regional Office continued to emphasize the needs for countries to develop their capabilities in radiation protection and its support in this direction.

Ensuring safe blood and blood products

The development of blood transfusion services in the countries of the Region was continuing according to regional and country-specific plans of action. The activities that were being strengthened through a WHO/AGFUND collaborative project aim at the provision of safe blood, blood components and blood products, based on voluntary, regular, non-remunerated blood donations, without undue pressure or inducement. An evaluation carried out showed that most countries continued to make significant progress towards achieving targets established in the regional plan formulated by the directors of blood transfusion services at their meeting in Nicosia, in 1991, and amended in Amman in 1993 and Tunis in 1995. This development took into account the training of personnel, donor recruitment and donor motivation, ensuring appropriate collection and screening, as well as appropriate use of blood products, quality assurance, technology of separation of components and local production of reagents. The two regional training centres in Amman and Tunis continued to play an important role in this field.

An intercountry workshop on transfusion medicine (appropriate use of blood, blood components and blood derivatives) took place in Amman, Jordan, from 12 to 16 March 1995. The general objective of the meeting was to develop criteria for the best practice in the utilization of basic blood components that are feasible and adapted to the local needs on capabilities of countries in the Region to improve the quality and safety of transfusion practice. Trends in transfusion medicine were reviewed. The workshop was attended by participants, mainly users of blood and blood derivatives, from 12 countries.

Another workshop on distance learning materials for safe blood and blood products was held in Amman from 20 to 24 March 1995. The workshop was attended by 21 participants from 13 countries. The overall objective of the workshop was to assist national blood programmes to establish distance learning programmes in blood safety in order to strengthen and expand the training for the staff working in blood transfusion services and hospital blood banks. The participants developed a broad plan of action and scheduled the establishment of national distance learning programmes in blood safety.

In order to support the developmental process in blood transfusion services, the Regional Office continued its efforts to publish manuals and guidelines. In addition to those brought out previously, the following were under preparation: *Microbiological aspects of blood transfusion*; and (in collaboration with WHO headquarters) *Establishing distance learning on blood safety*.

The following blood transfusion centres were twinned: the Blood Transfusion Centre, Tunis, Tunisia, with the Red Cross Laboratory, Berne, Switzerland; and the Blood Transfusion Centre, Amman, Jordan, with the Blood Transfusion Centre, Groningen, The Netherlands. The two centres in Jordan and Tunisia were designated as WHO collaborating centres for transfusion medicine.

PROMOTION AND PROTECTION OF HEALTH

4. Promotion and protection of health

4.1 Reproductive, family and community health and population issues

Promotion of reproductive health and family planning

The year 1995 witnessed a significant global shift towards realizing the importance of reproductive health as an essential component of general health. The conceptual and programmatic framework of reproductive health and of reproductive health care developed by WHO can be regarded as a milestone in the global efforts to provide comprehensive care for all in all issues related to reproductive structure, functions and systems in all ages, and not restricted to the reproductive years only.

WHO assures Member States that the advocacy of adoption of a reproductive health approach does not imply the establishment of a new programme on reproductive health, but rather that the existing programme of maternal and child health should have a strong component on reproductive health. This message was conveyed by the Regional Director to Member States during the Forty-second Session of the Regional Committee held in October 1995 in Cairo.

The programmatic framework of this approach has been worked out by WHO through a consultative meeting with interested parties held in Geneva in February 1995, in which the Regional Office participated by providing experiences from countries in the Region. The administrative issues concerned with the adoption of the reproductive health concept for an all-embracing care—considering safe motherhood as the priority objective of this concept and the mother-baby package as the most feasible tool—were the topic of a regional workshop held in Lahore, Pakistan, in December 1995, in which senior staff responsible for maternal and child health in all countries participated. This workshop not only sensitized the managers of maternal and child health programmes in the countries of the Region to the importance of reproductive health care, but also enabled them collectively to develop approaches and strategies to implement the mother-baby package as the tool for curtailing maternal and neonatal mortality.

Realizing that reproductive health research is an essential component of the strategy to derive full benefits of reproductive health care, an intercountry workshop on reproductive health research methodology was held in Dubai in March 1995, supported by the WHO Special Programme of Research, Development and Research Training in Human Reproduction. This workshop was primarily designed for those young research workers who have research experience in various facets of maternal and child health, but had not yet been fully involved in major areas of reproductive

health research. The Regional Office is now in contact with the participants to monitor the progress of reproductive health research in the Region.

Congenital anomalies and hereditary disorders, such as thalassaemia, neural tube defects and glucose-6-phosphate dehydrogenase (G6PD) deficiency, are now being identified as significant problems among children in several countries. Screening and counselling services are now being recognized as essential components of maternal and child health care programmes. Consultants were assigned to Bahrain and the United Arab Emirates to develop registries and counselling services in their national maternal and child health programmes.

The emphasis on the promotion and protection of breast-feeding through maternal and child health programmes is continuing. The Regional Office collaborated with Member States through the assignment of consultants to help them in organizing training programmes, developing and implementing a code for regulating marketing of breast-milk substitutes and strengthening of maternal and child health programmes towards this objective. The vast potential of maternal and child health and primary health care workers in the protection and promotion of breast-feeding had, in many countries, not been fully tapped. Based on an intercountry consultation conducted in Teheran, the Islamic Republic of Iran, in 1994, a technical publication entitled *Promotion of breast-feeding through MCH services and primary health care*, has been brought out by the Regional Office to serve as a reference manual for field workers.

The Regional Office provided technical assistance to countries for the overall strengthening of maternal and child health programmes through visits by the staff of the Regional Office.

Family planning for health is now being adopted in an increasing number of countries, although, in some, the national health infrastructures are not involved in providing contraceptive services. In a number of countries, NGOs play an active role in the provision of family planning services to the population. Except in Pakistan, where the family planning programme is outside the health sector and is located in another ministry, family planning is integrated into maternal and child health, and is now considered a vital component of reproductive health care.

Reproductive health, with its main focus on maternal and neonatal health, family planning and early detection and management of sexually transmitted diseases, is considered a priority area by both WHO and the United Nations Population Fund. Collaboration with the UNFPA increased and is continuing to provide support to strengthen reproductive health care, including family planning services, through UNFPA-funded projects, executed by the Regional Office, in Afghanistan, Djibouti, Iraq, Jordan, the Somalia, the Syrian Arab Republic and Yemen. Close collaboration is being maintained with the UNFPA Country Support Team for Arab States and Europe located in Amman, Jordan, in providing field technical support to countries of the Region in strengthening the reproductive health programmes.

Protection and promotion of child health

The Regional Office convened in 1994 a study group of experts to look afresh at child health and drew the attention of health decision-makers and planners to the area of child health, which does not receive due attention. The International Congress of Paediatrics, held in Cairo in 1995, organized a special seminar on the Rights of the Child. The Regional Director addressed this seminar at which he reiterated the fact that, in spite of the significant reduction of child mortality and morbidity in most countries, the quality of life of millions of children in the world is ravaged by practices that have yet to attract the attention of decision-makers. Child labour is found worldwide and, along with this, the deplorable practices of child prostitution and pornography. These were playing havoc with the lives of millions of children, and were still grossly neglected tragedies needing action at the highest political level.

Protection and promotion of adolescent health

The health of adolescents, especially of girls, is attracting increasing attention among the public health decision-makers of countries of the Region. The Regional Consultative Committee, at its nineteenth meeting in May 1995, considered a background paper entitled, "Adolescent Girls—Women and Mothers of Tomorrow" and recommended that the Regional Office support countries in creating awareness of adolescent girls and their problems; adolescent girls deserve to be cared for as a specific population group integrated within the PHC system, and the health of adolescent girls should be included as a topic for technical discussions at a future session of the Regional Committee, after appropriate preparations by the Regional Office including convening a consultation. It also recommended that health education on sexual issues be discussed at a future RCC meeting or RC session. A workshop was suggested for preparing a background document for discussion and development of guidelines for such a discussion. It was suggested that providing knowledge on sexual issues to adolescents within the framework of cultural and religious norms would have many benefits, but this would need a cautious approach, preferably through health education.

The Regional Committee decided at its Forty-second Session in Cairo, in October 1995, that one of the subjects for Technical Papers at its Forty-third Session in 1996 would be on health education for adolescents. A consultant has been recruited for preparing this paper, which is to include guidelines for the education of adolescents in dietary habits, physical activity, personal hygiene, dangers of smoking and substance abuse and sexual issues.

Adolescence is a crucial period, a transition between childhood and adulthood. Nevertheless, health administrators are increasingly realizing that there is very little information on morbidities during this period and on the special health needs of adolescents. In fact, adolescents are commonly regarded, without justification, as being in the healthiest spectrum of human life, and are thus often considered to have no special needs.

The Regional Office convened an intercountry consultation in September 1995 in Nicosia, Cyprus, on the promotion of health of adolescent girls through maternal and child health programmes. The consultation outlined the approaches to be taken by the health sector in order to respond to the needs of adolescent girls, mainly through school health and maternal and child health care programmes, wherever they exist—to be delivered within the health care system. The consultation also emphasized the need to provide knowledge on sexual issues to adolescents, within the cultural and religious norms of each country. It was also concluded that such education should be integrated into health education aimed at inculcating a healthy lifestyle.

These efforts are being closely coordinated with WHO headquarters, which is developing a framework for health promotion among adolescents. A study group was convened at headquarters in September 1995, with representatives from the regions and international experts to develop a framework of a strategy for the promotion of the health of adolescent girls. The Regional Office was represented by adolescent health experts from Jordan and Tunisia. With the financial support of WHO headquarters, a consultant was recruited to prepare a situation analysis of the health status of adolescents in countries of the Region, the existing health and legislative measures to respond to the health needs of adolescents, and any future strategies that the countries were contemplating.

Protection and promotion of women's health

Women's health received unprecedented global attention in recent years: two international conferences—one in Cairo in 1994 and the other in Beijing in 1995—focused attention on various facets of the life of women. The Regional Office staff, as members of the WHO secretariat in both of the conferences, played an active role in projecting the cultural and religious values associated with the special role of women and the family in countries of this Region.

The Global Commission on Women's Health continued to focus attention on women's health in various facets of their lives. The Commission's meeting in Perth, Australia, in 1995, to which the Regional Office provided data related to countries of this Region, gave special consideration to the health of elderly females. With the financial support of WHO headquarters, situation analyses of the life of women were being undertaken in selected countries of the Region.

The Regional Office was in the process of formulating a comprehensive policy for the promotion and protection of women's health, and a comprehensive database covering the existing status of women's health, the major determinants and measures by the government and nongovernmental organizations for the protection of women's health.

Protection and promotion of health of the elderly

The health of the elderly is receiving increasing attention in countries of the Region; there were collaborative programmes specifically concerned with the health

of the elderly in 10 countries during the biennium 1994-95. Technical collaboration with Member States covered a variety of fields, extending from developing a national policy for the welfare of the elderly to organizing training course for health workers.

WHO headquarters convened a consultation of regional focal points for health care of the elderly, at which a global strategy for health care of the elderly was developed. The Regional Office was designated as a focal point for the training of primary health care workers in the care of the elderly. It had been selected to participate in a Delphi questionnaire study being conducted by headquarters, to ascertain and explore various facets of the present demographic transition and decide on how best to meet the challenge.

An increasing number of countries are showing interest in developing a national policy for the welfare of the elderly to replace the ad hoc measures taken by the State (mostly the countries of the Arabian Peninsula and the Libyan Arab Jamahiriya), nongovernmental organizations (Cyprus and Lebanon) and religious bodies (Cyprus and the Islamic Republic of Iran).

The Regional Office was gathering information on the existing support for the welfare of the elderly through a questionnaire survey, and was preparing an outline of a model national policy which will be reviewed and finalized at an intercountry consultation in 1997.

Protection and promotion of occupational health

During 1995, WHO continued to play an important catalytic role and step up its promotive mandate in the development of national workers' health programmes. WHO inputs in national programmes of protection and promotion of occupational health were extended to 18 countries of the Region; these inputs have been instrumental in accelerating the momentum of national programmes.

In addition to providing technical advice to occupational health administrators through the Regional Office staff and consultants, and logistics for occupational hygiene and toxicology laboratories, WHO also awarded fellowships in many areas of occupational health sciences. Also, training activities at the country level included several courses in different occupational health disciplines. Workers' Health Days continued to be occasions to celebrate and promote occupational health in countries of the Region, particularly in Tunisia.

Occupational health has been identified as one of the priorities of WHO collaboration during 1996-97. Several countries have included promotion of occupational/workers' health in WHO collaborative country programmes during the joint programme review mission exercises. WHO is very keen to promote involvement of all sectors concerned with the health and well-being of workers, since it is not possible to achieve and sustain a healthy and productive life for workers without their coordination and full collaboration so that resources might be used efficiently.

The Regional Office enhanced its collaboration in the field of occupational health with academic institutions and NGOs in the Region. WHO provided technical expertise through its staff and other resource persons to symposia organized in Egypt by Ain Shams University, Cairo, and Alexandria University. A paper on *Training in Occupational Health for Undergraduate Medical Students* was presented at the Symposium of Medical Students Association in Ain Shams University. Another paper on *Prevention of Work Accidents* was presented at the Symposium on Accident Prevention, organized by the Faculty of Medicine, Alexandria University; also, an expert on psychosocial causes of work accidents was recruited by WHO to deliver a lecture at the symposium.

WHO responded to the request from the Executive Office of Ministers of Labour of the Gulf Cooperation Council to prepare a paper on chemical hazards in petroleum, petrochemical and mining industries for presentation at the Symposium on Occupational Health to be held in Doha, Qatar, in May 1996. Also, in response to another request, WHO was to present a paper on WHO Strategies for Safety of the Society, at a seminar on safety of the society being organized by the General Secretariat of Municipalities, Fujairah, the United Arab Emirates, in May 1996.

During 1995, WHO's collaboration with the Arab Institute for Occupational Health and Safety (an affiliate of the Arab Labour Organization's League of Arab States) continued with vigour. WHO provided the technical services of a national expert in occupational toxicology to teach at the training course on industrial toxicology organized by the Institute. WHO staff members made technical contributions at the meeting of Directors of Occupational Health Centres in the Arab Countries, and the Symposium on Formulation of Unified Tables and Standards for Hazardous, Dangers and Laborious Occupations. Negotiations are under way for a joint training course to be organized by the Institute on occupational safety and health in hospitals and dispensaries.

Promotion of school health

During the year, school health programmes, as a component of maternal and child health programmes, were reviewed critically in order to convert the existing programmes from routine health check-up of school students to more active and promotive ones, in which schoolchildren and schoolteachers could play very effective health promotional roles not only in the families, but also in the communities. WHO assigned consultants to the Libyan Arab Jamahiriya and Kuwait to develop and implement strengthened school health programmes.

4.2 Healthy behaviour and mental health

Mental health promotion

During the year, the Regional Office collaborated with countries in areas of training, evaluation, research and, when necessary, through the provision of some drugs or equipment for research and training purposes.

An intercountry meeting on the progress of the mental health programmes was held in Casablanca, Morocco, in May 1995. The main focus of the meeting was evaluation, because it was considered that many of the national mental health programmes have passed the initial stages, and that the evaluation of achievements and constraints therefore had top priority in identifying the best course of action for the future. A detailed evaluation questionnaire, proposed by the Regional Office, was examined, improved and adopted by the participants, as a tool for the collection of information on national mental health programmes. The information derived from this questionnaire would be used as a database for the Region and the questionnaire itself could assist the Regional Office, country-level managers and other health administrators in a continuous monitoring of the programmes. It is satisfying to note that many countries have completed the questionnaire.

The meeting also recommended that the Regional Office carry out a thorough evaluation of the achievements of mental health programmes and the constraints they face, and prepare a regional monograph. The first draft of this monograph was completed. The monograph contains a chapter on the mental health activities and programmes of each country, a chapter on regional activities and detailed conclusions and recommendations for countries and the Region. It is hoped that this important document will be published soon. It represents an initiative of the Regional Office which, in this form, does not exist elsewhere.

WHO collaborated with the Islamic Republic of Iran in an evaluation of the national mental health programme. Three independent, internationally known experts, together with the Regional Adviser on Mental Health and a senior medical officer from WHO headquarters, undertook this evaluation, in collaboration with a national committee that was formed for the purpose. The methodology used, which was being applied for the first time, included a set of pre-evaluation studies at all levels of mental health services. This was followed by observation of the functioning of the system of integration of mental health into general health at different levels. The evaluation exercise ended with a two-day evaluation workshop. The results of this evaluation clearly confirmed the value of the national programme of mental health as a method. It also clearly showed the effectiveness and feasibility of integrating mental health into general health systems.

In the area of prevention of mental illnesses, the activities undertaken related to early identification and correction of sensory deficits in schools (Pakistan), propagation of mental health messages relating to drug abuse through mosques, and

also provision of educational pamphlets (Tunisia). Primary prevention of mental illnesses also benefited, in many countries, from programmes such as iodization of salt and the EPI.

Promotion of mental health continued, with particular emphasis on school mental health programmes. So far, the activities have sensitized the school administrators, teachers, and school health staff and provided them with psychosocial skills to work with children. The outcome of these promotional activities have been encouraging—ranging from the utilization of school health services for epilepsy (for example, Alexandria, Egypt), the development of positive attitudes towards mentally ill, and reduced stigma (Gujar Khan, Pakistan), closer cooperation between health and education sectors for mental health (Bahrain and Qatar), discussions on inclusion of mental health subjects at different levels of curricula (Bahrain and Tunisia), and involvement of mothers in child development programmes through schools (the Islamic Republic of Iran). It is also planned to collaborate with healthy cities projects for the promotion of mental health in cities and the provision of services in urban areas.

The Regional Office is collaborating with WHO headquarters and the Islamic Organization for Medical Sciences in the development of a document on mental health legislation/civil law and Islamic law. Also, preparations for an intercountry meeting on needs assessment and a consultation on healthy cities and mental health are under way.

Prevention and control of substance abuse (alcohol, drugs, tobacco)

Substance abuse continued to be a major health and socioeconomic problem in the Region. The major substances involved in abuse are narcotics and psychotropics. Although alcohol abuse still had not reached an alarming level, owing to strict Islamic prohibition, there is evidence that it is on the rise. The countries most affected by narcotics are Afghanistan, the Islamic Republic of Iran and Pakistan. This is partly a result of the continuing civil strife in Afghanistan and the resultant uncontrolled flow of narcotics. Available information indicates that the flow of narcotics to countries of the Gulf Cooperation Council are on the rise. Egypt and Libyan Arab Jamahiriya and, to a lesser extent, Morocco, Sudan, Syrian Arab Republic and Tunisia, are in danger of reaching such a situation. The consumption of psychotropic substances, such as hashish, also continued in many parts of the Region. *Khat* abuse is a part of life in Djibouti, Somalia and Yemen.

Activities related to the control of substance abuse continued at regional and country levels, based on the felt needs of the countries. These included the provision of consultants, training and educational material.

During 1995, the Regional Office participated in a meeting on demand reduction, organized by the United Nations Drug Control Programme, and contributed to the drafting and revision of outlines of national plans. The regional mental health programme is working closely with other related regional programmes. These

included the programme on HIV/AIDS prevention and control, particularly in the programme of harm reduction for injecting-drug users. The importance of the danger of drug abuse was brought up in meetings with different national authorities.

The programmes of substance abuse and mental health at headquarters were merged in 1995 and it is hoped that both programmes will benefit from it during the current biennium. In this Region, programmes, such as the school mental health programme could be utilized for prevention of drug abuse. WHO is advocating in the Region a resource-oriented, rather than a cause-oriented, strategy for demand reduction. In such an approach, religion, school systems, sports, youth programmes, and programmes dealing with the welfare of women could be utilized. Another innovative approach which is to be adopted in this Region and which has already started in one project is the use of healthy cities projects in the prevention of drug abuse and promotion of positive behaviour.

World No-Tobacco Day (31 May), was observed widely throughout the Region. A large number of nongovernmental and governmental organizations participated actively in "Tobacco or Health" activities.

A video tape on tobacco and economics was prepared by the Regional Office and distributed to all countries of the Region.

The following activities were undertaken by the countries in the Region in the field of tobacco or health during 1995:

- 20 countries produced educational material on the harmful effects of tobacco smoking
- 12 countries conducted research on knowledge, attitudes and practices (KAP) of people regarding tobacco smoking
- 15 countries issued legislation to control smoking
- NGOs in 16 countries participated actively in the tobacco or health programme during 1995 by producing health education material and conducting lectures and workshops.

The Regional Office provided technical and financial support to the Second Workshop on Tobacco or Health of the International Union Against Cancer (UICC) which was held in Beirut, Lebanon, in April 1995. Fifteen participants from the countries of the Region attended the workshop.

All Member States produced health education material focusing on the hazards of passive smoking. Egypt produced two television spots and developed two issues of a newsletter on this topic.

Tobacco or Health medals were awarded to the Islamic Educational Scientific and Cultural Organization (ISESCO); the Ministry of Agriculture of Egypt; the Tunisian Scout Movement; Dr Mohamed Ali Al-Bar of Saudi Arabia; l'Association morocaine de prevention et d'education pour la santé, Morocco; the Ministry of Information, Bahrain; and Al Hakim Mohamed Said of Pakistan, for initiating successful and

innovative campaigns to introduce smoking cessation and anti-smoking programmes as an integral activity in their programmes.

In December 1995, the Regional Office organized a consultative meeting to develop action plans on tobacco or health for the Region. The meeting touched on the following subjects:

- The role of religion in tobacco control
- Ways of helping non-tobacco users stay tobacco-free
- Ways to promote cessation of tobacco use and to encourage and assist in cessation efforts
- Ways to protect the health and rights of children and adults by preventing involuntary exposure to environmental tobacco smoke
- Ways to support implementation of appropriate legislation and how to achieve pricing policies in the Region that deter tobacco use.

An action plan was developed at this meeting and copies of the plan will be distributed to all Member States.

In the field of intersectoral cooperation, the Regional Office, with the cooperation of the Scouts Movement for the Arab Region, prepared the Scouts Health Education Guide for Scouts Leaders to help them adopt healthier lifestyles.

Health education (including school health curriculum)

Health education in the Region continued to gain ground. During 1995, the Regional Office provided technical support to all Member States to help them improve activities related to health education, tobacco or health and school health curriculum programmes. This support included the provision of consultants, temporary advisers, and visits by the Regional Adviser on Health Education.

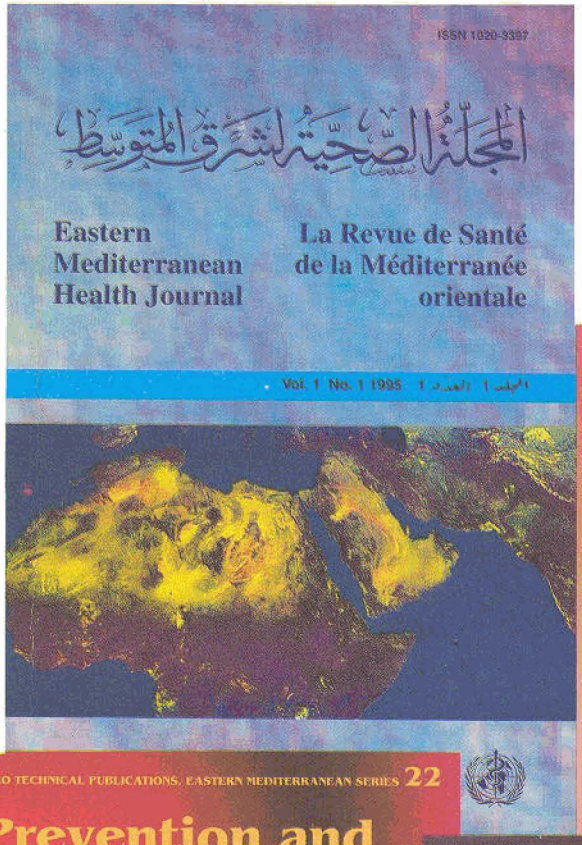
Among the collaborative efforts directed towards strengthening country capabilities in the planning, implementation and evaluation of health education programmes, 15 consultants were assigned to different countries of the Region to participate actively in the evaluation and to advise on health education activities.

National workshops to train health educators, teachers and family physicians in the methods and techniques of health education were held in Egypt, the Islamic Republic of Iran, Iraq, Kuwait, the Libyan Arab Jamahiriya, Morocco, Pakistan, Palestine, Qatar, the Syrian Arab Republic, Tunisia, and Yemen.

With regard to school health education, as can be seen from Table 4.1, during 1988-95, national coordinators were appointed in 9 countries, national committees established in 11, workshops for educational supervisors conducted in 9 and evaluation of projects carried out in Egypt (1992), Morocco (1993) and Bahrain (1994).

During a visit to Pakistan in December 1995, Dr Hussein A. Gezairy attended a Faculty meeting at the King Edward Medical College.

Dr Hussein A. Gezairy, at the above meeting, with HE Mr Badruddin Chowdhury, Minister of Health, Government of Punjab, and Mr Tariq Farook, Secretary of Health, Government of Punjab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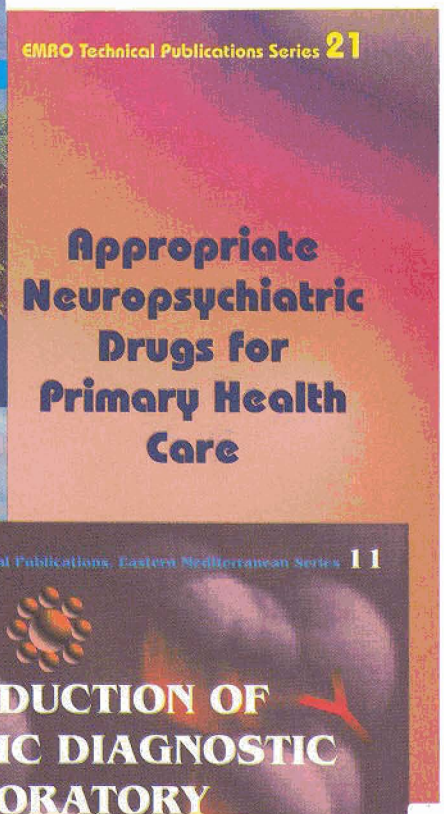
EMRO Technical Publications Series 21
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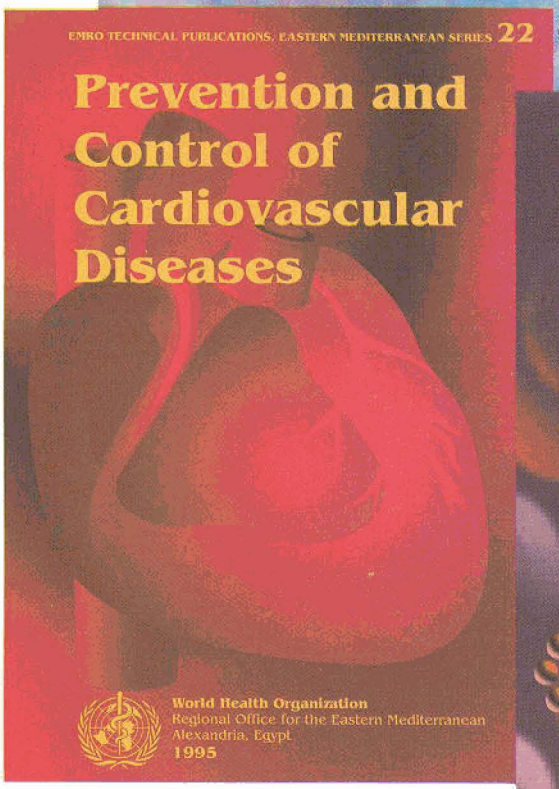
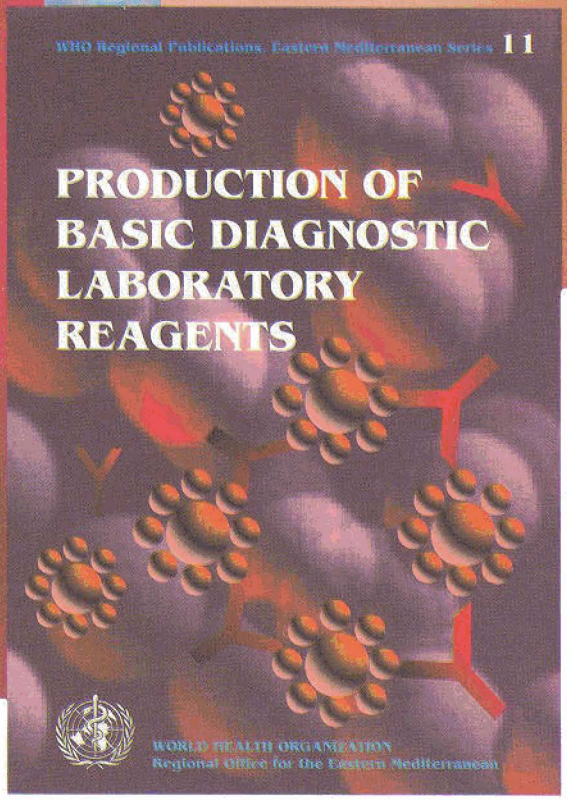
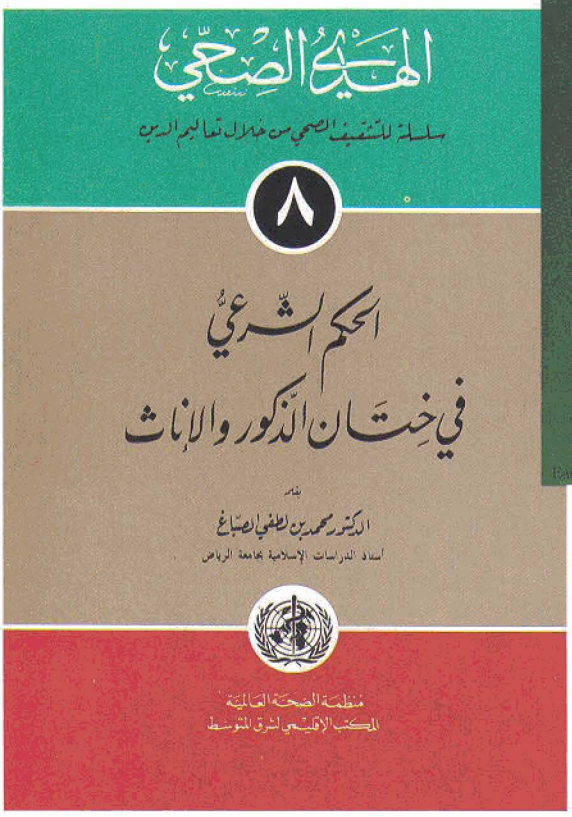
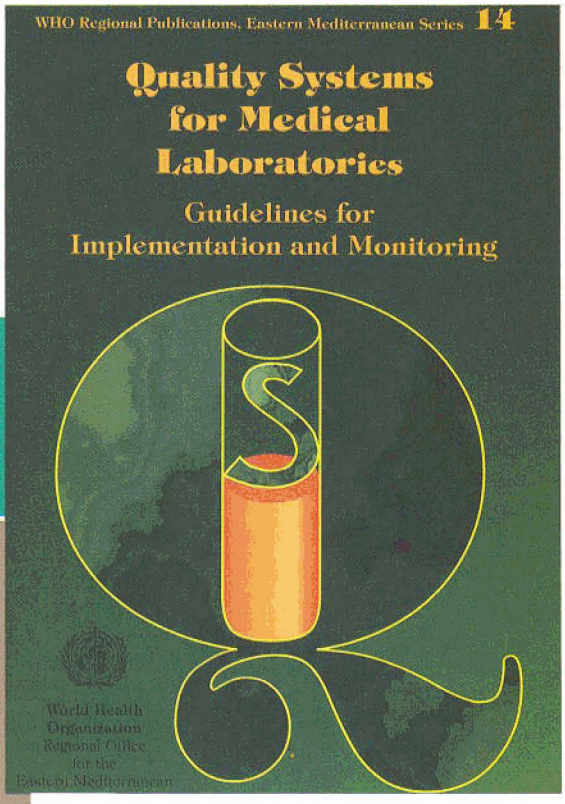
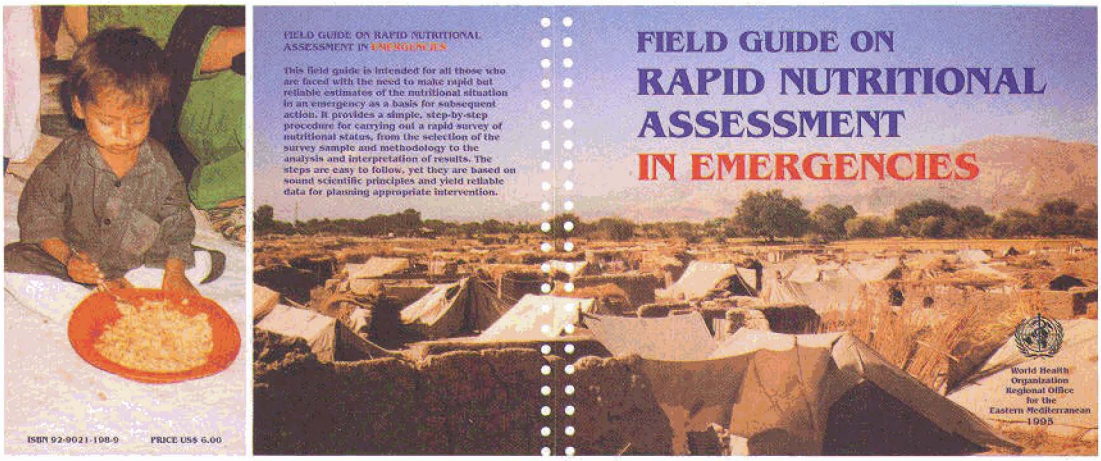

EMRO TECHNICAL PUBLICATIONS, EASTERN MEDITERRANEAN SERIES 22
Prevention and Control of Cardiovascular Diseases
World Health Organization
Regional Office for the Eastern Mediterranean
Alexandria, Egypt
1995

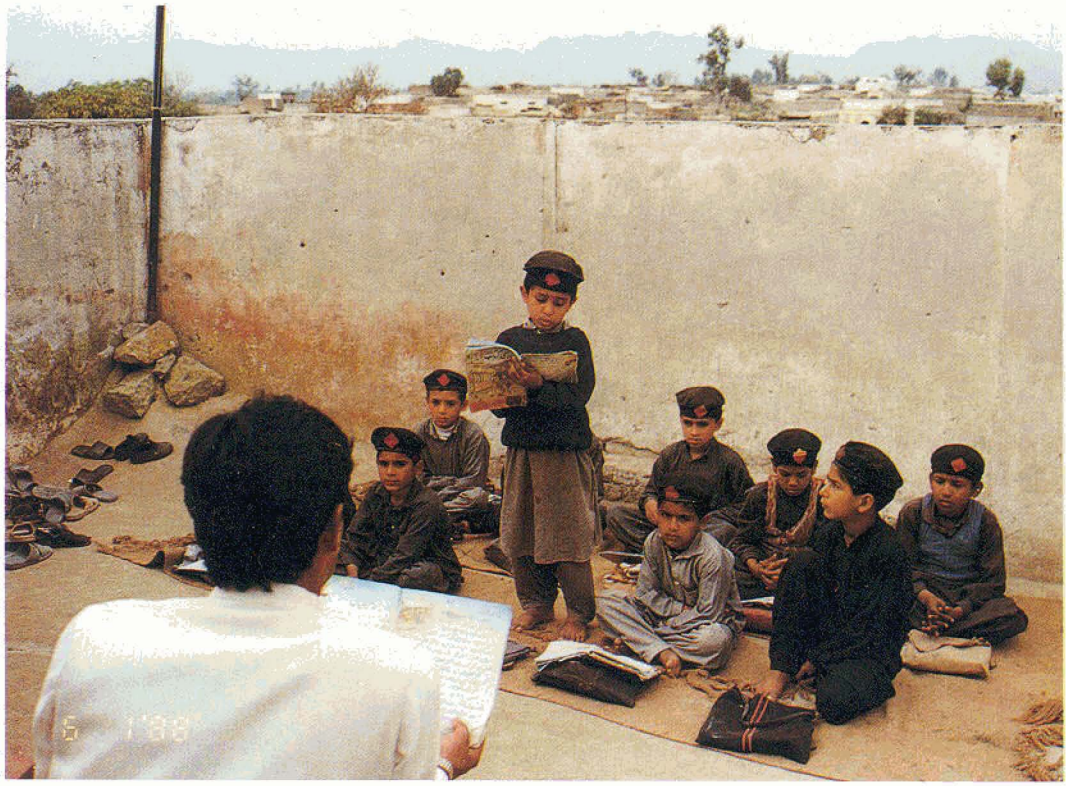

WHO Regional Publications, Eastern Mediterranean Series 11
PRODUCTION OF BASIC DIAGNOSTIC LABORATORY REAGENTS
WORLD HEALTH ORGANIZATION
Regional Office for the Eastern Mediterranean





A wide variety of publications were issued by WHO/EMRO during the year, among them the Arabic publication The Amman Declaration: Health promotion through Islamic lifestyles. Health Education through Religion Series, No. 5, *and the* Eastern Mediterranean Health Journal, *an important initiative in disseminating the research literature of the Region.*





WHO supports health education at all levels, from primary to postgraduate, as an essential component of socioeconomic and health development.

TABLE 4.1 School health education activities in selected countries, 1988-95

Country	First implemented	National coordinator	National committee	Workshops for educators and supervisors	Implemented in grades 1-3	Teachers' guide	Project evaluated
Afghanistan	1995	x	–	–	–	–	–
Bahrain	1988	x	x	x		x	1994
Cyprus	1992	–	x	x	x	x	–
Egypt	1988	x	x	x	x	x	1992
Iran, Islamic Republic of	1995	x	x	x	x	x	–
Iraq	1995	x	x	x	–	–	–
Jordan	1988	x	x	x	x	x	–
Lebanon	1991	–	x	–	x	x	–
Morocco	1988	x	x	x	x	x	1993
Pakistan	1991	–	x	–	–	–	–
Palestine	1995	x	–	–	–	–	–
Sudan	1988	x	x	x	x	x	–
Syrian Arab Republic	1991	–	–	x	–	–	–
Yemen	1992	–	x	–	–	–	–

x = Implemented
– = Not implemented

All countries in the Region developed their own health education materials, guided, to a large extent, by the health education material and articles provided by the Regional Office. Fellowships for academic degrees in health education were awarded to national staff in Egypt, the Libyan Arab Jamahiriya and Sudan. In addition, short-term fellowships for training in aspects of health education and the school health curriculum were awarded to health educators from Egypt, the Islamic Republic of Iran, Iraq, Jordan, Lebanon, Pakistan, Sudan, the Syrian Arab Republic and Yemen.

In the field of training, the Regional Adviser HED visited the Syrian Arab Republic and participated in teaching health education to those studying for the community health education course diploma. He also visited Sudan and participated in teaching the health education course to students in the Master's degree course in public health. He conducted the social mobilization workshop for health workers in Iraq and visited Egypt, Qatar and Yemen to participate in national training workshops for health educators.

WHO collaborated with the Scout Movement for the Arab Region in preparing a suitable health education guide for youth. The guide aims at helping all young persons to make use of local resources in health education aimed at involving and encouraging them to adopt healthier lifestyles. A WHO consultant carried out an

evaluation of health education activities in Kuwait and designed a plan of action for the next biennium. KAP surveys were conducted in Bahrain, Egypt, Jordan and Saudi Arabia to evaluate the impact of health education programmes on knowledge, attitudes and practices of people.

WHO participated actively in the ISESCO workshop on health education and environmental education held in Bahrain in July 1995 and in the Thirty-eighth Scientific Session on Education in Reformatories held in Tunisia in the same month.

School health curriculum

Five countries (Bahrain, Egypt, Jordan, Morocco and Sudan) fully implemented the Prototype Action-Oriented School Health Curriculum (PAOSHC), while ten (Afghanistan, Cyprus, the Islamic Republic of Iran, Iraq, Lebanon, Oman, Pakistan, Palestine, the Syrian Arab Republic and Yemen) have started implementation.

The Regional Office provided technical and financial support to seven national training workshops for teachers of primary schools. WHO fellowships were awarded to school curriculum development personnel from Iraq, Lebanon, Oman and the Syrian Arab Republic in the area of school health education. As the PAOSHC has been operational for several years now since its initiation, WHO, UNICEF and UNESCO—the main sponsors—felt that it was time for a formal evaluation of the programme. Two consultants designed a guide on methods and techniques of evaluating the PAOSHC. With the cooperation of UNICEF, UNESCO and ISESCO, a consultative meeting was conducted in Khartoum, Sudan, from 17 to 19 January 1996, to design a guide on evaluation techniques appropriate for the PAOSHC, in which four countries participated. The meeting reviewed the current situation of the programme and designed guidelines on the methods and techniques to be used for the evaluation.

Health information of the public

The regular output of the Public Information Unit has been maintained, with information being provided to Member States in print and on tape. Such material has concentrated mainly on the eradication of polio, the theme of World Health Day (7 April 1995), and the economics of tobacco, the theme of World No-Tobacco Day (31 May 1995). The Unit also cooperated with EMRO's AIDS Information Exchange Centre in providing material for World AIDS Day (1 December 1995). The Unit arranged media coverage during the Forty-second Session of the Regional Committee in Cairo, as well as coverage of major events in Egypt, at the Regional Office for the Eastern Mediterranean, and in other countries.

Following the practice of the past few years and in order to ensure young people's interaction with basic health concepts, the Unit organized a drawing and painting competition for schoolchildren aged 8 to 18 years, who were asked to express the 1995 theme of World Health Day. More than 2000 entries were received from eight countries. Prizes were given to winners in five age groups. In some cases, this took

place in a special ceremony attended by senior national officials. This activity has now been established as an annual event.

In the production of original film material, the Unit has continued its steady progress towards regionalizing its video output. The two videos prepared for World Health Day and World No-Tobacco Day were regional products. Filming was done in Egypt and footage from other countries was used as well.

The Unit organized a consultation on tobacco control in the Region. The consultation was attended by Christian and Muslim religious leaders as well as experts in the fields of law, media, education, human rights, taxation and agriculture. It drew up a plan of action for tobacco control in the Eastern Mediterranean Region, with clearly defined targets. A report on the consultation together with the plan of action will be presented to the Regional Committee for consideration.

Contacts with the national media were maintained in 1995, ensuring publicity for significant WHO events. Cooperation has continued and strengthened with the Scout movement throughout the Region.

Disability prevention and rehabilitation

Activities under a number of programmes on control of communicable diseases (poliomyelitis eradication, leprosy elimination, etc.) and noncommunicable diseases (blindness prevention, congenital disorders, etc.) and efforts at improvement of nutritional status of population contribute considerably to disability prevention.

WHO continued to collaborate with Member States in the area of rehabilitation. Emphasis was placed on the development of community-based rehabilitation (CBR) programmes. Technical backstopping was provided to several countries, particularly to Afghanistan, the Islamic Republic of Iran, Iraq, Morocco, Pakistan and Saudi Arabia, through visits of WHO staff members and assignment of consultants, to advise on matters related to CBR and the development and strengthening of orthotic and prosthetic services.

WHO continued to provide support to countries with CBR projects. Training has been provided to various categories of health care professionals. WHO publications on CBR and other aspects of rehabilitation were distributed to all Member States. Emphasis was given to the strengthening of information exchange and dissemination, particularly in relation to CBR. The Arabic version of the Joint Position Paper on CBR and other publications on rehabilitation have been produced and distributed to Member States.

The Regional Office maintained collaboration with other United Nations agencies, as well as international NGOs involved in rehabilitation.

In order to promote CBR programmes, a management course for national coordinators and programme managers was held in May 1996.

Promotion of healthy lifestyles

The healthy lifestyles promotion programme is considered as multisectoral in nature, and is linked with several collaborative programmes with a focus on health promotion. Six programmes—oral health, accident prevention, AIDS, nutrition and food safety, cardiovascular diseases, and mental health—have focused on positive health. Three programmes—tobacco or health, prevention of alcohol abuse and drug abuse—have focused on harmful substances. Earlier, healthy lifestyles were a part of the health education programme, which covered a variety of areas, such as school health education, and tobacco or health. The Regional Office provided technical support to all countries to help them improve their health education and promotion programmes and activities. Eleven countries (Afghanistan, Bahrain, Egypt, the Islamic Republic of Iran, the Libyan Arab Jamahiriya, Morocco, Qatar, Sudan, the Syrian Arab Republic, Tunisia and Yemen) prepared a series of information-and-education-for-health programmes to encourage people to practise physical exercise, quit smoking, and avoid substance abuse. Information packages were prepared through their programmes on information and education for health.

Pakistan, one of the first countries to give importance to the promotion of healthy lifestyles, started a healthy lifestyles project focusing on sports, hazards of smoking, avoiding obesity, etc. The Regional Office sponsored an anti-smoking football tournament in Peshawar, Pakistan, in 1995. During the year, the Regional Demonstration, Training and Research Centre for Oral Health (RDTRCOH) in Damascus, Syrian Arab Republic, and the school health services of the Ministry of Education launched, in the primary schools in rural Damascus, a campaign on oral hygiene practices and accidents in schools. The aim of the campaign was to achieve attitudinal and behavioural changes.

To give impetus to the programme, a consultation on policies and strategies to promote healthy behaviour and lifestyles is planned for the 1996-97 biennium. The aim is to assess the situation of healthy lifestyles of countries in the Region, identify the needs, and establish a process to select strategies and policies.

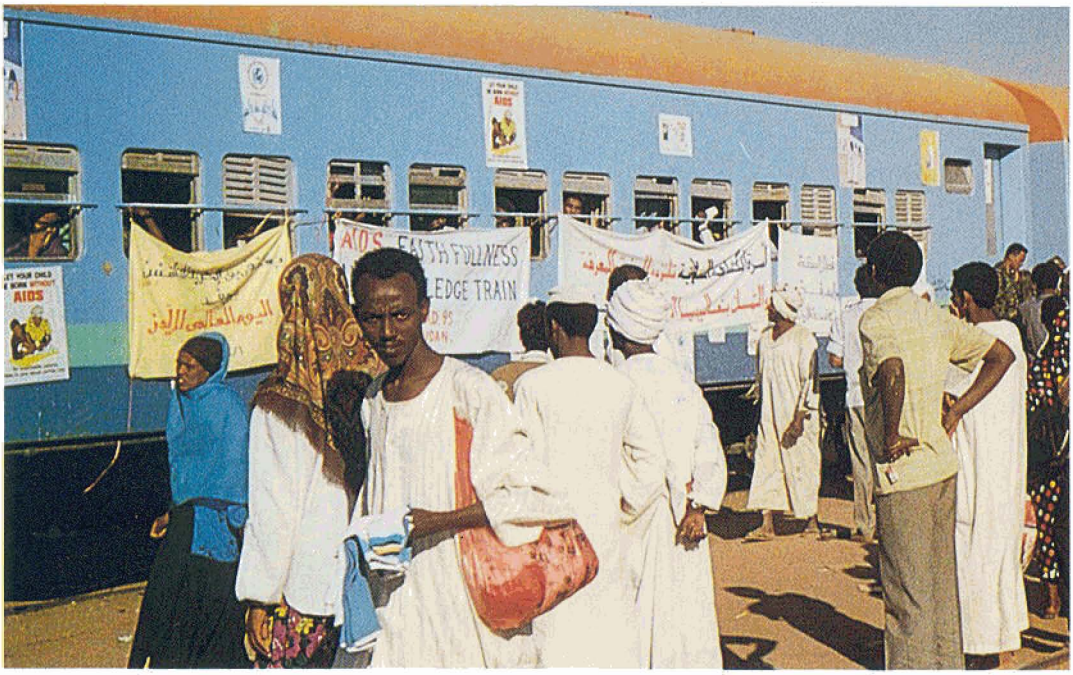
Bahrain and the United Arab Emirates supported the proposal to initiate separate programmes for the promotion of healthy lifestyles in 1996-97. A consultant would be assigned to the United Arab Emirates to identify ways and means of intersectoral cooperation to promote health-enhancing lifestyles and decrease health damaging behaviour, while another consultant would be sent to Bahrain to assess the existing services and provide training for a group of family physicians on promotion of health, and to identify needs and places for further training.

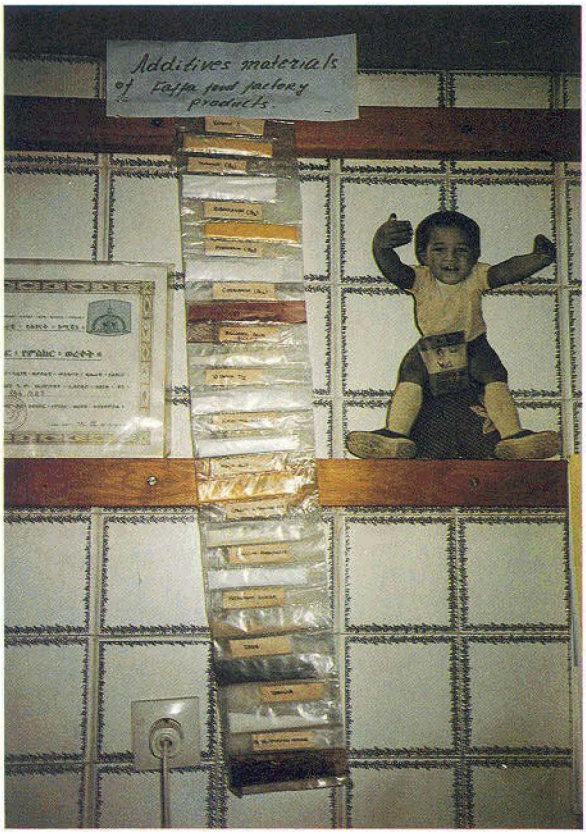
Safety promotion

The Regional Office continued to promote and support national initiatives for strengthening safety promotion and the control of accidental injury through coordinated multisectoral national programmes. WHO's collaboration in this programme area involved seven countries, and included the assignment of

Dr Hussein A. Gezairy and participants in the Consultation on Tobacco Control in the Eastern Mediterranean Region, Alexandria, December 1995

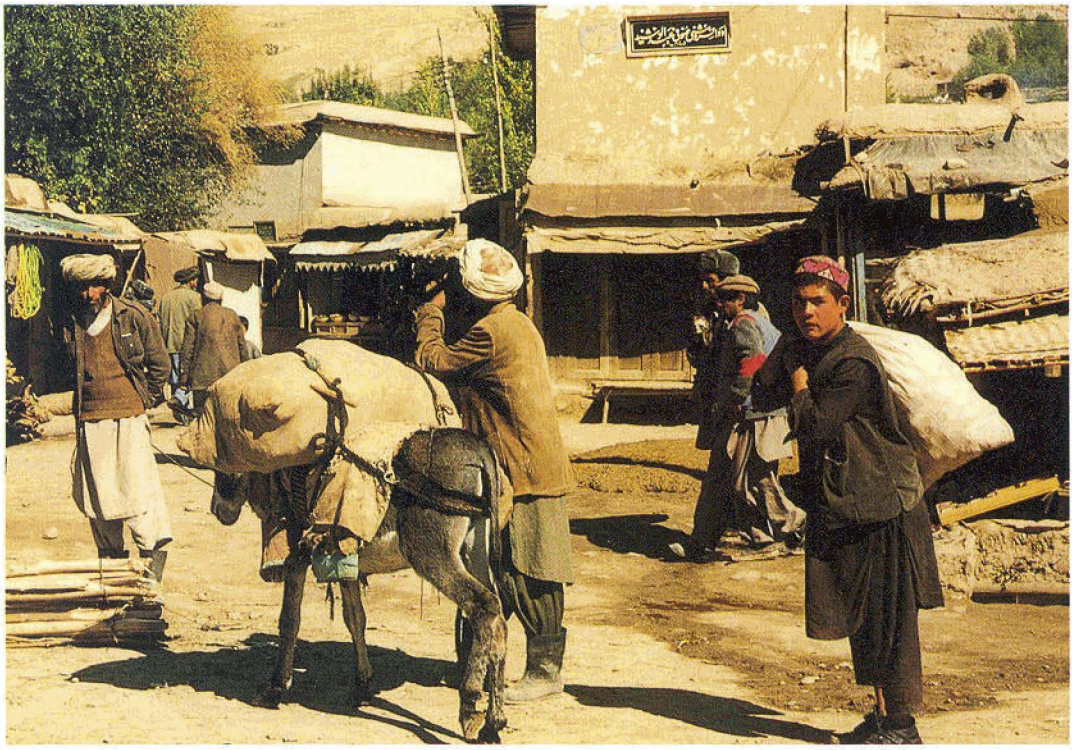
World AIDS Day was celebrated throughout the Region in 1995. In Sudan, the AIDS Knowledge and Faithfulness Train crossed seven provinces as part of the effort to raise public awareness about HIV/AIDS.





Small-scale production of complementary foods for infants and young children can be an effective means of combating deficiencies of essential micronutrients, such as iron, vitamin A and iodine.

When people live in inaccessible places, access to food in sufficient quantities to maintain good nutrition becomes a problem and may require special interventions.



consultants to support the national accident prevention programmes of several countries.

In Afghanistan, a consultant formulated a national plan for accident prevention. He also organized and conducted workshops for 20 participants representing the sectoral programmes and district hospital levels, with the aim of stimulating awareness as to the magnitude of accidents and injuries as a major health problem and to highlight the role of community awareness, education and participation.

In Cyprus, a team of 14 consultants from the United Kingdom conducted a course on advanced cardiac life support. Twenty-four Greek Cypriot and six Turkish Cypriot physicians participated in this training course. The course was based on the Advanced Life Support manual developed in the United States of America. The course will be repeated in 1996 for more participants from the Turkish Cypriot Community, in order to follow up the activities of 1995.

A consultant was assigned to the Islamic Republic of Iran to update the national plan for accident prevention, and to assist the national staff in launching an epidemiological survey of accidents. He also conducted a workshop on accident prevention at the district level. By the end of the workshop, the 28 participants were well sensitized to the strategies of accident prevention and the role of the multisectoral approach for the implementation of programmes at the district level.

In Morocco, a consultant assisted in the analysis of the reports of the National Commissions on Emergencies in order to contribute to developing a national policy for emergencies.

WHO assigned a consultant to the United Arab Emirates to undertake a situation analysis and draw up a national control programme to reduce the incidence and outcome of road traffic accidents. The consultant conducted a workshop on road traffic accidents, and drafted a plan of action to control traffic injuries.

In Palestine, a consultant conducted a situation analysis for the first time and organized two workshops for 40 participants from Gaza and the West Bank .

Fellowships in various fields of safety promotion were awarded to national staff of Cyprus, Egypt and Pakistan and several more will be awarded in 1996.

In order to stimulate accident prevention programmes in the Region, a consultation on the development of national strategies for safety promotion and the control of accidental injury was held in Amman, Jordan, from 26 to 30 November 1995, with participants from 11 countries. The consultation adopted goals on safety promotion in the Region, with the aim of reducing traffic, occupational, domestic and leisure injuries by 20% of 1994 baseline figures. It emphasized that priority should be given to pedestrian injuries, injuries among children and elderly and work-related injuries. The need for formulation of national plans on safety promotion and accident prevention was also stressed.

Oral health promotion

The increasing trend in dental caries and periodontal diseases in the countries of the Region among WHO's major concerns, requiring more attention. The Regional Office continued actively to support national efforts in updating oral health situation reports and in developing national plans for oral health, with emphasis on preventive oral health measures, to halt the increasing trend of oral diseases. The programme to improve the oral health status of schoolchildren continued.

Consultants were provided to several countries in 1995 to provide technical support to national oral health programmes. In Bahrain, the updating of the oral health situation report was conducted with the aim of developing a framework for a national oral health survey, including the methodology for data collection, sampling selection and calibration of examiners. In addition, a consultant designed and conducted three training courses for oral health personnel (dentists and dental hygienists) on dental public health and the community approach for dentists; on different methods of diagnosis , early detection of dental and oral diseases; and on caring for the handicapped and elderly. In Sudan, a consultant reviewed the implementation of new curricula in the Dental Assistants School in Omdurman. Another consultant was assigned to Saudi Arabia, to follow-up the outcome of the Ministry of Health/WHO countrywide field survey carried out in 1992 on oral/dental health. The consultant also conducted a pilot survey to determine the trends of the oral/dental health indicators in the country.

A situation analysis on oral health was conducted for the first time in Palestine, with the aim of utilizing the data for drawing up a national plan for oral health in 1996-97.

In the United Arab Emirates, a consultant assisted national staff in implementing a school-based self-care preventive programme.

The Regional Adviser provided technical advice to Cyprus, the Islamic Republic of Iran, Jordan, Lebanon, the Syrian Arab Republic and Tunisia. In Cyprus, he collaborated in establishing a national plan for oral health. He reviewed, in the Islamic Republic of Iran, the national plan for oral health and the current situation with respect to implementation of a sodium fluoride mouth-rinsing programme. In Jordan, he participated in a field oral health survey and helped in the preparation of the national plan for oral health. The Regional Adviser also participated in conducting a workshop on setting national strategies for oral health in Lebanon. In the Syrian Arab Republic he participated in teaching of dental public health and dental epidemiology with the emphasis on planning oral health programmes, and in Tunisia he reviewed the national oral health programme.

During 1995, the Dental Faculty in Damascus University, the Syrian Arab Republic, and the National Lebanese University and St. Joseph University in Lebanon, received assistance for conducting a workshop on curriculum development based on a community-oriented oral health system. Based on the success of the

workshop organized by the three faculties, a similar collaborative initiative will be taken in 1996, between three universities in the Syrian Arab Republic (Damascus, Aleppo and Tishreen).

In the context of strengthening the relationship between WHO and NGOs in the field of oral health, AGFUND provided support to the regional programme in the form of fellowships on the application of the atraumatic restorative technique (ART). These fellowships were offered to one school dentist from the Syrian Arab Republic and two dental auxiliaries from Pakistan. AGFUND identified funds for holding a regional training workshop for trainers on ART, which was held in Tunisia in March 1996.

AGFUND supported a pilot oral health survey at district level in Pakistan through the WHO collaborating centre in Karachi.

The Regional Demonstration, Training and Research Centre for Oral Health (RDTRCOH), in Damascus, Syrian Arab Republic, continued to play an important role by offering several training courses in planning and management of oral health programmes. The Centre has designed reorientation courses, in which the Regional Adviser participated, for national staff and oral health personnel from Afghanistan, Cyprus, and the Islamic Republic of Iran. The courses were aimed at reorienting participants towards preventive oral health measures. In addition, the Centre's staff participated in the preparation of oral health educational material, such as posters, pamphlets, handouts, slides and video films. The educational material developed by RDTRCOH are now used by many collaborative oral health programmes in Egypt, Sudan, Morocco and Oman. In order to disseminate information on oral health, an *Oral Health Newsletter*, both in Arabic and English, was developed by the Centre, with the support of the Regional Office, and copies were distributed to oral health personnel in the Region.

4.3 Nutrition, food security and safety

Promotion of healthy nutrition

A number of goals for the year 2000 were endorsed at the International Conference on Nutrition (ICN) held in Rome in 1992. These goals were subsequently reaffirmed by the Forty-sixth World Health Assembly (see resolution WHA46.7) and are now the nutrition goals and targets of the Ninth General Programme of Work covering the period 1996-2001. In order to facilitate the achievement of these goals, a number of mid-decade goals were adopted subsequently, and these represent intermediate targets. The year 1995 was therefore a year of enhanced activity in the area of nutrition promotion. Efforts were under way to meet the mid-decade goals, namely, achieving universal iodization of salt, and virtual elimination of vitamin A deficiency. In addition, action towards the end-of-decade targets continued unabated, especially in the area of improvement of infant and young child nutrition, monitoring

of nutritional status, control of iron deficiency, promotion of healthy diets and lifestyles and development of human resources for nutrition.

The process of development of national plans of action for nutrition, as pledged by all countries at the ICN, continued. By the end of 1995, Bahrain, Egypt, the Islamic Republic of Iran, Morocco and Sudan had finalized their national plans of action, while Tunisia is in the final stages of preparation. Kuwait, Oman and the Syrian Arab Republic requested WHO's support the development of their plans.

By the end of the mid-decade, universal salt iodization (USI) could be said to have become a reality in Jordan, the Islamic Republic, Lebanon, the Libyan Arab Jamahiriya, the Syrian Arab Republic, and Tunisia, although some problems still persist, notably those relating to the iodization level and the persistent use of local salt. In Egypt, Morocco, Oman, and Sudan, efforts to achieve USI are well under way, while Yemen has already taken steps, such as the passing of legislation, to enforce USI. In Iraq, the salt issued in the monthly ration is iodized, while in Pakistan more and more small producers are iodizing salt. Even countries with no or very limited iodine deficiency disorders, such as Kuwait, are keen to start producing iodized salt.

WHO held, jointly with UNICEF, a first regional meeting for salt producers in Amman, Jordan from 15 to 17 November 1995 to promote salt iodization and discuss technical and managerial issues. One important outcome of the meeting was the formation of a Regional Association of Iodized Salt Producers.

WHO is also actively supporting countries in the development of effective monitoring and evaluation systems, to ensure the sustainability of USI over the years to come. WHO staff and consultants have given technical support or carried out training on IDD monitoring, including laboratory techniques, in Jordan, the Islamic Republic of Iran, the Libyan Arab Jamahiriya and Yemen.

A short, colourful booklet on iodine deficiency, what it is and how to prevent it, was prepared by WHO for use in advocacy and as an information tool.

Vitamin A deficiency is a problem, particularly in Djibouti, Pakistan, Somalia, Sudan and Yemen and, under the present circumstances, Iraq. However, it is known that even mild sub-clinical vitamin A deficiency could have a negative effect on morbidity and mortality—a reason why a number of countries have decided to investigate their situation carefully. In Egypt and Oman national surveys were carried out that showed that mild, sub-clinical vitamin A deficiency affected infants and young children. Both countries are establishing control programmes, using high- dose vitamin A capsules to be given to women in the first months after delivery and to their offspring at nine months of age. Countries with more severe problems have already for some time been giving high-dose vitamin A capsules for the prevention and treatment of vitamin A deficiency.

Iron deficiency and the resultant anaemia are a serious problem in all countries of the Region. Studies have shown that in most countries, one-third to over one-half of

women in child-bearing age, pre-school children and school-age children, as well as adolescent girls, are affected. In view of the detrimental effects of iron deficiency on learning and development, urgent action is needed. Over the years, however, the supplementation activities undertaken by most countries have yielded meagre results.

WHO, jointly with UNICEF, has therefore organized a joint consultation from 22 to 26 October 1995 to develop strategies for the control of iron deficiency suitable for the countries in the Region, hosted by the Islamic Republic of Iran, at the Institute for Nutrition and Food Technology in Teheran—a WHO collaborating centre for research and training in nutrition. The consultation came up with sub-regional specific action plans that cover the four main strategies for control, namely (1) supplementation with iron tablets, (2) fortification of staple foods with iron, (3) dietary change to enhance iron intake and absorption, and (4) public health measures such as deworming, albeit with different time-frames and priority actions. In 1996, support at country and regional levels would continue to be provided, and several countries, notably Bahrain, Egypt, the Islamic Republic of Iran, Kuwait and Oman, have already embarked on fortification trials, while others are examining the scope of alternative supplementation regimes. A training workshop will be organized later in 1996 on food fortification techniques.

The regional training course on nutrition, which was established in 1991 at the Nutrition Institute in Cairo, with financial support from the Government of the Netherlands, is becoming more and more viable. The third course, which started in September 1995, had participants from Afghanistan, Egypt, Kuwait, Oman, Palestine, and Sudan. Preparations are already under way for the fourth course from September 1996 till March 1997. In the coming years, training modules developed for the course will be used for training at the country level.

While all countries in the Region are actively involved in the promotion of breast-feeding through the "baby-friendly hospital" initiative and through giving effect to the aims and principles of the International Code of Marketing of Breastmilk Substitutes, the important area of complementary feeding has received less attention. Following a francophone African workshop in 1994 on the improvement of complementary feeding, a joint EMRO/AFRO Workshop on Infant and Young Child Feeding was held from 11 to 15 December 1995, in Addis Ababa, Ethiopia. Participants from Egypt, Jordan, the Islamic Republic of Iran, Lebanon, the Libyan Arab Jamahiriya, Pakistan, Palestine, and the Syrian Arab Republic, and from a number of African countries participated actively and came up with an action-oriented programme for country-level action and research. In addition, the Regional Office participated actively in a state-of-the-art review process of infant and young child feeding, which should serve as a strong scientific basis for WHO's future infant and young child feeding recommendations.

An important step in the coming years would be the development of local, small-scale production of culturally acceptable, micronutrient fortified complementary foods.

In April 1995, the Regional Office and the Government of Cyprus hosted a global WHO/FAO consultation on the development of food-based dietary guidelines. Temporary advisers from a number of countries in the Region were invited to participate. A one-day workshop was also held to discuss the specific needs of the Region.

In collaboration with the Danish Catering Centre—a WHO collaborating centre for mass catering—in Copenhagen, Denmark, computer software was developed incorporating all the food-composition information made available to WHO by countries of the Region, as well as the FAO food composition tables for the Mid-East and other relevant data. This food analysis and nutrient-calculation software should be of considerable assistance to countries in carrying out and analysing dietary intake surveys, as a first step towards developing healthy eating guidelines. A regional training workshop on the use of this software took place from 5 to 15 May 1996 in the Regional Office, and several countries, notably Bahrain and Kuwait, have already expressed their interest in country-level training.

Promotion of food safety

WHO continued its support to countries in their efforts to develop and implement effective food safety and control systems in line with the strategies adopted at the International Conference on Nutrition (1992) and the Regional Strategy for Health and Environment adopted by the Regional Committee in 1993.

One of the two main areas of such systems is an effective food inspection system, built around preventive food control methodologies, such as the Hazard Analysis Critical Control Point (HACCP). During 1995, a regional training course on HACCP was organized by the Centre for Environmental Health Activities in Amman, Jordan. Similar workshops were organized in Bahrain and Cyprus. Support was given to Egypt, Oman, Palestine, Qatar, Sudan and Tunisia, for improvement of food inspection methodologies

The use of HACCP in food control, with special attention to its role in catering and street food-vending, will be the subject of an intercountry training workshop, to be held in Tunis, Tunisia, in December 1996.

The second main area for an effective food control system is a properly functioning laboratory, and consequently it is important to encourage capacity-building for such laboratories to improve their performance. Support was given to Bahrain, Cyprus, Egypt, the Islamic Republic of Iran, Jordan, the Libyan Arab Jamahiriya, Sudan and Tunisia, either through fellowships to improve the skills of the laboratory staff or through technical support to the laboratories.

A food control programme cannot exist without effective food legislation, which should comprise not only the food law itself, but also regulations with measures to be taken in case of non-compliance, and food standards as a basis of the regulations. In the aftermath of the World Trade Agreement, such legislation becomes even more important. However, during the intercountry workshop on food legislation, HACCP

and street food-vending, held in Limassol, Cyprus, 1994, it was unfortunately found that many countries in the Region either had outdated or incomplete food legislation. WHO is therefore supporting Member States in reviewing and, as necessary, revising their existing food legislation. In 1995, the Islamic Republic of Iran requested such support.

In addition, WHO encourages its Member States to participate more actively in the work of the *Codex Alimentarius* Commission, as this body develops the standards that become the benchmarks for world trade.

It is expected that a series of joint seminars by WHO and the World Trade Organization will be held for EMR countries to brief them in more detail about the consequences of the World Trade Agreement for their import and export activities.

4.4 Environmental health

Management of water supply and sanitation

Water, sanitation and health

Lack of adequate access to safe water supply and sanitation in poor neighbourhoods and low income settlements made people vulnerable to diarrhoeal and sanitation-related diseases including cholera; drinking-water quality monitoring and control were given sufficient attention. However, sanitation and hygiene efforts in underprivileged urban and rural areas need much more attention. The Regional Office collaborated with WHO headquarters in the development of a new global sanitation programme.

In many cities of the Region, solid waste management systems required urgent attention. Also, management of hazardous wastes and health care facilities needed much more effort.

Water leakage and wastage in water distribution systems are high. Faulty water distribution systems and inadequate sewers, in many instances, were responsible for contamination of drinking-water with wastewater and outbreaks of waterborne diseases. To assist the countries in preventing such problems, the Regional Office, in collaboration with the Islamic Development Bank (IsDB), organized a regional training course on leakage detection in June 1995. A technical consultation on water quality control at the household level was organized in collaboration with the Diarrhoeal Disease Control programme of WHO in October 1995.

As part of the regional efforts for the strengthening of national water supply and sanitation programmes, the Regional Office, in collaboration with AGFUND, organized a Regional Water Supply and Sanitation Conference in Beirut, Lebanon, from 11 to 15 December 1995. Following a comprehensive review of the national water supply and sanitation programmes and deliberations on the technical and managerial aspects of priority issues, wide-ranging conclusions and recommendations were adopted (also see below).

In addition to these regional and intercountry efforts, several activities were carried out at country level during 1995

The ongoing water supply and sanitation programme in Afghanistan is very active. The WHO Sanitary Engineer, along with a team of national staff recruited by WHO, has been assisting in the rehabilitation/construction of water supply systems in Kandahar, Mazar-i-Sharif, and in the preparation of a project in Faizabad. WHO is collaborating very closely with UNDP, UNICEF, and HABITAT. With support from the Qatar Fund, UNHCR and UNFPA, a water supply and sanitation programme was implemented and expanded. In Pakistan, the WHO Sanitary Engineer assisted the national staff in technical matters related to water supply and sanitation programme development, training and related engineering aspects.

As a result of the civil strife in Somalia, all water supply and sanitation facilities were disrupted resulting in waterborne diseases including cholera. A WHO consultant was assigned for preparing guidelines and a package for improvement and implementation of water supply and sanitation projects, with special reference to cholera prevention.

Major support was needed for rural water supply in Yemen—the rugged terrain of the country makes the operation difficult. WHO prepared a comprehensive programme and is providing substantial support to rural water supply and sanitation. Technical support was provided to Oman for reviewing groundwater contamination in the northern Batainah area. In Iraq, WHO continued its technical support to national authorities in their efforts to overcome the effects of war on the water supply and sanitation services. WHO reviewed the situation and assisted in determining the needs for the two major projects in Kufa and Najaf, and provided technical inputs. Solid wastes management and hospital wastes were addressed in Egypt and Tunisia.

WHO's collaborative activities also included the provision of some supplies and equipment to environmental sanitation projects in the Islamic Republic of Iran, Morocco and Sudan, and fellowships to Bahrain, Morocco, Sudan and Tunisia. They also included support to national training activities in Morocco and Sudan.

Promotion of healthy cities, villages and communities

Healthy cities

Many cities in the Region are faced with rapid and uncontrolled urbanization. Provision of health and environmental services for the fast growing population in the cities is becoming a formidable challenge for national and municipal authorities. The healthy cities concept attracted attention and gained popularity in many countries as the choice approach to deal with health and environment issues in cities.

A joint WHO/UNEP Supportive Environments and Healthy Cities Meeting was held in Manama, Bahrain, from 23 to 28 September 1995. The meeting resulted in the Bahrain Declaration, which among other pertinent things, recommended the use of

healthy cities and healthy villages as a practical and effective way to develop supportive environments for health.

The theme of the World Health Day in 1996 was "Healthy Cities for Better Life". Special national meetings of governors, mayors and leaders of the health sector were held in a number of countries. The Regional Office prepared printed material and a video film for the occasion and requested countries to declare 1996 as the Healthy City Year.

Healthy villages

The healthy villages concept, which was first put forward by the Regional Office in 1989, gained wide popularity. AGFUND provided a sum of US$100 000 for an intercountry healthy village project. To elaborate on the concept, the First Healthy Villages Conference was held from 6 to 9 November 1995 in Isfahan, the Islamic Republic of Iran. The conference defined the concept scope, strategies and institutional arrangements. Similar to the concept of basic minimum needs (BMN) approach, the healthy villages approach will accelerate the implementation of PHC.

Major programme activities at the country level

The WHO/UNDP/LIFE Project selected Fayoum in Egypt as one of the five cities for its global operation. A memorandum of understanding was signed between the Governor of Fayoum and WHO. A healthy city task force was formed and a healthy city coordinator appointed. The Regional Office provided a substantial amount from its resources, in addition to the support from the UNDP/LIFE project. The WHO/UNDP/Government of Egypt project on sanitation and employment in healthy villages is progressing well in 13 governorates and it is planned to extend it to 26 governorates.

In Pakistan, Quetta (Baluchistan) was selected as one of the five cities by UNDP/LIFE Project. Furthermore, WHO supported healthy city actions in a number of cities in Punjab, Sind and the North-West Frontier Provinces. In the Islamic Republic of Iran, Teheran's healthy cities project continued its impressive progress. The concept of healthy cities now enjoys support from the highest government authorities and is being extended to other cities.

Tunisia is the first country in the Region to start a healthy cities project. Currently, 11 cities are part of a national healthy cities network. Tunisia is the focal point for the Maghreb healthy cities network. WHO supported a number of fellowships and a major national seminar on the subject.

In Cyprus, in addition to Paphos, three more municipalities joined the healthy cities network.

Environmental health risk assessment and management

The objectives of this programme are to achieve a sustainable environmental basis for all, to provide an environment that promotes health and to make all individuals

and organizations aware of their responsibilities for health and its environmental basis.

Technical cooperation with countries continued in areas of environmental health risk assessment and management (strategies, plans of action for health and environment, environmental health considerations for development, environmental health impact and risk assessment, environmental pollution and control, water quality, water resources protection, air quality, noise pollution, environmental health hazards and radiation protection and coastal and marine pollution and quality control).

To examine the progress made in environmental health planning in relation to sustainable development planning, and, following the adoption in 1993 by the Regional Committee of the Regional Strategy on Health and Environment, urging countries to implement it, the Second Conference on Health, Environment and Development was held in Beirut, Lebanon, from 14 to 17 November 1995.

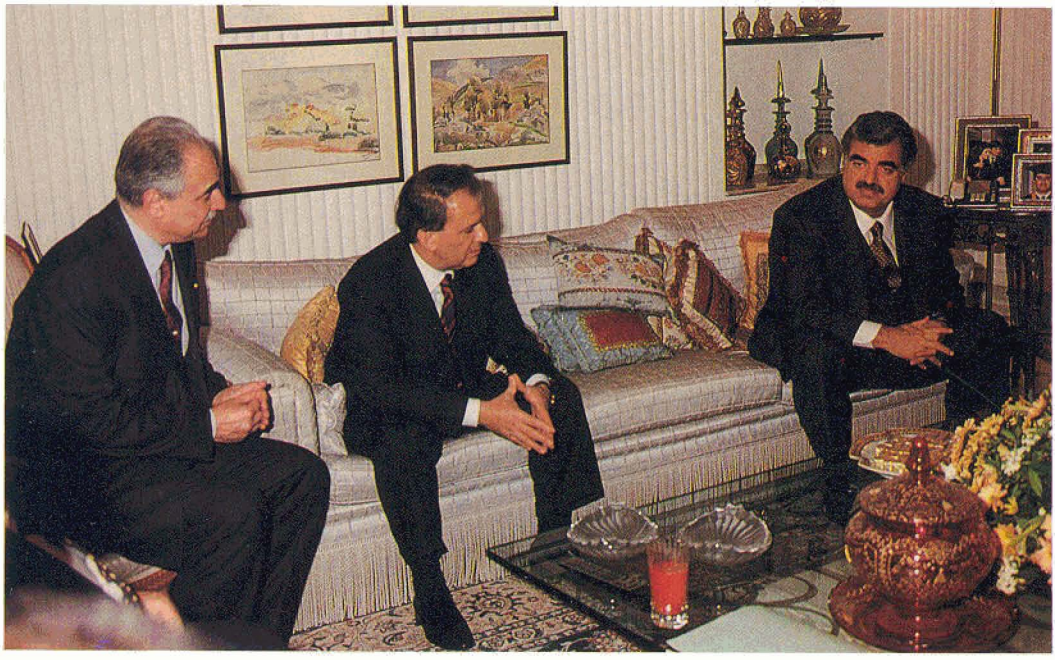
In the resulting Beirut Declaration on Action for a Healthy Environment, adopted at this conference, countries of the Region recognized the following as their shared goals:

- To promote development and improve, promote and protect health and the environment, and to eradicate poverty.
- To improve living and health conditions of the present generation, ensure that the carrying capacity of nature is not exceeded and safeguard the right of future generations to a satisfying and productive life.

The participating countries pledged to make the best use of local resources to achieve those goals and to cooperate to provide environmental elements required to meet the basic health needs of their people. They also pledged to prepare their action plans for health and environment by 1999 and requested WHO to prepare a regional plan of action for health and environment, a regional investment plan for health and environment, a model legislation, and a regional treaty on environmental health protection.

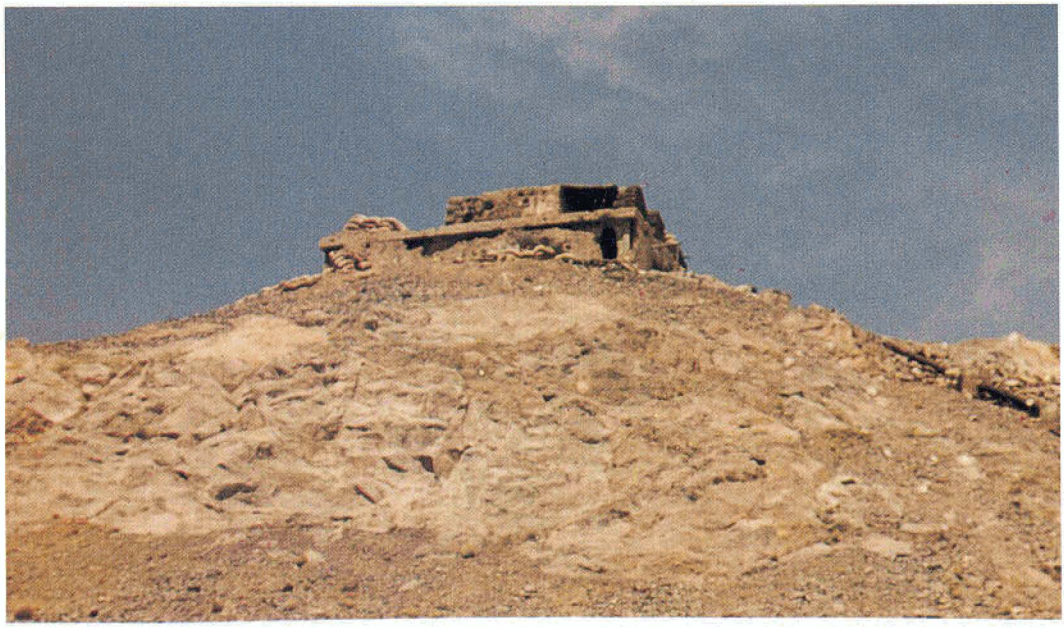
In the field of drinking-water quality, the Regional Office participated in the revision of WHO guidelines for drinking-water quality and sought introduction in the planned revised version of a chapter on health aspects related to treatment of chemicals and material used in water supply systems.

The joint UNDP/Capacity 21 and WHO country-based initiative for incorporating health and environment considerations into planning for sustainable development is under way in the Islamic Republic of Iran. Under this initiative, the situation was evaluated and a large number of officials and specialists were involved in the process of preparing a national strategy and plan of action for health and environment, which would be completed and discussed at an interministerial conference planned for early 1996. Country initiative is expected to start as well in Morocco during the first half of 1996.



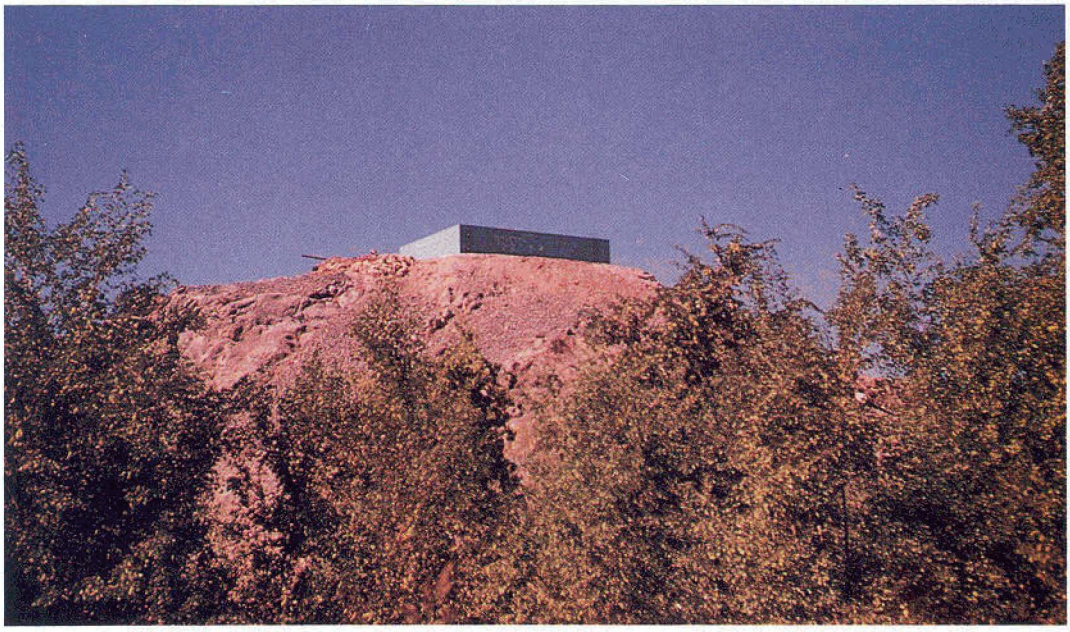
On the occasion of the Second Conference on Health, Environment and Development, Beirut, November 1995, Dr Hussein A. Gezairy was received by the Prime Minister, HE Rafik El Hariri, accompanied by the Minister of Public Health.

Opening session of the Second Conference on Health, Environment and Development, Beirut, November 1995. Left to right: Dr Hussein A. Gezairy, HE Mr Marwan Hamadeh, Minister of Public Health, Lebanon, and HE Mr Pierre Pharaon, Minister of Environment, Lebanon

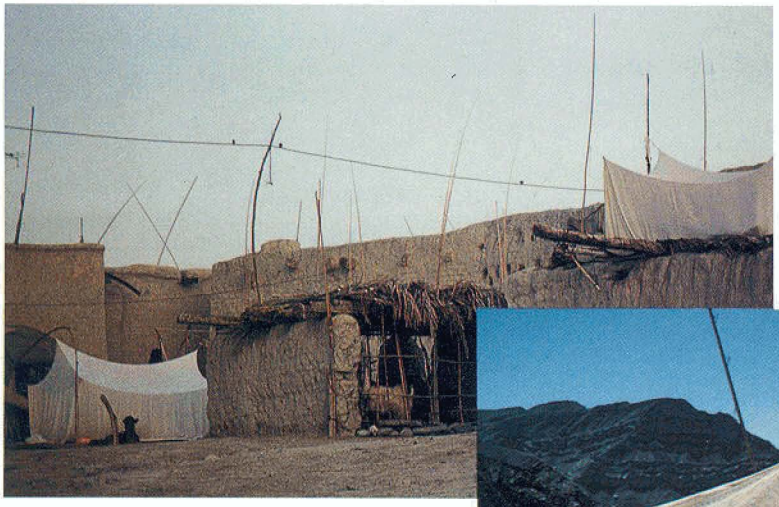


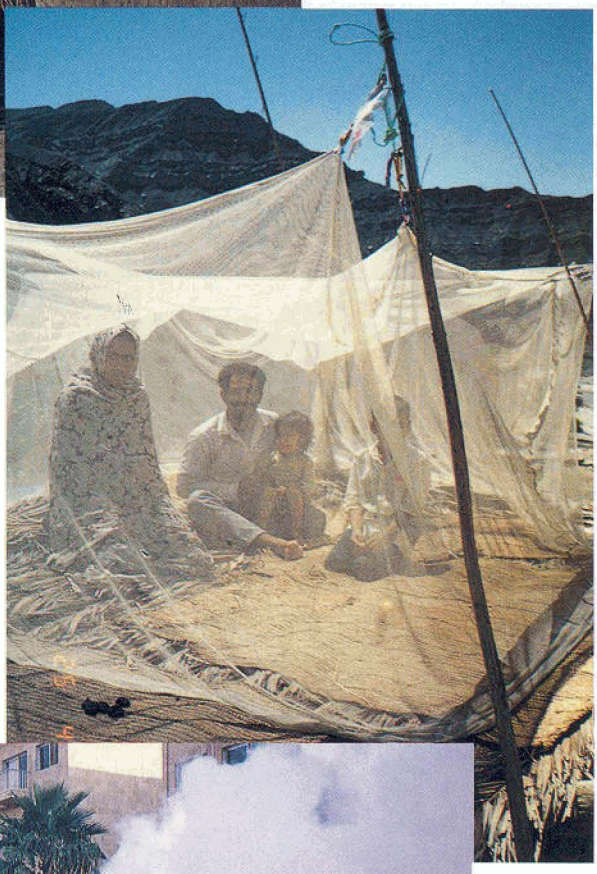
WHO, in collaboration with UNHCR, the World Food Programme, the United Nations Office for Coordination of Humanitarian Assistance in Afghanistan and nongovernmental organizations, supported the reconstruction and rehabilitation of the piped water supply system in Kandahar City. Prior to repair of the central reservoir in Kandahar (shown here), there was a high incidence of water-borne disease in the city and surrounding area.

network, Kandahar, Afghanistan



WHO Representative, Dr Ashour Gebreel, inspects (below) repair work to the central reservoir. Repair work was completed (above) in April 1995, to the benefit of 350 000 people living in the area.





Outdoor use of insecticide-impregnated bednets in Baluchistan, Islamic Republic of Iran. The regional initiative on the use of impregnated bednets is helping to control the spread of vector-borne diseases.

WHO's policy on safe use of pesticides being promoted through a field demonstration of safe methods of pesticide application in urban areas, during a training course in Kuwait

National teams representing various ministries and institutions concerned drafted national strategies and plans of action for health and environment in Cyprus, Egypt, Sudan, the Syrian Arab Republic and Tunisia.

Cooperation with the Arab League is continuing and resulted in a pilot study on environmental impact of sugar industry in Sudan. Working relations are ongoing with many other organizations, such as UNEP, ALECSO, and ROPME and the Arab Industrial Development and Mining Organization.

Other activities at country level

Development of national guidelines for environmental health impact was initiated in Egypt and the project on information management system for chemical safety was reviewed. Assistance was provided to the preparation of national standards for drinking-water quality, taking into account related WHO guidelines. A number of fellowships was awarded for education and training in various aspects of control of environmental health hazards.

Equipment for monitoring of radiation hazards and air quality was provided to the Islamic Republic of Iran.

A team was assigned to Iraq to assess the priority needs in the matter of environmental health that resulted from the severe damage caused during and immediately after the Iraq-Kuwait conflict to environmental health facilities and by the United Nations embargo ever since. The assessment showed the urgency of corrective measures to protect the public from environmental health hazards, particularly those linked to highly contaminated drinking-water and serious deficiencies in waste disposal and treatment. WHO action concentrated on the support to environmental health monitoring activities so as to base the evaluation of the situation on a sound footing. Supplies and equipment were ordered for air and water quality monitoring.

In Lebanon, priority areas in environmental health were reviewed and were found to concern particularly drinking-water quality, adequate sanitation, solid wastes, including health care wastes and marine and air pollution in specific areas. Activities in the field of water quality received support. With regard to the efforts of the Ministry of Health to open a school for health inspectors, in collaboration with the Ministry of Vocational Training, curricula and post descriptions for health inspectors were developed and the preparation of a manual for sanitarians was initiated.

In Morocco, Tunisia and Yemen, activities focused on the evaluation of, and training in, air quality monitoring, epidemiological consequences of air pollution and training of environmental health personnel.

Indoor air pollution and industrial pollution aspects were addressed in Sudan.

In the Syrian Arab Republic, an evaluation was made of chemical pollution of drinking-water and of coastal pollution and preparation and printing of guidelines for workers in environmental health centres were supported, as well as short training of

environmental health officers in respect of administration of environmental health programmes.

Promotion of chemical safety

Activities related to follow up of Agenda 21, Chapter 19 of the UNCED and to implement the recommendations of resolutions WHA45.32 and WHA46.20 that urged strengthening of national and international efforts on environmentally sound management of toxic chemicals, and the Regional Committee resolution (EM/RC40/R.3) on the Regional Strategy on Health and Environment were continued during 1995.

Despite a number of constraints at the country level, such as lack of legislative framework and strict implementation of available regulations in the majority of countries, shortage of well trained personnel, scarcity of good chemical analytical laboratories, shortage of information material, lack of awareness on the occupational and other exposure to toxic and carcinogenic chemicals, lack of well prepared and coordinated referral system for chemical accidents and emergencies, the Regional Office succeeded in strengthening chemical safety activities at the country level.

Information exchange

Safe use of chemicals is not possible without a database on risk assessment of toxic chemicals in a country. Generation of such information at country level requires extensive technical and infrastructure resources that are not available in most countries in this Region. Therefore, a number of international assessments produced by FAO, ILO, IPCS, UNEP (such as EHC, HSG, ICSC, PIM, computerized poison information package IPCS/INTOX, and other technical publications and material) was distributed and technical advice provided to Member States.

Development of national chemical safety programmes

WHO continued its technical support to Member States in the development and strengthening of their national chemical safety programmes. As a direct result of the regional workshop on chemical accident prevention, preparedness and response held at CEHA during 1994, eight countries were sensitized to develop and strengthen their chemical safety programmes.

WHO consultants assisted the Libyan Arab Jamahiriya, Morocco and Qatar in strengthening their programmes. Bahrain, Egypt, the Islamic Republic of Iran, Jordan, the Libyan Arab Jamahiriya and Morocco developed chemical safety programmes. National focal points—institutions and individuals—were identified in Djibouti, Egypt, the Islamic Republic of Iran, Iraq, Jordan, Morocco, Pakistan, Saudi Arabia, Sudan and the Syrian Arab Republic.

National capacity-building

WHO's efforts in national capacity-building in safe and judicious use of chemical pesticides were successful. A training course was held in January 1995, in Kuwait,

where 31 participants from health, agriculture and other sectors were trained as trainers. During the course, a package of material (reports and guidelines) published by FAO, IPCS, UNEP, ILO, GIFAP (Groupment international des Associations nationales de fabricants de produits agrochimiques) was provided to each trainee. Copies of the Arabic version of the IPCS manual, *Multi-level course on the safe use of pesticides and on the diagnosis and treatment of pesticide poisoning*, were distributed to the participants.

A national training course, supported by the Regional Office and CEHA, on chemical safety, disaster management and preparedness was held in Riyadh, Saudi Arabia, in April 1995.

Safe disposal of unwanted and outdated pesticides

Exact quantities of accumulated obsolete and unwanted pesticides in the Region that could cause serious threat to human health and environment are not known, but some countries reported large quantities, for example Sudan 250 tonnes, Yemen 271 tonnes, Pakistan 5000 tonnes. Other countries might have similar amounts. Since the disposal of pesticides, especially in developing countries, could be a very serious undertaking, the Regional Office continued to advise countries to give priority to cost-beneficial management, in consonance with the recommendations by WHO, FAO and others. At the same time, a regional initiative on safe disposal of unwanted pesticides was started. A regional consultation on the subject will be organized, in collaboration with CEHA, in 1996, to draw up a plan for safe disposal of unwanted pesticides.

Vector control

In view of persistent, frequent upsurge and re-emergence of a number of vector-borne diseases, the Regional Office continued to support Member States in the prevention and control of vectors of these diseases.

The programme implementation was guided by resolutions of the World Health Assembly on the control of disease vectors and pests, and of the Regional Committee on malaria, leishmaniasis, plague and emerging diseases.

Continuous flow of technical information to Member States was the salient feature of the support by the Regional Office, through assignment of consultants, visits by the Regional Adviser, and provision of selected technical information material. During the period under review short-term consultants advised Afghanistan, Djibouti, Egypt, Jordan, the Libyan Arab Jamahiriya, Morocco, Palestine, Saudi Arabia, Sudan, the Syrian Arab Republic and Tunisia on different topics such as biological control, snail control, monitoring of insecticide resistance, repair of insecticide spraying equipment, mosquito surveillance, vector surveys and surveillance system.

Support continued for the regional initiative on the use of impregnated bednets, which was launched during the previous year. In support of large-scale

implementation of this innovative technique, especially for the control of malaria and leishmaniasis vectors in Sudan, an additional amount of US$200 000 was provided to that country for the initiation of a large scale system of provision of bednets. Consequently, this method, which in 1991 was being tested on a small scale by two countries (Egypt and Pakistan) and was not known to the rest of the countries, is now being tested on a large-scale by Afghanistan, Djibouti, Egypt, the Islamic Republic of Iran, Morocco, Pakistan, Sudan and Yemen. The salient feature of this method is the maximum involvement of the community, which makes the activity sustainable.

In the light of global and regional vector control strategies, a regional workshop on integrated vector control was held in Lahore, Pakistan, in October 1995, at which 10 participants from eight countries were trained. This workshop set the stage for achieving the target of 15 countries adopting the integrated vector control methodology by 1997.

Regional Centre for Environmental Health Activities

The Regional Centre for Environmental Health Activities (CEHA), established by the Regional Office for the Eastern Mediterranean in 1985, as the technical arm of the Environmental Health Programme to further strengthen institutional capabilities and programmes of the Member States, celebrated its tenth anniversary in May 1995.

The Centre held five regional training courses and workshops at which 82 participants from 16 countries received training in food safety, solid wastes management, wastewater treatment and reuse, healthy villages concept, and GEMS/WATER. At the national level, CEHA organized over 60 training activities (training courses, workshops, seminars, etc.) in various fields of environmental health. CEHA's technical staff participated in 13 national, regional and interagency meetings and contributed papers. About 400 institutions and professionals engaged in various fields of environmental health benefited from the CEHANET information services. About 6500 newsletters, documents, articles and bibliographies were distributed to users in Member States.

The Centre's technical staff carried out 10 consultation missions to study, assess and advise on various problems of environmental health faced by Member States. CEHA also initiated a support programme to strengthen 10 institutional technical focal points and two national focal agencies in eight countries. The Centre provided computers and printers with software, photocopiers, portable water bacteriological testing kits, overhead and slide projectors and flip charts.

CEHA continued its technical and financial collaboration with regional and international agencies involved or interested in different aspects of environmental health. In 1995, CEHA further developed financial collaboration with UNEP for the training programme of UNRWA staff and, with AGFUND, for CEHA's programme of institutional strengthening in countries. A regional training course on wastewater treatment and reuse was co-sponsored/organized together with CEDARE and a workshop on GEMS/Water implementation in the EMR was organized under the

sponsorship of UNEP and the Robens Institute (United Kingdom). The Centre, in collaboration with the Liverpool School of Tropical Medicine, held a regional and some national training activities on environmental health impact assessment (EHIA) of development projects; these would ultimately lead to the development of regional guidelines for EHIA of development projects. The Islamic Development Bank is sponsoring some priority regional training activities to be organized by CEHA in the near future.

INTEGRATED CONTROL OF DISEASE

5. Integrated control of disease

Disease prevention and control are main issues of importance in public health practice in all countries of the Region. The Regional Office continued to give due attention to all aspects of prevention, control, elimination and eradication of communicable diseases, in view of the significant impacts and repercussions that are caused by them, especially in relation to their distribution, severity and related social and economic consequences resulting from their occurrence

5.1 Eradication/elimination of specific communicable diseases

The success achieved by smallpox eradication and the significant benefits that were derived have triggered the world health community to target the eradication of dracunculiasis and poliomyelitis and elimination of a number of other diseases such as leprosy, neonatal tetanus.

Dracunculiasis eradication

The guinea-worm eradication programme in Pakistan continued, with financial and technical support from WHO. No new cases of dracunculiasis were recorded in Pakistan during 1995. The "reward awareness" campaign was continued in the endemic areas through publication in the national papers, press releases by the Ministry of Health, television programmes and distribution of pamphlets. All rumours of cases of the disease have been examined by the staff of the national programme and no cases of dracunculiasis were found. If no new cases appear by mid-1996, Pakistan would have completed the three years of pre-certification surveillance of dracunculiasis, and thus will be eligible for consideration for international certification of eradication. A team representing the International Certification Commission will visit Pakistan in August 1996 and will submit a report to the Commission during its meeting in September 1996.

The programme in Sudan continued to conduct a national search for dracunculiasis cases. A national plan of action was prepared during the First National Conference on Guinea-worm Eradication in Sudan, which was held in March 1995 in Khartoum. A four-month long "Guinea-worm Cease-fire" was observed during March-July 1995 in Southern Sudan in order to accelerate control measures before the beginning of the rainy season. Training was conducted among village volunteers and community health workers. In 1995, over 60 000 cases of the disease were registered. It was however possible to apply a case-containment strategy to only 10% of registered cases. Routine activities are continuing with the distribution of filters, health education, case management and case-reporting.

During 1995, active case search was completed in all areas in Yemen that were previously endemic for dracunculiasis. Through this system, 82 cases of dracunculiasis were reported, of which 22% of them were fully contained. The National Dracunculiasis Eradication Programme is actively training village volunteers, distributing water filters, controlling vectors and conducting health education. The reward system has been instrumental in helping to identify endemic foci.

National programme managers from Sudan and Yemen participated in the Programme Review Meeting of Guinea-Worm Eradication Programmes, organized by WHO, UNICEF and Global 2000 in September 1995 in Khartoum, Sudan, at which several important recommendations on the management of the national programmes were adopted.

A regional plan for dracunculiasis eradication and certification has been prepared. The plan takes into consideration the differences in the certification procedures, depending on whether the country in question is currently or recently endemic, or whether no cases are believed to have occurred for many years.

Leprosy elimination

Although the total number of leprosy cases has further decreased in all endemic countries in the Region as a result of widespread implementation of multidrug therapy, leprosy continues to be an important public health problem in localized areas in some countries. The total prevalence rate of leprosy in the Region was 0.4 per 10 000 population, and the MDT coverage during 1995 was maintained at 95%. However, the total registered prevalence in Sudan continued to be more than 1 per 10 000. Although the total prevalence in Egypt, Pakistan, Islamic Republic of Iran and Yemen is less than one per 10 000, there are localized areas in these countries where the prevalence is in excess of 1 per 10 000.

The subject of elimination of leprosy was discussed during the Forty-second Session of the Regional Committee in 1995, which adopted a resolution (EM/RC42/R.8) endorsing the Regional Strategy for the Elimination of Leprosy as a public health problem; it urged those Member States where leprosy is endemic to give priority to leprosy control measures in their national health plans, with emphasis on early case-detection, treatment with multidrug therapy, and disability prevention.

As a follow-up to the resolution of the Regional Committee, a regional meeting on leprosy was held in Teheran, the Islamic Republic of Iran, from 23 to 25 October 1995 to review the national leprosy control programmes and steps taken to achieve the target of elimination of leprosy. National plans of action were discussed and national managers were assisted in updating them in order to strengthen surveillance, case-holding, monitoring of treatment, capacity-building and disability prevention, especially at intermediate and peripheral levels of public health systems.

WHO continued to support national control programmes with technical advice, training and provision of drugs for chemotherapy. WHO assigned consultants to

Afghanistan, Pakistan and Yemen to provide advice on essential steps to be taken for the improvement of the surveillance systems and monitoring of chemotherapy implementation. Technical assistance was provided to the Islamic Republic of Iran in the promotion of leprosy impairment surgery.

The WHO Action Programme for the Elimination of Leprosy has provided MDT drugs, in quantities needed free-of-cost, to the national programmes in Afghanistan, Egypt, Somalia, Sudan and Yemen.

WHO's collaboration was also extended to the conduct of national training courses on control of leprosy for PHC personnel in Egypt, Morocco, Sudan and Yemen and on management in Sudan.

Several WHO documents and the *Guide on elimination of leprosy* were distributed to national programmes in order to assist them in organizing and implementing leprosy control activities in the field and to serve as material for training courses.

Simultaneously, WHO assisted the national programmes in Sudan and Yemen to accelerate MDT implementation in geographically difficult-to-access areas through the Special Action Projects for Elimination of Leprosy. Five such projects in Sudan and one in Yemen started implementation during 1995.

Poliomyelitis eradication

Progress towards eradication of poliomyelitis has been maintained during the year. This progress reflects achieving and sustaining of high immunization coverage, developing sensitive systems of acute flaccid paralysis (AFP) surveillance, implementing supplementary immunization activities, including national immunization days (NIDs), and establishing laboratory surveillance for wild polio viruses.

Incidence of poliomyelitis

During 1995, a total of 771 confirmed cases of poliomyelitis was reported in the Region, compared with 1015 in 1994, representing a 24% reduction. The conduct of NIDs in 18 countries in 1995 and also improved control of the disease are believed to be the main factors for this decline in many countries. A breakdown of the 771 cases reported in 1995 from nine countries is given in Table 5.1. Reports were not received from Afghanistan, Djibouti or Somalia, and all other countries reported zero cases.

The monthly *PolioFax* newsletter, introduced in 1993, continued to be published regularly, and has been instrumental in increasing timely reporting of all cases of polio and AFP in the Region.

The routine immunization coverage all over the Region with at least three doses of oral poliovirus vaccine (OPV3) by one year of age was 80%. It is slightly lower than the 1992 coverage (82%) which was mainly the result of the low levels in four countries (Djibouti, Pakistan, Sudan and Yemen). Seventeen countries reported OPV3 coverage of 90% or more. In the four countries that were lagging behind,

TABLE 5.1 Incidence of poliomyelitis in the Eastern Mediterranean Region, 1995

Country	Number of cases	Percentage of total
Cyprus	1	0.1
Egypt	71	9.1
Iran, Islamic Republic of	101	13.1
Iraq	34	4.4
Pakistan	490	63.6
Saudi Arabia	3	0.4
Sudan	22	2.9
Syrian Arab Republic	4	0.5
Yemen	45	5.8
Total	771	99.9

routine immunization coverage, which started to decline in 1993, remained low in 1995. An intercountry meeting for these four countries was held in Cairo in December 1995. Individual country situations were reviewed and specific recommendations made.

Conduct of NIDs

During 1995, all Member States of the Region, except Cyprus, Djibouti, Somalia, Sudan and Yemen, conducted NIDs, compared to only five in 1994. Owing to shortages of resources to purchase vaccine, the NIDs planned for 1995 in Sudan were delayed by at least one year, in spite of strong national commitment of the programme.

The Regional Office provided technical assistance in all aspects of NID planning, implementation and evaluation. Most of the Member States achieved high (above 95%) coverage of the target age-group of under 5 years. In order to maximize the impact of NIDs, neighbouring countries coordinated activities so that NIDs were conducted simultaneously, particularly in the emerging polio-free zones of the Middle East, the Maghreb and the Arabian Peninsula.

Surveillance for acute flaccid paralysis

By the end of 1995, all Member States with the exception of Afghanistan and Somalia, have established systems for reporting and monitoring AFP. However, reporting from some countries has not been timely and needed to be improved considerably. To quantify AFP surveillance and ensure its quality in both timeliness and completeness, surveillance performance indicators are being routinely used in Bahrain, Egypt, the Islamic Republic of Iran, Jordan, Kuwait, Morocco, Oman,

Qatar, Saudi Arabia, the Syrian Arab Republic and Tunisia. Acute flaccid paralysis surveillance systems in eight Member States, namely: Bahrain, Islamic Republic of Iran, Jordan, Kuwait, Oman, Saudi Arabia, Syrian Arab Republic and Tunisia have achieved a non-polio AFP rate of one or above per 100 000 children under 15 years—the required level of AFP surveillance sensitivity. The reported rates from Morocco are approaching the expected level of surveillance sensitivity, but other countries are still far from the level. AFP or polio cases were being investigated clinically and epidemiologically in 21 countries.

Laboratory-based surveillance for wild poliovirus, the core component of AFP surveillance, has also made significant progress in 1995. Laboratory surveillance for polioviruses among AFP cases was initiated in 16 countries. Of 1715 AFP cases reported in 1995, laboratory investigations were performed for 1277 (74%) cases; of these, adequate stool specimens required were collected from 492 (46%) cases.

WHO continued its collaboration with Member States in strengthening the laboratory network through the provision of consultant and staff services, standard reagents and staff training. A WHO-sponsored intercountry course on standardizing virus isolation techniques was held at the Regional Reference Laboratory (VACSERA) in Cairo, at which national staff from the regional laboratory network were trained. Also, staff from the Regional Reference Laboratories in Egypt and Tunisia and the National Laboratory in Oman were trained in intratypic differentiation of polioviruses.

Certification of polio eradication. Activities aimed at preparation for the eventual certification of polio eradication from the Region continued. The Regional Commission for Certification of polio eradication held at its first meeting, and established a plan of work and procedures for the certification process. Many countries have now established national committees for the certification of polio eradication in their countries and the Regional Office continued to encourage formation of these committees in the countries that have not yet done so.

Constraints. In spite of the continued progress, the regional poliomyelitis eradication initiative is facing a number of constraints, the most serious being shortage of vaccine and civil war or areas of conflict in some countries.

World Health Day. The theme for World Health Day in 1995 was "Target 2000—A World Without Polio". To commemorate World Health Day, the WHO Regional Office and Member States joined efforts to accelerate progress towards the eradication of poliomyelitis in the Region. Over 40 million children received OPV during NIDs about the time of World Health Day.

In 1996, regional efforts to eradicate poliomyelitis will continue. The seven countries reporting 96% of polio cases in 1995 will conduct NIDs. WHO will continue assisting Member States in follow-up assessment of the national EPI surveillance systems with main emphasis on mid-decade goals of eradication, elimination and control of target diseases. The national network laboratories for

poliovirus diagnosis will be supported through provision of reagents and disposables, and staff training in intratypic differentiation will be extended to responsible officers from Kuwait and Pakistan.

Neonatal tetanus eradication

The total number of reported cases of neonatal tetanus from countries of the Region is still large, but slightly lower than that reported in the previous year (see Table 5.2). However, some countries, namely Bahrain, Cyprus, Kuwait, Qatar, the United Arab Emirates and the Palestine population served by UNRWA, have already achieved the elimination target, reporting zero cases during 1995.

TABLE 5.2 Neonatal tetanus cases in the Eastern Mediterranean Region, by country, 1991-95

Country	Year				
	1991	1992	1993	1994	1995
Afghanistan	NA*	NA	NA	NA	NA
Bahrain	0	0	0	0	0
Cyprus	0	0	0	0	0
Djibouti	0	0	0	NA	0
Egypt	2728	1830	1265	993	790
Iran, Islamic Republic of	9	18	12	21	13
Iraq	936	233	171	89	67
Jordan	6	6	6	5	2
Kuwait	0	0	0	0	0
Lebanon	NA	0	0	3	3
Libyan Arab Jamahiriya	3	3	NA	NA	NA
Morocco	23	18	8	9	14
Oman	1	0	0	0	1
Pakistan	1430	1737	1685	1842	1580
Palestine	NA	NA	NA	NA	2
Qatar	0	0	0	0	0
Saudi Arabia	12	15	35	33	25
Somalia	NA	NA	NA	NA	NA
Sudan	NA	150	71	70	21
Syrian Arab Republic	55	83	74	74	106
Tunisia	8	8	3	7	7
United Arab Emirates	0	0	0	0	0
Yemen	NA	21	8	3	12
UNRWA	0	0	0	3	0
Total	5211	4122	3338	3152	2643

* NA = Not available

Egypt, Iraq, Pakistan, Saudi Arabia, Sudan and the Syrian Arab Republic have reported a significant number of cases—these countries have 98% of reported cases in the Region. There is evidence that surveillance of neonatal tetanus is incomplete. Hence, reporting from some countries is unreliable with a very large number of cases neither detected, nor reported. Moreover, in view of the very low tetanus toxoid (TT) coverage and inadequate health care in Afghanistan and Somalia, it is assumed that the disease is common in these two countries.

In 1995, many countries in the Region started the implementation of the high-risk area approach, with TT immunization of all women in the child-bearing age living in identified high-risk areas. In addition, it is currently a common practice in most of the countries to check the immunization status of mothers attending health facilities mainly for immunization of their children, in order to increase TT coverage of these women.

It is planned to convene a special meeting in 1996 of countries where the disease is still common. In 1996, technical support will be provided for the proper implementation of the high-risk area approach.

Measles elimination

The target of 90% morbidity and 95% mortality reductions for measles has been achieved in many countries and is being pursued in the others. In countries with high immunization coverage (90% and more), outbreaks of measles are being observed due to the accumulation of susceptibles, especially among those where the spread of epidemics has been stopped. Among these countries, the strategy for anticipated outbreaks and preventive vaccination is being adopted and efforts for the implementation of other strategies, such as mass campaigns, are under consideration.

The reported number of cases of measles from the countries during 1995 is slightly less than those reported in 1994, with a clear decreasing trend (Table 5.3). However , it should be noted that the surveillance system is not yet sensitive enough in most of the countries to discover all the cases occurring. It is believed that most of the mild cases are not showing up in health services and a considerable proportion of them is cared for by the private sector, which seldom reports the cases to the health authorities.

A consultation on measles and rubella was held in 1995, which was attended by a number of experts from the countries of the Region, as well as staff from UNICEF and WHO. Discussions in the consultation included the epidemiological aspects of measles and rubella occurrence and the recent proposed preventive and control activities. Various recommendations were adopted for the control of both diseases in the countries.

TABLE 5.3 Reported measles cases in the Eastern Mediterranean Region, by country, 1991-95

Country	Year				
	1991	1992	1993	1994	1995
Afghanistan	792	NA*	NA	NA	NA
Bahrain	7	12	3	0	3
Cyprus	1	26	0	0	0
Djibouti	13	129	37	NA	8
Egypt	1 231	4 403	2 874	1 444	1 833
Iran, Islamic Republic of	6 034	5 028	4 616	506	263
Iraq	11 358	20 160	16 339	10 657	7 650
Jordan	143	1 071	2 985	516	318
Kuwait	165	383	260	432	12
Lebanon	NA	13	396	51	3
Libyan Arab Jamahiriya	1 695	3 691	NA	NA	NA
Morocco	2 125	6 008	8 431	3 512	2 380
Oman	220	1 834	3 108	163	68
Pakistan	617	2967	1 967	1 421	1 720
Palestine	NA	NA	NA	63	46
Qatar	563	67	27	12	0
Saudi Arabia	6 368	11 286	3 182	1 283	2 574
Somalia	NA	NA	NA	NA	NA
Sudan	1 756	1 727	683	963	841
Syrian Arab Republic	168	374	2 300	1 334	1 362
Tunisia	1 250	11 872	1 413	475	676
United Arab Emirates	1 148	1 063	744	518	671
Yemen	75	2 420	601	35	225
UNRWA	121	387	381	150	24
Total	35 850	74 934	50 347	23 535	20 677

* NA = Not available

In view of the advanced EPI activities in the countries of the Arabian peninsula, with high immunization coverage rates and an effective and sensitive surveillance system, and based on the expressed desire of these countries to target measles eradication, a special meeting was held, with WHO support, involving the EPI managers, together with senior paediatricians of each of the six countries concerned (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates). It was decided by these countries to adopt further activities with the aim of measles

eradication by the year 2000 and also to strengthen rubella control. These activities will be followed up and technical support will be provided by WHO to these countries to assist in achieving the targets.

5.2 Control of other communicable diseases

Vaccine-preventable diseases control and immunization

Immunization coverage

Countries that have achieved high rates of immunization coverage were able to sustain them during the year. However, those that had low coverage rates continued to report low figures, or even showed a further decrease. The estimated regional averages for immunization coverage in 1995, based on the reports received from countries (given in Table 5.4), were 84% for BCG, 80% for OPV3, 80% for DPT3 and 75% for measles for children in their first year of age. The reported coverage with two or more doses of TT among pregnant women was 48% (Figure 5.1 and Table 5.4). The coverage rates for basic immunizations were almost the same as those reported in 1994 owing to the continuation of the low coverage which started in 1993, particularly in Djibouti, Pakistan, Sudan and Yemen. Furthermore, the continuation of civil unrest in both Afghanistan and Somalia hindered the establishment of routine activities.

FIGURE 5.1 Reported immunization coverage of children in their first year of age and pregnant women in the Eastern Mediterranean Region, 1991–95

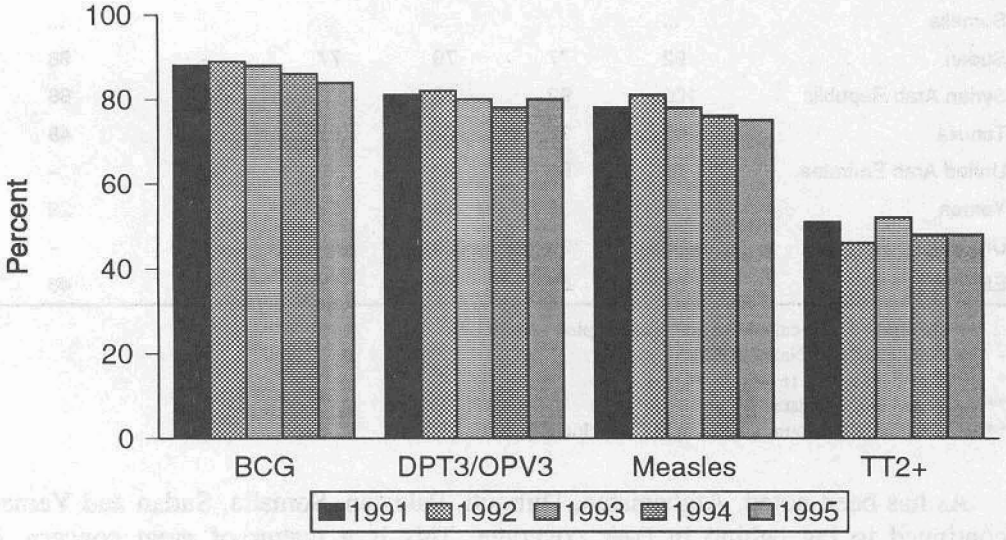


TABLE 5.4 Reported immunization coverage of children in their first year and pregnant women in the Eastern Mediterranean Region, 1995

Country/Area	Immunization coverage (%) Under one year					Pregnant women
	BCG	DPT3	OPV3	Measles	HBV3	TT2+
Afghanistan	...	...	...	...	–	...
Bahrain	–	98	98	95	95	49
Cyprus*	–	96	96	83	68	–
Djibouti	76	63	63	58	–	37
Egypt	93	91	91	89	91	66
Iran, Islamic Republic of	98	99	98	96	54	45
Iraq	99	91	91	95	57	71
Jordan	–	100	99	92	35	24
Kuwait	–	100	100	98	100	22
Lebanon*	–	94	94	85	–	–
Libyan Arab Jamahiriya	99	96	96	92	...	...
Morocco	93	90	90	88	–	78
Oman	96	100	100	100	100	54
Pakistan	69	58	57	56	–	42
Palestine National Authority	91	100	96	73	93	39
Qatar**	96	91	91	86	90	–
Saudi Arabia	94	96	96	94	95	62
Somalia	...	...	...	...	...	...
Sudan	92	77	79	77	–	68
Syrian Arab Republic	100	92	92	90	74	66
Tunisia	89	92	92	91	...	48
United Arab Emirates	98	90	90	90	90	–
Yemen	60	53	53	53	–	23
UNRWA	98	100	100	100	67	–
EMR Average	84	80	80	75	79***	48

... = Coverage % not calculated due to incomplete reports
– = Not included in National EPI
* = Based on survey results (1994)
** = Based on 1994 data
*** = Calculated for countries having HBV included in National EPI

As has been noted, Afghanistan, Djibouti, Pakistan, Somalia, Sudan and Yemen, continued to lag behind in their coverage. This is a matter of great concern. In response to this situation, a special meeting was held for these countries in Cairo, on 1 and 2 December 1995. The meeting was attended by the EPI managers together

with a senior officer (undersecretary or director-general of health) from each of these countries, together with WHO/UNICEF and a number of donors. The status of the Expanded Programme on Immunization in each of these countries was discussed in depth and recommendations were formulated, which included general as well as specific recommendations for each country. These focused on the necessity of analysing the factors responsible for any failure to advance and/or sustain immunization coverage and disease surveillance, preparation of detailed plans of action defining proposed strategies and activities in detail for the short- and medium-term. These plans of action should clearly quantify the resource needs, both financial and technical. WHO and UNICEF are collaborating with these countries in the implementation of the recommendations.

In addition to the routine immunization tasks, other, supplementary immunization activities were carried out during 1995, including the holding of national immunization days and "mopping-up" operations. The coverage rate for antigens covered in these supplementary immunization activities, especially for OPV, are generally much higher than those reported for routine immunization. These supplementary activities included the continuation of the multiple-antigen, catch-up immunization days conducted in the Libyan Arab Jamahiriya, Morocco and Tunisia in coordination with other neighbouring countries (Maghrebian immunization days). Also, Afghanistan conducted the second and third rounds of its first national multiple-antigen immunization days (the first round was carried out during November 1994), with considerable coverage. It is hoped to maintain this initiative through efforts made recently to establish routine activities.

Disease surveillance

An effective and sensitive surveillance system is required to monitor the effectiveness of EPI in the prevention of the target diseases and specifically to achieve the global goals of eradication, elimination and reduction of diseases.

Efforts to improve surveillance were further strengthened during the year. The surveillance assessment visits which started in 1994 were continued in 1995 and their scope was widened to include all EPI-target diseases, instead of poliomyelitis alone as originally planned. Good national surveillance systems are currently available in some countries; however, the systems are still weak in most of the countries and the timeliness and completeness of reporting still require improvement. In this respect, the follow-up surveillance assessment visits were continued during 1995 with the aim of improving the collection of data. In addition, a computerized data management system was developed for line-listing of cases and analysis of data about incidence of cases, as well as mapping. The system was introduced to participants from almost all the countries through two intercountry training courses. A series of national training courses on computerization of EPI data as well as on electronic data transfer, both within the country and from the country to the Regional Office will be conducted during 1996.

TABLE 5.5 Reported annual morbidity due to EPI target diseases in the EMR, 1991-95

Disease	1991	1992	1993	1994	1995
Poliomyelitis	2 120	1 901	2 435	1 016	771
Measles	35 850	74 934	50 347	23 535	21 284
Neonatal tetanus	5 211	4 122	3 338	3 152	2 642
Total tetanus	7 133	5 556	4 863	4 141	3 473
Diphtheria	1 464	1 047	404	312	298
Pertussis	3 397	4 690	2 089	1 692	3 437
Tuberculosis	253 671	71 524	62 959	52 075	23 491

The incidence of EPI target diseases showed further decline in 1995, based on the data reported from the countries (Table 5.5).

Hepatitis B immunization

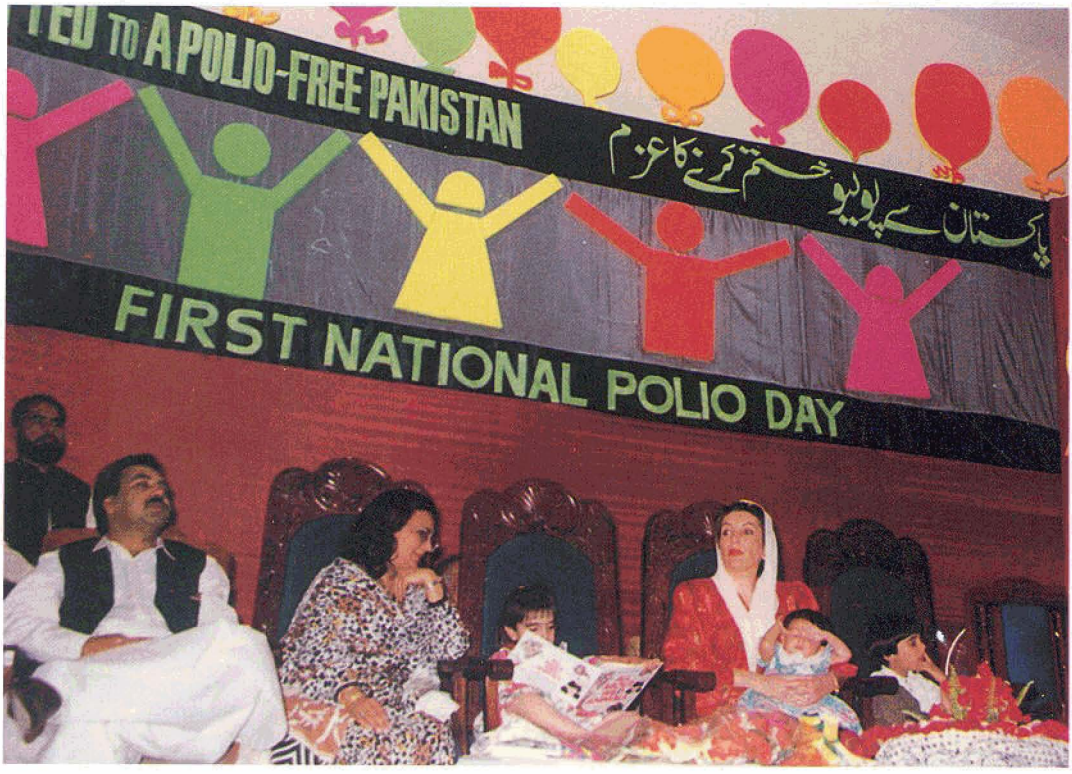
During 1995, two more countries (Jordan and Tunisia) started routine hepatitis B immunization of infants. This means that hepatitis B immunization is integrated into the national EPI for children under one year of age in 15 countries (Bahrain, Cyprus, Egypt, the Islamic Republic of Iran, Iraq, Jordan, Kuwait, the Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia, the Syrian Arab Republic, Tunisia, the United Arab Emirates and Palestine and the population served by UNRWA). These countries have about 44% of the Region's total infant population. The overall coverage rate in these 15 countries is 73%, although seven of the 15 countries reported coverage rates of over 90%.

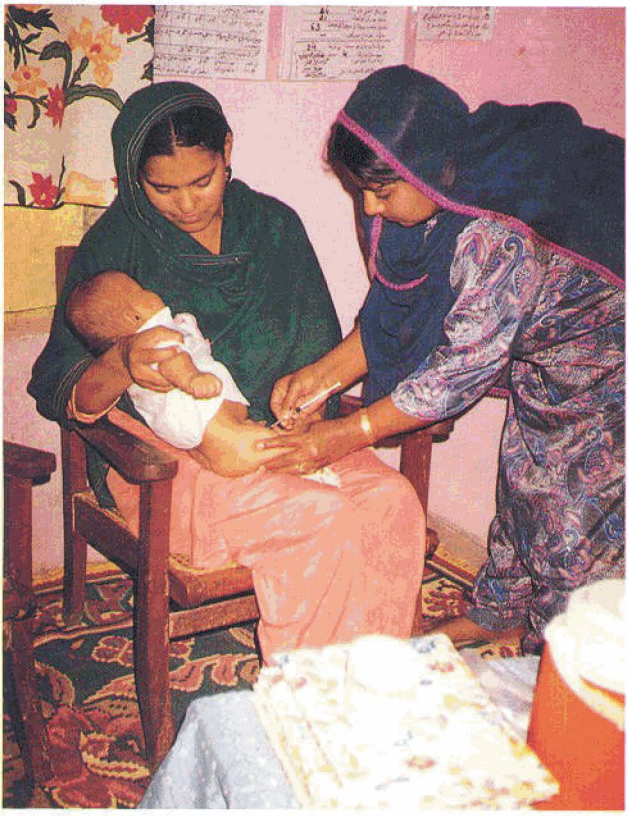
Training

Support to national training activities was continued during 1995. These activities included the training of various categories of health professionals in different aspects of EPI, including programme management, immunization activities, cold chain and surveillance.

Intercountry and interagency coordination

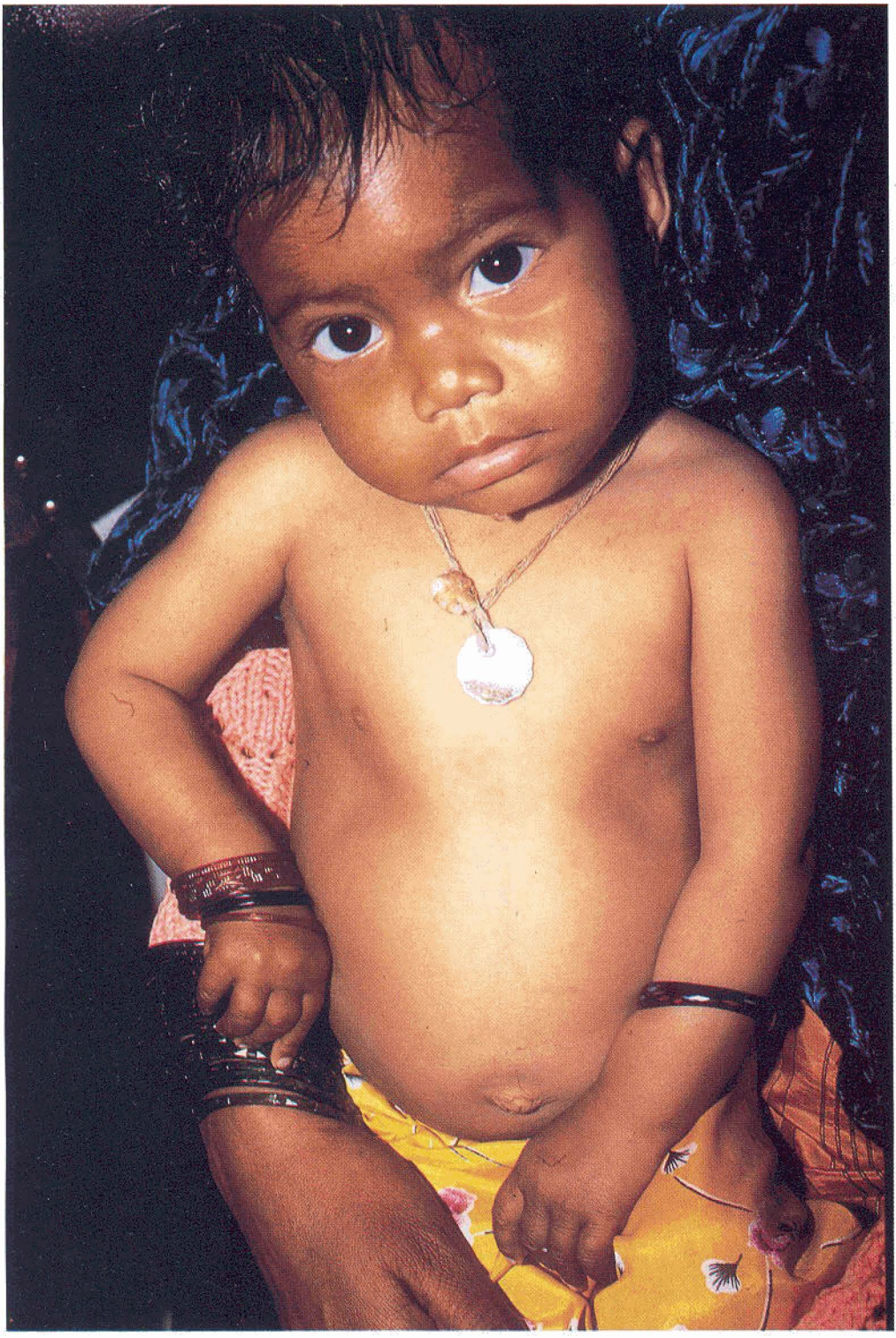
The annual EPI managers intercountry meeting was held in Manama, Bahrain. In addition to national EPI managers, the meeting was attended by representatives from UNICEF's Middle East and Northern Africa Region, USAID, Rotary International and the Centers for Disease Control (CDC), Atlanta, Georgia, USA. As usual, the progress of EPI activities, including routine and supplemental immunization, target diseases occurrence and status of achievement of global goals in member countries were discussed. In addition, recent advances and recommendations for improvement of EPI were also explained and discussed.





National immunization days to eradicate poliomyelitis were carried out in 18 countries of the Region in 1995. HE Muhtarma Benazir Bhutto, Prime Minister of Pakistan, inaugurated the first NID there and brought her three children for immunization.

Sustained high immunization coverage rates against the six vaccine-preventable target diseases has resulted in a marked decline in infant morbidity and mortality.



Children with acute respiratory infections can be detected earlier by adopting standard case management. This has been shown to prevent severe cases, such as this child with pneumonia, and gives them a better chance of survival.

The second annual meeting of the Regional Interagency Coordination Committee was held for one day immediately following the meeting of those countries that were lagging behind in their coverage. Representatives from UNICEF; CDC, Atlanta; Rotary International; and the Japan International Cooperation Agency (JICA) attended the meeting. Most of these representatives also attended the two-day meeting of these countries. The regional EPI and polio situation, and the proposed future activities were discussed. The discussions also included the situation in the countries that were low in their coverage, and the support required. All the attending agencies expressed interest in continuing their support to the regional EPI activities, especially polio eradication activities.

Control of acute respiratory infections and diarrhoeal diseases (including cholera)

Acute respiratory infections

Acute respiratory infections (ARI) remain a serious threat to the lives of children under five years of age. Statistical data indicate that ARI, particularly pneumonia, kill children in the developing countries of this Region more than any other illness.

The primary aim of the ARI programme is to ensure that children with pneumonia have access to treatment by well-trained personnel, in order to reduce mortality. Another important objective is to reduce the irrational use of antibiotics.

In order, to achieve these objectives, the regional programme for the control of ARI continued its collaboration with national authorities in the different priority areas.

Programme planning

The third intercountry meeting of the national ARI programme managers was held in Amman, Jordan, in close collaboration with UNICEF. Its objectives were to identify the programme achievements and operational problems of ARI, and to improve planning for the biennium 1996-97. The recommendations made encouraged the programme managers to work for expanding the quality training and strengthening of regular supervision, combining ARI activities with those for control of diarrhoeal diseases (CDD), recognizing the importance of private practitioners and potential use of community health workers (CHWs), utilizing the results of formal evaluations for replanning and improving programmes, and making tobacco control a part of all ARI programmes. Regional Office staff visited Morocco and Oman to collaborate with national authorities in updating their plans for 1995.

Training

The programme emphasizes that the best way to reduce ARI mortality is by training health workers to change their performance, particularly in relation to the rational use of drugs. WHO's support for national training activities has two main

elements: cooperation with countries to develop their training strategies, and strengthening and supporting the national capacity for training.

With WHO's technical and financial support, training courses in ARI programme management were conducted in Egypt, Iraq and the Libyan Arab Jamahiriya, and combined CDD/ARI courses were held in Sudan. Training courses in clinical standard case-management were conducted in Egypt, the Islamic Republic of Iran, Iraq, Jordan, Pakistan and Sudan. In these courses, 1545 medical doctors and 25 297 nurses, paramedical and community health workers were trained. Egypt and Pakistan have organized orientation seminars in case-management for doctors and pharmacists in the private and nongovernmental sectors who have no access to case management courses. In some countries, the national programmes have planned to promote the inclusion of WHO standard case-management guidelines in the undergraduate and basic curricula of nurses, doctors and paramedical workers. Egypt, Iraq, Pakistan and Sudan were actively involved in this approach, which will not only avoid modifying ingrained practices through in-service training, but also promises to be cost-effective and produce a sustainable, long-term impact.

Communication

The regional programme has had two major areas of activity related to communication. The first has been the implementation of the "Talking-to-Mothers" programme and the use of home-care cards, now in use in many countries, as part of the case-management training courses. The second has been the use of the focused ethnographic study to gather information on community beliefs and practices as a basis for planning communication activities.

WHO's collaboration in this respect included support to Egypt and Pakistan to prepare national communication plans and to develop communication material; the latter was also an area of collaboration with Iraq and Oman. In Morocco and Iraq, WHO collaborated in the conduct of focus ethnographic studies, and in Sudan the results of a similar study were adopted in a training course for community health workers.

Monitoring and evaluation

Monitoring and evaluation are part of the larger ARI programme planning and management process. In programme monitoring, the national programmes in Egypt, the Islamic Republic of Iran, Iraq, Jordan, Morocco, Oman, Pakistan and Sudan have developed and implemented reporting systems at the health facility level. Evaluation activities were supported wherever national programmes have carried out activities sufficient to suggest that improvements have occurred and when programmes have shown a commitment to act on the evaluation results.

Support was provided to three health facility surveys in Iraq, Morocco and Sudan. Two combined ARI/CDD household surveys were carried out in Pakistan and Sudan. A focused programme review was conducted in Islamic Republic of Iran.

Collaboration with other agencies, particularly UNICEF and USAID, has been very fruitful.

Diarrhoeal diseases, including cholera

Epidemiological situation

Acute diarrhoeal diseases continue to represent one of the two most frequent causes (together with acute respiratory infections) of morbidity and mortality among children below 5 years, with considerable incidence in other age-groups as well.

It is estimated that, in 1995, 190 million cases of acute diarrhoea occurred in the Eastern Mediterranean Region, including 20 million moderate or severe cases that resulted in approximately 350 000 deaths. These cases and deaths are estimated to include about one million cases and 40 000 deaths due to endemic and epidemic shigellosis.

Cholera continued to show increasing incidence and evolving endemicity in many areas in the Region. During 1995, cholera outbreaks or epidemics occurred in at least seven countries. Large epidemics were reported in Afghanistan, the Islamic Republic of Iran, Iraq and Somalia. It is estimated that about 50 000 suspected cholera cases with over 1000 deaths occurred in 1995. In most countries the average reported case fatality rates (CFR) were usually below 3%, which demonstrates the efficiency of preparedness and control measures.

In Afghanistan, 19 903 suspected cases of cholera with 624 deaths were reported between June and September 1995. Although these figures show a reasonably low overall CFR at 3.1%, deaths were much higher, with a CFR of 12.1 to 14.3% in two of the 11 affected provinces.

In Somalia, 191 deaths occurred among the 9255 cholera cases reported during 1995, with a case fatality rate of 1.9% which indicates good case-management. The causative agent was *El Tor* vibrio 01 Ogawa, highly resistant to cotrimoxazole but sensitive to tetracyclines. There was a continuing decline of cases since April 1995 as a result of the continued efforts of WHO and other international agencies to maintain chlorination and public health education. With the deterioration of the security situation, cases started to appear again during the early months of 1996.

In Iraq, 519 confirmed cases of cholera were reported during 1995. In addition a cholera outbreak in northern Iraq in November 1995 claimed 370 laboratory-confirmed cases and three deaths. Technical assistance was provided by WHO and several NGOs to local authorities in implementing control measures.

In the Islamic Republic of Iran, 2177 cases with 59 deaths (CFR 2.7%) were reported in 1995.

In response to countries' requests, the Regional Office continued providing technical expertise through consultants, supply of WHO training and reference materials, emergency supplies of oral rehydration salts, intravenous fluids, recommended antibiotics and diagnostic antisera.

An intercountry cholera coordination meeting was held in Cairo in March 1995 in which 20 countries participated. The purpose of the meeting was to provide the participants with up-to-date information on the global and regional cholera situations, to share experiences on preparedness for emergencies created by cholera, to improve and coordinate cholera control operations, and to develop/enhance national and intercountry action plans for cholera preparedness and control, and early response to outbreaks.

This meeting was followed by the Cholera Border Meeting sponsored jointly by the Regional Offices for the Eastern Mediterranean and Africa, for six neighbouring countries of the Horn of Africa with the purpose of harmonizing national control policies and strategies, and to coordinate intercountry cholera control activities.

Strengthening national plans for diarrhoeal diseases control

Active programmes for control of diarrhoeal diseases (CDD) exist in all countries of the Region. Accelerated implementation of CDD activities to achieve the mid- and end-of-decade CDD goals continued in 1995. Several countries, Egypt, Iraq, Morocco, Pakistan, Sudan and Yemen, with WHO collaboration, prepared new plans or revised their plans of action for the control of diarrhoeal diseases and cholera. Some of these plans established new national policies for control measures and case-management of cholera, shigellosis and persistent diarrhoea.

In large countries, in addition to central planning, collaboration in the preparation of provincial/governorate level plans continued.

Training and education

Clinical and managerial training in skills related to diarrhoea case-management and advising mothers continued to be given high priority in WHO's collaboration with Member States. For achieving this, improved national technical guidelines were prepared in many countries using new or revised WHO material. These were introduced in all clinical training courses. Efforts continued to achieve increased involvement of university staff in the training process, and in extending CDD training to physicians in the private sector.

Almost 600 diarrhoea case-management courses were conducted with WHO support for more than 8000 medical and paramedical staff in Egypt, the Islamic Republic of Iran, Jordan, Iraq, the Libyan Arab Jamahiriya, Morocco, Pakistan, Somalia and Sudan. Many other countries conducted training courses on their own, using WHO training material.

Activities related to the strengthening of teaching of diarrhoeal diseases in medical schools were continued and extended. In Egypt, the third CDD medical education workshop was conducted for the faculty members from four medical schools who had not been trained in previous workshops, followed by a course to train trainers of other teaching staff of the participating medical schools in CDD case-management and in advising mothers. As a result, 10 of 14 participating schools have improved the teaching of paediatrics or community medicine. At the end of

1995, the first follow-up visit was conducted in one medical school and plans were made for similar visits to other schools and training of their faculty in 1996. In the Islamic Republic of Iran, the WHO CDD medical education training materials were translated into Farsi, and the first workshop was conducted for six medical schools with WHO assistance in June 1995. The second workshop was held in March 1996. As a recognition of their importance, the Regional Office's experience with development and implementation of the CDD medical education activities in relation to CDD gained during 1991-95 was presented at the First International Congress of Paediatrics held in Cairo in September 1995.

In the field of CDD communications, various mass media activities took place in Egypt, the Islamic Republic of Iran, Iraq, Lebanon, Morocco, Pakistan, the Syrian Arab Republic and Sudan. In Morocco, the communication strategy was updated with WHO's collaboration. An annual communication plan was prepared in Pakistan by the national staff in collaboration with WHO and UNICEF. In the implementation of this plan, emphasis was given to production and distribution of ORT/CDD educational materials (posters, leaflets) to the provinces and to the development and daily broadcast of television and radio spots on home management and prevention of diarrhoea. Training of health staff in face-to-face communication techniques was continued in Egypt, the Islamic Republic of Iran, Jordan, Morocco, Pakistan and Sudan. In the Syrian Arab Republic, education in environmental and breast-feeding concepts was strengthened through the involvement of NGOs.

Promotion of breast-feeding

Breast-feeding is recognized in the Region as one of the most cost-efficient diarrhoea preventive interventions and its promotion was continued in the countries. In an effort to maximize its benefit, the training modules of the new WHO/UNICEF breast-feeding counselling course were translated into Arabic and plans were made in several countries to conduct courses with WHO assistance during 1996-97.

Evaluation

Several CDD evaluation activities were conducted jointly by national, WHO and UNICEF staff using the revised and newly designed WHO survey and review protocols. These included the combined CDD/ARI/breast-feeding household surveys in Pakistan and Sudan, CDD health facility surveys in Egypt and Morocco, phase 1 of the combined CDD/ARI focused programme review in the Islamic Republic of Iran, and CDD desk reviews in Iraq and Yemen. Special emphasis was given to efficient use of the results of these evaluation activities in the strengthening of national CDD programmes. After the health facility surveys in Egypt and Morocco, feedback meetings were held for national, WHO, UNICEF and other donor staff. As a result, improved CDD training and educational plans were prepared, and their implementation secured through increased national and external support.

It is estimated that, as a result of an increased use of oral rehydration therapy (ORT) in most countries (in 60-80% of childhood diarrhoea cases), over 100 000 deaths associated with diarrhoea were prevented in 1995.

Tuberculosis control

Tuberculosis is an important public health problem in the Region. The total number of reported cases in the Region in 1995 was 212 702. However, the estimated incidence of the disease is much higher than that notified, and could be as high as 745 000. Some 75% of the cases are among the productive age-groups of 15-59 years. It is anticipated that the incidence will increase in the coming years in the Region as a result of population growth, increasing trend of HIV infection and the potential spread of the multidrug-resistant tuberculosis. This is aggravated by the fact that 96% of the Region's population is estimated to live in countries that have either high (more than 100 cases per 100 000 population) or intermediate (20-100 per 100 000 population) incidence.

Activities

In its programme of collaboration with Member States, the Regional Office placed special emphasis, during 1995, on the strengthening of the proper treatment of cases, which is a key element in the success of national tuberculosis control programmes. In this regard, EMRO adopted the initiative to implement the directly observed treatment, short-course (DOTS) for the treatment of tuberculosis. DOTS is a system under which health workers ensure that each patient takes the correct medication. By using DOTS, health workers can be almost certain that their patients will be cured.

During 1995, the Regional Office conducted several activities at regional and country levels and, by the end of the year, Morocco and Oman were implementing DOTS throughout their national programmes, and seven other countries (Djibouti, Egypt, the Islamic Republic of Iran, Pakistan, Saudi Arabia, Somalia and Yemen) are implementing DOTS in demonstration sites or other projects. Table 5.6 indicates the control activities being carried out in Member States.

The managers of the national tuberculosis programmes (NTPs) in the Region were introduced to DOTS during a meeting held in Cairo in July 1995. The situation at regional and country levels was reviewed, and the importance of DOTS discussed. By the end of the meeting, each NTP manager developed a workplan for 1996-97.

A regional core group that has a clear understanding of DOTS was developed during a workshop for potential TB consultants held in Cairo following the meeting of NTP managers. Seven managers attended the workshops and learned the skills needed of TB consultants.

Table 5.6 Tuberculosis control activities in the Eastern Mediterranean Region

Country	Estimated incidence*	Adoption of WHO policy	Existence of NTP guidelines	Reported cure rate**	Implementation of DOTS***
Afghanistan	High	No	No	NA	No
Bahrain	Low	No	No	NA	No
Cyprus	Low	No	No	NA	No
Djibouti	High	Yes	Yes	Intermediate	Pilot
Egypt	Intermediate	Yes	Yes	Low	Pilot
Iran, Islamic Republic of	Intermediate	Yes	Yes	NA	Pilot
Iraq	Intermediate	No	–	Intermediate	No
Jordan	Low	No	Yes	High	No
Kuwait	Intermediate	No	No	High	No
Lebanon	Low	No	Yes	Low	No
Libyan Arab Jamahiriya	Low	No	Yes	NA	No
Morocco	Intermediate	Yes	Yes	Intermediate	Yes
Oman	Intermediate	Yes	Yes	High	Yes
Pakistan	High	Yes	Yes	NA	Pilot
Palestine	Low	No	No	NA	No
Qatar	Low	No	No	NA	No
Saudi Arabia	Intermediate	Yes	Yes	NA	Pilot
Somalia	High	Yes	Yes	NA	Pilot
Sudan	High	Yes	Yes	Low	No
Syrian Arab Republic	Intermediate	No	No	Low	No
Tunisia	Intermediate	No	Yes	NA	No
United Arab Emirates	–	No	No	NA	No
Yemen	High	Yes	Yes	Low	Pilot

Source: NTP Database Survey by WHO (1994 and 1995) and country reports.

* High incidence (> 100 per 100 000 population), Intermediate incidence (20-100 per 100 000 population), Low incidence (< 20 per 100 000 population)

** High cure rate (> 80%), Intermediate cure rate (50-80%), Low cure rate (< 50%)

*** Implementation of DOTS: Yes (nationwide); Pilot (in initial demonstration sites projects or other projects), No (no implementation)

– No information

Special emphasis was given to the development of national personnel experienced in tuberculosis control. The third intercountry facilitator training workshop, using WHO training modules on managing tuberculosis at the district level, was conducted in Beirut in October 1995. Eleven medical officers from Bahrain, Cyprus, Jordan,

Lebanon, the Libyan Arab Jamahiriya, Oman, Pakistan, Qatar and the Syrian Arab Republic participated in the workshop, which included an element on DOTS. Country level training courses on the WHO modules were conducted with WHO collaboration in Pakistan, Oman, Saudi Arabia and Yemen.

In addition to national training courses, a number of health personnel were awarded WHO training fellowships. Six doctors from the Islamic Republic of Iran attended a training course in Viet Nam. Two Palestinian doctors will attend an international training course during April/May 1996 in the United Republic of Tanzania to acquire knowledge on WHO tuberculosis control strategy and to implement them in their country.

In order to ensure that provincial and local officers responsible have valid information on tuberculosis, the Regional Office has translated several WHO technical documents on tuberculosis into local languages, copies of which were distributed extensively.

WHO collaborated with national authorities in reviewing and updating national programmes, with particular reference to introducing DOTS as a strategy. This was carried out in eight countries; the programmes of Morocco and Sudan will be reviewed in early 1996. The review of the programme in Egypt, carried out in collaboration with the Government of Netherlands-supported project, highlighted the need for full integration of the NTP into the general health services.

Staff from the Regional Office and headquarters collaborated with the national authorities in Pakistan in developing a five-year project plan. Demonstration sites/ projects of DOTS have started in two provinces.

In the Islamic Republic of Iran, WHO consultants discussed with the national authorities the development of a regional tuberculosis training course at the WHO Collaborating Centre for Tuberculosis Training in Teheran. The first regional training course is expected to take place in 1997.

In Yemen, the Regional Office collaborated with the Japan International Cooperation Agency (JICA) in support of the country's efforts to rehabilitate the NTP. Yemen has agreed to adopt DOTS as a national policy and implement it in demonstration sites in 1996.

In Somalia, despite continuous social upheavals, efforts were made with a number of NGOs and voluntary agencies to ensure the proper management of tuberculosis. The need to ensure that those involved adopted DOTS was highlighted in an effort to avoid the development of resistance and consequent complications.

WHO has assisted the provincial authorities in Afghanistan in initiating several zonal programmes in the stable areas. It is expected that WHO's assistance will continue to be provided to provincial authorities in 1996.

The Regional Office also assisted the Member States in developing a national system of a regular supply of drugs and laboratory equipment. Iraq was provided with

substantial quantities of drugs and laboratory equipment to ensure that they would be continuously available.

In order to strengthen the regional information system on tuberculosis, Regional Office support during 1995 included the on-going NTP surveillance database. Essential data on tuberculosis control, such as case-notifications and treatment results, were collected through this surveillance system.

In addition to the continuation of all the above efforts throughout 1995, the Regional Office has taken the opportunity of commemorating World Tuberculosis Day on 24 March to increase public awareness and ensure political commitment to tuberculosis control. In communications with the Ministries of Health, Education, Information and Social Affairs highlighting the importance of strengthening control efforts to meet the increasing importance of the disease was highlighted. Also, in response to a resolution of the Regional Committee (resolution EM/RC41/R.14), a consultation on the involvement of private sector in tuberculosis control was held in Beirut, from 10 to 12 April 1996, in an effort to strengthen NTP by initiating liaison between the private sector and NTP.

Control of emerging diseases and drug resistance

Emerging infectious diseases, such as dengue haemorrhagic fever, and infections with drug-resistant pathogens, were the subject of considerable scientific and public concern in 1995, as a result of recent experiences of existing, known infections that were rapidly increasing in incidence or geographic range. The world was still recuperating from the threat of the plague epidemic which struck India late in 1994, when it was faced early in 1995 with the Ebola epidemic in Zaire. In response to the challenge posed by these diseases with high epidemic potential, WHO, in 1995, assumed the leadership role in coordinating international efforts for their prevention and control. The Region was in the forefront in recognizing early the potential threat of emerging infectious diseases, as reflected by the discussions by the Regional Committee on the changing pattern of diseases during its session in 1994 and highlighting the importance of emerging infections.

At the regional level, the year witnessed small outbreaks of dengue haemorrhagic fever (DHF) and Crimean-Congo haemorrhagic fever (CCHF) in a few countries of the Region. Although there was some reluctance for countries to report outbreaks, the Regional Office collaborated actively in initiating appropriate investigation and control measures. The occurrence of the Ebola epidemic in Zaire and its possible incursion into some parts of the Region produced a state of alert, which was properly responded to by the Regional Office as well as the countries in the Region. A direct link was established between the Regional Office and the national authorities concerned through which information was exchanged continuously and technical advice provided whenever needed. At the same time, the Regional Office continued publication of fact sheets about the situation, including data on the epidemiology of the disease and its prevention and control.

Ebola fever was not the only threat to the Region in 1995. Several other emerging infections flared up close to the Region, such as yellow fever in tropical Africa. It was therefore considered that time was propitious for establishing a specific health programme at the regional level for emerging infectious diseases and developing a regional plan for prevention and control of such diseases. A regional conference on emerging infectious diseases, was convened in late-November 1995, which was attended by over 150 participants from all the countries of the Region, distinguished international speakers, and representatives of regional collaborating centres and staff members of the Regional Office and headquarters. The conference dealt with the important aspects of the epidemiology and control of emerging infectious diseases, as well as with constraints and solutions. It adopted the regional plan for the prevention and control of emerging disease in Eastern Mediterranean Region which would be presented as a document to the Forty-third Session of the Regional Committee. The main elements of the plan are the development of national disease surveillance, development and strengthening of relevant resources needed for surveillance and development of national plans to respond to the possibility of emergence of infectious diseases and to the occurrence of epidemics.

The Regional Office implemented some of the activity components of that plan by convening a meeting of the WHO regional collaborating centres in the field of communicable diseases. The aim of the meeting was to assess their capabilities, in order to strengthen them, thus ensuring the development of a network of centres capable of diagnosing emerging infections and contributing to their control and prevention. A plan for developing appropriate communication between these centres and with the Regional Office was developed.

In order to develop national human resources, a workshop for the training of trainers in communicable disease surveillance and preparedness for epidemics was held in December 1995. It was attended by 22 participants from 15 countries in the Region, Another workshop to cover these countries that did not participate in the first workshop was organized in May 1996.

A consultation on establishing a regional network on resistance to antimicrobial agents was held in 1995, which resulted in designating national focal laboratories in 18 countries to be part of the regional network.

Guidelines on antimicrobial resistance surveillance were prepared during the year.

Control of other communicable diseases of regional specificity

During 1995, the Regional Office continued its support to Member States in identifying national priorities in communicable diseases and developing national guidelines for their prevention and control, as well as developing national plans for the control of communicable diseases of specific importance.

Viral hepatitis

The importance of viral hepatitis as a major public health problem in the Region received more recognition in 1995. Complete information on the epidemiology and natural history of this group of infections is still lacking. However, it was estimated, based on several indicators of endemicity and recent surveys, that the overall annual incidence of acute viral hepatitis ranges between 50 and 150 cases per 100 000 population. Hepatitis A is highly endemic, and so is hepatitis E in several countries, particularly in communities with low social and environmental status. The carrier rate of hepatitis B in the general population indicate that the Region is in the category of intermediate-to-high endemicity. Hepatitis D infection appears to be endemic in the Region. Hepatitis C is highly prevalent in some countries and is causing much concern because of its long-term sequelae. Control measures, although widening in their application, are still not universally implemented in the Region.

The Regional Office took several steps to coordinate and strengthen national efforts in dealing with the problem of viral hepatitis. An intercountry workshop on the prevention and control of viral hepatitis was convened by the Regional Office in April 1995, in order to exchange experiences about viral hepatitis and the ongoing preventive activities in countries of the Region as well as to update the national plans of action for its prevention and control. The workshop was attended by representatives of 20 countries and it adopted sound recommendations for developing or strengthening national plans of action.

In response to a decision of the Regional Committee in 1995 requesting the Regional Director to convene a scientific meeting on viral hepatitis, particularly hepatitis C, a group of scientists from countries of the Region, WHO and the international scientific community met in Cairo in November 1995. The group reviewed the situation in the Region and reiterated the main recommendations endorsed by the intercountry workshop mentioned earlier. In addition, the meeting called for encouragement and support of studies to define all aspects of the epidemiology of viral hepatitis as well as its economic impact.

Technical support to the countries during the year included the provision of a WHO consultant to assist the health authorities in the Syrian Arab Republic in the development of a national plan for surveillance of viral hepatitis. Another WHO consultant reviewed the national plan in Oman for the control of viral hepatitis and suggested measures for its strengthening.

The Regional Office's support also included collaboration with Egypt, where hepatitis C is of specific importance, to conduct two studies on viral hepatitis B and C. The objectives of the studies were to determine the prevalence of the infection in the general population and the risk factors for transmission of viral hepatitis C in the community.

As a follow-up of these studies, EMRO, in collaboration with the Ministry of Health of Egypt, would convene a scientific group meeting at the Regional Office in

1996 to develop a detailed national plan for the prevention and control of viral hepatitis in Egypt.

Meningococcal meningitis

Close monitoring of the situation revealed no unusual occurrence of meningococcal disease in the Region during 1995. As usual, the Saudi Arabian authorities took successful preventive measures during the pilgrimage season to guard against the spread of the disease, particularly as there was an epidemic in the countries of the African meningitis belt. Copies of WHO's practical guidelines for the control of epidemic meningococcal disease which were published in 1995, were distributed to all countries in the Region. At the same time, EMRO stressed the importance of developing an early warning system in meningococcal disease surveillance, as well as appropriate planning for epidemic preparedness and response.

No unusual occurrence of other communicable diseases was noticed during 1995.

Bovine spongiform encephalopathy and Creutzfeldt-Jacob disease

The occurrence of a variant form of Creutzfeldt-Jacob disease (CJD) in 10 patients in the United Kingdom during 1995 and the possible link between these cases and exposure to bovine spongiform encephalopathy (BSE), commonly known as mad cow disease, has created considerable concern all over the world, including in the Eastern Mediterranean Region, resulting in some overreaction. From the outset, the Regional Office has kept all countries of the Region informed of the facts about the epidemiology of transmissible spongiform encepholopathies in humans and animals through issuing information bulletins and responding to enquiries. A WHO consultation, held in Geneva on 2 and 3 April 1996, made a number of recommendations which will, it is believed, be instrumental in limiting the risk to animals and human beings from exposure to specific products of animal origin through consumption or from their use in the preparation of medical products and devices.

Zoonoses

Zoonotic diseases continued to have public health significance in endemic countries of the Region. WHO continued to cooperate with Member States in the promotion and development of preventive and control measures against major zoonoses as a follow up of the resolution (EM/RC39/R.5) on zoonotic diseases adopted by the Thirty-ninth Session of the Regional Committee for the Eastern Mediterranean in 1992.

A regional workshop on the diagnosis, prevention and control of major zoonoses was held in Tunis, Tunisia, in June 1995, with the objective of evaluating the status of these diseases in Member States at which the future strategy in control was adopted.

In the field of brucellosis, WHO consultants assisted in the development of surveillance and plans of action for the control of brucellosis in Sudan and Yemen.

Technical advice was provided to Egypt in the organization of surveillance and assessment of the risk of brucellosis in different groups of rural and urban populations. WHO assistance was provided to Palestine also in the preparation of a project on the prevention and control of selected zoonoses in the West Bank and Gaza Strip, with particular emphasis on brucellosis. This project received extensive support from one of the donors and will begin implementation in 1996.

WHO supported the organization of national training courses on the control of brucellosis and other zoonoses in Jordan, the Islamic Republic of Iran, Palestine and the Syrian Arab Republic. Several fellowships were provided to endemic countries for training in Brucella typing, diagnosis and control.

Laboratory diagnosis of brucellosis in several countries of the Region was strengthened through training of technical staff and provision of diagnostic equipment and reagents.

Rabies continued to be among the most widespread zoonotic diseases in the Region. In response to requests from Member States, the Regional Office provided technical advice and supported training in post-exposure vaccination, diagnosis of rabies and development of local production of rabies vaccine.

WHO initiated activities in fighting the outbreak of rabies in Afghanistan through provision of urgent supplies of vaccines and immunoglobulins and training of staff, and by assisting in the preparation of a joint plan of action between health and veterinary services in the control of rabies.

Assistance was provided to Yemen in the organization of a campaign to reduce the stray dog population, which acted as a potential reservoir of infection. WHO supported the national programme with supplies of vaccines, training of staff and provision of diagnostic material.

WHO collaborated with Sudan through provision of technical advice, training of staff and supply of essential laboratory equipment in the modernization of the locally produced rabies vaccine for human use. In addition, supplies of modern vaccines and diagnostic materials was arranged with WHO assistance.

Surveillance, prevention and control of rabies in Lebanon was reviewed by a WHO consultant and a suitable plan of action was prepared in cooperation with health and veterinary services.

In Saudi Arabia, WHO provided technical backstopping to assess the epidemiological situation, evaluate current rabies prevention and control activities against wildlife rabies and develop a suitable control strategy.

Field evaluation of several vaccine-bait delivery techniques to vaccinate dogs orally against rabies was carried out under AGFUND-supported project on control of human and animal rabies in Tunisia.

The national rabies programmes in Djibouti, Iraq, Lebanon and Pakistan were supported with supplies of modern vaccines. Training courses and seminars on rabies

prevention and control were conducted with WHO assistance in Morocco and Tunisia.

WHO consultants assisted in the study of the transmission dynamics of cystic echinococcosis in Tunisia, evaluated the situation regarding medical aspects and advised on surveillance and the control strategy. Training courses on echinococcosis control have been organized with WHO's collaboration in Jordan, Syrian Arab Republic and Tunisia. Applied research studies on the geographical distribution of echinococcosis and assessment of the cost of patient hospitalization and treatment was supported in Tunisia.

WHO supported some activities in the field of fascioliasis control in Egypt, including clinical trial of triclabendazole for treatment. The firm that is manufacturing this drug for animal use is still hesitant to register the drug for human use in spite of requests from some countries and encouragement by WHO.

Close cooperation with the Mediterranean Zoonoses Control Programme (MZCP) continued during 1995. A joint WHO/MZCP consultation on human and animal salmonellosis national control activities was held from 13 to 15 March 1995 in the Syrian Arab Republic. Multidisciplinary approaches for the prevention and control of salmonellosis and other foodborne diseases with community participation have been adopted at the consultation. The representatives from several countries of the Region and the Regional Office participated at the Eleventh Session of the Joint Coordinating Committee of MZCP and adopted coordinated plans of activities for 1996-97 in the field of technical assistance, training and research on zoonotic diseases.

Control of schistosomiasis and other tropical diseases of regional specificity

Tropical diseases have a wide distribution in the Region and continue to be among the most significant public health problems. The burden of sickness, incapacity, disfigurement and death attributable to tropical diseases imposes serious constraints to socioeconomic development.

Schistosomiasis

Schistosomiasis continues to be an important public health problem in countries with ecological conditions favourable for its transmission, especially in areas of water-resource development projects. The significant progress in the reduction of the burden of the disease was achieved in countries with sustainable control activities, such as Egypt, Morocco, Saudi Arabia and the Syrian Arab Republic. The situation in some areas of Sudan and Yemen continues to be serious, with a high prevalence of schistosomiasis among children.

WHO supported schistosomiasis surveillance and training activities in several new water development schemes in Sudan in order to develop appropriate control strategy. Assistance was provided to Yemen for the strengthening of diagnostic and

treatment facilities in the newly opened units of the national schistosomiasis control programme. The Aswan Tropical Diseases Research, Training and Control Centre in Egypt was provided with diagnostic and laboratory equipment in order to strengthen schistosomiasis surveillance and control activities in Upper Egypt and to promote applied research. WHO also supported the national control programmes in Egypt, Jordan, Morocco and Saudi Arabia with supplies of laboratory equipment and praziquantel.

A computerized schistosomiasis recording and reporting system was introduced by WHO Consultant in Saudi Arabia. Efforts aimed at strengthening national capability in schistosomiasis control continued through the organization of training courses and provision of fellowships.

Leishmaniasis

WHO and its Member States continued to implement the Regional Committee's resolution on leishmaniasis (EM/RC40/R.7) adopted by the Fortieth Session in 1993. In particular, support was provided to the national programmes in the form of technical advice, training, provision of supplies and equipment, and applied research.

A WHO consultant assisted Afghanistan in the development of its national plan for leishmaniasis control and in training national staff on methods of surveillance and control. A unit for leishmania isolation and identification was established in the Syrian Arab Republic with the technical advice of a WHO consultant. WHO also provided a consultant to Morocco to evaluate and advise on control activities.

The Regional Office supported the organization of national training activities in Jordan, the Libyan Arab Jamahiriya, the Syrian Arab Republic, Tunisia and Sudan. Several fellowships were provided to Member States for studies in methods of surveillance, treatment and control of leishmaniasis.

Support was provided to Afghanistan, Iraq and Sudan, in the form of supplies of drugs, to fight the outbreaks of cutaneous and visceral leishmaniasis. Laboratory equipment and reagents for kala-azar diagnosis were supplied to the Islamic Republic of Iran. WHO supported the preparation and printing of a training manual on leishmaniasis in Sudan.

Several research projects on the development of leishmania vaccines and evaluation of vector, rodent and environment modification control methods against leishmaniasis have been supported by WHO in Member States.

Filariasis

Lymphatic filariasis is a public health problem in Egypt. A WHO consultant assisted the national control programme in organization of surveillance and advised on control measures.

WHO supported the surveillance and control of onchocerciasis in Sudan through the introduction of the method of rapid epidemiological mapping into the practice of the national control programme and mass distribution of ivermectin.

Intestinal parasitic infections

A WHO consultant evaluated the status of intestinal parasitic infections in the Syrian Arab Republic, conducted a training course on the surveillance and comprehensive approaches for the control of intestinal parasitic infections, and assisted in the development of a national programme.

Support was provided for organization of a survey on the intestinal parasites in urban and rural areas in three provinces in Morocco.

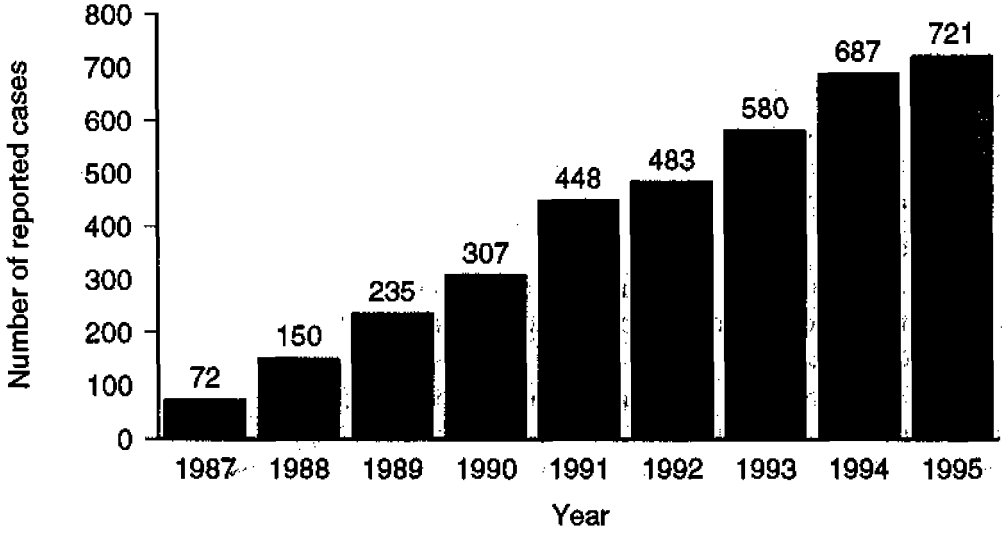
Control of sexually transmitted diseases (including AIDS)

Epidemiological situation of AIDS

The acquired immunodeficiency syndrome (AIDS) epidemic continued to spread indigenously in the Eastern Mediterranean Region. The number of new cases reported continued to show an increasing trend over the years (Figure 5.2). The number of new cases of AIDS reported during 1995 was 721, representing an increase of 5% over the number of cases reported during 1994 and making the cumulative total number of reported cases to 3729.

However, the reported figures are considered to be a gross underestimate. Allowing for underrecognition, underreporting and delays in reporting, the actual number of cases that have occurred in the Region since the start of the HIV/AIDS pandemic is believed to be at least three to four times greater, i.e. between 10 000 and 15 000 cases. Among the countries in the Region, Sudan continued to report the largest number of cases, followed by Djibouti, Morocco and Tunisia (Table 5.7). AIDS cases have been reported from all countries except Afghanistan.

FIGURE 5.2 Reported AIDS cases in the Eastern Mediterranean Region by year



Figures to end of 1995

TABLE 5.7 Reported AIDS cases in EMR countries to end of 1995

Country	Cases
Afghanistan	0
Bahrain	28
Cyprus	50
Djibouti	880
Egypt	129
Iran, Islamic Republic of	118
Iraq	42
Jordan	39
Kuwait	19
Lebanon	91
Libyan Arab Jamahiriya	17
Morocco	306
Oman	55
Palestine	8
Pakistan	55
Qatar	80
Saudi Arabia	137
Somalia	13
Sudan	1 341
Syrian Arab Republic	36
Tunisia	255
United Arab Emirates	8
Yemen	22
Total	3 729

However, it is the number of HIV infections, rather than AIDS cases, that gives a more accurate picture of the current situation of the epidemic. Using several methods and a variety of data sources, WHO has made a provisional working estimate of approximately 200 000 adult cases of HIV infection in the Region as at the end of 1995.

HIV surveillance is being carried out in many countries and the results show a higher prevalence of HIV infection among certain groups of population, particularly those at increased risk, such as patients suffering from sexually transmitted diseases (STD), prostitutes and bar girls. For example, in Djibouti, HIV prevalence in 1995 was 20% among STD patients and 45% among prostitutes. HIV infection is showing an increasing prevalence among STD patients in Pakistan, the Syrian Arab Republic and Yemen. However, HIV infection among recipients of multiple blood transfusions

declined considerably in 1995, indicating an increased efficiency of screening of blood donations.

HIV prevalence among blood donors and pregnant women is still very low in the EMR, except in Djibouti where it has reached 2.4% and 9.3% respectively in 1995. HIV infection was also reported among blood donors in many other countries namely Egypt, Islamic Republic of Iran, Kuwait, Lebanon, Morocco, Oman, Somalia, Sudan, the Syrian Arab Republic, Tunisia and Yemen, but at very low rates.

Support to national AIDS programmes

As in the previous years, the Regional Office continued to give top priority to providing technical and financial support to Member States for planning, implementing, monitoring and evaluating their national AIDS programmes.

Technical support

As a part of technical support, the Regional Office fielded 40 missions in 12 countries in 1995. These included four planning missions in three countries; 35 implementation missions in 12 countries and one review mission. The implementation missions included missions in information, education and communication (6), surveillance (6), injecting drug use (3), evaluation (5), STD control (3), clinical management of AIDS (3), HIV counselling (3), NGO collaboration (3), blood safety (2), and condom logistics (1).

In addition to the above short-term missions, WHO provided four long-term staff members (one each in Djibouti and Pakistan and two in Sudan). In addition, WHO supported the recruitment and funding of a number of national staff in Djibouti, Lebanon, Pakistan and Sudan.

Fellowships

With the aim of increasing the national capabilities, the Regional Office awarded 17 fellowships in 1995 for national staff from five countries (Egypt, the Islamic Republic of Iran, Iraq, Sudan and the Syrian Arab Republic). They included one each in the fields of HIV epidemiology, IEC and programme management; three in counselling; four in nursing care; and seven in clinical management.

Supplies and equipment

During 1995, WHO provided supplies and equipment, including diagnostic kits for HIV/STD, audiovisual equipment, educational materials, office and data processing equipment and condoms to 14 Member States. The value of these supplies and equipment was more than US$556 000.

Support to national and local activities

WHO continued to provide financial support to all Member States for a number of local activities such as formulation of national plans; production of training and educational materials; training of health and other workers; focus group studies; HIV surveillance; external review; and evaluation surveys using indicators.

WHO continued to provide high priority to collaboration of NGOs in AIDS prevention and control in Member States. During 1995, the Regional Office provided financial support amounting to US$220 000 to 61 NGO projects in 12 countries.

The Regional Office provided technical assistance for the formulation of the second national medium-term plan in the Islamic Republic of Iran, Morocco and Yemen.

Monitoring and evaluation

The Regional Office continued to monitor regularly the progress in the implementation of national AIDS programmes through reports and staff visits. A comprehensive external review of the national AIDS programme was carried out in Yemen with WHO's technical assistance. The first evaluation survey in the Region to measure the effectiveness of the programme using the global indicators, which began in 1994 in Sudan, was completed in 1995. Similar surveys started in Djibouti, Egypt, Lebanon and Pakistan in 1995.

Sexually transmitted diseases

The magnitude of STD in the EMR is not exactly known, but is considered to be significant. Efforts were initiated to develop national STD surveillance and reporting systems. More attention was given to prevention and control of STD, with an emphasis on the syndromic approach to STD case-management.

During 1995 technical and financial assistance for STD control was provided to a number of countries for planning and implementing national STD control activities. WHO produced a number of educational materials, manuals and guidelines on STD case-management, in Arabic and English. As a reflection of the emphasis placed by EMRO on STD control, an STD unit, including AIDS, was established in the Regional Office effective 1 January 1996.

Intercountry meetings

A number of intercountry meetings were organized to review the current situation and exchange experiences regarding the developments in various aspects of AIDS and STD control, as well as to increase the capabilities of the national staff in planning, implementation, monitoring and evaluation of AIDS and STD control programmes. They were mostly in the form of workshops directed towards priority areas, such as programme management, STD case-management, HIV counselling, AIDS education at the workplace, evaluation using global indicators, AIDS education in schools, AIDS among injecting drug users, condom social marketing and logistics, and laboratory diagnosis in the management of AIDS.

AIDS Information Exchange Centre

The regional AIDS Information Exchange Centre continued to provide information and educational material to national AIDS programmes, NGOs, institutions and individuals. A large number of audiovisual materials was distributed in 1995. The Centre also coordinated World AIDS Day activities in the Region. The

Centre assisted Member States in the production of printed material and the provision of culturally-sensitive prototypes.

World AIDS Day

World AIDS Day was observed on 1 December in all countries of the Region in various forms such as lectures, seminars, debates, games, fairs, exhibitions and competitions. The theme in 1995 was "Shared Rights, Shared Responsibilities". Many information materials in Arabic, English and French were distributed.

The Regional Director delivered a message on the World AIDS Day theme highlighting the rights of all individuals to have information about AIDS, to be able to avoid infection, to receive health care if afflicted with AIDS and to be treated with dignity and without discrimination. The Regional Director also elaborated on the responsibilities of individuals, families, governments and international communities for prevention of HIV infection and care of persons with HIV/AIDS.

UNAIDS

WHO's Global Programme on AIDS (GPA) came to an end on 31 December 1995 and was replaced by the joint and cosponsored United Nations Programme on HIV/AIDS called UNAIDS. The joint government/WHO programme review missions of EMRO allocated funds under the Regular Budget for the prevention and control of STDs, including AIDS, in a number of Member States for the 1996-97 biennium. The Regional Office has renamed the GPA/STD unit as STD (including AIDS) and has retained the post of the Regional Adviser to ensure continuity of WHO technical support to Member States in this important field.

In order to maintain the strong regional support to national programmes, the Regional Director took the initiative to begin meetings with other cosponsors of UNAIDS and organized a meeting in Amman with Regional Directors of other cosponsors and the Executive Director of UNAIDS. The meeting identified areas of collaboration and the comparative advantages of the cosponsors.

Malaria control

During 1995, WHO continued to implement the Global Plan of Work for Malaria Control for 1993-99 based on a new Global Strategy of Malaria Control, which had been approved by the Regional Committee for the Eastern Mediterranean at its Fortieth Session in October 1993. The Regional Working Group on Malaria, which met in Alexandria from 29 October to 2 November 1995, reviewed the implementation of the plan and concluded that the process of reorientation of the programmes was proceeding satisfactorily.

Epidemiological situation

At present, about 45% of the population of the Region live under the risk of both *Plasmodium falciparum* and *P. vivax* malaria, and additional 15% under risk of *P. vivax* alone.

The epidemiological situation of malaria in the Region is closely related to the major geographical subdivisions of fauna, known as zoögeographic regions. Three of these subdivisions meet in the Eastern Mediterranean.

In the *afrotropical* region, the environment is particularly conducive for the spread of malaria as a result of extremely efficient vectors and favourable temperatures. Malaria is mostly hyperendemic, and *P. falciparum* is overwhelmingly predominant. The situation is further compounded by poverty and political instability in many of the countries of this region. The EMR countries belonging to this type are Djibouti, Somalia, Sudan, Yemen and the south-western part of Saudi Arabia.

In the *oriental* region, which includes Pakistan, Afghanistan, the south-eastern part of the Islamic Republic of Iran, and Oman, malaria is initially less endemic and more amenable to control.

In the *palaearctic* region, which encompasses the rest of the Eastern Mediterranean, malaria is less tenacious.

In general, the number of malaria cases reported officially does not reflect the true dimension of the problem, since the most affected countries tend to either severely underreport malaria, or have stopped reporting altogether (e.g. Afghanistan). Since malaria is often oligosymptomatic in endemic areas, the underreporting affects control in such areas even if malaria control programmes are well developed. An effort was made by the Regional Office to reach realistic estimates annually of the number of cases occurring in the Region. This was done on the basis of available data on malaria prevalence for countries that severely underreport the disease (Afghanistan, Djibouti, Somalia, Sudan, Yemen), and by using a multiplier of two or three for endemic countries with reasonably good surveillance (the Islamic Republic of Iran, Iraq, Oman, Pakistan, Saudi Arabia). This estimate is of the order of 13 million; 96% of the estimated cases are in just five countries: Somalia, Sudan, Yemen (mostly *P. falciparum*), Afghanistan (mostly *P. vivax*), and Iraq (exclusively *P. vivax*) (Table 5.8). The estimated number of deaths due to malaria is about 35 000 a year, the bulk of them in Somalia, Sudan and Yemen.

For countries that drastically restricted or eliminated malaria transmission, reported data are more realistic (Table 5.9).

The grouping of countries according to the status of antimalarial programmes did not change compared with the previous year.

- In eight countries—namely Bahrain, Cyprus, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Qatar and Tunisia—malaria transmission does not occur or occurs only sporadically. However, these countries receive many imported cases.
- In another eight countries, national malaria control programmes are effectively controlling malaria throughout their territories. These are Egypt, the Islamic Republic of Iran, Morocco, Oman, Pakistan, Saudi Arabia, the Syrian Arab Republic and the United Arab Emirates. In many of them, malaria transmission

TABLE 5.8 Estimated number of cases of malaria in countries with endemic areas in the Eastern Mediterranean Region, 1995

Country	Total cases (in thousands)	Percentage of *P. falciparum*
Afghanistan	2 500	10
Djibouti	60	98
Iran, Islamic Republic of	150	40
Iraq	450	0
Pakistan	220	45
Saudi Arabia	75	80
Somalia	2 000	95
Sudan	7 000	90
Yemen	500	93
Total	12 955	71

TABLE 5.9 Parasitology-confirmed malaria cases in countries with no or sporadic transmission

Country	1990	1991	1992	1993	1994	1995
Bahrain	219	215	282	258	204	192[a]
Cyprus	5	3	1	2	4	1[a]
Egypt	75	24	16	17	527	313[b]
Jordan	225	155	260	266	246	197[a]
Kuwait	560	342	1 319	1 379	876	654[a]
Lebanon	2	2	4	4	6	27[a]
Libyan Arab Jamahiriya	92	108	230	136	...	30[a]
Morocco	837	494	405	198	206	197[a]
Oman	32 720	19 274	14 827	16 873	7 215	1 801[f]
Qatar	121	344	397	370	398	475[a]
Syrian Arab Republic	107	54	456	966	607	626[d]
Tunisia	32	...	34	45	40	49[a]
United Arab Emirates	3 514	3 457	3 605	3 735	3 335[e]	...
Total	38 509	24 472	21 836	24 249	13 664	4 562

[a] No local transmission
[b] All indigenous cases from Fayoum Governorate, out of which 475 were due to *P. falciparum*
[c] Of these, 156 indigenous cases, all due to *P. vivax*
[d] Of these, 558 indigenous cases, all due to *P. vivax*
[e] More than 90% are imported cases
[f] Mostly indigenous cases due to *P. falciparum*

continues only in limited areas, and, in some *P. falciparum* has been eliminated (Morocco, the Syrian Arab Republic).

- In the third group of countries—Afghanistan, Djibouti, Iraq, Somalia, Sudan and Yemen—coverage by malaria control programmes is incomplete. These countries either belong to hard-core malaria areas, or have grave internal problems or both.

During 1995, the situation in the countries of the latest group remained grave. In Afghanistan and Somalia, disrupted health services were unable to carry out organized malaria control activities, except in limited areas and that too mostly with the help of NGOs. In Djibouti and Sudan, there were no massive outbreaks, unlike in 1994. This, however, was mainly a result of less abundant rainfall compared with 1994, rather than to control operations. In Yemen, antivector activities were not maintained as a result of lack of funds. In Iraq, while extensive indoor spraying succeeded in bringing down the incidence of *P. vivax* malaria in the three northern governorates where the epidemic started in 1991, malaria continued to spread outside that area. It should be mentioned, however, that despite the setbacks that afflicted malaria control in Iraq, the country is free from *P. falciparum*.

Technical problems, such as the spread of chloroquine-resistant *P. falciparum* and increasing resistance of vectors to insecticides continued to hamper control activities in many countries.

Activities

The objectives of the regional programme are to prevent and control malaria, particularly in the areas where it represents an important health problem, and to maintain the malaria-free status in countries or areas where such status has already been achieved.

In its support to national malaria control programmes, the Regional Office continued to concentrate on the strengthening of the technical component and managerial capabilities of the programmes through the provision of services of technical staff and consultants, technical guidance, and training. Visits of consultant epidemiologists and vector control specialists were arranged in Afghanistan, Djibouti, Egypt, the Islamic Republic of Iran, Iraq, Lebanon, Pakistan, Saudi Arabia, Sudan and Tunisia. In Afghanistan, Somalia and Sudan, short-term national advisers were funded. In addition, a WHO technical officer worked alternatively in Afghanistan and Yemen throughout 1995, assisting in technical and managerial aspects of the programmes and in organizing and running training.

In addition to technical support, supplies and equipment were provided. In Iraq, intensive efforts were made to curb the epidemic in the northern provinces, financed mostly through voluntary funds.

A border meeting was organized for countries adjacent to Iraq, namely, the Islamic Republic of Iran, Jordan, Lebanon, the Syrian Arab Republic and Turkey, with the aim of coordinating activities for the prevention of the spread of the epidemic. Afghanistan, Somalia and Sudan were also assisted in emergency

situations through provision of drugs, insecticides, impregnated bednets, and spraying and laboratory equipment.

Training continued to be supported, including fellowships and training courses at country and intercountry levels. In response to the resolutions of the Regional Committee urging the establishment of national and regional training centres and provision of supplies and equipment, technical guidance and financial support were provided to the newly established training centre in Wad Medani in Sudan, which will start its first Master's course in 1996. In the Islamic Republic of Iran, WHO has designated Bandar Abbas Malaria Training Centre as a regional training centre; WHO also assisted in reviving the international training course in malaria.

Within the framework of the joint EMRO/CTD/TDR Small Grants Scheme, a total of 11 applied research projects for malaria were supported in 1995 in Egypt, Lebanon, Pakistan, Saudi Arabia, Somalia, Sudan, Tunisia and Yemen. One project for malaria control was selected from Egypt for support in 1996.

Coordination of efforts in malaria control within WHO—particularly with the Regional Offices for Africa and South-East Asia and headquarters—and with other United Nations Agencies, especially with UNICEF, was given priority.

5.3 Control of noncommunicable diseases

Cancer control

Cancer is now emerging as a major health problem throughout the world. Its increasing importance in the developing countries is not always recognized. In the EMR, cancer is being increasingly recognized as an existing and growing health problem.

The main emphasis in 1995 of the regional programme for cancer control was to continue WHO's collaboration with Member States in the development of national cancer control programmes (NCCP) and to strengthen national capabilities in all aspects of cancer control.

Various elements of the regional plan continued to be implemented during 1995. WHO's collaboration aimed at encouraging countries to develop comprehensive national plans for cancer control focusing on priorities based on local circumstances. These plans should take into consideration activities for the prevention, early detection, effective treatment of cancer, as well as pain relief and palliative care.

In addition, WHO collaboration during the year included:

- organizing a regional training course on palliative care and pain relief in June 1995 in which over 30 national staff from 12 countries were trained;
- organizing an international course on cancer epidemiology, with emphasis on cancer control, in Amman, Jordan, in September 1995 to train participants from the countries of the Region in cancer epidemiology and the establishment of cancer registries;

- organizing the second intercountry meeting on national cancer control programmes, in Muscat, Oman, in December 1995, with participation of 15 countries, to review the progress made in cancer control since the first meeting in 1993 and to discuss the planning and implementation of health education activities in the prevention and early detection of commonly encountered cancers;
- providing technical support in NCCP formulation. Technical assistance was provided by WHO staff members and short-term consultants to Bahrain, Iraq, Jordan, Lebanon, Oman and Saudi Arabia in the field of establishment of national programmes and formulation and evaluation of plans of action;
- developing human resources. Fellowships were awarded to several countries to strengthen national capabilities in aspects related to cancer control. WHO continued its collaboration with countries in supporting national workshops and training courses on cancer control; such workshops were held in Bahrain, Iraq, Jordan and Lebanon;
- issuing a regional publication, *Cancer control in the Eastern Mediterranean.* The publication reviews the regional cancer situation, and describes prevention strategies, identifying specific approaches and priorities for cancer control in the Region. Copies of the publication were distributed to all Member States and it is planned to bring out an updated version in 1996.

Cardiovascular diseases control

Cardiovascular diseases (CVD) now represent a leading cause of morbidity and mortality in many countries of the Region. They are emerging as health problems of considerable magnitude in many countries. Coronary heart disease and hypertension are the predominant types of CVD encountered in the Region. However, rheumatic fever and rheumatic heart disease (RF/RHD) continue to cause significant morbidity and mortality in children between 5 and 15 years of age in some countries.

It is gratifying to note that countries in the Region are becoming increasingly aware of the problem and are recognizing the urgent need to establish nationwide programmes for the prevention and control of cardiovascular diseases.

During 1995, the main emphasis of WHO's activities in CVD control was on promotion of epidemiological data collection and assistance in implementing the recommendations of the intercountry workshop on CVD prevention, held in Amman, Jordan, in 1994, particularly those related to the establishment of national programmes for the control of cardiovascular diseases. A second intercountry workshop for CVD control was held in Nicosia, Cyprus, in December 1995 and was attended by CVD national coordinators and focal persons from Bahrain, Cyprus, Egypt, the Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, the Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, the Syrian Arab Republic, the United Arab Emirates and Yemen. Guidelines for the primary prevention of CVD were formulated, with special emphasis on the development of national nutrition policies to promote healthy dietary patterns, promotion of physical

activity and prevention of smoking. Guidelines for developing national action plans on tobacco control were also formulated and a regional plan for smoking control was prepared, in a draft form, which was subsequently discussed and endorsed during the Regional Consultation on Smoking Prevention held at the Regional Office in Alexandria from 26 to 28 December 1995.

WHO's support to the development of national CVD programmes included the provision of technical advice in assessing the magnitude of the problem and in formulating national plans. To this effect, WHO staff members and consultants visited Cyprus, Djibouti, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine and Tunisia. Technical support was also provided to some countries to promote national capabilities in epidemiological research and surveillance activities. The standardized protocol and manual of operation for a cardiovascular risk factor survey, which has been prepared by EMRO, was provided to those countries that were planning to initiate such surveys. WHO continued to support the nationwide programme on RF/RHD prevention in Egypt, Iraq, Pakistan and Sudan; collaboration continued in 1995 in the implementation of the plans of action.

A regional publication on the prevention and control of cardiovascular diseases was brought out and copies were distributed to Member States. The publication summarizes the global and regional epidemiology of CVD, reviews prevention strategies, identifies approaches for control that are specifically suitable for countries in the Region and includes the WHO regional plan for CVD prevention.

In response to the recommendation made during the first intercountry workshop on CVD prevention and control in 1994, detailed guidelines for the prevention and management of hypertension were prepared. These guidelines cover the control of hypertension in populations, as well as classification, diagnosis, investigations and treatment of hypertension, with special emphasis on the situation in the Region. The guidelines were subsequently reviewed by regional experts and WHO advisers and discussed and endorsed in a regional consultation convened by the Regional Office in Lebanon in August 1995. The guidelines are being produced as a regional publication and are to be distributed to all countries in 1996.

WHO continued to collaborate with countries in data collection activities, particularly on coronary risk factors and RF/RHD. Technical advice and support in this regard were given to Cyprus, Jordan, Lebanon, Pakistan, the Syrian Arab Republic and Yemen. Financial support was also provided to some countries.

Diabetes control

Diabetes mellitus and impaired glucose tolerance have been reported to be of major significance in several countries of the Region. Data on the epidemiology and clinical characteristics indicate high prevalence rates of up to 10% of the adult populations studied and demonstrate an increased susceptibility of populations in the Region to diabetes.

During 1995, the standards on care and clinical practice guidelines for the management of diabetes which were prepared by the Regional Office were distributed to all Member States. They were subsequently discussed at a regional training course on diabetes management, organized in Karachi, Pakistan, in March 1995, in collaboration with the International Diabetes Federation and the Diabetes Association of Pakistan. Based on these guidelines, a similar training course was organized by the Egyptian Union for Diabetes Associations and WHO in October 1995. Two other regional documents—one on diabetes education programmes which is being printed and another on diabetes control for health professionals in primary health care (in Arabic)—were published.

At its Forty-first Session, the Regional Committee adopted a resolution (EM/RC41/R.6) inviting member countries to initiate national programmes for diabetes prevention and control and to promote the availability of the minimum standards of health care for people with diabetes. This resolution has been followed up closely with national authorities during 1995.

To this effect, WHO continued to support national diabetes programmes through the provision of advisory services. WHO staff members and consultants visited the Islamic Republic of Iran, Iraq, Kuwait, Jordan, Lebanon, Morocco, Oman and Pakistan to advise on formulation of national programmes. National workshops on diabetes prevention and control were organized with WHO's collaboration in Iraq, Jordan, Lebanon and Pakistan. National plans of action, with specific targets and activities, for the period 1995-2000 were formulated in Lebanon and Pakistan.

Technical support in epidemiological data collection, and technical and financial support for implementing diabetes prevalence surveys, were provided to several countries during 1995.

Support to the WHO regional collaborating centres on diabetes control continued. Several activities were organized jointly with the collaborating centre at the Diabetes Association of Pakistan in Karachi, and the evaluation of the national diabetes control programme was conducted with the collaborating centre in Muscat, Oman.

Control of blindness

Blindness and eye disorders represent a problem of major public health concern in many countries in the Region. Data available on blindness in countries where standardized surveys have been conducted indicate that the prevalence of blindness ranges between 0.8% in Morocco and Tunisia and 1.7% in Pakistan. The total prevalence of blindness and low vision ranges between 2.8% and 11.6% and the highest prevalence is seen in people over 60 years of age. Cataract is the main cause of blindness in the Region; it is responsible for between 38% and 72% of all cases of blindness. Other causes include corneal diseases, such as trachoma and glaucoma. Diabetic retinopathy and senile macular degeneration are increasingly found, as a result of the demographic, socioeconomic and nutritional changes encountered in

most countries. There is evidence to indicate that health care services are grossly inadequate. Cataract surgery services cover only 30% of actual requirements in one country.

WHO's collaborative efforts with countries in planning and implementing activities on prevention of blindness continued during 1995. Special emphasis was given to strengthening data collection activities and development of primary eye-care services.

Estimates of the prevalence of blindness and low vision were prepared for all countries of the Region, and technical assistance in data collection and epidemiological assessment of blindness was provided to some countries.

National training courses and workshops on primary eye-care were conducted in several countries. Support also continued to training of ophthalmic technicians in Pakistan.

In order to monitor progress and plan future activities, a Regional Advisory Panel for the Prevention of Blindness was formed. The first meeting of the Panel was held in Rawalpindi, Pakistan, in March 1995. During the meeting, strategies for primary eye-care and the development of community eye health services were reviewed and the tools for monitoring national blindness prevention programmes were discussed. Panel members made specific recommendations to increase the awareness and commitment to blindness prevention in Member States, to strengthen epidemiological and health system research, to promote training in primary eye-care and community ophthalmology and further develop intercountry collaboration and coordination with nongovernmental organizations.

The subject of prevention of blindness was discussed at the Forty-second Session of the Regional Committee in October 1995. A resolution was adopted that urged Member States to intensify their activities for the prevention of blindness. It also called for setting a target of eliminating the cataract surgery backlog within one decade.

Collaboration was maintained with international and regional organizations interested in the prevention of blindness. One of the main nongovernmental organizations working in the Region is the International Agency for the Prevention of Blindness (IAPB). Following the Regional Committee Session in 1995, the IAPB Eastern Mediterranean Regional Office collaborated with EMRO in supporting Yemen in the development of its personnel through the establishment of a diploma course, which was due to start in 1996.

Control of deafness

Evidence from epidemiological studies carried out in some countries of the Region indicate that deafness and hearing impairment represent a problem of substantial proportions, particularly among schoolchildren. Otitis media, a preventable problem, is reported to be the major underlying cause.

The meeting of the Regional Advisory Panel for the Prevention of Deafness and Hearing Impairment, which was held in the Regional Office in Alexandria, in 1994, was followed in 1995 by the collaboration of the Regional Office with WHO headquarters and the Liverpool School of Tropical Hygiene in the production of a draft protocol and a manual of operation for a standardized epidemiological survey on deafness and hearing impairment. The protocol, which is being finalized, will be supported by computer software, and will be distributed throughout the Region in order to promote standardized data collection by all countries.

The Regional Office initiated the preparation of a document that reviews the situation regarding deafness in the Region as well as describing WHO's intervention strategies. It is planned to finalize and publish this document during 1996.

Control of genetic and other noncommmunicable diseases

Other noncommunicable diseases and chronic conditions are responsible for a considerable proportion of morbidity and mortality in the Region. During the previous biennium, WHO initiated activities for the control of major problems, such as hereditary disorders and bronchial asthma.

Hereditary disorders

Hereditary and genetically determined disorders are increasingly recognized as important problems in the majority of the countries in the Region. Haemoglobinopathies, such as thalassaemia, and enzymopathies, such as G6PD deficiency, are commonly encountered. One of the main factors recognized as being responsible for these disorders in this Region is high consanguinity rates.

As a follow-up to the recommendations of the regional consultation on community genetics services which was organized in 1994, the Regional Office, in 1995, prepared a draft protocol for standardized data collection focusing on areas of high priority, such as parental age distribution, consanguinity, congenital malformations, metabolic disorders and other genetic diseases. The protocol was discussed and enlarged during a regional consultation held in November 1995. The final version, together with a manual of operation, will be produced in 1996. Technical assistance was provided to some countries in the development of congenital abnormality registers and neonatal screening.

During 1995, technical support was provided to a few countries in helping to assess their situation regarding genetic disorders and in the establishment of national programmes. A regional publication on the community control of genetic disorders and congenital abnormalities has been finalized and it is expected that it will be published and distributed to Member States during 1996. This publication focuses on regional needs, prevention strategies and the required health care services for the various commonly encountered hereditary disorders, in the light of local circumstances and ethical and social norms in the Region.

Bronchial asthma

Recognizing the importance of asthma as a problem of public health concern in the Region, the Regional Office prepared a paper analysing the situation in 1995. The Regional Office participated in organizing a session on the prevention of bronchial asthma, during the annual meeting of the Egyptian Society of Allergy and Immunology, in April 1995. The Regional Office also established contacts with experts in countries of the Region in order to form a network of collaborating experts and institutions in the prevention and control of bronchial asthma. It is hoped that further activities in this field will be implemented during the next biennium.

ADMINISTRATIVE SERVICES

6. Administrative services

The Administrative Services Programme includes the major programmes of Personnel, General Administration, and Budget and Finance.

6.1 Personnel

Personnel services continued to ensure the recruitment, training and administration of staff and consultants in support of the Organization's programmes. Table 6.1 shows the distribution of professional posts by organizational level.

An organogram of the Regional Office is given in Annex 1.

Emphasis continues to be focused on the need to recruit well-qualified staff from unrepresented and underrepresented nationalities, as well as those below the mid-point of the desirable range for adequate representation; and women. The Organization's minimum target for recruitment from such nationalities was increased to 60% (from 40%) by the Forty-eighth World Health Assembly in May 1995 and this target was realized during the period under review. The percentage of female staff in the Regional Office and in the field, at 17%, fell short of the Organization's overall goal of 30% by September 1995. However, the percentage of staff recruited in 1995 represented by women was 22%, an increase compared with the previous year.

The distribution of professional staff in the Region, by nationality, is listed in Annex 2. The table showed that 63 of the regional Professional staff (66%) are nationals of countries in the Region.

As of 31 December 1995, in addition to regular staff members, 95 persons were employed in their country of nationality under special service agreements.

During 1995, 291 short-term consultants were recruited, 45% of whom represented nationalities from the Region. The distribution of consultants by major programme area is shown Table 6.2.

TABLE 6.1 Professional posts as at 31 December 1995 (all sources of funds)

Organizational level	No. of professional posts
Regional	75
Intercountry	15
Country (including WRs' offices)	41
Total	131

TABLE 6.2 Distribution of consultants by programme areas, 1995

Programme area	No. of consultants	Percentage
Health policy and management	26	9
Health services development	75	26
Promotion and protection of health	123	42
Integrated control of disease	64	22
Others	3	1
Total	291	100

6.2 General administration

Office space

The Regional Office undertook major renovation of the basement to accommodate the Library and rented additional office space for Logistical Support Services, which both moved from their former premises at Alexandria University. Three rooms were constructed on the third floor of the main building.

The Government of Egypt allocated a piece of land for the construction of a new Regional Office building in Cairo, and finalization of the legal aspects continued into 1996.

Following the ninety-seventh session of the Executive Board in January 1996, it was decided to submit a request for funding of the construction to the Administration, Budget and Finance Committee, prior to the opening of the Forty-ninth World Health Assembly in May 1996.

Meetings

The Regional Office supported 84 meetings in 1995 (see Annex 3 for a list).

6.3 Budget and finance

The reporting period covers the financial closure of the 1994-95 biennium. The total approved Regular Budget of US$85 518 000 was affected by a reduction in the programme budget of US$3 640 000 at the start of the biennium. Later, US$1 904 000 were reinstated, leaving a total of US$83 782 000 available for the programme. Also, an additional amount of US$27 600 was made available to the Region from the interregional programme.

The final obligations for the biennium represented 100% of the available funds under the Regular Budget. In addition, obligations of extrabudgetary funds for 1994-95 amounted to US $27 774 000.

There has been a tendency to reprogramme funds to supplies and equipment and the result was that this component represented 34% of the total country programme

expenditure, twice the proportion normally anticipated from a careful application of the regional programme budget policy.

COUNTRY STATISTICAL PROFILES

Table 1. Demographic and socioeconomic data

Country	Population (million)	Y	Population projection year 2000 (million)	Crude birth rate (‰)	Y	Crude death rate (‰)	Y	Population growth rate (%)	Y	Urban population (%)	Y	Adult literacy rate (%)	Y	School enrolment ratio (first level) (%)	Y	Economically active population (%)	Y	Per capita GNP (US $)	Y	Per capita GDP (US $)	Y
Afghanistan	17.9	95	20.6	48.0	94	28.0	95	2.0	95	19	93	32	95	31	92	46	94	175	90	160	90
Bahrain	0.56	94	0.69	24.5	94	3.0	94	3.2	91	88	91	83	94	110	92	51	94	7 100	94	8 370	91
Cyprus	0.74	94	0.76	16.8	93	7.7	93	1.7	93	68	93	94	92	101	93	63	94	11 588	94	10 812	93
Djibouti	0.57	94	0.71	47.5	94	17.4	92	6.1	94	85	94	46	95	35	92	73	94	480	93	837	93
Egypt	60.6	96	67.9	28.6	94	6.8	94	2.2	95	47	90	51	95	97	92	42	94	660	93	800	93
Iran, Islamic Republic of	59.6	94	65.1	22.5	95	4.0	94	1.8	95	58	94	79	95	111	92	59	94	2 320	93	999	93
Iraq	20.5	95	23.6	37.0	94	9.2	94	2.5	92	71	93	58	95	90	92	51	94	3 608*	92	3 608	92
Jordan	4.1	94	5.6	32.0	94	6.0	94	3.6	94	78	92	85	94	94	92	44	94	1 460	95	1 261	95
Kuwait	3.3	95	...	48.1	95	4.6	95	4.2	95	100	95	87	95	93	88	69	93	18 642	93	15 735	93
Lebanon	3.1	94	3.6	31.7	90	8.7	90	2.5	95	84	90	92	95	118	92	50	94	960	92	772	93
Libyan Arab Jamahiriya	4.4	95	6.5	46.0	93	7.0	93	3.9	93	70	90	76	95	106	92	42	94	5 420	88	6 830	91
Morocco	26.7	95	29.6	26.0	95	6.7	95	1.9	95	52	95	44	95	73	92	51	94	1 022	93	1 218	93
Oman	2.1	95	2.5	36.5	95	7.2	94	3.7	95	72	93	59	93	86	92	46	94	4 850	93	5 435	94
Pakistan	129.9	95	149.0	39.3	95	10.1	95	2.9	95	34	93	38	95	44	92	51	94	460	94	405	94
Palestine	3.2	95	...	39.5	95	...		3.0	93	...		...		...		...		...		...	
Qatar	0.6	94	0.65	19.2	93	1.6	93	2.1	90	100	90	79	95	89	92	57	94	14 760	91	13 199	91
Saudi Arabia	17.8	95	21.3	35.2	93	7.6	90	3.7	93	77	90	64	92	90	92	50	91	...		6 680	94
Somalia	9.5	94	9.7	50.0	95	16.9	95	3.2	91	33	91	27	92	10	90	69	94	170	89	189	90
Sudan	27.1	93	31.1	30.3	93	15.0	93	2.8	93	29	94	54	93	58	93	57	94	330	93	570	90
Syrian Arab Republic	14.2	95	16.6	42.0	94	8.1	94	3.3	94	51	94	80	94	100	94	49	94	1 430	89	1 550	89
Tunisia	8.9	95	9.7	22.7	94	5.7	94	1.7	94	61	94	67	95	116	92	53	94	1 768	94	1 740	93
United Arab Emirates	2.4	95	3.2	23.6	94	2.1	94	7.1	94	79	95	79	95	103	95	54	95	16 200	95	16 500	95
Yemen	15.4	95	18.1	52.6	95	21.0	95	3.7	94	23	94	41	92	44	92	48	94	500	92	540	90

Note: *Y* is the reference year for data provided. * Per capita GNP is equivalent to $761 at 1990 prices. ... Data not available.

Table 2. Health resources

Country	Annual budget of MOH (per capita)		Total public expenditure on health (per capita)		MOH expenditure as % of GNP		GNP spent on health		National health expenditure devoted to local health care		Number of physicians		Number of dentists		Number of nurses and midwives		Number of hospital beds		Number of PHC units and centres	
											per 10 000 population									
	(US $)	Y	(US $)	Y	(%)	Y	(%)	Y	(%)	Y		Y		Y		Y		Y		Y
Afghanistan	0.3	90	3	90	1.6	90	3.0	90	37	90	1.4	90	0.1	90	1.2	90	3.3	90	0.1	90
Bahrain	257	94	350	91	3.1	92	7.9	94	23	94	11.1	93	1.2	93	28.9	94	30.4	93	0.4	93
Cyprus	191	92	200	93	2.1	94	4.7	93	...		23.1	93	8.0	93	42.5	93	52.4	93	1.1	84
Djibouti	19.4	94	35	90	7.6	95	7.2	93	60	93	2.0	95	0.2	95	12.0	90	20.0	95	0.3	90
Egypt	7.5	95	12.5	93	2.2	95	4.2	95	85	93	20.2	95	2.5	95	22.2	95	19.3	95	1.3	91
Iran, Islamic Republic of	237	92	...		2.5	88	3.8	95	38	88	4.7	91	0.9	91	7.4	88	14.6	88	2.3	94
Iraq	17	89	75	83	4.9	95	5.9	89	40	84	5.1	93	1.0	93	6.4	93	15.9	93	0.6	93
Jordan	22	94	36	94	2.4	94	7.8	95	35	93	15.8	94	3.8	94	22.4	94	17.0	94	2.4	94
Kuwait	594	94	442	91	2.9	94	6.0	85	21	94	17.8	95	2.7	95	46.8	95	32.9	95	0.4	95
Lebanon	46.6	94	48	83	...		9.0	87	4	82	19.1	94	8.8	94	12.2	94	22.2	90	1.9	90
Libyan Arab Jamahiriya	257	83	274	87	3.2	83	3.2	85	...		13.7	93	1.2	93	36.6	93	36.9	94	1.8	93
Morocco	13.1	94	12.3	91	1.1	94	3.4	93	23	93	3.4	94	0.5	94	9.4	94	10.1	94	0.7	94
Oman	139	94	154	94	2.6**	94	3.2	93	...		12.0	95	0.7	95	29.0	95	23.0	95	0.6	94
Pakistan	2.3	90	2.6	85	1.0	90	0.7	94	50	93	5.2	94	0.2	94	3.2	94	6.6	94	0.8	94
Palestine	21	94	...		...		...		...		0.9	94	0.2	94	2.7	94	1.4	94	0.7	94
Qatar	343	92	390	92	5.1	82	5.8	92	38	92	14.3	92	2.1	92	35.4	92	20.0	92	0.6	92
Saudi Arabia	123	94	524	94	2.0	94	8.0	90	...		16.6	94	1.5	94	34.8	94	25.0	94	1.0	94
Somalia	...		...		...		0.9	85	43	84	0.4	93	0.01	94	0.3	93	8.0	88	0.9	86
Sudan	3.1	90	36	83	...		1.0	92	...		1.0*	94	0.1*	94	7.0*	94	8.5*	94	2.6	94
Syrian Arab Republic	31	93	42	89	...		3.5	88	47	86	10.9	95	5.6	95	21.2	95	15.8	95	0.6	95
Tunisia	47	94	...		2.4	90	6.2	95	30	92	6.7	95	1.2	95	28.3	95	17.7	95	1.9	94
United Arab Emirates	131	94	311	94	4.5**	94	9.0	90	88	90	16.8	94	2.7	94	32.1	94	27.3	94	0.5	94
Yemen	2.8	95	...		1.6	94	2.1	92	19	85	2.6	95	0.1	95	5.1	95	5.9	92	1.0	91

Note: *Y* is the reference year for data provided. * Health personnel and beds in Ministry of Health only. ** As % of GDP. ... Data not available.

Table 3. Health services

Country	Population covered with health care		Population with safe drinking water		Population with adequate excreta disposal facilities		Pregnant women attended by trained personnel		Women delivered by trained personnel		Infants attended by trained personnel		Infants fully immunized against DPT		Infants fully immunized against polio		Infants fully immunized against measles		Infants fully immunized against tuberculosis		Pregnant women given TT(2 doses)	
	(%)	Y	(%)	Y	(%)	Y	(%)	Y	(%)	Y	(%)	Y	(%)	Y	(%)	Y	(%)	Y	(%)	Y	(%)	Y
Afghanistan	39	90	20	90	0.6	90	6	93	20	90	...		18	93	18	93	40	94	44	93	2	90
Bahrain	100	93	100	94	100	94	95	94	95	94	95	94	91	95	90	95	89	95	*		45	95
Cyprus	100	94	99.7	94	99.9	94	100	94	100	94	100	94	96	95	96	95	83	95	*		*	
Djibouti	80	93	45	93	50	93	58	94	60	94	60	94	63	95	63	95	58	95	76	95	37	95
Egypt	99	94	84	92	70	92	53	92	41	92	89	92	91	95	92	95	89	95	93	95	66	95
Iran, Islamic Republic of	89	93	90	95	80	95	82	95	85	95	51	95	99	95	98	95	96	95	98	95	45	95
Iraq	98	93	76	92	89	92	75	95	83	94	95	95	91	95	91	95	95	95	99	95	71	95
Jordan	92	92	98	94	88	91	85	94	84	94	99	91	100	95	99	95	92	95	*		24	95
Kuwait	100	95	100	95	100	95	100	95	100	95	100	95	100	95	100	95	98	95	*		22	95
Lebanon	96	92	94	92	75	85	96	91	45	84	96	91	92	95	92	95	88	95	*		*	
Libyan Arab Jamahiriya	100	90	90	90	91	85	100	92	76	84	100	92	96	95	96	95	92	95	99	95	45	93
Morocco	63	94	59	92	63	92	45	95	40	95	62	92	90	95	90	95	88	95	93	95	37	95
Oman	95	94	79	93	87	93	91	94	92	94	98	92	100	95	100	95	100	95	96	95	54	95
Pakistan	85	89	69	94	28	93	34	92	40	94	45	89	58	95	57	95	56	95	69	95	42	95
Palestine	100	94	93	94	58	94	85	94	85	93	80	94	100	95	96	95	73	95	91	95	39	95
Qatar	100	94	100	94	100	94	100	94	100	94	100	94	91	94	91	94	86	94	96	94	*	
Saudi Arabia	99	95	93	90	86	90	86	91	90	91	84	89	96	95	96	95	94	95	94	95	62	95
Somalia	20	93	37	92	18	92	25	87	2	84	5	87	18	90	18	90	30	90	31	90	5	90
Sudan	70	88	49	93	66	93	54	93	86	93	30	91	77	95	79	95	77	95	92	95	68	95
Syrian Arab Republic	95	94	88	93	52	93	51	94	76	94	65	93	92	95	92	95	90	95	100	95	66	95
Tunisia	84	95	83	94	72	91	79	94	80	94	70	84	92	95	92	95	91	95	89	95	49	95
United Arab Emirates	98	95	98	92	95	92	90	94	99	94	95	92	90	95	90	95	90	95	98	95	*	
Yemen	45	90	35	92	51	91	26	92	35	92	...		51	95	51	95	50	95	55	95	17	95

Note: *Y* is the reference year for data provided. * Not included in national programme of immunization. ... Data not available.

Table 4. Health status (morbidity)

Country	Newborns with birthweight at least 2.5 kg		Diphtheria		Polio		Pertussis		Measles		Tetanus		Respiratory tuberculosis		Neonatal tetanus per 100 000 live births	
			Incidence per 100 000 population													
	(%)	Y		Y		Y		Y		Y		Y		Y		Y
Afghanistan	81	87	...		...		...		...		...		...		...	
Bahrain	94	93	0	95	0	95	0	95	0.42	95	0	95	20.8	95	0	95
Cyprus	91	93	0	95	0.14	95	2.04	95	0	95	0	95	5	95	0	95
Djibouti	85	91	0	95	0	95	0	95	1.36	95	0	95	563	95	0	95
Egypt	91	92	0.02	95	0.12	95	0	95	4.2	95	2.05	95	...		44	95
Iran, Islamic Republic of	97	95	0.07	95	0.15	95	0.08	95	0.49	95	0.07	95	34.3	95	0.89	95
Iraq	79	94	0.39	95	0.17	95	2.24	95	30.2	95	0.43	95	93	95	8.4	95
Jordan	91	90	0	95	0	95	0.07	95	7.12	95	0.05	95	10.5	95	0.76	95
Kuwait	96	95	0	95	0	95	2.6	95	0.7	95	0.06	95	14.6	95	0	95
Lebanon	91	91	0.03	95	0.03	95	0.13	95	0.1	95	0.45	95	30.5	95	3.6	95
Libyan Arab Jamahiriya	96	92	...		...		...		...		...		24.5	95	...	
Morocco	96	92	0	95	0	95	0.14	95	8.9	95	0.11	95	114	95	2	95
Oman	91	95	0	95	0	95	5.6	95	3.6	95	0.4	95	10.2	95	1.9	95
Pakistan	75	95	0.01	95	0.31	95	0.13	95	1.26	95	1.05	95	56	95	25.2	95
Palestine			0	95	0	95	0	95	0.76	95	0.35	95	2.1	95	0	95
Qatar	92	92	0	95	0	95	0	95	0	95	0	95	33.2	95	0	95
Saudi Arabia	94	92	0	95	0.02	95	0.18	95	13.3	95	0.21	95	14.3	95	4.24	95
Somalia	...		...		...		...		...		...		...		...	
Sudan	85	84	0.06	95	0.08	95	5.5	95	3.09	95	0.59	95	147	95	2.45	95
Syrian Arab Republic	91	94	0.45	95	0	95	6.9	95	9.7	95	0.69	95	37.1	95	17.6	95
Tunisia	93	91	0	95	0	95	0.01	95	7.54	95	0.09	95	27	95	3.32	95
United Arab Emirates	94	92	0	95	0	95	1.2	95	28.2	95	0.3	95	16.1	95	0	95
Yemen	65	91	27	95	0.3	95	1.15	95	1.4	95	0.65	95	73	95	1.36	95

Note: *Y* is the reference year for data provided. ... Data not available.

Table 5. Health status (life expectancy and mortality)

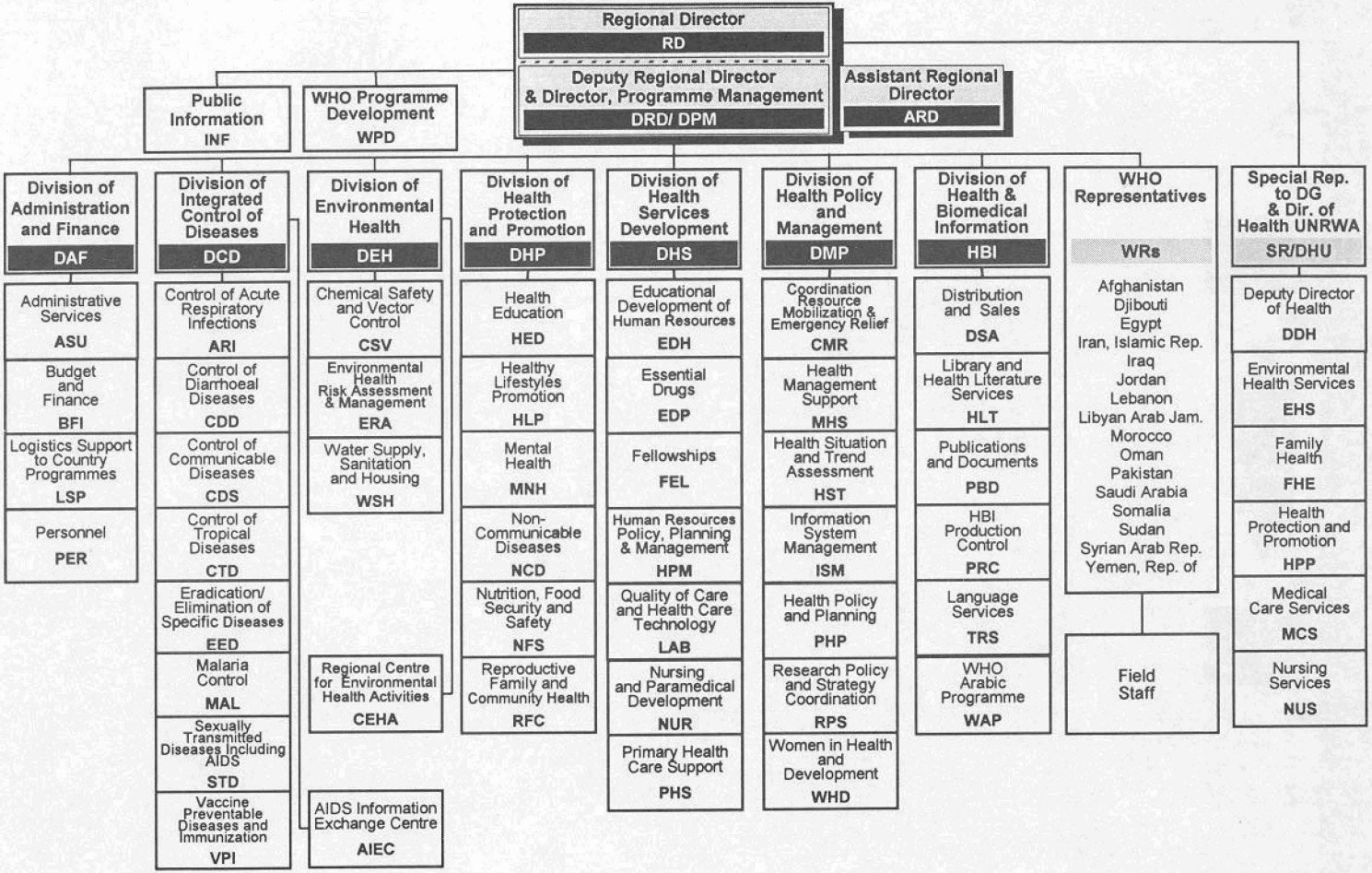
Country	Life expectancy at birth		Male life expectancy at birth		Female life expectancy at birth		Infant mortality rate per 1000 live births		Under-5 mortality rate per 1000 live births		Maternal mortality rate per 10 000 live births	
	(years)	*Y*	(years)	*Y*	(years)	*Y*		*Y*		*Y*		*Y*
Afghanistan	44	94	43	94	44	94	182	93	295	93	64	95
Bahrain	72	93	70	93	74	93	19.4	94	22	94	0.1	94
Cyprus	77	93	75	93	79	93	9.0	94	10.3	94	0	93
Djibouti	48	89	54	89	42	89	114	93	164	90	74	89
Egypt	65	91	63	91	66	91	34	94	56	90	5.1	91
Iran, Islamic Republic of	68	92	67	92	69	92	28	95	35	95	4.0	95
Iraq	66	92	65	92	67	92	92	95	128	92	11.7	92
Jordan	68	90	66	90	70	90	28	94	39	91	5	92
Kuwait	74	95	73	95	75	95	22	95	13.5	95	2.6	95
Lebanon	66	90	64	90	68	90	35	92	44	92	...	
Libyan Arab Jamahiriya	66	90	65	90	67	90	29	92	142	80	6	90
Morocco	66	90	64	90	67	90	61	95	80	95	33.2	92
Oman	67	94	67	94	68	94	23	94	29	94	2.7	94
Pakistan	61	94	60	94	62	94	86	94	159	93	30	94
Palestine	60	93	...		...		40	95	51	93	...	
Qatar	74	93	74	93	75	93	12.8	93	14.8	93	0	94
Saudi Arabia	69	90	68	90	69	90	21	95	34	89	1.8	93
Somalia	49	95	48	95	51	95	112	95	215	93	110	90
Sudan	55	93	53	93	57	93	70	93	113	93	36.5	93
Syrian Arab Republic	66	94	65	94	67	94	33	94	42	94	9.7	94
Tunisia	71	94	69	94	73	94	32	95	43	94	6.9	94
United Arab Emirates	70	90	68	90	72	90	9.5	94	12.5	94	0.1	94
Yemen	46	91	46	91	47	91	83	92	122	92	100	91

Note: *Y* is the reference year for data provided. ... Data not available.

ANNEXES

Annex 1

Organizational structure of WHO Eastern Mediterranean Regional Office (as of May 1996)



Annex 2

a) Professional staff in the EMR, by number and nationality (as of 31 December 1995)

Nationality	Regional/Intercountry	Country	Total
Egypt	11	1	12
Sudan	5	3	8
United States of America	6	2	8
Jordan	3	4	7
Tunisia	4	2	6
Syrian Arab Republic	5	–	5
Netherlands	3	2	5
Iran, Islamic Republic of	3	1	4
Pakistan	2	2	4
Russian Federation	4	–	4
Morocco	2	1	3
Somalia	–	3	3
United Kingdom	3	–	3
Iraq	2	–	2
Lebanon	2	–	2
Saudi Arabia	1	1	2
France	1	1	2
Afghanistan	1	–	1
Bahrain	1	–	1
Djibouti	–	1	1
Libyan Arab Jamahiriya	1	–	1
Yemen	1	–	1
Algeria	1	–	1
Austria	1	–	1
Bangladesh	–	1	1
Canada	1	–	1
Nepal	1	–	1
Poland	–	1	1
Rwanda	–	1	1
Thailand	–	1	1
Turkey	1	–	1
United Republic of Tanzania	–	1	1
TOTAL	**66**	**29**	**95**

Note: The above figures (a) do not include staff on leave-without-pay (LWOP) and (b) are funded from all sources.

b) Professional staff from EMR Member States, by number and nationality (as of 31 December 1995)

Nationality (country)	Total in WHO	of which in EMR
Egypt	16	12
Sudan	10	8
Tunisia	11	6
Jordan	8	7
Syrian Arab Republic	7	5
Pakistan	6	4
Iran, Islamic Republic of	5	4
Lebanon	7	2
Morocco	3	3
Somalia	3	3
Iraq	3	2
Saudi Arabia	2	2
Afghanistan	2	1
Libyan Arab Jamahiriya	2	1
Bahrain	1	1
Djibouti	1	1
Yemen	1	1
Kuwait	1	–
Cyprus	–	–
Oman	–	–
Qatar	–	–
United Arab Emirates	–	–
Total of EMR nationalities	**89**	**63**
Total of other nationalities	**1342**	**32**
Grand total	**1431**	**95**

Note: The above figures (a) do not include staff on leave-without-pay (LOWP) and (b) are funded from all sources.

Annex 3

WHO/EMRO meetings held in the EMR between 1 January and 31 December 1995, by date

Meeting title, location and dates	No. of participants
Joint WHO/FAO consultation on preparation and use of food-based dietary guidelines Nicosia, Cyprus, 2-7 March 1995	35
Intercountry workshop on transfusion medicine. Appropriate use of blood, blood components and blood derivatives Amman, Jordan, 12-16 March 1995	54
Eighteenth Session of the Eastern Mediterranean Advisory Committee on Health Research Riyadh, Saudi Arabia, 20-22 March 1995	25
Intercountry workshop on sexually transmitted diseases case-management Cairo, Egypt, 20-23 March 1995	23
Workshop on distance learning materials for safe blood and blood products Amman, Jordan, 20-24 March 1995	28
Intercountry workshop on reproductive health research methodology Dubai, United Arab Emirates, 25-29 March 1995	32
Workshop on the introduction of essential drugs and rational prescribing concepts into university curricula Jeddah, Saudi Arabia, 27-29 March 1995	25
Intercountry cholera meeting Cairo, Egypt, 27-29 March 1995	42
First meeting of the Regional Advisory Panel on the Prevention of Blindness Islamabad, Pakistan, 28-30 March 1995	18
Coordination meeting on cholera emergency preparedness and control in the neighbouring countries of the Horn of Africa Cairo, Egypt, 30 March 1995	22
Intercountry consultative meeting on strengthening of referral systems in support of primary health care Lahore, Pakistan, 9-13 April 1995	22
Intercountry meeting of national AIDS programme managers Amman, Jordan, 10-13 April 1995	46
Consultative meeting on the rational use of traditional medicine Cairo, Egypt, 10-13 April 1995	14
Intercountry workshop on the prevention and control of viral hepatitis Cairo, Egypt, 16-20 April 1995	32

WHO/EMRO meetings held in the EMR between 1 January and 31 December 1995, by date (*cont.*)

Meeting title, location and dates	No. of participants
Intercountry workshop on HIV counselling Beirut, Lebanon, 25-28 April 1995	21
Malaria border meeting Beirut, Lebanon, 22-24 May 1995	10
Intercountry meeting of national directors and managers of educational development centres Tunis, Tunisia, 22-25 May 1995	19
Intercountry meeting for the evaluation of the progress of national mental health programmes in the Eastern Mediterranean Region Casablanca, Morocco, 22-26 May 1995	26
Regional consultation on the acceleration of measles control Manama, Bahrain, 25 May 1995	31
Nineteenth meeting of the Regional Consultative Committee Alexandria, Egypt, 25-26 May 1995	10
Twelfth intercountry meeting of national EPI managers Manama, Bahrain, 27-31 May 1995	71
Fifth and special meeting of the Technical Advisory Committee CEHA, Amman, Jordan, 28-30 May 1995	20
Eighth EPI Regional Technical Advisory Group meeting Manama, Bahrain, 28 May - 1 June 1995	19
Intercountry group meeting presenting findings on field testing/country application of the manual, "Workload indicators of staffing needs" Cairo, Egypt, 5-7 June 1995	15
Regional workshop on diagnosis, prevention and control of major zoonoses Tunis, Tunisia, 5-8 June 1995	23
Intercountry seminar on setting up of poisons control centres and use of IPCS/INTOX package Hammamet, Tunisia, 6-9 June 1995	30
Scientific group meeting on primary health care future directions and actions for accelerating health for all Tunis, Tunisia, 14-19 June 1995	20
Third intercountry meeting of national ARI programme managers Amman, Jordan, 17-20 June 1995	42
Meeting of the national managers of tuberculosis control Cairo, Egypt, 15-17 July 1995	24
Consultative meeting on quality assurance of vaccines Islamabad, Pakistan, 16-20 July 1995	30

WHO/EMRO meetings held in the EMR between 1 January and 31 December 1995, by date (*cont.*)

Meeting title, location and dates	No. of participants
Workshop for potential consultants in tuberculosis control Cairo, Egypt, 18-20 July 1995	24
Task force meeting on continuing education for health personnel Alexandria, Egypt, 24-27 July 1995	10
Regional consultation on hypertension management Beirut, Lebanon, 4-5 August 1995	16
Intercountry workshop on evaluation of national AIDS programmes Nicosia, Cyprus, 22-25 August 1995	24
Intercountry workshop on AIDS education in schools Alexandria, Egypt, 11-15 September 1995	44
Twelfth meeting of the Regional Director with WHO Representatives and Regional Office staff Alexandria, Egypt, 17-21 September 1995	94
First meeting on the Regional Commission for the Certification of the Eradication of Poliomyelitis Alexandria, Egypt, 23 September 1995	23
WHO/UNEP intercountry meeting on supportive environment and health cities Manama, Bahrain, 23-28 September 1995	32
Intercountry workshop on AIDS education at the work place Lahore, Pakistan, 25-27 September 1995	33
Third meeting of the Regional Advisory Panel on Nursing Tunis, Tunisia, 25-28 September 1995	17
Regional meeting of directors of blood transfusion services Tunis, Tunisia, 25-29 September 1995	29
Intercountry consultation on the promotion of health of adolescent girls through maternal and child health programmes Nicosia, Cyprus, 26-29 September 1995	25
Second meeting on coordination of operation MECACAR Teheran, Islamic Republic of Iran, 27-28 September 1995	43
Forty-second Session of the Regional Committee for the Eastern Mediterranean Cairo, Egypt, 1-4 October 1995	175
Intercountry workshop on human resources for health projection models Amman, Jordan, 1-8 October 1995	20

WHO/EMRO meetings held in the EMR between 1 January and 31 December 1995, by date (*cont.*)

Meeting title, location and dates	No. of participants
Intercountry facilitator training workshop on managing tuberculosis control at district level Beirut, Lebanon, 14-18 October 1995	17
Regional workshop on integrated vector control Lahore, Pakistan, 14-19 October 1995	19
Intercountry workshop on prevention of HIV transmission through injecting drug use Cairo, Egypt, 16-18 October 1995	22
Consultation on follow-up of regional disease vector control strategy Lahore, Pakistan, 21-22 October 1995	9
Joint WHO/UNICEF consultation on strategies for control of iron deficiency anaemia Teheran, Islamic Republic of Iran, 22-26 October 1995	25
Regional seminar on progress in elimination of leprosy in the Region Teheran, Islamic Republic of Iran, 23-25 October 1995	10
Consultation on improving quality of drinking-water at home level for prevention of diarrhoea Alexandria, Egypt, 24-26 October 1995	12
Workshop on computer management of EPI data Manama, Bahrain, 28 October - 1 November 1995	25
Regional working group meeting on malaria control Alexandria, Egypt, 29 October - 2 November 1995	32
Regional conference on healthy villages Isfahan, Islamic Republic of Iran, 6-9 November 1995	43
Regional consultation on standardization of research methodologies related to control of hereditary disorders Alexandria, Egypt, 12-15 November 1995	19
Twelfth regional meeting of national fellowships officers Amman, Jordan, 13-16 November 1995	23
Training workshop on logistics of AIDS control supplies and condom promotion Rabat, Morocco, 13-17 November 1995	28
Second conference on health, environment and development Beirut, Lebanon, 14-17 November 1995	50
Joint WHO/UNICEF meeting on universal salt iodization for salt producers in the Eastern Mediterranean Region Amman, Jordan, 15-17 November 1995	29

WHO/EMRO meetings held in the EMR between 1 January and 31 December 1995, by date (*cont.*)

Meeting title, location and dates	No. of participants
Consultation on establishing a regional network on resistance to antimicrobial agents Alexandria, Egypt, 19-23 November 1995	5
Scientific meeting on viral hepatitis Cairo, Egypt, 25 November 1995	19
Consultative meeting on operational research as a component of the national drug policy Teheran, Islamic Republic of Iran, 26-29 November 1995	24
Regional conference on emerging infectious diseases Cairo, Egypt, 26-29 November 1995	165
Consultation on development of national strategy for safety promotion and accidental injury control Amman, Jordan, 26-30 November 1995	29
Intercountry consultative meeting on home health care Cairo, Egypt, 27-29 November 1995	12
Meeting of EPI lagging countries Cairo, Egypt, 1-2 December 1995	35
Second meeting of the inter-agency coordination committee on EPI Cairo, Egypt, 3 December 1995	19
Regional workshop on GEMS/water implementation in the Eastern Mediterranean Region CEHA, Amman, Jordan, 4-6 December 1995	34
Ministerial consultation on medical education and health services Cairo, Egypt, 4-6 December 1995	68
Intercountry workshop on formulation and implementation of national plans for cardiovascular diseases control Nicosia, Cyprus, 5-8 December 1995	27
Measles/rubella epidemiology workshop for the Arabian Peninsula Kuwait, 9-10 December 1995	12
Working group meeting for the development of Arabic textbook on psychiatric and mental health nursing Alexandria, Egypt, 10-11 December 1995	14
Workshop on laboratory diagnosis in the management of patients with AIDS/HIV infection Kuwait, 10-14 December 1995	18
Regional conference on water supply and sanitation in the Eastern Mediterranean Region Beirut, Lebanon, 11-15 December 1995	46

WHO/EMRO meetings held in the EMR between 1 January and 31 December 1995, by date (*cont.*)

Meeting title, location and dates	No. of participants
Working group meeting for the development of Arabic textbook on introduction to nursing Alexandria, Egypt, 12-14 December 1995	12
Joint WHO/EMRO/AFRO workshop on the development of improved complementary foods at household and community levels Addis Ababa, Ethiopia, 12-15 December 1995	30
Intercountry workshop on the introduction of mother-baby package: an essential step in reproductive health care Lahore, Pakistan, 16-19 December 1995	40
Workshop on computer management of EPI data Alexandria, Egypt, 16-20 December 1995	9
Second intercountry meeting on national cancer control programmes Muscat, Oman, 17-20 December 1995	29
Workshop for training of trainers in communicable diseases surveillance and preparedness for epidemics Alexandria, Egypt, 18-30 December 1995	24
Working group meeting for development of Arabic textbook on community nursing Alexandria, Egypt, 19-21 December 1995	12
Intercountry meeting on assessing basic minimum needs approach in the Eastern Mediterranean Region Amman, Jordan, 24-27 December 1995	13
Consultation meeting on health system research Bahrain, 24-27 December 1995	35
Experts committee on tobacco control Alexandria, Egypt, 26-28 December 1995	24

Annex 4

Principal publications, journals and documents issued during 1995*

No.	Title	Originator
Publications		
1	Appropriate neuropsychiatric drugs for primary health care: guidelines for countries of the Eastern Mediterranean Region EMRO Technical Publications Series, No.21 Language : English	EMRO
2	Blood transfusion and blood components WHO Regional Publications, Eastern Mediterranean Series, No. 12 Language : English	EMRO
3	Breast-feeding and fertility WHO Regional Publications, Eastern Mediterranean Series, No.13 Language : English	EMRO
4	Cancer control in the Eastern Mediterranean Region EMRO Technical Publications Series, No.20 Language : English	EMRO
5	Cost analysis in primary health care—a training manual for programme managers Language : Arabic	HQ
6	Essential elements of obstetrics care at first-referral level Language : Arabic	HQ
7	Field guide for rapid assessment of nutritional status in emergencies Language : English	EMRO
8	General surgery at the district hospital Language : Arabic	HQ
9	Health and environment in Islam Health Education Through Religion Series, No.7 Language : Arabic	EMRO
10	Health promotion through Islamic lifestyles: the Amman declaration Health Education Through Religion Series, No.5 Language : Arabic	EMRO
11	Islamic rulings on circumcision Health Education Through Religion Series, No.8 Language : Arabic	EMRO
12	Manual on diabetes mellitus in primary health care Language : Arabic	UNRWA

* **NOTE:** This Annex lists all principal publications and documents issued by EMRO during 1995, but does not include reprints, brochures, kits, posters and other printed material.

Principal publications, journals and documents issued during 1995 *(cont.)*

No.	Title	Originator
13	Production of basic diagnostic laboratory reagents WHO Regional Publications, Eastern Mediterranean Series, No.11 Language : English	EMRO
14	Specimen collection and transport for microbial investigation: WHO Regional Publications, Eastern Mediterranean Series, No.8 Language : English	EMRO
15	The state of child health in the Eastern Mediterranean EMRO Technical Publications, Series No.9 (updated version) Language : English	EMRO
16	Treatment of tuberculosis: guidelines for national programmes Language : Arabic	HQ
Periodicals		
1	*Bridge Newsletter*, No.14, Winter/Spring 1995 Language : Arabic	HQ
2	*Drugs Digest*, Vol.9, No.2, March 1993 Languages : Arabic/English	EMRO
3	*Eastern Mediterranean Health Journal*, Vol.1, No.1 Languages : Arabic/English/French	EMRO
4	*Epidemiological Bulletin*, No.23. Special issue on noncommunicable diseases Languages : Arabic/English	EMRO
5	*Epidemiological Bulletin*, No.24 Languages : Arabic/English	EMRO
6	*Epidemiological Bulletin*, No.25. Special issue on AIDS Languages : Arabic/English	EMRO
7	*Global AIDS News*, No.4 (1994) Language : Arabic	HQ
8	*Global AIDS News*, No.1 (1995) Language : Arabic	HQ
9	*AIDS Newsletter*, No.3 Language : Arabic	HQ
10	*Safe Motherhood Newsletter*, No. 14, March-June 1994 Language : Arabic	HQ
11	World AIDS Day 1995, Newsletter No.1 Language : Arabic	HQ
Documents		
1	Briefing on the Eighteenth Meeting of the Regional Consultative Committee and the Forty-first Session of the Regional Committee Language : English	EMRO

Principal publications, journals and documents issued during 1995 *(cont.)*

No.	Title	Originator
2	Development of health and biomedical information plan, Kingdom of Saudi Arabia Language : Arabic	EMRO
3	District team problem-solving guidelines for maternal and child health, family planning and other public health services Language : Arabic	HQ
4	Doctor's guidelines for the clinical management of HIV infection Language : Arabic	MHSYR[1]
5	Draft statute for the protection, support and promotion of breast-feeding Language : Arabic	MHOMA[2]
6	Epidemiology of acquired immunodeficiency syndrome, sixth edition Languages : Arabic/English	EMRO
7	Female sterilization, what health workers need to know Language : Farsi	HQ
8	Framework for effective tuberculosis control Language : Arabic	HQ
9	Guidelines for counselling about HIV infection and disease Language : Arabic	MHSYR
10	Guidelines for the appropriate use of blood Language : Arabic	HQ
11	Guidelines for the clinical management of HIV infection in children Language : Arabic	HQ
12	Guidelines for the management of breast cancer Language : English	EMRO
13	Guidelines on HIV testing Language : Arabic	MHEGY[3]
14	Management of sexually transmitted diseases Language : Arabic	HQ
15	Manual on counselling for AIDS workers Language : Arabic	MHEGY
16	Manual on sexually transmitted diseases Language : English	MHEGY
17	Promoting the development of young children with cerebral palsy—a guide for mid-level rehabilitation workers Language : Arabic	EMRO

[1] MHSYR = Ministry of Health, Syrian Arab Republic
[2] MHOMA = Ministry of Health, Oman
[3] MHEGY = Ministry of Health, Egypt

Principal publications, journals and documents issued during 1995 *(cont.)*

No.	Title	Originator
18	Report of the Eastern Mediterranean Programme on AIDS for the year 1993 Languages : Arabic/English	EMRO
19	Selection of executive action documents Language : English	EMRO
20	STD case-management workbook, module 1 Language : Arabic	HQ
21	Teaching and learning database programme Languages : Arabic/English	EMRO
22	The clinical management of AIDS Language : English	MHEGY
23	The initiative for the global eradication of poliomyelitis: a guide for clinicians Language : Arabic	HQ
24	The role of health research in the strategy for health for all by the year 2000: background document, technical discussions Language : Arabic	HQ
25	The treatment of malaria Language : Arabic	HQ
26	The work of WHO in the Eastern Mediterranean Region: Annual Report of the Regional Director, 1 January to 31 December 1994 Languages : Arabic/English	EMRO
27	Tuberculosis: a global emergency. WHO report on the tuberculosis epidemic Language : Arabic	HQ
28	Vasectomy. What health workers need to know Language : Farsi	HQ

Annex 5

WHO collaborating centres in the Eastern Mediterranean Region as at 2 April 1996

Title	Field	Designation date
Centre collaborateur de l'OMS pour le Diagnostic du SIDA en Laboratoire Institut Pasteur du Maroc, Casablanca, Morocco	AIDS	1992
WHO Collaborating Centre for Acquired Immunodeficiency Syndrome (AIDS) US Naval Medical Research Unit No.3 (NAMRU 3), Cairo, Egypt	AIDS	1987
WHO Collaborating Centre for Acquired Immunodeficiency Syndrome (AIDS) Department of Virology, Faculty of Medicine, Kuwait University, Kuwait	AIDS	1987
Centre collaborateur de l'OMS pour la prevention de la cécité Institut d'Ophthalmologie, c/o Ministère de la Santé publique, Tunis, Tunisia	Blindness, prevention of	1983
WHO Collaborating Centre for Prevention of Blindness Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan	Blindness, prevention of	1993
WHO Collaborating Centre for Prevention of Blindness King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia	Blindness, prevention of	1985
WHO Collaborating Centre for Research and Training in Breast-feeding National Lactation Management Centre, Teheran, Islamic Republic of Iran	Breast-feeding	1996
WHO Collaborating Centre for Cancer Control and Lymphoma Research Kuwait Cancer Control Centre, Shuwaikh-Kuwait, Kuwait	Cancer	1987
WHO Collaborating Centre for Cardiovascular Diseases National Institute for Cardiovascular Diseases (NICVD), Karachi, Pakistan	Cardiovascular diseases	1988
WHO Collaborating Centre for International Classification of Diseases Directorate of Statistics and Medical Records, Ministry of Public Health, Kuwait	Classification of diseases	1994
WHO Collaborating Centre for Research and Training in Diabetes Programme Development National Diabetes Centre, The Royal Hospital, Ministry of Health, Muscat, Oman	Diabetes	1992

WHO collaborating centres in the Eastern Mediterranean Region as at 2 April 1996 (*cont.*)

Title	Field	Designation date
WHO Collaborating Centre for Treatment, Education and Research in Diabetes and Diabetic Pregnancies Nazimabad, Karachi, Pakistan	Diabetes	1991
WHO Collaborating Centre for Educational Development of Medical and Health Personnel Educational Development Centre, Shahid Beheshti University of Medical Sciences and Health Services, Teheran, Islamic Republic of Iran	Educational development	1995
WHO Collaborating Centre for Research and Training in Educational Development of Health Personnel Department of Medical Education (DME), College of Physicians and Surgeons, Karachi, Pakistan	Educational development	1996
FAO/WHO Collaborating Centre for Food Contamination Monitoring Central Public Health Laboratories, Ministry of Health, Cairo, Egypt	Food safety	1977
FAO/WHO Collaborating Centre for Food Contamination Monitoring Qatar Food Control Laboratory, Ministry of Public Health, Doha, Qatar	Food safety	1979
WHO Collaborating Centre for Health and Biomedical Information Medical Documentation and Information Centre (MEDIC), Department of Research Affairs and Technical Cooperation, Ministry of Health and Medical Education, Teheran, Islamic Republic of Iran	Health and biomedical information	1993
WHO Collaborating Centre for Health Management Institute of Public Administration, Riyadh, Saudi Arabia	Health management	1993
WHO Collaborating Centre for Research in Human Reproduction Department of Obstetrics and Gynaecology, Shatby Maternity Hospital, University of Alexandria, Alexandria, Egypt	Human reproduction research	1974
WHO Collaborating Centre for Research in Human Reproduction National Research Institute of Fertility Control, Clifton, Karachi, Pakistan	Human reproduction research	1976
WHO Collaborating Centre on Development of Human Resources for Health Faculty of Medicine, Suez Canal University, Ismailia, Egypt	Human resources development	1986
Centre collaborateur de l'OMS pour la recherche et la formation en immunologie Institut Pasteur, Tunis, Tunisia	Immunology	1982

WHO collaborating centres in the Eastern Mediterranean Region as at 2 April 1996 (*cont.*)

Title	Field	Designation date
Centre collaborateur de l'OMS pour recherche et formation en leishmaniose Institut Pasteur, Tunis, Tunisia	Leishmaniasis	1994
WHO Collaborating Centre for Training and Research in Maintenance and Repair of Health Care Equipment Regional Training Centre, Higher Technical Institute, Nicosia, Cyprus	Maintenance and repair of health care equipment	1987
WHO Collaborating Centre for Training and Research on Malaria and other Vector-borne Diseases Research and Training Centre on Vectors of Diseases (ARTC), Ain Shams University, Cairo, Egypt	Malaria and other vector-borne diseases	1981
Centre collaborateur de l'OMS pour la recherche et la formation en santé mentale Centre Psychiatrique, Universitaire Ibn Rochd, Casablanca, Morocco	Mental health	1992
WHO Collaborating Centre for Research and Training in Mental Health Institute of Psychiatry, Ain Shams University, Cairo, Egypt	Mental health	1993
WHO Collaborating Centre for Research and Training in Mental Health Department of Psychological Medicine, Rawalpindi Medical College, Rawalpindi General Hospital, Rawalpindi, Pakistan	Mental health	1987
WHO Collaborating Centre for Haemoglobinopathies, Thalassaemias and Enzymopathies Department of Medical Biochemistry, College of Medicine, King Khaled University Hospital, King Saud University, Riyadh, Saudi Arabia	Noncommunicable diseases	1991
WHO Collaborating Centre for Nuclear Medicine Department of Nuclear Medicine, Faculty of Medicine, Kuwait University, Kuwait	Nuclear medicine	1988
WHO Collaborating Centre for Nursing Development Nursing Division, College of Health Sciences, Ministry of Health' Manama, Bahrain	Nursing	1990
WHO Collaborating Centre for Research and Training in Nutrition (Nutrition in PHC and Iodine Deficiency Disorders) (1) Department of Human Ecology, School of Public Health, (2) National Nutrition Institute, Teheran, Islamic Republic of Iran	Nutrition	1992

WHO collaborating centres in the Eastern Mediterranean Region as at 2 April 1996 (*cont.*)

Title	Field	Designation date
WHO Collaborating Centre for Research and Training in Nutrition, Specifically on Assessment of Nutrition Status and Iron Deficiency Anaemia Nutrition Institute, Cairo, Egypt	Nutrition	1992
WHO Collaborating Centre for Occupational Health Department of Occupational Health, High Institute of Public Health, Alexandria, Egypt	Occupational health	1972
Centre collaborateur de l'OMS de recherche et de formation en médecine du travail Institut de la Santé et de Securité au Travail, Tunis, Tunisia	Occupational health	1992
WHO Collaborating Centre for Research and Training in Oral Health Department of Dentistry, Jinnah Postgraduate Medical Centre (JPMC), Karachi, Pakistan	Oral health	1992
WHO Collaborating Centre for Research, Training and Demonstration for Oral Health Demonstration, Training and Research Centre for Oral Health, Damascus, Syrian Arab Republic	Oral health	1986
WHO Collaborating Centre for Pesticide Analysis Hussein Ebrahim Jamal (HEJ) Research Institute of Chemistry, University of Karachi, Karachi, Pakistan	Pesticide analysis	1988
Centre collaborateur de l'OMS pour formation et recherche en administration sanitaire et santé publique Institut National de l'Administration Sanitaire (INAS), c/o Ministère de la Santé publique, Rabat, Morocco	Public health administration	1993
Centre collaborateur de l'OMS pour recherche et formation en matière de développement de la formation des personnels de la santé Le Centre National de Formation Pédagogique des Cadres de la Santé, Tunis, Tunisia	Public health administration	1994
WHO Collaborating Centre on Quality Assurance for Clinical Laboratories The Reference Laboratory, Biochemistry Department, Bo Ali Hospital, Teheran, Islamic Republic of Iran	Quality assurance	1994
WHO Collaborating Centre for Reference and Research on Rabies Rabies Department, Pasteur Institute, Teheran, Islamic Republic of Iran	Rabies	1973
WHO Collaborating Centre for Management of Renal and Urological Disorders Mansoura Urology and Nephrology Centre, Mansoura University, Mansoura, Egypt	Renal and urological disorders	1993

WHO collaborating centres in the Eastern Mediterranean Region as at 2 April 1996 (*cont.*)

Title	Field	Designation date
WHO Collaborating Centre for Schistosomiasis Control Theodor Bilharz Research Institute, Giza, Egypt	Schistosomiasis control	1986
WHO Collaborating Centre for Community Control of Thalassaemia Archbishop Makarios Thalassaemia Centre, Ministry of Health, Nicosia, Cyprus	Thalassaemia control	1986
WHO Collaborating Centre for Traditional Medicine Traditional Medicine Research Institute, National Council for Research, Khartoum, Sudan	Traditional medicine	1984
WHO Collaborating Centre for Transfusion Medicine Blood Transfusion Centre, Amman, Jordan	Transfusion medicine	1995
WHO Collaborating Centre for Transfusion Medicine National Centre for Blood Transfusion, c/o Ministry of Public Health, Tunis, Tunisia	Transfusion medicine	1995
WHO Collaborating Centre for Tuberculosis National Institute of Tuberculosis and Lung Diseases, c/o Ministry of Health and Medical Education, Teheran, Islamic Republic of Iran	Tuberculosis	1993
WHO Collaborating Centre for Research and Training in Viral Diagnostics National Institute of Health, Islamabad, Pakistan	Virology	1982
WHO Collaborating Centre for Virus Reference and Research Department of Microbiology, Faculty of Medicine, Kuwait University, Kuwait	Virology	1984
Centre collaborateur de l'OMS pour la recherche et de la formation dans la domaine de l'approvisionnement en eau potable Centre Bou-Regreg de l'ONEP, Office National de l'Eau Potable (ONEP) Rabat-Chellah, Rabat, Morocco	Water supply	1993