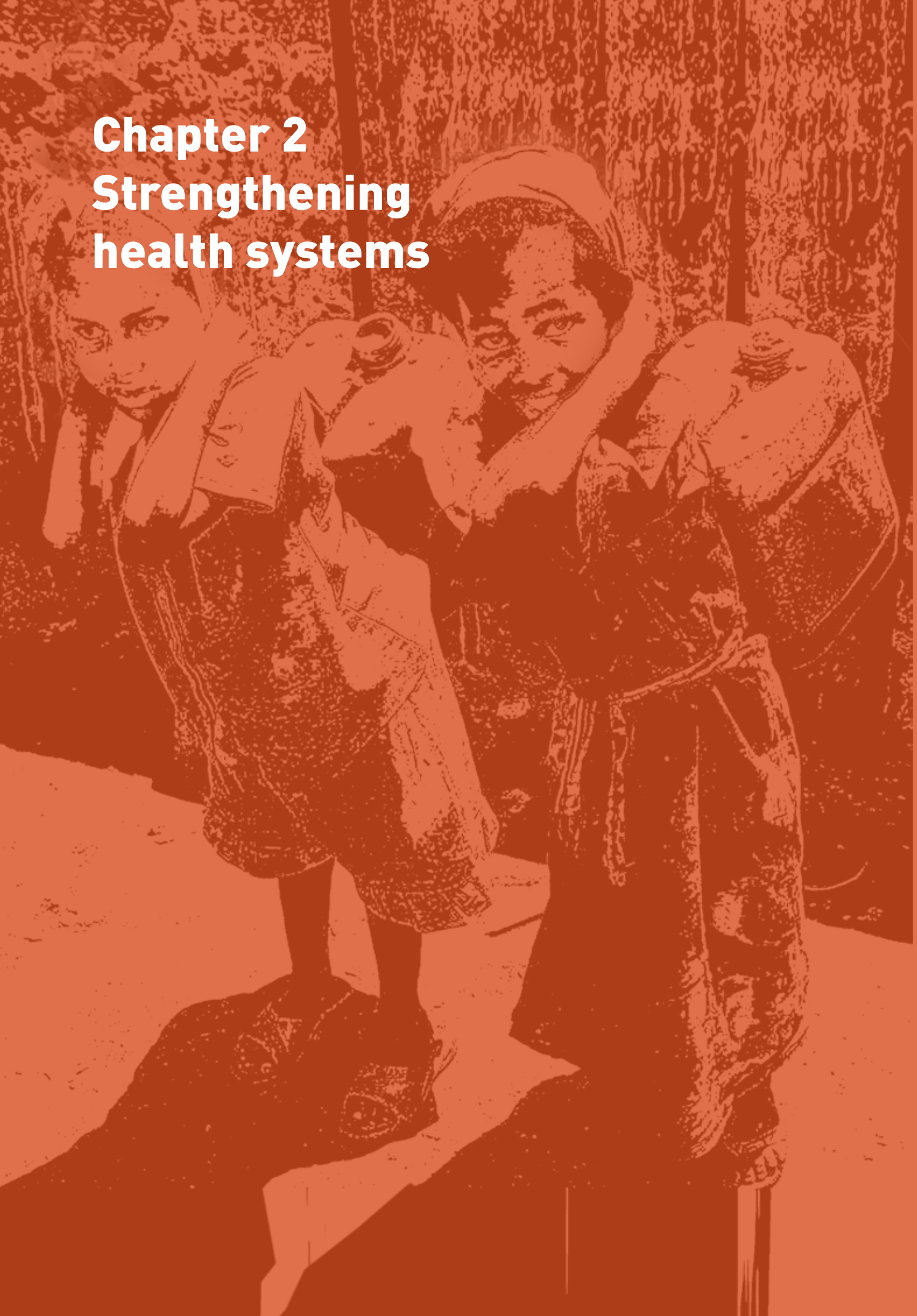


Chapter 2

Strengthening health systems





2. Strengthening health systems

Strategic objective 7: To address the underlying social and economic determinants of health through policies and programmes that enhance health equity and integrate pro-poor, gender-responsive and human rights-based approaches

Issues and challenges

Health challenges in the Region are becoming more acute and complex due to rapid urbanization, man-made and natural disasters, economic recession, poor quality of life, issues related to governance of the health system and lack of universal access to quality health care services. Vulnerable groups, including mothers, children, orphans, refugees, the poor, disadvantaged, disabled and people living in urban slums, are more affected than other groups, and in a wider variety of aspects. Gender inequity, insufficient intersectoral collaboration and partnership between stakeholders, high unemployment rates and inadequate funding are the driving issues of this strategic objective. Rapid increase in population density and serious environmental problems affect most of citizens. Insufficient social protection for the poor and maldistribution of human resources for health are all among the major challenges that affect health service provision and social well-being, particularly in low-income countries. There is insufficient intersectoral collaboration to have a positive impact on the social determinants of health. Insufficient political commitment to and resources for the social determinants of health is impeding achievement of gender and health equity goals and full realization of the right to health.

Achievements towards performance indicator targets in each expected result

Egypt introduced community-based initiatives in the Meet Hawy District of Algharbia Governorate. Technical support was provided to the Ministry of Health and Population, through orientation sessions, establishment of the local development committee and training of community health workers and community nurses in primary health care. Provincial governments in Pakistan received technical support to carry out a rapid assessment on implementation of the basic development needs programme. The assessment resulted in an action plan that will assist the provincial governments to adopt and expand the programme based on local capacities and needs. A meeting with the Ministry of Health, Sudan, resulted in a set of key activities that will facilitate institutionalization and expansion of community-based initiatives. A plan of action was also developed to expand community-based initiatives in three localities of Gezira State, namely South Gezira, Um-Ul Qura and Madani. In the Syrian Arab Republic, the healthy village programme was expanded to the governorates of Aleppo, Daraa and Hama, covering 42 villages and 568 beneficiaries. The Regional Office and Ministry of Health, Sudan, developed and field-tested a manual on community-based disaster risk reduction. The manual contains simple



Community members, and local volunteers and nurses participate in orientation sessions and training for community-based initiatives in Algharbia Governorate, Egypt

guidelines on the role of the community in disaster risk reduction and vulnerability assessment. A survey of the managerial status of community-based initiatives was conducted in all countries. Table 2.1 shows the status of the programme in 17 countries.

With regard to programme advocacy, the *CBI newsletter* continued to promote success stories of community empowerment from around the Region. *Monitoring, supervisory and evaluation tools for community-based initiatives* was published in French and *Training manual for the healthy city programme* and *Training manual for community-based initiatives* were translated into Arabic.

Urbanization and health was a major area of concern. The Regional Office worked with eight localities in Sudan to develop plans of action for introduction of the healthy cities programme, focusing on building appropriate infrastructure for community leadership and sustained intersectoral collaboration for improving urban health and social development. A web site was developed allowing many cities to join the Regional Healthy City Network. The municipality of Tripoli, Lebanon, held an orientation session on the healthy

city programme for an intersectoral team and developed an annual plan to work on food safety, school health, tobacco control and solid waste management as priority interventions. The Regional Director participated in the Asian Mayors' Forum in April 2011, sharing the experience of WHO on urbanization and health, including urban health equity.

Collaboration between the community-based initiatives and vaccine-preventable diseases and immunization programmes resulted in agreement to scale up immunization coverage in selected basic development needs sites of Djibouti, Somali and Pakistan. A sustainable follow-up mechanism was set up for defaulters and achieved 95% immunization coverage for children under 1 year of age in these selected sites. Development of a manual on community-based injury prevention is also in process, focusing on child injury prevention (including road traffic injuries), prevention of disabilities and community-based rehabilitation. This will initially be introduced in eight selected countries (Afghanistan, Egypt, Islamic Republic of Iran, Jordan, Morocco, Pakistan, Sudan and Yemen).



Table 2.1 Status of the community-based initiatives programme in 17 countries of the Eastern Mediterranean Region

Status	Afghanistan	Djibouti	Egypt	Iraq	Iran, Islamic Republic of	Jordan	Lebanon	Morocco	Oman	Pakistan	Occupied Palestinian territory	Saudi Arabia	Sudan	Somalia	Syrian Arab Republic	Tunisia	Yemen
Unit in Ministry of Health	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Focal point at provincial/district level	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Allocation of annual budget by government	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
3–5 year national expansion plan	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Acceptance as national programme	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
National capacity for training	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Partnership with United Nations/nongovernmental organizations and other sectors	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Evaluation conducted	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Monitoring and supervision once every 2–3 months	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Plan to train cluster representatives and health volunteers on priority health programmes	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

■ Present ■ Not present

The Regional Office participated in the World Conference on Social Determinants of Health in Rio de Janeiro, contributing posters illustrating community-based case studies from Afghanistan, Oman, Pakistan, Tunisia and Yemen. Technical papers on social determinants of health from five countries (Egypt, Islamic Republic of Iran, Jordan, Morocco and Pakistan) contributed to the technical documentation. These were on: social participation in Ezbet El Hagana, a disadvantaged area in Cairo; a school scouts programme in the Islamic Republic of Iran; capacity-building to address social determinants of health through Health

in All Policies (HiAP) and intersectoral collaboration in Jordan; health equity and its measurement in Morocco; and a HeartFile study of social protection in Pakistan.

The Regional Office continued to invest in building national capacities in social determinants of health and development of tools to address equity in health. In Morocco the national programme on health equity was reviewed in a workshop and a plan of action to address social determinants of health and health equity was outlined. A joint mission between WHO and UNICEF was conducted to promote health equity in Morocco. Iraq and Jordan were also among target countries for



promotion of social determinants of health. Training materials on ensuring health is included in all development policies were distributed to a number of countries and collaboration with other regional offices was strengthened through developing a system of networking within WHO.

The Regional Office organized a seminar entitled “The UN Convention on the Rights of Persons with Disabilities (UNCRPD):

from theory to practice”, to advocate for the implementation of the Convention at country level. Technical and financial support was provided for health and human rights activities in Afghanistan, Iraq, the occupied Palestinian territory and Yemen. WHO Afghanistan helped to raise awareness about human rights among policy-makers in the Ministry of Public Health, encouraging inclusion of human rights principles in



A health worker collects data to support the measurement of health equity in an urban area in Morocco



Civil strife and poverty are major determinants of ill health in Somalia, exposing children to stresses and risks beyond their years

health policies and strategies. As a result, a national health and human rights strategy was adopted, and further work is planned to support its implementation.

The health and human rights advocacy project in the occupied Palestinian territory is continuing with regular monitoring reports on the right to health. These include documenting the ability of patients to access health services, for example reporting on decisions and delays with regard to permit requests, interrogations by Israeli security services, arduous travel procedures to destinations and in the worst cases, complete denial of access. These restrictions have serious implications for health, in extreme scenarios having caused deaths when life-saving health services were not accessed in time.

To build health and human rights capacities in the Region, the Regional Office, in agreement with Heidelberg University, Germany, sponsored 11 fellowships from six Member States to attend a 2-week course held by the university on health and human rights. At the regional level, Human Rights Day 2011 was celebrated in December. A press release on focusing on social media as a tool to defend human rights was released, a media campaign was launched, and a short video clip to promote health as a human right was posted on all media.

Gender-based violence, gender and HIV, and the health-seeking behaviours of men and women were the focus of the gender and health development programme. Technical support was provided to Afghanistan, Iraq, Pakistan and Yemen on strengthening health sector response to gender-based violence and the Ministry of Health, Pakistan, committed to developing a national health sector protocol on gender-based violence. In addition, the Regional Office, working with WHO headquarters and the Regional Office



Health and human rights: Regional Director (Emeritus) Dr Hussein A Gezairy presents actress Hind Sabry with a special award to the Egyptian feature film "Asmaa" which tackled the right of people living with HIV to health care

for Europe, as well as with the Knowledge Hubs of the Islamic Republic of Iran and Lebanon, made progress in addressing gender issues in HIV bio-behavioural surveillance.

Capacity-building and technical support facilitated the integration of gender and health equity into health programmes and policies, both in-house and in countries. Capacity-building activities were conducted on addressing gender-based violence in emergency response and in integrating gender into Global Fund proposals. Capacity was also built in country offices and the Regional Office on addressing gender and health equity. Technical support was provided to Afghanistan on a national health sector strategy on gender, and capacity-building activities were conducted on gender and health equity in Afghanistan, Pakistan, Iraq and Oman.

Operational evidence is required on successful approaches to addressing root causes of gender and health inequities. For this reason, operational research on gender and HIV was supported in Afghanistan,



Integration of gender and health equity into health programmes and policies was the subject of this training session for health managers in Iraq

Egypt, Jordan, Lebanon and Yemen, and an assessment of health sector readiness to address gender-based violence was supported in Pakistan. A WHO gender assessment of health-seeking behaviour provided evidence to support development of the Ministry of Public Health gender strategy in Afghanistan.

Future directions

WHO will boost its technical support to Member States for institutionalization of community-based initiatives and reduction of health inequity, and for building evidence on the importance of social determinants of health, gender mainstreaming and health as a human right for health outcomes. Efforts will continue to be made to include community-based initiatives as an integral part of national health policies and plans. Technical support will be provided to improve intersectoral collaboration among government agencies and to enhance partnerships with civil society to tackle social and economic determinants of health, with interventions at the policy as well as community levels. The Regional Office will implement a regional action plan to operationalize the Rio political declaration following the

World Conference on Social Determinants of Health. Afghanistan and Oman will be supported to develop and analyse national disaggregated databases related to health and development, and to use the results for planning and scaling up interventions. Efforts will be made to integrate health as a human right into national health systems through implementation of the WHO strategy on health and human rights. The Regional Office will continue to develop and publish evidence on gender and health to support Member States in gender-responsive health planning and programming. Countries will continue to be supported to integrate gender perspectives in planning, implementation and monitoring of national health policies and programmes. Future focus in addressing gender and health inequities will include strengthening health sector response to gender-based violence. Further operational research is planned on programme-specific gender and health issues, including in the areas of HIV and mental health.

Strategic objective 10: To improve health services through better governance, financing, staffing and management, informed by reliable and accessible evidence and research

Issues and challenges

Equitable access to health care is a key component to achieving the Millennium Development Goals. The importance of health systems in contributing to better



health outcomes is beyond doubt. Many challenges nevertheless exist to the improved performance of health systems in the Region.

Improving governance in health is a major challenge. A positive step is the recognition by all countries of the importance of addressing governance in health with a focus on policy analysis and strategic health planning. Most ministries of health have limited capacities in policy analysis, policy development and planning. This is more serious in countries in crisis, where there is also a lack of institutional capacity at national and sub-national levels in these countries to translate national health policy into action. Ongoing crisis is continuously weakening the health system while emergency-oriented services dominate system development. Accountability and transparency is a major issue in low-income countries. Similarly, there is need to engage with partners and non-state actors. The role of the private sector in health care delivery is expanding, however, regulation of the services they provide remains a challenge. Donor coordination is another challenge, especially in countries in crisis where the health sector depends largely on external assistance and has to coordinate a large number of donors to ensure alignment and harmonization with the national health agenda and priorities.

Promotion of social health protection is a major issue. Moving towards universal coverage and limiting the share of out-of-pocket health expenditure has attracted much attention. Political commitment, a clear vision and availability of funding remain the main challenges facing successful initiatives, such as promoting prepayment options, in health care financing.

A key challenge to the adequate delivery of health care services in terms of effectiveness, efficiency and quality is the lack of management and leadership capacity

at the central and district levels and the organization of health care services, which does not support the integrated district health system approach. Another challenge is orienting countries eligible for the global health initiatives to enable them to benefit from the single health system funding platform so that all programmes can work more effectively, ensuring integration and harmonization.

Promoting and strengthening primary health care remains a priority. Major challenges include securing adequate political, financial, human and material commitments; optimal use of available resources; changing management approaches including decentralization; and ensuring effective community participation and intersectoral collaboration. Financing and management of primary health care, quality assurance and health systems research in support of primary health care are also challenges.

Patient safety is a global public health concern. WHO has adopted a multi-faceted approach to this issue. Efforts to improve the safety of patients in health care facilities must take into consideration political commitment, training and capacity-building of health personnel, facility infrastructure, availability of essential medicines, patient health literacy, community engagement, and a productive dialogue between patients and health care personnel.

Research for health provides the essential evidence needed to inform health policy and practice to address the causes, impact, prevention and treatment of poor health. Generating and sustaining high quality national health research systems and promoting evidence-informed policy-making contributes to the achievement of social and economic development, health equity and the Millennium Development

Goals. The main challenges to research for health are: insufficient resources, lack of a supportive research environment, absence of adequate multisectoral approaches to the conduct and use of research for health, lack of intercountry and intra-country research collaboration and coordination, national priorities which are not necessarily aligned with the changing health scene, and insufficient preparedness (based on research-evidence) to respond to immediate emergencies and needs. The importance of high quality medical journals for transfer and dissemination of knowledge is increasingly recognized. However, greater recognition is needed of the potential role of editors in creating links between researchers and policy-makers.

Some countries still suffer from being unable to access up-to-date health information. Therefore, improving health services through better management and utilization of reliable and accessible health information, research and evidence to support health systems is a key challenge. Strengthening the Region's capacity by improving access to health information and better utilization of electronic resources which are available in Research4Life programmes (HINARI, OARE and AGORA) for eligible countries is another key challenge to bridging the know-do gap. There is a great need to build the capacity of nationals in the development of e-libraries and the medical libraries network.

Weaknesses in national health information systems, in terms of reporting quality and timely information, continue to reflect systemic shortage of resources, especially well-trained human resources in the health information and statistics areas, and inadequate basic technologies. There is duplication and fragmentation of data collection and lack of rigorous

validation within the different programmes. Vital registration systems are not well functioning in most low income countries. There is need to expand the capacity of health information systems to monitor quality indicators of resources, coverage and new areas, such as social determinants of health and health system performance, and to immediately address the needs for monitoring the health-related Millennium Development Goals. Support for health sector reform through decentralization will require appropriate capacity of sub-national health information systems to support measurement of population-based health status, prioritization, planning, costing and budgeting, monitoring and evaluation of health care. There is a need to develop country-led monitoring and evaluation strategies as part of the national health plans with clear objectives and indicators.

Human resources development for health is widely acknowledged as the most critical asset for health systems. Evidence repeatedly shows a direct correlation between health workforce density or availability and population health indicators. While countries in the Region differ in terms of socioeconomic development, the main issues are either shortage, primarily in low-income countries, or surplus and deployment difficulties. Most countries lack national strategic planning and evidence-based policy development. Countries with a crisis in human resources for health and experiencing conflict suffer additional burdens, primarily due to brain drain and massive migration. Challenges facing ministries of health include weak governance at the macro level and imbalances (geographic, skills and facility-based) at the micro level. Moreover, countries still lack coherent coordination among partners and effective regulation, in addition to the limited availability and



reliability of information systems and evidence generation for informed decision-making and policy formation. Regional coordination to address migration and movement of health workforce is an additional and evolving challenge.

Nurses and midwives increasingly face rising levels of complexity in health care, coupled with expanding scopes of practice and responsibility. This requires more educated nurses and midwives with expanded skill sets capable of responding to change, greater demands and new priorities in health care and the social realities in the places they live. The need to scale up capacity was stressed by the Regional Committee in 2008 as critical to addressing the demand–supply gap. The concept of scaling-up is complex and multi-dimensional and touches on issues such as increasing retention rates, reform of education, maximizing and utilizing the full scopes of practice, introducing appropriate skill mix, and developing new roles, such as advanced nursing practice and family health nursing.

The attitude and understanding of the role and purpose of professional regulation of health professionals has undergone considerable change in the Region as governments realize that effective regulation is an important element in delivering the safe and quality services sought by citizens. Much effort in this area has been focused on the registration and licensing of health care providers although a plethora of standards, sometimes conflicting or outdated, plague this area in the nursing field. The nursing and midwifery profession also struggles to exert the same level of control over its own affairs as that accorded to other health professionals in a country. Few legislative instruments deal in depth with the regulation of the profession. Legal requirements are mostly couched in prescriptive terms, and may be

scattered throughout several laws or other legal instruments.

The Region has been recognized globally as a pioneering region in adopting innovative approaches to medical and other health professions education. Nevertheless, some countries still face serious challenges from either shortages of skilled health workforce and/or inadequate quality and inappropriate skill mix. Lack of quality education and training in the higher health institutions is one of the major shortcomings. Accreditation of health professions education programmes and institutions to assess the quality of the educational process and ensure graduation of competent practitioners is a major area of concern in most countries and is receiving more attention. Efforts are being made to assess the role and functions of the fellowships programme, to make it more cost-effective and responsive to national and regional needs and expectations.

Achievements towards performance indicator targets in each expected result

Support was provided to 11 countries (Afghanistan, Bahrain, Iraq, Morocco, Oman, Pakistan, Saudi Arabia, Somalia, South Sudan, Tunisia and Yemen) to develop national capacity in *health policy and strategic planning*. The Regional Office has been instrumental in advancing the public sector modernization project in Iraq, undertaking two major studies: a functional review of the health sector and health system performance assessment. As a result a plan for modernizing the health system was developed and an integrated district health system based on family practice was initiated.

Support was provided to South Sudan in developing the national health strategy and operational plan for the next five years. In

addition, a basic package of health services was successfully defined and finalized. A health system review to define existing gaps was conducted in Somalia and technical support was provided to implement the national policy and health strategic plan in Afghanistan. The national health system profile was updated in nine countries.

Capacity development was supported in health strategic planning and policy analysis for senior public health professionals and planners in South Sudan and Somalia, and to improve the knowledge and skills of nationals on key components of the health system in Oman. A training package for strategic health planning was developed and a pilot course organized in Nairobi for South Sudan and Somalia. This course will be rolled out to other countries in 2012. AWHO flagship course on health system development is being redesigned and updated.

The Global Learning Programme on National Health Policies, Strategies and Plans was rolled out in the Region. This is an initiative to foster WHO capacity to facilitate meaningful sectoral and intersectoral policy dialogue between national stakeholders and global partners on developing sound national health policies, strategies and plans, within the context of primary health care and in line with the Paris Declaration on Aid Effectiveness. A total of 116 staff participated in the various workshops and their capacity to contribute to sound national health policies, strategies and plans was built.

There was increased interest in developing efficient and equitable systems of *health care financing* and reforming existing financial arrangements. Technical support was provided to six countries to identify, assess and implement viable health care financing options and enhance the social health protection goal of their health care systems. Capacity-building was supported to

develop local capacities in health economics and health care financing in nine countries (Bahrain, Kuwait, Islamic Republic of Iran, Iraq, Oman, South Sudan, Sudan, Syrian Arab Republic and Yemen). In addition, four countries (Islamic Republic of Iran, Iraq, occupied Palestinian territory and Sudan) finalized extensive work on national health accounts, with the Islamic Republic of Iran publishing a time series of 7 years, in sequence, of detailed national health expenditures information. Bahrain made substantial progress towards publishing its first round of national health accounts, and Kuwait, Syrian Arab Republic and Saudi Arabia initiated work in health accounting. On the occasion of the 10th Anniversary of the Abuja Declaration, a joint workshop was held with the Regional Office for Africa which strengthened the capacity of two countries to track domestic contributions to the health sector in a manner that will support advocacy for further health care funding and provided the first step towards institutionalizing health accounting. As a result of an interregional consultative seminar to discuss the path to universal coverage through efficient use of resources, national capacities to promote equitable health outcomes by making efficient use of available resources were enhanced. The work carried out in health care financing brought further attention to the importance of moving away from direct payments in financing health care by introducing and promoting prepayment options.

In the area of *evidence-based health situation and trends assessment*, technical support was provided in conducting assessment of health information systems using tools developed by Health Metrics Network and WHO. Support for the implementation of the GCC World Health Survey continued. The Regional

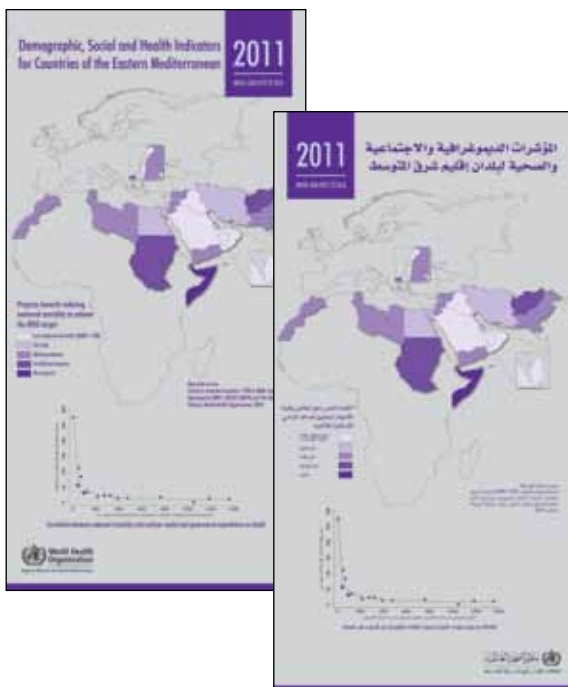


Office provided technical support also for implementation of the Afghanistan mortality survey, analysis of the results and drafting of the report, in collaboration with international partners. The Regional Office supported the assessment of mortality and cause-of-death data in several countries, and introduced the rapid and comprehensive assessment of civil registration and vital statistics, using standard WHO tools. It also worked with countries to improve the reporting of mortality and cause-of-death data and provided support in the use of international death certificates to better report on cause of death, national capacity-building in ICD10 coding and developing strategic plans for strengthening national health information systems. The dissemination and monitoring of several disease programme interventions were enhanced through provision of geographic information system (GIS) services and capacity-building and statistical data analysis. The Regional Office conducted

in-depth analyses on child mortality and effective coverage, in collaboration with the Institute of Health Metrics and Evaluation, and participated in the preparation for the report on the health of the people of Africa. It also developed a state-of-the-art regional health observatory.

In the area of *health care delivery*, as part of the regional strategic plan (2010–2015) for primary health care, significant support was extended to countries in implementing integrated district health systems based on the family practice approach. Five pilot districts in Iraq and Jordan started the initial phase, with comprehensive assessment under way. The Regional Office undertook an exploratory study to map the current status of family practice in the Region and to draft a way forward. A consultative meeting to review the status of family practice training and service delivery structures in the Region resulted in a recommendation to develop national modalities for family practice which respond to national needs and context. Support to countries for accreditation of health facilities has continued.

The Patient Safety Friendly Hospital Initiative (PSFHI) has been the flagship initiative of the Regional Office to respond to the challenge of improving patient safety in the Region. The patient safety assessment manual, developed over a period of two years with rigorous internal and external peer review and pre-pilot and pilot testing in seven countries, was published. The manual comprises 140 standards of which 20 are critical for any hospital to enrol itself in the initiative as a Patient Safety Friendly Hospital. Eleven countries have now pledged to adopt and test the WHO hand hygiene guidelines, 14 countries PSFHI, 8 countries the patients for patient safety programme and 14 countries the second patient safety challenge (Safe Surgery Saves Lives). A patient



safety curriculum guide was developed (for medical, nursing, midwifery, dental and pharmacy schools) and will be launched at a regional level in early 2012.

The report of the decentralization study conducted in nine countries (Egypt, Jordan, Morocco, Oman, Pakistan, Saudi Arabia, Sudan, Syrian Arab Republic and Yemen) was presented and discussed at a regional consultation to map the way forward in this area. In line with the 2009 Regional Committee resolution on hospital management and autonomy, a study was conducted in seven countries (Afghanistan, Bahrain, Egypt, Islamic Republic of Iran, Jordan, Syrian Arab Republic and Tunisia) to assess hospital performance in the past 10 years, and the results were presented at a regional consultation. Technical support was provided to the 10th Arab Administrative Development Organization conference focusing on new trends in

hospital performance improvement. The Regional Office participated in the 37th World Conference on Hospitals in Dubai and in special consultation meetings in Lyon and Geneva to develop a global curriculum to strengthen organizational management in laboratories.

With regard to global health initiatives, technical support was provided to follow up implementation of successful proposals to the GAVI Alliance on health system strengthening in the eligible countries. Two countries have finalized their first five-year proposals. Joint missions were undertaken to support four countries (Afghanistan, Pakistan, South Sudan, and Sudan). Also, technical support was provided to eight countries for the development of proposals to the Global Fund and support was provided to Djibouti, Pakistan and Sudan in collaboration with IHP+. Capacity-building in health system strengthening was supported with a view to having a single health system funding platform for global initiatives.

A regional strategy for *human resources for health* was developed and is being used as a guiding framework to strengthen national human resources development processes. Also, a regional guide for the development of an accreditation system for health professions education at the national level was finalized in consultation with national, regional and global partners in medical education. Support to scale up production of health personnel was provided to several countries in crisis (Afghanistan, Iraq, Pakistan, Somalia, Sudan and Yemen). With financial assistance from the European Commission, technical support was provided to countries in need to streamline information, through establishment of national human resources for health observatories. Countries with pressing challenges received support to



strengthen overall governance and use of evidence for planning and policy formation in regard to human resources for health. To build national capacity in human resources development, a plan is being developed to organize regional capacity-building in strategic planning and evidence-based policy formation for human resources for health, regulatory frameworks, continuous professional development and effective health workforce management modalities.

Technical support continued to be provided to South Sudan and Somalia to scale up production of nursing, midwifery and allied health professionals. Support was provided to several countries (Djibouti, Egypt, Iraq, Libya, Sudan, United Arab Emirates and Yemen) to improve pre-service nursing, midwifery and allied health education. The Syrian Arab Republic received support to establish a bridging programme at Tichrin University to allow nurses with a nursing diploma to obtain a university degree. Regional capacity was built in infection prevention and control and injection safety, in collaboration with WHO headquarters and the Safe Injection Global Network (SIGN).

Iraq received support to review and update its national nursing and midwifery strategic plan. The Islamic Republic of Iran initiated the leadership and management training programme developed by the International Council of Nurses, with support from the Iranian Nursing Organization and WHO. Technical support was provided to the nursing and midwifery councils of Oman, Sudan and United Arab Emirates to strengthen regulation. The regional strategy for nursing and midwifery development 2012–2020 was developed during the eighth regional advisory panel meeting, based on the analysis report of the country nursing profiles, review of the present challenges facing nursing, and the achievements and lessons learned over the past decade. The Regional Office supported international nursing conferences organized by universities in Jordan, Sudan and the Order of Nurses in Lebanon and provided technical support to sub-regional nursing forums, such as the Arab Scientific Society of Faculties of Nursing to strengthen nursing education and the GCC Technical Committee for Nursing to develop public



Participants in the eighth meeting of the Regional Advisory Panel on Nursing

health nursing within the context of primary health care.

In the area of networking of educational development centres and WHO collaborating centres in health professions education and nursing development, monitoring continued of the current collaborating centres in Bahrain, Egypt, Islamic Republic of Iran, Jordan, Pakistan and Sudan. Re-designation of two other centres was successfully completed.

A total of 218 fellowship requests were awarded. The highest number of requests was from Sudan, followed by Afghanistan (Table 2.2). The majority of fellows (137 fellows) continued to be placed within the Region. The European Region was the second most frequently chosen host for placement (38 fellows). Figure 2.1 shows those whose placements were finalized during 2011. Distance learning was well utilized, reaching 35 in number enrolled, of which the majority was distributed between public health, mental health and health professions education. Figure 2.2 shows the distribution of fellowships by area of study. Training in public health was the most frequent area of study followed by training in communicable diseases.

In the area of *research policy and cooperation*, the Regional Committee (EM/RC58/R.3) endorsed strategic directions for scaling up research for health in the Eastern Mediterranean Region. These were in line with the global strategy on research for health. Capacity-building on ethical issues in research for health was conducted for WHO staff involved in research. The status of the Regional Office Ethics Review Committee was reviewed, with the aim of optimizing the functionality of the Committee in ethical review of WHO-supported research protocols. To ensure transparent, evidence-informed conduct of health research, a pilot

Table 2.2 Number of fellowships awarded by country of origin, Eastern Mediterranean Region, 2011

Country	Number	Percentage (%)
Afghanistan	34	15.6
Egypt	26	11.9
Iran, Islamic Republic of	1	0.5
Iraq	17	7.8
Jordan	1	0.5
Kuwait	2	0.9
Morocco	12	5.5
Oman	13	6.0
Pakistan	13	6.0
Occupied Palestinian territory	7	3.1
Somalia	3	1.4
Sudan	45	20.6
Syrian Arab Republic	10	4.6
Tunisia	4	1.8
United Arab Emirates	1	0.5
Yemen	29	13.3
Total	218	100.0

project to establish knowledge translation platforms and develop policy briefs in three countries (Jordan, Lebanon and Sudan) was initiated. Support tools for evidence-informed health policy-making were translated into Arabic. In collaboration with McMaster University, Canada, the Regional Office translated the health systems evidence website of the McMaster Health Forum into Arabic to support knowledge-sharing of global research with researchers in the Region.

Fifteen proposals were selected for funding under the grant for research in priority areas of public health through a rigorous review process, including internal and external review. Capacity-building was supported for researchers in Somalia, to institutionalize health systems research and set national priorities for research for health.

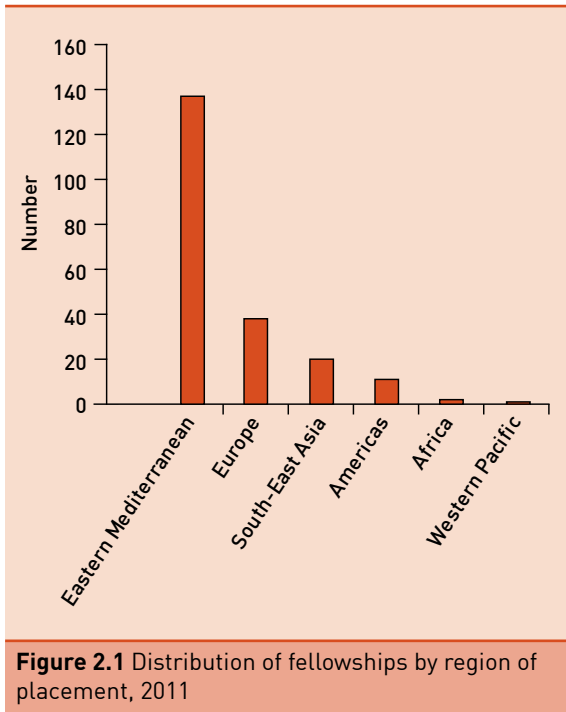


Figure 2.1 Distribution of fellowships by region of placement, 2011

The Regional Office also supported efforts to identify regional research priorities in noncommunicable disease. The Regional Office and COMSTECH (Standing Committee for Science and Technology of the Organization of Islamic Countries) continued its work in reviewing and selecting qualifying proposals for funding under the grant for research in applied biotechnology and genomics in health to strengthen national capacity in this area. A working session was held for researchers to improve the proposals submitted, focusing on tuberculosis.

Capacity-building in ethical issues in research for health for national ethics committees was supported in Egypt and Pakistan. A consultation on establishing clinical trials in the Region recommended

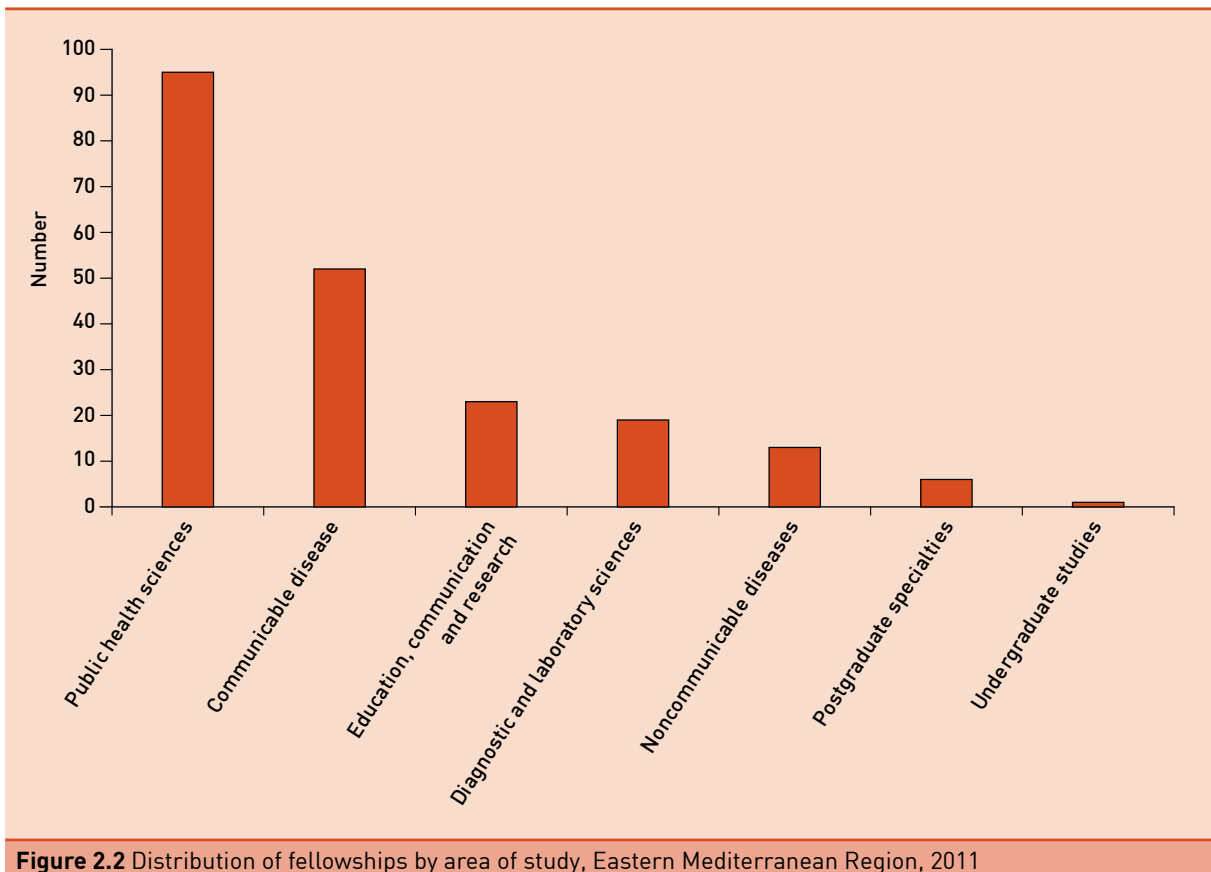


Figure 2.2 Distribution of fellowships by area of study, Eastern Mediterranean Region, 2011

the establishment of a regional clinical final registry. Regional capacity in publishing quality medical journals continued to expand. Following the second regional training course in medical journal publishing, thirteen countries now have trainers available in this field. The Eastern Mediterranean Association of Medical Editors continued to expand its network, with more than 300 now subscribing to the listserv.

Efforts continued in line with the regional strategy for knowledge management to support public health by improving access to health information and building capacity at national and regional level. National and regional capacity-building in Research4Life programmes (HINARI, OARE and AGORA) was supported, with trainers trained from nine countries (Iraq, Jordan, Morocco, occupied Palestinian territory, Somalia, Sudan, Syrian Arab Republic, Tunisia and Yemen). Twenty-eight health institutions from 11 countries joined the regional e-journals consortium, an increase of 100% compared with 2010. The consortium allows access to the full-text of more than 850 journals based on subscriptions to the printed journals with no additional cost. Collaboration continued at global level for development of the Global Health Library which will improve the equitable access to health information for all.

Future directions

Advocacy for adoption of national policies supportive of primary health care, including universal coverage, will continue. Particular efforts will be made to advocate for the family practice-based approach to be at the heart of the development of health systems and provision of health care. Accreditation of health facilities and services will be revisited to ensure quality

assurance. Public awareness and health education to improve patient safety will be promoted and a patient safety improvement toolkit to assist hospital administrators in establishing a patient safety programme will be developed. Patient safety concepts and approaches will be integrated in pre-service education of all health professionals, using a multidisciplinary approach.

Technical support in strategic health planning, policy development and good governance in health will be strengthened, with support provided during the national planning and mid-term review cycles. National capacity will be developed, with special attention to how the various health systems components interact with the social determinants of health, in order to create a broader and more holistic approach to health and development. User friendly tools for assessment of health system performance will be developed. Region-specific strategies for harnessing the role of the private sector and strengthening public-private partnerships will be implemented. Social determinants of health will be integrated into national health policy and strategy and countries will be supported in establishing national strategic plans for social determinants of health with focus on inclusion of health in all policies.

Social health protection will continue to be promoted through comprehensive review of health financing arrangements and support for development effective and efficient health financing policies. Particular attention will be given to building national capacity in use of the new system of health accounts and the OneHealth Costing analytical tools, and to promoting partnerships to advocate evidence-based health care financing reforms.

Technical support to strengthen management systems for effective delivery of health care will continue, including hospital



performance assessment and improvement and monitoring of decentralization. Implementation of global health initiatives and the single health system funding platform based on sound national health plans will be promoted. National capacity-building efforts in health system strengthening will continue.

Support to strengthen national health information systems, quality of routine data collection and civil registration and vital statistics systems will continue, as will work on implementing the recommendations of the Commission on Information and Accountability for Children's and Women's Health. Steps will be taken to embark on an in-depth analysis and comparative studies on progress towards the Millennium Development Goals, risk factors, health status, noncommunicable diseases and burden of disease, using the wealth of information collected through national surveys and studies. The health information system platform to support countries to improve their routine data collection systems, and communicable and noncommunicable surveillance systems will be developed.

Adoption of the regional human resources for health strategy to strengthen governance, production and management of human resources will be promoted. National capacities to generate evidence on human resources for health dynamics, including sustaining existing observatories and establishing new ones, will be strengthened. In addition, national capacities to develop policy briefs, as well as skills in governance and management of human resources for health, will be built through a series of competency-based learning courses. The establishment of policy forums at the national level will be facilitated.

The draft regional strategy for nursing and midwifery development 2012-2020 will be circulated within the Region to achieve

consensus before finalization. It will be used as a guiding framework for developing nursing and midwifery services and for WHO collaboration with countries in this area. The role of the nursing profession in leading infection control and patient safety at the national level will be supported through development of a regional framework on infection control and prevention and patient safety. Partnership and collaboration with the WHO collaborating centres for nursing will be enhanced and technical support to the sub-regional forums will be continued to further improve nursing education and services. Technical support will be provided to post-conflict countries in reform of education and human resources policy development, and planning and scaling-up production of nurses, midwives and allied health professionals.

Countries will be supported in their efforts to establish and strengthen their national health professions education accreditation systems and to advocate for social accountability in medical education. The regional guide and standards for accreditation will be translated and published. Networking, collaboration and information sharing between different educational development centres will be further supported. The focus of the fellowship programme will be on streamlining the placement process, updating rosters of training institutions and monitoring the quality of training and post-fellowship impact.

The Regional Office will continue to work with Member States to promote and strengthen a culture of research for health at the national and regional level through implementing the strategic directions endorsed by the Regional Committee for scaling up research for health in the Region, building national capacities to

conduct research for health that is needs-driven and addresses the priorities of the countries, and expanding collaboration with academia and research centres to address emerging regional and national research for health needs. Efforts will be made to establish, at the Regional Office, a regional clinical trial registry that complies with the International Clinical Trials Registry platform and to promote adherence to ethical considerations in research for health involving human participants. The role of WHO collaborating centres in promoting and contributing to the implementation of the research for health agenda at the national level will be enhanced, and dissemination and translation of research results will be facilitated. With the presence of the regional networks, such as the Evidence-Informed Policy Network (EM-EVIPNet) and the regional network of academic institutions (EMRAIN), knowledge translation platforms at the national level will be established and evidence-informed decision-making will be encouraged. Capacity-building of editors will continue to be supported in the next biennium to promote quality and standards in medical journal publishing in the Region, in particular at country level.

The Regional Office will continue to support the medical and health libraries network by strengthening and improving the utilization of information resources through the e-resources consortium for medical libraries in the Region. Capacity-building for medical librarians, health workers and professionals at national level will continue.

Strategic objective 11: To ensure improved access, quality and use of medical products and technologies

Issues and challenges

The delivery of equitable, quality and efficient health services requires an array of properly balanced and managed resource inputs. Health technologies, in the form of medicines, vaccines, devices and clinical procedures, are principal resource inputs that require countries to establish systems for standardizing and regulating their selection, procurement, use and management. The public sector in the Region consumes around 50% of the recurrent public health budget on health technologies. However, the ability of existing under-funded and weakly staffed national systems to manage them is extremely poor. This has become an increasingly visible operational and policy issue for many countries, especially those in situations of complex emergency and/or disaster. Countries face five major challenges: availability – lack of capacities and resources needed to make essential health technologies available to the public; accessibility – lack of equitable access to safe, quality and adequate health technologies and clinical services; appropriateness – failure to promote essential health technologies that are scientifically valid, adapted to needs, acceptable to patients and users, and easy to use and maintain; affordability – continuous growth of expenditure on health technologies leading to escalation in service delivery costs; and accountability – fragmentation of regulatory authorities, ineffective control over the private sector,



lack of coordination between programmes and/or regulatory bodies, and weaknesses in prequalification and post-marketing surveillance mechanisms. Although the overall implementation rate from available funds for the health technology programmes is reasonable, a major challenge will be to continue to implement successfully in the midst of the political changes and upheavals affecting much of the Region.

Achievements towards performance indicator targets in each expected result

In the area of *essential medicines and pharmaceuticals policies*, technical support was provided to countries to formulate, review and implement evidence-based policies. The Regional Office continued to build national capacity in operational research to measure critical indicators such as access (availability/affordability), quality/safety and use of medicines. Capacity was built in Bahrain, Iraq, Qatar and Saudi Arabia on conduct of pharmaceutical sector assessment using WHO level II methodology, and in Egypt, Iraq, Kuwait, Oman and Sudan on transparency assessment as part of the good governance for medicines programme.

Rapid assessment of the medicines regulatory structure was conducted in Libya during the crisis, and technical support was provided to the supply system. More than 40 regulators and essential medicines producers from 11 countries were introduced to the principles of WHO quality standards. Manufacturers from Egypt, Islamic Republic of Iran, Morocco, Pakistan, Saudi Arabia and United Arab Emirates expressed interest in the WHO prequalification of medicines programme, submitting essential medicines product dossiers. In addition, capacity-building on medicines quality control was

provided to Egypt, Islamic Republic of Iran, Oman, Saudi Arabia, Sudan, Tunisia and Yemen.

In the area of *essential vaccines and biologicals policies*, advocacy on behalf of the WHO policy for strengthening vaccine regulations and prequalification measures was conducted in Saudi Arabia and Sudan. Technical support was provided to build the technical capacity of the national regulatory authorities and EPI staff on regulation of influenza vaccines. A guidance document on the registration of vaccines in emergencies was drafted. The terms of reference of the regional technical committee for evaluation of vaccines were reviewed and finalized. In collaboration with the Supporting Independent Immunization and Vaccine Advisory Committee (SIVAC), a consultation was organized to strengthen the coordination between national regulatory authorities and national immunization technical advisory groups.

Capacity-building of health professionals and regulators through specialized training on monitoring and causality assessment of adverse events following immunization was conducted in the Islamic Republic of Iran. In Sudan, technical and financial support was provided to strengthen intussusceptions surveillance, and capacity built on causality assessment. As part of the regional activities related to the regional vaccine pooled procurement initiative, the vaccine regulatory systems of Algeria and Tunisia were reviewed.

In the area of *blood safety, laboratory and imaging*, the implementation of regional external quality assurance (REQA), national networks of public health and food regulatory agency laboratories, and laboratory biosafety and biosecurity were advocated. Egypt, with the technical support of the Regional Office and the Italian Government, is embarking on

creating a new BSL-3 diagnostic laboratory. Oman was the focus and model for implementation of most laboratory schemes and activities during the past biennium.

Capacity was built in good manufacturing practices (GMP) for blood and plasma establishments in 17 countries. The training of inspectors on GMP for the purpose of creation of national regulatory authorities for blood transfusion services was completed. The Islamic Republic of Iran, supported by the Regional Office, is currently seeking accreditation for its national authority in this regard. Capacity-building was supported for Afghanistan on surgical care at the district level. Following the promulgation of the law on transplantation, Pakistan is working with the Regional Office to designate a WHO collaborating centre in this area of expertise.

In the area of *medical devices*, the results of the global survey on medical devices, in which over 60% of countries of the Region participated, were published. The results will aid policy-makers and decision-makers in: estimating future needs for medical devices in the context of available resources; comparing performance with countries with similar conditions, thus establishing national benchmarks; and developing evidence-based health technology policies within existing national health systems.

Technical support was provided to: Sudan, Syrian Arab Republic and Tunisia in development, review and implementation of national policies, rational procurement, selection, management and use of health technology; Oman in addressing essential health technology-related problems at different delivery levels; Libya in restoring and/or developing their health services; and

Jordan in initializing a health technology assessment programme. Collaboration with WHO headquarters resulted in the development of 19 different WHO publications covering the whole range of health technology management.

Future directions

Improving management of health technologies will remain a serious challenge and require a comprehensive health system approach. Establishment of transparent procurement and supply mechanisms, development of adequate country-specific profiles, promotion of transparency and good governance concepts, rational use, and capacity-building are possible solutions. Support will continue through development of a regional strategy on health technologies based on available data and results of the global survey. The capacity of national regulatory authorities to implement WHO recommendations for strengthening health technology regulation will be enhanced. Training modules on management of medical devices will be developed, based on WHO guidelines, to support national capacity-building. Functional review studies will be conducted on existing national health technology programmes with a view to improving their management. GMP concepts for quality and safety of manufactured medical products will be promoted. Partnership and coalitions with other strategic partners to identify regional and/or national mismatches in terms of the five challenges, common interests, financing mechanisms, and potential resources will be necessary to ensure sustainability of WHO technical support services.