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Report on the  
**EXPERT GROUP MEETING ON REFORM OF HEALTH PROFESSIONS  
EDUCATION IN THE EASTERN MEDITERRANEAN REGION**

Cairo, Egypt, 31 March–2 April 2002



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## 1. BACKGROUND

Human resources constitute the most critical element of the health system and form the corner stone for attainment of national health goals in any country. While WHO commitment to human resources for health development has remained steady, the focus of its collaborative developmental work in this field has shifted over the years parallel with different phases of development of the health systems and human resources in Member States.

Despite the progress achieved in recent years to reform and improve performance of the health care system, health professional practice and health professional education (HPE), key challenges are still facing all efforts to bring about relevance, equity, cost-effectiveness and quality. In 2000 the WHO Regional Office for the Eastern Mediterranean Region (EMRO) began working towards the launching of a new initiative for the reform of medical and health professions education in the countries of the Region.

At the Twenty-fifth Meeting of the Eastern Mediterranean Regional Consultative Committee held in the Regional Office, 6–7 May 2001, members discussed at length health professional education with special reference to family practice and indicated the need for more consultation and recommended the following:

1. Establish a group of experts to elaborate on each of the priority interventions directed at reforming health professional education and health professional practice:
  - 1.1 Define socially relevant institutional missions and design educational programmes to meet the changing health needs of populations, and the health professions.
  - 1.2 Develop regional guidelines to reorganize the content of educational programmes around a balanced core content, which would include primary health care and healthy lifestyles as a requirement in all health professional educational institutes.
  - 1.3 Prepare regional guidelines on adoption of effective and active learning strategies including training in real practice settings and utilizing new technologies such as the health informatics.
  - 1.4 Prepare regional guidelines to establish quality assurance approaches in health professional education including accreditation based on national and/or regional standards and examinations.
  - 1.5 Report back to the 26th Regional Consultative Committee meeting on the outcome of the work of the Expert panel.

An in-house consultation was convened in the Regional Office in 1–5 July 2001 to prepare the ground for the expert group meeting recommended by the RCC. The in-house meeting recommended development of four regional guidelines targeted at priority interventions to reform health professions education in the Region. The proposed guidelines are:

- Regional guidelines on development of an accreditation system of HPE institutions.
- Regional guidelines on development of active learning and effective assessment methodologies.
- Regional guidelines on development of a core prototype curriculum for undergraduate medical education.
- Regional guidelines on capacity building and resource utilization to support health professions education reform initiative.

In addition, a plan for future course of action to implement the HPE reform initiative was developed.

## 2. INTRODUCTION

The Expert Group Meeting on Reform of Health Professions Education in the Eastern Mediterranean Region was held in the Regional Office in Cairo, Egypt from 31 March to 2 April 2002. The meeting was inaugurated by Dr Abdel Aziz Saleh, Deputy Regional Director for the Eastern Mediterranean, who delivered a message from Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean. Dr Gezairy pointed out that human resources development accounted for a major and crucial portion of any attempt to strengthen health systems and improve the quality of health outcomes. Consequently, it was of utmost importance to try to improve the basic educational training of health personnel before they joined the health services. Effective and efficient early and collective training would ensure better performance, improve health care and, at the same time, bring about an educational system that was more responsive to community health needs.

Dr Gezairy stated that in many parts of the world, hundreds of health professions education schools had revised and changed their curricula during the past 20 years. For example, despite resisting change for a long time, the majority of medical schools in the United Kingdom adopted innovative programmes following the Edinburgh Declaration on Medical Education in 1988. In the Eastern Mediterranean Region, in addition to many regional conferences and seminars on medical and other health professions education held since the early 1960s, a number of other important activities had also taken place. These activities included several consultation meetings and workshops on reform of curricula and colleges of medicine, pharmacy, nursing and allied health sciences, and on collaboration between the health care delivery system and health professions educational institutes. The current status of curricula in the countries of the Region showed that innovative programmes existed in many schools, in Bahrain, Egypt, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Pakistan, Palestine, Saudi Arabia, Sudan, Tunisia, United Arab Emirates and the Republic of Yemen. Dr Gezairy described the meeting of experts as an important step forward in achieving reform in health professions education in general and in medical schools in particular. As the number of medical schools in the Eastern Mediterranean Region had increased from just 18 in 1950 to 170 at the present time, national and regional standards and accreditation of medical schools were urgently needed. This was particularly true for the very many newly established

schools, a substantial number of which were privately owned and run. The well-established schools also needed quality assurance systems that would make them more responsive to community needs and changes. Such an accreditation system would incorporate a unified examination or test for the students or graduates of medical schools in the same country or region of the country. Teaching in national languages represented another important issue to be considered when standards were formulated.

In conclusion, Dr Gezairy emphasized that the meeting represented an important part of the reform initiative launched by the Regional Office in 2000. The regional guidelines, which the expert group would review and finalize, would eventually be made available to all medical and health professions schools in the Region. These guidelines would assist faculty in reviewing and choosing an appropriate approach to improve the process and outcome of their educational programmes to ensure the relevance, quality, equity and cost-effectiveness of the educational programmes in the Region.

The participants elected Professor Elsheikh Mahgoub as Chairperson for the meeting. Professor Ahmed Khafajei was elected as Rapporteur. The agenda, programme and list of expert group members are included in Annexes 1, 2, and 3, respectively. Annex 4 lists steps undertaken towards HPE reform in the Region; Annex 5 is a plan of action for implementation of the HPE reform initiative in the Region; Annex 6 is a table of accreditation system standards and indicators; Annex 7 lists pathways for improving the learning process; and Annex 8 lists essential competencies of the prototype core curriculum for medical schools in the Eastern Mediterranean Region.

Dr G. Al Sheikh, RA/HRD, and Dr F. Al-Darazi, RA/NUR, described the status of health professions education in the Region including publication of kits on strategic directions and prototype core curriculum for nursing and pharmacy institutes. A substantial number of medical schools have introduced change in their programmes.

### **3. RATIONALE FOR REFORM OF HEALTH PROFESSIONS EDUCATION**

This section of the report is based on a synthesis of the presentations of Dr B. Sabri, Director Health Systems Development, and Dr Salman Rawaf, WHO Consultant, the discussions that followed and the background materials.

Many changes and challenges affect the health systems in countries of the Region and have implications for the reform of health professions education. These changes involve the political, economic, social and the health fields. Changes in the political field include decentralization, growing role of civil societies and development of privatization policies. The role of governments is changing in response to these changes. A variety of economic factors affect the health systems such as the growing market economy, growing role of the private sector, changes in financing of health care delivery, the focus on efficiency and the escalation of health care costs.

The changes in the social field include changes in people's expectations of health services. As the public and therefore tomorrow's patients become better informed, better educated, more

affluent, less deferential to authority and professionals, have more to compare the health services against, and want more control and more choice, they will become 'customers' who will demand services (as consumer goods), including health, in totally different ways.

They will expect safe and high quality interventions with the best possible outcomes. They do not want to see huge variations between hospitals, they want immediate access to services and technologies, and they want more proactive services—in particular those related to protection, prevention and early disease detection—and expect staff to be knowledgeable and courteous, with the best of expertise. They also want seamless services which are joined across the four clinical pathways of disease prevention, early disease detection, health protection and maintenance and health promotion. They want comfortable and good accommodation and, above all, services which are centred on them and their diseases. It is therefore vital that medical practitioners and other health practitioners should be able to communicate effectively with their patients and relatives, and deal with patients as individuals with individual needs to be met.

Provider mobility, as a result of trade agreements (GATS) under the World Trade Organization, has resulted in an increase in mobility of health care providers. This is likely to exacerbate provider shortages in the face of growing consumer awareness and demand for services.

The rate of scientific advance has accelerated, driven by the quest for evidence to inform health practices. Although developments in communication technology are facilitating global communications and rapid dissemination of knowledge, barriers to developing, assessing and transferring technology in developing countries could result in widening the health divide. While technological advancements can lead to service improvements, they bring increasingly complex ethical dilemmas.

It is essential to take into account the unpredictability of the size of new technologies and the pace of its introduction to health care systems. For those who plan and manage such systems, they should have sufficient capacities and control in financial terms, organizational development, and change in clinical behaviour to be able to adapt and use these technologies effectively for the benefit of individuals and populations.

The epidemiological transition, including the double burden of disease with the re-emergence of infectious diseases and increase in noncommunicable diseases broaden the demands on health systems. The ageing and disabled populations are shifting service needs to communities. The burden of mental ill-health is increasing worldwide. The focus on health determinants and promotion of healthy lifestyles require a different future health professional.

Poverty and health care are interrelated. Poor social conditions (illiteracy, malnutrition, poor sanitation, etc.) lead to high mortality and high morbidity and thus adversely affect the overall health of the people. Hence, there is a need for poverty reduction strategies. The Eastern Mediterranean Region has introduced the community-based initiatives of Basic Development Needs (BDN) and Healthy Villages/Healthy Cities and in these identify the role of the community. This bottom up approach through intersectoral collaboration leads to self-reliance and sustainable socioeconomic development. In this non-standard approach, people are the initiators or actors for development.

The health sector thus becomes an entry point for social development and poverty alleviation. In this regard the BDN approach creates linkages, gives leadership to the community and leads to sustainable improvement of both the social and economic status of people. Implementation of the BDN strategy encourages partnership between the community and the public sector.

Linkage with the health professions, especially the nursing profession, can be created through intersectoral arrangements at operational level. The future health professional, nurse, pharmacist and physician, can thus be a part of the BDN support team and can not only provide health and social services but also be a partner in the overall development of the community.

Health system reform requires strengthening the stewardship function of the health system including developing and strengthening the regulatory tools and mechanisms for the provision of health services to protect the public from unsafe practice, strategic planning of human resources for health, quality assurance and improvement, accreditation of health facilities and services and strategic management and leadership development. Development of day care, home health care, long-term care, decentralization of the hospitals and promoting primary health care all have a significant impact on the development of future health professionals in the Region.

Preparing a health workforce to meet these challenging environments is more likely to be achieved if the universities in general and medical schools and other health professions schools in particular are strong and flexible. Their curricula should be modernized to meet these challenges and community needs, and should be developed in partnership with communities, especially those most in need of help.

In the 21st century the universities and medical schools are expected to improve fitness for purpose of medical graduates. There is a need for an academic and service continuum, as well as stronger interprofessionalism in developing human resources. Medical education is changing. These changes are in line with changes in the society to which the medical profession and other health and allied professions are responding, adapting or planning ahead.

The shift in balance between hospital inpatient services and those provided by primary and community services has tremendous influence on the way today's practitioners are practising medicine. They have to be aware of the traditional treatments in hospitals, they have to work in a team which could be led by a non-medical health professional, and they have to work in collaboration with colleagues in primary care, social services and other organizational groups within society. In many countries they have to work with a multiracial composition of patients. The future practitioners need to work not only with patients but their families, relatives and friends. Thus a practitioner needs to have a holistic approach to human disorders and accept a growing demand for interventions outside conventional orthodoxies.

In many western countries, if not all, medical curricula are changing to meet the changing needs of society. The Education Council of the General Medical Council of the United Kingdom is "charged by statute with responsibility for promoting and coordinating all stages of medical education" in the United Kingdom. The Council has recommended major changes to undergraduate medical education and set clear objectives for the process of medical education in a set of recommendations entitled *Tomorrow's Doctors*. The changes were in response to the changing

social and health needs of communities, information technology and the associated high expectation of all social classes.

- With the paradigm shift in health care delivery, many tasks which have been traditionally performed by doctors can be done by other professionals (e.g. nurses).
- Doctors need to devote more time for highly technical and specialized tasks.
- Patients need more time and personal attention to explain risk, underlying pathology and treatment.
- Patients are confused about the role of different professionals at all stages of clinical pathways (doctors, nurses, social workers, etc).
- Emphasis should be placed on high quality service and applying high standards to health care (clinical governance).
- There are requirements for continuing professional development.

The way forward will include:

- Common foundation modules shared by medical, nursing, pharmacy, physiotherapy and radiotherapy students, for example.
- Delegation of more responsibility to nurses (for example the post-Consultant Nurse was established in the UK in 2000 as part of the new national plan). Furthermore, and following the recommendations of the Crown Report, nurses who are fully trained to prescribe could prescribe up to 30% of all prescription medication.
- Development of a balanced interprofessional partnership in education and research in universities.
- Joint training for existing professionals.

In conclusion, medical education is changing. The products of today from many universities in the Middle East, North Africa and many developing countries may not fit for the needs of the 21st century's agenda for health and health care. While change is a must, this cannot be achieved without dedicated leadership with a vision for future education, research and services. Evidence from industrial countries has shown that these changes can be achieved and education and services are responding and shaping itself to meet the challenges and the society's evolving needs.

#### **4. ACCREDITATION OF HEALTH PROFESSIONS EDUCATION INSTITUTES**

Accreditation standards are agreed-upon rules set up to measure quantity, extent, value and quality. Criteria are statements which frame the issues that need to be examined in evaluation of a programme. Criteria are simple and straightforward, and are presented as declarative sentences that the programme-specific evaluator determines to be an accurate description of an accredited programme.

Value in accreditation relates not to matters of abstract good but to cost–benefit analysis. The value-specialized accreditation equals the degree to which the benefits of having such accreditation outweigh the various costs of achieving and maintaining it. Whether or not the benefits do, in fact, exceed the costs will vary from programme to programme. Nonetheless, added value is increased as accreditation aims to protect the public welfare and safety through preparation of competent practitioners.

Quality in education ensures high levels of student learning and student achievement. Institutionalization of an accreditation system would enhance patient safety and welfare, reduce errors in health and improve health care and its outcomes.

Accreditation in the Region is pertinent and badly needed for several reasons. Most of the countries in the Region are in the category of developing countries, and the standard of health care has not yet reached those of the industrialized world due to lack of resources, institutionalized systems and trained personnel.

The academic agenda should correspond to the health service needs and priorities. It should set a balance between health care delivery (the responsibility of health services) and long-term capacity (mainly the responsibility of universities). Close collaboration between the two systems (health and universities) in developing the needed human resources capable of meeting the challenges of rapidly changing disease patterns, risk factors and expectations is an essential long-term objective.

Both anecdotal and research evidence have clearly demonstrated that there are very limited links between these two systems in many countries of the Region. In many countries, obtaining the Bachelor and Medicine and Bachelor of Surgery (MBCbB) is a license to practise medicine. Furthermore, many personnel who continue with their postgraduate training and education are satisfied with the completion of a higher diploma (FRCS, MRCP, MSc, MD, MPH, etc) without evidence of certification of completion of higher specialist medical or surgical training (CCST). The establishment of the Arab Board to set, apply, maintain and monitor high standards of medical specializations is a welcome development in the Region. Such a development will have a very positive impact on human resources for health in the Arab world in the future. It will free the medical market and the movement of the workforce across 23 countries without any professional restriction or questions raised about possible variations in standards.

In the health care system of the 21st century, doctors are unlikely to make substantial impacts on health and meet populations' needs unless interprofessional teamwork is developed effectively.

There are, of course, some excellent examples of clinical collaboration and teamwork, but they stand out as exceptions rather than the rule. In thinking interprofessionally, in terms of education and service delivery the following must be considered.

Most of the medical schools in the Region are not subject to an accreditation system and hence they are not keen to be. Globalization, information technology development, knowledge expansion and rapid development of communication systems allows the people to explore what is happening in different parts of the world thus raised the interest of educators to think about curricular changes that are responsive to the latest advances in biomedical sciences, social and behavioural sciences, anthropology relevant to medical practice, to the burden of disease, to the organization and financing of health care, and to the changing demography of the population.

Unfortunately, most of the contemporary curriculum reforms have not yet been able to make necessary changes. In *The Education of medical students* (2002), Michael Whitcomb, Senior Vice-President for Medical Education of the Association of American Medical Colleges, writes that “lack of innovation ... is almost certainly due to the fact that many members of the clinical faculty do not believe that changes are needed”. Faculty staff of basic sciences are equally resistant, and possibly more so, because they are scared to lose power over their own disciplines in the process of innovation.

Members of university governing boards and leaders of the legislative and executive branches of state governments should be aware of the importance of accreditation systems to ensure curriculum reform in medical schools and their potential consequences for their nation's health care.

The accreditation body, at the national level, should be administered and monitored by a credible national body. Mechanisms set for accreditation should be stable and unbiased, and the accrediting body should be empowered with clear and legislated authority. At the regional level, almost all countries have requested that the WHO Regional Office for the Eastern Mediterranean be involved in accrediting of HPE institutes. The Regional Office can assist the national boards for accreditation of health professions education institutes in adopting the regional guidelines and national standards and work as a monitoring body at the regional level.

## **5. ACTIVE LEARNING PROCESS**

The proposed regional guidelines for improving the learning process describe the recently developed learning methodologies employed to ensure that health professionals are able to meet the demand of health care systems. These include student-centred, problem-based, task-based/competency-based, computer-assisted and simulation-assisted learning methodologies.

The organizational management of curriculum was also dealt with, emphasizing the concepts of integration; outcome based; community oriented; the spiral model and on core components. The issue of selecting the learning settings was accentual selection of learning sites such as the primary health care and community settings because they represent the training sites resembling the real working settings were emphasized. The validity, reliability and practicality of student's assessment

and evaluation methods were presented. The planning and implementation process of reform in improving the learning and evaluation methodologies are described using the following framework: prerequisites, essential activities; logistics; time-frame; and overall evaluation and criteria for efficiency (Annex 8).

## 6. PROTOTYPE CORE CURRICULUM

The core of the medical curriculum consists of the fundamental theory and practice of medicine, specifically biomedical, behavioural and social sciences, general clinical skills, clinical decision skills, communication abilities and medical ethics, and must be addressed by all medical schools aiming to produce safe practitioners of quality (World Federation for Medical Education [WFME], 2001).

The principal features of the term “core” are: common to all students; covering competencies essential for the practice of medicine, including knowledge, skills and attitudes; require a high level of mastery from students; and able to be added to and built on in subsequent stages of the curriculum or phases of education (WFME, 2001).

The need for change in medical education constitutes the basic reason for which the regional prototype core curriculum (RPCC) is to be established as an initiative for reform in medical education in the Region. Since the 1960s considerable effort has been put into teacher training through WHO and other agencies, but this has been largely ineffective without working examples of model innovative programmes. There is now growing awareness in the Region of the need for change. Therefore, for curriculum development, setting an example or examples for those who wish to make the change should be helpful.

It is important that the RPCC not be taken as a prescription for a curriculum format but rather as a guide and helping hand for curriculum design. In developing the curriculum, those who are going to implement it should be actively involved from the outset in its planning and design, with full involvement throughout the process. In addition, the RPCC is expected to form the basis for setting the minimum standards, along with which certain quality assurance measures and accreditation processes could be initiated.

### *Core competencies*

The outline of core skills of medical graduates in the Region should not only be on skills but should include also attitudes and behaviour. In addition, the skills should include cognitive (knowledge) and clinical skills. It may be more appropriate to define these under the categories of competencies.

**Process** competencies include the following.

- Graduates should continue professional development by:

- Keeping abreast with advances in health sciences critically, using an evidence-based approach and continuing self-evaluation to identify gaps in his knowledge and skills and seek relevant resources skilfully to fill these gaps;
  - Pursuing continuing and lifelong self-directed education;
  - Doing post-graduate education to specialize.
- Graduates should initiate change and function effectively as a change agent to promote health, health care and medical education.

**Content** competencies include the following.

Graduates should diagnose and manage common or serious health problems at the level of the individual, family and community with special reference to the priority health problems of his/her country (management meaning health promotion and protection, disease prevention, early detection, and cure and rehabilitation). In dealing with these problems the graduate is required to:

- a) Justify decisions/actions by explaining the underlying mechanisms with respect to etiology, structure, function and sequel on the basis of his/her knowledge of basic biomedical, behavioural, social and clinical sciences.
  - b) Exhibit empathy, respect, friendliness and support to the patient, family members and relatives with due respect for professionalism and medical ethics;
  - c) Use effective communication skills especially in interviewing and history taking; consultation and health education; dealing with his/her colleagues and other health personnel; and health personnel education;
  - d) Follow a problem-solving and cost-effective approach identifying the problem(s) and posing a working diagnosis; gathering information *accordingly and critically* from relevant history, physical examination, investigations and literature sources; evaluating and interpreting these data; subsequently taking timely, valid and justifiable management decisions and evaluating performance.
  - e) Conduct a proper interview and obtain adequate history (see c) above) covering as appropriate biological, psychological, social and cultural dimensions;
  - f) Perform the required physical and mental examination accurately, eliciting physical signs with proper use of the required clinical instruments, taking into account b) above;
  - g) Request relevant investigations selectively with respect to cost and effectiveness and interpret their results;
  - h) Formulate and execute appropriate plan of management for the problem(s) including psychosocial, ethical and legal aspects as appropriate as well as counselling, referral and
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follow-up, i.e. take any immediate measures dictated by the situation including life saving measures like cardiopulmonary resuscitation and easing pain and suffering; identify the drugs, if any, required for the particular problem(s); explain the usage and side effects of these drugs and write a correct prescription if required; involve patient fully in the management of problem(s) and secure compliance; identify any surgical procedures required for the problem(s); apply high-risk approach where relevant to detect and provide care for high-risk groups (e.g. high-risk pregnancies) and pursue prevention and control measures to avert occurrence of similar problem(s) in collaboration with health and health-related personnel; counsel patients, families and community in health promotion, prevention and control measures and healthy lifestyle (smoking, exercise, diet, drugs, child care, etc); refer patients beyond his/her capacity and whenever required; provide follow-up care in collaboration with the other members of the health team. Outline the systems of health care appropriate for tackling the problem(s) and evaluate those available in his country with special reference to national health programmes, e.g. EPI, IMCI, tuberculosis control, HIV/AIDS, reproductive health.

- i) Manage common emergencies and deal with unfamiliar situations.
- j) Work in harmony with, and participate effectively in, health teams
- k) Provide quality health care and observe medical ethics closely in his practice and in the equitable allocation of resources especially for minority, disadvantaged and high-risk groups.
- l) Use effective methods of administration and management in his medical practice and throughout the exercise of his duties in the health system.

Other criteria for selection of essential contents within the RPCC are described in the guidelines in addition to a recommended mechanism for assuring compatibility of RPCC, steps of developing the curriculum and a generic framework as an example of RPCC (Annex 9).

## **7. CAPACITY-BUILDING**

One of the key problems in managing reform is the staff and faculty development programme that will precede and accompany the reform. Historically it has been widely assumed that expertise in one's discipline was sufficient preparation for an academic career. The term "faculty development" is used to mean programmes for training physicians to become medical school members and to prepare them for their various academic roles and to sustain their productivity and promotion. Faculty development can also be a tool for improving the educational vitality and excellence of institutions.

A sufficient number of faculty members is needed who possess basic teaching skills and are familiar with the academic values, norms, and expectations of the institution. The first question to be determined is how to estimate this number according to the needs assessment. This should be determined according to the real needs of the institutional vision, mission, goals, objectives, curriculum approaches, and teaching/learning strategies.

If the main educational strategy is learning in a student-centred, integrated, objective-oriented, problem-based curriculum, then the capacity building will be directed towards the following:

- how to become an efficient tutor
- how to become a good coordinator
- how to formulate an educational problem
- how to practise innovative ways of students assessment including formative and summative evaluations.

The learning settings, in innovative schools, usually take the form of small group discussions facilitated by a balanced staff/student ratio which must be considered while planning for the standards of resource availability in relation to the needs. Regular updating of the job descriptions also helps in estimating human resources required and determining capacity-building targets.

An “Educational Development Centre” (EDC), capable of regularly assessing the educational needs in terms of human and financial resources and functioning as a training place for the required educational specialties, would serve as a built-in mechanism that offers additional capacity building when needed. An EDC should be established for all health professions and equipped with adequate facilities. Other health professional facilities, e.g. nursing or pharmacy or dentistry EDCs, are expected to cater for:

- professional development activities that assist the faculty member in understanding and meeting the educational demands of an academic career;
- instructional development activities that focus on teaching skills and teaching cognitions which facilitate learning and deals with all the learning steps and styles;
- organizational development activities, which involve the creation of policies, procedures and organizational structures that encourage meaningful participation by faculty members in the educational mission of the school and an institutional culture committed to continuous quality improvement (CQI).

In addition, certain skills are needed at the administrative level to be able to mobilize the available resources towards the required goals. These include communication, leadership, managerial and high technological skills.

In contrast to the educational mission of an academic institution, economics here emerged as a major motivational force and an obvious obstacle to human resource mobilization and faculty development. Even the most committed faculty members are subject to economic pressures.

To promote capacity-building, an educational development centre should be established that functions under certain national and institutional goals. National goals include systematic development and evaluation of curricula for health personnel, and continuous quality improvement of teaching/learning resources.

Designing capacity building programmes should include the following steps.

- conduct situation analysis and trend assessment
- set policy
- define target population/s (trainees) in terms of numbers and classify them into categories
- set criteria for selection of trainers and trainees
- select the proper timing for training
- choose an organizing committee
- plan, including setting objectives
- allocate budgets
- execute, and during execution of training activities, work as teams.

## **8. INITIATION AND MONITORING OF REFORM OF HEALTH PROFESSIONS EDUCATION (HPE)**

### **8.1 Initiation of reform of HPE**

The members of the expert group meeting on reform of HPE recommended the following steps to initiate and monitor reform of HPE in the Region:

1. Policy-makers and administrators in the health professions education institutes in Region are approached and provided with the reform documents, including the regional guidelines.
2. The institutes will then be short-listed to participate in a regional conference to discuss and select those who are ready to initiate and implement the reform. The selected institutes would be representative of the Regions' Member States and of different professions.

### **8.2 Monitoring of HPE reform**

The following are steps recommended for implementing monitoring of the reform:

- 1) Official institutes consent to promoting awareness among decision-makers, staff and students about the reform
- 2) At the level of colleges, the following steps are to be taken with WHO/EMRO technical support:
  - 2.1) Promote awareness
  - 2.2) Identify tasks related to the reform
  - 2.3) Nominate group of staff responsible for managing the reform process
  - 2.4) Establish curriculum committee and EDC

- 2.5) Recruit and train selected groups of staff for initiation and management of active learning
  - 2.6) Produce curriculum document
  - 2.7) Disseminate the curriculum document to staff and students
  - 2.8) Train staff to develop skills related to introducing reform methods.
- 3) Implementation of the reformed educational programme gauged by the following efficacy criteria in regard to institutional vision, philosophy, learning methodologies, evaluation, inputs and outcomes.
- 3.1) Relevant: meets the specific needs of the national health system
  - 3.2) Global quality: fulfils the global criteria for medical education development
  - 3.3) Cost-effective: staff efforts, money and material investments, pay, and demonstrable dividends
  - 3.4) Socially accountable: improved performance of the school in meeting the needs and expectations of stakeholders
  - 3.5) User-friendly: simple to understand and implement by staff and students
  - 3.6) Flexible: to modification and improvement
  - 3.7) New learning approaches well defined
  - 3.8) Educational outcomes are specified
  - 3.9) Student assessment methods are clearly indicated
  - 3.10) Contexts within which students tasks to be executed are specified
  - 3.11) Promotes students training in primary and community care settings
  - 3.12) Encourages student self-directed learning
  - 3.13) Emphasizes student communication and decision-making skills
  - 3.14) Links between different components of the reform initiative are defined
  - 3.15) Leadership for all components of the reform initiative are recruited

- 3.16) Person or group of persons responsible for individual tasks and the overall initiative are selected
- 3.17) Easily accessed by potential users
- 3.18) Teaching staff and students are well familiar with the initiative
- 3.19) Teacher training schedules are well developed and operational
- 3.20) Plans for updating the initiative are formulated
- 3.21) Plans for monitoring the initiative are designed and implemented
- 3.22) Ensure administrators—dean and head of departments—involvement and support
- 3.23) Ensure staff and students involvement and support
- 3.24) Sufficient time is provided for technical experts to develop the initiative including (information technology and educational planning experts)
- 3.25) Attractive features for staff and students are identified and made focal issues
- 3.26) Ensure that required material and finance are met
- 3.27) Ensure that learning settings are optimally developed.

## **9. RECOMMENDATIONS**

### **To faculties/institutes**

1. Each institute should explore the needs of society in each country and participate actively with their local health services and community to identify the health needs, people's expectations and the key result areas to improve health.
2. Medical and health schools should tailor their activities to meet community health needs and respond to society's expectations through improvement of systems and practices and ensuring high quality of care.
3. Reform should be initiated and implemented as a continuous process as part of the faculty's vision, mission and strategic planning. This is the only way to meet the rapidly changing needs of society.
4. Each faculty should establish an educational development centre (EDC), which will monitor, assess and advise on the necessary elements of the reform. As an initial phase, a dedicated department of medical/health professions education should be established and it should be

headed by a senior person specialized in health professions education. Such a department should collaborate with other health professions education departments locally (for example, those within the health services), nationally, regionally, and internationally.

5. All medical and health professions schools, established and new, should be assessed and accredited formally. The stages of the accreditation process should include, first a baseline assessment preferably as a self-study report, followed by formal external assessment and accreditation. The accreditation cycle should be repeated every 5 years to maintain the accreditation list held by the WHO Regional Office.
6. All medical and health professions schools should adopt the active learning process in the undergraduate programme (e.g. problem-solving approach, community-oriented education and self learning approaches). In addition, all staff should be trained in the application of the active learning process. Such training should be repeated on a regular basis, at least 3–5 year intervals to keep abreast of new developments in the field.
7. Each medical school should review its curriculum to cover the essential areas of core curriculum highlighted in this report. It is also recommended that each faculty/school have a centrally managed curriculum committee which should include representatives from different departments, students and the health services.
8. Each medical and health professions school should have clear strategies for human resources development including recruitment, retention, career development, incentive, performance management and exit strategies.
9. At the entry point of medical and health professions education schools, it is recommended that the selection process should focus on the fit for purpose rather than academic achievements alone.
10. It is recommended that the process of reform be initiated and monitored continuously through a joint and collective plan, incorporating the Regional Office, the college and the other colleges in the Region undertaking the process of the reform. In addition, each college should follow a separate plan of monitoring, follow-up and feedback, to the Regional Office and other colleges.

#### **To Member States**

11. Member States should support institutions responsible for health professions training and education in adopting holistic reform rather than piecemeal changes.
12. Member States should pursue governmental commitment at the highest level in order to launch a successful and meaningful reform of HPE.
13. Partnerships should be promoted between the health system, health professions institutions and the community, and strategic alliances developed to implement the reform of health professions education.

14. Member States should include reform of health professions education as a priority in collaborative programmes with WHO.
15. Member States should provide necessary resources to the institutions committing themselves to reform of HPE.
16. Member States should establish a national accreditation system to guarantee the quality of health professions education institutes and their graduates (product).
17. Member States should undertake steps for the adaptation and implementation of the regional guidelines and international accreditation standards.

**To WHO**

18. The regional guidelines for the implementation of accreditation should be finalized, including a set of core standards.
19. The regional guidelines on development of effective and active learning and assessment methodologies should be finalized.
20. The regional guidelines on development of a core prototype curriculum for undergraduate medical education should be finalized.
21. The regional guidelines on capacity-building and resources utilization should be finalized.
22. Technical support should continue to be provided to Member States for implementation of reform in health professions education.
23. The “four” regional guidelines should be translated, published and distributed in Arabic and French for better comprehension in Member States.
24. Assistance should be provided to Member States in the adaptation and implementation of the regional guidelines in accordance with the local requirements.
25. Reform of health professions education should be piloted, the validity of the standards and outcomes assessed, the services required estimated and financial and technical resources mobilized, and reform supported in 15–20 schools in the Region.

**Annex 1**

**AGENDA**

1. Opening session
2. Objectives and method of work
3. Review of the current status of health professions education reform in the Region
4. Evolving health systems: implications for health professions education reform, regional perspective
5. Review of health professions education response to the demands of health services
6. Review of the proposed regional guidelines on development of an accreditation system as part of the health professions education reform initiative
7. Review of the proposed regional guidelines on development of effective learning and assessment methodologies as part of the health professions education reform initiative
8. Review of the proposed regional guidelines on development of a core prototype curriculum for undergraduate medical education as part of the health professions education reform initiative
9. Review of the proposed regional guidelines on capacity building and resource utilization to support health professions education reform initiative
10. Developing a framework for reform of health professions education in the Region
11. Adoption of the final recommendations and plan of action
12. Closing session

**Annex 2**

**PROGRAMME**

**Sunday, 31 March 2002**

- |             |  |
|-------------|--|
| 09:00–09:30 | Registration   |
| 09:30–10:30 | Opening session  |
| –           | Message by Dr. Hussein A. Gezairy WHO Regional Director for the Eastern Mediterranean  |
| –           | Introduction of participants   |
| –           | Election of officers   |
| –           | Adoption of agenda and programme   |
| –           | Objectives and method of work  |
| 10:30–13:30 | Plenary session I  |
| –           | Evolving health systems: implications for health professions education reform, regional perspective/Dr B. Sabri, Director, Health Systems Development  |
| –           | Health professions education response to the demands of health services: an international perspective/Dr Salman Rawaf, WHO Consultant  |
| –           | Review of the current status of health professions education reform in the Region/Dr G. Al Sheikh, Regional Adviser for Human Resources Development, WHO/EMRO  |
| –           | Introduction to the regional guidelines for nursing education in the Region / Dr F. Al-Darazi, Regional Adviser for Nursing and Allied Health, WHO/EMRO  |
| –           | Discussion   |
| 13:30–16:00 | Plenary session II   |
| –           | Introduction to the proposed regional guidelines on development of an accreditation system as part of the health professions education reform initiative / Prof Fathi Maklady, WHO Temporary Adviser |

**Monday, 1 April 2002**

- 08:30–08:45            Synthesis of day 1
- 08:45–11:30           Plenary session III
- Introduction to the proposed Regional guidelines on development of effective learning and assessment methodologies as part of the health professions education reform initiative / Prof Ahmed Al-Khafajei, WHO Temporary Adviser
- 11:30–15:00           Plenary session IV
- Introduction to the proposed regional guidelines on development of a core prototype curriculum for undergraduate medical education as part of the health professions education reform initiative / Prof Bashir Hamad ,WHO Temporary Adviser
- 15:00–16:30           Plenary session V
- Introduction to the proposed regional guidelines on capacity building and resource utilization to support health professions education reform initiative / Prof Wagdy Talaat, WHO Temporary Adviser

**Tuesday, 2 April 2002**

- 08:30–08:45           Synthesis of day 2
- 08:45–10:15           Plenary session VI
- Developing a framework and a plan of action for reform of health professions education in the Region / Dr Salman Rawaf, WHO Consultant
- 10:15–11:00           Selected country experiences
- 11:00–11:30           Reading of the report and recommendations
- 11:30–12:30           Conclusions and recommendations
- 12:30                    Closing session

**Annex 3**

**MEMBERS OF THE EXPERT GROUP**

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**WHO SECRETARIAT**

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Dr Belgacem Sabri, Director, Health Systems & Community Development, WHO/EMRO  
Dr Ibrahim Abdel Rahim, WHO Representative, Oman  
Dr Ghanem Al Sheikh, Regional Adviser, Human Resources Development, WHO/EMRO  
Dr Fariba Al Darazi, Regional Adviser, Nursing & Allied Health Personnel, WHO/EMRO  
Dr Ali Hassanabadi, Technical Officer, Human Resources Development, WHO/EMRO  
Dr Salman Rawaf, Short-term Consultant, WHO/EMRO  
Mrs Hanaa Ghoneim, Senior Administrative Assistant, Division of Health Systems & Community Development, WHO/EMRO  
Mrs Shahinaz Khalil, Secretary, Division of Health Systems & Community Development, WHO/EMRO

**Annex 4**

**STEPS UNDERTAKEN TOWARDS HPE REFORM IN THE REGION**

So far the following steps were undertaken towards the definition and further development of the reform initiative of Medical and Health Professions Education in the Eastern Mediterranean Region.

1. The rationale and main concepts behind the initiative were articulated in an initial document, which was communicated by RD to potential partners.
2. Development of partnership was adopted as an essential strategy for the development of the initiative. The association for Medical Education in the Eastern Mediterranean Region (AMEEMIR) and The Jordan University of Science and Technology (JUST) were brought in as key partners while work is continuing to bring in more partners.
3. A first consensus building workshop was held in collaboration with JUST and AMIEER in Irbid, Jordan, in June 2000. The workshop proceedings and report further defined and redefined the reform initiative concept and strategies. The products of this meeting were widely disseminated among medical schools in the Region.
4. The Eastern Mediterranean Regional Consultative Committee (RCC) meeting in 2001 discussed the reform proposal and recommended further delineation, refinement and packaging of individual reform interventions by a group of experts.
5. The present in-house consultative was conceived and subsequently convened as an interim arrangement to prepare the grounds for the experts group meeting required by the RCC which is planned to be held later in the year.

**Annex 5****PLAN OF ACTION FOR IMPLEMENTATION OF THE HEALTH PROFESSIONS  
EDUCATION REFORM INITIATIVE IN THE REGION****Plan of action**

<i>Task</i>	<i>Responsibility</i>	<i>Time-frame</i>
Identify the expert group	EDH/DHS	July 2001
Preparation of draft packages by key experts using guidelines	EDH/Selected experts	December 2001
Expert group meeting to refine and adopt packages	EDH/NUR	March 2002
Publishing reform packages	EDH/NUR	Second quarter 2002
Prepare project document	EDH/ GOE Meeting	Second quarter 2002
RCC review	EDH/NUR	May 2002
Regional conference to launch the initiative	EMRO/JUST/AMEEMR	August 2002
Document for RC approval of project	EDH	September 2002
Resource mobilization	EMRO/HQ and partners	December 2002
Starting negotiations with participating institutes	DHS/EDH	First quarter 2003
Start of implementation phase	EDH/DHS/WRs/partners	September 2003

## Annex 6

## ACCREDITATION SYSTEM STANDARDS AND INDICATORS UNDER EACH DOMAIN

<b>DOMAIN/ *Indicator</b>	<b>LEVEL 0 (Sub-standard)</b>	<b>LEVEL 1 (Basic standard)</b>	<b>LEVEL 2 (Essential standard)</b>
<b>SPONSORSHIP/ *Funding</b>	Depends on temporary and/or foreign source	Depends on permanent and/or national source	Self dependent (regular revenues/fund raising) with or without national support
<b>LEADERSHIP/ *Vision/mission</b>	No vision/unstated mission	Personal vision, unreflected in the mission	Shared vision among all stakeholders, well translated into a stated mission
<b>*Involvement in improving health systems and service</b>	Not involved	Involved only in routine services	Full involvement in improving health systems services
<b>STUDENT ADMISSION POLICY/ *Selection</b>	Tuition-oriented selection	High school final marks-oriented selection	Personality/skills-oriented selection
<b>HUMAN RESOURCES/ *Selection</b>	No clear criteria for selection	Quantitative-based criteria	Quantitative/qualitative-based criteria
<b>*Staff–student ratio</b>	Under or overstaffing	Adjusted, demand-based, s–s ratio	Adjusted, need-based, s–s. ratio
<b>*Job descriptions</b>	No job descriptions	Written job descriptions	Regularly updated job descriptions
<b>*Faculty</b>	All part-timers	Mixture of full/part-timers	All full-timers
<b>*Capacity building</b>	No capacity-building programmes	Irregular, on request, capacity-building programmes	Regular, pre-planned, comprehensive capacity-building training programmes
<b>Health professionals (MOH)</b>	Do not contribute to training	Partial contribution in teaching only	Full contribution in teaching, research and programmes

<p><b>PHYSICAL AND TECHNICAL RESOURCES/</b> *Teaching/learning facilities</p> <p>*Technical resources</p> <p>*Teaching hospital/primary care and community outreach</p>	<p>Deficient teaching/learning facilities (buildings, classes, laboratories, lecturing rooms, etc.)</p> <p>Deficient technical resources</p> <p>No teaching hospital and/or no primary care or community outreach</p>	<p>Enough teaching/learning facilities</p> <p>Essential technical resources</p> <p>MOH teaching hospital and MOH primary health care teaching units with/without community outreach</p>	<p>Multi-purpose teaching/learning facilities and specialized technical units (like audiovisual, computer and multimedia, etc.)</p> <p>Highly advanced technical resources</p> <p>University teaching hospital with primary health care units belonging either to MOH or university or both with community outreach</p>
<p><b>CURRICULUM/</b> *Documented?</p> <p>*Language of instruction</p> <p>*Textbooks</p> <p>*Teaching/learning strategies</p> <p>*Instructional methods</p> <p>*Content</p> <p>*Curriculum committee</p>	<p>No written curriculum</p> <p>Foreign language</p> <p>Foreign</p> <p>Discipline-oriented, teacher-centred, and based entirely on teaching</p> <p>Lecture-based</p> <p>Knowledge-based with minimum skills emphasis</p> <p>Not present</p>	<p>Written, non-detailed</p> <p>Foreign-national mixture</p> <p>Translated</p> <p>Discipline-oriented, supplemented with innovative teaching learning methods, but based mainly on teaching versus learning</p> <p>Mainly lecture-based, using innovative approaches like problem solving</p> <p>Knowledge-based, but giving some attention to the skills component</p> <p>Present but not central</p>	<p>Written, detailed</p> <p>National language</p> <p>Adapted</p> <p>Objective-oriented, community-oriented, student-centred, integrated and based mainly on learning versus teaching</p> <p>Innovative approaches are adopted like: problem-based learning, community-based education, and evidence-based medicine. Tutorials, seminars and fieldwork are more used than didactic lectures</p> <p>Competency-based, with balanced content of knowledge, skills, and attitude. Even content of basic, clinical and socio-behavioural sciences</p> <p>Central committee with delegation</p>

<b>STUDENT ASSESSMENT/ *Rationale, concepts, approaches and modalities</b>	To test mainly recall of knowledge (knowledge-based), using only summative formats	To test both knowledge and skills	To certify competence (competence-based), provide feedback to both faculty and students
<b>*Frequency</b>	Annually	After each semester	After each learning activity as a form of "formative evaluation" and after each block, year and phase as a "summative evaluation"
<b>*Methods</b>	Mainly oral, long essays, practical, and clinical exams	Mainly short essays, multiple choice questions, practical and clinical exams	Mainly structured oral exams (e.g. triple jump), structured clinical exams (OSCE), structured clinical exams (OSPE), and modified essay questions
<b>*Confidentiality</b>	No security measures	Safe	Highly secure and confidential
<b>*Testing</b>	No testing procedures	Moderate validity and reliability	Highly valid and reliable
<b>*Standardization</b>	Local	Graduates are subjected to a national qualifying exam	Graduates are subjected to a qualifying national exam and trained to pass international qualifying exams
<b>POST-GRADUATE STUDIES AND CONTINUING MEDICAL EDUCATION/ *Policy</b>	No policy	Adapted to the national health needs	Adapted to the national health needs with a social accountability prospective
<b>RESEARCH COMPONENT/ *Purpose</b>	Staff promotion	In addition, teaching research methodologies to students	In addition, attempting at solving community health problems
<b>*Productivity</b>	Confined to promotion purposes	Individual research studies	Multidisciplinary group research work and multiprofessional community projects with student involvement
<b>PROGRAMME EVALUATION/ *Practice</b>	Not practised	Irregularly practised	Built-in strategic component
<b>*Conduction</b>	No present	Only internal	Both internal and external
<b>REFORM TENDENCY/ *Readiness</b>	Resisting	Accepting	Cooperating

**Annex 7**

**PATHWAYS FOR IMPROVING THE LEARNING PROCESS**

1. Rapid growth of medical sciences and information – explosion. Please see: student-centred and self-learning and core curriculum with special study modules.
2. Predominance on recall of knowledge on the expense of the application of knowledge. Please see: problem based-learning and outcome-based curriculum.
3. Increasing specialization in medicine and health need to have a view of the patient as a whole. Please see: integrated curriculum and core-curriculum with special study modules.
4. To recognize the importance of health care delivery in the community as well as in the hospital settings and in primary health care centres. Please see: community-oriented medical education and PBL.
5. Inefficiency of traditional didactic memory-based teaching. Please see: Task-based learning, spiral curriculum and outcome-based curriculum.
6. To much emphasis on the teaching itself couples by little concern of the product of teaching (the doctor). Please see: integration outcome curriculum.
7. Little relevance of teaching to the practice of medicine especially during early phases of study. Please see: task-based, PBL and spiral curriculum
8. Little emphasis on generic competencies like communication, decision-making, and team work. Please see: student-centred, outcome module and spiral curriculum.
9. Health promotion and disease prevention not emphasized. Please see: Community Oriented Medical Education (COME), outcome-based curriculum and task-based curriculum.
10. Critical thinking, problem solving, and clinical reasoning and judgment are neglected areas. Please see: problem-based learning and outcome-based curriculum.
11. Appropriate attitudes, ethical stance and legal responsibilities are not emphasized. Please see: problem-based learning, outcome-based curriculum and spiral curriculum.
12. Student skills in information gathering and synthesis are poor. Please see: student-centred learning and spiral curriculum.

**Annex 8**

**PROTOTYPE CORE CURRICULUM FOR MEDICAL SCHOOLS IN THE EMR:  
LIST OF ESSENTIAL COMPETENCIES**

**First draft, 2 April 2002**

- |     |   |  |
|-----|---|--|
| 1.  | Clinical methods<br>practical skills and<br>clinical behaviours | With a shift to community health<br>and family health  |
| 2.  | Communication<br>skills   | Listen<br>Written as important as spoken   |
| 3.  | Human biology   | Structure and function of body<br>Molecular, cellular, organ and whole body level  |
| 4.  | Human disease   | Abnormal structure and function<br>Natural pattern of disease  |
| 5.  | Man in<br>society   | Human development aspects: psychology,<br>sociology and anthropology (throughout the<br>5-year programme)  |
| 6.  | Public health<br>medicine                                       | Should figure prominently the impact<br>of changing needs in society, prevention, early<br>detection of diseases and promotion of health<br>Health system/management |
| 7.  | Management of diseases<br>and rehabilitation                    | Responses to illness and help towards<br>recovery. Management of diseases and disabilities   |
| 8.  | Crisis management   | Medicine in wars/emergencies   |
| 9.  | Self learning   | Should start from first year and continue<br>throughout the programme  |
| 10. | Special study<br>modules  | Should start from first year and<br>spread over 5 years.   |