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Report on the

# Intercountry meeting on strengthening medical education in the Eastern Mediterranean Region

Cairo, Egypt  
27–29 November 2014



World Health  
Organization

Regional Office for the Eastern Mediterranean

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## **EXECUTIVE SUMMARY**

The WHO Regional Office for the Eastern Mediterranean held an intercountry meeting on strengthening medical education in Cairo, Egypt on 27–29 November 2014. It was attended by over 60 participants who included national educational leaders in academic medical education from 22 countries in addition to representatives from various national and international regulatory and professional organizations. The objectives of the meeting were to:

- share the current status of medical education in the region based on the findings of the Eastern Mediterranean Medical Education Study (EMMES);
- identify and prioritize challenges in medical education in the Region;
- share successful experiences and good practices in medical education from within and outside the Region;
- develop a roadmap for strengthening medical education in the Region.

The meeting was opened by Dr Ala Alwan, WHO Regional Director for the Eastern Mediterranean, who noted the rapidly changing scenario of medical education at the global and regional levels and the challenges being faced by the health professions education system in the Region. He expressed the hope that the participants would be able to provide policy guidelines and actionable recommendations to WHO to play its role in strengthening the system in the Region.

A special feature of the meeting was the presentation of initial findings from the Eastern Mediterranean Medical Education Study (EMMES) conducted by the Regional Office. Although still in initial phase, the study provides useful information about the state of medical colleges and regulatory system in the Region. Once completed, the study will provide useful information to make evidence-based decision making about strengthening medical education system in the region.

The meeting was divided into themes, each of which included a number of presentations followed by discussion by the participants to identify major challenges in major areas of medical education. Detailed discussion around each theme helped the participants to identify key medical education challenges at the national and regional levels. Later in the meeting the participants were divided into five groups and were given the task to identify priorities within each major group and suggest short and medium term actionable recommendations. The five groups included the following areas:

- Governance, social accountability and accreditation;
- Curriculum development;
- Students' assessment and programme evaluation;
- Faculty development and support;
- Enabling environment and learning resources.

Participants discussed the issues in detail and made a large number of recommendations. Key findings are summarized below.

- Health professions education scenario is changing rapidly in the Region, posing new challenges to regulation and quality of the educational system.
- Most countries in the Region have fragmented medical education regulatory environment posing serious threats to the quality of health professionals being produced.
- The number of medical colleges is increasing, especially in the private sector, and at the same time the Region is experiencing a shortage of qualified teachers, especially in basic sciences.
- There is lack of technical expertise, collaboration and coordination at the national and regional levels.
- WHO can play a key role in improving collaboration among Member States, strengthening the regulatory environment, identifying and addressing key educational challenges being faced by each country.
- In order to provide effective leadership, WHO needs to strengthen health professions education infrastructure at the Regional Office, perform needs assessment at country level and provide guidelines to Member States to explore efficient and effective solutions to their educational challenges.
- Using the latest information and communication technologies, a nexus of professional organizations, regulatory bodies and educational institutes can be developed to address a number of challenges in a highly cost effective manner.

## 1. INTRODUCTION

The production of health professionals, in particular physicians in the required numbers and of adequate quality is essential for any well performing health system. It is estimated that more than 300 colleges, faculties or schools of medicine are operating in the 22 Member States in the Eastern Mediterranean Region. In recent years, there has been a substantial increase in the number of medical schools, which has led to significant expansion in the medical workforce in the Region. The physician population density rose significantly from 1990 to 2013 with the exception of Group 3 countries (including Afghanistan, Djibouti, Pakistan, Somalia, Sudan and Yemen).

Health system strengthening has been identified as one of the five strategic priorities for the work of the World Health Organization (WHO) Regional Office for the Eastern Mediterranean with its Member States over five years (2012 to 2016). A paper presented in the 59th session of the WHO Regional Committee in October 2012 identified health system constraints and challenges and delineated the way forward in strengthening health systems in countries of the Region. Developing a balanced, motivated, well-distributed and managed health workforce with the appropriate skills mix was one of the priorities identified for strengthening health systems. Such a workforce must be responsive to the needs of their countries, investing on the development of the workforce.

The Regional Office held an intercountry meeting on strengthening medical education in Cairo from 27 to 29 November 2014. The meeting was attended by national educational leaders in academic medical education from the 22 countries, in addition to representatives of ministries of health and of higher education, national regulatory bodies and regional and international medical education associations. Also in attendance were WHO staff and temporary advisers.

The objectives of the meeting were to:

- Share the current status of medical education in the region based on the findings of the Eastern Mediterranean Medical Education Study (EMMES);
- Identify and prioritize challenges in medical education in the Region;
- Share successful experiences and good practices in medical education from within and outside the Region;
- Develop a roadmap for strengthening medical education in the Region.

The meeting was inaugurated by Dr Ala Alwan, WHO Regional Director for the Eastern Mediterranean. He noted that the meeting was being held after a gap of 19 years and was unique because of the diversity of participants representing leaders from different sectors, including deans of medical schools, heads of accrediting and regulatory councils, as well as representatives of ministries of higher education and health. This multidisciplinary representation would provide the opportunity to discuss the situation of medical education in the Region and recommend appropriate actions towards transforming medical education so as to improve the health of the people.



He reminded participants of the previous year's resolution passed by the Sixty-sixth World Health Assembly (WHA66.23 Transforming health workforce education in support of universal health coverage), which called on Member States to strengthen policies, strategies and plans through intersectoral policy dialogue among the relevant ministries, including ministries of higher education, health and finance, to ensure that health workforce education contributed to achieving universal health coverage.

He concluded by saying that much needed to be done to ensure medical education was in harmony with the needs of the health system. This could only be done in collaboration with partners in academia, higher education, professional organizations and health systems. The participants were expected to identify strategies to support a wide array of health educational institutes (including medical universities, medical, nursing and allied health sciences institutes) in moving forward in terms of quality improvement, social accountability and production of competent graduates who could function effectively and efficiently and meet the needs in the rapidly changing and complex environment of the health system.

The programme was divided in the following nine themes, spread over three days, distributed in various sessions. Experts from various countries presented their views and findings under each theme, followed by extensive discussions by all participants. The detailed programme is included as Annex 1. The list of participants is included as Annex 2.

## **2. PRESENTATIONS AND DISCUSSION**

### **2.1 Global and regional challenges in medical education**

#### *2.1.1 Global challenges of medical education*

Medical education has always faced challenges; those challenges are ever-greater in present day circumstances. This presentation first listed the long-standing difficulties. These included the relative lack of evidence in medical education, problems of misguided interventions and policy proposals, occasional inappropriate political interventions, and the lack of good relevant research and data.

Some of today's new problems include: political and social change and unrest; global economic instability, with large areas of poverty and environmental change. Developments in patterns of disease, and in medical practice, are clearly relevant.

Three important contemporary challenges are:

- increasing recognition that medical education must be responsive to the needs of society and that this should not be at the expense of the professional expertise of the medical school and the medical profession;
- explosive growth in the numbers of new medical schools often opened for unscrupulous reasons, and often of poor quality;
- lack of credible information on the number of medical schools.

Good information is essential for improving medical education. Combined with attention to quality standards in medical education, and strong processes for the evaluation and accreditation of medical education, it will protect the future of medical education.

### *2.1.2 EMMES findings*

The WHO Regional Office for the Eastern Mediterranean launched an initiative, Eastern Mediterranean Medical Education Study (EMMES), in early 2014 to assess the status of medical education in the Region with a focus on undergraduate programmes. The purpose of EMMES is to support evidence-informed strategies that address the quality of medical education and health care and impact outcomes. EMMES covers several areas related to medical education, including governance, social accountability, curriculum, student selection and support, faculty development, educational resources, student assessment and programme evaluation and accreditation.

Altogether 157 out of the 297 invited medical schools (53%) responded to the online questionnaire. A major finding of the survey was a rapid increase in the number of medical schools in the Region across all three groups of countries during the past six decades. Equally important is the increase in the number of medical schools in the private sector, particularly after 2000. There was no major difference across the three groups of countries of the Region in their level of compliance with the different measures of social accountability. Almost 60% of medical schools reported that they were accredited either by a national or international accrediting body, while 40% reported either not being accredited or being in the process of accreditation. Twenty-six per cent of medical schools offered traditional, discipline based; 28% integrated, organ system based; and 15% each problem-based, community-oriented and hybrid curricula. Most medical schools in the Region accept students on the basis of high school grades (87%). Eighty-five per cent of medical schools had a clear policy for student assessment.

The major priorities for reforming medical education in the Region highlight the need to: strengthen the regulatory capacities of the governing institutions to improve accountability; provide clear standards and concrete guidelines for establishing new medical schools; establish and/or strengthen national and subregional accrediting bodies; and strengthen collaboration between medical schools and health services providers.

### *2.1.3 Discussion*

During discussions participants from various countries identified a large number of global, regional and national challenges being faced by the health professions education system in the Region. Such challenges include: intercountry and intracountry differences in the quality of education; the relationship between medical education, workforce planning and burden of disease; lack of communication between the educational systems (Ministry of Education) and health management systems (Ministry of Health); migration of doctors and other health workforce in developed countries; shortage of quantified faculty especially at the basic sciences level; and weak professional leadership in medical education. The

establishment and strengthening of quality assurance and accreditation systems is also needed at the national, regional and international levels.

Participants noted a clear dichotomy was emerging between public sector and private sector medical colleges, as private sector medical colleges are now dominating the scenario. This raises questions about the role of medical schools played in strengthening public health and health workforce. Private sector colleges work with a different motive than public sector colleges. In the emerging scenario the governments and medical education regulatory authorities must ensure that private sector medical colleges produce the doctors that are in line with the services needed in the communities they serve.

It was noted that there was almost 50% response from the medical colleges on EMMES study. This shows the lack of collaboration and cooperation among various stakeholders, including the colleges, regulatory authorities, medical universities and the WHO network in the Region. In the past WHO has not played a significant role in leading and strengthening health professions education systems in the Region. EMMES will provide essential data to identify key issues in the medical education scenario and provide leadership and technical expertise to strengthen medical education system in the Region.

Participants expressed that medical schools are no longer closed institutes and should play a wider role in promoting medical education that is the need of local communities. Current issues and innovations in medical education including social accountability, placement of students in the communities, especially villages, improving professionalism among students, improved regulations and governance system for medical institutes at the nations level etc. Participants expressed the need that more involvement of WHO country office with the medical schools is also needed. WHO priorities are not even known to the medical schools.

## **2.2 Recent advances in medical education**

### *2.2.1 Transformative health professions education*

This presentation aimed at describing the context in which the policy recommendations were developed and the challenges faced; the WHO response (normative role); the key policy issues and recommendations and the development of the global assessment tool and plans for its implementation. The period 2006–2013 witnessed major development in health professional education through publishing many documents namely the World Health Assembly Resolutions on health systems/health workforce strengthening, WHO global code of practice on the international recruitment of health personnel and the call for different approach to health professional education (Lancet Commission Report). The World Health Report 2006: Working Together for Health describes the various elements within a health workforce pipeline, has been adapted and contextualized within the post 2015 development agenda, with universal health coverage a key outcome of health workforce strengthening. The guidelines for transforming and scaling up health professions education included intervention in the following five broad categories: governance and planning; regulatory frameworks;

education and training institutions; financing and sustainability; and planning, implementation and evaluation.

Institutional and instructional change included ensuring that admission criteria are relevant, adoption of competency-based education and enhancing the skills of faculty. The global assessment tool provides baseline to enable assessment/evaluation of impact of transformative process in terms of supporting universal health coverage; guide and inform transformation of health workforce education to provide a basis for multi-sectoral and multi-stakeholder dialogue at country (and institutional level); and enable countries to manage change process, recognizing that this needs to be contextualized (at country level) and acknowledging the heterogeneity of influencers.

### *2.2.2 Networking for introducing change in medical education: European experience*

Medical education is facing one of the most challenging and exciting times in its existence because of the complexity of undergoing challenges demanding a permanent effort towards adaptation and consequent reforms. Globalization, new approaches to teaching, learning and assessment, a more scientific approach in education and a new vision of medical schools are among the most exigent paradigm changes, just to name a few. How medical education community can keep up-to-date with above undergoing challenges and how stakeholders can contribute to medical education progress when facing these changes are pertinent questions.

‘Networking’ is among the answers as a very active powerful factor with medical schools, teachers, students and researchers accepting that no one can continue working alone when facing above challenges. The use of networking in medical education for sharing new ideas, innovations, excellence, evidence, resources and publications is imperative in today’s globalized world. The future may still be uncertain and the impact of current undergoing challenges may still be unpredictable but one thing is certain: medical schools if they are to succeed will need to recognize and be committed to networking as a key factor for medical education progress.

### *2.2.3 Innovations in medical education in the Region: hindering and promoting factors*

A study on the determinants of innovation in medical education in Eastern Mediterranean Region covered 13 most innovative medical schools from nine countries in the Region. The study included questions about types of innovation in different areas (curriculum, teaching methods, assessment, etc.) and issues such as what initiated innovation, challenges faced and solutions.

The types of innovation adopted by these medical schools include innovations in student admission, curriculum development, student assessment, faculty development, student support, quality and programme evaluation and instructional methods. The degree of innovation varied among the selected schools. Results also demonstrate the impact of these medical schools on communities, health services and their influence on other medical schools. Strategies adopted by these medical schools to spread innovation included participation in

teaching, training of teachers, publication and documentation of innovation, conduction of joint research and implementation of students and staff exchange programmes. The main challenges facing the sustainability of innovation include lack of educational leadership, enough faculty and resources and resistance from senior faculty. Many successful experiences of innovations are going on in the Region. Areas related to innovation in graduates and some aspects of social accountability need to be strengthened. Sharing of innovative practice is strongly recommended to initiate and sustain innovation.

#### *2.2.4 Attributes of an effective dean in medical education*

A Delphi study on the attributes of an effective dean aimed at identifying the qualifications and the qualities of an effective dean. The study included 11 respondents from the Region in two rounds. The roles of a dean, as agreed by the respondents, are to make sure that the school has felt impact on the community and health services in its catchment area, to reform the curriculum and to ensure accreditation of the medical school. The minimum essential qualifications that the dean must have include: an advanced degree in his discipline; the rank of a professor or associate professor; training in management and leadership; and training in medical education.

The five attributes agreed by participants were leader, community mobilizer, scholar, communicator and productive.

#### *2.2.5 Discussion*

Participants discussed the changing scenario of medical education globally and in the region as a result of factors such as globalization, digitalization, information explosion and better access to information and increased public awareness about health care issues etc. The participants noted that health professions education should aim meet the needs of the health care system in the next 40 to 50 years. It should include consideration of the impact of issues such as social determinants of health, political issues, financial and educational environment. More consideration is also needed for what to teach the doctors about non-core medical issues such as ethics, leadership, professionalism, social accountability, patient safety, good communication skills, and evidence based medicine etc. Currently, the educational system does not cover many domains that make a doctor complete professional doctor.

Medical schools have a package of training tools. New techniques in reaching patients should be adopted. Students might make use of health services such as progress notes of the patients. Feasibility varies with country context. Different methods can be used to develop the skills of students in developing countries.

A good dean should share ideas and views and respect the system of the college. It is important that the dean serve as a translator of meanings. Strategies need to be translated into action. Deans should be transformational leaders. It was noted that transformative education recommendations have been in existence for the past 20 years and have not been implemented yet. Why not?

One of the roles of the dean is to encourage the faculty to have its rights. Deans should be a driving force for change and independent of politics and should be elected by the teachers.

There is need to develop processes, systems and mechanisms to get the health care delivery system and medical education together. The end user and the medical education system have to join together to bring about change. The end users are usually not involved in the development of the idea and the product.

Closer synergy is needed between medical and public health persons. Students as stakeholders are main driving force for transformation. More examination is need of the role of medical colleges in social transformation. Leadership should resolve these issues.

## **2.3 Governance and social accountability**

### *2.3.1 The contribution of social accountability to strengthen medical education*

Medical schools can make important contributions to sound health systems by orienting their education, research and service provision missions to act on health determinants and meet priority health needs in the societies they serve. Medical education should be strengthened not only from the point of view of content and methods to acquire needed competences to practice in a given context, but as an important strategy for the medical schools to improve their impact on health of the people. To encourage graduates to make a career choice and settle where they are most needed, schools need to develop strong links with key health partners and potential employers of their graduates.

The concept of social accountability as articulated in the Global Consensus for Social Accountability of Medical Schools ([www.healthsocialaccountability.org](http://www.healthsocialaccountability.org)) is defined as an engagement to identify priority health needs in society, act on them and verify impact on health. It therefore fosters schools:

- to anticipate new roles for health professionals;
- to share responsibility with key stakeholders in managing health in a society;
- to recognize excellence on the basis of impact on people's health.

An increasing number of schools, countries and organizations consider social accountability as a mark of excellence, which opens promising areas of research and development, namely in the establishment of evaluation frameworks and accreditation systems.

### *2.3.2 Social accountability experience around the globe*

THEnet is a collaborative network of outcome-driven medical schools in rural and remote regions in four continents with a core mission to increase the number, quality, retention and performance of health professionals in underserved communities. Although THEnet schools operate in different contexts and employ different strategies, they share the

following core principles: a) health and social needs of targeted communities guide education, research and service programmes; b) students are recruited from the communities with the greatest health care needs; c) programmes are located within or in close proximity to the communities they serve; d) much of the learning takes place in the community instead of predominantly in university and hospital settings; e) the curriculum integrates basic and clinical sciences with population health and social sciences; and early clinical contact increases the relevance and value of theoretical learning; f) pedagogical methodologies are student-centred, problem and service-based and supported by information technology; g) community-based practitioners are recruited and trained as teachers and mentors; h) partnering with the health system aims to produce locally relevant competencies; i) faculty and programmes emphasize and model commitment to public service.

### *2.3.3 Social accountability: Sudanese experience*

Sudan is piloting a project with four medical schools to address issues of social accountability and professionalism in the undergraduate curriculum. The project is funded by the Global Fund and the Federal Ministry of Health. It is managed by a national taskforce including key stakeholders such as the ministries of higher education and health, Sudan General Medical Council and the Sudan Association of Medical Education. The terms of reference for this task force were to:

- develop a common framework and detailed plan for implementation of the project;
- assist each selected university to develop a detailed action plan on how to implement the main activities of the project;
- supervise and assist the selected universities in formulating their sub-tasks and working groups and implementing their action plans;
- submit final report including outcomes of the work done by the selected universities to the Ministry of Health and WHO.

The project started with collection of baseline data in addition to development of framework and roadmap. Through site visits, faculty development programmes and close follow-up the project produced a positive impact in the participating institutions by adopting social accountability concepts, inclusion of professionalism in the curriculum and increased partnership with the health system. The lessons learned from this project for strengthening medical education include:

- involvement of partners and key stakeholders;
- institutionalization of partnership;
- active involvement of staff and students;
- development of framework link to national standards and conceptualized to individual school situation; and
- advocacy and close monitoring and evaluation.

### *2.3.4 Discussion*

A surge in the number of medical schools and increasing interest of private sector in medical education has raised questions about the governance, quality and social accountability of these institutes. Weak governance systems and lack of sensitization to share social responsibility may lead to deterioration in the quality of health professionals being produced by these medical institutions. Participants discussed these issues in global and regional and national context.

It was noted that discussions needed to focus not only on marginalized populations, as many universities happen to be in medically underserved areas. Clarity is needed on what is meant by generalism, family medicine and by extended generalists.

Health professionals should be able to acquire new competencies as needs arise. Specialties are important but there should also be a referral system and the use of IT, telemedicine etc. Curricular changes towards social accountability may need a lot of resources which may not be available. As well, curricular changes may not need to be the same in all medical schools in a country.

Motivated leadership is required to implement the concept of social accountability at the school level by the deans. A systems approach is needed for the change to happen. Academic institutions are in wonderful position to implement the concept compared to other stakeholders such as politicians, economists etc.

Community engagement cannot be done if a number of essential requirements are not met, including faculty, capability of communication, infrastructure etc. Universities affiliated with the Ministry of Health may find social accountability easier; when affiliated with the Ministry of Higher Education the context and the whole scenario changes.

## **2.4 Accreditation and quality assurance**

### *2.4.1 Accreditation as an effective approach towards quality improvement*

This presentation covered the following areas, definition of accreditation, process of accreditation, the standards for measuring quality of medical education, the impact of accreditation and lessons learned for the Region. Accreditation is defined as the certification of the suitability of medical education programmes, and of the competence of medical schools in the delivery of medical education. The process of accreditation includes preparation of a self-study, review of the self-study, external visit and accreditation decision. The World Federation for Medical Education standards are used by almost of 50% of medical schools worldwide. They included nine areas in addition to basic and quality standards. What is relevant to the Region is to support or establish a good and officially-recognized accreditation authority in each country (or group of countries), to be prepared to meet the cost and understand why this is an essential cost, work to minimize medical 'brain drain' and promote 'brain circulation'.



#### *2.4.2 Academic accreditation of the MD programme in Oman: A success story*

In November 2013, College of Medical and Health Sciences at Sultan Qaboos University was fully accredited for a ten-year period (on its first attempt) by Association of Medical Education in the Eastern Mediterranean Region in association with and in accordance with the standards of WFME. The MD programme complies with the WFME's basic and quality development standards.

The process of accreditation passed through three distinct phases including the pre-accreditation, self-study and external evaluation. The period 2000–2009 experienced the pre-accreditation stage where the curriculum was reformed, more educational resources were secured and Department of Medical Education was established. During the self-study phase, an accreditation and quality committee was formed, WFME and process of accreditation were mastered through capacity building activities; key stakeholders were actively engaged through the whole process; voluminous amount of information were compiled as evidence for each standard. In the last phase of external evaluation all the documentation and its cross-indexing by subject and in accordance to the standards numbering system were completed and categorized. In addition awareness campaign was launched and all stakeholders to be visited were identified. The college obtained a proof of excellence in many areas of its MD programme, if not all, since its performance satisfied the quality development standards which are considered as indicators of best practice by the WFME. Such an attainment presents a testament of excellence to the general public and peers as a pledge of societal reliability.

The process helped the College to recognize its strengths and identify areas of improvement and commitment to continuous improvement and brought out an amazing spirit of loyalty, solidarity and institutional ownership among staff and students. The College obtained a proof of excellence in many areas of its MD programme and gained motivation to maintain quality performance. Members gained experience in the accreditation process that they can act as advisors to other colleges in the university and a feeling of pride that shows on all college staff and students.

#### *2.4.3 Discussion*

A lot of discussion took place around the issues related to accreditation and quality assurance due to the importance of the subject. Discussion mainly revolved around the strategic issues of how to establish an accreditation system in a country and the role of WHO and other institutes such as the World Federation for medical Education (WFME) and the Foundation for the Advancement of Medical Education and Research (FAIMER) in accreditation and quality assurance.

Countries must have governance, regulatory and accreditation systems in place for all medical institutes. Countries with larger populations and more educational institutes need to have more robust systems to assure the quality of medical education.

Accreditation could be a vital issue for medical schools as we deal with the health of the people. Some accreditation standards in the schools are not up to the mark. Even the term

accreditation is not clear. Accreditation should be accompanied by quality assurance. Institutional accreditation may be costly. Critical issues such as social accountability should also be put in educational standards. Countries have little experience in accreditation.

The world directory is simply a list of medical schools existing and not an accreditation list. Accreditation information would be included as it is available from the regulatory authorities from different countries.

WHO should provide regional guidelines and build capacity of the regulatory bodies to implement accreditation systems in the countries. 16 countries have accrediting bodies in the Region. The higher education quality framework does not address accreditation issues.

Accreditation is an external intervention. There is a huge role for ministries of health and of higher education and the medical councils of the countries. Internal quality systems need to be strengthened. Accrediting bodies can be independent agencies. For example, the accrediting agency in Turkey is independent but recognized by the country. Financial consequences of accreditation should also be considered for poor countries. Accreditation systems need not be costly.

WHO/WFME/FAIMER can provide guidelines to countries to develop their standards at undergraduate, postgraduate and continuing professional development levels.

## **2.5 Curriculum development**

### *2.5.1 Contextual curriculum: a relevant approach to medical schools in the Region*

This presentation aimed at helping participants to think through how to develop a curriculum that is appropriate to the local settings and health care needs. The reasons for a contextual curriculum and the relationship between the medical school and the health care system were analysed and discussed. Steps of contextual curriculum design were described.

The term 'contextual curriculum' is used to emphasize the importance of the curriculum being rooted within local health problems, the learning of the local practice of medicine in the settings where patients usually present and the importance of both practitioner and teacher in making curricular decisions. Fundamental to curriculum is being able to train a doctor who can practice good and appropriate medicine in the local setting. A curriculum should not be decided by simply importing or applying the latest theories of education for which there is little evidence. The curriculum should be decided based on the problems of medical education and health care in the local setting. At a time of homogenization of medical education and universalization of curricular approaches, the term contextual curriculum argues for a local approach to medical education.

### *2.5.2 Good practice on curriculum development*

Some of the issues pertaining to curriculum development are over 100 years old. Many medical schools do not have capacity to address the shortcomings in their curricula due to

poor understanding and lack of technical expertise to deal with curricular change issues. Curriculum development must be seen through the lenses of societal needs, prevailing educational theories, professionalism and social contract and global trends in medical education. The curriculum must be responsive to the changing values and expectations in education if it has to remain useful. Good practices in curriculum development should follow the principles of curriculum development. Curriculum development cannot be left to chance. Countries with a large number of medical schools need some kind of national framework for curriculum development based on their national needs. WHO can facilitate the process by creating detailed regional and country specific guidelines on critical educational issues including design of the curriculum. A few low cost highly effective model colleges can also be created in medicine, nursing and allied health sciences. Improved networking and communication can help countries to share experiences with more developed countries.

### *2.5.3 Major findings of EMMES on curriculum development*

Challenges facing medical education in the region with regard to curriculum development include the following: mission statements of medical schools, when present, generally do not guide curriculum design, implementation and development; a large number of medical schools continue to adopt traditional curricula characterized by being teacher-centered, non-integrated, discipline-based, hospital-based and opportunistic; Innovative methods of instructions such as problem-based learning, team-based learning, community-based and other proven student-centred methods are not well applied. Lecture and didactic teaching are the dominant methods of instruction by majority of medical schools. Competencies stated by medical schools lack important areas such as professionalism, communication and health system improvement.

Other challenges include: priority areas such as patient safety; medical ethics; evidence-based medicine; research methodology are not adequately covered by many medical schools. Clinical skills and procedures training are introduced late in the curriculum. Revision and update of the curriculum is irregular in a large number of medical schools and involvement of students in curriculum development activities is lacking.

### *2.5.4 Discussion*

Participants noted that most of the countries were following traditional curricula in their medical colleges. Participants generally agreed that there was a need to update medical and other health professions curricula but there was no consensus on which type of curriculum should be followed. There were no convincing arguments to why even a problem-based learning curriculum should be followed. It was felt that the WHO should provide guidelines to the countries on strategic issues related to curriculum development at local levels. The role of national regulatory authorities was also considered important in this regard. These regulatory authorities must provide broad guidelines and training opportunities to the medical colleges to develop their own curricula within a broad framework. Participants also expressed concern about lack of national strategic guidelines for curriculum development and lack of capacity within health institutes to develop and update their curricula. It was noted that resources are needed for developing curricula including staff training programmes.

## **2.6 Student assessment and programme evaluation**

### *2.6.1 Current trends on student assessment and programme evaluation*

This presentation aimed at highlighting the current trends and new paradigms related to competency assessment particularly at the workplace and the rationale and conceptual models for programme evaluation and measuring its effectiveness. This presentation is expected to set the stage for a discussion and sharing of experiences on student assessment and programme evaluation in health professions education.

Work-based assessment is defined as assessment of working practices based on what doctors/trainees actually do in the workplace and is predominantly carried out in the workplace itself. What needs to be assessed may include outcomes competencies Frameworks are similar. The specifics and contexts are different, e.g. Accreditation Council for Graduate Medical Education, CanMed, etc.; assessment of working practices based on what doctors/trainees actually do in the workplace and is predominantly carried out in the workplace itself. The criteria for high quality assessment include utility, reliability, validity, acceptability, cost and impact on learner. Trustworthiness entitled that believing that the person who is trusted will do what is expected from him/her. No single method can achieve all the indicators of quality therefore it is always advisable to use a cocktail of assessment instruments. A trustworthy system of assessment needs to integrate qualitative and quantitative information in a more holistic way, including formative assessment. The student learns whether passed or not. Pure summative assessment cannot steer learning; assessment should have some combination of formative + summative. Both are equally important. Student assessments and programme evaluation drive the curriculum, students' learning, faculty and the organization culture. The key for its success is faculty training.

### *2.6.2 Student assessment and programme evaluation: findings from EMMES*

Although 85% of medical schools in the Region reported that they had clear policy for student assessment, only a few medical schools provided evidence for obtaining a policy document. Only 55% of medical schools stated that they had strong degree of alignment between graduate competencies and assessment. Comprehensive methods of assessment were used by medical schools including multiple choice questions, objective structured clinical examination, objective structured practical examination and long-short case assessment. True/false and multiple choice questions, which are proven to be invalid for testing high cognitive clinical skills, and long-short case assessment, which is unreliable, are still used by majority of medical schools.

Many challenges face student assessment in the Region. Many medical schools lack a documented policy for student assessment; where they exist, student assessment policy is not comprehensive or well aligned with graduate competencies. Assessment methods with proven low reliability and validity are still practised by most schools, e.g. multiple choice questions and long essays. Many medical schools lack effective central management of student assessment, and external feedback for programme evaluation is not widely used, e.g. health services and community views.

### 2.6.3 Discussion

Discussion started with highlighting the current focus on surface learning and didactic methods of instruction therefore teaching methods should be changed as a prerequisite for improving assessment. One participant raised the issues of students as assessors (peer assessment) and patients as assessors, it turned out that only few medical schools in the region are using these methods of assessment.

Another participant emphasized the advantages of work-based assessment where teaching and services go side by side in addition to the high authenticity of this type of assessment which represent real life situation. It is recommended that WHO sponsors the establishment of a regional item and objective structured clinical examination bank where all medical schools will be invited to actively participate. This will ensure high quality assessment items in addition to sharing of experiences and benchmarking. Suez Canal University volunteered to host this regional bank.

One participant questioned the authenticity of objective structured clinical examination to measure clinical competence. The disadvantages he raised were that objective structured clinical examination tests competencies in a fragmented manner. Therefore it is important to use multiple methods rather than relying in one method such as objective structured clinical examination.

The quality of assessment system was also discussed. High quality exams require time and on the job training of faculty in addition to close monitoring and supervision. The discussion continued to stress that assessment is no longer depends on psychometrics indicators alone, it is rather a matter of responding to educational objectives and health system requirements of graduating a competent physician, therefore formative and qualitative assessment methods should be incorporated in the assessment system.

The discussion concluded by Indicating that there is no good or bad assessment method. It is very important to have a comprehensive blueprint known to both faculty and students which is aligned to learning outcomes and competencies. Comprehensive assessment instruments that measure the full range of learning outcome in relatively reliable and valid way incorporating formative assessment should be used.

## 2.7 Faculty development and evaluation

### 2.7.1 Faculty development in the 21st century: case study of medical schools in Pakistan

Data available with the Pakistan Medical and Dental Council indicate that there is overall shortage of faculty development activities. This shortage is especially marked in areas such as professionalism, ethics, research and networking. Success in faculty development in health professions education includes sensitization of the Pakistan Medical and Dental Council and the Higher Education Commission, Pakistan, so that medical education is recognized as a career. The establishment of a department of medical education has already been mandated by the Pakistan Medical and Dental Council in every medical college. This

has led to increased interest in medical education among faculty, and increased number of faculty development activities and graduate programmes, including PhD in health professions education.

Challenges include lingering lack of interest and apathy at institutional and personal levels, lack of leadership in health professions education and low quality of the faculty development and graduate programmes.

### *2.7.2 Discussion*

Participants stressed that faculty enhancement programmes are essential for improving curriculum and learning outcomes. Faculty development programmes should be conducted on regular basis and based on a comprehensive needs assessment. It is recommended that participation in faculty development programmes should be linked to faculty promotion criteria and faculty evaluation. Comprehensive methods of delivery should be used including face to face courses, distribution of printed materials, online-based courses and participation in national and international medical education conferences. It was also agreed that WHO and WFME should work together to produce concrete guidelines on effective faculty enhancement programmes.

## **2.8 Hospital and community-based training**

### *2.8.1 Learning teaching and supervision in the clinical environment*

The aim of the presentation was how to develop strategies to improve clinical teaching and supervision of training in the clinical environment. The presentation set the stage to discuss barriers to effective clinical teaching and shared the experience of the participants on how to overcome these barriers and future direction of teaching and learning in the clinical environment.

### *2.8.2 Good practices on community-based education: Suez Canal University experience*

Community-based education is one of the educational strategies of Faculty of Medicine, Suez Canal University. Community-based education provides students with the necessary knowledge, skills and attitudes to provide health care at different community sites.

Early exposure to clinical encounters is achieved in phase I (year 1) as students receive training in the primary health care units where they understand the health care system, the culture and uniqueness of the rural and urban communities, they also learn basic communication skills starting from role-play and ending by history taking. In phase II (years 2–3), there is more emphasis on consultation skills, comprehensive and continuous individual and family care. Using an integrated approach, other areas of the curriculum are covered such as teamwork, patient rights and biomedical ethics. In phase III (years 4–6) students share actively in the primary health care programme through activities related to quality of services, leadership and management, family medicine model and referral system.

Research projects constitute an important component of community-based education. Projects have three dimensions. The educational dimension helps students to develop knowledge, skills and attitudes related to research abilities, whereas research and service dimensions help to find out simple solutions to Suez Canal area problems. Through the three phases, students are exposed gradually to research concepts beginning from community characteristics in phase I, to community diagnosis in phase II and ending with intervention in Phase III.

Although there are some challenges in implementing community-based education, however it helps students to learn many skills and to understand the preventive aspects. It also emphasizes interprofessional collaboration and social accountability concepts and prepares students for real life situations.

### *2.8.3 Discussion*

It was noted that the role of the clinical teacher encompasses a wide range of areas and of greater importance is their role in planning several experiences. This is more important than teaching in certain circumstances. Time must be given to students to stay in the trial phases. The design of the clinical phases will need to cover this aspect. The effective clinical teacher must encourage students to be active participants and engage them. The current practice of clinical teaching does not reflect the importance of involving students as assessors and equal partners.

Clinical teaching needs to be revisited. There are many cases with social determinants behind it; however usually there is no discussion of social history. Many opportunities are missed on learning and teaching in the hospital. Community engagement is the most optimal way in which students stay for 4–5 years. The reason for this is that they involve the community participation and the health officers represent the health community.

Schools and health care service need partnership. The teachers also need to engage in the community along with the students. There is then equality in the health care centres and the teaching institutions. Students learn from the context of practice and improve. In clinical training there is also need to focus on postgraduate training.

The presence of the external assessment is needed in pre-clinical, clinical and post-clinical training. In some cases the assessment is conducted by internal members. Students need to be encouraged to work in remote settings.

The burden of disease has changed in Egypt with the current burden in cardiovascular diseases as opposed to a general focus on communicable diseases. Therefore, countries need to modify their programmes to accommodate the reality on the ground. There is a lack of leadership and expertise (i.e. contracts between academic institutions and the specific areas to demonstrate what could be done.

## 2.9 Family medicine training programme in the Region: discussion

It was noted that family medicine is often confused with general practice. Structured postgraduate programmes in family medicine are either not available or they are weak. There is no job structure for family physicians. Family medicine programmes largely offered in public institutions.

Many countries are moving towards universal health cover but one of the key challenges faced is that, if countries are expanding their system but the family practitioners are not being absorbed.

The challenge is whether medical schools have the desire to produce family physicians. In particular there is need for family practice in the Region but these numbers are not being produced. For instance, the majority of general practitioners in the Region are in the private sector.

Medical schools need to concentrate on developing the service alongside the general teaching otherwise you will not be able to control the service that is provided outside the medical institutions. There needs to be greater link with health services. Medical institutions must emphasize the importance of family planning.

## 3. THE WAY FORWARD

Participants were divided into groups and given the task of identifying priority actions for the topic assigned to each group. After extensive discussion, the group prioritized the challenges and proposed actions to address each challenge in the short, medium and long term.

### 3.1 Governance, social accountability and accreditation

**Priority:** Create an independent body for accreditation in each or groups of countries and develop accreditation standards specific to medical education.

#### *Short-term actions*

- Survey national governments for the presence and suitability of an accreditation agency; if none exists, determine the reason.
- Set up a workshop with national representatives for assessment of all accreditation agencies identified.

#### *Long-term actions*

- Establish an accreditation authority in each country (or group of countries), forming a WHO/WFME taskforce for this purpose if necessary in order to facilitate information sharing and exchange of experience.



**Priority:** Ensure equal distribution of medical schools locations across the country

*Short-term actions*

- Survey national governments for awareness and implementation of social accountability in medical schools in each country and, if none exist, the reasons why.
- Set up a workshop with national representatives for this purpose. This workshop can be combined with the workshop relating to accreditation, above.

*Long-term action:* Ensure all stakeholders in social accountability of medical schools are identified and knowledgeable.

**Priority:** Increase awareness of social accountability

*Short-term actions*

- Identify the competent authority (if one exists) on the establishment of medical schools in each country.
- Advocate with national governments without such a competent authority that one be established.

*Long-term action:* Formulate acceptable criteria for the opening of new medical schools, at best international standards and based on assessment of needs, and recommend these to national governments.

**Priority:** Create regulation and guidelines for opening new schools

*Long-term action:* Each country to develop a national policy for the opening of medical schools in the public or private sectors.

**Priority:** Regulate migration within and outside the Region

*Long-term action:* Follow the recommendations for ethical recruitment in the WHO code on migration and the strategies to implement these guidelines.

### **3.2 Curriculum development**

**Priority:** Make curriculum relevant to context, including mission statement, educational outcomes, future perspectives of medical graduates and partnership between health services and academic institutions

*Short-term action:* Build capacity of medical education leaders and health service policy-makers on curriculum design, implementation, revision and improvement.

*Long-term action:* Encourage faculty and educational leaders to obtain a qualification in medical education degrees and include this proposal in joint WHO-country workplans in the area of fellowships.

**Priority:** Agree on a regional set of competencies including professionalism, communication skills, ethics, legal medicine, that guide curriculum implementation and assessment.

*Short-term action:* Review the existing competencies and formulate a draft regional set in collaboration with the Association for Medical Education in the Eastern Mediterranean Region (AMEEMR) and WHO collaborating centres.

*Long-term action:* Organize a meeting to develop the major areas and the guidelines for implementation and evaluation of competencies and discuss this issue within a small task force in the next AMEEMR conference in Sharm El Sheikh.

**Priority:** Encourage early community and patient contact of medical students to gain appropriate professional competencies and clinical skills.

*Short-term action:* Share experiences through publications, dissemination, meetings and workshops.

*Long-term action:* Develop policy briefs for early introduction of clinical skills.

**Priority:** Extend the clinical training to all health care facilities and other community institutions.

*Short-term action:* Formulate selection criteria for the training sites.

*Long-term action:* Design a course for train the trainers from all countries in the region on clinical teaching and supervision in collaboration with WHO collaborating centres.

### **3.3 Student selection, assessment and programme evaluation**

**Priority:** Develop guidelines for student admission criteria specific to the context of each country.

*Short-term action:* Encourage countries to develop written policies and a minimum of high school academic performance criteria. This policy should include admitting students from under-served areas include as well in the admission criteria instruments that measure interpersonal skills such as structural interview/multiple mini interview. The purpose of which would be to evaluate the communication skills and fitness for a career in medicine.

*Long-term action:* Carry out longitudinal follow-up of students to define the best predictors for student performance and progress.

**Priority:** Institute a minimum one year foundation study in all medical faculties to prepare students to progress well in medicine and rectify the shortcoming of school education.

*Short-term action:* Seek endorsement of this recommendation by the key ministries (ministries of health and education) along with community discussion to formulate and develop a national policy.

*Long term action:* Implement and carry out regular follow-up for improvement.

**Priority:** Develop a written policy for assessment and alignment of learning objectives with built-in mechanism and provision of feedback.

*Short-term action:* Develop guidelines for stating assessment policies that are based on sound principles and evidence. The guidelines will include as well Implementation plan, resources needed as well as evaluation. These guidelines will be developed in collaboration with WHO collaborating centres and AMEEMR as well as national and international experts.

*Long-term action:* Test the guidelines in a number of medical schools and follow up for further improvement.

**Priority:** Use a variety of reliable and valid assessment tools.

*Short-term action:* Develop a toolkit for a comprehensive assessment system utilizing feasible, valid and reliable multiple assessment instruments to be utilized according to the context, curriculum and learning outcomes. This toolkit should be based on review of existing experiences from the Region.

*Long-term action:* Evaluate and modify the use of assessment tools in line with its objectives.

**Priority:** Regularly measure the psychometric analysis and ensure quality of the assessment system.

*Short-term actions*

- Develop a course aiming at building the capacity of faculty on item writing and psychometric analysis.
- Develop a system for benchmarking with other universities as a requirement for quality improvement.

*Long-term action:* Follow up and review existing experiences in this regard.

**Priority:** Avail resources aiming at faculty development on assessment.

*Short-term action:* Develop guidelines for writing high quality assessment items.

*Long-term action:* Establish a regional bank for high quality assessment items to be shared by all medical schools in the Region.

### **3.4 Enabling environment and educational resources**

**Priority:** Make available adequate educational resources, in particular the facilities that support student-centred educational and clinical skills training.

#### *Short-term actions*

- Prepare guidelines for minimum requirements of skills laboratories and other educational resources.
- Suggest strategies for cost sharing between neighbouring medical schools and group purchase.

#### *Long-term actions*

- Encourage maximal utilization of information technology to support educational resources such as Webex, Adobe Connect, etc.
- Use tablets to download course modules for use in primary health centres to complete courses.

**Priority:** Conduct clinical training on academic teaching hospital as well as other health facilities across the health system. Strengthen clinical teaching and supervision. Non-hospital facilities including primary health care and community based sites should be optimally utilized by medical schools.

#### *Short-term actions*

- Distribute clinical training sites according to the country context.
- When there is a shortage of hospitals, clinical sites should be identified from primary care to district hospitals and up to the tertiary level hospital.
- Address the competition for clinical sites between private and publicly-funded schools through regulations.
- Ensure joint planning between the Ministry of Health and Ministry of Education on key educational issues.

#### *Long-term actions*

- Optimize existing Ministry of Health hospitals, including upgrading infrastructure.
- Invest in the minimum infrastructure needed in community facilities: lodging, communication, etc.

**Priority:** Use advanced methods of clinical teaching and assessment by many medical schools; Establish faculty training in clinical teaching and supervision in medical schools.

*Short-term actions*

- Emphasize the key role of faculty to improve education, training service and research.
- Establish educational development centres to develop the capacity of staff across all disciplines where they do not exist.
- Train faculty through networking within countries and between countries.
- Pedagogy (methods of delivery of curriculum) should be strengthened.
- Curriculum development/modification should be on a regular basis.
- A graduate tracking system should be established.
- Conduct orientation on future careers/specialties (with a note to encourage graduates to stay in situ by provision of courses).

*Long-term actions*

- Optimize existing Ministry of Health hospitals, including upgrading infrastructure.
- Invest in the minimum infrastructure needed in community facilities: lodging, communication.
- Ensure availability of classrooms and other facilities, e.g. eLibrary
- Establish distance learning courses through creating a regional centre to provide academic qualifications in medical education.

**Priority:** Capacity development of part-time staff and ensuring their integration in the educational process.

*Short-term action:* Provide development support to primary health practitioners through educational development centres.

**Priority:** Recruitment of new faculty to replace retiring ones.

*Short-term action:* Recruit staff with appropriate skills from outside the institution.

*Long-term actions*

- Institute a reward system to improve faculty retention rate.
- Make available opportunities for scholarships for students to replace retiring staff.
- Create a research culture where students are engaged in locally relevant research and supervised by faculty involved in research (should be mandatory).

**3.5 Faculty development**

**Priority:** Increase staff numbers in basic sciences; Enhance the capacity of faculty in medical education; Create a conducive and attractive environment for faculty to function appropriately.

*Short-term actions*

- In countries with severe shortage of basic medical sciences faculty, consider developing short courses in basic sciences and offering these courses to already qualified specialist doctors. For example a surgeon can be offered a short course in anatomy and a physician can be offered a short course in physiology and biochemistry. This policy should be for a transition period only.
- Improve intercountry collaboration to strengthen postgraduate opportunities. For example, Pakistan and Egypt can provide admission to students from Yemen, Sudan etc. to do MPhil/PhD in anatomy, physiology, pathology etc.
- Establish basic teacher training programmes to address the essential teaching skills needed by all teachers. These programmes should be mandatory for all newly appointed teachers to attend.
- Establish a regional competency framework for medical teaching (or assist countries in establishing national frameworks) to promote and regularize teacher training at the basic, mid and advanced levels.
- Develop criteria for selection and recruitment of deans and other key positions by countries. General guidelines can be provided by the WHO.

*Long-term actions*

- Depending on the country situation, consider offering more postgraduate programmes in specialties with shortage of specialists.
- In some countries with low staff salaries in basic sciences, consider improving staff salary structure.
- Improve bylaws and regulatory structures in most countries for staff. Clear and transparent policies for staff recruitment and retention and promotion should be established by the regulatory bodies, recruitment, retention and promotion.
- Promote the culture of medical sciences universities in countries with large number of medical colleges. Pakistan and Saudi Arabia have such universities in the field.
- Allow universities more autonomy for staff recruitment and other issues to improve the quality of medical education.
- Ensure the educational environment encourages training and research support to the staff. These could be big factors promoting staff. As a national policy, careful planning is needed on the part of the government to open new colleges and either gradually reduce the number of students or increase faculty to improve student faculty ratio. Generally acceptable ratio at undergraduate level could be between 1:10 to a maximum of 1:14.

**Priority:** Establish strong faculty development programmes.

*Short-term actions*

- Develop a comprehensive faculty development programme at the national, university and medical college level that is responsive to the faculty development needs.

- Ensure the faculty development programme works under a broad framework curriculum, based on faculty development needs.
- Make participation in faculty development programmes mandatory for all teachers and a requirement for faculty promotion.
- Design such programmes as a mix of short courses, medium and long courses.
- Consider establishing a faculty development centre at regional level keeping in view the WHO agenda and health priorities. This centre can be run online and may collaborate with universities and countries to strengthen faculty development activities in the countries.

*Long-term actions*

- Open educational development centres in all medical colleges and universities to regularize faculty development activities.
- Along with faculty development activities, consider continuing medical education/continuing professional development activities for all physicians working in the country.

**Priority:** Establish a fair and reliable system for faculty evaluation.

*Short-term action:* Establish a faculty evaluation and monitoring system at the national and university levels, depending on the regulatory mechanisms in the country.

**Annex 1****PROGRAMME****Thursday, 27 November 2014**

08:00	Registration Inaugural session	
08:30	Address by Dr Ala Alwan, Regional Director, WHO/EMRO	
08:50	Objectives and expected outcomes First theme: global and regional challenges in medical education Chair: Sameen Siddiqi Co-chair: Tahereh Changiz	Fariba Al-Darazi
09:00	Global challenges in medical education	David Gordon
09:15	Eastern Mediterranean medical education (EMMES) study: a regional overview	Mohi ElDin Magzoub
09:35	Discussion Second theme: recent advances in medical education Chair: Charles Boelen Co-chair: Mahmoud Al-Ahwal	
11:00	Transformative health professions education	Erica Wheeler
11:15	Networking for introducing change in medical education: European experience	Madalena Patricio
11:30	Innovation in medical education in the Region: hindering and promoting factors	Ibrahim Al-Alwan Mohammed Elsayed
11:45	Attributes of an effective dean of medical education: a Delphi study	Ali Batarfi
12:00	Discussion Third theme: governance and social accountability Chair: Hikmat Shaarba Co-chair: Hussein Khairy	
14:00	The contribution of social accountability to strengthen medical education	Charles Boelen
14:15	Social accountability experience around the globe and the medical education partnership initiative (MEPI)	Andre J. Neussy
14:30	Social accountability: Sudan experience	Zein Karrar
14:40	EMMES findings on governance, regulation and social accountability	Elsheikh Badr
14:50	Discussion Fourth theme: accreditation and quality assurance Chair: Hossam Hamdy Co-chair: Erica Wheeler	
15:45	Accreditation as an effective approach towards quality improvement	David Gordon
16:00	Accreditation of medical education: experience from	Nadia Al Wardi



	Oman	
16:15	EMMES findings on accreditation	Fariba Al Darazi

**Friday, 28 November 2014**

	Fifth theme: curriculum development Chair: Madalena Patricio Co-chair: Ammar Eltahir	
08:30	Contextual curriculum: a relevant approach to medical schools	Janet Grant
08:50	Good practice on curriculum development	Gohar Wajid
09:10	Major finding of EMMES on curriculum development	Mohi ELDin Magzoub
09:30	Discussion	
	Sixth theme: student assessment and programme evaluation Chair: Ibrahim Al Alwan Co-chair: Amal Al Ouzani	
11:00	Recent advances on student assessment and programme evaluation	Hossam Hamdy
11:15	Developing banks and repository of assessment questions	Siraj-ul-Haq
11:30	EMMES findings on student assessment and programme evaluation	El Sheikh Badr
	Seventh theme: faculty development and evaluation Chair: Janet Grant Co-chair: Adel Ayed	
14:00	Appropriate strategies on faculty development and evaluation	Rukhsana Zubeiri
14:20	Panel discussion: faculty development and evaluation	Hikmat Sharbaaf David Gordon Janet Grant Hossam Hamdy
15:2017:00	Group work: developing a roadmap for strengthening medical education in the Eastern Mediterranean	Mohi Eldin Magzoub

**Saturday, 29 November 2014**

	Eighth theme: hospital-based and community based education Chair: Rukhsana Zubeiri Co-chair: Said Walhad	
08:30	Effective clinical teaching and supervision	Hossam Hamdy
08:45	Good practices on community-based education: Suez Canal University experience	Somaya Hosny
09:00	Discussion	
09:30	Panel discussion on the role of WHO collaborating centres, educational development centres and departments of medical education	Charles Boelen Nader Momtazmanesh Nadia Al Wardi

12:00	Ninth theme: family medicine training programme	Haider El Hadi
13:00	Role of medical schools in strengthening family	Chair: Sameen Siddiqi
14:00	medicine training: challenges and opportunities	Co-chair: David
14:30	Group presentations and discussion: roadmap for	Gordon
	strengthening medical education	Hassan Salah
	Summary on the recommendations of group work	Mohi Eldin Magzoub
	meeting and next steps for strengthening medical	David Gordon
	education in the Region	
	Reflections on the consultation and the contribution of	
	World Federation of Medical Education to the Region	
	Discussion	
15:30	Concluding remarks from Regional Director	

**Annex 2**

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