Global Standards and Accreditation in Medical Education: A View from the WFME

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Abstract

Globalization of medicine is increasing, as manifested by the growing number of migrating doctors and cross-border education providers. In addition, new medical schools of dubious quality are proliferating. This situation accentuates the need to define standards and introduce effective and transparent accreditation systems.

With this background, and reflecting the important interface between medical education and health care delivery, a World Health Organization (WHO)/World Federation for Medical Education (WFME) Strategic Partnership to improve medical education was formed in 2004. In addition to working on reform processes, capacity building, and evaluation of medical education at the regional and national levels, the partnership in 2005 published guidelines for accreditation of basic medical education.

Only a minority of countries have quality assurance systems based on external evaluation, and most of these use only general criteria for higher education. The WHO/WFME Guidelines recommend establishing accreditation that is effective, independent, transparent, and based on criteria specific to medical education.

An important prerequisite for this development was the WFME Global Standards program, initiated in 1997 and widely endorsed. The standards are now being used in all regions as a basis for improving medical education throughout its continuum and as a template for national and regional accreditation standards.

Promotion of national accreditation systems will pivotally influence future international appraisal of medical education. Information about accreditation status—agencies involved and criteria and procedures used—will be essential to future databases of medical schools and will be a foundation for international "meta-recognition" of institutions and programs ("accrediting the accreditors").

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The overall mission of the World Federation for Medical Education (WFME), as the global organization concerned with education and training of medical doctors, is the improvement of health of all people through promotion of high-quality medical education.

WFME is an umbrella organization for its six regional associations for medical education and for national associations of medical education worldwide; it is a nongovernmental organization related to the World Health Organization (WHO).

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This article deals with the following topics: (1) the need for global standards and accreditation; (2) the WHO/WFME strategic partnership; (3) guidelines for accreditation systems in medical education; (4) definition of global standards; and (5) promotion of international quality assurance and recognition.

Needs for Global Standards and Accreditation

The increasing internationalization of the medical profession raises the issue of safeguarding the practice of medicine and the use of the medical workforce. These years, medical education is showing trends that also dominate other fields of higher education. Within the framework of internationalization, globalization, and cross-border education, and driven by the development of information and communication technology as well as by pronounced migration of medical doctors, there are economic and managerial consequences such as commercialization and privatization in a variegated mix of for-profit and not-for-profit providers. Higher education has now become a trade commodity regulated by the World Trade Organization, which is not always attending to quality issues. In reaction, emphasis has arisen on quality assurance, expressed in terms of harmonization, standardization, accreditation, and mutual recognition of qualifications.

Over the last years, a number of quality assurance initiatives have been taken internationally in higher education. Those taking such initiatives have included the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organisation for Economic Co-operation and Development, the International Association of Universities, the International Association of University Presidents, and the International Network for Quality Assurance Agencies in Higher Education. Similar initiatives have occurred at the regional level, for example in Europe by the European Association for Quality Assurance in Higher Education and the Bologna Declaration and Process, striving for a European dimension in quality assurance of higher education. The latter is now also a source of inspiration to higher education in Latin America and Africa.

Indication of the globalization process in medicine and medical education can be found in the migration traffic of medical doctors and the growth of cross-border education. The latter encompasses a wide range of modalities, including movement of students, teachers, programs, and campuses abroad and distance learning using various technologies, including e-learning. The globalization process is supported by common curricular and management trends that facilitate definition of global standards in medical education, such as student-activating instructional methods, integration of basic sciences and clinical disciplines in teaching and assessment, emphasis on clinical and communication skills, broadening of clinical training settings including use of skills laboratories, greater influence of curriculum committees, increasing student influence on program development, clearer budgetary responsibility for education, and strengthening of educational leadership.

Global standards in medical education are needed because of this globalization process, and they are also important to help address national problems and challenges resulting from changes in the health care delivery service, from institutional conservatism, and from insufficient management and leadership. In addition, new medical schools have mushroomed at a rate of about 100 per year over the last 10 years. The total number of medical schools worldwide is not known exactly, but it is estimated to be close to 2000; the figure depends on how one defines a medical school. Many of the new schools lack a clear mission, sufficient resources, adequate settings for clinical training, and research attainment. Additional sources of concern include the for-profit purpose of some schools and the lack of accreditation procedures in many countries.

The WHO/WFME Partnership

The interface between medical education and health care delivery systems was neglected by some stakeholders for a period, but it is again receiving greater interest, as shown by growing awareness of the social accountability of medical schools and by an increasing understanding of the importance of medical education to the quality of health care delivery. This trend is illustrated by recent coordination of some activities of the WHO and the WFME. In 2004, the two organizations decided to establish a joint policy on improvement of health system performance through improvement of health professions education.

Therefore, a new WHO/WFME strategic partnership[1] was established to pursue a long-term work plan designed to decisively affect medical education in particular and ultimately health professions education in general. The activities of the partnership will be based on collaboration with national and regional authorities, the WHO regional offices, the WFME regional associations for medical education, other international organizations, and medical educational institutions. The planned activities of this initiative are the following: (1) establishment of a shared database of medical schools, including information on quality-improvement processes; (2) promotion of twinning between advanced medical schools and schools of lower quality—preferably in developing countries—to foster reform; (3) development of means to update management of medical schools; (4) identification and analysis of educational innovations; and (5) assistance to institutions or national or regional organizations and agencies to develop and implement reform programs and to establish recognition and accreditation systems.

The WHO/WFME partnership involves the six Regional WHO Offices and WHO Headquarters in Geneva. Regional activities include reform programs, capacity building, and efforts to address accreditation issues. Comprehensive subregional and national reform programs are being developed, for example in Eastern European and Central Asian countries, Iran, and Ecuador. Definition of national standards, using the WFME Global Standards as template, is on the agenda in many countries, including Egypt, Sudan, and China, and the impact of the partnership is also seen in other parts of the Eastern Mediterranean, Southeast Asian, and Western Pacific regions and in parts of Latin America. Capacity building of medical schools in Sub-Saharan Africa is being achieved in conjunction with systematic evaluation of medical schools. Establishment of effective and transparent accreditation systems is the goal in all six regions.

Significant developments that address the need for reform have occurred in medical education over the last decades in many parts of the world in the form of increased social accountability of educational institutions and greater awareness of health care needs of societies. However, reforms and innovations are still required to prepare doctors for the needs and expectations of society, to help doctors cope with the explosion in biomedical knowledge and technology, to inculcate in physicians an ability for lifelong learning, to ensure training in the new information and communication technology, and to adapt medical education to changing conditions in the health care delivery system.

Guidelines for Accreditation Systems in Medical Education

A recent result of the WHO/WFME partnership relates to accreditation of institutions and programs. The concept of accreditation varies around the world, and the term is often misused for types of evaluation and recognition that we do not consider proper accreditation.

Quality assurance and accreditation systems for higher education based on external review are now used in somewhat more than 70 countries. The systems vary from country to country and sometimes within countries. Governmental and nongovernmental agencies are operating in this realm, not always with clear lines between those responsible for provision of education and those responsible for quality assurance. Purposes, functions, and methodologies differ; some systems are voluntary, others obligatory. Some systems cover only public institutions, whereas others cover all institutions. Some countries have one system for all types of higher education, whereas others use evaluation based on a combination of general higher education criteria and profession-specific education criteria. Variation is also seen regarding publicity of accreditation results. A new problem is that most systems cover only national providers, thus leaving cross-border education providers outside any control; in some instances, such providers are licensed to establish a campus and

produce graduates in a country, but the graduates are not allowed to work there.

Elements of proper accreditation in higher education include foundation on a clear, authoritative mandate, independence of governments and education providers, transparency, use of predefined general and specific criteria, use of external review and procedures based on self-evaluation and site visits, authoritative decisions, and publication of the final report and decision.

In some parts of the world or some countries therein, accreditation of education is still not an accepted concept and other means of quality assurance are used—for example, governmental evaluation based on comparison of programs with general regulations, without use of institutional self-evaluation or site visits. Quality can also be ensured by selection procedures, entrance examinations, centrally regulated curricula, self-evaluation and inspections organized by the institutions themselves, use of external examiners, and requirement of national examinations before licensure.

In this chaotic situation, the WHO/WFME partnership decided to establish some principles to be used in accrediting medical schools and their programs. An International Task Force of experts from 23 countries representing all six regions met in Copenhagen in October 2004.[2] The group reached consensus about the role of the WHO and the WFME: The two organizations generally will not be accrediting bodies themselves, but should promote formulation of and review regional and national standards, promote institutional self-evaluation and use of external reviews, define guidelines for and promote establishment of accreditation systems, and work for improvement of the WHO *World Directory of Medical Schools*.[3]

There is particular difficulty achieving reliable accreditation in countries with only one or a few medical schools and thus a paucity of independent external experts. This situation requires international cooperation, for example by affiliating the medical schools with an accreditation system in a neighboring country or establishing regional or subregional accreditation systems.

WHO/WFME Guidelines for Accreditation of Basic Medical Education, based on the recommendations of the Task Force, were published in May 2005.[4] These guidelines, which should be seen as flexible recommendations, cover fundamental requirements of an accreditation system, the legal framework, the organizational structure, the standards or criteria, the accreditation process, types of decision, public announcement of decisions, and benefits of using accreditation.

The accreditation system must operate within a legal framework, either pursuant to a governmental law or decree or following rules and regulations approved by the government. It is emphasized that an accreditation system must be trustworthy and recognized by all: the medical schools, students, the profession, the health care system, and the public. The system must be based on academic competence, efficiency, and fairness. It must be known by the users, such as students and health authorities, and be highly transparent.

The standards or criteria used must be predetermined, agreed on, and made public. They can be either the WFME global standards[5] with the necessary national or regional specifications or a comparable set of standards specific to medical education.

The guidelines recommend a combination of institutional self-evaluation and external evaluation, and they recommend a decision process with the options of full accreditation, conditional accreditation, and denial or withdrawal of accreditation. The model followed is the system used by, for example, the Liaison Committee on Medical Education (LCME) in the United States and the Accreditation Council of the Australian Medical Council. According to the guidelines, the decisions on accreditation of programs must be made public, and publication of the reports on which the decisions were based, or at least a summary of them, should be considered.

In summary, by publishing the guidelines, the WHO/WFME partnership wants to emphasize the need for clearer terminology and procedures regarding accreditation, for independence of the accrediting agency, for transparency, and for the use of predefined, medical-education–specific standards. At the same time, the partnership recommends developing nonbureaucratic and inexpensive quality assurance systems with a realistic chance of succeeding in the developing world.

Definition of Global Standards

Many existing accreditation systems for medical education operate either without standards or with standards that are general for higher education or in some cases very concrete, focusing on details such as number of square meters per student and number of laboratory places.

It was therefore natural for the WFME to formulate standards that could be used not only for reforms but also for accreditation purposes. The trilogy WFME Global Standards for Quality Improvement covers (1) basic medical education,[5] (2) postgraduate medical education,[6] and (3) continuing professional development of medical doctors.[7]

The WFME Executive Council launched its ambitious program on international standards in a position paper published in *Medical Education* in 1998.[8] The standards were developed by three international task forces with altogether 76 experts from all five continents. Members of the Task Forces were selected on the basis of their expertise; geographical coverage was also an important consideration.

The trilogy was the essential background material for the 2003 WFME World Conference in Medical Education, titled Global Standards in Medical Education for Better Health Care. The conference resulted in worldwide adoption of the standards program[9,10] and gave the WFME a renewed mandate for its work with quality improvement of medical education worldwide. The implementation of the WFME global standards program for basic medical education has been ongoing since 2001, when the first international task force finalized its work. Outcomes have included a number of publications, presentations at more than 100 international meetings and conferences, and translations of the standards for basic medical education into 20 languages. The standards have been drawn on by reform

programs in more than 250 medical schools and have been used in national standard setting and accreditation systems in more than 50 countries.

In defining global standards, the task forces were aware of the dissimilarities between regions and countries regarding the basic conditions for and management of medical education. The WFME Task Forces also discussed the advantages and disadvantages of global standard setting (Fig. 1). Balancing advantages and reservations, the task forces concluded that the time had come to explore the possibility of common global standards for medical education.

The aims of the WFME project on global standards are first of all to develop standards and use them as a tool to improve medical education by stimulating those responsible for medical education to formulate their own plans for change and reforms and for quality improvement in keeping with international recommendations. The second aim is to use standards as an instrument in safeguarding internationalization of medical doctors by establishing a system of national and/or international evaluation and recognition of medical educational institutions and programs to ensure minimum quality standards.

In developing the standards in basic medical education, it became clear that specifying global standards in any restricted sense would exert insufficient impact and indeed could lower the quality of medical education in some places; one reservation was that standards tend to focus on minimum requirements, with a risk of driving quality downward. Thus, a lever for change and reform had essentially to be incorporated. This realization led to the decision to designate two levels of WFME standards: (1) basic standards that are to be met from the outset and are useful for accreditation purposes; and (2) standards for quality development in accordance with international consensus about best practice, to be used for reform purposes. For different nations and institutions, the degrees to which standards at the two levels can reasonably be met will depend on the stage of advancement of medical education.

The WFME standards are formulated at the institutional and educational program levels. They deal with all relevant aspects of structure and organization, the curricular content and teaching process, the learning environment, outcome competencies, and management. In the documents for each of the three phases of medical education, standards are structured within nine areas, each with about 35 subareas (List 1).

Comparison of the LCME and the WFME standards shows a high degree of congruence and mutual consistency.[11] Most of the WFME standards for quality development are included in the LCME standards. The LCME standards are, of course, more detailed, taking into account specific US traditions and needs; most of these specificities are, however, referred to by use of annotations in the global standards. The WFME standards may be more reflective of the expectations of society and requests of stakeholders in the health care sector. All basic principles are shared by both sets of standards, which are nonprescriptive and which should not restrict innovation but rather support improvement in medical education.

The primary intention of the WFME was to provide a new framework against which medical schools and other providers of medical education could measure themselves during institutional self-evaluation and self-improvement processes. Evaluation and improvement should be further developed by inclusion of appraisal, counseling, and site visits by external peer review committees.

From the beginning, it was also stated that global standards, depending on local needs and traditions, could be used as a template for national and regional standards with the necessary specifications. Such standards could then be used as criteria by agencies dealing with recognition and accreditation of medical schools and other educational institutions and their programs.

Promotion of International Quality Assurance and Recognition

The increasing international interest in assuring and recognizing quality in medical education has called for a number of initiatives, including promotion of national accreditation systems, establishment of international partnerships, collaboration in forums and conventions, publication of global databases, and meta-recognition of accredited institutions and programs.

Within the framework of the WHO/WFME strategic partnership, the WFME recently formulated a program to promote accreditation. This program is based on an assistance package including help in formulating national specifications of global standards, in establishing accreditation systems, and in conducting the various steps in an accreditation process.[12] Essential to this development was the definition of a WFME advisor function by an international task force.[13]

Collaboration among a number of relevant international partners—for example, the WHO, UNESCO, the WFME and its network, the Educational

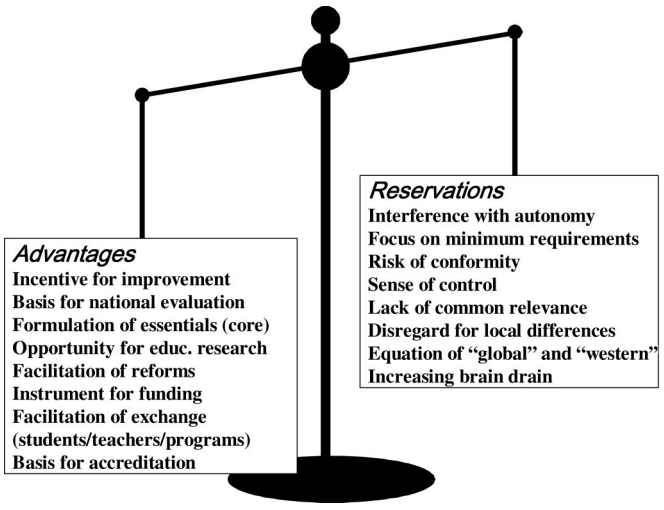

Figure 1 Advantages and reservations in defining global standards for medical education.

List 1

WFME Trilogy of Standards: Areas

Basic medical education	Postgraduate medical education	Continuing professional development (CPD)
1. Mission and Objectives	1. Mission and Outcomes	1. Mission and Outcomes
2. Educational Program	2. Training Process	2. Learning Methods
3. Assessment of Students	3. Assessment of Trainees	3. Planning and Documentation
4. Students	4. Trainees	4. The Individual Doctor
5. Academic Staff/Faculty	5. Staffing	5. CPD Providers
6. Educational Resources	6. Training Settings and Educational Resources	6. Educational Context and Resources
7. Program Evaluation	7. Evaluation of Training Process	7. Evaluation of Methods and Competencies
8. Governance and Administration	8. Governance and Administration	8. Organization
9. Continuous Renewal	9. Continuous Renewal	9. Continuous Renewal

Commission for Foreign Medical Graduates/Foundation for Advancement of International Medical Education and Research (FAIMER), the World Medical Association, and the International Association of Medical Regulatory Authorities—will be extremely important in ensuring the acceptance of necessary quality assurance instruments.

Regional collaboration regarding standards has been increasing. In 1975, the European Union signed a convention regarding mutual recognition of medical doctors. This Medical Directive,[14] which was recently renewed, defines, as a basis for mutual recognition and free movement of medical doctors in the European Union, minimum requirements for undergraduate medical education and for education of general practitioners and medical specialists. The requirements have not been revised during the 30 years since their establishment, and the expansion of the European Union to embrace 25 countries is creating problems in this regard because of different educational traditions in Eastern and Western Europe. The long-lasting coordination between the United States and Canada in the LCME collaboration and coordination of accreditation in Australia and New Zealand are other examples. New customs unions like Mercosur in South America and analogous entities in Africa and in Southeast Asia are also considering defining common educational standards and establishing mutual recognition of medical doctors. In the Arabic Gulf Region, a common accreditation system based on a modification of the WFME Standards was established in 2001. Likewise, the Central Asian Republics recently decided to coordinate their accreditation systems by using the WFME Standards. In the Western Pacific region, a set of regional standards[15] was formulated in 2001 based on the WFME Standards, which have also been drawn on directly in Australia, New Zealand, China, Malaysia, the Republic of Korea, the Philippines, and Vietnam.

A database containing information about the accreditation status of medical schools would greatly foster quality assurance and quality improvement of medical education because every institution would strive for inclusion. The WFME already in its 1998 position paper[8] emphasized the value of such a register of accredited medical schools.

Currently, there are three major databases listing medical schools: (1) the WHO *World Directory of Medical Schools*,[3] (2) the FAIMER *International Medical Education Directory* (IMED),[16] and (3) the Institute for International Medical Education Database.[17] The three databases list different numbers of schools, probably because of different ways of collecting data. The present WHO Directory is mainly a list of addresses and basic statistics, whereas IMED is now including qualitative data, such as information about accreditation. Inclusion in the WHO Directory is frequently misinterpreted or deliberately misused to indicate official recognition.

In recent years, the WHO has considered the future of the World Directory. It has now, because of requests from member states, decided to develop a new *Database for Health Professions Education Institutions* (HPEI) in order to (1) increase the ability to provide information on and monitor the educational background of the health workforce, (2) establish an instrument for national regulation of educational capacity and investment policies, and (3) establish and strengthen national accreditation. The WHO intends to expand the database to cover health professions other than medicine (both academic and nonacademic educational institutions). It plans to increase the amount of information about institutions and programs, including information about numbers of students admitted and numbers of graduates, attrition rate, ownership, management, and funding sources. Finally, and most important, quality-related information, for example about accreditation status (agency operating, criteria used, type of procedure, etc.), will be added to the database. The database will be Web-based only and will be regularly updated.

A model for collecting and processing data in the new HPEI database is shown in Figure 2. Data will still be collected from governments. However, the WFME and its network are supposed to assist the database administrator with information about accreditation issues.

The development of the FAIMER IMED database is an important inspiration for this development. It was of great importance that the ECFMG and FAIMER decided to develop a database that includes qualitative data. The ECFMG and FAIMER have been asked to assist the WHO with technical aspects of developing the HPEI database. In developing the new HPEI database, the WFME will continue to collaborate with the ECFMG and FAIMER with regard to collecting and presenting data relevant to quality assurance, including information about accreditation. In the future, it would be natural to join efforts and produce a single world register of accredited medical schools.

The plan described for the new HPEI Database will automatically lead to a kind of "meta-recognition" of accredited medical schools. This process of "accrediting the accreditors" will stimulate establishment of national

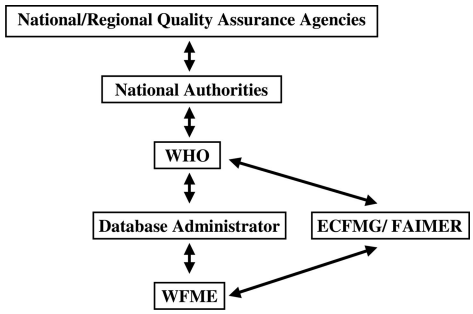

Figure 2 Model for collecting and processing data in a new World Health Organization (WHO) Health Professions Education Institutions Database. ECFMG = Educational Commission for Foreign Medical Graduates, FAIMER = Foundation for Advancement of International Medical Education and Research, and WFME = World Federation for Medical Education.

accreditation systems, recognize the work already being done by existing reliable accreditation agencies, and avoid unnecessary bureaucracy. The result will be the creation a global network of recognized accrediting agencies within medical education.

Conclusions

The following points deserve emphasis:

- Medical education is influenced by a number of forces that also dominate other parts of higher education.
- Medical education is facing major challenges because of globalization, including the increasing amount of cross-border education, and the proliferation of new medical schools.
- The new WHO/WFME Strategic Partnership to improve medical education will have a central role in reform processes and in promotion of efficient and transparent national accreditation systems worldwide.
- The WHO/WFME Guidelines for Accreditation in Basic Medical Education can serve as an instrument in this process.
- The WFME Global Standards, broadly endorsed in all six WHO/WFME Regions, can be used as template for developing regional and national standards with the necessary specifications.
- The need for international recognition of medical schools and other educational institutions and their programs calls for a number of initiatives, including international partnerships, international collaboration, and international agreements and common directives.
- Development of a global database of medical schools, which will include qualitative information such as accreditation status, will be the basis for future "meta-recognition" of institutions and programs and thereby create a basis for international recognition of medical education.

It is important that all efforts be joined in the endeavor to create effective and reliable instruments for quality assurance of medical education.

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