

# Quality Management in Medical Education between Theory and Application: Paradigm Shift or Falsification of Reality

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## Abstract

Quality management in medical education is not restricted to teaching and learning but also includes providing services to students. Many international, regional, and national organizations adopt global standards for quality improvement in medical schools. So, accreditation is considered an instrument to reach these global standards for continuous improvement in the performance of this medical institution. The accreditation process is usually representative, responsive, and appropriate to an institution accredited type depending on a peer review. It is carried out by accreditation organizations depending on specific criteria (national or regional or global standards). It is a certificate for proving the quality for a specific time and a guarantee for the graduate quality of medical schools that are acquiring a good reputation. However, the adoption of quality management in medical education is considered one of the contemporary challenges that are still faced many obstacles.

**Keywords:** quality; challenges; accreditation; medical education

## Introduction

Quality management is a commonly used term in most different work fields especially the health care system and educational field. The meaning of the quality term is a translation for well-core function achievement. Higher education is an important field that needs a quality management application wherein core functions of the university are teaching scientific research and community service. So, the quality management in higher education focuses on the learning process and the involved participants such as students, researchers, and community leading to well-learning achievement. To judge the quality of learning in the university, it should be identified the requirements of ideal learning that can give a learning opportunity for students all-time in all situations transforming them into epistemologists and flexible thinkers [1].

Quality in medical education is a used tool to ensure that education is more relevant to the socio-economic needs of the community in comparison with other medical educational institutions. Quality management is not only applied to the teaching and learning process such as education and research but also it should apply to providing services to the student which are divided into academic such as the library and administrative services such as cafeteria [2].

In more detail, implementation of the quality principles in a medical educational institution should include management, service, and every sub-entity in the institution such as university hospital. Noteworthy, quality management means continuous improvement, management commitment, outcomes reflecting the requirements and needs of the customer, mutual interdependence among the teamwork based on competition, and monitoring the work to solve the problems. Thus, quality management is considered a package of comprehensive management practices that are able to create an organizational culture empowering everybody to contribute in the work and achieve the quality of the service or the end product for achieving the long-term benefits to all institution members and the society based on customer satisfaction [3].

However, the adoption of quality management in medical education institutions is considered one of the contemporary challenges that are still faced many obstacles that decrease the enthusiasm of academics for the application of quality management such as the absence of the shared vision and participation in the decision-making, and ineffective communication inside the institutions [4].

## Importance of Quality Assurance in Medical Education

The impact of the health care level on the health status of people is not only an indicator of the economic status and management system but also reflects the quality level of the involved staff such as physicians and nurses. The output of medical education is responsible for the quality level of medical graduates, so any improvement in medical education will reflect indirectly on the health of people in the long grand. From this view, there is a necessity to apply the highest scientific and ethical standards in medical education that are based on innovative instruction tools and creative learning methods [5].

From this point of view, many international, regional, and national organizations started to adopt global standards for quality improvement in medical schools. The World Federation for Medical Education (WFME) launched international standards for the quality improvement in medical education that cover different phases of medical education including continuing professional development besides basic and postgraduate medical education. These standards are considered an accreditation instrument of medical schools wherein they can secure global, applicable, transferable physician competencies for a readily accessible of better health care. In the same context, there are Eastern Mediterranean Regional Accreditation System standards that are a regional standard for the accreditation in the health professions education wherein it is created by the Eastern Mediterranean Regional Office of the World Health Organization (EMRO, WHO) [6].

## Standards of Quality Assurance in Medical Education

No doubt that different types of programs for quality improvement and accreditation standards have the same main aspects while the different aspects may be little and limited to the arrangement of standards and indicators. The first standard of any quality improvement and accreditation system is usually the vision and mission of the institution associated with the corresponding performance indicators such as participation in its formulation, academic autonomy, and educational outcomes [7].

Resources are considered another quality standard wherein it is classified into human resources, physical and technical resources. Human resources are measured according to selection criteria, staff-student ratio, job description, duration of the work time for the faculty, capacity building, and health professional's contribution while physical and technical resources are measured according to availability of teaching and learning facilities, availability and quality of technical resources, teaching hospital facilities and community outreach [8].

Students are an essential standard that is specified into four indicators such as admission policy and selection, student support and counseling, and student representation. Moreover, this standard includes the degree of agreement of admission student policy with mission and objectives, transparency of admission policy, suitability of admitted students' number with institutional resources, students transfer policy, foreign students, students support (financial and health care), Care programs for outstanding, defaulters and those with special needs, students' activities, academic monitoring, students' satisfaction, and scholarships [9].

Aspects of educational program standard (curriculum) are determined according to performance indicators such as curriculum model and structure, instruction methods, basic biomedical sciences, behavioral, and social sciences, medical ethics, clinical skills, composition and duration, program management, linkage with medical practice and the health care system. This standard focuses on the suitability of the educational program for needs of the work market, degree of flexibility for the change response, design of the educational program and its agreement with

institutional mission and objectives, the target output of the program, level of progress, renewal of program and development. On another hand, student assessment is considered an indicator for teaching and learning facilities' standards wherein it includes the methods of assessment, reliability, and validity, the relation between assessment and learning. Also, it depends on the analysis of assessment results in comparison with other programs [10].

Research is one of the main standards wherein it is measured based on its institutional plan, the efficiency of research through multi-publishing, productivity, and genuinely besides other indicators such as the fund and output evaluation, and the research skills development. Postgraduate programs are another standard for quality assurance in medical education whereas it is an indicator for continuous medical education and professional development. The policy of postgraduate program according to national health needs with social accountability perspective is considered an important indicator for this standard with other indicators such as the number of granted scientific degrees, the educational process of the postgraduate program, number of postgraduate students, renewal of the rules of postgraduate programs, application of academic standards on Ph.D. and master programs, follow up and evaluation, and postgraduate students satisfaction [11].

Program evaluation standard focuses on the mechanism of evaluation, student and teacher feedback, student performance, and the involvement of stakeholders. This standard depends also on institutional self-evaluation and its reflection on total institutional performance as a measurable indicator besides practice and audition. On the other hand, the standard of continuous renewal focuses on updating with developing educational and organizational processes based on a revision of medical school policies and practices as indicators. It is also measured by readiness and resistance [12].

Lastly, the indicators of governance and administration standard should include governance structures, academic leadership, budget and resources allocation, administrative staff and management, and interaction with the health sector. In addition, sponsorship, criteria of employment and promotion, training programs, evaluation disciplines, employee satisfaction, the environment of the work, performance, and its relation to rewards [13].

## Accreditation in Medical Education

Accreditation is upgrading of programs and performance in medical schools by evaluation of the program's qualification activities. This evaluation is done via the application of specific criteria that are based on achieving the required standards of quality in medical school. The accreditation covers many institutional academic activities such as educational programs, research, scholarly activity, and community involvement. It is a supervisory, legal, and collegial process based on the self and peer's evaluation. The accreditation assesses the quality of the institution and academic program for getting more improvement that certifies this program meets the required standards and then it can produce highly efficient graduates [14].

Noteworthy, accreditation may be institutional that is accreditation of whole institution (university) including the adequacy of resources, provision of academic services, curriculum, student achievement, administrative policies, and procedures. On another hand, programmatic accreditation includes programs, departments, or schools such as medicine or pharmacy programs whereas it is a part of the institution. Thus, institutional accreditation guarantees the institution to ensure its quality to certify a program, and then programmatic accreditation is done as a second step [15].

## How to Accredit a Medical Program?

There are several steps that should be carried out to accredit a medical program. Firstly, voluntary request for accreditation is done by institutional authority. Secondly, a self-study (internal review) should be conducted by the medical school according to the above-mentioned standards as a guide. Thirdly, external review is carried out by a team of peers (site visit) wherein they visit the medical school to review the evidence and write an assessment report to the accreditation authority. Fourthly, the accreditation organization reviews the evidence and recommendations to make the judgment and communicate the decision to the medical school. Worthwhile, the final accreditation decision should depend on institutional compliance with the principles of accreditation, the core requirements, and the comprehensive standards. Fifthly, Re-evaluation of the program after a definite time (5-7 years) is carried out for re-accreditation [16].

### Self-Study

Self-Study is a used tool to describe and evaluate the educational program. It is a systematic and comprehensive examination of educational program components based on its mission. On another hand, this evaluation is considered a self-assessment to identify the strength and weak points of this program determining the extent of the program's success in achieving its objectives [17].

Moreover, self-study is a practical method for institutional identification to reform the institutional strategy based on the mission of this institution. It determines the practical necessary steps that correct any limitations in the program based on careful evaluation of obtained output from the involved teamwork; it is a method for a change, not a maintenance procedure for the current situation. It also gives a chance to construct an institutional strategic plan based on the valuable analysis of objectives, resources, students, and achievements. Therefore, self-study is considered a useful tool for accreditation because it detects the institutional shortcomings and strengths with a determination of the available opportunities to achieve the target goals of medical school. In addition, it satisfies the accreditation requirements with achieving the institutional productive outcome through overcoming the problems [18].

So, there are many practical steps that should be achieved to perform the self-study. At first, the teamwork should be representative of all institutional sectors such as administration, faculty, and the student body. Secondly, a prospectus should be developed before the study starting to guarantee comprehensive self-study. This prospectus should determine the different revised program components, the responsible person for each task, the review procedure, timetable, modality of data collection, decisions making and the progress measurement. Thirdly, the working document should be developed to facilitate further program revision via an accurate statement of the current program status [19].

Implementation of the self-study should include many steps; nomination of the self-study coordinator, the self-study task force appointment, the self-study committee's formation, the medical school database completion, distribution of the completed data sections to the task force and committees, revision, and analysis of the database, preparation of the reports to forward it to the task force, the revision of committees reports and prepare the final, summarized self-study report by the task force. The self-study report should include institutional strengths, issues needing attention, recommendations for the identified problems, plans, and the timetable for maintaining the institutional strengths and addressing the problems [20].

Noteworthy, data collection strategy is a key of the self-study success and an indicator for its good planning; so, it should collect the data from the representative sample of direct and indirect involved individuals in the program. Self-study is not only data collection but, it is also an evaluator

for further solutions or procedures that will manage the discovered problems or defects during the data collection. Furthermore, the data collection in the self-study should not miss the data of the graduates via follow-up of the program graduates in the clinical field including their performance in the different aspects of the work activities based on their institutional objectives. No doubt that judgment on the quality of any program depends on the evaluation of the output of this program [21].

In addition, it should mention that there are different methods for data collection such as questionnaires, interviews, direct observations, reporting, registration besides documents and records that consist of databases, meeting minutes, reports, financial records, and newsletters. Moreover, data analysis should be done wherein every standard is analyzed technically. Therefore, the description of every standard should be comprehensive, covering all related issues, compliance with the standard, and documentation besides it should include a benchmark for this standard, methods of data collection, SWOT analysis, and action plan [22].

SWOT analysis of standard is the research part of the self-study wherein it should include strength points that are answers for some questions such as what does the institution perform well? what are the distinguished resources of the institution? what are the competitive advantages of the institution? Besides, weak points that should be expressed such as lack of specific experience and resources, disharmony of staff, misallocation of resources, lack of access to technology, and incoordination. Available opportunities that emerge from the real resources of the institution should also be mentioned. SWOT analysis of the standard should also include the expected threats that may represent obstacles and problems in the future. Finally, an action plan of every standard should be constructed based on the priorities determining the responsible persons for every action, timetable, and the needed resources [23].

Worthwhile, internal quality assurance means self-evaluation (self-study) while external quality assurance means accreditation. Accreditation confirms that the institution has a distinguished character and identity wherein it approves that action which was taken for the quality improvement was successful.

### Obstacles, Threats, and Concerns

Unfortunately, there are many obstacles, threats, and concerns that face the accreditation application in the medical education field. Firstly, organizational resistance to the change is considered an essential obstacle while the lack of awareness for continuous quality improvement is the second obstacle. Thirdly, the increased staff workload and insufficient staff training represent another obstacle in the road to accreditation. Fourthly, there are not sometimes applicable accreditation standards to use at the national level besides there are not sufficient measurement tools that can judge the performance outcome [24].

On the other hand, the lack of the regulatory approach to compulsory participation and rewards of participation represent major threats besides funding reduction and opportunistic behaviors. However, there are concerns about accreditation programs that may lead to organizational changes in standardization and decision-making processes rather than actually improved quality. Furthermore, there is a lack of evidence on the efficiency and effectiveness of these accreditation programs and the lack of evidence about the factors that may be affecting the successful implementation [25].

In a related context, there are numerous studies in different countries especially developing countries revealed numerous challenges to the quality assurance in medical education and accreditation for medical schools, In Pakistan, the important challenges were the weak regulatory capacity of the accrediting body, violation of rules, lack of skilled inspectors and objective assessment criteria [26].

In India, there are not mandatory regulatory mechanisms for quality assurance in medical education such as accreditation, validation, and audit by external agencies. So, the quality assurance instrument of medical education is voluntary. Thus, there is a need for creating some changes in the quality programs to support faculty development and encourage institutional improvement to meet the global expectations [27].

In United Kingdom, there is an overlap between quality assurance, quality management, and quality control with duplication and confusion of responsibilities because of conflicting missions, fragmented accountability, and lack of collaboration. So, there is a need to clarify the structure of quality processes and how organizations can work collaboratively. Moreover, there is a debate about the role of self-assessment that reflects several challenges in relation to purpose and autonomy while institutional self-assessment can positively drive quality improvement. Thus, there are some issues that emerge related to validity, reliability, and internal quality review [28].

In Switzerland, the accreditation program provides all relevant stakeholders with transparent and independent information on the quality of the different study programs and highlights the significance of on-site visits. But lack of cooperation between the accreditation agency and all involved stakeholders represented a major shortcoming in the first phase of implementation of the accreditation process. However, many initiatives have since been taken to avoid these problems in the future. Moreover, there are challenges for the development of the accreditation system in medical education programs such as the establishment of mechanisms and processes for continuous quality enhancement within institutions in Switzerland. So, it is important to engage all relevant stakeholders to develop a culture of quality through which systems and processes evolve and adapt over time to achieve the aim of producing graduates who can meet the current and future health needs of the community [29].

In Saudi Arabia, the national authority for accreditation has been conducting workshops, courses, and orientation sessions for faculty staff and stakeholders of medical education to educate and orient them about the accreditation process, criteria, and standards. This was done to encourage and establish a culture of quality management rather than how to be accredited. In addition, medical schools in Saudi Arabia are adopting new trends in medical education such as problem-based and student-centered learning as quality enhancers besides courses of medical ethics and communication skills. However, new challenges emerged because of the rapid establishment of new medical schools associated with the adoption of new trends in medical education. These challenges include insufficient qualified faculty staff, lack of experience for selection of the best curriculum to adopt, shortage of teaching and training facilities, huge intakes of medical students with unclear criteria of selection, absence of vision and a clear management plan for faculty staff development to deal with issues arising. So, these challenges led to shortcomings in the implementation and management of quality programs in many medical schools in Saudi Arabia [30].

### How to Involve the Staff in Accreditation?

The staff may be involved in the accreditation program via different methods such as awareness motivation, training workshops, promotion of active participation, and attaining equality for all. Awareness may be achieved by a formal discussion, informal discussion, interviews, and seminars while the motivation of staff may be via rewards and continuous communications. Moreover, training workshops provide an acquired new knowledge and skills for staff to be fit for participation wherein participation of staff in the decision making and all steps of the process may promote their active participation in the accreditation program. Noteworthy, the absence of discrimination among staff besides equal opportunities may also encourage the staff to involve in the accreditation program [31].

### Conclusion

Quality management in medical education is a used tool to ensure that education is more relevant to the socio-economic needs of the community in comparison with other medical educational institutions. There are two famous standards for accreditation that focus on medical education and its relation to health care services; the world federation for medical education (WFME) has a global standard for quality improvement and accreditation while the eastern Mediterranean regional office of the world health organization (EMRO, WHO) has a regional standard. A self-study is a tool of the accreditation process that describes and evaluates the educational program identifying the weak and strong points of the program with providing action plans for development and improvement in the future. However, the management of quality programs on the ground was marred by many shortcomings in performance and did not achieve the desired target despite the efforts, time, and money expended on them.

In this context, quality management can be summed up in one phrase is "Say what you do, Do what you say, prove it", but now the reality has become exactly the opposite wherein there are many shortcomings such as an inability of the accredited medical school to achieve a scheduled disciplined course of study for a period of one or three weeks. Moreover, there is no mechanism for quality control in accredited medical schools throughout the accreditation period, which lasts from five to seven years. In addition, the site visits of the accreditation committees have become festive for the visit of an official for whom every medical school prepares to see everything that is beautiful and hides everything ugly behind it.

Furthermore, the goal of accreditation and quality programs was getting the international accreditation that allows the graduate to transfer and work through the countries of the world without additional tests or equivalencies for local certificates, but unfortunately, the biggest goal now is how to renew the national accreditation only. Finally, the exerted efforts via the faculty members in quality and accreditation programs led to a negative impact on the educational process and the level of teaching due to the involvement of faculty in the administrative work and the documentary cycle in an attempt to falsify reality to make it appropriate for what was written on paper (self-study) that aim to formulate a reality which is far from the truth.

### Recommendation

It should establish a mandatory mechanism for quality control before and after accreditation of any medical school to ensure eligibility of the medical program to be accredited. Moreover, it is recommended that national accreditation should be the first step of international accreditation via one worldwide accreditation agency for the globalization of medical education wherein national accreditation should not be the endpoint of the quality program.

### Declaration of conflicting interests

The Author declares that there is no conflict of interest.

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