

Research Article

Implementing Accreditation Standards in Academic Medical Programs is Necessary to Trust Higher Education: The Experience of Two Academic Programs at Qassim University, Kingdom of Saudi Arabia

Abdelmarouf Hassan Mohieldein

Department of Medical Laboratories, College of Applied Medical Sciences, Qassim University, Buraidah, Saudi Arabia

ORCID:

Abdelmarouf Hassan Mohieldein: <https://orcid.org/0000-0003-2105-3438>

Abstract

Background: Quality assurance (QA) is becoming more critical in higher education (HE) worldwide. Quality in HE can be managed by QA, quality improvement, and quality control. This systematic review demonstrates the benefits of QA and academic accreditation in HE by examining the National Commission for Academic Accreditation and Assessment (NCAAA) accreditation standards and two accredited academic programs at Qassim University (QU) in the Kingdom of Saudi Arabia (KSA).

Methods: Elton B. Stephens Company (EBSCO) e-library was used to collect and retrieve literature from December 2022 to January 2023. Only English-language full-text papers were reviewed and cited.

Results: To assure medical education quality and encourage healthcare workforce confidence, medical educational institutions must be overseen by a QA system, such as a formal accreditation system. The World Federation of Medical Education set “Trilogy” global standards for quality improvement in medical education. The ambitious “Vision 2030” of KSA invests a large percentage of its Gross Domestic Product in education to address the significant challenges of educational quality management. The sole statutory organization in KSA that evaluates and accredits all public and private HE institutions and programs is the National Commission for Academic Accreditation and Assessment (NCAAA). The NCAAA’s accreditation standards are generally acknowledged as good practice in HE worldwide and have been adapted to KSA higher education’s special circumstances. NCAAA has recently granted accreditation to two academic programs offered by College of Applied Medical Sciences, QU.

Conclusion: Accreditation promotes “added value” under the win-win-win “WWW” paradigm, where stakeholders win first, then the program, and finally the community.

Keywords: accreditation, quality assurance, Qassim University, College of Applied Medical Sciences, Kingdom of Saudi Arabia

Corresponding Author:
Abdelmarouf Hassan
Mohieldein; email:
mabdelmarouf@hotmail.com

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1. Introduction

Quality is derived from the Latin word “qualis,” which means “an inherent or distinguishing attribute” and is used to describe “degree or level of perfection” [1]. Students, alumni, employers, teaching staff, professional bodies, local governments, healthcare administrators, and policymakers all have different definitions of what “quality” means in higher education (HE) [2, 3]. This systematic review demonstrates the advantages of quality assurance (QA) and academic accreditation in HE by examining the National Commission for Academic Accreditation and Assessment (NCAAA) accreditation standards and two accredited academic programs (Doctor of Optometry “OD” and Medical Laboratory Sciences “MDL”) in the College of Applied Medical Science (CAMS) at Qassim University (QU) in Kingdom of Saudi Arabia (KSA).

2. Methods

The Elton B. Stephens Company (EBSCO) e-library was utilized between December 2022 and January 2023 for the purpose of collecting and retrieving relevant literature. Only full-text articles published in English were considered, reviewed, and cited. Additionally, the NCAAA and QU websites were visited, and handbooks and manuals were downloaded. HE, medical education, accreditation, standards and guidelines, QA, total quality management (TQM), and KSA were the search keywords used.

2.1. Higher education (HE)

HE is defined as formal educational programs offered to students at the postsecondary level, typically leading to an academic degree or diploma. HE is intended to equip students with broad disciplinary understanding and the skills necessary to apply in the workplace [4]. As a result of technology advancements, rising demand, new finance structures, widespread engagement, and mobility of persons and expertise, educational systems have undergone significant change in practice. Hence, the quality in HE is becoming increasingly important in order to deal with these challenges [5, 6]. There are five different perspectives on quality in HE. First, “Excellence” which means attaining the highest standards and meeting a minimal set of requirements; second, “Perfection,” that is, conformity to specifications with zero defects, getting things right the first time; third, “Fitness for its intended use,” that is, satisfying the needs of the consumer; fourth, “Value for money,” that is, efficiency and cost-effectiveness; and fifth, “Transformation,” that is, continuous improving, enhancing, and empowering [7, 8].

2.2. Quality assurance (QA) and total quality management (TQM)

The vast majority of HE institutions have embraced quality-oriented tools in order to improve “quality of education” and provide graduates who are highly effective and efficient to fulfill local and global labor market demands [9, 10]. Therefore, universities have begun to manage the quality of their education and to exhibit business-like behavior in order to meet the demands of the labor market and national and international competition [11–13].

QA, quality improvement, and quality control are the three major independent approaches that can be used to manage the quality of a service such as education. The steps in the process of improving quality are as follows: evaluating current performance levels and the environment in which the institution operates; identifying strategic priorities for improvement and setting objectives; creating plans; putting those plans into action; monitoring what occurs and making any necessary adjustments; and finally evaluating the outcomes [14]. Consequently, adherence to the standards should ensure the quality of education, encourage ongoing quality improvement, and measure quality output, all of which will ultimately result in high-quality education [15]. The implementation of TQM in education is the proper strategy to achieve the desired goals through a systematic planning, executing, and assessing in teaching, learning, training, and research [12, 16]. That is to say, the processes of QA in institutions should include not only the educational programs, but also other concerns such as the facilities and equipment, staffing, relationships with the communities that are served by the institution, and the administrative procedures that link all of these things together. That’s why it’s important for a QA system to engage faculty and staff from all around an institution, not just those who run classes [4]. Five pillars and three foundations make up the new approach for quality management systems that have recently been developed. The five pillars are context, structure, process, outcomes, and impact that make up the framework. The three foundations are science, practice, and ethics which all constitute the competency [17].

2.3. Evaluations of quality management in HE

The two key factors in evaluations of quality in HE include the degree to which goals and objectives are met as well as conformity to commonly accepted standards of performance. The goals and objectives should be derived from the mission statement of the institute that is obviously articulated and suitable for the nature of the institute, national trend, and community needs [14].

The European education ministers authorized standards and guidelines which form the framework for QA in the European Higher Education Area (EHEA) [18]. The Bologna Declaration and the Lisbon Strategy, two reform initiatives in Europe, accelerated the HE reform process, leading to the adoption of QA systems or QA regulatory bodies in about half of the world's countries [20].

Furthermore, in response to growing patient populations and a worldwide scarcity of physician or other healthcare professionals, there have been a remarkable increase over the past half-century in the number of institutions offering undergraduate medical education. Additionally, there are substantial differences in the structure of undergraduate medical education around the world, how institutions evaluate the quality of education, and a growing need for international mobility for study and employment [21–23]. Due to the aforementioned factors, it is imperative that medical educational institutions be subject to oversight of QA, such as formal accreditation systems, in order to guarantee proper operation [24]. HE institutions are required by QA authorities to adjust their processes and operations (the means) so that they are more aligned with the desired outcomes (the end, i.e., their graduates) [25].

Accreditation is a key part of the QA system; therefore, QA agencies in the EHEA forced HE Institutions to step outside of their comfort zone in order to meet quality standards, employing a methodology based on self-assessment and peer review [26]. The World Federation of Medical Education (WFME) established “Trilogy” of global standards for quality improvement in medical education which includes: Basic Medical Education, Post Graduate Medical Education, and Continuing Professional Development [27]. The World Health Organization, the World Medical Association, and the International Association of Medical Regulatory Authorities have all endorsed the WFME standards. The WFME standards serve as a template for the development of national and regional accreditation systems all around the world [23]. Numerous medical education programs, including the US Education Commission for Foreign Medical Graduates, have adopted the WFME Standards with the appropriate modifications. The WFME standards and accreditation systems contribute to ensure the quality of medical education and to fostering trust in the healthcare workforce. WFME investigates whether or not accreditation agencies adhere to the requirements and criteria that have been established [28].

2.4. The Philosophy of Accreditation

The term “accreditation” is defined by the European Consortium of Accreditation as a formal and independent judgment stating that an HE institution and/or programs offered

meet specific standards. Accreditation is the process by which educational institutions and/or programs are evaluated on a periodic basis in accordance with a predetermined set of criteria, standards, and procedures based on a quality management approach and held accountable by formally designated external regulatory bodies at the government level [22, 29, 30–32]. Accreditation is a voluntary peer-review process that institutions and/or programs of HE agree to and apply for to ensure and improve the quality of the education they offer [33, 34]. Hence, it has become a challenge for HE institutions and programs to improve the quality of medical education curricula and subsequent training programs across the learning continuum in order to increase the approved competitiveness of medical education graduates [35, 36]. Additionally, HE programs and institutions are required to achieve high standards in teaching, research, community development, and innovation [37].

Among the many possible purposes of accreditation systems are the following: ensuring that graduates of accredited programs have competitive opportunities in the global labor market; promoting an appropriate learning environment; encouraging ongoing institutional improvement; facilitating the QA mechanisms in institutions for monitoring the overall educational activities toward acceptable and meaningful outcomes; positively impact the institution management strategy to facilitate long-term success and organizational culture; stakeholders' positive perception of accredited programs as a valuable asset in practicing and implementing quality; and improve the institution's reputation for QA and innovation [13, 22, 24, 32, 34, 38–40].

Accreditation authorities or agencies can be part of a country's government's ministry of education or an independent body whose decisions are recognized by the government [6].

Around the world, there are numerous organizations that can grant accreditation [9, 41–43]. The Sudan Medical Council (SMC) and the Ministry of Higher Education and Scientific Research are the two governing bodies in Sudan responsible for overseeing and accrediting medical institutions [44].

2.5. Quality in Saudi Arabia

Undergraduate medical education in KSA has experienced rapid growth in recent years, with the number of medical institutes increasing by over 200% in the previous five years alone. In addition, several students were sent to the United States and Europe to study medicine and other health-related fields [29]. As part of the ambitious "Vision 2030" of KSA, the Saudi government invested a significant amount of funds of its Gross Domestic

Product to the field of education in order to address major challenges associated with the management of educational quality [45].

The National Commission for Academic Accreditation and Assessment (NCAAA) was founded in 2004 as a result of a significant initiative by the nation's Higher Education Council (HEC), as per Royal Decree No. 7/B/6024 dated 9/2/1424 H. (April 12, 2003) [34, 45]. NCAAA, which is part of the Education & Training Evaluation Commission (ETEC), is the only statutory body in KSA responsible for evaluating and accrediting all HE institutions and programs in both public and private sectors. NCAAA is an independent authority that reports directly to the Higher Council of Education in KSA to achieve three major quality objectives: the quality of students' learning outcomes, the efficiency of management and support services, and the evaluation of the quality and impact of research and community development contributions [46]. The goal of accreditation is to acknowledge quality, not "fail" institutions or programs that may be having difficulties. Therefore, before an accreditation assessment, processes and other standards are checked. The review after that will make a judgment about the quality of what is done [47]. By identifying and simplifying the evaluation process and procedures, NCAAA is able to carry out the accreditation process and procedures for academic programs in an efficient and practical manner. The self-study report (SSR), one of the documents analyzed by the NCAAA, serves as the foundation for the on-site visit by an NCAAA-appointed accreditation team. SSR includes a thorough examination of the program's objectives, educational resources, and effectiveness, as well as administrative and evaluative data from stakeholders. Following the completion of the on-site visit, the Chair of the Reviewers Panel submits the initial draft report to NCAAA. The report may include commendations (for activities or processes that are of extremely high quality and go beyond basic expectations), recommendations (actions needed by the program to complete or to be revised or modified in order to maintain educational quality), and suggestions (advice to the program that may wish to follow or respond). The Accreditation Review Committee issues the accreditation decision, which is subsequently confirmed by the Accreditation Council, followed by the notification of the program's accreditation status. Based on program evaluation, the accreditation decision may be one of the following: full accreditation, conditional accreditation, or denial of accreditation. Full accreditation is valid for five years, while conditional accreditation is valid for up to two years. The academic program, whether fully accredited or conditionally accredited, prepares annual reports to show progress toward resolving the conditions and/or implementing the recommendations contained in the accreditation report [34, 48]. Figure 1 summarizes NCAAA academic program accreditation steps:



Figure 1: Steps for program accreditation by NCAAA, KSA. Retrieved from Education & Training Evaluation Commission [49].

2.6. Accreditation for CAMS's programs, QU

QU adheres to quality policies that are in line with the NCAAA's quality standards. QU is fully committed to maintaining its NCAAA accreditation and ensuring that its academic programs and administrative units meet NCAAA quality standards. QA processes are applicable to all departments within the QU and are an essential component of routine management and planning processes, where performance metrics are primarily focused on outcomes. QA units were established in all of the University's colleges, programs, deanships, and administrative units. Multiple handbooks, guidebooks, and manuals publicize and thoroughly describe terms of reference, duties, tasks, procedures, and so on [50].

The NCAAA has developed a set of 11 standards (Program Accreditation Standards 2009) that are generally accepted as good practice in HE all over the world and have been adapted to the specific circumstances of HE in the KSA. Five categories make up the 11 standards: First, "Institutional Setting" that includes mission and objectives (standard#1), governance and administration (standard#2), and management of QA and improvement (standard#3); second, "Quality of Learning and Teaching" that includes learning and teaching (standard#4); third, "Support for Student Learning" that includes student administration and support services (standard#5) and learning resources (standard#6); fourth, "Supporting Infrastructure" that includes facilities and equipment (standard#7), financial planning and management (standard#8), and employment processes (standard#9); fifth, "Community Contributions" that includes research (standard#10) and institutional relationships with the community (standard#11) [4]. Doctor of Optometry (OD) program in CAMS at QU has been fully accredited by the NCAAA in November 2017. This accreditation is contingent on the OD program's adherence to the 11 standards

listed above, all of which are in line with the standards set forth by the National Qualifications Framework (NQF). The NQF specifies general requirements for credit hours and standards for learning outcomes at each qualification level. Evaluation of quality during OD accreditation processes were based on evidence such as self-assessment reports, evaluation of the outcomes of processes, stakeholders' satisfaction surveys, independent expert opinion, key performance indicators "e.g., statistics on course and program completions, employment outcomes, student/faculty ratio, faculty qualifications, faculty turnover, volume of research publications per faculty member, research citations, commitment to community service," descriptions of orientation programs for new faculty and students, and faculty evaluation and promotion criteria [4].

In 2018, the NCAAA revised its standards for accreditation of academic programs, consolidating them into six standards. These standards are as follows: "mission and goals"; "program management and quality assurance" with substandards: program management, program quality assurance; "teaching and learning" with substandards: graduate attributes and learning outcomes, curriculum, quality of teaching and students' assessment; "students"; "teaching staff"; "learning resources, facilities, and equipment" [50]. The Medical Laboratory Sciences (MDL) program at CAMS, QU recently in May 2022 met the requirements and obtained the NCAAA academic accreditation. This is in accordance with the six revised standards that have been implemented by the NCAAA. The MDL program demonstrates adherence to the optimal standards and ensures that it provides effective educational services. The MDL program has an internal QA system that includes all stakeholders in order to foster a culture of quality. The MDL program was preparing for accreditation about three years before the real on-site visit when the QU rector signed a contract with the NCAAA on its behalf.

3. Conclusion

The processes to fulfill accreditation's standards are laborious and must be done on a daily basis. However, they provide opportunities for the program to improve and grow. Accreditation instills the concept of "just culture" among the program's stakeholders, in which every member can be active to the extent that he or she can participate, learn, identify weaknesses, and establish action plans for resolving the weaknesses without fear of repercussions. The concept of "added value" is given additional support through the process of accreditation, which enables us to assert that it will reflect the win-win-win "WWW" model, in which the stakeholders come out on top as the first winner, followed by the program, and then by the community as the third winner.

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Ethical Considerations

Not applicable.

Competing Interests

The author has no competing interests.

Availability of Data and Material:

Data will be available upon request.

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