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## Recommended Citation

Tariq, M., Ali, S. A. (2014). Quality assurance and its application in medical education.. *Journal of the College of Physicians and Surgeons--Pakistan*, 24(3), 151-152.

**Available at:** [http://ecommons.aku.edu/pakistan\\_fhs\\_mc\\_med\\_med/204](http://ecommons.aku.edu/pakistan_fhs_mc_med_med/204)

# Quality Assurance and Its Application in Medical Education

Muhammad Tariq and Syed Ahsan Ali

There is no single definition of quality as it is a philosophical and relative concept and means different things to different people and hence may demand different quality outcomes and methods of quality assessment. Indeed, the notion of quality in higher education is complex and dependent upon perspectives of different stakeholders and the criteria that each stakeholder uses when judging quality.<sup>1-4</sup>

Harvey and Green grouped differing conceptualizations of quality into five discrete but interrelated dimensions and viewed quality as exceptional, as perfection or consistency, as fitness for purpose, as value for money and as transformative.<sup>2</sup> The quality as exceptional implies that quality is high standards. The perfection or consistency focuses on process and sets specifications that it aims to meet perfectly. Quality as fitness for purpose suggests that quality has meaning in relation to the purpose. Quality as value for money has to do with efficiency and cost-effectiveness. Quality as transformative is rooted in the concept of qualitative or a fundamental change in an individual (a student or trainee).

The quality assurance and total quality management philosophy, which initially emerged from industrial and commercial practice, has soon embedded very much into the higher education and both internal and external quality assurance are now high on agenda.<sup>5</sup> Therefore, ensuring quality of teaching and learning in higher education institutions is of major concern.<sup>6</sup> Quality assurance can be defined as the planned and systematic activities put in place to ensure that quality requirements of an educational program are fulfilled.<sup>7</sup> The quality assurance is a cyclical process, where quality of the educational program is measured, the collected data are judged to identify strengths and weaknesses and an improvement plan is delineated.<sup>8</sup>

In an educational setting like undergraduate medical education or postgraduate residency program, quality assurance can focus on the quality of curriculum and assessment, quality of teaching staff, faculty development, and also on input processes, output and human resource management.<sup>5</sup> The quality assurance process

is a systematic evaluation of all aspects of an educational program by involving all key stakeholders, structural evaluation carried out at regular intervals and the evaluation data is judged against pre-defined standards and is integrated with clearly defined responsibilities and considered to be an integral part of organization's work activities.<sup>8</sup> In order to assess the quality of an educational program, different perspectives of all key education stakeholders and different quality dimensions need to be considered. Qualitative or quantitative assessments need to be used as snapshots of current practice or for benchmarking through a longitudinal study.<sup>1</sup>

Stalmeijer emphasize on two main goals of quality assurance as collecting data either for accountability for detecting weaknesses in an educational program or quality improvement to diagnose weaknesses, and generating suggestions for improvement.<sup>9</sup> In higher education, an overall shift from accountability end of the spectrum to improvement end is stressed.<sup>4</sup> However, the balance differs between different institutions. One of the models used frequently in Industry for continuous quality improvement is Deming's or PDCA cycle and is consists of four interrelated elements: plan-do-check-act. It is a cyclical process and is adapted for benchmarking with the purpose of self-regulation and quality improvement in teaching and learning.<sup>10</sup>

In order to conduct a successful quality assurance process a multipronged approach is vital, where multifaceted quality evaluation instruments may be needed. If the goal is accountability, a questionnaire filled out by students or trainees at the end of the program may be required. On the other end quality improvement requires comprehensive data evaluation, which is gathered through more diagnostic questionnaires with both quantitative and qualitative components, interviews, focus group discussions with faculty and trainees/students, observations, document analysis etc.<sup>5,8</sup> All key stakeholders need to be involved in the development of all evaluation instruments, which will enhance the content validity of the instrument.<sup>7,11</sup>

Medical education is a continuously evolving field and quality in higher medical education has become an integral part in recent years. Therefore, continuous feedback through program reviews are required to keep pace with the changing trends to ensure quality. This is done through regular cycle of analysis of curriculum and identification of challenges leading to development of educational strategies with implementation and impact followed by analysis of impact and identification of new

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*Received: October 29, 2013; Accepted: February 03, 2014.*

challenges and development of new strategies and the process goes on.<sup>12</sup>

The higher education sector has never been a priority in Pakistan even until recently and quality assurance practices have never been adopted in its true spirit. In consultation of the stakeholders including teachers, students, employers, etc., the Task Force on Improvement of Higher Education in Pakistan identified a number of issues that affected the quality of education. To enhance the quality of education of higher education institutes, the Higher Education Commission (HEC) was established in 2002 on the basis of recommendations given by the Task Force on Improvement of Higher Education in Pakistan. Since its establishment, the HEC has undertaken a systematic process of implementation of reforms in which access, quality and relevance have been identified as the key challenges. HEC took such initiatives as formulation of accreditation councils, development of quality curricula and ranking of institutions on the basis of performance in order to push the higher education institutes to adopt an effective and quality assured system.<sup>13</sup>

A comprehensive postgraduate program evaluation process is followed at some places in order to identify areas that may need improvement. According to Dolmans, program evaluation or a quality assurance process should be structural and should take place at regular interval.<sup>8</sup> However, a significant time commitment and energy is expected by the key stakeholders to conduct the process successfully. This process should be systematic and integrated and involve all stakeholders including program directors of each residency program, program coordinators, faculty, chief residents and residents. Questionnaires, focus group discussions and regular meetings of review committee members with the program directors are the main instruments used for evaluation of the postgraduate residency programs. In this process, feedback is also given back to the individual programs with identified areas of improvement. But all this process generally captures snapshots of quality assurance, and bench-marking through longitudinal studies is lacking. The author would recommend from personal experience and work place model that review reports could be linked through cohort studies from which explanations and trends could be identified to produce benchmark performance and more comprehensive longitudinal picture of quality. Indeed, a longitudinal approach has to do with the effectiveness of change over time. The trends in residents' evaluation, the outcomes or success in exit examinations and the satisfaction level of residents could be measured over time and compared.

In conclusion, quality in higher education has become an integral part in recent years with its main goals of accountability and improvement. The quality assurance

is a cyclical, systematic, structural and integrated process, where evaluation of an educational program is carried out at regular intervals and the data is judged against pre-defined standards and is considered to be an integral part of organizations work activities by involving all key stakeholders. Tremendous efforts are needed to implement quality through quality strategies in higher medical education institutes. Quality models of developed countries cannot be implemented as such in developing countries like Pakistan, and there is a dire need of an indigenous quality assurance model for our medical institutes to keep pace with international standards.<sup>13</sup> PMDC can play a vital role in enhancing quality of higher medical education by setting some benchmarks, comprehensive yet flexible policies, and ranking of medical institutes on the basis of education quality, research and passing rate of exit examinations etc.

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