# FINAL PAPERS FOR INQAAHE CONFERENCE

Theme: NEW APPROACHES TO QUALITY ASSURANCE IN THE

CHANGING WORLD OF HIGHER EDUCATION

Sub-Theme: A quality culture- embedding QA into the life of an institution

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Title: Quality Assurance in Medical Education at GMC – 1998 to 2008

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Abstract:

The Gulf Medical College has a tiered well-planned structure that seeks to assure the delivery of the MBBS program. Accountability is practiced at all levels from the ground level and generates a large amount of evidence of teaching practices and student learning. The dissemination and communication of reports of the ongoing self-study serve as a feedback for both the instructor and the learner thereby assuring quality on a continuing basis. The feedback serves to prioritize the annual operational objectives and give direction for strategic planning. With each passing year, these efforts have helped to institutionalize the principles of accountability, self-evaluation and external peer review, closely linked to educational development and to accreditation. Quality assurance in medical education requires not only the performance of specific tasks but also an approach to this performance that is consistent with ethical understanding, professionalism and the need for personal development.

#### Introduction

Today communities increasingly demand more accountability from their public institutions including medical schools. The World Health Organization has derived measures of social responsiveness of medical schools that take into account the relevance, quality, cost effectiveness and equity focus of these activities. In addition to being responsive to these social needs, medical schools need to continuously adapt to changes in scientific, educational and health practices worldwide. To meet these challenges medical schools need robust and dynamic procedures for reviewing,

modifying and renewing its fundamental structures and activities. <sup>1</sup>

In UK the General Medical Council (GMC) runs a Quality Assurance programme, which involves regular assessments and visits to schools order to ensure that UK medical schools maintain the standards in medical education. This programme is called QABME (Quality Assurance of Basic Medical Education). <sup>2</sup>

The World Federation for Medical Education gives priority to specification of international standards and guidelines for medical education, comprising both institutions and their educational programmes. Adoption of international standards will constitute a new framework for medical schools to measure themselves. Furthermore, internationally accepted standards could be used as a basis for national and regional recognition and accreditation of medical schools' educational programs. [from introduction] <sup>3</sup>

Measures of quality of courses are varied and their implementation is labour and resource-intensive. This therefore requires commitment from governments and other stakeholders involved in setting up training programmes for health care workers. The provision of high-quality education in their own country will reduce the need for health care workers to travel overseas in search of internationally recognized higher-education courses, and will contribute to providing a skilled and sustainable workforce.<sup>4</sup>

In the UAE the Ministry of Higher Education and Scientific Research takes very seriously its responsibility to assure the quality of higher education opportunities available to the students in the country. Within the Ministry the Commission for Academic Accreditation is responsible for these quality assurance processes. The standards that guide these processes and the criteria that institutions must meet are specified in this commission publication. <sup>5</sup>

The Gulf Medical University seeks actively to assure the quality of the programs it offers. For the past decade the measures undertaken at the Gulf Medical College have conformed to the basic principles of quality assurance. This paper shall address these measures under the major principles of accountability, self-evaluation and peer review.

<sup>1</sup> WHO Guidelines for Quality Assurance of Basic Medical Education in the Western Pacific Region, WHO Regional Office for the Western Pacific, 2001.

 $<sup>{}^2\,</sup>Quality\ assurance\ of\ undergraduate\ education\ \underline{http://www.gmc-uk.org/education/undergraduate/undergraduate}\ \underline{qa.asp}\ downloaded\ 28\ Feb.\ 2009$ 

<sup>&</sup>lt;sup>3</sup> Basic Medical Education: WFME Global Standards for Quality Improvement Copyright: World Federation for Medical Education 2003

<sup>&</sup>lt;sup>4</sup> Development of a quality assurance handbook to improve educational courses in Africa Helen M Nabwera, Sue Purnell and Imelda Bates Human Resources for Health 2008, 6:28 doi:10.1186/1478-4491-6-28: http://www.human-resources-health.com/content/6/1/28

<sup>&</sup>lt;sup>5</sup> Standards for Licensure and Accreditation, Commission for Academic Accreditation, Ministry of Higher Education and Scientific Research, United Arab Emirates, 2007

#### Methods:

The following documents were examined for the purpose of this study: Self evaluation reports and institutional responses to recommendations submitted to the MOHESR from time to time in the first decade of its existence (1998-2008); reports of the bi-annual Academic Council, monthly College Council, weekly Departmental Council meetings, reports of standing committees: MEU reports on Curriculum Reforms Initiative, Faculty development activities, minutes of Examination Committees, feedback from students survey of teaching, self-learning, and student support services and report from the Student Council, the offices of career counseling and placement and GMU Alumni; feedback from faculty on self-appraisal, peer assessment and Heads of Departments; HR reports of faculty attendance and scholarly activities (publications, invitation to speak at professional scientific meetings, publications, participation in research, renewal of contracts and promotions).

#### Results:

The findings have been presented under the major principles of accountability, self-evaluation and peer review.

## Principles of Accountability

Statements of Mission and Objectives have been substantially revised recently to match the demands of educating a skilled health workforce. The mission and objectives now encompass social responsibility, research attainment, community involvement, and address readiness for postgraduate medical training. Educational outcomes are now addressed as competences, both generic and program specific and are well aligned with assessment.

Program management has become increasingly formal over the years. The medical school has a tiered well-planned organizational structure that seeks to assure the delivery of a quality program. The system operates at different hierarchical levels beginning with the ground level activities monitored by the Departmental Councils that report to the Dean. The Dean apprises the College Council of the progress made before reporting to the Academic Council chaired by the President of the medical school. The President in turn is accountable to the sponsors who form the Board of Trustees and ultimately to the Ministry of Higher Education in the country, which under the aegis of the Commission for Academic Accreditation is responsible for the accreditation of the program. This continuous and ongoing dialogue has served well to embed accountability into the education process.

### Principles of Self-Evaluation

The introduction of the Curriculum Reforms Initiative Project in 2003 led to the development of an organ system-based, integrated MBBS curriculum in keeping with global trends in medical education that is learner centered and emphasizes lifelong

learning. The horizontal integration of the basic biomedical sciences, psychosocial sciences and communication skills has been integrated vertically with the clinical sciences further consolidating their relevance in medical practice. The early introduction and practice of basic clinical skills has been made possible in the safe environment of the simulation labs.

Assessment of students has become more objective. Formative assessment has been formally introduced as a policy. Self-, peer- and tutor assessments have been introduced. Information obtained on analysis is used to provide a feedback both to the teacher and the learner. These feedbacks have been used to improve instruction delivery. Items of assessment have improved in construction, levels of cognition, validity and reliability. Rubrics like rating scales are used to score assignments.

Student admission policy and selection methods have become more and more structured and stringent. In addition, efforts have been made to introduce assessment of non-cognitive traits as a component of aptitude for medicine as a career choice. The introduction of English language proficiency has had an impact for the better on student learning particularly in the early years and reduced dropout rates.

The availability of clinical training sites has been a limiting factor in the intake of students. The annual intake of 100 students in the first three batches has been reduced to 60 in the subsequent batches. This has improved the learning opportunities for the individual student. The institute continues its efforts to secure more clinical training sites so vital for both clerkships and internships.

The student evaluation of support services has helped to rope in the non-instructional staff to contribute to the improved delivery of student support services thereby enriching the educational milieu of the program – the hidden curriculum. This has particularly led to the expansion of the library services, development of the multimedia labs, improvement of cafeteria facility; photocopy services, transport, hostel accommodation, visa-processing services among others.

The Student Council represents the student body and nominates student representatives on various committees dealing with student activities. Student participation in co-curricular activities has increased over the years.

Staff policy and development has benefitted both the personal and professional standing of the faculty. The teaching fraternity has contributed to the development of the institute and its programs at different levels. All faculty members have contributed to the process of quality assurance largely in their professional capacity as members of their respective departments and as members of the different modules of the new curriculum development task force; in addition, some provided inputs as members of the different councils and committees.

Educational resources have kept pace with the increasing use of information and communication technology for teaching and learning. Investment in the electronic

medium and multimedia has paid dividends in the form of greater use of web-based instruction modules and the introduction of computer-aided learning modules in the synchronous delivery of learning resources to the students.

Educational expertise in planning medical education has been harnessed extensively over the years. The establishment of the medical education unit in 2000 was a pivotal step towards quality assurance. The unit has organized workshops, conferences and lectures for faculty development particularly in areas like assessment, curriculum development and teaching learning methods. Currently a core group of faculty members are undergoing a formal in-house training on medical education. All these activities have fostered a professional approach to teaching in a big way.

The mechanisms for program evaluation are well in place. The process began with simple reports generated by programs to evaluate courses, teaching, student performance, item analysis, reliability of examinations, profiles of student progress; it is currently being developed into a complex database with input from instructional and non-instructional units that will generate reports using defined benchmarks to evaluate effectiveness of the curricular and extracurricular elements of the programs.

Currently, reports submitted by the College Council, Department Councils, Course Coordinators, Medical Education Unit, Examination Cell, and standing committees dealing with different extracurricular activities of students are submitted from time to time. These reports form the basis of the bi-annual report prepared in turn by the Dean and submitted to the Academic Council. The institutional/individual responses are widely disseminated and communicated to serve as feedback thereby closing the loop.

Teacher and Student Feedback are obtained on a regular basis. The medical education unit conducts the student evaluation of the courses and teaching in each academic year from year 1 to year 5. The results are used for consideration of faculty tenure, promotions and awards. Student profiles maintained in each department give detailed information regarding learning styles and strategies of the individual learner. These are available in the student portfolio along with logs of achieved skills and attitudes.

Student Performance at each examination is analyzed and a report is generated for each course. This gives the class average, highlights the outstanding, mediocre and poor performers and is used to focus remedial measures for the latter in the form of counseling, tutorial sessions and extra classes. The result of item analysis after each examination help the departments to improve their question banks prepare blueprints and further align assessment with learning outcomes.

## Principles of External Peer Review

The Standards Manual published by the Ministry of Higher Education and Scientific Research provides the guidelines for quality management of the educational program. Members of the accreditation committee inspect the records at regular intervals as part of the quality assurance in higher education in the country. They are also responsible for

inviting medical education experts from around the world in different areas of medical education for evaluating the program before reaccrediting it every five years.

Use of External Examiners during summative assessments serves to introduce external peer review as a vital component of QA. Presently external examiners are invited for the summative examinations held each year. They also report on the performance of the students and the instruments of assessments used. These reports are analyzed and the information is conveyed to the course coordinators and filed as evidence of effectiveness of the program.

Evaluation of students attending electives in hospitals in the country and abroad serves as yet another opportunity for external peer assessment.

Four batches of students have graduated and attempt has been made to obtain other indicators for quality assurance like employer satisfaction, admission into higher education programs, and entry into research oriented programs, opinions of other practitioners in the region and alumnus feedback. The establishment of an alumni society last year is another step in this direction.

Efforts are on to establish a dedicated institutional research unit supported by a group of professional who will be able to conduct and analyze data and generate reports for timely intervention. Instruments for assessment have been further refined and now cover more areas as spelt out by the operational objectives of each unit. The benchmarks shall serve as a measure of institutional effectiveness.

Vroeijenstijn, (1995) rightly concludes that "a tool for safeguarding quality is the design of a well-functioning quality assessment system, based on two pillars: a system of internal quality control and external assessment by peers. The connection between the internal and external assessments is the self-evaluation by the school. On the one side, this self-evaluation is a critical self-analysis and an agenda for improvement. On the other side, it contains information for the external reviewers. The peer review also provides input for the process of improvement". <sup>6</sup>

### References

1 WHO Guidalines for Quality A

- 1. WHO Guidelines for Quality Assurance of Basic Medical Education in the Western Pacific Region, WHO Regional Office for the Western Pacific, 2001.
- 2. Quality assurance of undergraduate education http://www.gmc-uk.org/education/undergraduate/undergraduate\_qa.asp
- 3. Basic Medical Education: WFME Global Standards for Quality Improvement Copyright: World Federation for Medical Education 2003
- 4. Development of a quality assurance handbook to improve educational courses in Africa Helen M Nabwera, Sue Purnell and Imelda Bates Human Resources for

<sup>&</sup>lt;sup>6</sup> Vroeijenstijn, A I Quality assurance in medical education Academic Medicine: vol 70, No. 7, S59 – S67, Supplement/July 1995 (C) Association of American Medical Colleges

- Health 2008, 6:28 doi:10.1186/1478-4491-6-28: http://www.human-resourceshealth.com/content/6/1/28
- 5. Vroeijenstijn, A I Quality assurance in medical education Academic Medicine: vol 70, No. 7, S59 S67, Supplement/ July 1995 (C) Association of American Medical Colleges
- 6. Standards for Licensure and Accreditation, Commission for Academic Accreditation, Ministry of Higher Education and Scientific Research, United Arab Emirates, 2007