Medical education and the pursuit of excellence - the quest for the Holy Grail?

Medical education in Europe is currently facing enormous challenges brought about by the number and the diversity of medical schools that are now within the fold. This diversity is amplified by different educational systems, cultural and socioeconomic issues, health care delivery systems and the ever increasing burden of communicable and non-communicable disease. There is also a movement away from traditional taught curricula to curricula that emphasise self-directed learning and thererby promote lifelong learning. The ultimate goal of undergraduate medical curricula should be to produce a medical doctor with certain core competances and the right basis for further specialisation and adaptability to different roles in health care. Furthermore, increasing professional mobility has highlighted the need for the establishment and maintenance of standards for quality assurance common to all EU countries.

Initiatives such as those spearheaded by the World Federation for Medical Education (WFME) have resulted in the development of Global Standards for Quality Improvement in Medical Education. However the diversity of resources, the challenges of medical practice in differing environments and cultures mandate that each individual country assesses issues particular to both the provision of medical education and the maintenance of quality of care standards. MEDINE, the Thematic Network on Medical Education in Europe together with WFME and the Association for Medical Schools in Europe (AMSE) established an international task force to look at the reforms necessary in the European Region and formulated both a tool as well as criteria for the recognition and accreditation of medical education programmes. These European specifications can be accessed on the web at www.wfme.org. They deal with both undergraduate and postgraduate medical education as well as continuing professional development. Amongst the concerns raised by this international task force, the potential hindrances to the implementation of standards in medical education that have been identified include inadequate leadership, insufficient allocation of funds and resources, lack of programme supervision, resistance to change and political and cultural realities. Furthermore, the trend in commercialisation of education, in medical education embodied by the establishment of private and off shore medical schools in Europe, is another cause for concern and of the need for surveillance. Whilst the majority of these undoubtedly conform to quality assurance, it is possible that a minority, for reasons of inadequacy of funds, insufficient settings for clinical training or insufficient expertise may not conform to this need for standardisation and quality assurance.

Against this backdrop, it is interesting to look at the situation with respect to Medical Education in Malta. The University of Malta Medical School was established in 1676 and over the last 332 years has provided Malta and indeed a number of other countries with sterling graduates in the medical sciences. The exodus, which has regrettably reached epidemic proportions, ultimately attests to the rigour and the quality of medical education in this country. What could be the secret of this small medical school on an island in the middle of the Mediterranean, and does its success in fact lie in the implementation of standards and specifications akin to those now promulgated by the WFME consensus statement? Perusal of this document and analysis of the mission and objectives, the educational programme, the methods of assessment and evaluation in place at the Medical School reveal that the latter has gradually in fact been implementing change that retrospectively is in keeping with a number of the WFME recommendations.

The Faculty of Medicine and Surgery, which encompasses the Medical School, is embedded within the University of Malta. Over the years, changes have been implemented geared to produce high quality graduates equipped to face the multitude of challenges brought about by national and global developments in healthcare provision and disease. Furthermore, its graduates have gone on to postgraduate specialisation and excelled at both a local and an international level.

Admission to the course is at an undergraduate level with strictly defined admission criteria and additionally there is also an intake of eligible science graduates. The course is defined as a one cycle course as described in the Bologna process. Within the framework of the University, the Medical School has its governance and administrative system clearly defined, with the Dean leading the faculty and its committees, including the curriculum committee, in delivering medical education, ensuring that lines of responsibility are maintained and that the allocated budget is appropriately utilised.

At an academic level, the MD course is organised with the first two years focussing on the basic sciences and the last three years being the clinical sciences. A certain degree of integration has been introduced and there are plans for further enchanced horizontal and vertical integration within the curriculum. Throughout the five years, the students attend lectures, tutorials, seminars and demonstrations aimed at imparting knowledge, developing skills and competances relevant to the practice of medicine. Case-based learning has been introduced at various levels throughout the medical course with good effect and has been welcomed by the students. A number of modules have been reviewed to prevent curriculum overload. Students are regularly informed, in advance, of any changes in the curriculum and assessment methodology. Changes made consider the requirements of the European Framework of Qualifications and this year for the first time, the core competances specified in the TUNING medical education project of MEDINE (www.tuningmedicine.com) as essential to the formation of tomorrow's doctors were communicated to students as targets to be attained by the end of their training.

The Medical School's forte ultimately is small group learning, and its proximity to the main teaching hospital, enabling students to have ready access to a wealth of clinical experience. This in fact is what has attracted foreign medical students to seek electives and exchanges with our medical school to an extent that the student population doubles throughout the year. A number of formal agreements with EU medical schools have also been established within the Erasmus exchange system to promote bilateral exchange of students.

There are a number of informal and formal assessments throughout the course with summative assessments at the end of years I, II, V and as of this year, formal examination of clinical skills at the end of year III has been introduced in addition to written assessments. The final MD examination in the clinical sciences is in fact a combination of written exams (MCQs and short essays) and clinical assessments. The examination process has been fine tuned to ensure adequate opportunity to assess knowledge, skills and attitudes and that potential graduands have acquired the relevant core competances. The students rotate through a number of stations and are examined by 2 different examiners per station. The stations comprise patients with positive clinical findings across the breadth of different systems, data interpretation, emergencies and history taking and communication skills. Passing this clinical component is mandatory to passing the final MD examination. Students are aware of the structure, format and marking system of assessments and a similar but less exhaustive process has now been introduced for the first time this year at the end of the third year to further help students identify their weaknesses at a sufficiently early stage in their undergraduate course. These processes ensure that students leaving the Medical School have reached a satisfactory level of knowledge, acquired the necessary skills and have the right attitudes.

The issue of quality assurance and maintaining standards in the Medical School has been the subject of repeated review. At the end of Yr II and Yr V the examination process is monitored by external examiners traditionally invited from medical schools in the UK. Their task is to examine both the written and the oral sections of key summative examinations and provide feedback. In the final year, observers are also invited to the final clinical exams in the major specialties as part of an ongoing exercise in quality assurance and development. Finally the Faculty of Medicine underwent an external audit process instigated by the Quality Assurance Committee at the University of Malta, an audit which confirmed the high standards achieved by both students and academic staff but which did outline the need for further infrastructural development and increased allocation of funds for expansion, staff development and research. With the establishment of the National Commission for Higher Education, this quality assurance exercise should be strengthened and accreditation processes standardised for all educational institutions in Malta, medical education institutions included.

The process of surveillance of the educational methodology utilised at the Medical School is an ongoing one. The introduction of log books at the start of the clinical years has helped catalyse the process of student directed learning, a process we hope to augment. There have also been discussions regarding the introduction of problem based learning as an additional tool in promoting the concepts of critical thinking and self- directed learning in preparation for lifelong learning. In keeping with the WFME consensus statement, the need for continuous step by step renewal and utilisation of developments in educational theories and learning methodologies is accepted and respected.

The outcomes speak for themselves in that graduates of the University of Malta Medical School have an excellent reputation as physicians and can effectively compete for placements and jobs on an international level and succeed. A significant proportion go on to specialise in different areas. Regrettably the incentives to come back until recently were not good and we have seen a drain in our manpower at earlier and earlier post graduate stages with this year seeing a significant proportion of our new graduates leaving immediately for placements abroad. The impact this will have on the delivery of health service in Malta is tremendous. It is to be hoped that the establishment of postgraduate training programmes will provide an incentive for these young graduates to stay in Malta. The commitment of the Government and the specialist associations to postgraduate training has been a significant step in the right direction. Furthermore, the University's commitment to fostering research should facilitate matters for those interested in pursuing a career in research and clinical investigation.

No institution has unlimited resources in its pursuit of the holy grail that constitutes medical education of a high standard and quality and the University of Malta Medical School is certainly no exception. Over the centuries, in response to different challenges, the need for change has been felt and the relevant processes implemented whilst maintaining standards in the face of seemingly insurmountable odds. Much has been achieved. It will undoubtedly continue to do so both independently and in collaboration with other medical education institutions in the future.

> Josanne Vassallo Editor