EUROPEAN CONSENSUS CONFERENCE ON MORPHOLOGICAL SCIENCES
(ANATOMY, HISTOLOGY AND EMBRYOLOGY)

Consensus Resolution

Preamble

Several European countries will need to adapt to the imminent shortage of medical practitioners. Accordingly, access to medical schools has recently been, or will soon be, opened to an increased number of students. This fact brings increased pressure on those institutions which teach Medicine. Moreover, many medical curricula have been restructured over several years in order to make them more efficient in terms of both quality of health care and sustainability of economic cost.

The European Federation for Experimental Morphology (EFEM) groups 23 regional and national scientific societies of Anatomy, Histology and Embryology in the European region. The EFEM held a Consensus Conference in Bologna (Italy) on 17th and 18th November, 2007. The Presidents and Delegates of its Constituent Societies wish to insist that care of patients must remain at the centre of the recurring changes.

Role of Morphology in Medicine

At the centre of the patient-doctor relationship is the need for the physician not only to enter into dialogue with her/him, but also to expertly perform a direct physical examination. This expertise rests on a deep knowledge and understanding of the structures (macroscopic and microscopic) of the body. This expertise is also indispensable when undertaking emergency life-saving measures. Contrary to what many people seem to believe, the living human body cannot be considered as a nearly dematerialized set of electrochemical signals and minute components easily accessible to elaborate investigation techniques.

Every medical graduate must master, at the end of his/her studies, a core of morphological (anatomical, histological and embryological) knowledge, enabling her/him to understand those underlying structures that he/she can perceive by means of her/his own senses. All institutions (political, academic and professional) dealing with medical education must take into account this basic exigence.

New imaging technologies and minimally invasive procedures are continually being developed, which allow increased accuracy of clinical investigation, increased efficiency of procedures and better patient comfort. Therefore, every medical graduate must master the domain of human morphology sufficiently well to evaluate critically both the true value and the inherent flaws of new and emerging techniques. This is indispensable not only for the welfare of the patient, but also for an optimal management of public health expenditure.

Consequences for medical curricula

Many statements of learning objectives for medical training at the undergraduate level already exist in Europe and America. They are based on clinical disciplines and/or skills. However, some concerns have recently been expressed by clinical associations about the lack of morphological knowledge of some medical and surgical practitioners.

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1 In this respect, the term “morphology” always means quantitative and qualitative comprehension of the structures composing the human body ranging in scale from the gene to the external aspect of the individual. The significance of the terms "anatomy, histology and embryology" may differ according to the various regions and/or linguistic groups.

2 Official increases in numerus clausus already decided in France, Germany, Spain and Sweden and debated in Austria and Switzerland

Consequently, the EFEM Consensus Conference declares that:

1. It is essential to establish an internationally accepted corpus (core catalogue) of the minimal knowledge and skills that each medical graduate must have acquired at the end of her/his education and training. Cooperation between the clinical/professional and morphological associations is needed in order to produce this.

2. The total weight of morphological sciences (anatomy, histology and embryology) taught as a discipline should not fall below an equivalent of 30 ECTS, extending throughout the whole medical curriculum.

This does not preclude the Academic and Faculty programme planners from introducing any kind of vertical or horizontal integration, or from teaching morphology as an introduction to clinical matters, rather than concentrating basic education in morphology during the first years of the curriculum.

**Consequences for the teaching of morphology**

Teachers at the senior level in anatomy, histology and embryology must be fully qualified persons. In spite of the current rationalisation of teaching/learning methods there is a minimal acceptable level of the teacher-student number ratio.

It is also highly significant that the mean age of senior-level anatomy teachers in some European countries is greater than 60 years. Many Medical Schools now require clinicians to teach morphology without taking account of their actual qualifications in morphological sciences. However, their approach to Morphology as a scientific discipline is commonly derived from the limited scope of their clinical specialisation. Consequently they fail to present medical students with the broad structural and analytical comprehension of the human body that is a necessary foundation for modern and future medical practice.

The EFEM Consensus Conference wishes to remind every authority or institution responsible for the education of medical graduates of the following:

1. Notwithstanding the departmental or organisational structures of a Medical School or Faculty, the number of persons appointed to teach Morphology must remain adapted to the number and needs of students. A clear definition of their teaching roles must be provided.

2. Experience in efficiently teaching the subject (masterful knowledge of the discipline, aptitude to lead discipline-specific pedagogic laboratories and tools, willingness to train junior level assistants, etc.) must be considered as an important parameter in addition to scientific productivity when recruiting, appointing or electing teachers in Morphology at the senior level.

3. Based on the British, Dutch and German experiences, the EFEM affirms that specific training and professional development of teachers in Morphology at the junior level must be undertaken in all parts of Europe and a European common list of objectives must be defined as an immediate priority. The main priority is for training in morphological science, leading to some professional specialisation (for example, the German Fachanatom). Appropriate grants should be made available.

The European Federation for Experimental Morphology

Bologna, 18th November 2007