

GUEST EDITORIALS

MEDICAL EDUCATION AND THE 21ST CENTURY

F. F. Fenech

Medical education at both the undergraduate and postgraduate levels has been undergoing continuous changes in the last 40 years. Critics like Mckeown (1988) complain that medical education and practice should change from the study of intrinsic disease and its management; in their view, it should concentrate on epidemiology, preventive medicine and public health. They hold this view because they believe that environmental factors are the root of the most common diseases. Acceptance of this view by some educators is reflected by the fact that there is growing cynism about the value of basic medical science for day to day clinical practice.

I feel that this is an oversimplification of the issues involved. I cannot see how knowledge about DNA which contains our evolutionary history can be irrelevant to the basic grounding of one who is going to practice medicine towards the end of this century and the first 20 to 30 years of the 21st century. We have now the means to read DNA and our increasing knowledge of the human genome will put researchers in a stronger position to determine the basic mechanisms involved in the common diseases. It is true that it may be years before the fruits of current research are seen in the clinic but surely our future doctors must be in a position to understand and make full use of the findings borne out of such research activities. I fully concur with Weatheral's (1992) contention that it is difficult to control the current killer disease such as cardiovascular disease and cancer solely by modification of one's environment and lifestyle. In many diseases such as diabetes, arthritis, asthma, the major psychoses and dementia we have no idea about the relative roles of environment and endogenous factors. The way forward is therefore a combination of preventive medicine and what Garrod called "high Medicine" that is thorough application of basic science towards a better understanding of human biology in both health and disease. Those who criticise the curriculum as being disease oriented are ignoring the fact that there will always remain the relief of distress requiring

doctors trained to deliver a first class curative service. In planning our education and service needs we have to take into consideration the above issues as well as the likely pattern of major diseases in the next 20 years taking into consideration the demographic changes that are likely to take place in our society.

The drop in birth rate and the marked decline in infant mortality in Malta are now largely over. We have an ageing population; cases of senile dementia are likely to increase. Cancer, which is also ageing related, will increase as a proportion of serious disease. Cardiovascular disease could be greatly reduced if correctly managed however immunodeficiency disorders, viral disease and organ transplantation are likely to increase. Progress in molecular biology and genetic engineering will transform prevention which will become based on the evaluation of risk factors and on a genuine prediction approach.

We have to prepare our future doctors for this type of scenario. The education of our undergraduates and postgraduates together with the activities of continuing medical education have to reflect these changes.

Undergraduate education should aim to train our future doctors to practise the medicine of the nineties but has also to equip them with the ability to absorb profitably the changes in medical practice that are sure to occur through the next thirty years. The GMC in the UK has just issued a booklet with recommendations to medical schools under the title "Tomorrow's Doctors". It makes the following recommendations:

*F. F. Fenech MOM, MD,
FRCP, FRCPG, FRCPE, FRCPI, FACP, KM*

*Head, Department of Medicine
Dean, Faculty of Medicine and Surgery
University of Malta Medical School,
G'Mangia*

- Reduction in factual content of the medical course;
- Core-curriculum should be system based and integrate the clinical and preclinical divide;
- Self-teaching should be encouraged;
- There should be a module where students would choose a non-medical topic for example, language, literature, arts, etc.

These recommendations should also be taken up by our medical school; indeed we are moving some way towards their realisation. We have reduced the lecture content of the course and with the establishment of the Dr Francis Portanier Audiovisual Unit we have improved our self-education facilities. Our core course is system based and though there is no integration between the preclinical and clinical years, we have for the first time advertised a post - Lecturer in Molecular Biology and Medicine - which spans a preclinical and clinical department. I hope that this is only the first of such posts. We have started to move from having only science subjects as entry requirements for medical school to one where a non-science subject for example Philosophy is accepted. I do also feel that having a non-medical module during the five year programme would be useful to mould a much more mature graduate at the end of the five year programme.

Following the initial pre-registration period, the practice of medicine both at the community or hospital level is now speciality based. Malta has to conform to the trend which is becoming prevalent in Western Europe. In the last thirty years, there has been an inexorable trend towards the development of the subspecialities. New specialities arise through fragmentation of disciplines. For example paediatrics is splitting up into paediatric nephrology, paediatric oncology, paediatric dermatology and so on. At the moment in Malta, we do not have a structured training programme for speciality training. Until such programme exists, speciality training in Malta will not be recognised at European level. We need a national authority which would be responsible for specialist

qualification which would not be the Malta Medical Council. In my view this should be organised on the same pattern as the Academy of Medicine of Hong Kong. Under its umbrella, a number of specialist associations would organise and monitor the training of specialists to standards set by the Monospeciality Boards of the Union of European Medical Specialist (UEMS) in Brussels. This is an urgent issue if we are not to be left behind in this important and vital area of medical education. We have to establish joint training programmes with overseas postgraduate institutions for on our own, except in a few instances, we are not able to provide the whole breadth of training required for specialists who are going to practice in the 21st century. The present state of the specialities could also possibly change in the future with specialities regrouping and becoming increasingly interdependent.

Continuing Medical Education (CME) is an activity which every doctor has to undertake at regular intervals throughout his professional life. In March of this year, Dr J Pace and I attended a meeting called *Continuing Medical Education in Tomorrow's Europe* in Cologne, Germany, organised by the European Academy of Medical Training. It is recognised that throughout the 30 - 40 years of professional life, the doctor is likely to experience a rapid expansion of knowledge in the various aspects of medicine. In order to update himself, the practising physician must participate regularly in continuing medical education activities. This is vital if he is to fulfil his healing role efficiently. It was unanimously accepted that **this participation in continuing medical education activities is an ethical obligation.** We must therefore develop a continuing medical education programme which is actively monitored and audited. **It is indeed the duty of the Medical Profession and the State to see that such a programme is not only instituted but also supported.** If this is carried out, the medical profession in Malta could claim that it has lived up to the Declaration of the Standing Committee of Doctors of the European Community.

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