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Editorial

Training for what by the year 2000?

Earlier this month a medical politician announced that his country's health reforms programme was moving towards the goal of the Alma Ata declaration of "Health for all by the year 2000". On that same day the Teaching Hospital had no antibiotics or ferrous sulphate in the pharmacy and the theatre autoclaves had broken down yet again, leaving the wards overfull with patients awaiting urgent surgery. Whatever the state of the World at the end of this century, it is patently obvious that it will not be one of universal health. What will be the major health problems for which we are training the next generation of doctors?

Patterns of disease change. In 1960, I had three lectures on syphilis during my introduction to clinical medicine. Subsequently, I saw one elderly housemaid with the scars of a gumma around her knee, but syphilis has not figured in my subsequent surgical practice. Great therapeutic successes have been won against smallpox, poliomyelitis, whooping cough, diphtheria and measles. These no longer reach epidemic proportions in Africa as they did 30 years ago. But against a background of over-population, war and malnutrition, malaria and the diarrhoeal diseases take an increasing toll of African children. In the cities, the diseases associated with affluence and gluttony are still seen. Violence and road traffic accidents are major problems, especially among men. Women continue to suffer the complications of childbirth and sepsis of all varieties has increased with HIV disease. Tuberculosis, apparently under control 20 years ago, has again become a major cause of death and morbidity. Despite unprecedented expenditure on antituberculous chemotherapy, the dual epidemic of tuberculosis and HIV disease increases. New HIV-related pathologies are regularly recognised in every field of medicine and surgery but the sheer number of sufferers often preclude thorough examination and investigation. Are these to be the major diseases for the 21st Century? It is a far cry from "health for all".

How can we best prepare our students for the situation whilst coping with the increased patient workload? In several African medical schools innovative revisions of curricula are being introduced. Community-based education and problem-based learning are the buzz words but the integration of related aspects of the curriculum from different disciplines and small-group teaching is often impossible because it is time consuming and demands a high ratio of teachers to students.

The only plentiful resource at our teaching hospitals is the multitude of patients exhibiting gross pathology but students have moved from the wards to the library in order to amass the necessary catalogue of facts for their examinations. Each year, when it is realised that large chunks of the curriculum have not been covered by problem-based learning, "revision" lectures are rapidly organised. Students scribble a mass of new facts into their notebooks, adding to the confusion within their minds engendered by the discrepancies between the "standard textbooks" and current practice.

A doctor needs to be able to take an accurate history, perform a good physical examination and correlate his findings with known patterns of pathology to form a differential diagnosis (not an impression!). In the few instances where the diagnosis is not readily apparent, one or two of the few available investigations may be employed. Where better to learn all this but on the wards and in the clinics of our hospitals?

Students should take increasing responsibility for the care of patients until they reach a level of competence at which they can be called doctors. Such an apprenticeship is truly problem-based learning. As the students work and learn they are of direct benefit to patients and staff alike. Teaching becomes part of clinical practice, not something extra to cope with after the needs of the patients have been met. Students develop a sense of responsibility for *their patients* and better develop the rapport so essential in a good doctor. Medical apprentices, already involved in the day-to-day care of *their patients*, will then have the basic skills and resources to cope with whatever patterns of disease predominate by the end of the Century.

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