

# Determining the curriculum

**W**HAT decides the undergraduate medical curriculum? Are the needs of our society, or different societies, the best guide? Or should the academic power structure continue to determine what goes in and what is left out? How sure are we that science-based school performance is the soundest criterion for student recruitment to medicine? If anatomy, biochemistry, and physiology teaching are too detached from medical practice, could this be because clinicians have not taken the trouble to advise pre-clinical teachers on their requirements? As hospitals become more and more concerned with sophisticated disease and high technology, should clinical medical education not be shifted towards the community health centre? As institutions of all kinds get bigger and less personal, should primary health care teams be helped to practise and teach whole-person medicine?

Formal undergraduate medical education has been going on for a century, during which time responsibility has shifted from producing a ready-made practitioner to producing a graduate who chooses and trains for a specialist career (specialist in the sense of knowledge, skills, and attitudes). Since the ultimate distribution in society of general practitioners, hospital-based specialists, community physicians, doctors in the armed forces, and others, is known, why not base the content of the curriculum on their frequency of occurrence? To some extent this may be so now, with the conspicuous exception of primary medical care, which should surely rapidly come to occupy a more prominent curricular place than it does now. Not that medical education should be based on frequency of disease only—

the common cold has rather limited educational value—any more than it should be based exclusively on the severity of disease or the technology thereof—paraproteinaemias are relatively rare.

Central to the difficulty of defining the content of the curriculum is of course the problem of curricular aims. If we knew more precisely what constitutes a good or competent doctor, be he a family physician, a gynaecologist, or cardiac surgeon, then we could define aims in terms of knowledge and behaviour. The fallacy in this of course, is that there is one commonly agreed 'best', whereas in practice there are many. It also seems likely that medical educationists have paid too little heed to the profound importance of social learning.

So where does this thinking lead us? Surely to a greater than ever need to examine the medical educational structure, process, and outcome. Has the value of the 1968 Royal Commission Report been forgotten? How has ten years' further experience of social change altered the conclusions of the report? Will the reconstituted General Medical Council have the courage of its more strongly supported convictions and promote new experiments in the medical schools? Will the needs of society for health care, and especially for primary prevention, really become the determining influence on the curriculum? To argue that we do not have the resources to do anything except wring our hands deserves contempt—*now* is the time to prepare for better times ahead.

### Reference

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# Urinary tract infections in general practice

**A**GREEMENT about the best management of urinary infection in general practice has been impeded by lack of understanding of the natural history of pyelonephritis and its associated complications—hypertension and renal failure. It has long been apparent that not all patients suffering recurrent urinary infections will proceed to renal failure. It is becoming increasingly accepted (Smellie, 1972) that it is in the period of active growth of the kidneys, that is, childhood, that recurrent infection may lead to permanent scarring and long-term complications.

The symptoms, frequency of micturition and dysuria, are much more common in women than men, and are encountered four times as often in married women as compared with single women. It has been estimated that about four per cent of non-pregnant adult women have asymptomatic bacteriuria, and that about 10 to 20 per cent experience symptoms of urinary tract infection during their lifetime; many suffering recurrent symptoms (Wing and Morrell, 1972).

Quantitative bacteriology has aided the management of urinary infection, and the use of the dip slide has

overcome many of the problems of bacterial multiplication in specimens of urine stored before bacteriological examination. Bacterial infection of bladder urine correlates closely with colony counts of over  $10^5$  per cu ml in a fresh specimen of urine (Kass, 1956). Of those patients presenting in general practice with symptoms suggestive of a urinary tract infection, only about 45 per cent have significant bacteriuria (Mond *et al.*, 1965). The remainder are regarded as suffering from the urethral syndrome, the causes of which are obscure but probably include trauma from sexual intercourse, non-bacterial infection, and hypersensitivity to deodorants and bubble baths.

Between three and seven per cent of women have significant bacteriuria in the early weeks of pregnancy. They are particularly susceptible to acute pyelonephritis during pregnancy, and this may be associated with enhanced risks to the fetus.

Menopausal women often suffer from urinary infection, particularly associated with vaginal prolapse and stress incontinence, of which many fail to complain. Elderly males may suffer recurrent urinary infections associated with prostatic hypertrophy. The bacteriology of urinary infection in general practice reveals that about 75 per cent of infections are caused by *E. Coli*; *Proteus* and coagulase-negative staphylococci account for most of the other infections. About 75 per cent of these infections are sensitive to sulphonamides and about 95 per cent to cotrimoxazole.

It is becoming increasingly clear that patients who are most in need of treatment are those least likely to complain of specific symptoms of urinary tract infection. Young girls may present with vague symptoms of abdominal pain and pyrexia. If this is caused by a urinary infection it should be treated at once and, if it recurs, the child should be referred to a urologist for a full investigation. She may well require close follow-up with

three-monthly examinations of the urine for bacteria until puberty. In pregnancy all women should be screened for bacteriuria at the time of booking, and those who are infected should be treated.

Urinary infection in the sexually active non-pregnant female is of less significance. It can be treated in the first instance with sulphonamides, cotrimoxazole, or ampicillin—the latter being the drug of choice in pregnancy. If recurrent infections occur an IVP should be carried out to exclude any treatable form of urinary obstruction. This will rarely be demonstrated. The patient should be advised to maintain an adequate fluid intake, to empty the bladder at regular intervals and particularly after sexual intercourse or bathing. If recurrences are common the administration of a single dose of sulphonamide after sexual intercourse may be helpful.

The duration of treatment of urinary infections is still subject to debate. A seven-day course of treatment is usually recommended, but recent evidence (Charlton *et al.*, 1976) suggests that three days may be equally effective.

Some patients who present in general practice with symptoms of dysuria and frequency are suffering from the urethral syndrome, associated with problems with sexual intercourse. People with these symptoms, and particularly those without bacteriuria, should be given an opportunity to express these problems.

## References

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