

been used to show that a homoeopathic consultation alone has a healing impact before any additional effect from subsequent medicine (SW Mercer et al, Scottish NHS research conference, Stirling, September 2000). Critics and advocates agree that complementary medicine produces non-specific benefits, so—apart from the debate about specifics—if the greater emphasis on human care and holism encouraged by complementary medicine can result in better outcomes, long term cost effectiveness, and reduced drug use, iatrogenesis, and spirals of secondary care,<sup>9</sup> then how will orthodoxy change to get similar results?

We should explore how therapeutic engagement (and qualities like compassion, empathy, trust, and positive motivation) can improve outcomes directly in addition to any intervention used. But can the creation of therapeutic relationships be taught? Could we do for the healing encounter what Betty Edwards has shown for other creative processes, with “non-artistic” people’s ability to draw being transformed in days by activation of so called right brain processing?<sup>10</sup> Creative medical caring might similarly require balancing short term analytic, quick fix, technical thinking with analogical, holistic processing.

The study of human healing would ask, on multiple levels, what facilitates or disrupts recovery processes in individuals, with what potentials and limits? Founded on clinical care, it would gather knowledge from other places—placebo effects, hypnotherapy, psychoneuroimmunology, psychology, psychosocial studies, spiritual practices, art, and complementary medicine, not as ends in themselves but as portals to common ground in creative change.<sup>11</sup> It needs to be practical—

for example, if fear affects physiology, say in bronchospasm,<sup>12</sup> what help can we offer other than drugs?

I hope in future that we routinely ask: what is the problem, is there a specific treatment, and how do we increase self healing responses? Then “show me your evidence” will require evidence of effective human care and facilitation of healing and not only data that our chisels were sharp. Because sometimes there is no chisel.

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## Complementary medicine and medical education

*Teaching complementary medicine offers a way of making teaching more holistic*

Education and debate  
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Complementary and alternative medicine is no longer an obscure issue in medicine. Our patients are using alternative therapies in addition to conventional care<sup>1 2</sup> and sometimes do not share this information with us. But even if they did would we know how best to advise them about safety issues or about the effectiveness of a particular therapy for their problem? Surveys indicate that doctors and medical students are increasingly interested in complementary and alternative therapy,<sup>3-5</sup> yet lack of knowledge is one of the greatest barriers to its appropriate use. Although many medical schools and training programmes now include teaching on complementary and alternative therapies, the approaches are variable and often superficial.

In this issue Owen et al ask provocative questions about our attitudes and behaviour towards complementary and alternative therapy (p 154),<sup>6</sup> and point out that few of us encountered such therapy as medical students or during later training. Nevertheless, there are signs of change, and Owen et al describe initiatives to include complementary and alternative therapy in medical education in the United Kingdom. Similar changes are occurring in the United States. In 1995 a national conference on complementary and alternative therapy

education involving the National Institutes of Health recommended that complementary and alternative therapy should be included in nursing and medical education. Two years later a survey of all 125 US medical schools found that 75 of them offered some form of education on complementary and alternative therapy.<sup>7</sup>

Teaching includes elective modules, core curriculum lectures, and inclusion in problem based learning at undergraduate and residency level. Institutions such as Harvard and Stanford offer continuing postgraduate education courses, and the universities of Maryland and Arizona offer research and clinical fellowships. In addition, special interest groups in complementary and alternative therapy have been formed in professional organisations such as the Association of American Medical Colleges, and the Society for Teachers of Family Medicine has issued guidelines on including complementary and alternative therapy in the curriculum for residents.<sup>8</sup> The NIH-National Center for Complementary and Alternative Medicine recently issued funding initiatives to support the development of teaching on complementary and alternative therapy in medical, dental, and nursing education. The centre also supports career development and training programmes at several of its research centres around the country.

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When in 1992 we developed a complementary and alternative therapy curriculum at the University of Maryland we thought it was important to present the therapies in the context of their own philosophies and models of health and illness. Students and residents have the opportunity to experience the clinical practice of these therapies both in the community and in our own integrated medical clinic. We also teach students how to find and evaluate the evidence for the safety and efficacy of complementary and alternative therapies. Our goal is to encourage the additional skills of openness, sensitivity to cultural influences and beliefs, communication, and critical appraisal of the literature of complementary and alternative therapy treatments.

Nevertheless, great heterogeneity exists in the content, format, and requirements of complementary and alternative therapy courses for medical students and physicians in training. Typically, courses give an overview of the main complementary and alternative therapies and their uses and possible effects, but they do not teach skills to a clinical level of competence. Decisions about which complementary and alternative therapies to include in teaching will necessarily be dictated by usage patterns and resources in one's locality. However, guidance about the main complementary and alternative therapy categories can be obtained from sources such as the National Center for Complementary and Alternative Medicine (<http://nccam.nih.gov>). In addition, however, some general consensus needs to be reached on the essentials of a core curriculum. This should aim to improve doctors' knowledge of complementary and alternative therapy practices and their place in patient care; their ability to advise and guide patients about these therapies; their ability to refer patients to practitioners of complementary and alternative therapy; and their knowledge of the practicalities, such as credentials and legal and reimbursement issues.

Most medical schools have a packed curriculum, so complementary and alternative therapy options tend to be electives with only a smattering of core curriculum lectures. Given the shift towards problem based and case based learning, it is a realistic goal to have complementary and alternative therapy treatment options integrated into existing teaching at all levels. This highlights the need for faculty development. Academics who are not experts in complementary and alternative therapy

but accept its legitimacy at some level must gain knowledge of the subject in order for students to receive this exposure. Complementary and alternative therapy educators will need clearly to define their objectives and goals and be rigorous in evaluating whether their aims are being met. Nevertheless, until qualification requirements include components on complementary and alternative therapy it may seem an indulgence to curriculum committees and students to dedicate time to complementary and alternative therapy.

We know from research that people are drawn to complementary and alternative therapy mostly out of a desire for a more humanistic, "holistic" approach.<sup>9 10</sup> Medical education should re-examine the emphasis it places on the importance of the integration of mind, body, and spirit and acknowledge the role of social, cultural, and environmental influences and the power of self care and healing. Healthcare professionals, patients, and our healthcare system can only benefit if medical education bridges the gap with complementary and alternative therapy.

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## Advances in the management of CSF leaks

*New techniques will improve the management of unilateral clear nasal discharge*

Important advances have been made in the diagnosis, localisation, and surgical management of cerebrospinal fluid (CSF) rhinorrhoea. CSF leaks have been associated with about a 10% risk of developing meningitis per year.<sup>1</sup> It is important to diagnose the cause of unilateral clear rhinorrhoea and to differentiate unilateral autonomic rhinitis from the rupture of a mucus retention cyst (the contents of which are light straw coloured) or a CSF leak. CSF leaks can occur spontaneously although there may be a history of trauma or surgery. A specimen of the discharge must be sent for analysis of  $\beta$  2 transferrin by immunofixation;

this test has a high specificity and has superseded all other diagnostic techniques.<sup>2</sup> The glucose oxidase test has poor predictive value and should no longer be used.<sup>3</sup> Unilateral autonomic rhinitis can look like CSF rhinorrhoea, and it is essential that fluid be sent for  $\beta$  2 transferrin analysis before surgery is contemplated.<sup>4</sup>

Localisation of the site of any suspected defect is best detected by high definition coronal computed tomography of the anterior skull base.<sup>5</sup> If this fails to localise the site of a defect, a T2 weighted magnetic resonance image may help, and this has superseded computed cisternography.<sup>6</sup> In a small proportion of

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