education. In Britain, such provision is uneven, though awareness is growing and some schools already have some teaching. In the US many practitioners are being trained with a distance learning, internet based module, and medical education is also being restructured.[12] The Consortium of Academic Health Centers for Integrative Medicine aims to have programmes of integrated medicine in a fifth's of the county's 125 medical schools within the next few years.

Such programmes will produce fundamental changes in the way physicians are trained because integrated medicine is not just about teaching doctors to use herbs instead of drugs. It is about restoring core values which have been eroded by social and economic forces. Integrated medicine is good medicine, and its success will be signalled by dropping the adjective. The integrated medicine of today should be the medicine of the new millennium.

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Enhancing human healing

Directly studying human healing could help to create a unifying focus in medicine

All therapeutic avenues meet at life's innate healing or destructive processes. So direct study of human healing might serve as a unifying focus, bridging disparate worlds of care—a truly integrated medicine. In recent decades orthodox medicine's successful focus on specific disease interventions has meant relative neglect of self healing and holism, and from this shadow complementary medicine has emerged, with its counterpointing biases. The gap between them is, however, narrowing with the emerging view, backed by the study of placebo and psychoneuroimmunology,[1] that to ignore whole person factors is unscientific and less successful.

Almost 20 years ago young doctors' interest in complementary medicine surfaced,[2] presaging major changes in Western medicine that seemed unimaginable at the time. For example, acupuncture is now used in most chronic pain services,[3] and about 20% of Scottish general practitioners have basic training in homoeopathy.[4] But is integration just bolting on the scientifically proved bits of complementary medicine to the "leaning Tower of Pisa" of orthodoxy?[5] To stop there would ignore the fundamental imbalances that complementary medicine's rise reflects but cannot fix. Indeed, complementary medicine may be largely driven by medicine's main omission—the failure of holism. Consider the needs (of both doctors and patients) revealed by these remarks of doctors after training in complementary medicine: "This has rekindled my interest in medicine" and "I now see the whole person and not a biochemical puzzle to be solved."[4]

But how can primary care deliver its whole person perspective and honour a biopsychosocial perspective[6] in too short consultations with rushed doctors whose human contribution is so undervalued it is excluded from treatment protocols? The back up is a pressured secondary care system designed around a mind-body split. So we end up too often resorting to our Western based, limited range of interventionist, expensive tools, with their resultant iatrogenesis. A Trojan horse delivery of holism by complementary medicine may help but won't cure this system failure.

Both orthodox and complementary medicine are in danger of identifying themselves and their care with the tools in their tool boxes—be they drugs or acupuncture needles. Our research and our "evidence based" treatment guidelines echo our focus on technical treatments for specific diseases, ignoring the critical impacts of whole person factors in these diseases. We are the artists hoping to emulate Michaelangelo's David only by studying the chisels that made it. Meantime, our statue is alive and struggling to get out of the stone. Take ischaemic heart disease, for example: evidence that hopelessness accelerates the disease and increases mortality[7] is ignored in our guidelines. In developing and assessing care we cannot ignore that human caring and interaction is a powerful, creative activity with impact, which tools can serve but should not lead. Complementary medicine has similar blind spots, and its need to defend its specific interventions undervalues what it has to teach about holism and healing.

It might help to speak of integrative care (as in the United States), rather than integrated care. If we defined it as care, aimed at producing more coherence within a person or their care it would be measurable. For example, Howie's patient enablement index[8] has

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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,[9] 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?[10] 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.[11] It needs to be practical—for example, if fear affects physiology, say in bronchospasm,[12] 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 p 154

Complementary and alternative medicine is no longer an obscure issue in medicine. Our patients are using alternative therapies in addition to conventional care[1 2] 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,[3–5] 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),[6] 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.[7]

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.[8] 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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