



Professor Edzard Ernst does not think complementary and alternative medicine should be taught as a scientific subject Chris Saville

# 'The opposite of science'

**BSc courses in homeopathy are closing. Is it a victory for campaigners, or just the end of the Blair/Bush era?**

**Anthea Lipsett**

Can a blog force a university to close a degree course? David Colquhoun, the University College London pharmacology professor behind the "Improbable science" blog would like to think so. Since 2003, Colquhoun has used his blog, along with freedom of information requests, to draw attention to universities running courses in complementary and alternative medicine (Cam). He argues that the treatments are unproven, degree courses unscientific, and universities wrong to award students bachelor's or master's of science qualifications.

"It's particularly offensive that they're called BSc," he says. "You have to address the question: 'Is it worth lying to patients to get that placebo effect?'. They keep publishing what they call trials but are actually customer satisfaction surveys - you have no means of knowing how many people would have got better anyway. Students are learning the very opposite of critical evaluation. And they have to believe the homeopathy story in the end in order to go out and practice."

## Disappearing courses

The long and time-consuming campaign by Colquhoun and fellow scientists may finally be making a difference. Last month, Salford University dropped its course in homeopathy for which the vice-chancellor, Professor Michael Harloe, won the praise of big-name scientists in a letter to the Times. Westminster University is strengthening the "science base" of its courses, while the University of Central Lancashire (Uclan) suspended its homeopathy degree last year and is now undertaking a review of other courses.

No one from Salford would comment. But a university statement acknowledges the criticism of the scientific establishment. It says, however, that the decision was made for "financial and strategic reasons", and it will "continue to encourage and promote research into complementary and alternative medicine". Uclan declined to comment until after its review ends in April. But a course leader last year said the university had been "the subject of many attacks by the anti-homeopathy league".

For Colquhoun, the VCs are the ones at fault. "We'd been contacting Harloe since spring last year and I'd given up hearing anything back. It really does show that a bit of persistence makes things happen."

In the case of Westminster, the "idea you can put science into courses when they are simply anti-scientific is completely barmy", Colquhoun adds. "If they recruit more scientifically rigorous staff who are supposed to understand science, then the courses

would crumble." He claims research to prove the effectiveness of Cam treatments is not done because academic practitioners "know that they would fail, but they say it's because the methods of randomised clinical trials are unsuitable".

As well as Salford, Uclan and Westminster, the anti-Cam lobby has so far focused on the universities of Middlesex, Thames Valley, West of England, London South Bank, Napier and Southampton. But, in all, 16 universities across the country run a mixture of courses in subjects ranging from aromatherapy and herbalism to ayurvedic medicine and homeopathy.

Those teaching the courses insist they are academically rigorous and scientific. Dr Peter Davies, dean of Westminster's school of integrated health, says: "There's been a certain amount of pressure [from lobbyists] but it hasn't fazed us because we believe in what we're doing. And clinicians are referring people to complementary medicine therapists. Our job is to make sure practitioners are practising safely, competently, know their limitations, and can converse with healthcare professionals."

Davies says he welcomes the debate but it isn't as open as he would like. "The views expressed are intransigent, whereas practice on the ground is very different," he says. "There's no doubt that particular herbal remedies, Chinese or western, are extremely efficacious. The anti-science lobby has put most attention on homeopathy. But there are upwards of 450 medical doctors who practise it - I don't believe they are all wrong or this is just a placebo effect. Large numbers of people feel better having been treated by homeopathy."

"We need to understand these therapies in a much more critical way and that's what we're attempting to do. We encourage our students to be research-minded and deliberately set them assignments where results may look positive, but if they dig deeper they'll realise the methodology is flawed. Intrinsic is the notion of reflective practice. Half of orthodox medicine has not necessarily got an evidence base but it's observed that people get better - that doesn't remove the need to research thoroughly. We're attempting this by doing a clinical audit to establish a little more clearly what's going on. We're running a trial on Chinese herbs

in the treatment of menopause supported by the Department of Health. We're trying to offer patients other choices."

George Lewith, professor of health research at Southampton University, has also felt under pressure. "A formal complaint of academic fraud made about me to my university and ethics committee was investigated for two years and dismissed," he says. "My VC wasn't sure whether to give me a personal chair because of what people might think, but our academic unit at Southampton received a 4\* [top] rating in the research assessment exercise and was the third best in primary care in the country. There's considerable suspicion about Cam and it's completely unfounded."

## Academic intent

All universities run courses in research methodology as part of their training, Lewith claims. "The quality of degrees is an open joke but there's academic intent in most of the new universities in relation to their degrees. There's little to choose between the clinical training of medics and practitioners. The anatomy, physiology and pathology chiropractors learn is of a similar standard. The courses of which I have personal experience are academically rigorous enough and turn out safe and sensible practitioners," he says.

But Professor Edzard Ernst, director of the complementary medicine centre at Exeter University's Peninsula medical school, which tests Cam therapies, says most of the subjects are so far removed from science they should not be taught as scientific courses.

"BSCs in energy healing or homeopathy are not only out of line with science but profoundly the opposite of science. They could be taught in a scientific fashion but, as far as I can see, they aren't and that's disturbing. People are very cagey about disclosing the contents of courses. To teach at academic level, these courses need critical evaluators as teachers rather than promoters of it," he says.

"Academics could present the claims and then look at the evidence and plausibility of the concepts, and do this with scientific rigour. But the sad truth is that that's not happening. Students are unsuspecting victims of brainwashing, if you take it to the extreme, which is the exact opposite of an academic training."

So why are the courses taught? "To put it bluntly, there's a market for it," Ernst suggests. "This begs the question - what's more important, academic rigour or market forces? Sadly, I think the abundance of these courses seems to indicate that it's going the wrong way."

Colquhoun, however, is more optimistic. He believes the climate is starting to change after the Bush/Blair era where people believed in things because they wished they were true. "This has been going on for a generation and it's about time for a swing in the other direction," he suggests.

"Salford has set an example and it seems likely others will now follow. If Uclan does stop courses, that would be a big deal."

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