



The rise and rise of complementary and alternative medicine: a sociological perspective

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THE INCREASING USE of complementary and alternative medicine (CAM) within industrialised, “advanced” Western nations presents itself as something of an enigma. As a social phenomenon, it is not well understood or indeed much researched. In this article we offer some observations and tentative explanations, some of a speculative nature. It is curious that this growth is occurring in countries where Western science and scientific method generally are accepted as the major foundations for healthcare, and “evidence-based” practice is the dominant paradigm. As medicine experiences an explosion in its knowledge base and genomic medicine opens a whole new approach to medical care, we are witnessing the rapid expansion of a branch of healthcare whose claim to be “scientific”, so far at least, has been widely debated.

The problem of definition

An immediate difficulty in understanding CAM is that it has no uniform definition. The definition used by the National Center for Complementary and Alternative Medicine in the United States is “healthcare practices that are not an integral part of conventional medicine. As diverse and abundant as the peoples of the world, these practices may be grouped within five major domains: alternative medical systems; mind-body interventions; biologically-based treatments; manipulative and body-based methods; and energy therapies”.¹ However, as CAM is increasingly included in the teaching programs in medical schools and in medical practice, this distinction is becoming problematic. Further, the diversity of practices included under the rubric of CAM lessens its usefulness as a definition. They range from very focused therapies such as reflexology to whole medical systems such as Ayurvedic medicine and traditional Chinese medicine.

However, all the CAM group subscribe, in one way or another, to the principle of “vitalism” — that all living organisms are sustained by a vital force that is both different from and greater than physical and chemical forces. There are numerous ways of expressing this vitalism (*Qi*, life force, yin-yang, *prana*, universal intelligence, innate, etc). However, it should be noted that many of the therapies of the

ABSTRACT

- Major reasons for the growth in the use of complementary and alternative medicine (CAM), in Australia and elsewhere, are general societal changes rather than specific reasons internal to medicine.
- There are problems of definition of CAM, as well as the extent to which CAM modalities can be considered a unified paradigm.
- The general changes examined include the consumer and green movements, as well as postmodernism.
- The movement surrounding evidence-based healthcare may provide some answers, but will not settle the issue of compatibility.
- CAM is here to stay and will continue to present challenges for conventional medicine on how to respond.

MJA 2004; 180: 587–589

traditional paradigms have been incorporated into current practice without adopting vitalistic principles. Even within particular CAM groups there are both weaker and stronger versions of vitalism. In the extreme form the vital force is supernatural,¹ while the more moderate form assumes a position called *vis medicatrix naturae* (“the healing power of nature”), and the physician merely facilitates this. Such a position contrasts with materialism, which holds that disease can be explained entirely in terms of materialistic factors (usually biological ones in the case of biomedicine), so there is no need to invoke vitalistic forces. Vitalism leads to a different philosophy about health, healthcare and the role of the healthcare provider. It is the basis of the claim that biomedicine and CAM are distinct paradigms.²

The issue of what to call the CAM group has important social and political ramifications. To term the group of modalities *alternative* may be to claim too much for their role in healthcare, but to term them *complementary* may make their role seem secondary to primary medical care. To call them *integrative* implies some process in which integration or convergence will eventually occur. Last, but not least, to define them in terms of “otherness” — that is, by what they are *not* (as in “not taught in medical schools” or “not practised by conventional medicine”) — is arguably useless. We do not define allopathic medicine by what it is not.

In sociological terms, the issue is one of commensurability of paradigms. To argue for complementarity or integrativeness implies that the knowledge bases of the paradigms are commensurable — that is, they are not logically inconsis-

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ent. For example, in the paradigm that we now call conventional scientific medicine, dilution of a therapeutic substance weakens its potency. However, in the homeopathic paradigm, dilution — even multiple times so that few molecules of the original substance remain — actually increases its potency. Presumably dilution can't do both. The paradigms are incommensurable, and so the possibilities for combining treatments based on the two paradigms must be limited.

The CAM “craze”

In Australia, there is not much doubt overall that CAM has become a widely used form of healthcare. Government surveys show that 42% of Australians report using CAM treatments.³ A South Australian study showed that, in 2000, Australians spent \$2.3 billion on alternative therapies, a 62% increase since 1993.³⁻⁵ Similar findings have been made in the United States⁶ and Great Britain.⁷ In sociological terms, what appears to be occurring is a social movement featuring the increasing legitimacy of CAM within the healthcare services of Australia and other nations. Our only slight reservation with this otherwise solid evidence of a boom in the use of CAM is that perhaps there is at least a certain extent to which people have *always* used CAM-type treatments (then called “home” or “folk” remedies). What may have changed is the social acceptability of admitting to researchers or medical practitioners that they have been doing so. No data exist on this hunch, although 57% of CAM users in the South Australian survey stated that they still did not tell their doctor they were using CAM treatments.⁴ Likewise, in “developing” countries, most healthcare treatments, especially among the large poorer sections of their populations, have always been folk remedies because of the cost of conventional treatments.

This social movement has undoubtedly progressed further overseas. In the United States, for instance, this has been reflected in that nation's most prestigious research institution, the National Institutes of Health (NIH),⁸ establishing an Office of Alternative Medicine (OAM), now called the National Center for Complementary and Alternative Medicine (NCCAM). The current budget for NCCAM is over \$100 million, and, to date, they have funded 10 university-based centers for research on alternative and complementary medicine,⁹ including one located at the RAND Corporation (a not-for-profit, private “think-tank” located in Santa Monica, California, which houses one of the largest centres of health services research in the USA) as part of the Southern California Evidence Based Practice Center. A directory of databases now exists for CAM research.¹⁰

In our view, this is unlikely to be a passing fashion or craze. Setbacks such as the collapse of companies manufacturing the products used in CAM, like Pan Pharmaceuticals,¹¹ will probably be little other than a blip on the CAM radar screen. Many of the CAM group are embracing evidence-based methods, with an emphasis on outcomes and the effectiveness of treatment compared with other treatment or placebo groups. What is less important is the adequacy of the explanation for why treatments might work,

the traditional basis for objection from Western scientific medicine.

The causes

The causes of the rise in demand for CAM are largely unknown and little researched. Our somewhat speculative explanations for this social phenomenon include the ageing population, and a growing emphasis on chronic illness and lifestyle-related morbidity rather than acute illness. In such instances, where conventional medicine may be perceived to be less successful, CAM may appear to have much more to offer (eg, the use of acupuncture for chronic pain).^{12,13}

In this substantively new stage of human history known as the postmodern era,¹⁴ a second explanation might be the so-called postmodern thesis. This suggests that as social change (also involving globalisation) has accelerated, faith in the ability of science and technology (including medicine) to solve the problems of living has declined.^{14,15} Social “green” movements with a preference for organic and non-chemical solutions to problems have arisen.¹⁶ Societal trends toward individualism¹⁷ seem to us to have influenced healthcare trends, with individuals being less prepared to accept traditional authority, such as doctors, and seeking greater levels of control and empowerment over their lives (a trend fuelled by the Internet). The postmodern thesis is an interesting one, but the difficulty lies in translating the broad concept to concrete empirical evidence. While cross-sectional survey data can show that those using CAM hold postmodernist beliefs or opinions, drawing causal inferences from such data is more difficult.

Moreover, any explanation for why more patients are choosing CAM must also account for why patients are increasingly able to exercise this choice, have it met by more CAM providers and, in some instances, paid for by the state and insurance plans. We think two broad social changes are implicated. The first is the impact of the consumer movement on healthcare. While postmodernist values can be predictors of use of alternative healthcare, other factors that affect the individual, such as higher education, poorer health, a transformational experience that changed the person's worldview, a commitment to the environment, feminism, spirituality and personal growth have also been predictive.¹⁸ Another important reason for growth in CAM use in the last 20 years is increased migration and the transmission of established medicines from other lands (eg, Ayurvedic medicine, traditional Chinese medicine).

Allied with this has been the politicisation of health. The clearest example here has been feminism, but it can also be seen in the gay movement (particularly around HIV) and in the green movement. Politicisation of health returns control of health to the individual and control of the healthcare system to the community. We think it is significant that the growth of CAM has coincided, both in the United States and elsewhere, with a lessening of medical dominance. For much of its history, medicine has contained CAM by ensuring that it was not taught in medical schools or universities; did not have access to research funding; did not get access to hospitals, laboratories and services that might have enhanced their services to their patients; was not

covered by government and private insurance; did not obtain state licensure or registration; and that the private educational institutions created by CAM providers did not receive funding. All of these significantly impeded the legitimacy of CAM. Much of it was made possible by medicine claiming to be acting in the public interest. As the consumer movement gained strength and healthcare became politicised, this defence lost its legitimacy and legality. Consumers demanded to act in their own interest and legislation made restraint of trade illegal, even for medicine.

Other specific causes may have contributed to the growth of CAM, and will probably do so in the future. One is the declining competitive advantage of conventional doctors as bulk billing is abandoned, which means patients may be more willing to try alternatives, even though CAM services have never been cheap. Further, as Internet use grows, patients may find more and more useful information about CAM treatments, whatever the problems with some of that information might be.

Conclusion

It is very unlikely that the trend towards CAM will be reversed in the immediate future. It seems to us equally unlikely that conventional medicine will be able to prevent this trend continuing. It is occurring in the context of broader societal changes, which have produced a political climate in which CAM can increasingly challenge medicine and seek its own power. To be clear, we do not think that this growth in CAM was a major cause of the decline of medical dominance — both reflected broader change in society and healthcare provision, along with the growth of a consumer movement that stressed increased choice and worked to have those choices recognised as legitimate.

One response within medicine has been an increasing call for CAM to be subjected to the same rules of evidence that are assumed to be held for medicine,¹⁹ and the same methods of evaluation as those for clinical competence and safety.²⁰ A more radical position is that there is only one kind of medicine that has empirical support, and that until CAM can demonstrate such support it should not be considered complementary or alternative.²¹ To date, there is simply not enough “scientific” evidence to accept or reject most CAM. Further, this lack of evidence seems to be having little impact on the growing use of CAM. So, in making evidence the basis for any form of relationship, medicine runs the risk of being as isolated from CAM as it has always been, and in no better position to advise patients or to detect potentially dangerous interactions between the two therapies.

Another major response in the US is the emergence of integrative medicine (called integrated medicine in Great Britain), referred to as “practicing medicine in a way that selectively incorporates elements of complementary and alternative medicine into comprehensive treatment plans alongside solidly orthodox methods of diagnosis and treatment”.²² There are numerous ways in which this can be done. Commonly, doctors seek training in CAM methods.

In the US, the most common of these are acupuncture, homoeopathy, traditional Chinese medicine and Ayurvedic medicine. A second response is to bring CAM providers into traditional medical centres. This usually involves the most commonly used CAM providers (chiropractors, naturopaths, homoeopaths, acupuncturists), and usually those who are licensed or registered.

A third solution for doctors may be simply to learn as much as possible about CAM, and to ensure their patients feel comfortable enough to discuss their use of CAM with them. It might also help to recall medicine’s own history, as its emergence as a scientific, evidence-based discipline is both very recent, and very much a work in progress. This is a journey that at least some CAM therapies have already begun.

Competing interests

None identified.

References

1. National Center for Complementary and Alternative Medicine (NCCAM). Expanding horizons of healthcare: five-year strategic plan, 2001-2005. Available at: www.nccam.nih.gov/about/plans/fiveyear/index.htm (accessed Apr 2004).
2. Coulter ID. Integration and paradigm clash: the practical difficulties of integrative medicine. In: Tovey P, Adams J, Easthope G, editors. The mainstreaming of complementary and alternative medicine. London: Routledge, 2004: 103-122.
3. Bensoussan A. Complementary medicine — where lies its appeal? *Med J Aust* 1999; 170: 247-248.
4. MacLennan AH, Wilson DH, Taylor AW. The escalating cost and prevalence of alternative medicine. *Prev Med* 2002; 35: 166-173.
5. MacLennan AH, Wilson DH, Taylor AW. Prevalence and cost of alternative medicine in Australia. *Lancet* 1996; 347: 569-573.
6. Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, 1990-1997. *JAMA* 1998; 280: 1569-1575.
7. Murray J, Shepherd S. Alternative or additional medicine? An exploratory study in general practice. *Soc Sci Med* 1993; 37: 983-988.
8. Wardwell W. Alternative medicine in the United States. *Soc Sci Med* 1994; 38: 1061-1068.
9. Niemark J. Their numbers are growing, and so is their confidence: more and more respected mainstream physicians are blending traditional and alternative medicine. *Psychol Today* 1997; Jan-Feb: 53-69.
10. Woolton J. Directory of databases for research into alternative and complementary medicine: an update. *J Altern Complement Med* 1997; 3: 401-403.
11. Australian Consumers Association 2003. Choice. Campaigns: health campaigns. Pan Pharmaceuticals. Available at: www.choice.com.au/viewArticle.aspx?id=103731&catId=100386&tid=100008&p=1 (accessed Apr 2004).
12. Easthope G, Gill G, Beilby J, Tranter B. Acupuncture in Australian general practice: patient characteristics. *Med J Aust* 1999; 170: 259-262.
13. Bensoussan A, Myers S. Towards a safer choice: the practice of traditional Chinese medicine in Australia. Sydney: Faculty of Health, University of Western Sydney, 1996.
14. Crook S, Pakulski S, Waters M. Postmodernisation: changes in advanced society. London: Sage, 1992.
15. Siahpush M. Postmodern values, dissatisfaction with conventional medicine and popularity of alternative therapies. *J Sociol* 1998; 34: 58-70.
16. Eastwood H. Why are Australian GPs using alternative medicine? Postmodernisation, consumerism and the shift towards holistic health. *J Sociol* 2000; 36: 133-156.
17. Beck U, Beck-Gernsheim E. Individualization: institutionalized individualism and its social and political consequences. London: Sage, 2002.
18. Astin JA. Why patients use alternative medicine: results of a national study. *JAMA* 1998; 279: 1548-1553.
19. Chalmers I. Evidence of the effects of health care: a plea for a single standard across “orthodox” and “complementary” medicine. *Complement Ther Med* 1998; 6: 211-213.
20. Lewith G, Davies P. Complementary medicine: the need for audit. *Complement Ther Med* 1996; 4: 233-236.
21. Angell M, Kassirer JP. Alternative medicine — the risks of untested and unregulated remedies. *N Engl J Med* 1998; 339: 839-841.
22. Faass N. Integrating complementary medicine into health systems. Gaithersburg: Aspen Publications, 2001.

(Received 30 Jan 2004, accepted 5 Apr 2004)

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