

# The role of evidence in alternative medicine: Contrasting biomedical and anthropological approaches<sup>☆</sup>

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## Abstract

The growth of alternative medicine and its insurgence into the realms of the biomedical system raises a number of questions about the nature of evidence. Calls for ‘gold standard’ randomised controlled trial evidence, by both biomedical and political establishments, to legitimise the integration of alternative medicine into healthcare systems, can be interpreted as deeply political. In this paper, the supposed objectivity of scientific, biomedical forms of evidence is questioned through an illumination of the multiple rhetorics embedded in the evidence-based medicine phenomenon, both within biomedicine itself and in calls for its use to evaluate alternative therapeutic systems. Anthropological notions of evidence are constructed very differently from those of biomedical science, and offer a closer resonance with the philosophy of alternative medicine. Examples are given of the kinds of evidence produced by anthropologists researching alternative medicine. Ethnographic evidence of ‘what works’ in alternative medicine includes concepts such as transcendent, transformational experiences; changing lived-body experience; and the gaining of meaning. It is proposed that the promotion of differently constructed modes of evidence can be used to legitimise alternative medicine by widening the definition of what works in therapy, and offering a critique of what people feel is lacking from much of orthodox medical care.

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## Introduction

Over recent decades there has been an exponential increase in the availability of alternative therapies in the Western world.<sup>1</sup> A particular feature of this grassroots move (much of it driven

by consumer demand) has been the extent to which alternative therapies are provided through national public biomedical<sup>2</sup> healthcare systems. The inclusion of complementary and alternative medicine (CAM, as they are more likely to be known in this

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<sup>1</sup>Examples include Acupuncture, Osteopathy, Homeopathy and Reflexology.

<sup>2</sup>I refer to the science-based, western medical system as biomedicine, taking an anthropological critical stance and seeing biomedicine as a comparable cultural system. I prefer the term ‘alternative’ medicine, to highlight the underlying philosophies that underpin these systems of medicine, often ignored in debates about integration. Complementary is often used in a relational sense to biomedicine and implies that the two systems are compatible.

context) within science-based medical systems has become known as integrated (UK) or integrative (USA) medicine.

Concurrent with this rise in alternative and integrated medicine there has been a movement towards increasing reliance on science-based research to judge the effectiveness of treatments, otherwise known as evidence-based medicine (EBM). In this paper, I focus on the UK context in discussing debates connecting the EBM movement with alternative medicine. I then go on to investigate the different notions of evidence produced in anthropological research on alternative medicine.

I wish to problematise the call from within biomedicine for more evidence of alternative medicine's effectiveness via the medium of the randomised clinical trial (RCT). This call originates in part from the motive of ensuring that alternative medicine 'works' before providing it in a publicly funded service. I will suggest, however, that this call is also, in part, political and relates to the agenda of controlling the threat posed by alternative medicine to the long-standing hegemony of biomedicine in the West. I also want to highlight possible omissions and biases inherent in the RCT method, not always visible to its supporters. RCTs usually omit the measurement of important elements of 'what works' in alternative medicine, which often acts in a different way to biomedical drugs. By presenting ethnographic evidence, I wish to show how evidence, when seen from the perspectives of the users and practitioners of alternative medicine, hinges on a very different notion of therapeutic efficacy.

My interest in this debate arises from my experience as a patient of both biomedicine and alternative medicine.<sup>3</sup> I can contribute from an outsider perspective, neither being a biomedical nor an alternative practitioner, but also from an insider perspective of having experienced both as a user.

Having conducted research in general practice (Barry, Stevenson, Britten, Barber, & Bradley, 2001) and alternative healthcare systems (Barry, 2003), I find debates on the production of evidence in alternative medicine, lead by biomedically trained commentators (for example, Ernst, 2002), ignore most of the aspects that advocates of alternative therapies draw on as evidence of therapeutic effectiveness.

## **Integrating alternatives into the NHS: the role of the RCT**

In Britain the CAM integration debates have been most vocal from within the medical establishment, albeit at the fringes. Central to this debate has been the Foundation for Integrated Health's campaign to increase CAM in the National Health Service (NHS), and the [House of Lord's Select Committee on Science and Technology \(2000\)](#) report on CAM. In a medical system currently dominated by discourses of EBM, the integration debate has centred on the pivotal issues of regulating CAM professions and producing evidence to prove such therapies merit inclusion in the NHS. In fact [Baer \(2004\)](#) differentiates this new CAM or integrative movement from its predecessor of holistic medicine, through its emphasis on EBM. Evidence in this CAM context is conceived of as therapeutic efficacy for biomedically diagnosed disorders, within the individual body (or body part), and as measurable utilising science-based research strategies, most notably the randomised controlled trial.

These assumptions reflect a biomedical orientation towards 'healthcare technologies' (such terminology itself denotes a separation of treatments from: the people they treat, the people providing them, and the settings in which they are provided). In an alternative orientation such a separation makes no sense, as the therapeutic effect does not reside inside a homeopathic remedy, for example, but in an energetic system that comprises the patient, the remedy, the healer and the setting. Homeopathy as conducted by a homeopathically trained biomedical GP in an NHS practice was so different from the practice of lay homeopaths as to be unrecognisably the same therapy ([Barry, 2005](#)). The GP prescribed homeopathic remedies for biomedical diagnoses, collecting little information from patients. The professional homeopaths prescribed on the totality of symptoms, many non-medical, which necessitated much more complex consultations.

The nature of Homeopathy precludes the straightforward administration of clinical trials to measure it. Based on the principle of treating like with like, homeopathic remedies are developed from substances in the natural world. A picture of the symptoms of these substances is catalogued by 'proving' the effects on healthy volunteers. A much-diluted form of the remedy is then administered to

<sup>3</sup>I turned to acupuncture, when biomedicine failed to treat a chronic condition.

patients suffering with a picture of symptoms that is closest to that particular remedy. Each remedy picture includes multiple physical symptoms in multiple body locations, diverse psychological and emotional states, and aspects of behaviours that are not part of biomedical diagnoses. For example symptoms that improve on violent motion, particularly dancing (irrelevant to a biomedical diagnosis) is one of the keynote aspects of the symptom picture for Sepia (Vermeulen, 2000). Different individuals with the same biomedical diagnosis will be prescribed different remedies, as their symptom and personality picture will likely be different in each case. So two important aspects of homeopathy, individual prescribing and attention to non-biomedically recognised ‘symptoms’, problematise the use of RCT methodology.

RCTs carried out on alternative therapies necessarily entail reducing the complexity of the intervention to fit the reductionist nature of the RCT method. As a result, the therapeutic intervention as tested in RCTs is in most cases quite different to the interventions used by alternative practitioners in everyday clinic situations.

Evidence-based epistemology can in itself have transformative effects on alternative therapies. Villanueva-Russell’s (2004) sociological case study shows how the development of clinical guidelines has influenced some practices within chiropractic. She suggests such guidelines are at odds with the approach and work of purist chiropractors, whom she calls ‘straights’ who follow a vision of vitalism, seeing their work as aiming to ensure a free flow of innate intelligence through the body. The guidelines were skewed in favour of the agenda of the adulterated practice of medicalised chiropractors—the ‘mixers’—who have divorced the epistemological foundations from the mechanistic practice of manipulation. This research demonstrates how scientifically constructed ‘evidence’ for an alternative therapy only works when the therapy has mutated into a medicalised version and divested itself of its alternative philosophy. Quah (2003) makes similar claims for the incompatibility of science-based evidence with traditional Chinese medicine.

Tonelli and Callahan believe CAM is a field of enquiry for which suitable methods diverge from the traditional science-based view: ‘The methods for obtaining knowledge in a healing art must be coherent with that art’s underlying understanding and theory of illness. Orthodox medicine should

consider abandoning demands that CAM become evidence-based, at least as “evidence” is currently narrowly defined, but insist instead upon a more complete and coherent description and defence of the alternative epistemic methods and tools of these disciplines’ (Tonelli & Callahan, 2001, p. 1214).

### Rhetorics of evidence in biomedicine

I do not wish to discredit the notion of the RCT. In its purest ideological form, the concept of offering patients only therapeutic interventions that have been proven to work is unquestionably sensible and morally correct. Where the problems arise is the imperfection of the RCT tool as an arbiter of what works, because it measures the wrong things or the wrong populations. The real world clinical context is different to the trial laboratory. The RCT can sometimes become a victim of hubris. Just being the ‘gold standard’ is not enough—it is still an imperfect tool. Even the most elegantly designed trial with statistically beneficial sample sizes and clever protocols for blinding usually measure only a subset of symptoms and therapeutic effects (those that are short-term and easiest to measure). The production of scientific evidence is a social as well as a scientific process. There is no such thing as The Evidence, just competing bodies of evidence.

As part of a broader cultural movement towards the audit culture (Maguire, Shore, & Wright, 2001), ‘evidence’ has become an increasingly strong rhetoric in biomedicine in the last few years. This is not without criticism from both within and without. There are, for example, ongoing extensive debates about EBM among biomedical practitioners (Lambert, *this volume*).

One explanation for its rise is that the NHS is becoming an increasingly managerial system. Greenhalgh (1999) argues that EBM is driven by those with managerial rather than clinical backgrounds. Overt rationing of healthcare services through the use of committees such as NHS trusts and the National Institute for Clinical Excellence (NICE) requires decisions about resource allocation to be based on evidence of efficacy and cost-effectiveness of treatments.

The optimum evidence for this task is the ‘gold standard’ of the RCT, or preferably the Systematic Review of a number of RCTs, which has come to be positioned at the top of the evidence hierarchy (Lohr, Eleazer, & Mauskopf, 1998).

Timmermans and Berg (2003) propose that the introduction of clinical practice guidelines (based on trial evidence) in the 1980s, was motivated by the medical professions' need to claim exclusive expertise in healthcare. The guidelines embodied the extent of medicine's jurisdiction and created a 'market shelter' protecting the stock of knowledge from competition. They conclude that EBM serves some goals at the level of the professions but hardly makes a difference at the level of the work these professionals do. They report minimal guideline compliance with only 15–66% of clinicians aware of guidelines, and of those who have read them, less than a third report changes in their behaviour as a result. In the UK, implementation of NICE guidelines has also been found to be patchy (Sheldon et al., 2004). The difficulties implementing innovations in health services are not to be underestimated, and whilst robust scientific evidence may be necessary, it is not sufficient for change (Dopson & Fitzgerald, 2005).

Berg and Mol demonstrate that in spite of a rhetoric of standardisation through evidence-based guidelines, there exist enormous variations in medicine and that medicine should not be seen as a coherent whole, rather as a heterogeneous coalition. They argue that 'protocols do not create homogeneity, but introduce new kinds of diversity in medical practices' and that 'Medicine does not fail to meet the standards. The standards fail to meet reality' (Berg & Mol, 1998, p. 10).

There is also the issue of bias in funding of trials and the vested interests of the powerful pharmaceutical industry influencing the so-called neutrality and objectivity of much RCT data (de Vries & Lemmens, *this volume*). 'It takes a lot of gold to meet the gold standard of the clinical trial' (Hess, 1998, p. 17), and in alternative medicine there are rarely powerful pharmaceutical interests, with the exception of herbal products, and therefore few trials.

In addition to the question of availability of evidence, concepts embedded within the notion of RCT evidence are problematic. A placebo in medical terms is supposed to be an inert substance yet it is known to exert around a 35% improvement effect (Beecher & Boston, 1955). Di Blasi and Kleijnen (2003) demonstrate that the existence of a placebo option is capable of changing patient responses even in non-placebo arms of an RCT. Just knowing that they might potentially be on placebo reduced the response of participants given an active drug.

Wolpe (2002) raises the paradox that many of the most powerful phenomena in orthodox medicine, the placebo effect, psychosomatic illness and spontaneous remission, which can account for large percentages of healing rates, get very little research attention. Mythological, ritualised and culturally embedded aspects of all healing systems, biomedicine included, can in themselves possess great healing potential. Orthodox medicine can be blind to such aspects of its own praxis in its claim to scientific legitimacy, and these elements are not studied in the RCT. Yet it is often these very aspects that attract patients to CAM.

EBM has also been conceptualised as ritualised behaviour, that does not actually encourage changes in clinical practice, in Sinclair's (2004) ethnographic research of EBM teaching in psychiatry. Such an interpretation supports the idea that EBM might have non-practical, symbolic advantages to the profession of medicine, without changing practice. It would seem that the notion of scientific evidence in biomedicine should be treated as complex and serving multiple agendas.

So given the inherent problems in notions of evidence, preoccupations with evidence as the preferred basis for good medicine can be seen to constitute a form of rhetoric. I can identify three further rhetorical aspects. The first is the preponderance of gaps in the evidence base. How can EBM be possible when there is either no available evidence or the quality is suspect (Linde & Willich, 2003)? Systematic reviews use criteria for assessing quality of RCTs and reject a lot of trials. There is a hierarchy of evidence according to the ways in which the study has been conducted, points being assigned for randomisation, controls and blinding. Therefore, the use of RCT methodology is not itself a guarantee of sufficient quality to produce solid evidence.

The next rhetoric is that the relationship of RCT evidence to the reality of clinical practice is often seriously de-contextualised and so manipulated as to be unrepresentative of actual treatment and patients in the clinic. For example, the Royal London Homeopathic Hospital have very little success recruiting patients for trials of homeopathy. Their patients refuse to consider the possibility of being in a placebo arm. Such patients are very committed to taking homeopathy and have often been on a long waiting list. In their place, trialists have to recruit from general practices to find patients willing to be randomised (Peter Fisher,

Table 1  
Problems with basing biomedical practice on rhetorics of evidence

1	RCT methodology measures what is easily measurable ignoring subtle and complex effects
2	RCTs pay little attention to the context or provider of treatments
3	The placebo concept has powerful healing properties not fully acknowledged in RCT methodology
4	Funding for trials is patchy and biased towards products with pharmaceutical industry interests
5	EBM can be seen as a political move to protect the medical professions' exclusive expertise in healthcare
6	EBM can be seen as benefiting hospital managers more than clinicians and arising from the growth of managerialism and audit culture
7	Compliance with guidelines derived from evidence is low
8	Teaching of EBM to clinicians can be conceptualised as ritualised practice that does not impact on clinical practice
9	Evidence may be in conflict with patients' wishes in patient-centred medicine
10	RCTs come low down in the hierarchy of patients' decision making factors

personal communication). Such recruits may be very different to many homeopathy patients. Being committed to homeopathy makes patients more likely to comply with homeopathic treatment over the long term and also makes them more likely to judge it successful (Barry, 2003). The patient, it is sometimes forgotten, is a very powerful ingredient in the mix of factors to achieve a successful intervention. Patients' belief systems and emotions have been shown to be very instrumental in healing outcomes through the study of psychoneuroimmunology (Pert, 1999).

Ignoring such individual factors, the trial method works at the statistical level of populations and 'average' patients rather than real patients. However, average patients are not an average of the whole population, only of the population of trial consenters. Trials are often peopled with middle-class, white, male patients with no co-morbidity (Tudor-Hart, 1993), yet in reality many patients are on several different drugs. Tudor-Hart demonstrated that only 10% of people with hypertension have an uncomplicated version that would be appropriate for the application of standard guidelines, making these irrelevant for the 90% majority. The average patient is often therefore just an artefact, not representative of real patients.

A final problem with the rhetoric of EBM is the conflict with other accepted healthcare policies, such as patient-centred medicine, characterised by increasing involvement of patients in decision-making about healthcare (Bensing, 2000; Lambert, *this volume*). If a patient expresses a strong desire for a treatment, regardless of evidence-based guidelines, it may be impossible to satisfy the needs of both patient-centred medicine and EBM (Table 1).

While these rhetorics of evidence are very powerful, they encompass only one formulation of

evidence within biomedicine. For clinicians dealing with their patients, RCT evidence is just one form of evidence they use in their daily lives, alongside clinical judgement—the art versus the science of medicine. General Practitioners, for example, combine formal knowledge such as that gleaned from textbooks and trials, with the case specific features of the individual patient's story (Greenhalgh, 1999). They also draw on more experiential and intuitive evidence, the accumulated expertise of dealing with many such individual cases over time.

So the rhetoric of evidence as encapsulated in the RCT represents only one, albeit powerful, formulation of evidence in biomedicine. What effect has this powerful evidence-based rhetoric had in the world of alternative medicine?

### Evidence and alternative medicine

Alternative medicine in the past has shown little interest in producing RCT evidence. Its proponents are less embedded within a science-based epistemology, there is no money available, and there has been an awareness of the limitations of such methodology for studying complex individualised treatments (Long, Mercer, & Hughes, 2000).<sup>4</sup> However, increasing integration requires alternative therapists to start to play the 'evidence' game. Alternative practitioners who take up research projects often want to use research for political ends to validate therapies and to improve access by getting alternatives accepted in NHS settings. Most Primary

<sup>4</sup>CAM therapists are not alone; physiotherapists have raised similar doubts about the use of RCTs to pinpoint the processes of their therapy (Dopson & Fitzgerald, 2005).



Table 2  
Problems with alternative medical practice and rhetorics of evidence

1	Alternative interventions are often complex and multi-stranded; e.g., most alternative practitioners also recommend lifestyle changes such as diet
2	Alternative therapies are quite different when practised in the NHS versus outside
3	Committed users of alternative therapies interact with a therapy quite differently from biomedically minded patients
4	The phenomenon labelled 'placebo effect' in RCTs is recognised as a powerful intrinsic component of alternative healing
5	Few alternative therapies are allied to powerful industry interests
6	EBM can be used as a tool to limit threats to biomedicine's power from alternative therapists
7	NHS managers are unlikely to appreciate the benefits of alternative therapies in the absence of hard data
8	RCT evidence alone will not lead to implementation of alternative therapies into the NHS
9	Patients who choose alternative therapy are often against orthodox treatments, whatever the evidence

Care Trusts<sup>5</sup> will not provide alternative medicine services to their constituency unless the proposer can support their request with RCT evidence.

Some biomedical researchers involved in the production of trials wish to quash the rise of alternative medicine, and RCT evidence can be used as a tool to discredit it and bar it from the NHS. RCT data are being used to limit the activities of non-medical complementary therapists. For example, most cancer hospital departments now employ acupuncturists, aromatherapists and/or reflexologists who are often instructed to limit their interventions to the alleviation of side effects of treatments, rather than any treatment of the cancer or the patient as a whole. In part this is because RCTs have not been conducted on the effects of treatment on the whole person, only on specific symptoms, such as alleviation of chemotherapy-related nausea. However, whole system acupuncture, for example, may benefit patients' healing responses.

In alternative models of healing, effectiveness is often constructed very differently. In homeopathy short-term cures are only seen as appropriate to acute and minor illnesses. Homeopathy views treatment for chronic and serious illnesses extending over long timescales. A private patient of lay homeopathy explained 'over the last *few years* my homeopath has really improved my hay fever' (Barry, 2003). On the other hand, a more biomedically inclined patient of a homeopathic GP said she had given up on the homeopathic remedy after 3 days when it had not worked on her hay fever. Another patient of a lay homeopath reported working through a repetition of old symptoms of all the health problems she had experienced since

childhood, over a 3 year period: 'asthma then eczema then allergic sneezing for 12 months then conjunctivitis, stomach problems and finally thrush which I had as a baby' (in homeopathic healing the notion of the return and resolution of old symptoms is seen as beneficial in the restoration of health).

The very publication of trials can act as a reformulation of the very nature of a therapy, generally in the direction of medicalisation. Where homeopathy has been tested on a biomedically diagnosed disorder, rhinitis, for example (Schapowal, 2002), it suggests to the readers that homeopathy can be used in a biomedicalised way, for medical conditions across a population of sufferers, ignoring the mental, spiritual, and relational picture in favour of physical symptoms.

In a lay homeopathy clinic, I observed patients with rhinitis symptoms being prescribed very different remedies. One patient's nasal drip was accompanied by feelings of fear and distress about a recent mugging, unresolved grief from her parents' death and a metallic taste. Another patient with nasal drip reported menstrual problems, relationship issues and feelings of unexpressed anger. In the Schapowal (2002) trial, both would have been given the same remedy, Butterbur, yet neither were prescribed this remedy.

In homeopathy training, students are told that if a remedy that does not match the total symptom picture, it is seen as an inert substance. For a remedy to be active, the 'similimum', it has to be the most similar symptom picture to that of the patient. Under this logic, many of the prescriptions of Butterbur in the trial would have been inert and useless, in spite of the shared biomedical diagnosis of rhinitis.

After conducting an RCT, Elaine Weatherly Jones, a non-medical homeopath, reported a 'change of heart' on the usefulness of this method for

<sup>5</sup>Primary Care Trusts are the administrative units that hold budgets and allocate resources in primary care.

researching such an individualised form of therapy (Weatherly Jones, 2004). Unusually, she interviewed the trial practitioners who reported that the blinding procedure interfered with their normal practice routines, to produce a radically different version of their normal therapeutic practice (Table 2).

### **The response of biomedicine to the growth of alternatives**

Macro-analyses suggest that the response of biomedicine at the system level, to the growing popularity of alternative medicine, can be interpreted as politically motivated. Mike Saks suggests RCT evidence is being used strategically by biomedicine's medical associations, to reduce potential threat from alternative medicines, feeding into incorporationist and assimilationist policies (Saks, 1996). In one case study Saks charts how the British Medical Association (BMA) moved from a completely hostile position of total exclusion of alternative medicine (in their 1986 report) to an idea of embracing collaboration with non-medically qualified alternative practitioners (in their 1993 report). Saks interprets this U-turn as a heavily defensive, politically motivated strategy, aimed at reducing the potential threat to biomedicine's position, in terms of power, income and status, from alternative therapies. Baer (2004) has noted similar shifts within the American Medical Association, and interpreted them similarly.

Another example of attempts to control the impact of alternative medicine, through defensive strategies, is evidenced by the impassioned hostile response to RCTs published in mainstream medical journals. Such trials usually produce a furore of response from individual doctors and scientists. In the *British Medical Journal*, Taylor et al. (2000) published an overview of four trials of homeopathy in perennial allergic rhinitis. There were an unusually large number (61) of electronic rapid letter responses, mostly dismissing these positive findings, often using emotively charged phrases: 'The Emperor's New Therapy', 'Homeopathy is ridiculous.... Preposterous', 'Like the sprinkling of holy water on vampires' (see responses on [www.BMJ.com](http://www.BMJ.com) after Taylor et al., 2000).

### **The nature of evidence in anthropology**

Although any one system of medicine covers a broad and varied range of practices and philosophies, contextualised accounts of practices and

processes in specific circumstances are notably lacking in most forms of research. RCT research and survey research, for example, do not tend to investigate the detailed context in which healthcare was provided. However, Verhoef has recently called for the use of qualitative research to monitor the context, process and practice within clinical trials so that conceptual generalisations can be made (Verhoef, Casebeer, & Hilsden, 2002).

Just as the scientific laboratory method and the nature of population statistics have shaped the nature of RCT evidence, so too anthropological method influences what constitutes evidence. Ethnographic research is conducted in everyday real-life settings and so can pay attention to the all-important contextual features of interaction.<sup>6</sup> Reality is seen as ever-changing through a series of processes, formed by interactions and relationships between people, and always affected by the context in which social actions take place. The method utilises an observer situated in the context, not researching from afar. The focus of research is neither wholly predetermined nor tightly structured. This allows for research to uncover issues of importance to participants that may have been ignored in the literature. Shifting the focus to the perspective of the actors involved, and seeking the native point of view, not mirroring the prior concerns of the academic community, can produce powerful new interpretations (O'Connor, 2002).

In ethnography real-life interactions between members of a community or setting are recorded, paying attention to the ways in which people construct the meaning of an event together. Other research methods such as surveys or focus groups usually canvass the views of one particular group—patients, for example. Ethnographic research recognises that it is the interaction between a specific patient and their specific healthcare practitioner that needs to be looked at, as a system, and so would look at what happens in the actual interactions between them. My previous work in general practice is an example of how different data collection methods reveal quite different interpretations of events (Barry, 2002a). Qualitative data collection techniques usually favour either the investigation of practices or meanings (Silverman, 1998). Ethnography is particularly powerful as it usually investigates both. Anthropologists, as a

<sup>6</sup>Ethnography is also used by sociologists, educationalists, nurses and others.

result, are very aware of the difference between the ideal and the real, through both listening to what people say about their behaviour and actually watching what they do, which can be very different (Lambert, 1998).

Embodied and inter-subjective data are acceptable evidence in anthropology. Ethnographers pay attention to how people feel in their bodies and how they relate to each other. Action is analysed over long timescales, fieldwork extends for months, sometimes years. The anthropologist's main tool is her/himself. Thus the collection of evidence is not through randomisation and standardisation but via personal, individual ways of knowing. This incorporates the utilisation of the anthropologist's emotions, intuitions, relations with others, and own bodily responses (Turner, 2000; Laderman, 1994). It also requires the anthropologist to account for her/his presence in the research through reflexivity, paying attention to the impact they have on the production and interpretation of data (Davies, 1999; Barry, 2002a, 2002b). It is, however, worth noting that in our increasingly audit driven culture, pressure from funders is increasingly forcing standardisation even on anthropologists (Maguire et al., 2001).

### **Evidence on alternative medicine in anthropology**

There has been relatively little study of the use of alternative therapies in western settings by anthropologists (Micozzi, 2002). Anthropologists mainly study cultures from other parts of the world. Although there is a growing tradition of 'anthropology at home' in western cultures, medical anthropologists working 'at home' have traditionally focused exclusively on the sub-culture of biomedicine (for example, Good, 1994).

McGuire conducted one of the first ethnographies of alternative practices in America, showing how healing was seen to work primarily through providing meaning to its participants (McGuire, 1988). Some kind of order was created in their personal lives, through the naming of illness and its causes, in non-biomedical terms. Symptoms and other aspects of life were connected in a meaningful narrative. When patients evaluated the 'success' of a treatment, changes in identity and self were experienced as more important than physical improvements. The shaping of meaning of bodily experience was central. Evidence of the therapy's

success was seen in its effect on understanding as much as on bodies.

One very powerful theoretical strand in medical anthropology that is relevant to the study of alternatives is the work on embodiment. Csordas (1990) explains that embodiment requires that research investigate the phenomenology of the lived body using more creative methodologies to deal with processes, in both the researcher and the researched, such as intuition, somatic perception, bodily imagination and sensation. He used subtle and interpersonal methods to study healing in a charismatic Catholic Pentecostal community (Csordas, 1997). Analysing his own bodily experiences, and those of the congregation, he shows how the presence of collective bodies in this church produced co-ordinated action and sensory stimulation, through chanting, drumming, dance and/or drama. The resulting changed bodily states were experienced as therapeutic.

In an ethnographic study of a Chi Gung exercise class, attendees reported a sense of alienation in their dealings with western medical practice and its reductionism (Busby, 1999). They experienced a sense of coming home to a practice that was more congruent with their lived experience of their bodies. Their Chi Gung practice not only reflected their everyday bodily experience more accurately, it invited new ways of thinking. The idea of an intelligent nature within the body, and the importance of flow and release as healing movements, were well received in contrast to more mechanistic biomedical versions of the body.

Adams' (2002) comparative ethnography of shiatsu as practised in Japan and the UK illustrates how in each country the therapy is practised quite differently and reflects the local culture and context. Adams utilised an auto-phenomenological approach to investigate the experience of a shiatsu session from both therapist's (himself) and client's viewpoint. By presenting the mental imagery reported by the client, alongside an analysis of his own imagery and felt bodily experience, Adams portrays the subtlety and inter-subjective nature of a healing session. His case study illustrates how dependent this experience is on the specific individuals involved. His work has implications for understanding the embodied dimensions, the role of imagery in practitioner-patient encounters, the idea that a healing session may be experienced very differently according to the different images conjured up by any one individual, and the importance



of attending to the interactions of therapist and patient.

### **What works from homeopathy users perspectives?**

In an ethnography of homeopathy in South London I researched inside clinics (a homeopathic general practice, and a lay homeopath's low-cost clinic) but also in settings in the community: women's homes, educational classes and a support group (Barry, 2003). I observed the same people over 2 years and gained a processual view of engagement with homeopathy. I also incorporated my embodied experiences by attending homeopathic clinics as a patient and homeopathy classes as a student.

My research showed that a therapy's effectiveness, from the perspective of therapists and patients, was embedded in the development, over time, of a whole new set of beliefs about health, illness and the body, and about the nature of the healing process. For committed users, health is an ongoing interdependency with the social, physical and spiritual, and illness is an active and positive part of health. The healing process starts with health not sickness, and the body does the healing naturally. Ultimately, homeopathy helps, pharmaceuticals hinder, and the user has primary responsibility for healthcare. The development of this new belief system about health was seen in itself as evidence of the power of homeopathy for many users (Barry, 2003).

Committed users and lay homeopaths shared notions of efficacy that involved evaluating (over much longer timescales) the health of themselves as embedded within and inseparable from a network of emotions and connectivity with others. The therapy was judged to be successful in many cases through perceived changes in family relations. One user judged the fact that her husband sought counselling for his depression as evidence for the effectiveness of her own homeopathic treatment. Homeopathy helped her come to terms with difficulties in adjusting to her second pregnancy and this, in turn, had linked effects of changing the communication between her and her partner, leading to a whole sequence of behavioural changes in the family. She explained this as working through quite physical responses (such as nausea) to remedies. She did not separate out physical and emotional effects. Her homeopath accepted this, unquestioningly, as matter-of-fact evidence of homeopathic therapeutic effect.

Gaining spiritual meaning through resonance with the homeopathic philosophy of treating mind, body and spirit, was of particular importance to people who were struggling with transitions in their lives—divorce, bereavement or first experience of parenthood.

Many of the women in the study who had had difficult experiences with orthodox medicine, often during pregnancy and childbirth, saw one aspect of the effectiveness of homeopathy as a way of being more in control of their own healthcare.

In evaluating the evidence for the success of these therapies, committed users stressed the importance of the individual relationship between their specific homeopath and themselves. They also drew on observations of their children's speedy and sometimes miraculous symptom response to remedies, or their own longer-term changes, as evidence that the homeopathy was working. Evidence for them was the evidence of their own eyes and embodied experiences.

Not that they ever used words such as 'evidence' or 'efficacy'. Users of homeopathy did not see a need for scientific testing and were happy with their own judgement of whether the treatment was working for them. Any existence of RCT proof that the remedy was efficacious was never sought. The science of biomedicine was perceived as old-fashioned and rejected in favour of the quantum and chaos theories of modern physics. Several referred to Capra's (1976) book on parallels between eastern mysticism and quantum physics as a rationale for favouring a more modern notion of scientific enquiry about healing. Interestingly, Verhoef (2004) showed in qualitative research with CAM patients, that RCTs came bottom of their hierarchy of evidence. Anecdotal evidence, particularly from friends and family, rated highest.

Those who felt homeopathy did not work for them tended to be those who remained tightly allied to biomedical notions of health and illness and did not change their views of the body. As a result of this view, they often were not compliant with homeopathic remedies. Interestingly these were the only people who referred to scientific RCT evidence during the whole study, with a tendency to idolise science-based medicine. Laura for example, declared 'I believe that medicine is the most wonderful thing really. I think it is a God-given thing'. In spite of 6 months of homeopathy at a victim support clinic after she was mugged, she never came to believe in homeopathy and justified

her continued attendance only because she felt it was like counselling.

Each of these pieces of ethnographic research contributes to a different notion of evidence in alternative medicine. Each produces a different answer to the question ‘Does it work?’ The work of anthropologists has come much closer to investigating the power of alternative medicine as it is viewed by those who use it. What ‘works’ for alternative medicine users and their therapists do not just include relief from physical symptoms. It also includes changes in beliefs about health, healing and disease; the gaining of meaning of illness experience in the context of the life story; bodily experiences and changed view of body-self; transcendent, transformational and spiritual healing experiences; changed identity; and a powerful dialectic relationship with the therapist. None of these aspects of therapeutic effectiveness is measured within existing clinical trial research. Whilst there are calls to include quality of life measures in RCT research more generally, such measures still do not incorporate any of the above.

## Conclusion

In this paper, I have deconstructed the powerful notion of evidence within biomedicine, and highlighted evidence as highly constructed and shifting, shaped according to the method in which it has been created and the purpose for which it is used. I have shown how evidence is used not only to assess the efficacy of therapies, but also in political ways to influence how alternative medicine is integrated, assimilated or blocked from entry into the biomedical system. By providing a contrasting notion of evidence, drawn from the discipline of anthropology, I have illustrated how differently advocates of alternative therapies judge therapeutic success.

Non-biomedically trained alternative practitioners have a knowledge system that is closer to that of anthropology than to science-based medicine; it is more grounded in the phenomenal world of everyday lived and embodied experience. In their view, the evidence needed is that which investigates not whether a therapy is working according to biomedical and scientific criteria, but whether it is making a difference to the bodies, beliefs, social and cultural experiences of its clients and whether patients keep coming back. Baer cites Cohen’s view that many alternative practitioners ‘advocate an expanded epistemology of science, which includes

phenomenological and experiential data’ (Cohen 1998:10 cited in Baer, 2004). In which case, the use of anthropological forms or evidence may be more helpful in providing a measure of how therapies are working on the real patient in the real world, not on the statistically average patient.

These two perspectives on evidence, the biomedical focus on evidence in the forms of standardised statistical forms of knowledge, and the anthropological focus on evidence as local and particular, are to some extent worlds apart. The goal of this paper has been to attempt to raise questions about the suitability of the EBM approach, in spite of the power it holds in medical discourse. Baer suggests one of the problems with the narrowness of science education is that many scientists do not recognise that their own way of thinking is not ‘a value-free endeavour but culturally constructed and deeply embedded in larger political-economic structures’ (Baer, 2004, p. 156). Social scientists can contribute to raising consciousness of this issue and offer alternative models of evidence such as the anthropological research presented here.

This alternative construction of evidence, detailing how a therapy is deeply embedded in its context, may lead to a greater focus on the contexts in which the treatment is provided. Instead of biomedicine asking, ‘Does it work according to our criteria?’, the alternative community might start asking, ‘Does it work to import these therapies out of their alternative context and into a science based clinic?’ Maybe in losing the context they will lose ‘what works’. The alternative community could also use anthropological evidence to raise questions about why so many people prefer to forego science-based medicine and seek alternative treatment, with a different practitioner-relationship and different rituals. This may shed some light on valued health-care aspects, lacking from much orthodox medical care: for example, the chance to be treated as a person embedded in a particular lifeworld (Barry et al., 2001).

As the research community in alternative medicine has developed in recent years, it is beginning to ask questions of this nature, and qualitative and ethnographic research provide a powerful tool in this enterprise.

Such alternative evidence may prove useful in what David St. George, an NHS consultant, has called the potential for holistic transformation of the NHS through a synthesis of science and spirituality into a new paradigm. As he puts it

'Perhaps alternative and complementary therapists can help the NHS to break out of its own prison' (St George, 2004, p. 38). St George's vision was incredibly well received by the 100 delegates at the Diversity & Debate in Alternative and Complementary Medicine in July 2004, who comprised a high proportion of alternative therapists and social scientists researching alternative medicine. Anthropological and other qualitative forms of evidence may prove a political tool to assist in this enterprise of transformation.

Ethnographic research in alternative medicine is coming to be used politically as a challenge to the hegemony of a scientific biomedical construction of evidence. The introduction of ethnographic forms of evidence that represent the grounded experience of users and therapists of alternative medicine communities act as a critique of biomedical notions of evidence. Thus anthropological evidence can be used to open a debate about what one should be measuring as evidence of alternative medicine efficacy, and whether one should be measuring it at all.

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