Role of research in the rapprochement between conventional medicine and complementary therapies: discussion paper

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This paper approaches the subject of its title by way of addressing four questions. Why is research into complementary therapies necessary? What exactly is the nature of the subject to be researched, and what are the particular problems involved in doing it? Finally, what long-term benefits can be expected from a successful rapprochement between conventional medicine and complementary therapies?

The need for research

If anything is certain in this uncertain world, it is that complementary therapies are here to stay – and without doubt their use will continue to expand as the months and years go by. This being so, it surely makes good sense to foster rather than fight their development and progress. However, taking part in the management of illness carries very considerable responsibilities, and therefore anyone presuming to practise in the field should recognize the need for these activities to be researched with the object of revealing any potential hazards as well as evaluating their relative benefits – in short, to provide a measure of quality control. Furthermore, research is the only means of obtaining valid evidence upon which acceptable judgments can be based for exercising proper control over the practice of any therapeutic activity – that is, for the provision of ethical constraints.

Taken in conjunction with existing laws in the UK, the paucity of research evidence and consequent lack of quality controls and ethical constraints in the field of complementary medicine render the public highly vulnerable to exaggerated claims of inadequately qualified persons purporting to practise a wide variety of insufficiently tested treatments. In addition, there is a very real danger of blind faith in beguilingly soft options resulting in arbitrary rejection of the well proven benefits of orthodox scientific practice, thereby compounding the problems of long-suffering patients and resulting in more than the occasional tragedy.

An equally important factor is the appearance of an increasing number of publications purporting to provide guidance and advice on 'improvement of health', and 'the curing of illness'. Accompanying these is a veritable flood of articles and media presentations on the same theme by people highly skilled in the art of presentations but short on the science of verification. Some of these are couched in pseudo-scientific jargon of a quality requiring a PhD in biochemistry to reveal the transparencies of the argument. Of course, the majority of the material is based on an element of truth – but all too often the journalistic overlay results in a dangerous distortion of the message.

In essence, therefore, the need for research in this field stems from the absence of quality controls and ethical constraints, exposing the public to the danger of being misled by over-enthusiastic promoters of unconfirmed options.

Nature of the subject

Before going on to consider the considerable problems of researching complementary therapies, it would be wise to remind ourselves about the essential duality of sickness and of the fundamental distinction between 'illness' and 'disease'.

'Illness' is a purely subjective state as perceived by the patient and is heavily dependent upon the inherent variability of the individual. It bears no consistent relationship to disease. 'Diseases' on the other hand are specific entities, and may quite often be present in the absence of any illness whatsoever.

Conversely, 'health' is by no means synonymous with the absence of disease, nor even with the absence of illness. It is essentially a matter of harmonious integration of all the body systems, maintained by the bioregulatory functions of the neuroendocrine and psychoimmunological mechanisms.

This concept of health involves recognition of the body as having self-regulatory, self-defending, self-repairing, and cell-replicatory capabilities. In actuality it is therefore a continuously self-healing organism. The 'self-healing' concept is nothing new: Hippocrates originally expressed the idea in his well known pronouncement, '*Vis medicatrix naturae*'. The 'healing force' of nature invoked by Hippocrates is, indeed, a natural force. It is the energy powering a series of highly complex intracellular biochemical functions and cell replicatory activities, all co-ordinated by a series of endogenous bioregulatory agents – enzymes, endocrines, immunoglobulins, and neuropeptides.

This being so, there is no logical reason for not accepting that these mechanisms can be mobilized or potentiated (I prefer the word catalysed) by a variety of different therapeutic activities, systems, or techniques – including both spiritual and lay healing. That said, the catalytic influence over the natural healing capability by no means excludes the probability of complementary therapies having a measure of specific action.

The really interesting thing to me is that Hippocrates anticipated the modern concept of imbalance of homeostasis as a cause of illness in his theory of imbalance of the four humours: blood, phlegm, black bile and yellow bile. If we substitute enzymes, endocrines, immunoglobulins, and neuropeptides for his humours, the simile is virtually exact. In fact we have now come full circle, but have scientifically definable entities, as opposed to mystical designations, to work with.

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However, Hippocrates was by no means a pure humouralist any more than we are pure 'homeostasists', for he was fully aware of the fact that diseases could arise from alterations in the structure of the body and from external influences such as climate, seasons, etc. It is no surprise that he has been universally acclaimed as the Father of Modern Medicine. What is less widely recognized is that he was also the Father of Research. Knowledge, he insisted, could be acquired only by observation of the processes of nature and by deduction from ascertained fact.

The various regulatory, defensive, and reparative mechanisms operate continuously and automatically. But they are profoundly influenced by the patient's attitude, being strongly potentiated by positive states of mind such as optimism, enthusiasm and the will to get better, and conversely are inhibited by the negative emotions of anxiety, apprehension and the fear of getting worse. In one way the body thrives on positive stress; on the other hand it is inhibited by distress.

'Getting better' is a mutually participatory activity between patient and therapist, and the former must not expect – let alone demand – 'to be cured', nor the latter (be he orthodox or complementary) delude himself that his particular method in itself is exclusively responsible for the recovery.

Superimposed upon this is the all-important factor of patient/therapist interaction in influencing the processes of recovery. This has been encapsulated in the famous phrase 'bedside manner' – all too often contemptuously dismissed as a mere placebo effect. Placebos as a whole are by no means simply a sop to the patient, as is implied by the name. A moment's thought should suffice to recognize them for what they really are – catalysts of the bioregulatory mechanisms. In this sense they are an invariable ingredient of any therapeutic activity, and the colour of the pill – let alone the personality of the therapist – are both important factors. All of these, i.e. individual patient response, patient/therapist interaction, and the element of placebo effect, must be taken into account when carrying out research into the clinical outcome of any therapeutic procedure.

Problems of research in this field

Unfortunately, research in this field presents considerable problems, the first of which is really so obvious that it is surprising it has not been more widely recognized before. The plain fact is that the majority of complementary practitioners lack the necessary expertise and experience, as well as the time, material facilities and finance, to mount research projects of an adequate calibre to meet the stringent standards obligatory for commanding respect in the international arena.

The deficit is primarily due to the absence in their training establishments of the intermediate echelon equivalent to the Registrar grades that exist in orthodox medical schools, and whose job specification includes the implementation of research projects under the experienced guidance of their professional mentors. In fact, research of an acceptable quality (and this is mandatory) can really only be achieved with the full and active cooperation of the established profession and of sister disciplines in academic institutions.

So in a way the rapprochement has to antedate the research, and I am happy to say that the Research Council for Complementary Medicine (RCCM) has already gained the enthusiastic cooperation of 9 university centres and medical schools, which now have research projects in train.

The second problem associated with researching this area is the absence of any adequate literature access facility, comparable with that available for orthodox scientific medicine, and without which any research project is seriously compromised. A start has been made on the creation of this with the active cooperation of the British Library and financial backing from the DHSS and the Hayward Trust and a grant from the Muirhead Trust for the acquisition of the necessary hardware. In the initial stages the centre is to be based in the British School of Osteopathy.

The third problem, and this is the most demanding one of all, is the need to reconsider the whole subject of research methodology in relation to complementary therapies. Of course existing research methodologies will continue to hold an important place, but the time is now overdue for researchers to question the validity of regarding patients as rigidly standardizable objects when attempting to evaluate any activity involving their person[1]. A participatory relationship between patient and therapist is an indispensable ingredient in any treatment situation, and when research fails to follow suit it ceases to deal with reality and not infrequently runs the risk of being frankly unethical.

Peter Reason[2] rightly uses the adjective 'experiential' to describe the more appropriate collaborative research technique, and John Heron[1] has built up a convincing volume of experience in its use. However, it still needs further exploration and refinement in therapeutic practice, as do the markers of the various bioregulatory mechanisms involved in any recovery process. Quantifiable changes in the immune system reflect the general state of the patient and these serve as valuable indicators for monitoring the progress or otherwise of nonspecific illness, an aspect comprehensively reviewed by George Solomon under the title 'The Emerging Field of Psychoneuroimmunology'[3]. There are, of course, yet other methodologies, such as computerized psychometric questionnaires, which also merit further development.

It is predominantly in the sphere of nonspecific undifferentiated illness, i.e. homeostatic imbalance, that the greatest potential of the complementary therapeutic systems lies, and new paradigms of research are needed for adequate assessment of these. The Medical Research Council is in agreement with this and I am delighted to say that it is sharing with the RCCM the funding of a Research Fellowship for the purpose of reviewing the problem *in toto*.

Benefits of achieving rapprochement

The long-term benefits that can be expected from successful integration of properly trained, accredited and registered complementary therapists with conventional scientific practitioners are far-reaching. First, it should relieve the severely restrictive and, indeed, often crippling overload with which both the general practitioner and hospital services are faced today. Secondly, it should effect substantial economies in the management of the majority of patients

suffering from non-life-threatening undifferentiated illness, for whom neither expensive high technology services nor costly and potentially toxic agents are necessarily appropriate. In turn this would render these same services more readily available for the minority of patients suffering from specific disease entities for which these same services and medications are unquestionably essential.

However, the full realization of these benefits can only be brought about by way of a sustained multidisciplinary research effort, deploying all the technical facilities and creative faculties that are available in university centres and medical schools. Hence the overriding importance of surmounting the barriers of misunderstanding and of achieving an early and lasting rapprochement between conventional and complementary therapists in the interests of patients and practitioners alike.

Research could well prove to be both the bridge and the vehicle by which a truly effective rationalization of the health services could be achieved in the not too distant future. I would even go so far as to suggest that a reciprocal partnership between conventional doctors and properly trained, accredited and registered complementary therapists could go a long way towards transforming our existing National Disease Service into a National Health Service in actuality as well as name.

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