Alternative Medicine: The Attitude of the Army Medical Services
(Modified from an address to the Postgraduate Dean’s Study Day 13 June 1985)
Major General D M Roberts QHP MD FRCP FRCPE
Director of Army Medicine

The Placebo Effect

Since time immemorial medical therapists have been making use of the placebo effect, sometimes at an entirely subconscious level, not even knowing that such a thing as a placebo effect existed. Even if they knew of its existence, they certainly had no idea of how it was mediated. All experienced doctors recognize the value of good rapport with the patient; an air of calm and reassuring confidence; a “bedside manner”; even a certain mystique. The process involves suggestibility, but little is known about the nature of this suggestibility.

Three features are essential if the process is to work optimally:

First: expectancy. The patient should have a high degree of anticipation, and a maximum degree of expectancy as to the outcome of his encounter with the therapist.

Second: ritual. The clinical examination is an essential part of this but the manner of its execution and the setting against which it is carried out may be crucial. It is important that there should be an elaborate, structured, even ritualistic set of procedures to be gone through. The content may be rich in imagery, provided that the imagery is never allowed to lapse into the bizarre.

Third: relevance. The content of the therapeutic process must be apposite and appropriate to the patient in a cultural and intellectual sense. For example, the placebo effect will be more powerful if a sick Ghurka soldier were seen by a Brahmin priest than if he were seen by an urbane and elegant Harley Street specialist.

The Whole Person

The medical profession is now entering an era when it is increasingly realised that there is more to illness and disability than just the morbid process. We have a confused awareness that other things are involved, including various unquantifiables such as emotion, the will, the spirit, the hopes, the fears, and all things that go to make up the whole person. We are, in other words, becoming increasingly aware of our need to practice holistic medicine.

The dictionary defines holism as a noun from a philosophy meaning “the idea that the whole is greater than the sum of its parts”. The idea of holism in medicine is now generating interest and debate, although the medical profession is tending to bend the original philosophical concept that the whole is greater than the sum of its parts, to the idea that conventional Western medicine has been guilty of concentrating on the organic morbid process and on our ability to influence it, and has neglected other important but less well understood, and less easily quantifiable parts of the whole.

This balance between the physical and the metaphysical in medicine (the word metaphysical is not quite right here; it is used in the absence of a better term), has undergone wide variations over the years, as represented in Figure 1. In the 19th century less was understood about the morbid process and therapeutics, so empirical methods were required.

During the early part of this century there was wavering for a while between the two. The introduction of the antibiotics in the 1940s was the harbinger of an explosion of therapeutic, technological, biochemical, and immunological discovery which will continue.

One can perhaps foresee a downward shift in the graph, if only because technology is so expensive and resources so limited, but it is not possible to see the future with any certainty. It is shown as representing true holism in medicine, encompassing an era on both sides of the baseline. I believe that this is what will happen, but cannot produce evidence to substantiate this, other than the fact that some movement has already started.

One of the main motivating forces behind the approachment with holism in medicine, then, is the increasing disparity, in this technological age, between development of advanced and very expensive techniques for extending life and our capacity to deliver it to most people most of the time. That is to say, a disparity between capability and resources.

A corollary is that the improved capacity to extend life has perhaps not been matched by an equal improvement in the capacity to enhance the quality of life. Taken together, this means that people’s expectations of modern medicine are not being met.
The relationship between advances in medicine, the costs of medical care, and the expectations of the patient is shown in Figure 2. There is something intrinsically anomalous about Figure 2. When medicine advances, expectations rise; when costs rise, expectations are not met, but medical advances and costs cannot move the arrow in the same direction, so conflict arises. Conflict inevitably results in disenchantment and a search for alternatives.

Fig 2. The relationship between advances in medicine, the costs of medical care, and the expectations of patients.

Alternatives

It has been said that there is no alternative to good medicine, only an alternative to bad medicine. Nevertheless people are seeking alternatives to the inability of modern conventional medicine to meet their increasing expectancy in terms of the whole quality of their lives. This explains the progression from a holistic concept of medicine to the next stage, the growth of interest in alternative medicine, particularly alternative therapies.

I am not going to propose a definition of an alternative therapy: there are so many definitions, none of them entirely satisfactory. Indeed, some people prefer to use a different name. Some talk of complementary medicine and complementary therapies, meaning that they are intended to complement mainstream orthodox medicine, rather than to compete with it outright.

One rather ingenious definition which until recently came fairly close to being acceptable, defined an alternative therapy as one which is excluded from the medical undergraduate curriculum. This recently ceased to be tenable when holistic medicine was introduced as a subject into the medical undergraduate curriculum at St Mary’s Hospital in London. However defined, some of these alternative therapies have a time-honoured history and widespread adherents throughout the world, while others have an obviously ephemeral nature and only a few eccentric disciples.

Are they effective? Are they respectable? Are they desirable? These are very difficult questions to answer. Depending on the definitions used, and the viewpoint taken, the overall picture can seem either very simple, or totally confusing. The simplistic view is that anything which the patient perceives as being beneficial, no matter how it works, or even if it works at all, must by definition be a good thing. The opposite view is that any therapy which cannot be shown by modern scientific and statistical method, using strict parameters quantifying measurable changes in the morbid process, should be labelled as quackery and deemed totally unacceptable. The truth is probably somewhere between the two. Currently there is insufficient evidence to make a reasoned judgement of the truth, so an arbitrary stance may have to be adopted.

Attitudes

It may be asked if a stance is necessary, arbitrary or otherwise? There are several reasons why the profession in general — and this includes the Army Medical Services — is being put in the position of having to develop an official attitude to the alternative therapies. There are five important reasons:

1. Patients are seeking alternative therapies in ever increasing numbers, the rate of increase perhaps being as high as 15 per cent per annum.

   This is reflected by an increase of 11 per cent per annum in the number of unorthodox practitioners in the United Kingdom.

2. By extrapolation, this could imply that within a decade or so the switch from orthodox to unconventional medicine will be almost complete! This will not happen, but there is unquestionably a shift of attitude taking place even among orthodox doctors.

3. Many orthodox doctors, including Service Medical Officers, are seeking to learn and to use alternative techniques, or at least to find out about them. The evidence of this is overwhelming:

   (i) The British Holistic Medical Association now has more than 500 medically qualified members. Last year the BHMA ran more than 80 courses on techniques ranging from acupuncture to meditation and massage.

   (ii) There are some 200 conventionally qualified doctors currently practising homeopathy to some degree.

   (iii) In a survey by Reilly of a group of GP trainees, 21 per cent already used at least one alternative method themselves. 36 per cent had referred patients for such treatment, and 80 per cent expressed a wish to train in one or more methods.

   (iv) As already mentioned, holistic medicine has already been included in the medical undergraduate curriculum of one of our great teaching institutions.
(v) There has been a recent flurry of publications on alternative therapies in the medical literature and in the lay press, and learned medical societies have arranged symposia on alternative medicine.

(vi) At his recent Presidential Address to the British Medical Association, HRH The Prince of Wales exhorted doctors to explore the merits of holistic medicine. The BMA, indeed, is currently undertaking a review of the status of alternative therapies.

4. Clinics purveying various types of alternative therapy are developing in many places. There are many in London. Some of them are larger centres where practitioners of various disciplines have grouped themselves together and undertake teaching and research as well as offering therapy, such as “The Centre for the Study of Alternative Therapies” in Southampton, and “The Liverpool Holistic Medical Centre”.

5. The alternative disciplines themselves are generally disorganized and there is much rivalry between them. Recent attempts by some, for example chiropractors, to acquire classification as a “Profession Supplementary to Medicine” (like physiotherapists) were rebuffed. However, there is a growing perception of a need for regulation, control and recognition of the alternative therapies – or at least some of them – partly to give them status and partly to give the public more protection.

Just one attempt to satisfy this need is “The Institute for Complementary Medicine” founded in 1982 as an independent charity, which has as its aims “To make known the natural therapies, to encourage the training of practitioners and to develop research into the therapies”. It seeks to do this by setting up an organization to regulate the various disciplines by a process of affiliation, but will concede full affiliation only to those disciplines which already have a form of governing body and require practitioners to complete a recognized training programme. Therapies currently accepted in this sense by the Institute are Osteopathy, Chiropractic, Herbal medicine, Homeopathy and Acupuncture.

Beyond this process of affiliation, however, the Institute fully recognizes a whole range of therapies which, to the conventional medical practitioner, would seem vastly more suspect.

The therapies

Table 1 is a daunting list of some 92 alternative therapies; it is inevitably incomplete and open to dispute. This list includes some that are unarguably used in modern conventional medical practice, such as hypnosis, massage, ultrasound, and possibly transcutaneous electrical nerve stimulation. There are others, perhaps a large majority, which orthodox practitioners would immediately condemn as totally irrational and without any possible scientific foundation. Some examples of those which I find unacceptable are:

1. **Iridology**, which claims to use the distribution of colour, texture and other features of the iris to diagnose both physical and mental disorders. The lines, flecks and pigment of the iris are said to give an instantaneous picture of both the organ-related disease and the overall state of health.

2. **Radionics** is a system of diagnosis and healing which is normally done at a distance, making use of special instruments claimed to measure disturbances in the energy fields which surround all matter and to correct these disturbances. The UK is the world centre for radionics and the Radionics Association has a current membership of 692. Radionics is used for the treatment of all kinds of physical and psychological diseases, and has the most convenient advantage that, since it can be used without the patient actually being present, the technique is especially useful in emergencies!

3. **Rolfing** is a manipulative therapy (called “structural integration”) which claims to relieve physical and psychological stresses resulting from long term postural defects.

4. **Reflexology** is a form of compression massage of the feet used to diagnose and treat a wide range of conditions including migraine, sinus trouble, and even hormone imbalances!

5. Then there is a group of therapies which are related in my mind by nothing other than the assonance or innuendo of their names, such as: Do-in, which is actually a modified form of Shiatsu, itself a non-invasive form of acupuncture; **autoimmune buccal urine therapy** and those three therapies whose names give rise in the mind to irreverent associations, although they are actually quite unrelated one to the other; **Opi-gone therapy**, **Rogerian therapy**, and **Royal Jelly**!

“Legitimate” or not?

Are there any of these hundred or so therapies whose claims are legitimate? Legitimate implies that they should be recognized as having some part to play in the overall provision of health care to the population, either within or without the National Health Service or, for us, within the Army Medical Services. Without according any approbation to anyone, there are five which merit very serious consideration as listed in Table 2. After consideration they may or may not be accepted, or they may be accepted with reservations. In considering them the placebo effect and the features of expectancy, ritual and relevance which are so necessary to good results must be remembered.

**Homeopathy**

Some (I am not among them) would wish to add homeopathy to the list. Homeopathy is a system of medicine based on two main beliefs: that “like cures like” (substances which produce certain symptoms within the body in health will cure these same symptoms when they are caused by disease); and the “principle of potencies” (the more a drug is diluted and successed in its preparation, the more powerful it can become).
Alternative Medicine: The Attitude of the Army Medical Services

Table 1
A suggested list of alternative therapies

<table>
<thead>
<tr>
<th>Acupressure (shiatsu)</th>
<th>Feldenkrais</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acupuncture</td>
<td>Gerson treatment</td>
</tr>
<tr>
<td>Alexander technique</td>
<td>Gestalt</td>
</tr>
<tr>
<td>Anthroposophical medicine</td>
<td>Ginseng therapy</td>
</tr>
<tr>
<td>(Rudolph Steiner)</td>
<td>Hand healing</td>
</tr>
<tr>
<td>Applied Kinesiology</td>
<td>Healing (spiritual and lay)</td>
</tr>
<tr>
<td>(plus touch for health)</td>
<td>Heller work</td>
</tr>
<tr>
<td>Aromatherapy</td>
<td>Herbalism</td>
</tr>
<tr>
<td>Auricub therapy (ear acupuncture)</td>
<td>Homeopathy</td>
</tr>
<tr>
<td>Auto-immune buccal urine therapy</td>
<td>Hydrotherapy (and balneotherapy)</td>
</tr>
<tr>
<td>Ayurvedic</td>
<td>Hypnosis and hypnotherapy</td>
</tr>
<tr>
<td>Bach flower remedies</td>
<td>Iridology</td>
</tr>
<tr>
<td>Backswing</td>
<td>Kirlian photography (and diagnosis)</td>
</tr>
<tr>
<td>Bioenergetics (Reichian Therapy)</td>
<td>Macrobiotics</td>
</tr>
<tr>
<td>Biofeedback</td>
<td>Manipulation</td>
</tr>
<tr>
<td>Biochemistry (tissue salts)</td>
<td>Massage therapy</td>
</tr>
<tr>
<td>Cancer therapy (unorthodox)</td>
<td>Meditation</td>
</tr>
<tr>
<td>Cannabis therapy</td>
<td>Megavitamin therapy</td>
</tr>
<tr>
<td>Christian Science</td>
<td>(orthomolecular therapy)</td>
</tr>
<tr>
<td>Chiropractic</td>
<td>Metamorphic technique (prenatal therapy)</td>
</tr>
<tr>
<td>Clinical Ecology (allergy desensitizing)</td>
<td>Moxibustion</td>
</tr>
<tr>
<td>Counselling</td>
<td>Music therapy</td>
</tr>
<tr>
<td>Dance movement therapy (Diet therapy)</td>
<td>Mud therapy</td>
</tr>
<tr>
<td>Do-in</td>
<td>Naturopathy</td>
</tr>
<tr>
<td>Dowsing</td>
<td>Negative ion therapy (ionisator)</td>
</tr>
<tr>
<td>Dream therapy</td>
<td>Niagara therapy</td>
</tr>
<tr>
<td>Electro-acupressure according to Voll (EAV)</td>
<td>Orgone therapy (Reichian)</td>
</tr>
<tr>
<td>Encounter</td>
<td>Osteopathy (and cranial osteopathy)</td>
</tr>
<tr>
<td>Esoteric healing</td>
<td>Paranormal healing</td>
</tr>
<tr>
<td>Faith healing</td>
<td>Past lives therapy</td>
</tr>
<tr>
<td></td>
<td>Pattern therapy</td>
</tr>
<tr>
<td></td>
<td>Pneumotherapy</td>
</tr>
<tr>
<td></td>
<td>(Bioelectron/oxygen therapy)</td>
</tr>
</tbody>
</table>

There is no valid pharmacological basis for homeopathic therapeutics – indeed, none is claimed. What is claimed is that the process of dilution and successions effects an “immaterial and vital force” and that this force is therapeutic. There is no scientific evidence to support this belief. Nevertheless, there are some 200 medically qualified homeopathic doctors in the UK and homeopathic treatment is available under the NHS. The Faculty of Homeopathy is recognized in law in the UK and South Africa, but disallowed in the USA.

Acupuncture

The status that should be accorded acupuncture within the Army Medical Services is as follows;
1. Acupuncture is an authentic therapy substantiated by an increasing volume of clinical and experimental evidence, but with limited application and particular relevance to analgesia and perhaps drug addiction.
2. Its use by medically unqualified practitioners has inherent dangers, and its practice should be confined – particularly within the Army Medical Services – to properly trained Medical Officers, and in a limited way to trained physiotherapists acting strictly under medical supervision.

I disagree with the view expressed in a recent letter to the Editor of the Journal, in which it is proposed that Combat Medical Technicians should be trained in basic acupuncture by a one-week course, to relieve the pain and suffering of mass casualties on the battlefield. The problem is the potential for mis-use of such techniques in other situations by personnel trained only to the level of medical ancillaries.

The readers may feel that these are provocative statements, but there is often some benefit and seldom any harm in contention.

Hypnosis

Although hypnosis has a very long history, its use in medicine was largely neglected until psychiatrists were faced with large numbers of “shell shock” casualties from the First World War. There is now a good precedent for the use of hypnotherapy in several areas of conventional practice. As long ago as 1955 the BMA Psychological Group recommended its use in conjunction with conventional therapy for some psychological disorders and in anaesthesia. There is now a flourishing British Society of Medical and Dental Hypnosis with about a thousand members, (the British Society of
Experimental and Clinical Hypnosis is a splinter group of the Royal Society of Medicine. The present state of hypnotherapy illustrates the dilemma facing many complementary therapies today, since many medical practitioners are now using a technique which others – perhaps a majority – view with suspicion, so that some unqualified practitioners are benefiting from the apparent reluctance of the profession to become involved.

A major difficulty in obtaining scientific validation is one that faces all workers who have a putatively effective treatment for a serious disorder. In establishing a control group, the therapist must deny some patients the benefit of the therapy, and particularly where full double-blind procedures are impossible, as in the use of hypnosis, the temptation to neglect the use of the controls is very great. Additionally, most experienced physicians would agree that time spent with the patient by the therapist is his most effective weapon of all, and any controlled study of hypnotism (and many other therapies) would require an equal allocation of time for the control therapist.

Nevertheless, some controlled trials of hypnotherapy have been done in several conditions, and a widely held view is that, provided the technique is used by a properly qualified practitioner in conjunction with his own professional skills, it has useful applications in medicine, dentistry, clinical and educational psychology, midwifery and speech therapy. The dangers inherent to mis-use are illustrated by those few dentists, for example, who, having usefully employed hypnosis in their practice, have set up as part-time hypnotherapists treating emotional disorders about which they know very little, having no relevant training in psychology. There are, indeed, organisations which register therapists after one week of full-time teaching and three weeks of postal tuition, and this surely must be condemned.

Osteopathy, chiropractic and herbal medicine function largely outside the sphere of orthodox medicine so will only be briefly mentioned.

Osteopathy and Chiropractic

Osteopaths and chiropractors both see themselves as specialist therapists within complementary medicine having a specialist knowledge of the musculo-skeletal system. Within each system are complex and variable standards of training, qualification and registration. In general, the theories on which the therapies are based are not in accord with current medical concepts. At present, a consensus within the medical profession would be that occasional referrals of highly selected cases might be justified, particularly for help in the management of mechanical disorders of the spine refractory to conventional forms of treatment.

Herbalism

Practitioners of herbalism believe that only plant material should be used in the treatment of disease and the promotion of health, and they usually use unpurified preparations from living plants, containing a range of substances. I include it on the list only to emphasise that some plant extracts have undoubted pharmacological properties – for example, quinine from the cinchona bark, the vinca alkaloids used in oncology; and Quing Hao Tsu, now known to be extremely effective against the malaria parasite. The medical profession should not turn to herbalists for help or expertise, but the profession should investigate very carefully the remedies they purvey to see if potent substances with useful therapeutic properties can be developed from them.

I have briefly reviewed a few of the alternative therapies and tried to highlight the principles which might guide our attitude towards them. As in all things, the attitude of the Army Medical Services must, and will be, strongly influenced by the attitude of the medical profession generally within the UK.

When assessing reports on these remedies or techniques the evidence for their efficacy must be examined with care. There are many scientifically unacceptable reports published of orthodox medicine, even more care must be exercised when evaluating complementary or alternative medicine.

The whole field remains under active consideration by the Council of the Royal Army Medical College and we await with interest the final report of the BMA survey on alternative therapies. I would like to finish with a plea that, whilst we should avoid making any hasty and inadequately informed decisions, neither should we be afraid to spell out, when the time comes, exactly where we stand on these important issues.

REFERENCES