



Alternative Medicine

Price
30p

Proven or unproven

The history of mankind is rife with all kinds of medical treatments, some remarkably successful, others bizarre. The extent of blood letting or cutting, once widespread, amazes us now, yet leeches are still used for patients whose blood retains excess iron. Early progress occurred by trial and error. Gradually however the scientific method of controlled experiment led to a growing number of 'conventional' treatments that could be relied upon to give relief more often than not. These co-exist with 'traditional' or 'alternative' or 'complimentary' remedies, many of which have their roots overseas. The real distinction however is that 'conventional' treatments are (within limits) 'proven' whilst the alternatives generally are not. Even so some 20% of the population use 'unproven' treatments in whole or in part and spend over £1.6bn/year on them.

This is not to say all conventional medicines work all the time. There is a great field of genetics to be mined to discover why some drugs work on some patients but not others. Nor is it to say that alternative treatments do not work. Some do: others almost certainly don't. It is that (usually) there is no convincing proof. To understand why so many alternatives are championed so successfully we first need to understand something of our bodies and brain.

Our amazing bodies

The human body contains a skeleton; muscles, ligaments and so on to move it around; organs to receive and absorb water, energy, oxygen, nutrition and dispose of waste; a mechanism to maintain temperature; sensory organs of sight, smell, touch, hearing and taste to signal warnings and opportunities to the brain; and a brain capable of making choices at any time in response to these signals and the forces of hunger and pleasure, both sexual and other, which motivate us.

Furthermore, unlike machines, our bodies have the ability to grow in response to need (bones thicken, muscles increase) and repair and defend themselves. Bones knit together, cuts heal, immune systems resist infection (which is why AIDS, Auto Immune Deficiency Syndrome, is so destructive).

Mind over matter

The interaction between mind and body is still not fully understood. Yet it is apparent that anxiety or excessive stress often leads to ill health, and that loneliness, a lack of self worth or sense of social failure leads to depression with physical as well as mental symptoms. It is a terrible comment on our times that clinically diagnosed depression affects around 1 in 6 people at some time in their lives. In contrast good health is assisted by a sense of well being.

Unsurprisingly diet and exercise are both linked to greater life

expectancy but so too is laughter, and regular church goers, who may be a relatively fulfilled and well behaved group within society, are variously found to live an extra 2-7 years. So the *state* of the brain appears important in determining the body's ability to resist illness.

The placebo effect

A placebo is, typically, a pill without active ingredients. Doctors have found that with many illnesses a placebo can make a patient better *if the patient believes it will*. This is an amazing and incredibly important concept. It means the brain is capable of *generating* the healing responses (ie producing the chemicals, accelerating the body's repair mechanisms and so on) that an *active* pill could induce. The phenomenon makes no physical sense and would be dismissed if one after another drug trial had not found a greater or lesser placebo effect.

Recognition that placebos can work helps explain the apparent success of many alternative medicines including the salesman's snake oil. It means that doctors and their medicine often receive undeserved credit. It also means that maintaining an aura of confidence in them, for example through a good 'bedside manner', is extremely important.

Alternative therapies

There are around 70 (and growing) alternative treatments of which **acupuncture** (and other Chinese medicine), **ayurvedic** (Hindu medicine), **herbal remedies** and **homeopathy** have perhaps attracted the most interest.

Acupuncture and Chinese medicine

Chinese practitioners believe a healthy body is one that is 'in balance' so creating a sense of well being. They will first look at the patient's life style, especially diet, and only then address ailments with mixtures of herbal preparations. They believe pain or malfunction of organs arises from blockage of lines of 'vital energy' or 'life force' called meridians which run between the organs. Acupuncture, the most intriguing therapy, uses 9 different types of fine needles, inserted at different angles in different ways along these meridians to 'unblock' them. Acupuncture has been proved effective in dulling pain, for example among arthritis sufferers and in May 2009 NICE (the National Institute of Clinical Excellence) agreed it could be provided by the NHS. The scientific explanation is that, placed in the right positions, the needles stimulate the production of endorphins (morphia-type chemicals) in the part of the spinal cord which links to the pain, for example a back joint. A general criticism of Chinese medicine is that it is palliative, alleviating symptoms but not dispelling their causes.

Ayurvedic medicine

An ALDES Briefing Note

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This briefing note has been written for ALDES by Richard Balmer but the opinions expressed are his own. It should be technically accurate but if you see errors or have comments, please contact him at 79, Links Drive, Solihull, B91 2DJ, or richard_balmer@blueyonder.co.uk

Ayurvedic medicine has been practised in India for 4 millennia. It has developed along similar but not identical paths to the Chinese, seeking to treat a patient holistically and first considering lifestyle. Like the Chinese the ayurvedic school believes illness derives from imbalances in the body systems, being initially ignorant of pathogens, viruses and genetic disorders. Unlike the Chinese it uses yoga and meditation as well as massage and offers precise guidance on diet. Its medicines are predominantly herbal but not exclusively so. A few have been found to contain traces of undesirables such as lead, mercury and arsenic.

Reflexology was practiced in both India and China and focuses on the same notions of body 'balance' and well being. Additionally it believes 'reflex' areas on the feet (and hands) link to specific organs and areas of the body. Practitioners believe they can detect 'tightness' in these areas and employ massage to ease the pain or problem. Introduced to the USA in 1913 and developed later by Eunice Ingram, who mapped the zones of the feet, it is a mild treatment for minor ailments.

Herbal remedies

Europe developed its own portfolio of herbal remedies and it is clear some work. Preparations of St John's wort have proved efficacious in controlled trials for mild depression; garlic for reducing blood cholesterol; ginger for nausea; hawthorn berries for mild heart failure; and saw palmetto for enlarged prostate. There are several others. In any case many modern drugs use the active component of a herb. Quinine, the early anti-malarial prophylactic, derives from the bark of the cinchona tree and aspirin from willow bark. Digitalis, used to modulate irregular heart beat, comes from the foxglove. Spinach was for a long time believed to be very rich in iron and is still used as a medicine/dietary supplement. Herbal remedies differ from conventional ones as practitioners use the whole herb. This, they contend, ensures there are no side effects.

The issue for herbal medicine today is to provide proof of the claims made. Some can not do so. Extracts from the plant Valerian have been used since the time of Ancient Greece and were proscribed for insomnia by Hippocrates in the 2nd century BC. Though valerian remains on sale today, controlled studies have been inconclusive. Studies of course are time consuming and expensive and there is a delicate battle between herbal practitioners wishing to make claims they believe in and others insisting that the Trade Descriptions Act should be invoked to protect gullible patients.

Homeopathy

Nowhere is the debate about alternative medicine fiercer than over homeopathy. Its 2 principles are first, treat 'like with like' and second extreme dilution of the medication used. Every sickness has symptoms. At the end of the 18th century the German physician Christian Hahnemann identified substances causing a range of symptoms in *healthy* people, and administered them in diluted form as apparently successfully remedies for the sick. In theory a small dose might 'kick start' the body's own restorative properties. Today the consensus view is that benefits derive exclusively from the placebo effect. Of course the greater the belief in a medicine, therapy or practitioner, the greater the placebo effect will be. Belief

grows with apparent results and is advanced through the use by or advocacy of celebrities including Prince Charles and, it is understood, the Queen. Generally it is believed modern homeopathic remedies are harmless because they contain nothing active. This was not so with earlier remedies. One contained uranium as a cure for diabetes. It could be shown to be reducing sugar in urine - but only because it was damaging the kidneys.

The most extreme example of the placebo effect is 'faith healing': the laying on of hands, attendance and bathing at religious sites such as Lourdes and so on. Nonetheless we must recognise that this 'trickery' of the brain, attempted with hypnotherapy and 'positive thinking' as well, genuinely assists many. It would be an immense benefit if doctors could 'bottle' the placebo effect. Fewer drugs would be needed and there would be fewer side effects.

Regulation

Of the 70 alternative practices only chiropractic (the easing of pain by manipulation of joints) and osteopathy (basically a softer approach to the same problems) are regulated. Others, such as aromatherapy and hypnotherapy, are not. Regulation requires training and qualification, adherence to professional standards and discipline for offenders. A voluntary register is being set up. Currently anyone can set up with any therapy. It is hoped regulation will drive out charlatans.

Conclusions

There are 5 broad conclusions.

1. Alternative treatments may well assist in the long litany of minor illnesses though not in major ones such as cancers or those requiring surgery.
 2. It is very clear that attention to lifestyle including diet, posture, regular exercise, avoidance of harms such as smoking, and balancing one's life to limit stress, can assist good health. It is almost certainly true that *too little* attention to this 'holistic' approach is paid by GPs under pressure of time in the NHS, or by many citizens themselves who may, for example, eat badly or ignore exercise and then expect doctors to provide a pill to offset the consequences. Many alternative treatments do much more to address the 'preventative' or early stages of illnesses and research is increasingly showing how lifestyle affects the incidence of sickness including serious sicknesses like cancers.
 3. It is a weakness of the alternative lobby that so few treatments have undergone properly run scientific trials. This leaves them open to the charge of fad and to practice by charlatans. It would be good for medicine generally if voluntary regulation is successful.
 4. One can see a convergence of medical practices as globalisation brings contact and comparison, and research into the various herbal portfolios extends understanding of the ingredients, whilst other research helps explain the important interaction between body and brain.
 5. Individuals tempted to try alternatives should be wary and not mix and match conventional and alternatives without guidance. If a therapy seems to work without side effects however, be thankful but do not be swayed by celebrity, advert, or unsubstantiated claim. The words 'natural' or 'herbal', for example, are not the same as 'safe'.
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