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Paranormal health claims

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Summary. Faith in paranormal cures has always been the last hope of many sufferers from chronic or incurable diseases. Magico-religious rituals of healing are still around, but some have been replaced by pseudo-scientific systems, thinly disguising old superstitions in new obscurantism, more appealing to the half-educated. In medical quackery, inventiveness seems to be limitless, and only the main paranormal healing systems can be reviewed here. The increasing popularity of 'alternative' healing indicates the extent of dissatisfaction with dehumanising aspects of modern, technological medicine and its preoccupation with curing the curable at the expense of caring for the incurable. This leaves the sufferers, and also healthy people labelled with non-existent diseases, bleeding prey for the sharks roving the seas of medical ignorance.

Key words. Faith healing; Christian Science; psychic surgery; miracles; radiesthesia; psionic medicine; homoeopathy; Bach's flower remedies; acupuncture; reflexology; osteopathy; chiropractic; quackery; placebo.

Medicine came into the world with a twin brother called Charlatanism. – Lavoisier

Introduction

Throughout history, medicine and magic have been closely linked and, at times, indistinguishable. Pliny thought that magic originally had sprung from medicine. Even now, the boundary between rational medicine and quackery is fuzzy, partly because medical education does not provide criteria for the demarcation of the absurd, ⁵⁸ and partly because some 'alternative' practitioners, eager to be recognised and to infiltrate the enemy, present their fancies in a form superficially resembling the scientific approach (with statistics and trials, terms borrowed from science) which beguile the gullible.

As suffering from disease is universal, and the stride of medicine slow, the false promises of medical messiahs are lapped up with reverence, and quackery is rife. Yet, most diseases improve without any treatment, and naturally also with any harmless placebo, for which quacks are quick to take credit,

and so are many doctors. Regrettably, not all doctors practice rational medicine, and conversely, not all healers are quacks, if by quackery we mean deliberate deception for gain. I shall not discuss the fine distinction as to whether the paranormal healers are fools or frauds. In the end, it matters little whether a healer believes that he acts as a channel for God, or that he is an unrecognised Galileo who discovered natural healing energy, or whether he deceives deliberately: the means employed are the same.

One reason why paranormal health claims cannot be evaluated is the lack of accurate diagnosis. Some healers deny the existence of disease altogether (Christian Science), others heal without diagnosing (faith healers), and many have developed their own disease classification which is meaningless outside their system (e.g., the pulse or tongue diagnosis, homoeopathy, auricular acupuncture, Voll's electrodermal diagnosis, osteopathy and chiropractic, iridology, Kirlian photography, medical dowsing).

Paranormal health claims can be divided into several categories; they often overlap, and it is common that 'alternative' practitioners embrace several healing methods in their 'holistic' approach 5, 59:

1) Mind cure (all forms of faith healing, Christian Science, Simontons' cancer cure, psionic medicine); 2) Medication (homoeopathy, Bach's flower remedies, herbalism, tissue salts, oral chelation, urine therapy, apricot kernel cancer cure, Cousins-Pauling vitamin C cure, rejuvenation therapies); 3) Manipulation (osteopathy, chiropractic, reflexology; acupuncture, colonic irrigation); 4) Occultism (pyramidology, gem therapy, sympathetic magic, psychic surgery, medical dowsing); and 5) Quack devices (Abrams' oscilloclast, ozone generators, negative ionizers, Reich's orgone accumulator, colour-light boxes, black boxes, radionics). While many people do not believe in magic as such, they are

while many people do not believe in magic as such, they are prepared to accept magic in pseudo-scientific bottles. The anthropologist Hsu recalled how at a Democratic Party Convention in Philadelphia in 1948, many important party members sported Vrilium tubes, for which they each had paid \$ 306. These pencil-like devices were supposed to emit healing rays which relieved cancer, diabetes, arthritis, sinus trouble and many other ailments. ³⁶

In the USA alone, at least \$ 10 billion is spent annually on quackery, half of which goes to cancer 'cures'. ⁵ The U.S. committee investigating health fraud reported that one investigator attended 50 faith healers, posing as a patient; he noted that "It would be difficult to see these people as other than exploiters of the poor and gullible". The committee concluded that "incidental evidence accumulated in the process of the investigation seems to confirm... that many of [the healers] are charlatans." ⁵

Healing and miracles

The tradition of healing merges with shamanism and with belief in miracles. Even in the time of Hippocrates, healers were suspected of being frauds. ⁴⁰ The healing priests in the temples of Aesculapius (Asclepius) promised miraculous cures; the rod of Aesculapius entwined with a snake is still the emblem of the medical profession! Aristophanes in *Ploutos* made fun of their frolics.

The rise of Christianity intensified the belief in supernatural healing. 9, 62 - 69 An early form of healing, the laying on of hands, became the 'royal touch' for mal de roi (scrofula) and for various other disorders; it remained a royal prerogative for 700 years. 14 In a delightful account by Aubrey, a certain Evans with a fungous nose dreamt that the King's hand would cure him: "At the first coming of King Charles II into St. James' Park he kiss'd the King's Hand and rubbed his nose with it; which disturbed the King, but cured him." 8 The superstition is ancient and has amusing variations. Pliny recorded that King Pyrrhus healed his subjects by laying his toe on them! 62 Van Helmont recommended to his friend: "Try touching the sore with the hand of one who died a slow death, until the patient feels a great chill" 68; Robert Boyle and William Harvey tried it too. 69 Now even *The Lancet* gives it an airing: "Healing has a long tradition reaching back to Christianity and spiritualism. Some healers believe that their power derives from God, others concentrate on the patient's psychic entity, and others view themselves as a channel through which can flow a natural healing power.' Some academic institutions in Great Britain are seriously investigating this. 6 The Reverend Woods, an expert on these matters, distinguished 33 different models of healing. 81 An early example of critical investigation of healing, including distant healing, was Pfeufer's study of Austrian Prince von Hohenlohe, who, as a Catholic priest, was reputed to cure patients by his prayers. Pfeufer found no evidence for miracles. 46 Francis Galton approached the prayer-cure statistically, commenting upon Guy's tables of the life expectancy in royalty, clergy, and other classes: despite the fact that prayers were said daily on behalf of the sovereigns throughout the kingdom, the royal houses had the shortest

life expectancy, and, moreover, eminent clergymen, despite their life of leisure, had shorter lives than gentry. 30 Galton also noted that missionaries did not live as long as other men, and that churches were as likely to be hit by lightning, set on fire, or destroyed by an earthquake as any other buildings of the same size. He suggested that the matter could be delved into further by studying the mortality of babies born to praying and to non-praying mothers. This suggestion, to my knowledge, has not been taken up, but the London Hospital carried out a controlled trial of prayer in their patients. The study is little known, because it showed nothing. 38 The Indiana Health Board reported, however, that the perinatal and maternal mortality among the members of the Faith Assembly Church (who, like the Christian Scientists, do not believe in disease) was higher than in the control population. 8 In Britain, the Confederation of Healing Organisations, representing over 7000 healers, are doing their best to be recognised as a bona-fide treatment, reimbursable under the National Health Service. ⁶ Their president, Dr Alec Forbes, in a recent article, showed interest in the mystic syllable OM, colour therapy, pyramidology, radionics, and homoeopa-

thy. ²⁸
The situation in Britain took a turn for the worse when His Royal Highness Prince Charles became the President of the British Medical Association in 1982 and exhorted the profession to return to the precepts of Paracelsus ²¹, who is held by many in suspect light because, for instance, his pharmacopoiea included such miraculous cures as zebethum occidentale, which was dried human excrement, blown into the eyes to clear them. ⁶⁹

In the USA, supernatural healing is sponsored by the White House: President Reagan congratulated Oral Roberts, the faith healer, on founding his university in the City of Faith in 1981. 15

A careful investigation of supernatural healing by Rose failed to substantiate its claims with Rose noting that "after nearly twenty years of work I have yet to find one miracle cure." ⁵¹

"When the spirit of religion joins itself to the love of wonder, there is an end of common sense." ³⁷ Sir William Whitla, professor at Queen's University, Belfast and president of the British Medical Association, believed in biblical miracles and levitation. 79 A British gynaecologist confessed recently in a presidential address that he believed every single miracle recorded by Venerable Bede, and added some miracles of his own. ³¹ Are doctors, by virtue of some intrinsic fault in medical education, more gullible than others? After all, Conan Doyle, a graduate of Edinburgh University, believed in fairies. 58 The president of the Section of General Practice of the Royal Society of Medicine is also a member of the International Medical Committee of Lourdes. Of the 25 members, ten hold university chairs. ²⁵ The miracles accepted by this committee have not been reported in medical journals where they could be critically discussed. They include 'miraculous' cures of multiple sclerosis, and of other conditions of uncertain prognosis or diagnosis. At healing shrines one may find abandoned crutches but no wooden legs. A painstaking investigation of Lourdes miracles by an Officer of the Society for Psychic Research, D. J. West, who is also a medical doctor, found no evidence for miraculous cures: "It is difficult not to feel real hesitancy as to the trustworthiness of the facts in general." 78

Not surprisingly, the stories of miracles are of old vintage, since, as George Lichtenberg observed, miracles must be seen from a distance to be taken for real, just as clouds must, to be regarded as solid bodies. Henri de Mondeville, a 14th century surgeon, found his contemporary scene not much different: "They pretend that they have from the glorious God an infused science whereby they know how to cure the diseases which come by fate... in this way we have the false

religious such as hermits and recluses, old whores and procuresses and such like . . . who by means of holy water, divine prayers, and other artifices try to induce patients to believe that they work with the help of God." 44 Erasmus wrote in the 16th century that "the Christian religion nowadays does not require miracles, and there are none; but you know that lying stories are set about by crafty knaves." ²⁹ David Hume thought that the advantages of starting an imposture among the ignorant people are great, particularly, if they serve a 'good' cause. "Fools are industrious in propagating the imposture; while the wise and learned are contented, in general, to deride the absurdity without informing themselves of the particular facts, by which it may be distinctly refuted." ³⁷ After a lifetime spent in the study of magical beliefs, L. Thorndike concluded that "Men have a natural tendency to assert, and craving to hear, the sensational, exaggerated, and impossible, and to fly in the face of both reason and experience."69 Erasmus was of the same opinion, noting that man's mind is so formed that it is more susceptible to falsehood than to truth. 27 I suspect, writing this from the land of moving statues, that the task of conjurors is greatly facilitated by the audience's willingness to believe the impossible. Believers in supernatural healing tend to forget that by the same logic which props up their faith, the opposite of healing (that is, causing a disease or worsening of the existing one) could take place through evil powers evoked by evil men, who are probably more plentiful than the men of God. Apollo both healed and shot arrows of sickness. Many saints, e.g. The Virgin Mary and Thomas Beckett healed or carried out 'revenge miracles', causing disease and death. 75 Black magic, voodoo, spellbinding, demoniacal possession, jinx, or the evil eye still plague some societies. Why do 'advanced' societies give prominence to white magic only?

Christian Science

According to a senior official of the Christian Science Church, by "dissolving the mental attitude from which all diseases ultimately stem," hundreds of cures were achieved in recent years in their sect, including cancer, diphtheria, pernicious anaemia, club foot and spinal meningitis. ⁶⁰ "To the Christian Science healer, sickness is a dream from which the patient needs to be awakened. Disease should not appear real to the physician... Tumours, ulcers, tubercles, inflammation, pain, deformed joints, are waking dream-shadows, dark images of mortal thought, which flee before the light of Truth." ²⁶

The founder of Christian Science, Mrs M. B. Eddy, discovered her System in 1866, after being disappointed with homoeopathy. It struck her, however, that patients were cured by remedies which contained nothing of the original medicine. By extrapolating from the placebo effect (which she called the Divine Mind) she denied the existence of all diseases. Even poisons do not exist in reality but only in imagination. The reason that people die after swallowing arsenic or strychnine is the false belief that they are poisonous; it is the false belief which kills them, as arsenic and strychnine per se are harmless. ²⁶

Incredidible as it may seem, Christian Science is a recognised system of health care in the USA. The U.S. taxpayers are subsidising this quackery, as the U.S. Internal Revenue allows money paid to Christian Scientist healers to be deductible as 'medical' expenses. The reason why this is possible is in part due to the magical power of the word 'Christian' (and perhaps also of 'science'). As one doctor suggested, if Christian Scientists believe that the denial of disease will cure childhood meningitis (as they do), why not enter their children into a trial comparing no treatment with antibiotic treatment, agreeing beforehand that the result of the trial would make the inferior treatment illegal: "Neutral readers

may be tearing their hair at such a Swiftian proposal, but let me point out that although it might cost the lives of 10 or 15 children (who would die anyway, as their Christian Scientist parents and healers would deny them proper treatment) it might save hundreds from that fate in the long run." ²³

A coroner in the state of Washington studied the mortality patterns among Christian Scientists. On the basis of 1000 autopsies he concluded that the average age at death was slightly below the national average, and that the incidence of cancer and heart disease among Christian Scientists was higher than the national average. ⁸⁰

It is of interest that other believers in faith healing tend to dismiss Christian Science as a fraud, though it is not clear whether the motives for the dismissal are theological or competitive. For example, the authority on faith healing, L. D. Weatherhead, ridiculed the profit-making of Mrs Eddy, who made \$ 1 million in seven years from teaching her method. ⁷⁷ Reverend B. E. Woods accused Mrs Eddy of believing in witchcraft. ⁸¹

Mrs Eddy, though, did not adhere to her doctrine too literally; she consulted a doctor when her husband was ill, but the combined efforts of her healing power and of orthodox medicine did not prevent him from dying from an 'illusory' disease. She used medicaments herself, made necessary, as she explained, by the 'animal magnetism'of her enemies. 50 Mark Twain, in a brilliant exposé of Eddy's raving, was puzzled why Christian Scientists, who claim all diseases to be imaginary, refuse to accept imaginary cheques. "There is the Mind-Cure, the Faith-Cure, the Prayer-Cure, the Mental Science Cure, and the Christian Science Cure; and apparently they all do their miracles with the same old powerful instrument – the patient's imagination. Differing names, but no difference in the process. But they do not give the instrument the credit..." 71

Psychic surgery

Foreigners looking for magic cures started flying to the Philippines in the early 1950s, having heard rumours that the local healers can carry out a psychic surgery which leaves no scars. In the local system of magic, illness is caused by witchcraft: foreign objects are introduced into the body by magic and their removal by psychic surgery provides the cure. ⁴² To conform to the expectations of the Western patients, the traditional objects of illness (tobacco leaf, pieces of string, broken glass, etc) have been replaced by chicken innards and bovine blood (squeezed out from palmed cotton wool or a gimmick) to create a realistic impression of an "operation".

The parabiologist Watson claimed that he had observed Tony Agpaoa (whose annual earnings were estimated at \$700,000) ⁴⁵ removing "portions of intestine... and a piece of liver" from the abdomen of a women with 'colongitis' (?!); the patient did not feel a thing. Watson provided his own cotton wool so that Agpaoa could not cheat. ⁷⁶ Elementary, my dear Watson?

A professional magician, David Hoy, had a different impression: "As a sleight-of-hand artist myself I was impressed... in an unguarded moment, one healer distractedly and repeatedly thumb-palmed a cigarette lighter, almost as a reflex action... In every case I witnessed techniques, moves and uses of suspect props" used by professional conjurors. ⁴² One such prop is cotton wool: "cotton wool dipped in oil may be dematerialized into the chest of the patient and a few minutes later rematerialized from the neck minus oil, or it may be dematerialized in one ear and later removed from the other." ⁴² This is a rather old trick, deplored in the Hippocratic treatise Epidemics, as an example of a charlatan practice of concealing a wad of wool in the palm and then pretending that it was removed from the patient's ear to cure his

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earache. 40 A similar sleight-of-hand 'surgery' was used by the shamans among the Kwakiutl Indians. The disease was 'sucked out' into the shaman's mouth, who then spit his saliva with the 'illness' represented by a piece of tallow or eagle down, hidden in the shaman's mouth. The blood was provided by the shaman sucking his gums. ¹⁶

A U.S. surgeon, W. A. Nolen, let himself be operated upon by a Filipino healer in 1973. The healer 'removed' a 'kidney tumour', which looked to Nolen like a piece of chicken fat, but he was not allowed to inspect it. 45 James Randi was prevented by the Philippine authorities from investigating the miracles of psychic healing, under the pretext that he

might upset 'religious' people. '

A German occultist alleged that one Filipino surgeon, appropriately named Orbito, removed an eyeball with his bare hands from a patient. ⁴² A similar miracle was witnessed by St. Augustine who saw a demon taking out a boy's eye: this was replaced amidst prayers and no harm followed. 9 The same credulous investigator 'saw' how Agpaoa dematerialised flesh to gain access to an old unhealed fracture of the

In Brazil, the local psychic surgeon Arigo, was studied by Geller's friend Puharich, who thought it significant that during his investigations there was apparently increased U.F.O. activity in the vicinity. According to Puharich, Arigo cured cancer by psychic surgery, extricating a lot of bloody tissue. He claimed that he saw Arigo 'thrust' a knife into a patient's eye, without pain or injury. 42 This stunt is explained by Randi, whose photograph of himself with a kitchen knife sticking out of his eye is well worth seeing. 48 Other patients treated by Arigo were given prescriptions dictated into Arigo's ear by a deceased 'Dr Fritz'. The only pharmacy around belonged to Arigo's brother.

Some psychic surgeons use 'spiritual' shots, snatched from the air and 'charged' by placing on the Bible. 42 A Reverend Brown, who seems to have a highly developed sense of humour, borrows a whole panoply of surgical instruments from the air, but visible only to him, and adopts the Irish brogue belonging to a Dr Murphy, who heads a team of surgeons advising jointly the jolly Reverend which way to 'cut'. The team spirit presumably reassures his American patients. 42 A Malaysian doctor described how the local quacks deceive their patients into believing that they removed their kidney stones: an analysis of one such stone showed that it was really a stone – it was quartz! ²⁰ Not dissimilar to the practice of some surgeons of the past who carried a 'spare' in their vest pocket, in case they failed to extract a real one.

Radiesthesia, radionics, psionic medicine

Radiesthesia, a term coined by the dowsing priest, Abbé Mermet, is ability to pick up "vibrations" from persons and objects. Medical dowsing is still used, for example, by Tuscan peasants. 22 When used by medical doctors, this sorcery is known as psionic medicine, elaborated by a group of British doctors before the 2nd World War. They combined the use of the pendulum, homoeopathy, and pseudo-scientific claptrap (all diseases are due to 'over-contraction or over-expansion of the protein as whole or in many of its parts'). 34 For the diagnosis, the patient's 'witness' (blood, urine, saliva, hair, or just a photo) is set against a diagnostic 'witness' (a vial with an 'inert powder impregnated with the vibrations of various diseases') in a triangle, in whose apex a homoeopathic remedy is placed, and the whole display is 'zeroed' with a pendulum.

Radionics uses black boxes decorated with knobs and dials for the quantification of vibrations: it is a high-technology psionic medicine. The first such device was invented by the U.S. medical dowser, Dr Abrams, who was described upon his death in 1924 in the Journal of the American Medical

Association as "the Dean of the 20th century charlatans". His followers were charged with fraud and some of them jailed; one of them, a chiropractor D. V. Tansley came to England, because "the climate of opinion is a little more tolerant" there. 61 According to Tansley, the patient's problem is sorted out in the box, the 'rate' of his vibration is determined, and the 'disease' is cured by broadcasting the corrected rate telepathically to the patient. 'Some practitioners will add the appropriate homoeopathic remedy, colour, flower remedy, vitamin or mineral sample by placing it on the treatment set near the blood spot" 61 on the radionic box. For example, the yellow-orange colour is good for liver diseases (presumably because jaundice is yellow-orange) and also for "hard chronic tumours, idiocy, and ulceration of the lung." ⁶¹

Radiesthetists believe that vaccination is bad for health (in this they agree with most homoeopathists) and also that the use of aluminium kitchenware is highly dangerous. One of the medically qualified radiesthetists believes that aluminium pots and pans cause "intestinal toxaemia, heart disease, clots, duodenal ulcer, anaemia and debility." 70 He determines the 'aluminium reaction' in the patient with a pendulum: if the pendulum reacts to a mentally imagined note Mi (of the Sol-Fa scale) after sunset, or to the note Sol during daylight, the aluminium reaction is positive and the patient is treated. ⁷⁰ The detrimental effects of vaccination include growths, hypertension, erysipelas and many skin diseases, including lupus vulgaris, ⁴¹ but not all is lost if one attends a radiesthetist. The fraudulent use of radiesthesia in diagnosing non-existent allergies in Britain is common. 24

Extensive literature on this subject is characterised, as so many other 'alternative' healing systems, by a medley of Eastern 'wisdom' (tantric chakras, etheric bodies, reincarnation), theosophy, astrology, interspersed with references to Einstein, quantum physics, and black holes. For information on the paraquantum pataphysics, see Stalker and Glymour.

Of 86 general practice trainees in Scotland, two received radiesthetic treatment. 49 The presence of sceptics puts a spanner in the works: "Experience has shown that should there be scepticism and doubt in the mind of a third party closely associated with the patient...failure is usually inevitable." 50

Homoeopathy

This modern version of sympathetic magic ('like is cured by like') was 'invented' around 1800 by Samuel Hahnemann as a panacea for all diseases. Except syphilis and 'sycosis' (figwarts), all diseases are caused by a 'miasma of psora' (itch). This lunacy is still taken seriously by some medical graduates. Homoeopathists do not treat diseases but symptoms, using infinitesimally diluted 'remedies', which, in higher doses elicit the same symptoms in normal volunteers. Thus, for example, red pepper gives normal volunteers red cheeks and a feeling of homesickness. A German homoeopath suggested that homoeopathic dilutions of red pepper could be usefully administered to the 11 million foreign workers in Western Europe. ¹⁹ Another example comes from the Dean of the Faculty of Homoeopathy in Britain, who prescribes kitchen salt, so diluted that none is left, to help a "girl with a broken love affair or a woman who has a never been able to cry... to unwind." This is bound to work, cum grano salis, as tears are salty. The same doctor, together with the President of the Faculty, expressed worries that "ill trained, unqualified practitioners can thrive and make wild claims." ¹⁸ Why should anyone be trained for prescribing pure water, unless the special 'training' is to facilitate the abandonment of reason and the acceptance of the homoeopathic humbug of 'dynamisation,' or 'potentisation,' i.e. the

process of imparting the 'vital force' into the diluent by shaking? The more diluted the solution becomes, if properly shaken, the more potent it is; this is why the delusional dilutions are called potencies. When 12th centesimal dilution is reached (known as 12 C) the dilution is 10^{-24} , i.e. of the same order as Avogadro's number. Avogadro's number gives the number of molecules in a mole; for example, in one mole of kitchen salt (58 g) there are 6×10^{23} molecules of salt. The enormity of this number, or of the 12 C dilution is unimaginable. The best attempt to get this across is the 'Caesar's last breath' theorem: provided that the last breath of Caesar has by now become equally distributed throughout the earth's atmosphere, and accepting the estimate that the volume of the atmosphere is 10²⁴ times the capacity of human lungs, then with each breath we take we inhale a single molecule of Caesar's last breath. ¹¹ As von Baeyer pointed out, the same calculation would apply for any single breath of Shakespeare or Jesus. But 12 C is only the start. The medium homoeopathic dilution is 30 C, i.e. dilution (sorry, a potency) of 10⁻⁶⁰. This was calculated as corresponding to one grain of salt dissolved in a volume of diluent which would fill ten thousand billion spheres, each large enough to enclose the whole solar system. ³ And homoeopathy does not stop here. According to a WHO, publication, potencies of 'over' 100,000 C, i.e. dilutions of $10^{-200,000}$, have been 'successfully used' 72. That such delusions can capture the fancy of thousands of medically qualified men and women in Europe (particularly in France, West Germany, and Britain) is a damning indictment of the education provided in medical schools, and evidence, perhaps, that with current educational methods some minds are incapable of developing critical faculties. 58 Numerous trials by open-minded physicians, when it was still thought that homoeopathy deserved a fair trial, failed to substantiate homoeopatic claims. There is nothing new to add to the penetrating critiques from the last century by Oliver Wendell Holmes, 35 James Young Simpson (who introduced chloroform as an anaesthetic) 52 and others.

Bach's flower remedies

A variant of homoeopathy, invented by Dr Edward Bach (1886–1936) was hailed by Dr Charles K. Elliott, Royal Homoeopath to her Majesty Queen Elizabeth II, as "one of the most comprehensive state-of-art-systems of healing known." It rarely happens that a British Royal Physician, a medicine-man of the Bear Tribe in Spokane, and a former New York Commissioner of Mental Health, endorse in one book a panacea, known as Bach's Rescue Remedy. ⁷³ It supposedly cures itch, premature ejaculation, misbehaviour of brain-damaged children, delirium tremens, cuts and bruises, high fever, emotional and physical shock, convulsions and dysmenorrhoea, to name just a few. It is also useful in induction of labour. It revives unconscious animals if the remedy is rubbed behind their ears. It is a wonderful tonic for plants which are out of sorts. ⁷³

Osteopathy and chiropractic

A Missouri bone-setter, A. Still, lost three of his children to meningitis, and disillusioned with medicine, developed a bizarre theory that all diseases are caused by a pressure on the arteries, mainly in the spine, as a result of structural faults in joints. He 'discovered' osteopathy, as the system is known, in 1876.

A few years later, and about 150 miles away from Still, a 'magnetic healer', D. D. Palmer, 'discovered' a competing system, according to which all diseases were caused by a pressure on nerves, as a result of misalignment ('subluxation') of the spinal vertebrae. Palmer's first patient was a

deaf janitor whose hearing was restored by 'adjustment' of his neck. The mental processes of this Tweedledum of manipulation can be illustrated by a passage from this 'textbook': "I am the originator, the Fountain Head of the essential principle that disease is the result of too much or not enough functionating (sic!)... I have answered the time-worn question, What is Life?" ¹⁰ Chiropractic, as Palmer's system is known, is advertised as a cure for practically any human illness, including diabetes, heart trouble, tonsillitis, or cancer. 13 H. L. Mencken, in his inimitable style, wrote about chiropractic and osteopathy: "[They] counteract the evil works of the so-called science of public hygiene, which now seeks to make morons immortal. If a man, being ill of a pus appendix, resorts to a shaved and fumigated longshoreman to have it disposed of, and submits willingly to a treatment involving balancing him on McBurney's point and playing on his vertebrae as on a concertina, then, I am willing for one, to believe that he is badly wanted in Heaven." 43 Barrett described an experiment carried out in Philadelphia in 1976 by a Committee Against Health Fraud. They sent out a healthy, four-year-old girl for a checkup to 5 chiropractors. The first found "pinched nerves to her stomach and gallbladder", the second noted a "twisted pelvis", the third worried about future "headaches, nervousness, equilibrium and digestive problems" due to spinal misalignment he detected, the fourth predicted "bad periods and rough childbirth" if the "short leg" was not lengthened, and the fifth diagnosed hip and neck misalignment, requiring instant treatment. 12 A leaflet from the recently founded Chiropractic Association of Ireland encourages whole families to come for a "checkup to ensure early detection of potential nerve interference". The promised benefits are "improved digestion, better circulation, improved mental clarity, normalization of reproductive-hormonal imbalances, and easier breathing", in other words, a rip-off.

The only justification for manipulative techniques are musculoskeletal disorders, in which massage or physiotherapy, and possibly some specialised manipulative techniques, may bring symptomatic relief. However, the common complaint of low backache has a high rate of spontaneous recovery, or a fluctuating course, and the value of manipulation beyond its placebo effect, remains unproved. In a recent trial of osteopathy for low back pain, osteopathy was no better than placebo. ³²

Acupuncture

Acupuncture developed from magico-religious rituals of blood-letting between the third and the first centuries B.C. in China. Gradually the puncture of blood vessels was substituted by pricking points along imaginary 'meridians', believed to be linked with inner organs and functions, in a total disregard for physiology and anatomy. In its petrified form, the needling ritual survived for 2000 years, until it was banned by the Emperor in 1822 who removed acupuncture from the curriculum of the Imperial Medical College as a bar to the progress of medicine. ⁵⁶

The current interest in acupuncture dates from former U.S. President Nixon's visit to Maoist China in 1970. His entourage of journalists and politicians, entertained by the show of 'acupuncture anaesthesia', was not aware that the anaesthesia was invented on Mao's orders to save on anaesthetic equipment. They were duped into believing that a needle in the ear provided anaesthesia, without realising that the patients, carefully selected and brainwashed, were given analgesic medication before and during surgery. When similar operations were done in the West, under local anaesthesia, they made no headlines because they were part of a normal practice lacking mystery. As E. H. Ackerknecht pointed out, the Mao-Nixon acupuncture wave was the fifth

one which reached the West since the 17th century, each time abating when it spent itself and its placebo nature was recognised. The uncritical acceptance of acupuncture was facilitated by certain neurophysiologist attracted by the Oriental mystique, and by the historian J. Needham, the world authority on Chinese science, who endorsed acupuncture as a genuine discovery. The Chinese theoretical physicist, Qian, formulated the Needham Puzzle: with so many marvellous achievements in science, why did China not contribute to the development of modern science?

Because of the interest in acupuncture in high places, (such as the White House, the National Institutes of Health, universities, academic institutions, The Lancet), acupuncture has become the most thoroughly investigated irrational medical alternative. Numerous controlled trials showed that acupuncture is a placebo. 4, 56 However, once the juggernaut of the acupuncture industry has started rolling, it will keep its momentum for the foreseeable future. A French acupuncturist invented a new variant, known as auricular acupuncture, based on a delusion that all body organs and functions are projected onto the surface of the human earlobe, in such a way that a projection forms a human homunculus in the fetal position, standing on its head. The eye of this Paracelsian creature happens to be the point normally pierced for earrings. The leading British acupuncturist, G. T. Lewith, was not slow to notice that this may explain the old superstition that the pirates who wore earrings were able to see ships long before they themselves were seen. I have analysed the fallacies and fancies of quackupuncture in more detail elsewhere. 53 – 57

Needles are needless. The same effect can be obtained by burning cones of dry leaves over acupuncture points (moxibustion), a somewhat gentler method than using hot iron, or by applying pressure (acupressure). A special form of acupressure is reflexology: by pressing organ projections on the surface of the hand or foot, diseases can be prevented or cured. For example, in a book on Indian acupressure, prefaced by the former Prime Minister of India, Morarji Desai, the treatment for syphilis consists in applying pressure over the Achilles tendon and one of the ankles, while massaging the affected part with boiled urine. In the same preface, Mr Desai recommends besides acupressure five other 'natural' panaceas, among them magnetotherapy and drinking ones' own urine. ⁷⁴

Placebo

Any beneficial effect obtained from alternative healing is the placebo effect. It is this effect which has saved the reputation of the medical profession throughout its history, and which guarantees a majority of satisfied clients to the shamans, witch doctors, and quacks. Placebo is the beneficial effect of reassurance on the mind of the patient, reinforced by the natural healing process. The effect is stronger if the reassurance is given be charismatic persons, whether doctors or laymen, in exotic surroundings, using mysterious techniques. Even in ordinary hospital settings, up to 50% of surgical patients with severe wound pain report satisfactory relief of pain after injections of water, if they were led to believe that the injections were a strong analgesic. ³⁹

The placebo effect is presented as something more mysterious than it is. As humans we respond to symbols: words, white coats, test-tubes, prescriptions, acupuncture needles, black boxes, a friendly smile, hand touch; they all may act as symbols of the promise to help and heal. The enormous popularity of couéism (named after the French psychotherapist Émile Coué), which brought relief to innumerable sufferers, was the placebo effect of the phrase: "Every day, and in every way, I am becoming better and better", which the patients were encouraged to repeat daily.

It is useful to distinguish between illness, i.e. the sick feeling caused by disease, and the disease itself. Placebo cannot cure organic disease (a broken bone, infective hepatitis, dementia, cancer, etc.) but it helps the patient to feel less ill, and most commonly, to feel less pain. The placebo effect can be achieved by friendly reassurance, empathy with the patient, and willingness to care for the patient. Suffering shared is halved. It is a pity that modern medicine is often so preoccupied with disease that it loses sight of the person who suffers from it. This drives many sufferers into the clutches of the alternative healing trade. The danger of alternative healers is not in their providing placebo that medicine failed to offer, but in fostering an irrational climate which induces the ignorant not to seek medical help. The alternative healing systems are final and omniscient: there is nothing more to discover in homoeopathy, acupuncture, psionic medicine, chiropractic, or faith healing, and there are no conceivable experiments which would convince these healers that their doctrines are false.

The placebo effect is the hub of the doctor's dilemma, so well expressed by Asher: "It is better to believe in therapeutical nonsense than openly to admit therapeutical bankruptcy. Better in the sense that a little credulity makes us better doctors, though worse research workers... If you believe in your treatment, even though controlled tests show that it is quite useless, then your results are much better, your patients are much better, and your income is much better, too." ⁷

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