

Homeopathy, Herbs And Hypnosis

Common Practices In Complementary And Alternative Medicine

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Homeopathy

Of all the popular alternative therapies, probably none generates the disbelief or hostility of the conventional medical practitioner as does homeopathy. Homeopathy is a unique approach to healing that uses extremely dilute medicines to trigger a person's innate capacity to heal. It was developed by Samuel Hahnemann (1755-1843), who was a German physician, chemist, and author of a well-known textbook on the preparation and use of contemporary medicines. In reaction to some of the barbaric medical practices of his day, Hahnemann sought a more comprehensive, gentle approach to healing which encouraged the body's innate ability to heal itself. The practice of homeopathy is based on several beliefs. The *Law of Similars* states that the appropriate remedy for each sick person is the substance which would give rise to precisely the same set of symptoms if given to a healthy person. Hahnemann's method employed only one remedy at a time for the whole patient, comparing the totality of symptoms of the individual with those of various remedies until the closest possible match is found. Integral to the belief system of homeopathy is that of a 'vital force', which like acupuncture, herbalism, and other natural methods, belongs to the vitalist tradition. Illness is viewed as the organism's ability to heal itself and this life energy is the ultimate source of health. In modern terms, this would be likened to the bioenergetic integrity of living beings. The detailed philosophy of homeopathy would encompass several volumes of text. Often overlooked in the homeopathic belief system are the recommendations of healthy diet, fresh air, exercise, and the avoidance of toxic substances, none of which deal with the administration of any medication.

The most significant controversy in homeopathy involves the minute dose of the medicine (remedy). This principle states that one should use the smallest dose and lowest frequency possible. Although all good medical practice would agree with this principle, the degree to which homeopathy practices this defies generally known principles of molecular biology or biochemistry. Homeopathic medicines are prepared by a process of serial dilution and agitation (succussion). Many of the homeopathic remedies are so dilute that they would not be expected to contain any of the original therapeutic substance.

Reference to the extraordinary dilutions used in homeopathic remedies is given context by referring to the concept of Avogadro's number from basic chemistry. This number is the theoretical number of atoms or molecules in a gram molecular weight of any given substance, namely $6.02 \times$

10^{23} . Homeopathic dilutions are measured in decimal (x) or centesimal (c) potencies. Therefore at a dilution of 12 C or 24X (10^{-24}) there is almost no likelihood of any of the original substance in the solution.

The activity of the homeopathic remedy is thought to follow from properties of the solvent water conferred to it by the original substance, not the molecules themselves. For the scientist grounded in the concept of chemistry and molecular biology, the observation that medicines that contain no molecules of the original substance could have biological activity defies all logic and is frankly unbelievable. This is, however precisely what the proponents of homeopathy claim, and it is increasingly demonstrated in controlled clinical trials.¹

Evidence of the biologic activity of serially agitated dilutions (SAD) is accumulating. Theoretical explanations revolve around the "memory of water" and a subtle energy system that can perceive and respond to the information encoded in the homeopathic solution. The physicist Callinan suggests that the process of succussion produces energy storage in the bonds of the diluent in the infrared spectrum that downloads in contact with water in living systems.² The nature of this effect, and the reason why it is so persistent may be deduced by the work of Weingartner using magnetic resonance spectroscopy.³ The signals H_2O and OH between a homeopathic remedy of sulfur (23x) and the control solvent without the homeopathic dilution are significantly lower (probability > 99%).

The recent discovery of I_E structures in water may be the clearest evidence to date of a mechanism of action for homeopathic remedies.^{4,5} These I_E structures are crystal-line-like structures of water molecules generated in response to electrical dipoles surrounding ions or proteins in solution. At ion concentrations below 10^{-7} , these structures become stable and when exposed to shearing forces, break apart into three nanometer fragments, but then reaggregate into more stable structures that are capable of self-replication in more dilute solutions, despite the absence of the original polar molecule. The form that these aggregates take is determined by the electrical field of the original polar molecule. The shape of these aggregates may contain information that is communicated to highly specific receptor

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sites on cell surfaces, antibodies, etc. Therefore, when viewed in the light of quantum physics and plasma chemistry, the mechanism of homeopathic remedies is not unplausible.

Homeopathic Research

In the mid-1950's, a review of 25 investigations of microdoses was published, citing their effects on such widely variant systems as paramecia, the Schick test, growth of *Aspergillus* mycelia, germination of wheat germ, and blood flow in the ears of rabbits.⁶ More recently, European laboratory studies have demonstrated the effects of homeopathic microdoses on mouse macrophages⁷, arsenic mobilization in the rat⁸, bleeding time with aspirin⁹, and degranulation of human basophils¹⁰. These studies, as well as others in the veterinary literature, suggest that response to homeopathic remedies is not a placebo response. One of the first clinical studies reported was sponsored by the British Government during World War II.¹¹ It was conducted in volunteers in whom skin burns were produced using azotized mustard gas and showed a significant improvement in subjects receiving Mustard Gas 30c as a prophylaxis or Rhus tox 30c, and Kali bichromium 30c. The study was conducted independently in two different centers (London and Glasgow) using a double-blind placebo-controlled design. A recent meta-analysis by Kleijnen, et al. produced a review of 107 clinical trials in homeopathy on the basis of rigid assessment criteria of the type used for trials in allopathic medicine.¹² In all, of the 105 trials whose results could be interpreted, 81 yielded positive results.

The Homeopathic Prescription

In taking a homeopathic history, the first priority is to understand the patient and his/her illness. The second, is to find an appropriate remedy. There are three main components to the homeopathic history:

1. The conventional medical history.
2. The physiology of the patient. One of the areas where homeopathic history differs from that learned in conventional allopathic medicine, is that factors modifying the illness are given greater attention including: modality, i.e. what modifies the sensation. Not only what makes it better or worse is considered, but what side of the body it is on, whether it is affected by cold, heat, wind, dampness, time of day, etc. Sleep and dreams are considered.
3. The mental state. This includes cognitive function, emotional symptoms, how the patient feels about themselves, consolation, confrontation, etc.

After listing all the history and symptoms, a repertory is consulted. This is a tool for working out which remedy the patient needs. The dosage regime consists of two elements — the potency and the frequency of dosage, both of which

Table 1. Common Homeopathic Remedies And Their Uses

Aconitum Napellus: ailments from shock, fright, or fear, or exposure to cold
Apis Mellifica: stings, burning pains, difficulty passing urine, edema
Arnica Montana: bruising
Belladonna: sudden illness with redness & heat (fever), throbbing headache
Calendula Officinalis: injuries causing torn or ragged wounds
Cantharis: cystitis, burning or scalding pain while urinating
Chamomilla: teething, irritable child, colic
Graphites: thickened, scaly or crusty patches on skin
Hypericum: crush injuries, punctures, or lacerations
Ipecacuanha: nausea unrelieved by vomiting
Nux Vomica: digestive disturbances, anger, morning headaches, nausea & vomiting
Pulsatilla: catarrh, styes and conjunctivitis, timidity and weeping
Rhus Toxicodendron: joint pains, arthritis, back pain
Ruta Graveolens: tendon injuries, bruised, sore, achy feeling
Sanguinaria: migraine, burning sensation in eyes or ears, nasal polyps
Sepia: depression
Staphysagria: pains in genitalia, pain in abdomen, symptoms caused by suppressed anger
Sulfur: chronic skin inflammation

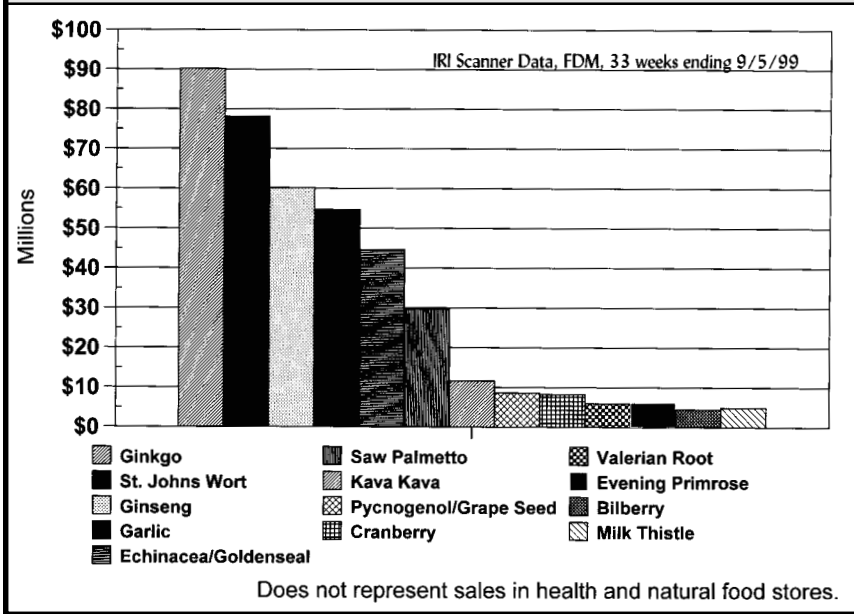
are of secondary importance to choosing the correct remedy. Despite a multiplicity of symptoms, one remedy is usually chosen which matches all the patient's findings. Remedies are generally given more frequently and in lower potencies for acute conditions, and less frequently in higher potencies for chronic or mental conditions. Computer programs are now available to help in remedy selection. The remedy is discontinued when the symptoms resolve. If the symptoms change, then another remedy is chosen which matches the new symptom complex. Table 1 contains a list of common homeopathic remedies and their uses.

Phytopharmacology (Herbal Medicine)

The sale of herbal medicines in the United States is one of the ten fastest growing industries. It is estimated that over 60 million adults used herbs for a medical condition in 1996. The average spent per person is \$54 annually, with many people spending much more. The total estimated retail sales exceeded \$3.42 billion in 1996 and \$4.415 billion in 1997 (Figure 1). There was an estimated 78% increase in the use of herbs over this one year period. Media coverage of herbal medicines is extensive.

Numerous factors contribute to this increased use of plant-derived medicines for self-treatment. Although the tremendous benefits of technology that produce dramatic effects (increasingly technical surgeries and procedures), the dangers and indiscriminate use of chemicals (preservatives, coloring agents, drugs, chemical pollution) is straining the adaptability of our complex bodies and the environment. There appears to be a growing distrust of

Figure 1. Herb Supplement Sales — First 8 Months Of 1999



technological medicine which has given rise to a 'back to nature' movement.

Science is a double-edged sword and its enormous influence means that we must begin to realize and address the long-term consequences of our technology. Yet, both technology and nature must be combined wisely. The history of herbal medicines is as old as the history of healing itself. Only in the past fifty years, with the increase in synthetic drug manufacture and the medical promise of a drug to cure every ailment, has the use of botanicals as medicines taken a back seat to prescription, manufactured pharmaceuticals. Reasons for this are multiple. There is no dedicated support of the herbal industry by the Federal Government; the cost of bringing a new drug to market is between \$140 and \$500 million. With natural substances being non-patentable, pharmaceutical companies are loathe to spend the necessary research money to provide adequate research because the development money spent is non-recoverable.

In the European Commonwealth, there is less of a dichotomy between naturally-derived botanical medicines and synthetic pharmaceuticals, leading to more research, longer history of use, and stricter quality control. In phytomedicine, pathological understanding of illness is similar to western allopathic pathology, however medical herbalists view illness within the context of the healing capacity of the whole person and then chose herbs that support the specific organ systems under stress.¹² Most western-trained herbalists believe that the body is a self-healing organism

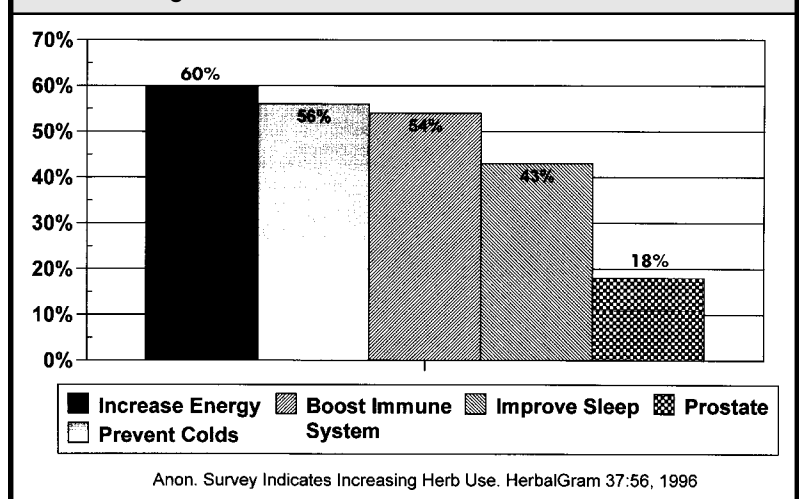
and that herbs should be chosen to support wellness, not simply to relieve symptoms or treat diseases. The main uses for herbs in the United States are shown in Figure 2.

For the past forty years, researchers have been trying to isolate the "active" constituent of a plant. As a result, the exact mechanism of action for a number of plants has been elucidated and the understanding of phytomedicines expanded. With the ability to standardize herbs — that is, to accurately measure the exact percent of active constituents within an herbal product — a new range of herbal medicines are now available to the public. Many practitioners feel more confident recommending a product if they know the exact amount of the active principle and the number of milligrams that should be prescribed daily.

Most plants, however, contain hundreds of constituents that may be acting in concert, not individually, to create the physiologic effect. Clinical trials that study the whole plant's activity must be designed. This requires a shift of thinking in western allopathic research — a movement away from reductionism — looking at herbs as complete products in which the whole is greater than the sum of its parts.

Additional evidence of widespread consumer interest in herbs and other natural products, now legally classified as "dietary supplements" in the United States, can be found in the estimated two million letters, faxes and phone calls by Americans to members of Congress during 1993 and 1994 in support of legislation that would protect and increase access to the products and information on their responsible

Figure 2. Consumers' Use Of Herbal Remedies



use. The Dietary Supplement Health and Education Act (DSHEA) of 1994 created a new legal definition for dietary supplements: vitamins, minerals, herbs or other botanicals, amino acids, and other dietary substance for use by man to supplement the diet by increasing total dietary intake, including a concentrate, metabolite, constituent, extract, or combination of these ingredients (103rd Congress, 1994). A limited amount of information regarding an herb's physiologic effects can be conveyed on a product label, however therapeutic or drug claims are prohibited. That is, DSHEA allows for 'statements of nutritional support' or so called 'structure and function claims.'

Because of the high level of professional interest in herbs and phytomedicines in Germany, there is a considerable amount of scientific research conducted. Herbal medicines in Germany have been protected beginning with the Imperial Decree of 1901 that permitted the trade of many botanical drugs outside pharmacies. Germany's Second Medicines Act (*Arzneimittelgesetz*) of 1976 required the entire range of medicines in the pharmaceutical market (including conventional drugs, medicinal plants and phytomedicines) to be reviewed by a scientific committee every three years. In 1978, the Minister of Health established a series of commissions to review various categories of drugs, including an expert committee of herbal drugs and preparations from medicinal plants, Commission E. These committees were situated at the *Bundesgesundheitsamt*, the Federal Health Agency. This Commission E was composed of 24 members (physicians, pharmacists, non-medical practitioners, pharmacologists, toxicologists, biostatisticians, and representatives of the pharmaceutical industry). The scientists and physicians in this committee had authored over 1,000 publications. The report of this Commission E, "Therapeutic Guide to Herbal Medicines", has become one of the most complete reference works in herbal medicine in the world and was recently translated in to English.¹³

Some of the most commonly used herbs and their pharmacologic properties are listed below.

St. John's Wort: St. John's Wort (*Hypericum perforatum*) has received a great deal of attention since a story on its use appeared in the media. A meta-analysis of 23 clinical trials conducted on more than 1757 outpatients was published in the British Medical Journal in 1996 showing that the extract was more effective than placebo and equally as effective as standard synthetic antidepressants.¹⁴ Although initially classified as a monoamine oxidase inhibitor, later studies suggest that its effect may be due to serotonin reuptake inhibition.¹⁵ Even more recent studies suggest that hypericin does not cross the blood-brain barrier and that its effects are due to regulation of cytokines, specifically suppression of interleukin-6.¹⁶ *Hypericum* also possesses antiretroviral activity both *in vivo* and *in vitro*. Both hypericin and pseudohypericin interfere

with the development of viral components and directly inactive mature retroviruses.¹⁷ The usual adult dose is 300 mg three times daily, with products standardized to contain 0.3% hypericin. Pediatric dosage for children 6 to 12 is 250 mg daily. Gastrointestinal side effects may be experienced. Photosensitivity in light-skinned patients is theoretically possible but has never been reported in a human taking the herb.

Kava Kava: Kava root (*Piper methysticum*) is found throughout the South Pacific Islands where it has been used as a slightly intoxicating, non-alcoholic beverage for thousands of years. Several studies have demonstrated kava's effectiveness in alleviating stress and anxiety. It has also been used as a muscle relaxant and analgesic. The muscle relaxant effects are thought to be of supraspinal origin¹⁸ and the analgesic effect is not thought to operate through opiate pathways because the effect is not reversed by naloxone.¹⁹ Kava has been demonstrated to increase deep sleep without affecting REM sleep.¹⁸ Kava is a viable option in the treatment of anxiety and muscle tension before turning to the benzodiazepines and tricyclic antidepressants. Sedation is not seen in therapeutic doses recommended. There are minimal side effects — weight loss and a reversible skin condition known as kava dermopathy have been reported in long term users taking very high doses.²⁰ The usual dose of a standardized extract is 200 mg three times daily. Caution should be used when used with other psychotropic or sedative medications.

Echinacea: Echinacea (*Echinacea* spp. [usually *purpurea*]) is indigenous to North America and is exported to Europe for medicinal uses. It is used as a stimulant to the immune system. Echinacea's action on the immune system is non-specific and works primarily through cell-mediated actions - increasing activity among macrophages and lymphocytes, and increasing the number of circulating granulocytes.²¹ The polysaccharides found in echinacea stimulate the secretion of tumor necrosis factor, interferon, and interleukin-1.²² The arabinogalactans found within the roots have distinct antiviral properties. Echinacoside has bacteriostatic properties, while echinacin B promotes tissue granulation.²³ Echinacea is a suitable herb for cold and flu-like symptoms. Patients often pressure physicians to prescribe something for obvious viral infections and antibiotics are often requested. Echinacea is an appropriate recommendation. A meta-analysis of six double-blind, placebo-controlled and randomized studies show an improvement in symptoms and decreased length of upper respiratory illness when echinacea is given. It has also been shown to be of benefit in the prophylaxis of upper respiratory infections.²⁴ Echinacea has also been used topically to promote the healing of wounds. There are few side effects. The recommended dose of standardized extract is 900 mg two to four times daily. It can be used in children and adults.

Ginkgo: *Ginkgo biloba* extracts standardized to contain 24% ginkgo flavonglycosides, are among the most well-studied plant-based medicines. More than 40 double-blind studies have shown it to be effective in cerebral vascular insufficiency. The leaves have been studied for a wide number of indications including dementia, poor memory, difficulties with concentration, cerebral insufficiency syndromes (including dizziness, headache, and tenets), intermittent claudication, Raynaud's Syndrome, and asthma. Ginkgo is a potent inhibitor of platelet activating factor (PAF) which helps reduce platelet aggregation and plays a role in inhibiting bronchoconstriction,²⁵ preventing lipid peroxidation,²⁵ inhibiting catecholamine O-methyl transferase and stimulating synthesis of serotonin receptors. It prolongs the half-life of endothelium-derived relaxing factor resulting in dilation of the arterial bed and improved peripheral circulation. It has been shown to increase pain-free walking distance in patients suffering from intermittent claudication.²⁶ Other studies have shown effectiveness in treating vertigo, macular degeneration, Alzheimers Disease, tenets, cochlear deafness, diabetic retinopathy, impotence, premenstrual syndrome and idiopathic cyclic edema, allergies, and depression. The standard dose is 40-80 mg three times a day. It is extremely safe and side-effects are uncommon. In 44 double-blind studies involving 9,772 patients taking GBE, the number of side effects reported was extremely small. The most common was GI discomfort and this occurred only in 21 cases, followed by headache (7 cases) and dizziness (6 cases).

Saw Palmetto: Saw palmetto (*Serenoa repens*) is a small palm tree native to West Indies and the Atlantic Coast of North America from South Carolina to Florida. The fat soluble extract of the berries inhibits the conversion of testosterone to dihydrotestosterone (DHT) and has been reported to have antiandrogen and estrogenic effects. In one of the larger studies involving 110 patients with BPH, impressive clinical results were reported: nocturia decreased by 45%, flow rate (ml/s) increased by over 50% and post micturition residual (ml) decreased by 42% in the group receiving saw palmetto extract while the placebo group showed no significant improvement.²⁷ Direct comparisons with finasteride (Proscar) report increased efficacy, lower side effects, and significantly reduced cost of treatment with saw palmetto. While finasteride typically takes up to a year to produce significant benefit, most patients on saw palmetto extract achieve some symptom relief within the first 30 days. A recently reported study has now evaluated the long-term efficacy of saw palmetto. This three year, multi-center open label study evaluated 160 mg of a standardized extract in 435 men (aged 41-89 years) with stage I or II BPH. By the end of the study 120 patients had withdrawn: 12 from lack of efficacy, 41 due to need of surgery, 41 lost to follow-up, and 8 from adverse reactions. In the remaining 315, the following were reported:

Table 2. Other Common Herbs And Their Uses

<p>Ginseng: adaptogenic, stimulates ACTH, Hawthorne: mild (Stage I & II NYHA) cardiac insufficiency - 40-90 mg daily Milk Thistle: hepatoprotection, stimulates hepatic protein synthesis, cirrhosis, viral hepatitis, gallstones - 140-210 mg/day Garlic: antibacterial, antifungal, antiviral, antihelminthic, immune enhancing, cardiovascular - 4,000 mg allicin per day Black cohosh: menopausal symptoms, preventing osteoporosis - 250-500 mg/day Licorice root: antiinflammatory, antihepatotoxic, PMS symptoms, peptic ulcer - 250-500 mg/day. Feverfew: migraine, rheumatoid arthritis, 500-1000 mg/day Valerian: insomnia, anxiety - 250-500 mg/day Ginger: anti-nausea (motion sickness), inflammatory conditions, 100-200 mg/day.</p>

- nocturia normalized or improved in 73%;
- daytime frequency improved in 54%;
- feeling of incomplete emptying improved in 75%;
- rectal examination revealed improvement in prostate congestion in 55%;
- average residual volume decreased from 64 to 38 cc; and
- peak urine flow increased an average of 6.1 ml/sec.²⁸

Other common herbs in use in the United States, their common actions, and recommended dosages are seen in Table 2.

There is no organization or governmental agency in the United States that certifies that a herbal product is what it claims to be. Reputable companies producing herbal remedies bioassay the product after manufacture and list on the label that the product contains a standardized herbal extract, listing the percent of the known active ingredient(s).

Medical Hypnosis

As in every other aspect of medicine, hypnosis is both an art and a science. Those readers who are familiar with the nuances of hypnotic phenomenon are well acquainted with the art. This brief introduction to the field of Medical Hypnosis will focus on the history, theories, clinical applications and research investigations into the use of hypnosis as a medical intervention. When consulting the references used to prepare this review of the literature, the reader will note that medical, dental and psychological uses of hypnosis have undergone mainstream scientific testing of its effectiveness since the late 1950's.

History

In 1734 Franz Anton Mesmer, a Viennese physician, began the modern medical study of hypnosis through interventions designed to alter the flow of electro-magnetic fluids in the body.^{29,30} This treatment, later called "animal

INTERNET SOURCES FOR REFERENCE

HOMEOPATHY

www.homeopathic.com Homeopathic Educational Services: One of the largest sites for information concerning homeopathy, including research, ailments and their treatments, and sources for educational materials, including books, tapes, remedies and software.

www.homeopathic.org National Center for Homeopathy: Information about journal articles, cost effectiveness research, and educational programs.

HERBS

www.herbalgram.org American Botanical Council: Information about education, Commission E Monograph Translation, individual herbs, journals and textbooks.

HYPNOSIS

<http://jama.ama-assn.org> (Articles) Society for Clinical and Experimental Hypnosis

<http://www.ish.unimelb.edu.au/ish.html> (Articles, Journal, training, membership) International Society of Hypnosis

<http://www.asch.net> E-mail AMJCH@aol.com (Articles, Journal, training, membership) (This website is down currently) 1-312-645-9810. American Society of Clinical Hypnosis has the best training in the country for Medical Hypnosis.

<http://www.apa.org> (Articles) American Psychological Association Division 30 Psychological Hypnosis

<http://nccam.nih.gov> (Articles/Grant Funding) National Center of Complementary and Alternative Medicine

magnetism", was documented as instrumental in miraculous cures of individuals unresponsive to contemporary medical interventions. In 1784, an international commission, led by Benjamin Franklin, was appointed by the King of France to investigate Mesmerism's claims. Without disputing the "cures" attributed to Mesmerism, the findings elucidated the impact of an individual's imagination in the healing process and the ability of a practitioner to manipulate this imagination.³¹

Despite unbelievable "cures", the medical profession forced Mesmerism to remain virtually unused even after the mid 1800's, when it's application in India as the sole anesthetic during at least 300 surgeries was documented by Dr. James Esdaile, a Scottish surgeon.^{32,31} Finally, in 1842, James Braid, a British surgeon, coined the term "hypnosis" equating it with somnolistic sleep. This definition moved mesmerism away from magnetism and energy flow towards the theory of it as an induced state of consciousness.³¹ The professional recognition of hypnosis was achieved in

the late 1950's upon the development of several medical, dental and psychological societies dedicated to the scientific study and clinical application of hypnosis.³³

Definition

While academic and experimental investigations of hypnosis have revealed a wealth of data, no one has agreed upon a definition of hypnosis.³⁴ Milton Erickson, M.D., founding father of the American Society of Clinical Hypnosis, taught that a hypnotic trance state was a natural phenomenon that correlates with changes in neuro-hormonal rhythms.³⁵ It is on these very same states upon which marketing professionals and television evangelists depend! Basically, it is believed that hypnosis works as a tool that facilitates the suspension of critical thinking processes allowing communication to take place directly with the sub-conscious mind. Logical thinking is bypassed, facilitating the acceptance of the illogical.

Most medical hypnotic inductions (the specific interventions through which hypnotic phenomenon are stimulated), employ a structured approach to elicit specific cognitive and physiologic responses whether or not a spontaneous trance exists. The ability of a person to perform certain hypnotic skills depends on several factors. The first factor known to influence an individual's hypnotizability is expectancy. Prior experience or exposure to hypnosis and belief based on that information shapes an individual's entire responsiveness to the hypnotic intervention. It is for this reason practitioners assess what individuals are expecting from their experience and dispel misconceptions.³⁶

The most important facet of hypnosis for medical interventions is dissociation. Individuals vary in their ability to turn on or off certain psychological or physiological processes. Through cognitive dissociation athletes can enhance their performance and cut off sensory feedback from their body.³⁷ A closely related factor to dissociation, is the concept of absorption. While individuals who score high on absorption scales may not be able to turn off sensation, they are able to become "mesmerized" by something other than the undesired experience.^{38,39}

The fourth influencing factor in hypnotizability is one's response to suggestion. Once a light trance state is induced, therapeutic hypnotic suggestions are formulated and shared with the hypnotized individual. An individual's innate tendency to accept or reject suggestions influences their responsiveness. Resistance of suggestions occurs when there is an absence of the suspension of critical thinking.³¹ Last but not least, motivation plays a key role in achieving hypnotic states. Individuals involved in crisis situations can access deeper levels of hypnosis based on the situational motivation. Also, individuals motivated to please their care givers will perform according to the socialized role of subject to the hypnotic master.⁴⁰

Most of the experimental data suggests that varying degrees and dimensions of these five hypnotic traits influences an individual's ability to "be hypnotized". Standardized scales of hypnotizability are used in experimental and clinical settings to assess an individual's ability to engage in certain tasks. Selection of appropriate hypnotic inductions depends upon hypnotizability levels.³¹ It is generally believed that all hypnosis is self hypnosis and an individual cannot be hypnotized against their will. However, through by-passing the conscious critical adult mind people are capable of feats that they may consciously not believe are possible.³³

Medical Applications

It is accepted that hypnosis induces a state of relaxation and well being, however, the most convincing aspect of hypnosis is being able to willfully influence physiological processes.³⁵ Controlled experiments and clinical interventions document the ability of hypnotized individuals to control pain,^{31, 33, 35, 40-45} reduce physiologic arousal in preparation for and during surgery,^{32, 46} replace or supplement chemical anesthesia and analgesia^{31, 32, 47-49} and reduce bleeding, swelling, infection, post-operative complications and pain^{31-33, 40, 50} and reduce length of hospital stay³² (see Figure 3).

In dentistry, hypnosis is used for psychogenic oral pain,⁵¹ overcoming fear, gagging,⁵² tongue thrusting, thumb sucking, flow of saliva and capillary bleeding, bruxism, cooperation with procedures and as an anesthetic in place of chemical anesthesia due to allergies.⁵³ In obstetrics there

are many documented cases of hypnosis assisting with hyperemesis gravidarum,⁵⁴ preparation for labor and delivery^{31, 33, 40, 55-57} and during c-section for hypnoanesthesia.^{31, 33, 40, 58} Smoking cessation and habit control programs are more successful with the inclusion of hypnosis^{31, 33} and individuals have demonstrated measurable modulation of the autonomic, endocrine, immune and neuropeptide systems in the body while hypnotized.⁵⁵

In dermatology, hypnosis has shown great success for removal of warts,^{59, 60} reduction of burns,⁶¹⁻⁶³ reversal of allergic reactions^{33, 64} and has proven helpful with many other diseases of the skin.⁶⁴ Psychiatric applications of hypnosis have shown effectiveness in mood disorders, eating disorders, enuresis, hypochondriasis, psychogenic impotence, premature ejaculation, insomnia, dissociative identity disorder, personality disorders, phobias, various psychosomatic disorders, stuttering, tics and vaginismus.^{31, 33, 35} The reader is encouraged to explore other resources for additional medical, surgical, dental and psychological applications of hypnosis.⁶⁵

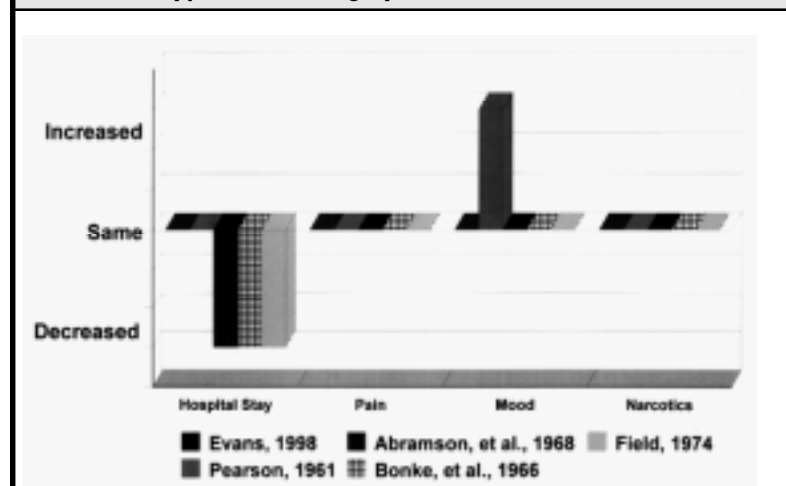
Reimbursement And Best Practice Issues

Prior to diagnosis related groups (DRG's) and other cost containing measures, the motivation to included hypnosis in mainstream medicine was not present. The cost savings in successful treatment of psychogenic, dissociative and psychosomatic conditions, all high utilizers of medical treatments, is unimaginable. Another key area for cost savings is demonstrated in decreased length of hospital stays, lowered uses of pain medications and reduced complications post-surgically.³²

In response to these findings, Medicare has approved the use of medical hypnosis (CPT 90880) for treatment of phobias, psychogenic pain, conversion and dissociative disorders.⁶⁶ Florida Statute (§456) on the Practice of Hypnosis, limits this therapy to licensed practitioners of the healing arts, including physicians, psychiatrists, dentists, chiropractors, podiatrists, and optometrists "within the pervue of the statutes applicable to his respective profession". A patient may be referred to a "qualified practitioner" by a licensed practitioner of the healing arts, but that "qualified practitioner" must employ hypnotic techniques under the supervision, direction, prescription, and responsibility of such referring practitioner.⁶⁶

There are several professional societies which regularly offer training in hypnosis that complement various medical specialties. However, experience is the best teacher and there is no better method of learning what hypnosis can help individuals achieve than trying it yourself! The authors of this paper encourage all physicians to

Figure 3. Randomized / Double Blinded Clinical Trials Of Hypnosis And Surgery (Blankenfield, 1991)³²



The most significant data reflects a decreased length of hospital stay for 211 out of 316 patients (67% in three out of five studies reported). Average decreased length of stay was 1.5 days. Other trials included in Blankenfield's study (18 in all) were not randomized, double blinded placebo controlled as are the ones above. However, they reflected similar or better results when integrating pre-surgical, intra-operative, and post-operative hypnosis.

recognize the long history of medical hypnosis and the fact of it's professional standing in the healthcare community. Encouraging patients to tap into their psycho-physiological abilities through learning self-hypnosis will complement and enhance the course of treatment physicians feel is best for their patients.

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