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Hypnosis and Hypnotherapy in the Milieu of Integrative Medicine: Healing the Mind/Body/Spirit

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"Increasingly, research shows that how we live, what we think, and how we feel affect our health. For example, hostility, depression and loneliness contribute to heart disease. Stress can exacerbate infections, fibromyalgia and asthma. High-fat diets can lead to coronary disease and cancer. Obesity is a major factor in the development of type 2 diabetes, hypertension and cancer. While traditional medicine can help diminish the consequences of unhealthy lifestyles, integrative medicine can reverse those consequences, prevent illness and reduce symptoms, resulting in: decreased pain; improved sleep; enhanced immune function and fewer infections; lowered blood pressure, cholesterol and glucose levels; improved bowel function; less anxiety and depression related to illness; fewer complications after surgery; resolution of post-traumatic stress disorder."[1]

"Hypnosis is used increasingly for healthcare applications in hospitals, clinics, and psychotherapy practice. A substantial body of research demonstrates the efficacy of hypnosis as part of the integrative treatment of many conditions that traditional medicine has found difficult to treat (e.g., Pinnell & Covino, 2000; Elkins, Jensen, & Patterson, 2007). . . . We have also come to know that in these populations hypnosis can lead not only to reduced anxiety but also specifically altered physiological parameters."[2] [3] [4]

At the Scripps Center for Integrative Medicine, the staff integrates the best of high-touch alternative therapies with the best of high-tech modern medicine into the care of their patients. According to medical director Erminia M. Guarneri, "the staff strives to complete the circle of care and bring their patients the best in disease prevention. They treat patients holistically by embracing the best of both scientific-based medicine and evidence-validated alternative methods. This allows them to offer their patients full care instead of the fragmented care typical of the current system of modern medicine."[5]

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Integrative, Alternative, and Complementary Medicine

As defined by the National Center for Complementary and Alternative Medicine at the National Institutes of Health, integrative medicine "combines mainstream medical therapies and CAM [complementary and alternative medicine] therapies for which there is some high-quality scientific evidence of safety and effectiveness."[6] The NCCAM suggests that Complementary and Alternative therapies can be loosely grouped into five categories:

1. Biologically based practices, such as herbal remedies, vitamins, other dietary supplements
2. Mind-body techniques, such as meditation, hypnotherapy, guided imagery, yoga, biofeedback
3. Manipulative and body-based practices, such as massage, reflexology, chiropractic, Feldenkrais method, Pilates, Rolfing Structural Integration
4. Energy therapies, such as magnetic field therapy, Reiki, healing touch, Qi Gong
5. Ancient whole medical systems, such as traditional Chinese medicine, Ayurvedic medicine, acupuncture, homeopathy

The Consortium of Academic Health Centers for Integrative Medicine provides somewhat more detail in its definition: "the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals, and disciplines to achieve optimal health and healing."[7] The Consortium is composed of 42 academic medical centers -- including those at Harvard, Columbia, Georgetown, the University of Pennsylvania, Duke, and the University of California, San Francisco.

According to Dr. Andrew Weil,[8] Integrative medicine is healing-oriented medicine that takes account of the whole person (body, mind, and spirit), including all aspects of lifestyle. It emphasizes the therapeutic relationship and makes use of all appropriate therapies, both conventional and alternative.

Weil suggests that the principles of integrative medicine are:

- A partnership between patient and practitioner in the healing process
- Appropriate use of conventional and alternative methods to facilitate the body's innate healing response
- Consideration of all factors that influence health, wellness and disease, including mind, spirit and community as well as body
- A philosophy that neither rejects conventional medicine nor accepts alternative therapies uncritically
- Recognition that good medicine should be based in good science, be inquiry driven, and be open to new paradigms
- Use of natural, effective, less-invasive interventions whenever possible
- Use of the broader concepts of promotion of health and the prevention of illness as well as the treatment of disease
- Training of practitioners to be models of health and healing, committed to the process of self-exploration and self-development

Integrative medicine may include any of the following areas (not intended as an exhaustive list): acupuncture, massage therapy, nutrition, herbs and dietary supplements, mind/body practices such as meditation, movement therapies such as yoga, biofeedback, hypnotherapy, homeopathy, energy medicine such as Healing Touch, or traditional methods such as traditional Chinese medicine. This article will focus primarily on the contributions of hypnosis and hypnotherapy to integrative medicine.

The genius of Fritz Perls was his phrase, "give your body a voice." The beginning of learning to listen to our bodies is asking specific body parts to speak to us. This of course, in traditional psychological terms, is a projective technique. Projections, going back to Freud and Carl Jung, emanate from the deepest shadow parts of our unconscious mind. When we therapeutically call forth shadow projections while in the trance state of hypnotherapy, the unconscious mind can literally speak to us. It will inform us about the illness or disease that infects our

bodies and the lessons to be learned. This is the road to recovery and healing. It is paved with awareness, truth and spiritual connections.

An example of this is a woman who was diagnosed with breast cancer. I asked her to give the cancer a voice, describe itself and speak to us. The cancer spoke the following. "I am eating away at you. You give and give and give which leaves nothing for you." The voice of the cancer, continued. "It is time to take care of you. It is time to realize that you also have needs. I am making you rest, to ask for help and to surrender." The lessons are about letting go of control and allowing others to give to you."

Dr. Perls always said that whatever in our lives *emerges*, is the *emergency*. In other words, it's the emergency that demands attention, awareness and consciousness. These illnesses, diseases and even "accidents" are wake-up calls indicating that we need to pay attention. The Heart-Centered Hypnotherapy (HCH) process is designed to bring to our awareness what we are currently unaware of. Often I hear people asking, when suddenly confronted with an illness, "Why is this happening to me?" Studies demonstrate that the conscious mind contains merely 10% of the functioning of the entire mind. This is the part of the mind that thinks, questions, analyzes and debates. Even though we are more aware of the conscious mind, it is actually very limited when it comes to understanding why a person got sick or how to heal a disease. So what does the other 90% of the mind do? This is the unconscious mind which is extremely complex. The unconscious contains all of our emotions, creativity, intuition, and a whole host of resources that control our bodily functions such as breathing, heart rate and metabolism. When we learn to relax into a trance state, we then have access to this other 90% of our mental capacity.

This is why hypnosis is invaluable in the dynamic process of mind/ body/ spirit healing. While in the trance state, we begin to realize that our mind is very much like a computer. The computer program has been set from the day it was in the factory. New programs may be added along the way, but the basics are always there. If you have a Mac then your choices and skills and capabilities are conducive to what a Mac can do and the same of course with a PC. We as human beings each have

our own individual "programming" that has been set from the moment of our conception which contains our limitations as well as our immense capabilities.

Since modern medicine has emerged in the last 200 years, we have lost many of our natural healing abilities that have been with us previously for centuries. Our modern culture has taught us to give over the task of healing to the medical professionals who have been trained in universities. This has proven to be a blessing and a curse. On one hand, modern medicine has brought to us the necessary research to deliver medicines that save lives, prevent outbreaks of contagious diseases and help us to tolerate pain. On the other hand, the price we've paid for that medical model is to give over our inner wisdom and innate healing abilities to people and machines that can't or don't take into account the deeper meaning of our illnesses. We have learned to give over the creative aspect of our own healing to strangers who don't know us and often are too busy to find out who we are beyond the functioning of our organs. We take no responsibility for what happens to us once we step into a medical facility. We are accustomed to giving over not only our power, but the trust in our own internal wisdom.

Modern medicine is most powerful when accomplished in conjunction with the resources that we, as patients, bring to the table: the operating table for starters. Certainly we are most grateful for surgeons who skillfully remove disease from our bodies, repair broken bones and replace dysfunctional organs with new ones. However, the patient also brings innate skills and talents to the operating table. Medical research shows that tissue, bones and organs begin to heal immediately under the proper conditions. Studies show that healing is greatly speeded up when relaxing music is played, when positive suggestions for healing are given and when the patient is called upon to participate in their own healing process. For example, some years ago I fell off a slippery deck and severely broke my femur and my ankle. I was rushed to the hospital where the surgeon placed two metal plates and twelve pins (screws) into my leg and ankle during the emergency surgery. I was told that it would take at least six months or more to heal. The prognosis was that after being in a wheel chair so as not to put any pressure on the ankle, I would then be on crutches for several months. Then x-rays would be

taken to determine the progress of the bones mending back together and I would be required to wear a "boot" for three to six more months.

Upon returning home from the hospital, I immediately made several self-hypnosis tapes with my favorite music and powerful suggestions designed to reach my own inner healing resources. I played the tapes several times a day and used visualization in order to see the bones neatly mended and stronger than ever before.

When I returned to the doctor to get the x-ray of the progress of the bones mending together, the doctor was amazed. He said to my husband and me, "What have you been doing?"

He was amazed that the healing was so complete that I didn't need to wear the boot and I could move right into physical therapy. It was apparent that by using the self-hypnosis diligently I had been able to reduce by three months the healing time normally required.

Dr. Andrew Weil, MD, is a well-known advocate of integrative medicine, which combines conventional medicine (using synthetic drugs and surgery to treat health conditions) with alternative and complementary medicine (emphasizing a partnership between patient and practitioner in facilitating the body's own innate healing capabilities, and use of natural, effective, less-invasive interventions whenever possible). While conventional medicine is often both expensive and invasive, it is also very good at certain things; for example, handling emergency conditions such as massive injury or a life-threatening stroke. Dr. Weil is unstinting in his appreciation for conventional medicine's strengths. "If I were hit by a bus," he says, "I'd want to be taken immediately to a high-tech emergency room."

The term integrative medicine is used to signify a more holistic, systemic combination of approaches. Instead of regarding non-conventional healing modalities as an *alternative* to traditional practices, or adding them as a supplement or *complement* to traditional treatment, this model emphasizes an integration of traditional and previously non-conventional modalities based on empirical evidence of their efficacy. This model addresses not only inclusion of modalities such as acupuncture and hypnosis, but also advocates a different model

of understanding the underlying concepts of health and illness. The integrative medicine paradigm proposes that an interrelated combination of biological, psychological, social and spiritual factors lead to onset, maintenance, or exacerbation of illness.

> Is hypnosis in healthcare used as an alternative treatment, a conventional treatment, or an integrative treatment? This question still generates great confusion among insurers, clinicians, and patients. The answer depends in part on how we conceptualize the development of illness and healing. If one ascribes to the "physiology as machine" metaphor and considers illness to be strictly the product of disordered biology, then hypnosis will be utilized in an ancillary, mechanistic, and less effective manner. However, if one is informed by PNI and conceptualizes health and illness as a cybernetic system affected by multiple interactive influences, then hypnosis becomes one of many ways to intervene in that system from an integrative vantage point.[9]

The traditional health system employed an outdated dichotomy: that all symptoms should be viewed as either *real biologic disease* or else *psychosomatic* (read "all in your head"). And the corollary belief is that healing those symptoms of *real biologic disease* is a matter of applying the appropriate physical intervention (medication or surgery), while resolving the symptoms of *psychosomatic* origin is a matter for psychologists or clergy to deal with. An integrative medicine perspective discards the dichotomy as simplistic, and views symptoms as a reflection of the interaction of all aspects of an individual's life experience.

Acceptance of hypnosis and hypnotherapy by conventional medicine was officially acknowledged in 1958, the year that the American Medical Association and Canadian Medical Association endorsed hypnosis as a valid medical therapy. However, acceptance by medical practitioners has often been slow.

Psychosomatic Phenomena

The colloquial meaning of the term *psychosomatic* is quite the opposite of the true significance of the term. When someone says, "It is all psychosomatic," that has come to mean that the person is making up their illness or disease. The implication is that the pain or illness is "all in their head," and therefore that it is not real. However, the Latin term *psyche* actually refers to the *soul* which encompasses the deeper emotions and feelings. The term somatic refers to the body. So actually the term psycho-

somatic indicates that there is indeed a mutually causal connection between the deeper part of ourselves and our bodies.

There are, of course, bodily symptoms created mentally. When it is through an unconscious process, this is referred to as conversion reaction. Symptoms can be created mentally also through suggestion in hypnosis. The mechanisms responsible for conversion symptoms are the same as those involved in the creation of analogous phenomena by hypnotic suggestion. Evidence supporting the link between hypnosis and conversion disorder has been obtained from both neuroimaging[10] and clinical studies.[11] For example, in one study the induction of paralysis of the left leg in a non-clinical hypnotized participant was associated with the same pattern of brain function as observed in a conversion disorder patient with the same symptoms.[12]

This mutually causal connection between *psyche* and *soma* is embedded in our language, not only in English, but in many languages around the world. In Heart-Centered Hypnotherapy we have great respect the language of each individual person. We listen carefully to the words and phrases that each person uses, especially when describing their illnesses or somatic experience. We have learned that the unconscious mind, the soul of the individual, will use psychosomatic language to give us clues about their emotions, their pain, and the best healing course of action to take.

So, for a moment, let's take a look at some of the common expressions in our language and what those expressions actually mean. When treating patients in medical settings as well as traditional counseling and therapeutic settings, it is essential to always pay extraordinarily close attention to their language. Neuro-Linguistic Programming (NLP)[13 14 15] has brought to our attention the importance of the specific words and language people use.

For example, if we ask ourselves, what emotion are we expressing when we refer to being "weak in the knees," perhaps the emotion of being strongly in love, may come to us. Or the term, "lovesick" may be making reference to the pattern that some people actually do make themselves sick due to the stress of worrying about relationships. Then there is the term "heartsick," which refers to the deep pain in the heart some feel

when they lose a love. This can then become the basis of heart disease or be a warning about a heart attack. Let's take a look at the term, "pain in the neck or pain in the butt." What might those words mean? It is interesting that very often this may refer to a person that one has difficulty tolerating. Another common term along these lines is "being pissed off." The emotion underneath refers to anger.

In hypnotherapy, we make great use of this mind-body or psychosomatic language. We have discovered that it is the key to discovering what the unconscious mind is attempting to communicate to the patient. An example would be a woman who came to see me with a diagnosis of chronic cystitis. She continued to get severe bladder infections even after her doctors had done all that they knew how to do to treat this. Once under the trance state, we asked the patient to give her bladder a voice, "Let it speak to you." That may sound a bit strange to the untrained reader. However, through Gestalt Psychology, Dr. Frederick Perls and others have developed this technique as a very viable way to invite the diseased organ to communicate with us. Over the past fifty years, we have witnessed the amazing ability of the unconscious mind to communicate directly to the hypnotherapist and the patient what the body could never before put into words. It is also quite apparent that when the patient hears and receives this clear message, it opens the door to the possibility of true healing.

The subconscious mind/bladder of the client responds with the words, "I'm pissed off. I'm angry." The patient continues to get in touch with deeper emotions, at which time we do an age regression process developed by Dr. Milton Erickson. This process helps the patient to discover the missing puzzle pieces of their life so that healing can occur on all levels. During the regression, the woman patient returns to a childhood experience at age eight, where she is being forced to have sexual intercourse with her stepfather. There is great physical and emotional pain involved, which she experiences in her female parts and all over her body. She becomes very angry and defiant shortly after this experience; however, she is physically abused and punished when she expresses her rage. During a severe beating, this young child went into shock and became numb to the physical and emotional pain of her abusive stepfather. This is a natural way

that the human psyche protects itself from intolerable pain. Shortly after this she began to somaticize her emotional and physical pain. She developed severe migraine headaches, intense stomach aches and then sometime later, the bladder infections began.

At this point in her therapy, the patient continued to put more puzzle pieces in place. As she became a teenager, the doctors told her mother that the bladder infections were from being sexually active. This brought more shame and fear to the young woman, since her mother refused to acknowledge that it was the stepfather who was using the daughter for sex. This pattern carried into the woman's own marriage, where she used the bladder infections to avoid having sex with her husband. The bladder infections became a convenient excuse to fend off her husband's sexual demands.

Another example of somatically descriptive language is "gut wrenching" anxiety. This brings to mind a client (we'll call her Paula) who, at the age of 25, was hospitalized for severe Crohn's disease. At this young age, responding to years of intense stomach pain, the surgeons began removing pieces of her intestine. They told her that this disease does not get better, only worse, and that eventually she would need to have a colostomy bag. This "prediction" of course is a suggestion (remember the power of suggestion by authority figures) and only served to increase the anxiety that was constantly in her stomach. She described it as "*gut-wrenching anxiety*."

We began treating Paula with Heart-Centered Hypnotherapy and asked her to give her stomach a voice. In a deep trance state, the patient began to speak as her own stomach and describe herself. She began with, "I am all tied up in knots. I am filled with anxiety, fear and self-loathing." Each day the knots get tighter." We then proceeded with the hypnotherapy age regression in order to bring mind and body together.

Paula regressed back to the age of seven when the family minister and good friend was visiting for supper. After supper the parents were occupied and the minister took the little girl Paula for a walk. He began kissing her and putting his tongue in her mouth. He told Paula that this was their private secret and that God wouldn't want her to tell anyone, especially not mommy & daddy. This behavior escalated, as the minister began

visiting on a much more regular basis. He always warned Paula not to tell anyone their secret.

Each time the minister came over, and smiled and winked at her, Paula began having stomach aches. She finally was so sick, she told her parents she could not come out to see him. Her speaking up resulted in her father becoming very angry at her, yelling and screaming and spanking her very hard for being so disrespectful. This huge pain in her stomach got worse and worse until she was in excruciating pain any time there was an indication of the minister coming over. One devastating night, while the parents were preparing the dinner, the minister actually forced himself on her and raped her. She was then expected to come out to the table since dinner was ready. Paula was frozen in shock by this point and said nothing.

After the minister left and often before he came back again, the parents would fight over the whole thing. The mother no longer wanted to force Paula to participate in these dinners. She was finally sensing that something was horribly wrong with her daughter. As the years went on, the father became furious at the mother for not making Paula be more respectful to the minister. Their fights turned into physical abuse and, of course, resulted in Paula's "gut-wrenching anxiety" becoming more and more severe. The minister, hearing about the severe stomach aches Paula was having, offered to take her to the doctor, a member of the church congregation, where she was given pain medication. Subsequently, he began to bring the medication directly to her.

As time went by, Paula was confused as she simultaneously dreaded and looked forward to the visits of the minister. She did not realize that he had 'groomed" her over the years to associate the sexual abuse with pain relief. He had conditioned within her a drug and sex addiction, that he and only he could satisfy. So now she had been groomed to expect to participate in the sexual pleasure of the minister in exchange for the pain relief. Anytime she appeared unwilling to participate, he threatened to cut off her drugs. This pattern continued well into her young adult years until the time she came in for therapy facing a colostomy bag.

In her sessions she was encouraged to get the intense rage out of her body and to release the physical pain that had resulted from this massive lifelong emotional repression. This type of repression nearly always results in some type of a stress-related

illness if not dealt with soon enough. After six months of intensive hypnotherapy consisting of emotional release, psychological awareness and physical healing suggestions, Paula returned to her doctor. He was quite amazed that not only had her severe physical symptoms been greatly reduced but her lab results showed that the Crohn's disease was barely present. After one year, Paula was completely off her pain medication and did not need the dreaded colostomy bag.

She shared with her doctor what she had learned about the origin of this disease within her. He asked to speak with us, her hypnotherapists. After much conversation and research, contemplation and soul-searching, this amazing mind/body healing lead Paula's doctor to become dedicated to Integrative Medicine in his own practice and for his other patients. He realized that by treating *only the body*, without taking the psyche into account, he was over-prescribing medications and recommending debilitating surgeries that were perhaps unnecessary. He spoke of the Hippocratic Oath he had taken about first doing no harm.

As we step back and take a look at the whole picture, it becomes clear that in order for any medical intervention to be effective, the emotional healing needs to be in the forefront. It required a number of sessions to recover and process the memories which were the source of her anger and rage. The patient developed the courage to face up to the abuse that had occurred. As she released some of the rage at her abuser and some of the shame about herself, she was able to bring healing thoughts and energy to her bladder and her entire body. Then and only then, did the antibiotics given by the medical doctor work to treat and once and for all completely cure the cystitis. This was the last time she ever had a bladder infection.

Our experience is that integrative medicine is the most effective way of treating the whole person. When the medical knowledge of treating infection is combined with the deeper hypnotherapy techniques to guide the patient into receiving the true underlying message from the body, then healing is generated from the vey deepest part of the psyche to heal the body. This, then, is the deeper meaning of the expression *psychosomatic.*

The Placebo Effect and the Nocebo Effect

The Placebo Effect is well-known. The mind's expectations largely determine the body's experience when a drug is administered. Some patients in a double-blind clinical trial who are actually receiving a sugar-pill rather than the actual medication experience relevant physiological effects as if they had received the actual medication. This is a demonstration, of course, of the miraculous power of the human mind and imagination: mind over matter. Not so well known or studied is the Reverse Placebo Effect, however: patients' expectations that an actual medication will *not* work leads their body to cancel out any physiological effect of the medication.

In fact, research documents that the mind can make a placebo "real" and render a real drug useless.

A new study published in *Science Translational Medicine* documents this nocebo effect.[16] This particular experiment involved causing pain to the legs of test subjects, then adding a painkiller medication to an IV drip while assessing the subjects' pain levels. When the painkiller drug was present, the test subjects were told about it, and just as expected their pain scores significantly dropped. But when test subjects were told the pain medication *had been stopped*, their pain levels returned back to the original, non-medicated levels even though the pain medication was secretly still being dripped into their IVs. The expectation of poor or no results became a self-fulfilling prophecy. "Doctors shouldn't underestimate the significant influence that patients' negative expectations can have on outcome," says Professor Irene Tracey of the Centre for Functional Magnetic Resonance Imaging of the Brain at Oxford University, who led the research. "For example, people with chronic pain will often have seen many doctors and tried many drugs that haven't worked for them. They come to see the clinician with all this negative experience, not expecting to receive anything that will work for them. Doctors have almost got to work on that first before any drug will have an effect on their pain." Subjects in the study were in an MRI scanner during the experiment, and the researchers used brain imaging to confirm the participants' reports of pain relief. MRI scans showed that the brain's pain networks responded to different extents according to their expectations at each stage, and

matching their reports of pain. This showed that they really did physiologically experience different levels of pain when their expectations were changed, although the administration of pain relief remained constant.

The miraculous power of the human mind and imagination is here at work again. Integrative medicine recognizes this power and utilizes it for effective healing through many types of interventions. Hypnosis and hypnotherapy is especially well-suited to accessing the belief systems embedded in the mind, and to modifying the expectations of a treatment outcome.

The placebo effect is actually the ability, indeed the inclination, of the unconscious mind to accept suggestions and employ the innate human resource of imagination. One of the ways that the medical field can work together with others in integrative medicine is to become acutely aware of the principles of suggestion, how the unconscious mind works, and how what medical professionals say affects patients. A dramatic example of this is a patient who came in for hypnotherapy with a sudden hearing loss in her left ear. In a dramatic hypnotherapeutic age regression to the onset of this hearing loss, the patient found herself on the operating table in a recent operation. She describes the surgeon on her left side telling the others medical staff present that this was more serious than he thought and that the patient may not survive. She then describes everything going deaf in that ear and she could no longer hear any conversation. When she awoke in the hospital recovery room, she discovered the hearing loss, but obviously had no memory of anything that occurred in the operating room. Because patients are "asleep" does not mean they can't hear or are oblivious to their environment. To the contrary, the unconscious mind is processing all that happens in an operating room under anesthetic.

Anesthetized consciousness is ungrounded, but with "remote" awareness and memory. Milton Erickson[17] and David Cheek[18] discovered that anesthetized patients could perceive conversation at some level of awareness. Research with anesthetized surgery patients reported by Halfen[19] and Bennett[20] shows that a surprising amount of awareness does exist during anesthesia, for bad but also for good. The beneficial effects of positive suggestions to patients during anesthetized surgery have

been well-documented.[21] Hypnosis has proven effective in patient recall of events that occurred under anesthesia.[22] The famous neurosurgeon Penfield concluded that the mind is active during anesthesia. He discovered that patients consistently recalled exact details of incidents during surgery. He noted, however, that the electroencephalograph (EEG) brainwave was totally inactive during anesthesia, ruling out the idea that an active nervous system produced the memory. The memory is, in Hunt's research[23], held in the energy field of the body, where conscious retrieval is limited (although enhanced by hypnosis) but effects are clear.

When doctors minimize the patient's experience by saying, "It's just the placebo effect," we deny a powerful aspect of the mind that can be used for healing. The principles of suggestion have long been acknowledged by psychologists, hypnotists and motivational speakers. The power of suggestion has been used with very positive results and with very negative ones. It is understandable that television advertisers spend billions of dollars to give viewers suggestions to buy and use their products. We see the effects on children who watch Saturday morning television and then have a fit on the grocery store floor when parents won't purchase the cereal brand they viewed on television.

It is very important for medical professionals to understand how patients are put into a trance state. The main way anyone is put into a hypnotic trance is called "eye fixation." This is simply by staring at a spot, at a book, at a television or a movie screen, an iPhone, iPad, a computer screen, the ceiling or anything else. Studies show that people go in and out of trance state 80% of the day. This explains why, for example, the Columbine killers watched *Natural Born Killers* over 100 times just before they went on their horrendous bloody rampage killing their fellow students and teachers and ultimately themselves. People were in shock. How could this happen? The same power of suggestion was at work in the minds of these students as the "placebo effect" works to make patients believe a sugar pill improves their depression or that a heavy dose of narcotic medication is not producing results. When we learn to use this ability of the unconscious mind to accept and imaginatively implement suggestions, it is certainly preferable to use it with conscious

awareness and purposeful intent to assure that results will be positive rather than negative.

Another aspect of the power of suggestion is the principle that suggestions coming from authority figures carry much more weight than those coming from a peer. Doctors, nurses and other professionals carry the weight of authority, which makes it doubly important for these professionals to be highly conscious of what they say to patients, what suggestions they give, and what expectations they arouse.

Hypnosis and Hypnotherapy in Integrative Medicine

There is mounting evidence for the efficacy of adding hypnosis and hypnotherapy to conventional treatment of many medical conditions.

> Millions of minor and major surgical operations and invasive interventional medical procedures are performed each year around the world. Preparing patients hypnotically for surgery can have an enormous positive impact on both their surgical course and their recovery. Hypnosis can be very effective in enhancing the patient's coping skills, managing stress and anxiety, reducing pain, and increasing a sense of self-mastery in the patient having surgery.[24]

The American Society of Clinical Hypnosis suggests the following uses of hypnosis in medicine.[25] Hypnosis may be used in the following disorders and/or circumstances:

- Gastrointestinal Disorders (Ulcers, Irritable Bowel Syndrome, Colitis, Crohn's Disease);
- Dermatologic Disorders (Eczema, Herpes, Neurodermatitis, Pruritus [itching], Psoriasis, Warts);
- Surgery/Anesthesiology (In unusual circumstances, hypnosis has been used as the sole anesthetic for surgery, including the removal of the gall bladder, amputation, cesarean section, and hysterectomy. Reasons for using hypnosis as the sole anesthetic may include: situations where chemical anesthesia is contraindicated because of allergies or hyper-sensitivities; when organic problems increase the risk of using chemoanesthesia; and in some conditions where it is ideal for the patient to be able to respond to questions or directives from the surgeon);

- Acute and Chronic Pain (back pain, cancer pain, dental anesthesia, headaches and migraines, arthritis or rheumatism);
- Burns: Hypnosis is not only effective for the pain, but when hypnotic anesthesia and feelings of coolness are created in the first few hours after a significant burn, it appears that it also reduces inflammation and promotes healing. We believe that a second degree burn can often be kept from going third degree if hypnosis is used soon after the injury;
- Nausea and Vomiting associated with chemotherapy and pregnancy (hyperemisis gravidarum);
- Childbirth: Based upon our members' anecdotal evidence, approximately two thirds of women have been found capable of using hypnosis as the sole analgesic for labor. This eliminates the risks that medications can pose to both the mother and child;
- Hemophilia: Hemophilia patients can often be taught to use self-hypnosis to control vascular flow and keep from requiring a blood transfusion;
- Allergies, asthma;
- High blood pressure (hypertension);
- Raynaud's disease

Another way to organize the uses of hypnosis and hypnotherapy in the medical setting, rather than by symptom, is by function. For example these are valuable uses:

- **Improving patient compliance with medical treatment protocols**. For example, addressing a dysfunctional pattern of passive/aggression with authorities through hypnotherapy could significantly improve a given patient's willingness to cooperate with "doctor's orders".
- **Addressing collateral behavioral or muscular habits** that impact on whether medical treatment will be successful or not. For example, hypnosis can be instrumental in reducing muscle clenching and bruxism, important in treating temporomandibular disorder[26] [27], headache[28] and tinnitus.[29] Hypnosis has been effective in the management of diabetes, including regulation of

blood sugar, increased compliance, and improvement of peripheral blood circulation,[30] and this has been the case with adolescent diabetics as well.[31]

- **Improving motivation for self-care**. For example, a tendency toward self-sabotage or self-destructiveness can be ameliorated through hypnotherapy oriented to discovering deep-seated beliefs of unworthiness.
- **Reducing anxiety and depression about being ill**. Hypnosis and hypnotherapy can be powerful ways of accessing the underlying emotions that otherwise remain invisible to conscious awareness, and then consciously changing them.
- **Facilitating visualization to promote health improvement**.[32 33 34 35]
- **Assisting in the treatment of infertility and in-vitro fertilization procedures**. Hypnosis and guided imagery is beneficial in modifying attitudes, optimism, and mind–body interaction related to infertility or receptivity to IVF.[36 37 38 39]
- **Assisting in many aspects of childbirth**. The use of hypnosis in preparation for childbirth, labor and delivery is becoming commonplace, and patients have fewer complications, higher frequency of normal and full-term deliveries, and more positive postpartum adjustment.[40 41 42] Hypnosis may play an important role in reducing preterm labor for patients who have higher levels of psychosocial stress.[43 44] Hypnotherapy has been used to convert breech birth presentations to the normal vertex position;[45] in one study of 100 women with breech presentation, 81% of subjects receiving hypnotherapy successfully converted as compared to 48% of matched controls.[46] Hypnotherapy has been shown to be effective as an alternative anesthesia for childbirth,[47] and in treating postpartum depression.[48]
- **Providing a sense of mastery and control over the disease** when the patient may feel an overwhelming dread about the future and a depressing sense of their life spinning out of control. Hypnosis, or self-hypnosis, is a "simple, portable, self-contained therapeutic technique by which they themselves can exert some control over

their illness. This sense of mastery is often as important as the benefits of symptom and pain management in allaying the dread and depression which are often accompaniments to the diagnosis of cancer."[49 50 51]

- **Ameliorating side effects of medications**, such as nausea, vomiting, and fatigue. Studies have demonstrated that hypnosis can be an effective means for some cancer patients to alleviate nausea and vomiting associated with chemotherapy,[52 53] including with children.[54] For example, the highly hypnotizable patient can frequently control nausea and vomiting by hallucinating the taste of orange or mint and dissociating from negative environmental cues.[55]
- **Reducing pain and levels of pain medication**. "Hypnosis has earned a secure place in the modern armamentarium against pain."[56] Hypnosis has been shown to be particularly helpful for a variety of acute and chronic cancer pain issues in children,[57] for wound debridements in burn wound care,[58] for radiological procedures,[59] for large core needle breast biopsy,[60] and for colonoscopy.[61] An NIH Technology Assessment Panel found strong evidence for hypnosis in alleviating cancer-related pain.[62] Ewin[63] examined the usefulness of hypnosis for tending to the patient with acute burn pain. Later, Patterson and colleagues established a strong argument for using hypnosis as an important adjunctive treatment for burn pain[64] and subsequently refined the knowledge base in this area by elucidating factors predicting hypnotic analgesia in clinical burn pain.[65]

  We are learning that the experience of pain is different for different people, processed differently in their brains. In a functional MRI (magnetic resonance imaging) study done at the National Institutes of Health, patients with fibromyalgia, blinded to what that they were experiencing, identified a stimulus as painful compared with controls who did not.[66] Each group had metabolic activity in very similar areas of the brain that are known to be associated with pain processing; more areas of the brain lit up, metabolically, in fibromyalgia patients. So a normally non-painful stimulus is

augmented by the central nervous system to be experienced by the person with fibromyalgia as painful. Suggestion following a hypnotic induction can readily modulate the subjective experience of fibromyalgia pain, with fMRI showing activation of the midbrain, cerebellum, thalamus, and midcingulate, primary and secondary sensory, inferior parietal, insula and prefrontal cortices correlated with reported changes in pain.[67]

- **Accelerating wound healing**. Post-surgical wound healing is significantly greater with the addition of a hypnotic intervention to usual medical care in reduction mammaplasty and bone fractures.[68] In a randomized controlled trial, researchers found that an adjunctive hypnotic intervention with usual care significantly accelerated post-surgical wound healing with reduction mammaplasty patients. Digitized photographs were scored using a wound assessment inventory (WAI) to document the results.[69]
- **Used as adjunct therapy in conscious intravenous sedation** for plastic surgery, providing better pain and anxiety relief than conventional intravenous sedation and allowing for a significant reduction in midazolam and alfentanil requirements, and improving patient satisfaction significantly.[70]
- **Preparing patients hypnotically for surgery** can "have an enormous positive impact on both their surgical course and their recovery. Hypnosis can be very effective in enhancing the patient's coping skills, managing stress and anxiety, reducing pain, and increasing a sense of self-mastery in the patient having surgery."[71] [72] [73] This is also the case with children.[74]
- **Reducing postoperative nausea and vomiting**.[75]
- **Preparing patients for painful or anxiety-producing procedures**, such as bone marrow biopsies, blood drawing, computerized tomography (CT) or magnetic resonance imaging (MRI) scans[76], colonoscopy[77] , or invasive procedures such as surgery.[78] [79] Dr. Donald Lynch[80] describes his use of hypnosis with a surgery patient diagnosed with invasive transitional cell carcinoma. The patient was scheduled to undergo radical

cystectomy with staging pelvic lymphadenectomy and ileal conduit urinary diversion. At the time of her preoperative examination, the patient expressed some anxiety about the procedure and was offered the opportunity to use a "relaxation program" consisting of deep breathing exercises and use of an audiotaped hypnosis program consisting of a tape to be listened to prior to surgery, one to be used during the procedure, and one for the postoperative period. While this patient had no experience with hypnosis, she embraced the program enthusiastically, used the tapes regularly, and approached her operation with a level of calm which both she and her anesthesiologists found surprising. Following surgery, her pain was managed with a patient-controlled morphine analgesia (PCA) protocol and the postoperative audiotape program, and we found she required roughly half the anticipated regular dose of analgesic. She spent only a single day in the intensive care unit instead of the usual two and experienced return of bowel function after four days versus five or six. She was discharged on the afternoon of the fifth postoperative day. A hospitalization of 8-10 days is typical for this procedure. In follow-up, the patient remarked that the overall experience had been much less stressful and uncomfortable than she had anticipated. She also reported that she was able to return to most of her regular activities in about 3 weeks following surgery, in comparison with 5-6 weeks required of most patients.

Hypnosis has proven to be especially useful with children.[81] [82] [83] Hypnosis has been consistently found to be more effective than control conditions in alleviating discomfort associated with bone marrow aspirations, lumbar punctures, voiding cystourethograms, the Nuss procedure, and post-surgical pain in children.[84] [85] [86] [87] [88] [89]

- **Altering physiological activity that affects disease progression and healing**. In other words, going beyond the treatment of illness-related anxiety or pain to enhancing the body's natural ability to restore health. For example, hypnosis is effective in reducing blood

pressure, not just in the short term but also in the middle and long terms[90]; research results suggest "the value of adding self-hypnosis to the standard medical treatment for hypertension."[91] Immune systems can be influenced by psychological interventions such as hypnosis, and research indicates that "deep trance does significantly reduce negative emotional affect and improves immunocompetence."[92] For example, Taylor[93] demonstrated that hypnosis combined with progressive muscle relaxation, meditation and biofeedback induced an increase in T-cells in HIV-positive subjects with low T-cell counts. Kiecolt-Glaser and her colleagues[94] were able to show how hypnosis could be used to modulate the degree of cellular immune dysregulation during periods of acute stress. Researchers have shown direct correlations between relaxation, imagery and changes in immune function.[95] Wood and colleagues[96] demonstrated that hypnotic intervention altered T-cell activity in healthy subjects. Many studies have shown markedly improved and durable survival in cancer patients who received weekly supportive group counseling and self-hypnosis training plus conventional medical therapy, versus conventional therapy alone.[97] [98] [99] [100] Also, hypnosis can be used to effectively reduce the triggering processes of neurogenic inflammation that exacerbate migraine headache.[101] [102] [103] [104] [105] Hypnosis has been used to treat hemophiliacs; those using hypnosis have realized a reduction in the need for transfusions.[106]

Human beings, then, affect the functioning of their bodies through mental processes, either unconsciously or consciously. Dwelling on negative fearful worried thoughts produces definite effects of stress in the body, such as ulcers or hypertension. With conscious awareness, one can employ intention, self-reflection, and mindfulness to create beneficial effects in the body. And the effects created in the body include changes within the brain. Called *neuroplasticity*, science is now documenting how *as the mind changes, the brain changes*.[107] For example, people who routinely meditate build synapses, synaptic networks, and layers of

capillaries to bring metabolic supplies such as glucose or oxygen to busy regions of the brain. An MRI shows this changing structure as measurably thicker in two major regions of the brain. One is in the pre-frontal cortex, involved in the executive control of deliberately paying attention to something. The second brain area that gets bigger is a very important part called the insula, which tracks both the interior state of the body and the feelings of other people, which is fundamental to compassion and empathy. So, people who routinely tune into their own bodies – through some kind of mindfulness practice – make their insula thicker, which helps them become more self-aware and empathic.

Another example of neuroplasticity, this time a negative effect on the brain structure rather than positive, is that early trauma through abuse or neglect results in a significant decrease in the volume of the hippocampus structure in the midbrain. "The integrative failure that is characteristic of traumatized individuals may also relate to structural brain changes, notably in the hippocampus."[108] The hippocampus is a brain structure instrumental in the synthesis of experiences, providing a conscious structure, context and a time stamp to the experience in the process of memory encoding, storage and retrieval. Smaller hippocampal volumes have been reported in female adult survivors of childhood sexual abuse.[109] [110] That damage consists of a loss of neurons and synapses (a loss of up to18%), and results in corruption of thought process and learning, particularly deficits of encoding short-term into long-term memory.[111]

Severe or prolonged stress can, by suppressing hippocampal functioning, create memories dominated by affective experience with little capacity for categorization.[112] [113] [114] These memories are organized on a somatosensory level, as somatic sensations (body memories), behavioral re-enactments, nightmares, and flashbacks.[115]

The traumatic experiences, etched in *procedural* memory (unconscious somatic conditioning) and

semantic memory (unconscious categorization, generalization) but not converted into long-term *episodic* (occasion specific) memory, interfere with current working memory. Past threats are perceived to be present threats, suggested by intrusive thoughts, flashbacks, and hypervigilance. Not only does PTSD obscure the ability to distinguish between past and present, but the "repertoire of survival skills remains confined to those skills that were acquired up to the time of the trauma, and they lack the resilience to learn new strategies."[116] An aspect of this individual is frozen in the past, or perhaps more accurately that frozen dissociated part of the person is carried like deadweight in the ever-present – a "primitively organized alternative self."[117]

Fortunately, however, the hippocampus is a unique region of the human brain in that it can replicate new neurons as well as new synapses. Treatment of PTSD and resolution of early childhood trauma can reverse the damage to the hippocampus, and there is evidence that the hippocampal volume actually increases along with a decrease of PTSD symptoms and significant improvements in verbal declarative memory.[118 119]

The age regression capability within hypnotherapy is an ideal means of access to mend the damage to the hippocampus, allowing the brain to return to the origins of the traumatic loss of neurons and synapses, and "rewire" the processing of experience and laying down of memory. Some of the relevant factors that apply to the state of hypnosis (as well as meditative states) are a proclivity to dissociation, tolerance of ambiguity, experiencing states of nonordinary reality, boundarylessness, merging, and fluid ego boundaries.[120] Further, the state of hypnosis is known to promote a state of being deeply engrossed in imaginative activities, to produce vivid imagery, and to engage in "holistic information-processing styles."[121] The panoramic bird's-eye view common in the state of hypnosis, or meditation, activates the brain's lateral network circuits, associated with mindful, open, spacious awareness.

Activating these lateral networks contributes to steadiness of mind, the capacity for deep concentration, and resilience.[122] Here the brain's plasticity is observably at work, following the dictum *as the mind changes, the brain changes*.

- **Facilitating palliative and end-of-life care**. Hypnosis and hypnotherapy can be extremely relevant to assisting patients deal with impending death, treating a variety of symptoms, including pain, anxiety, anger and depression.[123] This is the case with terminal patients of all ages. Hypnosis has been used to help children deal with loss and anticipatory loss; enliven the role of hope; and help a child live fully, making every moment count, until they die.[124] [125]

In 1996, the National Institute of Health (NIH) published an extensive report on the Treatment of Chronic Pain: "The evidence supporting the effectiveness of hypnosis in alleviating chronic pain associated with cancer seems strong." In addition, the panel suggested the effectiveness of hypnosis in other chronic pain conditions, which include irritable bowel syndrome, oral mucositis, temporomandibular disorders, and tension headaches (NIH, 1996).[126]

The Mind/Body/Spirit Connection

We have noted the tendency in traditional medicine to discount the influence of the mind, personality, or psyche on the function or dysfunction of the body ("it's *only* the placebo effect"). A similar but reversed bias has been rampant among traditional psychotherapists, discounting the role of the body in the formation and potential rehabilitation of mental health pathologies. "Although the chronic somatically-based upheavals of unresolved trauma usually form the basis of the client's distress, the body often remains strangely 'invisible' to both therapist and client."[127] Viewing distress that presents as medical symptoms and/or as psychological symptoms equally as trauma reaction may be a way of bringing both realms to bear in an integrated way.

"Each component of the ordinary response to danger, having lost its utility, tends to persist in an altered and exaggerated state

long after the actual danger is over."[128] Ogden and associates elaborate: "If a person is endangered, experiences the instinct to fight or flee, but is unable to execute these actions, this previously activated but never completed sequence of possible defensive actions may persist in distorted forms, such as muscles held in a chronically tightened pattern, heightened and unstable aggressive impulses, or a chronic lack of tone or sensation in a particular muscle group. Many, if not most, traumatized patients come to therapy exhibiting chronic immobilizing defensive tendencies, ranging from physiological and psychological passivity to hyperactive but ineffective aggression."[129] These truncated or undischarged somatic defenses, often the source of medical complaints, we call traumatic stress.

Traumatic stress is common among medical patients, and treating the trauma is an integral part of treating the disease in an integrative medicine setting. For example, it has been estimated that one third of all cancer survivors suffer from traumatic stress symptoms.[130] It is generally recognized that stress and unmet psychosocial needs negatively affect health.[131] Amplified stress in cancer patients has been associated with increased morbidity and mortality,[132] [133] decreased immune function,[134] and increased relapse.[135]

Stress is a basic intersection between mind and body: it accumulates through a futile cycle of somatic distress generating psychological distress, which in turn advances somatic distress.[136] This interaction between mind and body is foundational to the integrative medicine approach. And hypnosis/ hypnotherapy is one of the most optimal ways of accessing that intersection, because traumatic memories are encoded subcortically, rather than in autobiographical memory, and must be accessed through the unconscious/ somatic psyche rather than through verbal conscious awareness.[137] *As the mind changes, the brain changes*. We know, too, that we learn procedurally; that the brain changes as a result of direct experience.[138] The hypnotherapy context provides a highly effective means of correcting dysfunctional habitual patterns through reflective self-observation and mental rehearsal. *As the body changes, the brain changes*.

Before directly addressing a traumatic event in therapy, three areas must first be strengthened: containment of out-of-control

emotions and thoughts that feel overwhelming; positive body awareness to promote a sense of the body and its sensations as friend, not foe; and dual time awareness to separate the past from what is occurring now, even though it feels as if past trauma is occurring now. [139] [140] [141] The same principle applies in addressing somatic dysfunctions (traumas) *from an integrative medicine perspective*. That is, to successfully redirect the body toward repair and health, we will follow these three steps. Incidentally, this process is highly relevant to the process of spiritual awakening as well. Our "patient" is mind, body, and spirit, and our treatment protocol must address all three aspects.

Very often current life stresses tend to be experienced as somatic states, and an integrative approach leads us to accept physical symptoms as *ally* rather than *enemy*. Physical symptoms are the body's way of communicating an unmet need to the person; they are not a statement of defiance, mutiny, hostility, or weakness. Developing an awareness of inner body sensations and a precise sensation vocabulary are helpful steps toward restoring a sense of the body and its sensations as friend, not foe.

Ultimately, we are assisting the patient/client to increase self-regulation of internal states, and to increase the ability to tolerate distress, i.e., to decondition the traumatic stress response. This is fundamental to healing trauma, because people's core sense of self is defined to a very large degree by their capacity to regulate internal states and regulate their response to stress.[142]

The future is bright for integrative medicine. An important aspect of that future belongs to a renewed collaboration between the fields of allopathic medicine and hypnosis/hypnotherapy.

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