Hypnotherapy for Sleep Disorders
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Abstract
Hypnosis can be defined as a procedure during which changes in sensations, perceptions, thoughts, feelings or behaviour are suggested. Hypnosis can be used to amplify whatever it is about therapy that makes it therapeutic. It permits a wide range of choices regarding where and how to intervene in the patient’s problems. In this paper, we set out to examine the rationale of using hypnotherapy to manage various types of sleep disorders, and to explore the techniques, strategies and hypnotic scripts employed by various hypnotherapists. We also examine the research data available on the efficacy of hypnosis in the treatment of sleep disorders. Acute and chronic insomnia often respond to relaxation and hypnotherapy approaches, along with sleep hygiene instructions. Hypnotherapy has also helped with nightmares and sleep terrors. There are several reports of successful use of hypnotherapy for parasomnias, specifically for head and body rocking, bedwetting and sleepwalking. Hypnosis is a specialised technique, not a therapy itself, and should be used as an adjunctive intervention within a complete psychological and medical treatment package. Most of the literature is limited to case reports or studies with such a small sample that at times it is very difficult to interpret the results. There is a major placebo effect, so uncontrolled trials are of limited value. It is hard to perform a randomised, double-blind, controlled trial to evaluate hypnotherapy given that cooperation and rapport between patient and therapist is needed to achieve a receptive trance state.

Key words: Insomnia, Nightmares, Nocturnal enuresis, Parasomnias

Hypnotherapy for Sleep Disorders
Derived from ‘Hypnos’, the Greek God of sleep, the word hypnosis literally means sleep. Ironically, hypnosis is not a form of sleep but a state of increased concentration and awareness. Marmer1 defined hypnosis as a psychophysiological tetrad of altered consciousness consisting of narrowed awareness, restricted and focused attentiveness, selective wakefulness and heightened suggestibility. The American Psychological Association Division of Psychological Hypnosis2 has defined hypnosis as a procedure during which a health professional or researcher suggests that a client, patient, or subject experience changes in sensations, perceptions, thoughts, feelings or behaviour. This broad definition acknowledges the role of the person doing hypnosis, the context in which it is done, and the role of the person experiencing hypnosis.

Hypnosis is a way of communicating ideas in the context of a doctor-patient or therapist-client relationship. It is a therapeutic tool for systematically amplifying dimensions of experience, and then associating those experiences to situations in ways that are useful to the patient. Hypnosis can be used to amplify whatever it is about therapy that makes it therapeutic. It permits a wide range of choices regarding where and how to intervene in the client’s problems. A good hypnotic session, involving appropriate suggestions for contextualisation, is thought to yield positive results that last a lifetime.2

Oakley et al3 list a number of properties of hypnosis that are of relevance to clinical hypnosis: increased suggestibility, or at least an increased willingness to accept suggestions less critically; enhanced capacity for imagery and role enactment, so that imagined events are experienced as real; greater access to childhood memories, though not a literal return to an earlier stage of cognitive development; reduced reality testing (a greater tolerance of logical incongruities – so called ‘trance logic’); enhanced relaxation responses,

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which can be learned and applied in every day situations; increased rapport; increased expectancy of positive outcome of therapy; more focused attention and enhanced ability to disattend to extraneous thoughts and feelings; an opportunity to create, develop and control dissociative experiences. It is obvious that these properties will enhance the therapeutic endeavour.

Hypnotherapy refers to ‘psychotherapy that uses hypnosis as part of its treatment’. It is the therapeutic use of the hypnotic state of consciousness as part of a psychotherapeutic intervention in order to enhance the effectiveness of the patient’s utilisation of psychotherapy. The therapies that can be facilitated by hypnosis include supportive work (ego strengthening), direct suggestion, symptom substitution and hypnoanalysis. Direct suggestion while in the hypnotic state is the most commonly used method of decreasing discomfort from pain, pruritus, burning sensations, anxiety and insomnia. Posthypnotic suggestion and repeated use by the patient of an audiocassette tape for self-hypnosis help reinforce the effectiveness of direct suggestion.

Hypnotisability connotes the presence of an intact ability to concentrate intensely, a receptivity to new information and a flexibility in changing behaviour. Using standardised measures of hypnotic responsiveness, higher levels of hypnotisability have been associated with phobias, post-traumatic stress disorder, dissociative identity disorders, sleep disturbances featuring nightmares and eating disorders.

Neuroimaging techniques now offer new opportunities to use hypnosis and post-hypnotic suggestion as probes into brain mechanisms and, reciprocally, provide a means of studying hypnosis itself. Recent data support the claim that the state of hypnosis is associated with distinct neural correlates and therefore is more than role-playing or social compliance. The findings suggest that a genuine change occurs in the brains during a hypnotic trance. The underlying mechanisms for how hypnosis modulates the neuronal structures that are involved in consciousness and sleep have been investigated, but they have not been well elucidated. Using positron emission tomography, Rainville employed regional cerebral blood flow techniques to demonstrate the involvement of the anterior cingulate cortex, the thalamus and the ponto-mesencephalic brainstem in the production of the hypnotic state and in the regulation of consciousness. Using similar approaches, Faymonville reported that during hypnosis, widespread activation was observed that involved the occipital, parietal, precentral, prefrontal and cingulate cortices in the simple task of evocation of autobiographical information. Rainville and Price further postulated that neurophysiological mechanisms underlying the increase in relaxation and absorption during hypnosis include the modulation of ascending cholinergic and noradrenergic activity. They proposed that reduced cholinergic activity might facilitate thalamocortical synchronisation and reduce cortical arousal.

Many clinicians recognise that how clients respond to suggestions depends less on the nature and success of a particular induction than on the following variables: a) clients’ prehypnotic attitudes, beliefs, intentions, and expectations about hypnosis; b) their ability to think, fantasise, and absorb themselves in suggestions; c) their ability to form a trusting relationship with the hypnotist; d) their ability to interpret suggestions appropriately and view their responses as successful; e) their ability to discern task demands and cues; f) their ongoing interaction with the hypnotist; and g) the appropriateness of the therapeutic methods and suggestions to treating the presenting problem. It has been shown that hypnotic scripts are useful as a means of increasing skills and self-confidence of novice therapists.

The aim of this paper is essentially two-fold. First, we set out to examine the rationale of using hypnotherapy to manage various types of sleep disorders, and to explore the techniques, strategies and hypnotic scripts employed by various hypnotherapists. Second, we examine the research data available on the efficacy of hypnosis in the treatment of sleep disorders.

Problems Falling Asleep

Chronic primary insomnia has been characterised as a state of hyperarousal. The hyperarousal can be seen in various signs of peripheral and central activation and with various symptom and behavioural manifestations such as excessive worry and reactivity. Hyperarousal appears to distinguish patients with primary insomnia from controls, as evidenced by prolonged sleep latency during the day despite fragmented and decreased nocturnal sleep. Also, patients with chronic insomnia show a variety of physiologic markers suggesting sympathetic nervous system hyperarousal. Richardson and Roth hypothesised that 1) corticotropin releasing factor (CRF) hyperactivity, arising through either a genetic diathesis or early stressors, leads to an exaggerated CRF response to stress; 2) subsequent re-exposure to stress leads to amplification of the abnormal stress response, perhaps via pathological changes in the hippocampus; and 3) this sequence leads to marked difficulty sleeping when stressed, exacerbated and prolonged sleep disturbance following stress, and ultimately to chronic primary insomnia. People with agrypnia phobia assume that they will not fall asleep, and get themselves so nervous about not falling asleep that their nervousness prevents them from drifting off promptly.

In managing insomnia it is important to recognise that...
insomnia is not merely a symptom of another disorder but a disorder of hyperarousal. Hence, treatment should be directed at the insomnia as well as the comorbid disorder. As hyperarousal may precede the full-blown manifestation of insomnia, treating transient sleep problems may help halt the spiral to chronic insomnia.19

Hypnotherapist Hammond20 indicates that the sleep patterns of a significant proportion of insomnia patients are disturbed by: 1) cognitive overactivity and condition habit patterns incompatible with sleep; and 2) central nervous system excitation and underlying or unconscious conflicts or fears that disrupt sleep. These patients are likely to receive substantial benefits from hypnotherapeutic interventions.

Acute and chronic insomnia often respond to relaxation and hypnotherapy approaches, along with sleep hygiene instructions, in just a couple of sessions.19,21 Becker19 reported that 50% of patients suffering from chronic dyssomnia experienced improvement in their sleep pattern lasting over 16 months after a simple 2-session treatment course. Because hypnosis is not sleep but a form of concentration, it might seem paradoxical to use hypnosis to help people fall asleep. However, hypnosis can be useful for inducing a state of physical relaxation that is at least compatible with sleep, diminishing the sympathetic arousal usually associated with anxious preoccupation.22 The hypnotic trance may also provide patients a structured way of managing preoccupation with anxiety-producing problems, thus facilitating entrance into a restful sleep. Lastly, hypnosis can be used to help a person observe proper sleep hygiene and establish a bedtime ritual.

Hammond20 indicates that hypnosis strategies may involve self-hypnosis to facilitate deep muscle relaxation and additional self-hypnosis methods to control cognitive overactivity. He suggests that when the first 2 approaches are not successful within 4 or 5 sessions, a third approach involving unconscious exploration or conflicts associated with sleep disturbance could be considered.

Techniques used include instructing clients to go into a state of self-hypnosis and induce a sense of floating relaxation physically; then, if preoccupied with arousing or uncomfortable thoughts, they can project these thoughts onto an imaginary screen in the trance state. Clients are taught to become ‘traffic directors’ for their own thoughts, or to deal with them on the screen, thereby dissociating them from the evoked physical and emotional responses.23 After inducing a state of self-hypnosis, clients are taught to create a sensation of buoyancy, floating or any other sensation that they associate with physical relaxation. Images such as floating on an inflatable mattress in a pool, or floating down the river on an inner tube could be rather effective.24 After clients are successful at this exercise, they may proceed to put their worries or thoughts on hold ‘for tonight’, knowing that they can always deal with them tomorrow. There is a number of imagery techniques that clients can use to put problems on hold. For example, they can project these thoughts onto an imaginary screen, then imagine either changing the content of the screen (as one would change television channels), putting the VCR tape on pause, or simply turning it off.22

Visualisation techniques are commonly used. Subjects can imagine themselves sitting by a riverbank observing leaves flowing down the stream.23 They can imagine themselves placing their thoughts over the leaves and watching them floating away, not holding on to any particular thought, while allowing the body to feel progressively relaxed.24 Alternatively, they can imagine themselves lying restfully in a comfortable and safe place, while they see themselves placing the disturbing thoughts onto the clouds, watching the breeze slowly carrying them away.22

Stanton23 reported on 3 typical cases of hypnotherapy for insomnia (initial, middle and failure to daytime nap) in which he found success rates of 85%. The treatment model he described includes 2 sessions with follow-up as needed. Stanton’s model utilises hypnotis in the following ways. 1) Visualisation of a soft curtain which has a warm comfortable feel about it. As thoughts enter the patient’s mind during the session, they allow those thoughts to drift across the curtain and disappear out to the other side of their mind. They are then able to return to a contemplation of the curtain. 2) Visualisation of a scene in which subjects imagine themselves on the veranda or patio of a lovely house which has 10 steps leading down to a beautiful garden below. For each step downward, they allow themselves to let go more and more. At the bottom of the steps, peaceful and relaxed, they enter the garden, attention being drawn to the colours, flowers, drifting clouds, birds singing, leaves rustling and the pleasant warmth of the sun. The final phase (3) of this model is referred to as a ‘special place’. After letting go of problems, subjects are able to remain in the garden, or, if they prefer, ‘go away’ to a special place where they are able to feel peace and contentment.25

The American hypnotherapist and psychiatrist Milton Erickson (1901-1980) was able to create innovative strategies for healing and change in his patients. He used a technique that involved post-hypnotic suggestions that if one is unable to sleep, he can get up and do something he really dislikes, for instance, clean the refrigerator, wash his car, mop and wax the kitchen floor, sort out desk drawers or perform some other task.26 Erickson helped such clients recognise how much energy they used staying awake. If a post-hypnotic suggestion of this sort is used, it should also include the stipulation that when one is sufficiently tired.
from his task, he can stop and return to bed to sleep. That, of course, is the goal.\textsuperscript{26}

It is important to point out that any hypnotic approach should be accompanied by sound sleep hygiene practices. These include having adequate time to unwind prior to bedtime, adopting a pre-sleep routine, avoiding large meals or exercise just prior to bedtime, keeping the bedroom as a place where work and other anxiety-arousing activities do not occur, avoiding doing work or reading in bed and avoiding constantly looking at the clock when awakened.\textsuperscript{22,27}

**Nightmares and Sleep Terrors**

Young children between the ages of 7 and 12 are particularly susceptible to the power of hypnotic suggestion,\textsuperscript{28} especially during the hypnagogic (sleep-onset) state or if they have just awoken. Therefore, if a child is given to recurring nightmares, a parent can employ a technique to covert a nightmare to a lucid dream. After putting the vulnerable child to bed, the parent can stay with him/her. As the child begins to show symptoms of becoming sleepy and entering the hypnagogic state, the parent can begin making positive suggestions, for example, that the parent will be able to keep the child safe and secure.\textsuperscript{29}

The relaxation and self-control aspects of self-hypnosis are helpful in allowing children to become more comfortable going to bed. Hall\textsuperscript{30} had children construct a ‘dream catcher’ above their bed. According to the Native American tradition, it captures bad dreams in the net and allows good dreams to get through. However, it is not certain if such a strategy can be applied in other cultures.

The hypnotist can suggest that the client has a dream during hypnosis, which resembles a daydream or nightdream that serves a therapeutic purpose. Such dreams can serve as vehicles to learn about personally meaningful life themes, problems and conflicts.\textsuperscript{31} Self-hypnosis can also be used to banish nightmares.\textsuperscript{29} A simple suggestion can tell the ‘unconscious mind’ that when the bad dream starts, a different ending will occur, that the client will switch to another, nicer dream, or maybe become a hero and alter the outcome.\textsuperscript{32}

Hypnotherapy has also helped with sleep terrors, although the mechanism by which it impacts is unclear.\textsuperscript{28,33} Koe\textsuperscript{34} successfully used posthypnotic suggestions decreasing nocturnal sensory stimulation to eliminate night terrors in a 16-year-old boy with a history of this disorder since the age of 7.

**Parasomnias**

Few results of formal studies have been reported, but most case reports suggest that hypnosis is useful in the treatment of not only primary insomnia but other sleep disturbances as well.\textsuperscript{27,34-37} There are several reports of successful use of hypnotherapy for parasomnias, specifically for head and body rocking,\textsuperscript{36} bedwetting and sleepwalking.\textsuperscript{37}

Hurwitz et al\textsuperscript{38} reported the use of hypnosis in the treatment of 27 adult patients with parasomnias. Hypnosis was introduced as a method of enhancing self-control. Hypnotic trance was most frequently induced with a commonly used technique of suggesting eye closure during upward gaze and subsequent relaxation and sensation of floating. Then, patients were asked to visualise themselves in a pleasant, comfortable scene where they could find an imaginary screen on which to watch a time-lapse film of themselves sleeping quietly and peacefully through an entire night. The initial induction in the office was often recorded on audiocassette, lasted about 20 minutes, and constituted instruction in self-hypnosis. Post-hypnotic suggestions included those for security and anxiety reduction, restful sleep with minimal movement, and the instruction that suggestions be reiterated during self-hypnotic practice at home. Seventy-four per cent of these individuals reported much or very much improvement when followed over substantial periods after instruction in self-hypnotic exercises that were practiced at home.\textsuperscript{38} Hypnosis, often preferred over pharmacotherapy by patients, required 1 to 6 office visits.

Gafner\textsuperscript{4} described an intern who was once working with a sleepwalker. During trance, he gave the client the posthypnotic suggestion that he would awaken from sleepwalking whenever his feet touched the floor. The suggestion worked and the client woke up every time he touched his feet to the floor when he began to sleepwalk.

Nocturnal enuresis, which is involuntary passage of urine during sleep, occurs in as many as 10\% to 15\% of 6-year-old children on a routine basis.\textsuperscript{39} Because no single mechanism explains the symptoms of enuresis, a 3-system aetioologic model has been proposed that includes lack of vasopressin during sleep, bladder instability and defective arousal mechanisms from sleep. Nocturnal enuresis in children can have significant consequences, including poor self-esteem and family stress. Treatment options include nonpharmacologic measures (bed-wetting alarm systems, hypnosis) and medications.\textsuperscript{40}

Hypnotherapy has been successfully employed to treat children and adolescents with primary nocturnal enuresis.\textsuperscript{28,41,42} There is also some suggestion that hypnotic strategies for enuresis are more effective than imipramine for children older than 5 to 7 years of age.\textsuperscript{31} In a typical therapy session, the patient is given a drawing and explanation of how the bladder works, followed by an introductory hypnotic induction with suggestions that a section of his brain will wake him when he has a full bladder.\textsuperscript{28} Results are usually evident after a few sessions.
Hypnosis has been reported to be effective for controlling excessive daytime sleepiness, cataplexy and sleep paralysis. For the patient with loud snoring, suggestions may include simple measures like change of sleeping posture to side, and for the person to lose excessive weight. Hypnosis can be used to help the bed partner of a loud snorer to reframe the noise; and to visualise having a switch and hence the ability to turn the sounds on and off, and ultimately, to alter the partner’s tolerance and perception of the sounds. Hypnotherapy may also include a suggestion that the sounds can be turned down like the volume of a radio.

**Discussion**

In their oft-quoted meta-analysis, Kirsch, Montgomery and Sapirstein made the strongest case yet for the addition of hypnosis to cognitive behavioural therapy (CBT). They examined 18 studies in which CBT was compared with the same therapy supplemented by hypnosis. These studies involved chronic pain, insomnia, obesity, phobia and other disorders. The results demonstrated that the addition of hypnosis substantially enhanced treatment outcomes.

Hypnosis is a specialised technique, not a therapy itself, and should be used as an adjunctive intervention within a complete psychological and medical treatment package. In many of the cases described, hypnosis was integrated into an overall treatment plan, much of which did not involve hypnosis. Also, hypnosis is effective for insomnia, particularly when integrated into a package of cognitive therapy (including, for example, sleep hygiene).

There are very few research data available on the efficacy of hypnosis in the treatment of sleep disorders. Most of the literature is limited to case reports or studies with such a small sample that at times it is very difficult to interpret the results. There is a major placebo effect, so uncontrolled trials are of limited value. Future research should be conducted to determine the contribution made by behavioural and hypnotic interventions in the treatment of sleep disorders, perhaps by single-treatment comparisons conducted on matched samples. Also, in many case reports, it is noted that there is uneven progress that often occurs in the conduct of psychotherapy. Often, the therapist uses a trial-and-error approach to determine what interventions will have the greatest impact. Therefore, it will be pertinent to collect outcome data along the way, in order to determine which techniques are most effective.

To adequately evaluate the relative success of different treatment modalities for primary insomnia, 2 major issues need to be resolved. First, valid objective measures of insomnia need to be adopted. Some investigators rely on self-reports by patients, whereas others believe that insomnia must be documented by polysomnography. Second, what constitutes a therapeutic outcome should be determined. Some investigators use only time until sleep onset, number of awakenings and total sleep time as outcome measures, whereas others believe that impairment in daytime functioning is perhaps a more important outcome measure. Both of these issues require resolution so that research in the field can move forward.

Evidently, hypnotherapy has significantly therapeutic potential. This potential should be seriously explored as well as the physiology of the hypnotic state per se. Evaluation of clinical trials of hypnosis is complicated by the nature of hypnosis. The gold standard of a randomised, double-blind, controlled trial is virtually impossible because cooperation and rapport between patient and therapist are needed to achieve a receptive trance state. Patient characteristics such as fear, attentiveness, interest, expectation, suggestibility, motivation, desire and belief in hypnosis may alter outcomes. Vital practitioner characteristics include training and experience and the ability to induce trance, to properly word suggestions and to establish the necessary states of expectancy, rapport and motivation. According to Milton H. Erickson, ‘It is the patient who does the work. All that the therapist does is provide conditions in which this work can be done’.

**REFERENCES**