## THE ROLE OF HYPNOSIS AND RELATED TECHNIQUES IN INSOMNIA

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*Abstract* - Hypnosis is a widespread technique in psychotherapy with applicability in various psychiatric and psychosomatic disorders. Although there are very few studies in this area of research, some results argue in favor of using hypnosis for various sleep disorders. Insomnia is a common health problem, in both primary form and associated with other pathologies, causing a reduction of self-efficiency/cognitive abilities and an overall decreased life quality. Classical psychotropic medication that is commonly used to treat insomnia can cause significant side effects, produce phenomena of dependence and is generally effective only during the period of treatment. Since the current means of pharmacologic treatment for insomnia present significant limitations, especially when treating chronic insomnia, a more suitable alternative could be attained by non-pharmacological approaches such as hypnosis.

Key words: hypnosis, self-hypnosis, suggestion, insomnia, hypnotherapy.

### INTRODUCTION

Insomnia, as defined in DSM IV, is the difficulty in initiating or maintaining sleep or poor sleep for at least one month and which disturbs functional daytime capacity (DSM IV, 1994). The current treatments used to relieve sleep disorders are pharmacological and cognitive-behavioral.

Insomnia is an important contemporary issue with a high prevalence in the population (2-4%), affecting the overall functioning of the individual in social, professional and family environments, thus generating distress for the patient and his/her family (Roth and Drake 2004, Lalive et al., 2011). Moreover, it appears that insomnia can affect physical and mental health, causing the occurrence of symptoms of anxiety and depression (Scott et al., 2011). Regarding the link between hypnosis and sleep, it should be noted that there are several connections that are symbolized at an etymological level, as well as in actual technical terms. Thus, in both cases a state of mental and physical relaxation is induced, as well as relative detachment from external stimuli and conscious-unconscious dissociation. In addition, some formulas for the induction of the hypnotic trance suggest the state of sleep (drowsiness, dozing, sleep, eyes closing, fatigue) (Dafinoiu and Vargha, 2007). Nevertheless, evidence indicates that the two states are physiologically and behaviorally different (Fellows, 1985).

The objective of this paper was to evaluate the effectiveness of hypnosis and several techniques derived from hypnosis in treating insomnia. Justification for this work comes from the need to clarify the role of hypnosis in insomnia therapy.

#### **METHODS**

For this report, relevant data, carefully selected from the literature (original articles, case presentations, books and reports) regarding the use of hypnosis and derivative techniques in insomnia, were analyzed.

## *Hypnosis therapy*

Viewed simplistically, hypnosis consists of two main stages: the induction stage which is considered to produce a change in the state of consciousness, and the suggestions application stage (Mazzoni et al., 2009). Suggestions may act at the level of cognition, perception, affect or behavior, and depending on the problem may include suggestions for anesthesia, relaxation, increased self-efficacy, stress reduction or sleep induction (Batty et al., 2006). The suggestions formulated in insomnia are usually associated to notions related to sleep (bedroom, sleepiness, eye closing, falling asleep, deep sleep) (Assen et al., 2007). In this way, hypnosis can be used as both a method of sleep induction/self-induction, as well as a way of accessing problems that may be determinants for insomnia, beyond the mere symptomatic treatment that is used in other types of hypnotherapy.

Several hypnotic methods and derived techniques regarding the treatment of hypnic disturbances have been described. These techniques are complementary, being frequently associated as they share an increase in physical and mental relaxation and focus attention. Among these techniques relaxation techniques, autogenic training, ego strengthening techniques, mental imagery techniques or biofeedback should be mentioned (Anbar and Slothower, 2006, Paterson et al., 1982).

## Hypnosis and self-hypnosis

Regarding the effectiveness of hypnosis in inducing sleep, a study compared this method to the stimuli control technique and placebo in a group of 45 people suffering from insomnia, demonstrating the superiority of hypnosis (Stanton et al., 1989). However, it seems that the subjects undergoing hypnosis therapy in this case received education on sleep hygiene, which could have augmented the hypnoinductive effect of hypnosis. Generally, it is considered that hypnosis and relaxation techniques are effective for sleep therapy (Vickers and Zollman, 2001).

Additionally, in another experimental protocol that targeted a small group of subjects, hypnosis improved the sleep of 3 out of a total 6 patients, with a long-term maintaining effect (evaluated after 16 months) (Becker et al., 1993). This would suggest a beneficial effect of hypnosis for insomnia, but also the need for a careful selection of subjects to whom this type of hypnotherapy would be better suited.

In therapy, self-hypnosis, which refers to self-administered hypnosis, is often used to treat insomnia. The advantage of this technique is the ease of administration and that it does not require the supervision of a therapist. From a technical standpoint, hypnosis can also be achieved by listening to CDs containing various hypnotic inductions and visualization exercises (Batty et al., 2006). Hypnosis complexity can range from simple gradual relaxation exercises extending to deep self-induced trances (Paterson et al., 1982). Viewed in terms of structure, self-hypnosis exercises can be composed, as in classical hypnosis, of elements for trance induction ("close your eyes", "breathe deeply", "body floats"), relaxation suggestions ("floating", "comfort", "safety", "deeper and easier breathing"), concentration of attention and dissociation ("the body must be present, but you do not") and sensory suggestions ("heat") (Lang et al., 2006).

Self-hypnosis is also used as sleep therapy by psychotherapists with extensive clinical experience like Barabasz. For hypnotic auto-induction the author uses various relaxation suggestions ("clear lake", "gentle heat", "calming, soothing", "the comfort of the hot stone"), dissociation suggestions ("washing worries, concerns and thoughts") and sleep suggestions suggestively presented ("nap", "rest", "pressing the sleep button", "slumber", "sleeping deep body") (Barabasz and Watchins, 2011).

The effectiveness of this method is demonstrated in a study published in 2006, in which self-hypnosis was applied to a group of 75 children suffering from insomnia (Anbar et al., 2006). For most subjects, sleep improved after only one or two sessions. The technique used included the description of hypnosis, practical demonstrations of hypnotic induction, relaxation techniques in hypnosis and developing mental images associated to the notion of sleep. As a limitation of the study, the significant age difference between subjects (7 to 17 years) is stated, which could influence the understanding, learning and actual application of the process. However, the study presents relatively consistent arguments in favor of self-hypnosis, at least in children. Moreover, other authors have demonstrated the usefulness of hypnosis in children (Stanton et al., 1989). Additionally, there are also authors who consider the utility of hypnosis in insomnia associated with old age (Morin et al., 1999).

#### Autogenic training

These methods are aimed at raising awareness and improving voluntary control over the autonomic nervous system. Thus, in a research on a group of 150 patients who had various chronic somatic diseases, mostly insomnia, the administration of autogenic training was conducted for a period of 8 weeks. Conclusions of the study reported a significant improvement in sleep patterns. This improvement included better sleep onset latency and a more rapid onset of sleep after night waking, a more refreshed and more energized feeling on waking, and a reduction of anxiety and depression (Bowden et al., 2012).

## The technique of self-enhancing

It is thought that in order to solve their problems, patients must improve their self-image and selfconfidence (Hartland et al., 1971). The benefit of this technique lies in the usage of positive suggestions that may be beneficial in insomnia by reducing tension and anxiety, improving self-esteem and adaptation capacity, while facilitating behavioral changes (Paterson et al., 1982).

# Possible mechanisms involved

It seems that sleep difficulties are associated with an increased state of nervous excitability and mental activation, which are linked to an increase in the activity of the sympathetic nervous system (Ng et al., 2008). Furthermore, it is considered that primary insomnia may occur under a state of activation in the sympathetic nervous system caused by disruptions in the discharge of cortisol (Santo et al., 2011). In this way, the activation of the autonomic, immune and the central neuronal function has been demonstrated (Nofzinger et al., 2004). It is also known that hypnosis causes a reduction in the level of nervous excitability and tension (Assen et al., 2007). Thus, it would not be an exaggeration to assume that one of the mechanisms by which hypnosis would favor sleep onset lies in the reduction of mental stress, in stimulating relaxation and releasing tension. In fact, previous studies showed that stress has an important role in the occurrence of insomnia (Roth and Drake et al., 2004). It is also considered that psychological insomnia associated with the state of tension is the best indication for therapy with hypnosis (Assen et al., 2007).

However, in a study applied to children, it was shown that insomnia is often associated either with fear or with somatic complaints, such as headache, chest pain, habitual cough or dyspnea (Anbar et al., 2006). Still, there are studies showing the beneficial effects of hypnosis in relieving stress, but also in a wide range of such somatic disturbances (Holdevicia and Claus, 2012), which suggests another possible mechanism of action of hypnosis in insomnia, by reducing the level of physical discomfort, which may be the basis of sleep disorders.

Also, concerning the advantages of using hypnosis, it is worth mentioning the cases of pregnant women, small children, afflicted people or persons with risky professions (e.g., pilots, drivers etc.) who have medical contraindications in pharmacological therapy. Another advantage of hypnosis in insomnia is the method's long-term effectiveness (6-24 months in reported studies) compared to pharmacological therapy (Assen et al., 2007).

## CONCLUSIONS

The management of insomnia requires complex therapeutic approaches, tailored to each case, which may include in some cases, in addition to education on sleep hygiene, hypnotic processes as well. Literature is relatively scarce in this area of research; however, the studies generally provide reasons in favor of hypnosis as an effective method in insomnia. In conclusion, future studies are needed in order to establish clear guidelines for the use of hypnosis in the treatment of insomnia.

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