

Review Article**Hypnosis “A Lost Art” In Dentistry – A Review**

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Abstract: A child is a future adult, and in the path of becoming an adult, comes a lot of psychological, social, general and dental development. Amongst all these, psychological development is a dynamic process, which begins at birth and proceeds in an ascending order through a series of sequential stages manifesting in various characteristic behaviours. When the psychology of a child meets to that of a paedodontist, the aura of whose dental clinic, is associated with a predictable unpleasant experiences in the mind sets of parent as well as the child, a paedodontist has to do something to control the anxiety and fear. Distress, fear, anxiety, phobia, anger are the various feelings that come in the minds of children as well as adult patient, once they enter a dental clinic and place themselves on a dental chair and the worst of sensation is of being on the mercy of someone you do not even know. Amongst a lot of options for behaviour management and modifications, hypnotics is one of the oldest and non-invasive way to control dental anxiety in children, adult as well as in geriatric patients and hence get a better treatment result and a good compliance and satisfaction of the patient.

Keywords: Anxiety; Hypnosis; Psychology.

INTRODUCTION

A child is a future adult, and in the path of becoming an adult, comes a lot of psychological, social, general and dental development. Amongst all these, psychological development is a dynamic process, which begins at birth and proceeds in an ascending order through a series of sequential stages manifesting in various characteristic behaviours.¹ When the psychology of a child meets to that of a paedodontist, the aura of whose dental clinic, is associated with a predictable unpleasant experiences in the mind sets of parent as well as the child, a paedodontist has to do something to control the anxiety and fear. Distress, fear, anxiety, phobia, anger are the various feelings that come in the minds of children as well as adult patient, once they enter a dental clinic and place themselves on a dental chair and the worst of sensation is of being on the mercy of someone you do not even know. Amongst a lot of options for behaviour management and modifications, hypnotics is one of the oldest and non-invasive way to control dental anxiety in children, adult as well as in geriatric patients and hence get a better treatment result and a good compliance and satisfaction of the patient.

HISTORY

The Fruedian and the Ericksonian hypothesis have so far been the guiding light in understanding psychology. Sigmund Freud

being the one who initiated the use of hypnosis as a therapeutic tool in psychoanalysis, a role that is still maintained till today and followed by many². As this art is lost, because many of the dentists now are finding general anaesthesia as a better option as it saves time.

Hypnosis is defined as a “special trance-like state in which the subject’s attention is focused intensely on the hypnodontist, while attention to other stimuli is markedly diminished”.³ The world of hypnotism carries with it a number of misconceptions. The term, ‘hypnosis’ is often associated with magician types, swinging pendulums, deep sleeps and stage performance. A lot of people are unaware that, the art of hypnosis carries a great therapeutic benefit in the medical, psychological and dental fields. This review provides an insight into the history and development of hypnosis as a therapy, and explores its applications in support of hypnotherapy as a powerful tool in the modern dentist’s armamentarium.

The title of ‘father of modern hypnotism’, however, belongs to the physicist Dr James Braid, who coined the term ‘hypnosis’. In his books, Neurohypnology and On hypnosis, published in 1843 and 1860, respectively, Dr Braid introduced concepts of suggestions and monoideism (focused attention on a single idea). He recognised that the subject cannot act beyond his/her

will, and emphasised the operator/patient relationship⁴. Although slowly accepted, hypnosis emerged as a science by 1884 with the publication of *De La Suggestion* by Hippolyte Bernheim,⁵ who together with Ambroise-Auguste Liébeault, developed Braid's theories and opened the first academic treatment centre to use hypnosis to treat patients, the Nancy Medical Faculty, where they treated over 1200 patients.^{6,7}

REVIEW OF LITERATURE

Majority of paediatric dental patients reveal a great anxiety and fear during routine oral procedures. Such attitude of children to dental procedures is a cause of irregular visits to dental clinics, which, in consequence, may lead to greater damage to teeth, which otherwise could have been saved by simple procedures. Management of fear and anxiety, hypnosis for dental analgesia, control of bleeding, control of salivation, control of bruxism, control of gag reflex, could be controlled by pediatric dental hypnosis. This kind of psychotherapy may be used in everyday dental practice; however some profound knowledge in this field is needed for pedodontist.⁸

There is a limited amount of literature regarding the use of hypnosis and hypnotic elements in pediatric dentistry. Induction techniques, reframing, distraction, imagery suggestions, and hypnosis are identified, although mostly anecdotally, while there are very few structured controlled studies. Nevertheless, the advantages of using hypnotic elements and hypnosis in pediatric dentistry are evident.⁹ Epidemiological studies show that about 75% of dental patients feel scared, 10-15% feel anxious and 20% of them even report physical symptoms that are connected with feelings of discomfort.¹⁰

A research conducted during oral and maxillofacial interventions¹¹ reports how patients treated with hypnosis before visits showed – compared to a control group – stress reductions. This is clear both from the behavioural and sympathetic nervous system activation standpoints; researchers, in fact, reported a better state of relaxation and a greater sensation of wellness associated to dental care, which remains stable in time.

As the evidence presented suggest, along with other experimental results, we can infer that hypnosis can be useful to dentists especially when treating “sensitive” subjects, such as patients who have an intense gag reflex,¹²⁻¹³ patients with dental phobia,¹⁴⁻¹⁶ previously traumatized, or with children. Recent research seem to have focused on paediatric patients and, along with confirming results about the reduction of anxiety levels in adult patients, it is clear that hypnosis can be useful during specific phases of interventions that children experience as stressful. In a research conducted in 2011,¹⁷ researchers from the university of Rennes used hypnosis to help children overcoming the fear of the needles used for anaesthesia. In 19% of children (and 10% of adults) this becomes a true phobia.

Results of the study, that compared a group of children who were exposed to hypnosis with a control group, show that hypnosis heightened pain threshold, reducing thus pain intensity and increasing the number of patients who didn't feel anything. Such effects are stable and can be accompanied by reduction of weeping, of interfering behaviours, and by an overall reduction of physiologic arousal.¹⁸ Abdeshahi et al suggest that hypnosis enhances control over stress, pain, muscle tension, perception, memories, emotions and feelings.⁶ Within dentistry, the term ‘hypnosis’ encompasses a wide variety of techniques, ranging from use of ‘hypnotic language’ to create a positive environment and distraction, to deep hypnotic trances to achieve more profound results, such as surgical analgesia.

According to the State theories have suggested that hypnosis ensues through dissociation within high-level control systems of the body, and the hypnotic induction only assists in splitting the functioning of the executive control system (ECS) of the brain in different streams. The amnesic barrier created allows for part of the ECS to remain functioning normally, but unable to represent itself in conscious awareness. The barrier permits Hypnotic suggestions to appeal to the dissociated part of the ECS, resulting in the subject being aware of the results of the suggestions, but

unaware of how the process normally comes about. Physiologically, there is increased activity seen within the left-sided Fronto-Limbic brain regions, possibly this permits a release of self-control by the subject to the hypnotist. Further, the right-side temporoposterior systems has increased activity, presumably that leads to the subject engaging in passive imagery.^{19, 20}

Hypnosis in children and adolescents is possible, but, much harder to administer than in the adults. It is also true that not everybody is susceptible to hypnosis, as it is apparent that this phenomenon has also some association with genetics and brain structure. Susceptible persons have been found to have a brain structure with the front part of the corpus callosum of almost a third bigger in relation to the lowly hypnotizable people. Further, on the basis of neurological imaging studies, there appear to be some differences in the function of the frontal lobes, especially, the anterior cingulate in highly hypnotizable people. Nonetheless, allowing for a conducive environment, children, especially for ages 6 to 18 years are more amenable to hypnosis.²¹⁻²⁵

CONCLUSION: 'Hypnosis' originated from the Greek word 'hypnos' meaning sleep. Interestingly, it's implication as a sleep state is another major misconception. Hence understanding the real meaning of hypnosis along with a thorough and appropriate training, selection of patients and with appropriate informed consent, the dentist can successfully employ Hypnosis as part of the management regime in paediatric and general dentistry. This could form a part of the green dentistry application within the paediatric dental practices too.

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REFERENCES

1. Tandon S, Textbook of Pedodontics, 2nd ed. Publisher: Paras Medical Books;2008. Chapter 12, Theories of Child Psychology; Pg: 121.
2. Barber J, Mayer D: Evaluation of the efficacy and neural mechanism of a hypnotic analgesia procedure in experimental and clinical dental pain, *Pain.*, 1977;4:41
3. Patel B, Potter C, Mellor AC: The use of hypnosis in dentistry: a review, *Dent Update*, 2000;27(4) : 198-202
4. Facco E, Zanette G, Casiglia E. The role of hypnotherapy in dentistry. 'SAAD Digest'- Journal of the society for the advancement of anaesthesia in dentistry. 2014; 30 : 3-6.
5. Rowley D. Hypnosis and Hypnotherapy. Beckenham: Croom Helm, Ltd; 1986: 40-59
6. Abdeshahi SK, Hashemipour MA, Mesgarzadeh V, Shahidi Payam A, Halaj Monfared A.. Effect of hypnosis on induction of local anaesthesia pain perception control of haemorrhage and anxiety during extraction of third molars: a case-control study. *J Craniomaxillofac Surg* 2013; 41(4) : 310-15.
7. Kroger W. Clinical and Experimental Hypnosis in Medicine, Dentistry, and Psychology. 2nd ed. Philadelphia: Lippincott Williams & Wilkins; 2008.
8. Panda A, Garg I, Oberoi J, Rajput N. Reintroducing hypnosis in pediatric dentistry. *Indian J Multidiscip Dent* 2014; 4(3) : 984-86.
9. Peretz B, Bercovich R, Blumer S. Using elements of hypnosis prior to or during pediatric dental treatment. *Pediatr Dent.* 2013; 35(1) : 33-6.
10. Peretz. B. Relaxation and hypnosis in pediatric dental patients. *The Journal of clinical pediatric dentistry* 20(3) : 205-7
11. Eitner, S., et al., Comparison of conventional therapies for dentin hypersensitivity versus medical hypnosis. *Int J Clin Exp Hypn*, 2010;58(4): 457-75.
12. Barsby, M.J., The use of hypnosis in the management of gagging and intolerance to dentures. *British dental journal*, 1994;176(3): 97-102.
13. Eitner, S., Wichmann .M, and Holst .S, "Hypnopuncture"--a dental-emergency treatment concept for patients with a distinctive gag reflex. *Int J Clin Exp Hypn*, 2005 ;53(1): 60-73.

14. Eitner, S., Wichmann .M, and Holst .S,. A long-term therapeutic treatment for patients with a severe gag reflex. *Int J Clin Exp Hypn*, 2005;53(1): 74-86
15. Finkelstein, S., Hypnotically assisted preparation of the anxious patient for medical and dental treatment. *Am J Clin Hypn*, 1991;33(3):187-91.
16. Forgione, A.G., Hypnosis in the treatment of dental fear and phobia. *Dent Clin North Am*, 1988;32(4): 745-61.
17. Hammarstrand, G., U. Berggren, and M. Hakeberg, Psychophysiological therapy vs. hypnotherapy in the treatment of patients with dental phobia. *Eur J Oral Sci*, 1995; 103(6):399-404.
18. Huet, A., et al., Hypnosis and dental anesthesia in children: a prospective controlled study. *Int J Clin Exp Hypn*, 2011;59 (4): 424-40.
19. Gokli, M.A., et al., Hypnosis as an adjunct to the administration of local anesthetic in pediatric patients. *ASDC J Dent Child*, 1994. 61(4): p. 272-5.
20. Arthur M Kemoli. "Hypnosis - A Probable Green Dentistry Application in Paediatric Dental Practice". *EC Dental Science*. 2016, 6(4) : 1338-9.
21. Bryant RA., et al. "The additive benefit of hypnosis and cognitive behavioural therapy in treating acute stress disorder". *Journal of Consulting and Clinical Psychology* 2005. 73(2): 334-40.
22. Cardena E. "Hypnosis in the treatment of trauma: a promising, but not fully supported, efficacious intervention". *International Journal of Clinical and Experimental Hypnosis*. 2000 Apr, 48(2) : 225-38.
23. Spiegel D. "Hypnosis in the treatment of victims of sexual abuse". *Psychiatric Clinics of North America*. 1989. 12(2) : 295-305.
24. Spiegel D. "The use of hypnosis in the treatment of PTSD". *Psychiatr Med* 1992; 10(4) : 21-30.
25. Spiegel D, Cardena E. "New uses of hypnosis in the treatment of posttraumatic stress disorder". *J Clin Psychiatry* 1990;10(51):44-6.

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How to cite this article: Singh G, Kholi A, Mehrotra A, Garg K, Dwivedi A, Katyayan R. Hypnosis "A Lost Art" In Dentistry – A Review. *Rama Univ J Dent Sci* 2017 Mar;4(1):15-18.

Sources of support: Nil

Conflict of Interest: None declared