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Hypnosis and It's Applications

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Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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ABSTRACT

The applications of hypnosis are gradually receiving highlighted attention and credibility among physicians and young healthcare workers nowadays. The objective of this review is to provide a short summary on hypnosis and its' supporting evidences on the applications of hypnosis based on recent researches. The major finding of this review demonstrates that hypnosis has a huge potential to become a side-effect free and effective therapy for medical or mental disorders by targeting on the specific brain regions. Heightened focus with positive suggestions during trance-like state could cause positive changes on biopsychosocial aspect to patients. In conclusion, hypnosis appears to be utmost research in medical field and more warranted researches' result could further support the importance of hypnosis.

Keywords: Applications; heightened focus; hypnosis; suggestions; trance-like state.

1. INTRODUCTION

In the past, the mystery psychophysiology action of hypnosis has not been fully unveiled even though the existence of hypnosis is well recognised for the past 250 years [1]. Hague et al. [2] provides clear definition for hypnosis, hypnotism and hypnotherapy. Hypnosis is inferred as an altered state of consciousness characterised by increased suggestibility and attention; whereas, hypnotism is the study of suggestions with or without the presence of hypnosis[2]. Hypnotherapy, which is known as clinical hypnosis can be defined as a therapy that

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use hypnotism constitute to the core of treatment [2]. According to American Psychotherapy and Medical Hypnosis Association, the clinical use of hypnosis has been well-endorsed by several international associations such as British Medical Association, Canadian Medical Association, Canadian Psychological Association, American Psychological Association and American Psychiatric Association [3]. It is widely implemented in medical and psychotherapeutic field to provide better medical and mental healthcare to patient [4,5]. In a study group, Joseph Meyerson disclosed that hypnosis becomes a practise to professional community with the main priority of improving professional performance, followed by providing better mental health to clients [4].

2. DISCUSSION

To me, hypnosis is a powerful mind-body approach method which can shut off the conscious control of patient to manipulate the thoughts, experiences and behaviours for positive changes. During hypnosis, hypnotist provides a platform with positive suggestions, which is tailored based on patient's condition to achieve the best therapeutic effect. However, the success figure of hypnosis in the past could only be measured by subjective patient's evaluation or feedback [6]. A major breakthrough in imaging technology such as magnetic resonance imaging (MRI) scan and brain mapping finally can partially explain the biological actions of hypnosis on brain [6]. Therefore, the study on mechanism and suggestibility of hypnosis is gaining new creditability in neuroscience with the advancement of brain imaging technologies [7].

Marl PJ describes hypnosis as a procedure that involves induction followed by suggestions to bring significant and meaningful changes in thoughts, sensations, emotions and perceptions [8]. Hypnosis is a state of relaxation of subconscious mind that free from environmental influences with heightened focus and responsive to suggestion that lead to post-hypnotic alterations in thought, sensation, emotion or behaviour [9,10]. During the hypnosis process, the hypnotised patient does not lose consciousness and can awake anytime if the suggestion is against their wills [9]. The typical structure of hypnosis entails introduction, induction, deepening, therapeutic suggestion, awakening, post-hypnotic feedback and patient debriefing [11]. Different people will have different degrees of suggestibility with strong rapport and trust are essential between hypnotist and subject [12-14].

Introduction stage is the history taking or discussion between patient and hypnotist that centres on patient's condition because hypnosis's suggestion needs to be tailored to meet patient's expectations, needs and attitudes [11,15]. Then, the hypnotist will induce patient into trance-like state via visual, auditory or kinaesthetic stimulation [11]. Hypnotist deepens the trance-like state by instructing patient to focus on physical changes such as breathing pattern. After that, the suggestions are made once the deepened state is stabilised. At this point, patient is in the most teachable state and self-hypnosis is normally being taught as well [11]. Removal of all negative connotations, anticipation and occurrence of negative events can be reduced to comfort patient to certain extents [12]. Finally, the patient is guided back to normal and suggestions made during hypnosis are reinforced at post-hypnotic stage [11].

Based on the neuroimaging data, Matthias Mende and Halsband indicate hypnotic trance exists as separate state of consciousness [16,17]. Hypnosis is an integrative procedure that involves attention, perception, communication and rapport. High level of trust contributes to effective communication which can access the inner world of a person [16]. At this point, therapeutic suggestion can be made to patient. Besides, patient needs to remain focus in proper direction which leads to a state of pleasant absorption for suggestions [16]. Positive changes can be made during hypnosis provided that the patient put attention on direction that supports health and well-being. Perception is subjective reality that introduces into patient's mind during trance-like state to correct the negative thoughts, experience, emotion and sensation [16]. Matthias Mende deduces that hypnosis plays an important role in assessing the influences of suggestion on its therapeutic effects [16]. Therefore, a successful hypnotherapy should include three salient components which are heightened attention, correct perception and effective communication.

From the normal procedure of hypnosis, followed by suggestion, the wonderfulness of hypnotherapy never fails to create opportunities and chances for patients with mental or medical disorders. Indeed, hypnotherapy could emerge as a new form of treatment for patient who cannot tolerate with any form of medication due

to major organ failures such as liver or kidney failure. Hypnotherapy could be used to treat patients with emotional distress or pain-intolerance. Many journals proved that hypnosis is a side-effect free therapy and adjunct treatment for numerous of medical and psychosocial problems [16,18,19]. There are anecdotal evidences that show hypnotic technique is used to reduce fear, anxiety and pain control for the past few decades [18-20]. Many clinical trials using hypnosis for medical purposes are fully supported by National Centre for Complementary and Alternative Medicine of the National Institutes of Health [11]. Nowadays, hypnosis is accepted as evidence-based intervention to enhance the quality of life in general [9]. Numerous articles reveal the significance of association between hypnotherapy and alterations in behavioural or emotional expression, somatic changes and reduction in pain and distress [21-24]. In 1891, British Medical Association announces that hypnosis is an effective therapy for alleviation of pain and multifunctional ailments [10]. There are many other benefits that yet to be discovered under the advancement of imaging technologies.

Numerous models are suggested by Mark PJ to support the clinical uses of hypnosis [25]. Among the benefits of hypnosis, it is an effective measure for pain management. The experience of pain involves multiple interactive process and neurons in different areas of brain [25]. Apart from that, few important brain areas such as prefrontal cortex, sensory cortex, anterior cingulate cortex and insula have been identified as culprit of pain perception [25]. Theoretically, suppressing those areas via hypnosis can alleviate pain associated with any medical illnesses or procedures [26]. In a book written by Mark PJ, dissociation model gives rise to the principal of pain treatment because it creates an unusual dissociative experience during hypnotic session by influencing all the multilinked brain areas that involve in pain perception [25]. Apart from that, experimental pain research shows that hypnotic-induced analgesia will divert pain perception via inhibiting thalamic-somatosensory cortical pathway, thalamic frontal cortical and anterior cingulate pathways [27]. Besides, an article from Journal of American Medical Association encourages practitioners to consider the modalities such as hypnosis for pain management instead of pharmacological measures alone [28]. It is obvious that hypnotic sedation could reduce the cost and risk of sedative drugs. However, pharmaceutical companies consider that popularity of hypnotic would jeopardise the development of medicines. Therefore, pharmaceutical industry still not supportive on the hypnosis research in the field of medicine as it might potentially replacing pharmaceutical products if hypnosis can really cure the patient without drugs [16].

Psychoanalytic model reveals high level of creativity could be triggered during hypnotic therapy [25]. In sociocognitive model, interactive skills and motivation of patient could be heightened after hypnotic session [25]. A study conducted by Dr Ginandes shows that hypnosis could alter the autonomic process to speed up the rate of tissue healing after surgical operation [29]. This statement is further supported by another pilot study that hypnosis could enhance anatomical and functional healing by manipulating the central processing and psychological effects [30]. In a study carried out by James, he proposed that hypnosis activates the left prefrontal lobe and amygdala to create positive emotions and self-control [6]. Hypnosis also stimulates autonomic, endocrine and immune system during hypnosis and it plays a role in influencing pain perception [6]. The neurophysiologic model provides the answer for biological effect of hypnosis on brain area based on imaging devices such as electroencephalography or MRI or functional MRI. Marvin et al. found out that relaxation and suggestion during hypnosis will directly inhibit the sympathetic pathway while stimulate parasympathetic pathway, indicating the adjustment of psychosomatic changes [31]. According to Sala H, many researches are warranted for hypnosis so it could acts as adjunctive mind-body approach for psychological and medical conditions [11].

3. CONCLUSION

In conclusion, hypnotherapy is a strong evidence-based treatment to many medical or psychological problems. It is a verbal procedure which involves the nature of brain that constitute to the core of treatment. It is safe, side effect-free, cost-effective, fast, and readily available with minimal equipment or personnel and has no risks therapy that suitable for all age groups. The brain mapping clearly proved the amazing interaction between hypnotherapy and various brain areas' activities. Brain is a complicated organ with millions of neurons that interact with each other and it is the main controller for any activities performed by our body. Hence, any

therapy that could influence the activities of brain region would definitely appear to be a very powerful tool for management from the aspect of bio-psychosocial. Surprisingly, hypnotherapy appears to be effective in targeting various brain areas for therapeutic effects. In new era, it is a highly potential therapy that can overtake the role of pharmacological drugs for sedations, pain control, emotional distress management and other functions which yet to discover. More awareness about hypnotherapy should be raised among citizens and more educational institutions should be established to provide competent and skilled training for hypnotist to perform quality hypnotherapy to patients.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Kenneth V. Iserson. A hypnotic suggestion: Review of hypnosis for clinical emergency care. The Journal of Emergency Medicine. 2014;46(4):588-96.
2. Hague, Michelle, Mabbutt, Peter. About hypnotherapy and clinical hypnosis. Healthcare Counselling & Psychotherapy Journal. 2013;13(20). Item number: 2012088020.
3. American Psychotherapy and Medical Hypnosis Association. Important notice regarding hypnosis and the American Medical Association. Retrieved July 14, 2014.Available:http://www.apmha.com/amahypnosis.htm.
4. Joseph Meyerson, Marc Gelkopf, Gaby Golan, Ewa Shahamorov. What motivates professionals to learn and use hypnosis in clinical practise? International Journal of Clinical and Experimental Hypnosis. 2013;61(1):71-80.
5. Lynn SJ, Rhue JW, Kirsch I. Handbook of clinical hypnosis (2nd ed.). Washington, DC: American Psychological Association; 2010.
6. James U. Clinical hypnosis textbook: A guide for practical intervention. Oxford, England: Radcliffe Publishing; 2005.
7. Kosslyn SM, Thompson WL, Costantini-Ferrando MF, Alpert NM, Spiegel D. Hypnotic visual illusion alters colour processing in the brain. American Journal of Psychiatry. 2000;157:1279-84.
8. Mark P. Jensen. Hypnosis for chronic pain management. New York, NY: Oxford University Press; 2011.
9. Debra Rose Wilson, Dana M. Dillard. Use of hypnosis in the childbearing year. International Journal of Childbirth Education. 2012;27(3):31-6.
10. American Psychological Association. What is clinical hypnosis and what is it used for? Retrieved July 14, 2014. Available: http://www.apa.org/pubinfo/hypnosis.html.
11. Sala Horowitz. Realizing the benefits of hypnosis: Clinical research and medical applications. Alternative & Complementary Therapies. 2006;914:740-2100.
12. Scotland M. Why I'm a hypnobirthing practioner. Midwifery matters. 2007;114:6-7.
13. Preston. Hypnosis: Medicine of the mind. Montreal, Canada: Ulyssian Publications; 2001.
14. McClenon. Shamanic healing, human evolution and the origin of religion. Journal for the Scientific Study of Religion. 1997;36(3):345-54.
15. O'Hanlon WH. Taproots: Underlying principles of Milton Erickson's therapy and hypnosis. New York, NY: W. W. Norton; 1987.
16. Matthias Mende. Hypnosis: State of the art and perspectives for the twenty-first century. Contempory Hypnosis. 2009;26(3):179-84.
17. Halsband U. Plasticity changes in the brain in hypnosis and meditation. Contemporary Hypnosis. 2009;26:(in press).
18. Joscha Reinhard, Helga Huesken-Jan Ben, Hendrike Hatzmann, Sven SChiermeier. Preterm labour and clinical hypnosis. Contemporary Hypnosis. 2009;26(4):187-93.
19. Wermer WEF, Schauble PG, Knudson MS. An argument for the revival of hypnosis in obstretrics. American Journal of Clinical Hypnosis. 1982;24:489-94.
20. American Psychiatric Association. Position statement on hypnosis. Retrieved July 14, 2014.
Available:http://www.psychiatry/org/advocacy-news-room/position-statements/apa-position-statements.
21. Michael R. Nash, Nicole Perez, Anthony Tassa, Jacob J. Levy. Clinical research on the utility of hypnosis in the prevention, diagnosis and treatment of medical and psychiatric disorders. International Journal

of Clinical and Experimental Hypnosis. 2009;57(4):443-50.
22. Liossi C, White P, Hatira P. A randomized clinical trial of a brief hypnosis intervention to control venepuncture-related pain of pediatric cancer patients. Pain. 2009;142:255-63.
23. Olson DM, Howard N, Shaw RJ. Hypnosis-provoked nonepileptic events in children. Epilepsy & Behaviour. 2008;12:456-9.
24. Elkins G, Marcus J, Stearns V, Perfect M, Rajab MH, Ruud C, Palamara L, Keith T. Randomized trial of a hypnosis intervention for treatment of hot flashes among breast cancer survivors. Journal of Clinical Oncology. 2008;26:5022-6.
25. Mark P. Jensen. Hypnosis for chronic pain management. New York, NY: Oxford University Press; 2011.
26. Julie B. Schnur, Ilana Kafer, Carolyn Marcus, Guy H. Montgomery. Hypnosis to manage distress related to medical procedures: A meta-analysis. Contemporary Hypnosis. 2008;25(3-4): 114-28.
27. Pierre Rainville. Brain imaging studies of the hypnotic modulation of pain sensation and pain effect. Retrieved 16th July 14, Available:http://www.mcmaster.ca/inabis98/woody/rainville0419/two.html.
28. Loitmann JE. Pain management: Beyond pharmacology to acupuncuture and hypnosis. Journal of American Medical Association. 2000;283:118-9.
29. Ginandes C. The strategic integration of hypnosis and CBT for the treatment of mind/body conditions. New York: Springer Publishing; 2006.
30. Ginandes C, Rosenthal DI. Using hypnosis to accelerate the healing of bone fractures: A randomized controlled pilot study. Alternative Therapy Health Medicine. 1999;5:67-75.
31. Marvin JA, Muller MJ, Blakeney PE, Meyer WJ. Pain response and pain control. In: DN Hrendon (ed.) Total Burn Care. London: Saunders. 1996;529-43.

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