

Heterogeneous Approaches for Tobacco Cessation: A Disparate Perception

Dhruv kumar Patel¹, Hitesh Patel², Anand Shah³, Krina Patel⁴, Pooja Patel⁵

1,2-B.D.S., Karnavati School Of Dentistry. 3-BDS, KM Shah Dental College & Hospital. 4-B.D.S., Ahmedabad Dental College & Hospital. 5-B.D.S., Dharmsinh Desai University.

Correspondence to:
Dr. Dhruv kumar Patel B.D.S., Karnavati School Of Dentistry,
Contact Us: www.ijohmr.com

ABSTRACT

All the substantial deleterious effects of the prolonged abuse of tobacco products in any form affect both the oral cavity as the general human body. Apart from tobacco, other considerable causes for significant death ratio and degraded quality of life are the diseases associated with the cardiovascular system of the body and other lungs disorders. However, tobacco remains to be the core suspect for the mortality, causing the death of nearly a million people each year in India. The most regular site to be affected is the mouth and considering the lethal effects; it is highly imperative that tobacco abuse is controlled to a considerable level with the means of heterogeneous approaches.

KEYWORDS: Tobacco; Cessation; Perception; Approaches; Nicotine

INTRODUCTION

Nicotine has been rated as one of the most addictive ingredients present in the tobacco which often leads to tobacco abuse over an epoch of time. Distillation of nicotine existing in the cigarette occurs when the smoke is huffed. This is followed by the absorption of the smoke onto the arterial circulation. A final binding of smoke particles with nicotine receptor aids in opening the channels and allowing entry of ions like sodium or calcium.¹ The whole sequence of events leads to addiction of nicotine. Nicotine has been supplementary to aid a human being with the enticement of a decline in anxiety. Hence, the abuse of nicotine is on a rise since it helps to control temper and mood. The most basic hurdle on the road to establishing a complete cessation of smoking is the associated withdrawal symptoms which include severe bouts of despair and restiveness along with spurts of anxiety.² Sometimes the drawing symptoms are so critical that they have a certain form of analogy with patients undergoing a psychiatric condition.³

Hence, to decline the dependency on the nicotine requires a meticulous sequential treatment and a wide-ranging handling, one of which is a recurrent augmentation of the mood of the patient and a measured check on withdrawal symptoms. Furthermore, one of the rudimentary conceptions to considering the medical treatment for the addiction is to have a profound indulgence and a complete knowledge of the symptoms of the disease. The principal element is that tobacco dependence is a very resilient and substantial progression which intensely prerequisites the accomplishment of cessation. The other concern is dealing with the hesitation of the subject that the treatment to reduce dependency is not obligatory which is rationalized out of the fear that the conduct of medicine use and withdrawal symptoms connected with it will be furthermore appalling than the use of tobacco

itself. It is unassailable to conduct a blend of different remedies to provide a pleasant experience to the patient. The varied treatment options available for tobacco cessation are as follows:

METHODS OF TOBACCO CESSATION

- Behavioral support
- Pharmacotherapy
- Acupuncture
- Hypnosis

Behavioral Support: A lot of change models have been utilized in the behavioral upkeep of the patients anguished with the tobacco addiction. The cardinal focus of most of the behavioral support models is to imply the prominence of impulsive nature, self-ability to adapt, and contemplation of the positive attitude.⁴ The solace is delivered by means of persistent advice, repetitive group discussions, a staunch encouragement and other such activities.⁵ Augmenting a stout inspiration is a vital fragment of the complete management in association with tobacco addiction as it intensifies smokers' fervor and gives him a sagacity of resolve.⁶ The use of 5 A and 5 R has been contemplated to be an effective psychological approach for aiding the subject to quit tobacco dependence. Amongst the 5A, the first "A" is to ask the patient. It is the most fundamental step which inculcates asking the subject about his use of tobacco.⁷ The idea behind this is to pay scrupulous attention to the patients' problem which empathy. The second "A" represents advice to the patient. The dentist has a moral duty to be accurate and authentic with the patient while advising him to stop the dependency on tobacco. The third "A" represents the assessment of the patient. The doctor

How to cite this article:

Patel D, Patel H, Shah A, Patel K, Patel P. Heterogeneous Approaches for Tobacco Cessation: A Disparate Perception. *Int J Oral Health Med Res* 2016;3(1):203-205.

should perform a thorough evaluation of the condition of the patient and assess his alacrity to quit tobacco. The fourth “A” signifies the assistance to be given to the patient. It is impervious to provide demonstrations and discussions to the patient as an assistance along with the medical therapy. The fifth “A” is for indicating the arrangement to be made for the patient. The dentist should make arrangements for an adequate counseling session for the patient.

The 5R model was devised especially for those group of subjects who were reluctant to quit the dependency on tobacco. The first R would represent the relevance of the patient to the tobacco and its effects. The dentist and the team of oral clinicians are designated with the task of aiding the patient to realize that the cessation of tobacco could change his daily lifestyle. The second R implies the risks associated with the abuse of tobacco. The patient must be conscious of the risks and fatal effects. The third R epitomizes telling the patient about the rewards associated with the tobacco cessation. The patient is made to realize the financial benefits of tobacco cessation and also a focus on an enhanced appetite is highlighted. The fourth R alerts the patient about the possible roadblocks which are inculcated in the form of withdrawal symptoms like dejection and possible mass gain. The fifth R is an attempt to keep the repeatedly keep the patient motivated towards the mission of tobacco cessation.

Pharmacotherapy: A wide range of medical drugs have been implemented in the process of tobacco cessation. Most of the drugs have exhibited a considerable range of success, but the most globally used process is the nicotine replacement therapy. The probability of declining the dependency on tobacco is significantly higher with the aid of Nicotine replacement Therapy as compared to the use of placebo. The substantially deteriorated use of just about one-third of the nicotine is found in nicotine replacement products as compared to the nicotine content in cigarettes. Thus, the withdrawal symptoms attendant to the complete cessation of tobacco is controlled with the use of nicotine replacement products.⁸ Moreover, the nicotine used in the nicotine replacement therapy contains no harmful additives.⁹ This is important since the current research is pointing towards the fact that it is not the nicotine but the harmful additives in tobacco that are responsible for causing carcinoma. Some of the common nicotine replacement products used are nicotine patches, nicotine gum, inhalers and use of lozenges as well as the tablet form. Nicotine injection had been first used about 70 years back for the sole purpose of tobacco cessation. The injection particularly contains as less as 1/500 part of the nicotine which else could be acquired by a lone gasp of cigarette smoke. The outcomes of such injections in smokers have shown a constructive transformation by plummeting the dependency on smoking. Furthermore, the mechanism of action of products like a nicotine gum is based on substantiating plasma nicotine levels at a lesser level than a cigarette, thus restricting the craving for a cigarette. However, some of the patients have reported chewing problems and hence the gum can be

replaced by a nicotine transdermal patch. The biggest advantage of using a nicotine transdermal patch is the stable administration of the nicotine which aids to control the withdrawal symptoms. The nicotine patch has been proved to be a superior product only when used in conjunction with other nicotine replacement therapies.

A drug which has been considered as a preliminary line of treatment includes varenicline which has a mechanism of action of binding selectively to nicotinic receptors. However, one of the issues rendered by the medication is the psychiatric problems induced by it. Hence, the judicious use of the drug is necessary to prevent any kind of psychotic experiences. An anti-depressant drug which is the majorly administered drug is the Bupropion Hydrochloride. The drug acts by causing a substantial rise in the level of dopamine. When a person consumes nicotine in any form, the effects are similar to the rise of the level of dopamine caused by the use of bupropion. Thus, a clear analogy makes the subject suffer from no withdrawal symptoms at all. The subject also maintains a healthy appetite and body weight and bupropion is now considered as the drug which provides the fastest cessation from tobacco dependence. Clonidine has also be used extensively for the patients suffering from alcohol withdrawal symptoms, but the ability to work with tobacco abuse has yet to be thoroughly tested. Nortriptyline has been utilized as the last line of drug majorly due to the inclination of suicidal jeopardy connected with it.

Acupuncture: A traditional approach to aid the subjects in decreasing their dependency on tobacco is the practice of acupuncture. The method requires the use of needles which are inserted into precise points in the human body which are then stimulated manually or by the aid of an electric current. The procedure can be performed intermittently on specific days of appointment, or even an unremitting stimulation can be delivered. A study was conducted to determine the efficacy of acupuncture on around 50 patients. The patients were smoking a close to 25 cigarettes a day with some negligible disparities in number. The acupuncture was adequately performed on those patients for a substantial phase of time after which it was determined that a significant decline was observed in the prerequisite of the number of cigarettes. Moreover, different effects were achieved with different acupoints and most of them aid is dipping the sense of taste of tobacco.¹⁰

Hypnosis: Hypnosis has been demarcated as a transmogrified state of perception in which the patient appears to be in a flow of serenity. Hypnosis has not only been used to consider physiological problems but also to treat problems associated with the psychiatric conditions of the patient. A study was conducted on around 60 members to co-relate the prosperous use of hypnosis for the purpose of tobacco cessation by Green and Lynn.¹¹ The study was designated with randomized members and clinical information which failed to embrace control groups were a fragment of it. The conclusion of the

results mentioned that the hypnosis can be a supportive treatment option for tobacco cessation.

CONCLUSION

Tobacco cessation has become a necessary measure to aid the patients in living a healthy and comfortable life. The collective perception amidst the subjects suffering from tobacco addiction is that the treatment of tobacco dependency will have a despairing effect on their mind. However, the contemporary confirmation of reports undoubtedly recommends that tobacco cessation will consequently aid to achieve a recovered stable mind and appropriate physical fitness. With the suitable consumption of medical drugs, there is a colossal probability of efficaciously abandoning tobacco.

REFERENCES

1. Dajas-Bailador F, Wonnacott S. Nicotinic acetylcholine receptors and the regulation of neuronal signalling. *Trends Pharmacol Sci.* 2004; 25:317–324.
2. Hughes JR, Hatsukami D. Signs and symptoms of tobacco withdrawal. *Arch Gen Psychiatry.* 1986; 43:289–294.
3. Hughes JR. Clinical significance of tobacco withdrawal. *Nicotine Tob Res.* 2006; 8:153–156.
4. Bandura A. *Social Learning Theory.* Englewood Cliffs, NJ: Prentice-Hall; 1977.
5. Michie S, Hyder N, Walie A, West R. Development of a taxonomy of behavior change techniques used in individual behavioral support for smoking cessation. *Addict Behav.* 2011; 36(4):315–319.
6. Lai DTC, Cahill K, Qin Y. Motivational interviewing for smoking cessation. *Cochrane Database Syst Rev.* 2010; 1:CD006936.
7. Stead LF, Perera R, Bullen C, Mant D, and Lancaster T. NRT for smoking cessation. *Cochrane Database Systemic Rev;* 2008; 1.
8. Kozlowski LT, Giovino GA, Edwards B, DiFranza J, Foulds J, Hurt R et al. Advice on using over-the-counter nicotine replacement therapy - patch, gum, or lozenge - to quit smoking. *32, 2140-2150.* 2007.
9. Zwar N, Bell J, Peters M, Christie M, Mendelsohn C. Nicotine and nicotine replacement therapy - the facts. *Australian Pharmacist.* 2006; 12, 969-973.
10. He D¹, Medbo JI, Hostmark AT. Effect of acupuncture on smoking cessation or reduction: an 8-month and 5-year follow-up study. *Prev Med.* 2001 Nov; 33(5):364-72.
11. Green, J. P., Lynn, S. J. Hypnosis and suggestion-based approaches to smoking cessation. *International Journal of Clinical and Experimental Hypnosis.* 2000; 48(2), 195-223.

Source of Support: Nil
Conflict of Interest: Nil