

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 9, Issue 4, 1427-1435.

Review Article

ISSN 2277-7105

A AYURVEDIC THERAPEUTIC COMPREHENSIVE MODULE FOR TOBACCO DEADDICTION -A STEP TOWARDS COMMUNITY HEALTH

¹*Vd. Laxman Kundale and ²Vd. V. G. Patrikar

¹P.G. Scholar, ²Guide, Professor and HOD

Department of Swasthavritta and Yoga Government Ayurved College, Nagpur.

Article Received on 15 Feb. 2020.

Revised on 05 March 2020, Accepted on 25 March 2020,

DOI: 10.20959/wjpr20204-17161

*Corresponding Author Vd. Laxman Kundale

P.G. Scholar, Department of Swasthavritta and Yoga Government Ayurved College, Nagpur.

ABSTRACT

Addiction is one of the biggest health challenges that the world is facing today. Nowadays Tobacco addiction has become a sign of civilisation. in every part of world, majority Youth, male, female, adolescent's, adults are addicted. Today tobacco is sold in the form of the Tobacco leaves, gutakha, mava, jarda, kharra, khaini, bidi, sigarete, etc. According to the World Health Organization, Tobacco is the cause of around 6 million deaths per year which is expected to rise to 10 million per year by the 2020 or early 2030, with 7 million deaths occurring in developing countries. It affects the liver and lungs and leads to heart attacks, strokes, chronic obstructive pulmonary disease, hypertension and cancer. Monotonic therapy for every individual is not

applicable therefore a comprehensive; side effect less and feasible. Aim: To use the ayurvedic aspect of therapeutic comprehensive module in the management tobacco addiction. Result: Strong will of patient along with suppression of tobacco chewing urges are prerequisites, in order to manage this collective use of regular yogic practices and healthy lifestyle modification with oral substitute for tobacco made up of herbal remedies is beneficiary module for management of tobacco deaddiction. Conclusion: Daily use of herbal substitute of tobacco to reduce chewing urges is innovative preparation handy, and feasible for every social group. Everyday practice of yoga and meditation for 30mins and healthy lifestyle adaptation are the complete management of tobacco deaddiction. However its propagation should be done as part of community health.

KEYWORDS: Tobacco deaddiction, herbal substitute, Yoga, Pranayama, Asana, lifestyle modification.

INTRODUCTION

Ayurveda is an ancient traditional medicinal system native to the Indian subcontinent. Ayurveda is known to be a complete medical system that comprised of physical, psychological, philosophical, ethical and spiritual health. It is also called as a science of self-healing, the basic concepts of Ayurveda are *Guans*, *Dravyas* and *Doshas* in which Guans means qualities, *Dravya* means five elements (ether, air, fire, water and earth) and Dosha means movement (Kapha, Pitta and Vata). Guans are also known as primary forces of creation i.e., Sattva or pure (goodness, constructive, harmonious); Rajas or excitable (passion, active, confusion) and Tamas or indifferent (darkness, destructive, chaotic). According to Ayurveda, the human body is a vehicle for spiritual experience and its form as well as function is created according to prakriti (desire) of an individual. Various Ayurvedic approaches are certainly helpful in reducing the adverse effects of tobacco, these approaches are given in following heads. [2]

AIMS AND OBJECTIVE

To use the ayurvedic aspect of therapeutic comprehensive module in the management tobacco addiction.

Method

Different article, journal and books were analyzed and reviewed for the literature about role of Ayurveda and tobacco deaddiction. chewing tobacco is used orally by placing a pinch between the gum and cheek and gently sucking and chewing. According to the Tobacco Atlas, "Chewing tobacco is also known as plug, loose-leaf, *chimo*, *toobak*, *gutkha*, and twist. Pan masala or betel quid consists of tobacco, areca nuts and slaked lime wrapped in a betel leaf. These products also contain sweetening and flavorings agents. Varieties of pan include *kaddipudi*, *Kharra*, *kadapam*, *zarda*, *pattiwala*, *kiwam* and *mishri*". Chewing tobacco is used in all over southeast asia in general and all over India in particular Proportion of tobacco chewing is common among the males and females.

Etiopathogenesis

According to Ayurveda the tobacco i.e. *Tambakhu dravya* is *sthvar vanaspatij visha*, having properties-

1428

Guna- laghu, tikshna, vikasi, vyavayi having

rasa: tikta and katu and

virya: ushna

Doshkarama

Due to its *tikta guna* and ushna *virya*, it is *kaphavatsthamak*, and *pittavardhak*. action of tobacco on different sansthan:

Pachanvah sansthan-vamak, krumighna

Swasan sansthan -shwasan uttejit

Mutravah sansthan: alpamutra pravrutti

Prajanan sansthan: garbhashay uttejak

Nadisansthan-Nadisansthan uttejit

Due to its *vyavai*, *vikasi* guna it spreads speedily in central nervous system and other major systems of body and produces above effects. [3]

According to Modern science-

Pathophysiology

The addiction to nicotine is a consequence of the speed and magnitude of nicotine delivery, the clearance of nicotine, its effect on the brain, the development of physical dependence, The speed and amount of nicotine delivery is dependent on the amount of nicotine in the product, the alkalinity of the product, and the route of administration. Nicotine, 3-(-1-methyl-2-pyrrolidnyl) pyridine, is a volatile alkaloid in the tobacco plant and its absorption and renal secretion is highly pH dependent. Higher alkalinity is associated with greater absorption in the non-ionized state, which crosses cell membranes more rapidly than ionized nicotine. The fastest rate and greatest amount of nicotine delivery is through cigarettes. Nicotine, when inhaled, enters the lungs where there is a large surface area of small airways and alveoli, undergoes dissolution in pulmonary fluid at a high pH, is transported to the heart and then immediately passes to the brain. Nicotine targets various nicotinic acetylcholine receptor (nAChRs) subtypes, which are found in the periphery and in the central nervous system. That exist in the central nervous Nicotine administration also increases the extracellular noradrenaline in various parts of the brain (; however, the effects of nicotine on neurotransmitters such as serotonin or other CNS neurotransmitter systems such as the endocannabinoids and neuropeptides have been less studied. The release of all these various neurotransmitters leads to the arousal, mood modulation, performance enhancement,

analgesic and weight loss effects associated with tobacco use (). With chronic or even acute administration of nicotine, neural adaptations occur to attain homeostasis resulting from the increased activity on the nAChR receptor sites and increased concentration of neurotransmitters.^[4]

Toxicity effect of the tobacco.^[5]

Acute Toxicity of tobacco	Chronic Toxicity effect of tobacco:
Mukh, kanthadaha.	Agnimandya
aamashay daha	Kas
ati lalasrava	Kampan
Utklesha	rhudya dourbalya
Vaman	aniyamit nadi gati
Atisara	Murchha
Bhrama	Smrutibhransha
Kampa	Anidra
Shitangata	mukhpaka.
shvas kasht	Drushtimandya
sadnyanash (tobacco heart: hrudyavsad.)	Napunsakata
	Palitya khalitya. liver and kidney diseases. dnyanendiriya dourbalya

Chronic consumption of tobacco causes severe effect on lungs and causes oral and lungs cancer in males. Females are badly affected by tobacco addiction as it causes early ageing. infertility, frequent miscarriages. Smoking during pregnancy is linked with a range of poor birth outcomes including Low birth weight and preterm birth Restricted head growth Placental problems Increased risk of still birth Increased risk of miscarriage.

Diagnosis Criteria for Addiction:

The term commonly applied to maladaptive drug-seeking behavior, often performed despite knowing of negative health consequences.

Nicotine meets the established criteria for a drug that produces addiction, specifically, dependence and withdrawal.

According to who Diagnostic Criteria for Nicotine Dependence Source:

Dependence is a maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period: 1. Tolerance, as defined by either

• a need for markedly increased amounts of the substance to achieve the desired effect, markedly diminished effect with continued use of the same amount of substance

- 2. Withdrawal, as manifested by either the characteristic withdrawal syndrome for the substance, or the substance being taken to relieve or avoid withdrawal symptoms.
- 3. Taking larger amounts of the substance or over a longer period than was intended.
- 4. A persistent desire for or unsuccessful efforts to cut down on substance use.
- 5. A great deal of time being spent in activities necessary to obtain or use a substance.
- 6. Abandonment or reduction of important social, occupational, or recreational activities because of substance.^[6]

Ayurvedic therapeutic comprehensive Treatment

Herbal medicinal substitute for tobacco^[7]

Ginger	has sulphur compounds, thus, chewing on bits of dried ginger can help curb the addiction. You can soak small pieces of ginger in lemon juice, then mix it with black pepper and store in a jar. Just suck into this piece of ginger whenever you have the urge to smoke or chew tobacco.
Ajwain	Take few seeds of ajwain and chew them whenever you get the craving for tobacco. Initially it might be difficult but chewing them regularly will help do away with the habit of tobacco addiction.
jatasmi, chamomile and brahmi	into equal proportions and keep it in a jar. Steep one tablespoon of this mixture in a cup of hot water and sip it slowly. This will help relieve the desire to smoke
Ginger, Amla, Turmeric	A ball prepared out of ginger, amla and turmeric powder respectively is said to help reduce the craving for tobacco usage. The ball can be used as sweets, put it in the mouth and suck it.
Ginseng	is a herb that can help reduce cravings and also aid the body to deal with emotional and physical stress while experiencing withdrawal symptoms like irritability, mood swings etc. Ginseng has the ability to control the pleasure neurotransmitter dopamine from being released when you have a cigarette.
Triphala	can clear the toxins from your body and help reduce the craving for toxic tobacco. You can consume one tablespoon of it every day at night with warm water, which will also help in better digestion.
Cinnamon	Cinnamon helps do away with tobacco addiction. Whenever you have the craving for smoking or other forms of tobacco, take a piece of cinnamon and keep sucking for a while.
Basil Leaves	Chewing basil leaves helps reduce the craving for tobacco usage and also it cures the problems caused by its usage earlier. Every morning and evening take about 2-3 basil leaves, chew and eat them.
Calamus	A well known herb calamus is helpful to do away with smoking addiction. Add small quantity of calamus in the form of powder with ghee and have it or it can be consumed just in the form of powder.
Water Kept In Copper Container	Copper scrap off the toxic deposits. Drinking lot of water kept in copper container helps to remove the toxic deposits and lessen the craving for tobacco use over a period of time.

Importance of yoga in tobacco deaddiction^[8]

The nature of the mind is to seek happiness, joy, and ecstasy. Sometimes, the mind cannot find this in the area of the five senses. When it is not satisfied with just seeing, hearing, tasting, touching or smelling, it starts to crave. The mind longs for the highest peace and bliss. And in search of that higher ecstasy, the mind is lured into the trap of addiction and dependency. Repeated attempts to kick the butt generally fail. Because the smoker is always in need of that 'one last 'drag. Unfortunately, addiction calms the mind and gives temporary relief from stress. Giving the smoker a reason to cling on to the addiction.

There is yet another way out of the addiction. The way of yoga and meditation. Or "Having a bigger addiction! A higher ecstasy that you can find through yoga, pranayama and meditation! Of course, this is love for the cosmos, love for God, a devotional dance! This will give you such an ecstasy that it can snap you out of your addiction."

- Lung capacity improves. Stamina increases. This will become obvious during exercise sessions.
- Blood circulation and **heart rate** improves. Imparting a **youthful glow**.
- The immune system becomes stronger. Resulting in resistance to sickness and disease.
 Improving overall health.
- Smoking is a **leading cause of cancer**. **Quitting smoking** reduces the possibility of being afflicted by the dreaded illness.
- When we decide to quit smoking, we may experience more stress. This is caused primarily by withdrawal symptoms. The symptoms will eventually decrease. And our stress levels will go down.
- We will no longer expose our family, friends and those around us to the lethal hazards of passive (second hand) smoking.^[9]

Yoga asanas and pranayamas

Pranayama

Nadi Shodhan

- 1. Pranayama helps **relax the mind** and prepares it to enter a meditative state.
- 2. Practicing it for just a few minutes every day helps keep the mind calm, happy and peaceful.
- 3. It helps in releasing accumulated tension and fatigue. When you do pranayama, 80% of the toxins in our body are released through the outgoing breath.

4. Nadis are **subtle energy channels** in the human body that can get blocked due to various reasons. The *Nadi Shodhan pranayama is a breathing technique* that helps clear these blocked energy channels, thus calming the mind. This technique is also known as *Anulom Vilom* pranayama.

Yogasanas	Benefits
Bhujangasana	Improves blood circulation. Reduces fatigue and stress
Setu Bandhasana	Calms the brain, reducing anxiety, stress and depression
Sarvanana	Nourishes the brain with more blood, Stretches the heart
	muscles by returning more venous blood to the heart
Trikonasana	Increases mental and physical equilibrium, Helps improve
	digestion
	Reduces anxiety, stress, back pain and sciatica
Shava - Corpse; Asana	- It is a position of rest and relaxation, and is usually
	practiced towards the end of a yoga session'.

Ahara: Diet to follow

- Avoid eating acidic foods such as meat, dairy products, tea, coffee, pasta and breads.
- Intake of alkaline food such as vegetables, fruits, nuts, sprouts etc. are highly beneficial.
- Intake of raisins, beets, lima beans, dandelion, etc. can really help you to quit smoking habit.
- Increase the amount of vitamin C in your eating habits. Fruits rich in vitamin C such as lemon, oranges and grapefruits very useful.
- Sweet foods reduce the urge of smoking. In addition to that add a small quantity of honey in whatever sweet dishes you consume.
- When you feel excessive urge of smoking it is suggested to eat something salty. Or you can lick a little salt at that time.
- Juice of radish along with honey twice a day is very beneficial to quit smoking.
- Chewing liquorice (*mulethi*) is a good alternative to cigarette. It helps you to suppress the urge of smoking when you feel so.^[10-11]

Vihara

- An ayurvedic massage with aromatic oils is also very effective to relax you mind and suppress the urge for smoking.
- socializing with friends or spending quality time with your family, will keep your mind diverted from the stress of quitting.

Ayurvedic sadvritta; Achara rasayana Keep yourself busy in some sorts of work that can keep you away from smoking.

These ayurvedic tips are really very effective and efficient to curb the urge to smoke in an individual. [12]

DISCUSSION

Strong will of patient along with suppression of tobacco chewing urges are prerequisites, in order to manage this collective use of regular yogic practices and healthy lifestyle modification with oral substitute for tobacco made up of herbal remedies is beneficiary module for management of tobacco deaddiction. continuous use of tobacco causes different diseases as mentioned above. Use of the herbal preparation described above on daily basis causes vatpitaashaman and reduces harmful impacts caused by Nicotine. Though patients of addiction want to get out of the vicious cycle of Nicotine dependency, they do not get proper way. Regular practices of yogasanas and meditations causes reduced urges of tobacco chewing and obtained control over mind and sensory organs.

Pranayama are also useful detoxify body toxins via breaths and perspiration. Diet described above is useful for the maintain lightness in body and mind, smoother bowel movement and detoxifying the toxins the body. Healthy lifestyle should be adopted according to work profile of and individual and should be followed with discipline.

CONCLUSION

It is important to keep in mind that nicotine or tobacco addiction should be treated as a chronic disorder. Treatment may require persistent efforts in trying to assist tobacco users in their attempts at quitting. Relapse should be seen as a likely event. Treatment can improve these outcomes. Treatment may involve using various avenues of counselling and different kinds of pharmacotherapy. It also may involve the use of multiple ayurvedic herbal medications. However, it is clear that effective treatments are available and promising new treatments are being developed. Delivery of treatments can be facilitated by developing the infrastructure to promote the identification of tobacco addicted patients at each clinic visit, by training health care professionals on nicotine addiction treatments, by providing tobacco cessation medicinal products on the formulary, and by providing health care coverage for tobacco cessation.

REFERENCES

- 1. WHO report on the Global Tobacco Epidemic, 2015. Tobacco Free Initiative. July 7, 2015. http://www.who.int/tobacco/global_report/2015/en/.Widgery, A.G., 1930.
- 2. The growing burden of cancer in India: Epidemiology and social context. Lancet Oncol., 15: e205-e212.145.
- 3. J. Med. Sci., 2015; 15(3): 139-146. Maps of World, 2014. Top 10 tobacco producing countries. Updated on 22 November, 2014.
- 4. The contribution of heavy metals in cigarette smoke condensate to malignant transformation of breast epithelial cells and in vivo initiation of neoplasia through induction of a PI3K-AKT-NFκB cascade Applied Pharmacol., 2003; 274: 168-179. National Cancer Institute.
- Dr. C.K. Parikh, Parikh's Textbook of medical jurisprudence Forensic medicine and Toxicology; Reprint edition, CBS Publishers and Distributors, Delhi; Section VIII, Clinical and Forensic toxicology, 2002; Q.8.01: 8.1.
- Parikh CK. Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology. 7th ed. Subrahmanyam BV, editor. New Delhi: CBS Publishers and Distributors, Pvt. Ltd., 2016; 575.
- 7. Dravyguana Vidnayan Dravyaguna vidnyan, volume 2, acharya priyvat sharma choukhambha bharati academy-varanasi, 2011.
- 8. Yoga and Ayurveda. Chaukhamba Orientalia, New Delhi, Pages: 187. Mohapatra, P.R. Preet, D Das S.R Sat apathy and S Siddharth et al., 2014.
- 9. Mishra, S.P., 2004. Yoga and Ayurveda. Chaukhamba Orientalia, New Delhi, Pages: 187.
- 10. Mangal K, Rana S, Chauhan P, Tiwari R.C. Charak's Chaturvimshati Upakrama and its Contemporary View. World Journal of Pharmacy and Pharmaceutical Sciences, 2018; 7(4): 294-304.
- 11. Kerala Traditional Ayurveda Medicine, 2008. Quit smoking with the help of Ayurveda & Yoga. http://keralamedicine.blogspot.in/2008/07/quit-smoking-with-help-of-ayurveda-yoga.html#links.
- 12. Bagali SS, Baragi UC, Deshmukh RA. Concept of Satwavajay Chikitsa (Psychotherapy). Journal of Ayurveda and Integrated Medical Sciences, 2016; 1(1): 56-63.