

Tobacco Smoking and Homoeopathy - A Review

Dr. R. Samaran¹, M. Sowmiya²

^{1,2}RVS Homoeopathy Medical College & Hospital, Coimbatore, Tamilnadu, India
 drsamaran[at]yahoo.com
 sowmiyam477[at]gmail.com

Abstract: *Tobacco smoking which is a temporary craving, causes permanent damage to health and life. Nicotine, an alkaloid of tobacco is toxic and a dangerous stimulant, which causes damage to all the system of the body. All forms of tobacco are harmful and there is no safe level of exposure tobacco. Homoeopathic medicines of plant kingdom are more potent in the treatment of tobacco smoking. They act on the person as a whole and shows beneficial effect in treating the effects of tobacco smoking.*

Keywords: Tobacco smoking, forms of tobacco, nicotine, health hazards of tobacco, homoeopathic management

1. Introduction

Tobacco Smoking

- Tobacco smoking is the practice of burning tobacco, and inhaling its vapor. The practice began as early as 5000 – 3000 BC in Meso America and South America. ^[1] India is the second largest consumer of tobacco products worldwide with more than 267 million users that is 28.6% of Indian adult population. ^[2]
- Tobacco is an agricultural product processed from the fresh leaves of plant “NICOTIANA TABACUM”. ^[1] Nicotine is the primary alkaloid found in tobacco leaf accounting for 96–98% of total alkaloid content, with the remaining portion composed of nor-nicotine, anabasine, anatabine, cotinine and myosmine. ^[3]
- Tobacco smoke is a sooty aerosol produced by the incomplete combustion of tobacco during smoking. Particles in tobacco smoke are liquid aerosol droplets (about 20% water), with a Mass Median Aerodynamic [MMAD].
- The smoke is the complex mixture of over 7000 toxic chemicals, with 69 of them are associated with carcinogenic properties. Tobacco smoking is the leading cause of preventable death and a major public health concern.

Statistical Analysis

- Tobacco kills half of its users. The death rate varies from 7 – 8.5 million per year. Among this 7 million deaths are the result of direct tobacco use and around 1.2 million are the result of nonsmokers being exposed to secondhand smokes.
- Over 80% of the world tobacco users live in low and middle income countries.
- According to sex men are more likely to be current cigarette smokers than women which contribute to 15.3% male and 12.7% female.
- Current cigarette smoking was highest among people aged 22 – 64 years. ^[4]
- Children under the age of 18 years try their first cigarette and become new, regular daily smokers, and eventually will die prematurely from smoking related diseases. ^[5]

Processing of Tobacco

Tobacco belongs to the herbs of genus NICOTIANA, the genus contains many species of which nicotiana tabacum is commonly used. It belongs to Solanaceae family. It is indigenous to north and South America, Australia, southwest Africa and south Pacific. The plant is grown in soil, after the plant reaches about 20 cm tall, immature and decayed leaves and flowers are topped or removed from the plant. Harvested leaves are then processed for slow oxidation and degradation. This process gives smoothness of smokes. During this process “Advanced Glycated End products”, AGE’s are produced, which on inhalation causes atherosclerosis and cancer. ^[1]

Action of Tobacco on Human Tissues

- Tobacco contains an important alkaloid called nicotine. Absorption of nicotine across the biological membranes depends on pH. ^[6]
- Nicotine is a weak base with a pH of 8.0. In its ionized state, such as in acidic environments, nicotine does not cross the membranes. The pH of smoke from cured tobacco is acidic with pH 5.5-6.0. At this stage it is readily absorbed through mucus membranes. ^[1]

Absorption in Human Tissues:

When tobacco smoke reaches the alveoli of lungs the primary alkaloid NICOTINE is converted into a chemical called “AMINO KETONE”. Concentration of nicotine in blood rises quickly during a smoke and peak at the completion of smoking. After a puff, high levels of nicotine reach the brain. Dose of nicotine level in brain will increase on puff – by – puff basis. This stimulates adrenal glands and the hormone epinephrine is released. Epinephrine stimulates central nervous system and increases the blood pressure, respiratory rate and heart rate. On stimulating the central nervous system dopamine is increased and reinforces the rewarding behaviour. ^[6]

Duration of Nicotine:

After smoking its effect are less than 10 seconds and lasts only a few minutes. ^[7]

Different Forms of Tobacco:

Volume 11 Issue 1, January 2022

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

Tobacco is available in various forms like smoking, chewing and sniffing tobacco. Smoked tobacco products include: cigarette, cigars, bidis, kretek's, water pipe, cigar rolls, roll your own tobacco, pipe tobacco, e-cigarettes and HTP's.^[8]

Cigarette:

It is a narrow cylinder containing burnable material (tobacco) that is rolled into thin paper for smoking. They are also called cigs, ciggies, stogs, boges and tabs.^[9]

Health Effect:

It contains chemicals including carcinogens, this causes cancer of lungs, heart and other health problems.^[9]

Water Pipe Tobacco Smoking (WTS or HOOKAH):

It is a smoking device which employ indirect heat source to slowly burn tobacco leaves, while users draw smoke down through a water chamber into their mouth through hoses. The water cooling effect may increase harm by enabling smokers to inhale smoke deeper into their lungs. A single puff from water tobacco smoking (450ml) is equal to volume of smoke inhaled from an entire cigarette.^[10]

Health Effect:

It increases the level of carbon monoxide (CO) to eight [8] times than the normal level. It delivers 1.7 times nicotine dose of one cigarette and the rate of absorption is equal to 10 cigarettes per day. Carbon monoxide (CO) poisoning includes headache, nausea, lethargy, fainting etc., called "HOOKAH SICKNESS". It damages heart, increases blood pressure and also impairs baroreceptor reflex control.^[10]

Cigar:

A cigar is a rolled bundle of dried and fermented tobacco leaves made to be smoked. It contains three main components: A filler, a binder leaf and a wrapper.

Filler-Bunch of tobacco leaf folded by hand to allow air passage.

Binder-small bunch of tobacco leaf is bound together inside a leaf.

Wrapper-made from fermented tobacco leaf which determines the character and flavor to Cigar.

For every gram of tobacco smoked a cigar emits 120–140 mg of carbon dioxide, 40-60 ng of carbon monoxide, 3-4 mg isoprene and other volatile components.^[11]

Health Effect:

It causes cancer of lungs, oral mucosa, esophagus, pancreas, larynx and heart diseases.^[11]

Cigarillos:

A cigarillo is a short and narrow cigar. They are made without filters and contains 3 gm of tobacco.^[11]

Roll Your Own Tobacco (RYO):

These are hand rolled cigarettes and made with loose tobacco. It contains additives and dangerous chemicals like carbon monoxide, nicotine, tar and nitrosamines.^[12]

Pipe Tobacco:

Oldest traditional form of tobacco smoking. It produces a safe, manipulable volume in which incompletely combustible smoke is produced.^[13]

BIDIS:

They look different than regular cigarettes, but they still pack plenty of nicotine, these are alternative cigarettes made in India. According to Centers of Disease Control and Prevention (CDC) 12.9% of high school students and 4.4% of middle school are reported that they has smoked bidi. It contains 21.2 mg nicotine. These are thin and filled with tobacco flake and wrapped in tender leaf.^[14]

KRETEKS:

These are called clove cigarettes, produced in Indonesia, contains 60 – 80 % tobacco and 20-40% ground clove buds and clove oil. It also contains more nicotine, carbon monoxide and tar. Addition to that it contains "Eugenol", a mild anesthetic, which has a numbing effect.^[15]

Electronic Cigarettes (or) E-CIGARETTES:

It is an electronic device that stimulates tobacco smoking. It consists of an atomizer, battery and a tank. User inhales vapor instead of smoke and hence called "vaping". The atomizer uses a liquid solution called e-liquid. Vapor contains propylene glycol, glycerin, nicotine, nitrosamines, toxicants and carcinogens.^[16]

Health Hazards of Tobacco:

Effect of smoking depend upon the frequency of smoking, duration and also on the concentration of tar content and also on the concentration of tar content in cigarettes and bidis.^[17]

Immediate effects:

Fresh smokers get the feeling of relaxation, sharpness, calmness and alertness. Unpleasant sensation like nausea, cough, dizziness and rapid heartbeat occurs.^[17]

Delayed effects:

Smoking affects every organ in general and respiratory and cardiovascular systems in particular.^[17]

Changes In General:

- **Cardiovascular System** – hardening of blood vessels, increase blood viscosity, arteriosclerosis, increased blood pressure, aneurysm, stroke and paralysis.
- **Respiratory System**-carbon monoxide, cyanide, poly aromatic hydrocarbons damages the alveoli leading to chronic obstructive pulmonary disease and bronchogenic carcinoma.
- **Reproductive System** – In male it reduces blood supply to penis leading to erectile dysfunction and impotency. In females it causes preterm delivery, still birth, low birth weight, sudden infant death syndrome and infertility.
- **Ophthalmic System** – cause macular degeneration leading to blindness and early cataract.
- **Oralcavity**-Stains teeth and gums, halitosis and teeth falls out. Aphthous ulcer and leukoplakia.
- **Gastro-Intestinal System**-Ulcerative colitis, peptic ulcers, inflammatory bowel disease.
- **Bones**-Men who smoke may have more severe knee arthritis and degenerative disorders of spine.
- **Urinarysystem**-cancer of kidney and bladder.
- **Cancer**-It causes cancer of lungs, oral cavity, hypo pharynx, nasal cavity, paranasal sinuses, pancreas, liver, kidney, ureter, uterus, cervix, colorectal and premenopausal breast cancer. ^[18]
- **Hyperkeratosis** – Leukoplakia has a strong association with tobacco smoking particularly, pipesmoking. ^[19] In common all smokers have impaired immune system, a small increase in hematocrit, white blood cell count and platelet count. There is a small decrease in leucocytes, vitamin c, serum uric acid and albumin. ⁽²⁰⁾

Homoeopathy:

Homoeopathy is a form of medical therapeutics discovered by Dr Samuel Hahnemann. It is based on the principle 'Similia Similibus Curenter' – Let the likes be cured by likes. Homoeopathy considers the person has a whole on both physical and mental sphere.

Homoeopathic Management**Avena Sativa:**

Commonly named as Oats, belongs to "poaceae" family. Effective in quitting tobacco smoke and it removes the weakness and itrestorevitality when trying to quit smoking.

Bryonia Alba:

Commonly named as White bryonyorwildhop, belongsto "Cucurbitaceae"family. Coughis dry, hard and very painful at night. Must sit up. Stitches in cardiac region, pulse-quick, harsh. Dryspasmodic, gagging and vomiting. ^[21]

Caladium Seguinum:

Commonly named as American arum, belongs to "Araceae" family. Modifies craving for tobacco. Tobacco

heart, asthma where mucus is not readily raised. ^[21]
Breathing impeded, larynx seems constricted. ^[23]

Camphora:

Commonly named as Camphortree, belongs to "lauraceae" family. Icy coldness of whole body. Suffocative dyspnoea, asthma, violent cough, palpitations, respiration. Arresting of breath. ^[24]

Chamomilla:

Commonly named as Chamomile, belong to "Asteraceae" family. Dry hacking cough. Tickling in pit of throat, causes scraping, dry cough. Worse at night. Small lump of mucus fly from mouth when coughing. ^[25]

DaphneIndica:

Commonly named as Spurgelaurel, belong to "Thymelaeaceae" family. Removes the Craving for tobacco. It is prescribed when severe headache occurs, as if head was separated from the body. Also given, when patient have symptoms like Sleeplessness, Profuse sweat, Burning in stomach and Foetid breath.

Eugenia Jambos:

Commonly named as Rose apple belongs to family "Myrtaceae" Effective in quitting smoking where nausea is predominant symptom which is better by smoking.

Gelsemium Sempervirens:

Commonly named as False jasmine (or) Yellow jasmine, belongs to "Loganaceae". Nervous weakness of cigar makers. Dry cough with sore chest and frequent coryza. Sudden forcible expiration. ^[21]

IgnatiaAmara:

Commonly named as Saint ignatius bean, belongs to "Loganaceae" family. Takes deep breath, dry hawking cough, spasmodic cough, sleepy after cough. ^[21] Cannot bear tobacco, smoking or being in tobacco smoke, produces or aggravate headache. ⁽³⁰⁾

Ipecaceanha:

Commonly named as Ipecac, belongs to "Rubiaceae" family. Looser attling cough, suffocating cough, haemoptysis with rattling cough. Constriction in chest. ^[25] Nausea with profuse saliva. Vomitting of white glary mucus in large quantities without relief. For the primary effects of tobacco. ^[23]

Lobelia Inflata:

Commonly named as Indian tobacco, belongs to "Lobeliaceae" family. Used by individuals to quit smoking and also in treatment of asthma, bronchitis cough, depression, pneumonia and smoking addiction.

Cough and shortness of breath. Senile emphysema. Persons cannot bear smell and taste of tobacco.

Lycopus Virginicus:

Commonly named as Bugle weed, belong to "Lamiaceae" family. Removes palpitation and rapid action of heart seen in smokers. It reduces heart rate and lowers blood pressure.

Nicotinum:

Alkaloid extracted from tobacco. Pale face, loss of appetite. Great aversion to tobacco and tobacco smoking. Difficult breathing and impeded. Dryness and scraping in throat. Pulse and respiration very irregular, sometimes rapid and sometimes sinking, constant sinking of pulse.

Nux Vomica:

Commonly named as Poison nut, belongs to "Loganiaceae" family. Helps in detoxification of toxic material absorbed from tobacco smoking. Headache, vertigo, insomnia are common complaint. Great depression, irritation, stress and anxiety when trying to quit smoking. The symptoms are worse in morning.^[23]

Plantago:

Commonly named as Ribwort, belongs to family "Plantaginaceae". Produces a version to tobacco. Removes the depression, sleeplessness, constipation or diarrhea and nocturnal enuresis is seen in chronic tobacco smokers.

Pulsatilla:

Commonly named as Wind flower, belongs to family "Ranunculaceae". Effective in dry cough, mostly in evening and night. They must sit up to get relief. Shortness of breath with anxiety and palpitation. Expectoration is bland, tough, bitter and greenish.^[2]

Sanguinaria:

Commonly named as Bloodroot, belongs to family "Papaveraceae". Cough with burning pain in chest. Sputum is tough, rust coloured, offensive and impossible to raise. Severe dyspnea and constriction of chest. Offensive breath.^[23]

Spigelia:

Commonly named as West Indian pinkroot, belongs to family "Loganiaceae". Foul odour from the mouth. Violent palpitation and pre-cardiac pain. Pulse is weak and irregular. Pericarditis and dyspnea, they must lie down on right side with head raised.^[23]

Staphysagria:

Commonly named as Louse seeds, belongs to family "Ranunculaceae". Effective for stops craving for tobacco. Controls the madness and lessens the emotions mostly

people facing the quitting period. Prescribed when irritability, hypersensitivity, insomnia, stupefying headaches, a desire for stimulants and itchy skin are seen in tobacco smokers.

Tabaccum:

Commonly named as Tobacco, belongs to "Solanaceae". It is prescribed when there is nausea, death like pallor, vomiting, icy coldness and sweat with intermittent pulse. Also given for incessant nausea from smell of tobacco.^[23]

2. Conclusion

"An atmosphere contaminated with tobacco smoke can contribute to the discomfort of many individuals". Quitting smoking is beneficial for the health and wealth of themselves and also for the members of their family. Hence lead a healthy life by quitting smoking. Homoeopathy not only helps the person to treat the ill effects of tobacco smoking, but it also improves the general health of the person both mentally and physically. It attempts to remove the hereditary, inborn tendency of human wired in our genes.

References

- [1] Tobacco smoking, wikipedia.en.m.wikipedia.org/tobaccosmoking. [cited 2021 sep 22]
- [2] Tobacco-World Health Organization, tobaccocontrol. bmj.com. [cited 2021 sep 22]
- [3] Kelly J. Clemens, Stephanie Caille, Luis Stinus, Martin Cador, Addition of five minor tobacco alkaloid increases nicotine induced hyperactivity, sensitization and intravenous self administration in Rats, International Journal of Neuro-Psychopharmacology, Vol.12, Issue 10. [cited 2021 sep 23]
- [4] Tobacco-World Health Organization, who.int/news-room/factsheets/details/tobacco. [cited 2021 sep 23]
- [5] Substance abuse and mental health services administration, National survey on drug use and health, 2014. lung-org/quitsmoking/smokingfact/tobacco use among children and teens. [cited 2021 sep 23]
- [6] L. Neal. Benowitz, Hoyekanen Janne, Jacob Peyton Etal, Nicotine chemistry metabolism, kinetics and biomarkers, ncbi.nih.gov/pmc/articles. [cited 2021 sep 23]
- [7] Nicotine. wikipedia, en. m. wikipedia.org. [cited 2021 sep 23]
- [8] National Institute Of Drug Abuse, National Institute Of Health, US Department Of Health And Human services, Cigarette, Wikipedia, drugabuse.gov/publication/drug. [cited 2021 sep 23]
- [9] Cigarette, wikipedia.en.m.wikipedia.org/cigarettes. [cited 2021 sep 23]
- [10] Aboaziza. Eiman, Eissenberg. Thomas, Waterpipe Tobacco Smoking, tobaccoatla.org/waterpipe. [cited 2021 sep 23]
- [11] Cigar, wikipedia, en.m.wikipedia.org. [cited 2021

- sep 23]
- [12] Martin. Terry, The risk of rolling tobacco, verywellmind.com. [cited 2021 sep 23]
- [13] Tobacco Pipe, Wikipedia, en.m.wikipedia.org/tobacco-pipe. [cited 2021 sep 24]
- [14] J. L. Malson, E. M. Lee, E. T. Moolchan, W. B. Pickworth, Alternative Cigarettes not safer than regular cigarettes, washington.edu/bidi. [cited 2021 sep 24]
- [15] Martin. Terry, Clove cigarette, verywellmind.com. [cited 2021 sep 25]
- [16] Electronic cigarette, en. m. wikipedia.org. [cited 2021 sep 25]
- [17] Suryakantha. A. H, "Community Medicine with recent advances", 5th edition, Jaypee Brothers medical publishers Pvt. Ltd.,
- [18] pageno: 1008.
- [19] Harrison's, "Principles of Internal Medicine", 18th edition, volume 2, McGraw-Hill profession publishers Pvt. Ltd., pageno: 2736.
- [20] Harrison's, "Principles of internal Medicine", 16thedition, volume2, McGraw-Hill profession publishers Pvt. Ltd., pageno: 2516.
- [21] Robin's "Basic Pathology", 10th edition, Elsevier India Publishers Pvt. Ltd., page no: 546.
- [22] Phatak. S. R, "Materia Medica of Homoeopathic Medicines", 2ndedition, B Jain Publishers Pvt. Ltd., New Delhi,
- [23] pageno: 58, 77, 86, 139, 149, 155, 326, 363, 449.
- [24] Gopi. K. S, "Homoeopathy for tobacco craving or quit tobacco smoking", linkedin.com/pulse/homoeopathy tobacco-craving-quit. [cited 2021 sep 28]
- [25] Boerick William, "Pocket Manual of Homoeopathic Materia Medica & Repertory", 9thedition, 2015, B Jain Publishers Pvt. Ltd., New Delhi, pageno: 142, 629, 353.
- [26] Patil. J. D, "Text book of Applied Materia Medica", 5thedition, B Jain publishers Pvt. Ltd., New Delhi,
- [27] Page no: 414, 417, 419, 476, 492.
- [28] Burt. H. William, "Physiological Material Medica", 3rdedition, B Jain Publishers Pvt. Ltd., New Delhi, Page no: 261, 499.
- [29] Allen Henry. C, "keynotes Rearranged and Classified with Leading Remedies of the Materia Medica and Bowel Nosodes", 10th edition B Jain Publishers Pvt. Ltd., New Delhi, Page no: 67, 92, 94, 154.

Authors Profile



Dr. R. Samaran: Professor & HOD-Organon of Medicine & Homoeopathic Philosophy in RVS Homoeopathy Medical College & Hospital. Had Completed his BHMS from Fr Muller Homoeopathic Medical College, MD (Hom) from Vinayaga Mission Homoeopathic Medical College, PhD (Hom) from Homoeopathy University. A classical Homoeopath and President: Homoeopathy Awareness Association, Coimbatore.



Ms. M. Sowmiya: A dedicated Homoeopathic learner. CRRI, RVS Homoeopathy Medical College & Hospital.