

Anxiety Disorders Among The Nicotine Dependent People And Homoeopathic Treatment.

Dr. Santosh Hande^{1*}, Dr. Yogita Chattopadhyaya², Dr. Sreeshma K³

^{1*}PhD (Homoeopathy) Scholar, Tantia university, Sriganganagar (Rajasthan), India

²Professor, Tantia University Sriganganagar (Rajasthan), India

³M.D. Scholar, Department of Psychiatry, Government Homoeopathic Medical college and Hospital, Bhopal, MPMSU, Madhya Pradesh, India

ABSTRACT

Nicotine addiction is increasingly becoming a widespread concern, with significant health implications. Among the many effects of nicotine, its connection to mental health, specifically anxiety, stands out. While nicotine provides temporary relief from anxiety by acting as an anxiolytic, this short-term effect can lead to dependency. As users rely on nicotine to manage stress, they become trapped in a vicious cycle: nicotine alleviates anxiety briefly, but dependency eventually increases anxiety, creating a loop where anxiety and nicotine consumption reinforce each other. Nicotine withdrawal can further complicate this relationship. When attempting to quit, individuals often experience heightened anxiety, which may drive them back to smoking or vaping. However, research shows that long-term cessation leads to reduced anxiety levels, highlighting the importance of overcoming initial withdrawal symptoms. There is also some evidence from homeopathic medicine suggesting it can help manage both nicotine dependency and related anxiety. In homeopathy, treatment is tailored to each patient, focusing on the totality of symptoms and the individual's unique experience. By addressing the broader spectrum of symptoms rather than just the nicotine addiction itself, homeopathy aims to bring more holistic relief.

KEY WORDS: Nicotine Dependency, Anxiety, Homoeopathy

INTRODUCTION

Dependency on nicotine arises from a craving for the products and an inability to give it up. The ingredient in tobacco that makes quitting difficult is called nicotine. Brain experiences pleasurable benefits from nicotine, a plant alkaloid stimulant that is extremely addictive. But these effects wear off quickly. That's why they grab a second cigarette. Any level of tobacco use can swiftly cause nicotine dependence in some people. They go through uncomfortable bodily and mental changes when try to stop. These are signs of withdrawal from nicotine. Strong cravings, anxiety, impatience, restlessness, problems concentrating, low mood, frustration, rage, increased appetite, insomnia, constipation, or diarrhea are just a few of the physical and emotional symptoms that have resulted from his attempts to quit.⁽¹⁾ Nicotine has an instantaneous anxiolytic effect. You could, however, find that you need to use nicotine frequently in order to assist you deal with daily stress because this impact is only momentary. Addiction to nicotine may result from this. In the short term during recovery, nicotine withdrawal from quitting smoking might cause anxiety or exacerbate it. However, giving up smoking has been shown to eventually lower anxiety levels.⁽²⁾ The link between nicotine addiction and anxiety disorders will be the main topic of this paper, along with potential homeopathic remedies.

According to data from the 2010 Global Adult Tobacco Survey (GATS) in India, 35% of individuals there reported using tobacco in some capacity. 21% of the adults among them exclusively used smokeless tobacco, 9% only smoked, and 5% both smoked and used smokeless tobacco. Overall, tobacco usage is significantly higher among Indian men (48%), but it is also a major worry among females (20%). The most popular smokeless tobacco product in India is called khaini, or tobacco lime mixture (12%). It is followed by gutka, or a mixture of tobacco, lime, and areca nut, (8%) and betel quid with tobacco (6%). The most popular smoking product is bidi (9%) and is followed by hukkah (1%), and cigarette (6%).⁽³⁾

Nicotine is the substance most frequently linked to dependency, even though cigarette smoke contains a variety of other dangerous substances, including cotinine, tar, hydrogen cyanide, tobacco-specific nitrosamines, carbon monoxide (CO), and polycyclic aromatic hydrocarbons. Because nicotine in cigarettes is psychotropic, it causes neuroadaptation, which increases cigarette consumption by causing dependence.⁽⁴⁾

Nicotine activates the brain's mesolimbic system's dopaminergic pathways, which are engaged in support of other medications that are abused. Nicotine binds to the brain's nicotinic acetylcholine receptors (nAChRs), which releases dopamine and other neurotransmitters that cause neural activation and behavioural arousal. Dopamine, norepinephrine, and serotonin release are linked to both appetite control and happy emotions.

Nicotine use is linked to an excess of acetylcholine being released, which is connected with enhanced focus, heightened awareness when performing repetitive tasks, and enhanced memory.⁽⁵⁾ But by producing dependence it develops anxiety

which is in turn relieved by consuming nicotine, which is a vicious cycle thus develops. Further get complicated by withdrawal symptoms after the cessation of its use.

Data from the Centers for Disease Control and Prevention (CDC) Trusted Source shows an association between anxiety and tobacco use. In 2020, 45% of individuals with severe anxiety reported using tobacco, compared with 30% of people with mild anxiety and 18% of people with little to no anxiety. ⁽²⁾

Numerous epidemiological studies based on population data have shown that smoking is associated with higher incidence of both mental illness and smoking among those with mental illness. In particular, compared to non-anxiety disorder control groups, anxiety disorders have been linked to higher smoking rates, higher cigarette consumption per smoker, and worse rates of smoking cessation. ⁽⁶⁾

Three interactions that are not mutually exclusive could account for the association between anxiety disorders, smoking behaviour, and nicotine dependence (ND). First of all, smoking and/or nicotine dependence may make an anxiety disorder more likely to occur. Possible explanations for this could include the detrimental effects of smoking on neurodevelopment and neurotransmitter pathways that modulate anxiety, which could predispose people to developing enhanced anxiety, or direct effects on the autonomic and respiratory systems, which could change how the body reacts to situations that cause anxiety. Second, smoking behaviour and the chance of developing nicotine dependence may be elevated by anxiety disorders. Some possible explanations for this could be that those who experience higher levels of anxiety are more likely to start smoking or to use cigarettes as a form of self-care anxiolytic. Thirdly, a shared vulnerability factor or set of characteristics that raise the risk of smoking, nicotine dependence, and anxiety disorders development may be the foundation of the association. ⁽⁶⁾

A proven dose-dependent link would bolster the idea that smoking cigarettes causes the emergence of anxiety disorders later on. Breslau showed that, in a dose-dependent manner, more standardized pack years of smoking were linked to higher odds of GAD. ⁽⁷⁾ Compared to other anxiety disorders, the relationship between panic, Parkinson's disease (PD), and cigarette smoking has been the subject of more research in epidemiological and laboratory-based investigations; the available data was recently evaluated. The research has shown that smoking cessation at a younger age is linked to an increased risk of Parkinson's disease (PD), and smokers showed an earlier beginning of PD than non-smokers. ⁽⁸⁾ Some researches support the notion that nicotine dependence increases the likelihood of developing PTSD later in life. ⁽⁶⁾ Smoking may be more prone to cause panic-type anxiety disorder symptoms due to the physical effects of smoking (such as respiratory and autonomic disruption), given the somatic nature of panic attack symptomatology. Respiratory sensitivity affects panic, and nicotine modifies cholinergic respiratory neurons' sensitivity set point. ⁽⁹⁾

After reviewing the literature, Cosci et al. identified three possible theories to explain the link between fear and cigarette smoking. The moderational model states that neuroticism moderates the association between smoking and fear. The second is a "pathoplastic model," in which smoking 'exacerbates affective disturbances and negative health process' ⁽¹⁰⁾ thereby influencing the expression of Parkinson's disease (PD). This model combines acute physiological effects (like increased noradrenaline and autonomic sensations) with direct negative health effects (like the induction of chronic obstructive pulmonary disease (COPD)) and negative self-perception of health status. ⁽¹¹⁾ The results of empirical research are summarized in a paper that suggests the following: smoking and panic disorders frequently co-occur; smoking is a risk factor for panic attacks and panic disorder and may help to maintain them; premorbid panic-specific vulnerability variables and full-blown panic disorders are linked to coping-oriented smoking motives and possibly to the maintenance of smoking behaviour. ⁽¹¹⁾

To determine whether nicotine dependence, categorized by severity, was linked to major depression, anxiety disorders, and other substance dependence, a study was carried out on a random sample of 1007 young adults in the Detroit (Mich) area using the National Institute of Mental Health Diagnostic Interview Schedule, which was updated in compliance with DSM-III-R. Individuals with nicotine dependency showed increased rates of major depressive disorders and anxiety disorders even after accounting for the impact of other substance dependencies. The degree of nicotine dependency affected the intensity of these connections. ⁽¹²⁾

In conclusion the relationship between anxiety and nicotine involves a negative feedback loop. Nicotine lowers anxiety levels because it is an anxiolytic medication. As a result, those who experience higher amounts of anxiety could be more inclined to utilize it to control their mood. They might eventually grow reliant on nicotine as a coping mechanism for daily stress. Without nicotine, they may experience withdrawal and increased anxiety, which are hallmarks of severe nicotine addiction. ⁽²⁾

HOMOEOPATHIC MEDICINES FOR ANXIETY DISORDERS

Aconitum napellus :- The most used medication for treating anxiety is aconite. The main signs that it should be used are anxiety coupled with obvious panic, fear, trembling, and restlessness. Those that require it move around and shift positions while sitting down. This can cause a string of negative ideas to enter your head and cause you to start sweating. It is also the most effective homeopathic medication for treating panic episodes associated with severe anxiety, palpitations, and a strong fear of dying. ⁽¹³⁾

For past trauma survivors who are more likely to experience panic episodes in the future. It could manifest as dry lips, dry skin, elevated heart rate, etc. Patients with anxiety, restlessness, and other symptoms that manifest quickly and forcefully can benefit from this.⁽¹⁴⁾

Argentum nitricum :-It relieves nervousness before performing on stage and stops panic attacks, which are abrupt bouts of fear and worry. Aids in treating a variety of phobias, including those related to heights, flying, swimming, exams, darkness, crowds, etc. In addition to diarrhea, anxiety can also cause cravings for sweets.⁽¹⁴⁾

Arsenicum album:-An excellent treatment for obsessive-compulsive disorder in anxiety . anxiety with extreme restlessness. The limbs are chilly and heavily perspiring. The patient can be afraid of illnesses and germs.⁽¹⁴⁾

Calcarea carb:- People who are prone to feeling overwhelmed by physical ailments or excessive workloads. The patient has a strong sweet tooth, is easily tired, and is quite cold.⁽¹⁴⁾

Gelsemium :- Anxiety as a result of inadequate feelings. People are inherently cautious and bashful. Additionally, a patient may develop agoraphobia. Stays away from public speaking and crowds. When you are experiencing exam anxiety or test blues, this is the most effective treatment.⁽¹⁴⁾

Ignatia:- Anxiety resulting from unexpected loss and sadness is Ignatia. The patient exhibits abrupt mood swings from happiness to sadness and is highly sensitive. In the event of depression, Ignatia Amara is also prescribed. Post-traumatic stress disorder and panic disorder are treated by it.⁽¹⁴⁾

Kali ars :-is prescribed for patients with health-related anxiety, especially those with hypochondria. It was also given to someone who experiences irregular sleep, restlessness fear of death and dying, and heart attacks. The patient is susceptible to panic and cold attacks.⁽¹⁴⁾

Kali Phos :- Patient feels overwhelmed by illness or overwork and is deeply anxious about not being able to handle things. They are extremely jittery and overly sensitive. Aggravation from thinks about the outside world or hears any bad news. Amelioration food, rest, and warmth.⁽¹⁴⁾

Lycopodium :- Anxiety in people who are not confident in themselves. The patient is afraid to talk in front of others. It helps with claustrophobia, agitation, and digestive issues like bloating and indigestion. A person has intense cravings for sweets.⁽¹⁴⁾

Phosphorus :- Administered to socially anxious individuals. The individual is highly tense and perceptive, imaginative, enthusiastic, open-minded, etc. Common symptoms include thirst, palpitations, and easily flushing of the face.⁽¹⁴⁾

Pulsatilla :-Childish anxiety .It helps ease anxiety throughout periods of hormonal transition, including puberty, menstruation, and menopause. Anxiety, which frequently manifests as insecurity. When a patient feels warm or hot, anxiety increases.⁽¹⁴⁾

Silicea:-Experiences severe anxiety related to public appearances, exams, interviews, new jobs, etc. Patients with anxiety, fatigue easily, low energy, and sleeplessness should use silicea. It helps those who struggle with self-doubt and public speaking anxiety.⁽¹⁴⁾

Stramonium :- Anxiety related to dark thoughts and night terrors. People are anxious when they are alone themselves or in the dark. They're thinking about monster.⁽¹⁴⁾

Calcarea phos :- Fear of one's own health and that of others. He wanders around because he will be restless. Fears include those of hearing bad news, cancer, heart problems, and darkness. This is beneficial for anxiety disorders. Anxiety chill throughout salvation anxiety, anxiety while you're sleeping. Fear of the dark and the night will exist. They are agitated, rushing, and fidgeting in bed.⁽¹⁵⁾

Spigelia :- Useful in anxiety disorders .Fear in open air , snakes, evils. Anxiety about future,bad breath coming from the lips⁽¹⁶⁾

HOMOEOPATHIC MEDICINES FOR TOBACCO / NICOTINE ADDICTION

Caladium: one of the best treatments for tobacco cravings, encourages an aversion to tobacco, While smoking causes nausea or vomiting. Fear of motion, headaches, memory loss and dyspnea. The symptoms improve after sleeping and get worse with movement. The symptoms improve with warmth and are worse at night and when moving.⁽¹⁷⁾

Daphne: Reducing for tobacco cravings, along with Caladium. Its symptoms include foetid breath, sleeplessness, a bursting headache, twitching, and a searing sensation in the stomach. ⁽¹⁷⁾

Eugenia: Sometimes a patient will experience sickness that is soothed by smoking, making it difficult for them to stop. In this situation, eugenia can be quite helpful. ⁽¹⁷⁾

Plantago :- In its mother tincture form, plantago has been proven to cause an aversion to tobacco and is advised for "nicotinism,". ⁽¹⁷⁾

Staphysagria:- Is characterized by a number of leading symptoms, including as irritability, worry, anxiety, and concerns about one's own and other people's health, sleeplessness, stupefying headaches, a need for stimulants, including nicotine, and itchy skin. ⁽¹⁷⁾

Tabacum :- Aid in the removal of toxins found in tobacco smoke for reducing tobacco craving. Cold extremities, early-morning headaches, indigestion, palpitations or vertigo, prostration, hypertension, dizziness, nausea, confusion, and lack of focus. Slow motion and worsening at night, better during the day, are the symptoms. ⁽¹⁷⁾

Lobelia inflata: (Indian tobacco), used to help people stop smoking as well as cure conditions like depression and smoking addiction. People find tobacco's taste and smell intolerable. ⁽¹⁶⁾

Lycopus virginicus:- It eliminates the fast heartbeat and palpitations that smokers experience. It lowers blood pressure and heart rate. ⁽¹⁶⁾

Nicotinum: is an alkaloid that is found in tobacco. This medication causes appetite loss and a pale face, strong dislike of tobacco use and smoking. ⁽¹⁶⁾

HOMOEOPATHIC MEDICINES FOUND USEFUL IN BOTH ANXIETY DISORDERS AND TOBACCO CRAVING

Arsenicum: can ease the symptoms of chewing tobacco, such as irritable heart syndrome in those who are addicted on nicotine. Beneficial for older people experiencing night time discomfort and anxiety. Degenerative alterations that could lead to cancer will occur. Anxiety will be present, particularly when you're sleeping, and it will worsen after midnight. They travel about because of their agony. Arsenic also causes vexation, anxiety of dying, and fear of being alone. ⁽¹⁵⁾

Aconite: is a good remedy for treating tobacco craving. Anxious dreams and nightmares, vertigo, headaches (accompanied by a boiling sensation short, dry, croupy cough, tickling in the throat, and chest pain brought on by coughing can all be effectively treated with Aconite. The symptoms are greater at night and after midnight. ⁽¹⁷⁾

Numerous illnesses brought on by tobacco usage can be treated with homeopathy. Petroleum or Sepia are two remedies that a homeopath could recommend if tobacco. smoking significantly increases anxiety. ⁽¹⁸⁾

If all of the ailments are related to snuff inhalation, silicea may be taken into consideration. ⁽¹⁸⁾

CONCLUSION

An increasing number of people are concerned about nicotine addiction. Nicotine's link to mental health, particularly anxiety, stands out among its numerous other impacts. Although nicotine works as an anxiolytic to temporarily reduce anxiety, this short-term impact might result in reliance. Users who depend on nicotine to cope with stress end up in a vicious circle whereby nicotine temporarily reduces anxiety but eventually causes dependency, which feeds the cycle of anxiety and nicotine usage. Additionally, there is some evidence from homeopathic medicine that it can assist treat anxiety connected to nicotine use. There are many options for treating anxiety and nicotine addiction using homeopathy. However, the choice of medication depends on how similar the symptoms are in order to achieve a permanent cure.

REFERENCES

1. Dependence [Internet]. Mayo Clinic. 2022 [cited 2024 Jul 22]. Available from: <https://www.mayoclinic.org/diseases-conditions/nicotine-dependence/symptoms-causes/syc-20351584>
2. Lillis C. Nicotine and anxiety: Connections, feedback, treatments, and more [Internet]. Healthline. 2024 [cited 2024 Jul 14]. Available from: <https://www.healthline.com/health/anxiety/nicotine-and-anxiety>
3. Gov.in. [cited 2024 Jul 22]. Available from: <https://ntcp.mohfw.gov.in/assets/document/Guideline-manuals/Tobacco-Dependence-Treatment-Guidelines.pdf>

4. Sugavanesh P, Pushpanjali K. Nicotine dependence, its risk indicators, and exhaled carbon monoxide levels among the smokers in Bengaluru, India. *Indian J Community Med* [Internet]. 2018 [cited 2024 Jul 14];43(3):220. Available from: http://dx.doi.org/10.4103/ijcm.ijcm_98_18
5. Bala R, Srivastava A. Role of homoeopathy in tobacco addiction- A narrative review [Internet]. *Ijrrjournal.com*. [cited 2024 Jul 14]. Available from: https://www.ijrrjournal.com/IJRR_Vol.7_Issue.3_March2020/IJRR0040.pdf
6. Moylan S, Jacka FN, Pasco JA, Berk M. Cigarette smoking, nicotine dependence and anxiety disorders: a systematic review of population-based, epidemiological studies. *BMC Med* [Internet]. 2012;10(1). Available from: <http://dx.doi.org/10.1186/1741-7015-10-123>
7. 7.Google Scholar [Internet]. Google.com. [cited 2024 Jul 14]. Available from: https://scholar.google.com/scholar_lookup?journal=Psychol+Med&title=Daily+smoking+and+the+subsequent+onset+of+psychiatric+disorders&author=N+Breslau&author=SP+Novak
8. 8.Cosci F, Knuts IJE, Abrams K, Griez EJJ, Schruers KRJ. Cigarette smoking and panic: A critical review of the literature. *J Clin Psychiatry* [Internet]. 2010;71(05):606–15. Available from: https://www.psychiatrist.com/wp-content/uploads/2021/02/11586_cigarette-smoking-panic-critical-review-literature.pdf
9. 9.Coddou C, Bravo E, Eugenín J. Alterations in cholinergic sensitivity of respiratory neurons induced by pre-natal nicotine: a mechanism for respiratory dysfunction in neonatal mice. *Philos Trans R Soc Lond B Biol Sci* [Internet]. 2009;364(1529):2527–35. Available from: <http://dx.doi.org/10.1098/rstb.2009.0078>
10. Zvolensky MJ, Schmidt NB, McCreary BT. The impact of smoking on panic disorder: *J Anxiety Disord* [Internet]. 2003;17(4):447–60. Available from: [http://dx.doi.org/10.1016/s0887-6185\(02\)00222-0](http://dx.doi.org/10.1016/s0887-6185(02)00222-0)
11. Zvolensky MJ, Bernstein A. Cigarette smoking and panic psychopathology. *Curr Dir Psychol Sci* [Internet]. 2005;14(6):301–5. Available from: <http://dx.doi.org/10.1111/j.0963-7214.2005.00386.x>
12. Breslau N. Nicotine dependence, major depression, and anxiety in young adults. *Arch Gen Psychiatry* [Internet]. 1991 [cited 2024 Jul 14];48(12):1069. Available from: <https://jamanetwork.com/journals/jamapsychiatry/article-abstract/495583>
13. Homeopathic Remedies for Anxiety- top Homeopathic remedies for anxiety [Internet]. Homeopathy at Drhomeo.com. 2022 [cited 2024 Jul 14]. Available from: <https://www.drhomeo.com/anxiety/homeopathic-remedies-for-anxiety/>
14. 14,12 homeopathic remedies for anxiety - causes & best medicine [Internet]. Plank Homeopathy. 2022 [cited 2024 Aug 16]. Available from: <https://plankhomeopathy.com/blog/homeopathic-remedies-for-anxiety/>
15. Synthetic Materia Medica of MIND from MacRepertory by Dr.Hari Singh and Dr.(Mrs) Asha Hari Singh
16. Me A. Tobacco smoking and homoeopathy [Internet]. Homeopathy Resource by Homeobook.com. Homeobook; 2022 [cited 2024 Jul 22]. Available from: <https://www.homeobook.com/tobacco-smoking-and-homoeopathy/>
17. Senapati S. Homoeopathy for tobacco craving [Internet]. Practo.com. Practo; 2017 [cited 2024 Nov 20]. Available from: <https://www.practo.com/healthfeed/homoeopathy-for-tobacco-craving-27409/post>
18. Vaishnav V. Homeopathy for tobacco abuse [Internet]. Drvaishnav.com. 2009 [cited 2024 Jul 14]. Available from: <https://drvaishnav.com/Blog/homeopathy-for-tobacco-abuse/>