

## **TOBACCO ADDICTION CONTROL AND CESSATION**

( <https://youtu.be/xJ8kh26DW4Y> )

**Addiction** is a complex chronic condition marked by substance or behaviours that continues despite negative outcomes.

Addiction leads to

- impaired control over substance
- preoccupation with the substance
- dependency on something that is physically or psychologically habit forming
- abnormally strong craving for the object or desire
- need for immediate gratification
- use despite knowing negative consequences
- denial

Tobacco is the most commonly and legally available substance which results into addiction causing many health hazards eventually leading to death.

It was primarily used for medicinal purposes by the native americans. Then it spread world wide. Currently india and china leads in tobacco production and its consumption.

Tobacco is used in various forms

- smoking form i.e. cigarettes, cigars, pipes, beedis etc.
- smokeless form i.e. tambakhu, gutakha, kharra etc.
- snuff
- paste

### **Factors leading to tobacco addiction**

- Immitation : Usually the kids see the family members using the tobacco and try to immitate them.
- Role models : Youth looks at social media influencers and movie stars as their role models. So when they see their role models using tobacco they start to copy them leading to addiction.
- Curiosity : Sometimes its just out of curiosity about the substance and its effect, one starts using it and ends up getting addicted to it.
- Peer pressure : Out of peer pressure in social group whether its with friends or colleagues, just to fit in or because its hard to say no people start using tobacco.
- Low self esteem : To overcome low self esteem one seeks the help of addiction
- Stimulation effect : Tobacco has a stimulation effect on brain. So just to relax one might start the use of tobacco and become dependent on it.
- Associated with other addictions like alcohol.

### **Chemicals present in tobacco**

More than 4000 poisonous chemicals are present in smoking forms of tobacco while more than 3000 poisonous chemicals are present in smokeless that is chewing form of tobacco.

There are more than 200 carcinogens which are responsible for causing cancer. These are polycyclic aromatic hydrocarbons.

### **Health hazards**

*Cardiovascular disorders* - Smoking damages the entire cardiovascular system. Nicotine causes blood vessels to tighten restricting the blood flow. It can lead to coronary heart diseases , increasing the risk of heart attack.

*Lung disorders* – COPD ( Chronic Obstructive Pulmonary Disease ), tuberculosis, cancer

*Precancerous conditions* - Tobacco use causes certain precancerous lesions in oral cavity which can lead to cancer if not treated in time. These lesions are leukoplakia ( white patches on the oral mucosa ), erythroplakia ( red patches on oral mucosa), smoker's palate ( harden white palate with brown spots on it ), OSMF (Oral SubMucous Fibrosis).

*Cancers* – Oral cancer ( 90% ) , cancer of larynx (95%), cancer of lungs (90%), oesophagus, stomach, pancreas, colon , urinary bladder, kidney, uterine cervix, breasts are associated with tobacco use directly or indirectly.

48% cancers in male and 20% cancers in females in India are associated with tobacco use.

*Diabetes*- People who smoke have higher risk of belly fat which increases the risk for type 2 diabetes

*Hypertension* – Smoking may raise the blood pressure and accelerate the heart rate.

*Covid 19* – Smoking tobacco impairs the lung function which makes it hard to recover from covid 19 virus.

20 lac deaths occur every year due to the tobacco addiction in India and 8 million deaths around the globe each year.

### **Passive smoking**

Passive smoking means breathing in other people's tobacco smoke. It can happen when someone is in the company of a smoker or even if standing near by smokers.

Passive smoking can also have ill effects on the body such as cold , bronchitis , pneumonia, ear infections, increase in severity and episodes of asthma , cancers ( leukemia, lymphoma, brain tumors ).

### **Mechanism of nicotine addiction**

Nicotine travels through blood stream to the brain where it crosses blood brain barrier through specific nicotinic acetylcholine receptors . It stimulates presynaptic acetylcholine receptors there by enhancing Ach release and metabolism. Dopaminergic systems also stimulated by it, thus increasing the concentration of dopamine in nucleus accumbens. This might be responsible for behavioural changes and causing dependency to nicotine.

### **Conditional effects**

Most of the times the habit is associated with various things and it becomes a conditioned behavior. It can be associated with

- Tea/ coffee : they will have a smoke while drinking tea or coffee and they might take tobacco after drinking
- Toilet : some people get conditioned in a way that they can not pass the stool without tobacco use. Its just a psychological dependency.
- Meal : some addicts will use tobacco after each meal.
- being free : whenever they get free time they will engage themselves with tobacco use.
- Some location / Shop : particular locations or shops make them use tobacco
- Night : some might have habit of smoking tobacco during the night to calm themselves before sleep or they might use insomnia as an excuse for using tobacco.

### **Nicotine dependence syndrome**

It is a chronic , relapsing disease defined as a compulsive craving to use tobacco despite social consequences, loss of control over drug intake , and emergence of withdrawal symptoms.

### **Tolerance**

Nicotine tolerance results from adaptation to the effects of nicotine where responses diminish or fall after repeated nicotine consumption or where greater nicotine dosages are required to achieve the same magnitude of response.

## **Stages of addiction**

### *1. Experimental stage*

It is the voluntary use of the substance . It might be just to try the substance out of curiosity or out of peer pressure , thinking about it as a one time thing.

They may not progress to next stage and they might quit easily without experiencing any withdrawal symptoms. But this stage opens the door to the downward spiral of addiction.

### *2. Recreational stage*

At this stage physical dependence begins. Use of the tobacco becomes often.

There will be a mild desire for the substance which will be short lived and can be ignored.

The thoughts of the person are not intruded at this stage.

### *3. Early dependence*

At this stage the desire is persistent, hard to ignore.

Daily usage is maintained.

Adopts to addictive lifestyle without thinking of the surrounding. Person starts to justify dangerous behaviour and outcomes of the addiction.

### *4. Full dependence*

At this stage desire is urgent and compulsive, it is impossible to ignore.

Person needs tobacco to function normally.

Experiences severe withdrawal symptoms which can not be ignored.

The person can be self destructive.

## **Quitting processes**

*Cold turkey* – it is a quick fix method to quitting tobacco, alcohol or drugs. In this method the person has to stop the use immediately. This can lead to uncomfortable withdrawal symptoms and powerful urge to start using the substance again.

*Gradual reduction* - It means reducing the number of cigarettes smoked or frequency of tobacco consumption to zero over a period of time. This method involves setting a goal for each week and gradually tapering the number.

## **STAGES OF QUITTING**

### **1. Pre-contemplation**

At this stage people are not really thinking about quitting and if challenged they will probably defend their addiction.

### **2. Contemplation**

During this stage they start considering to quit the habit sometime in near future. They are more aware of the ill effects of their addiction. They are more positive towards quitting

### **3. Preparation**

At this stage they have made their mind to quit and they are getting ready to quit with baby steps by reducing the frequency.

### **4. Action**

Now at this stage, people are actively trying to stop the addiction with self motivation and support from friends and family. This stage lasts upto six months.

### **5. Maintenance**

Former addicts have now learned to anticipate and handle temptations and are able to use coping mechanisms.

## **Intervention technique**

@ *Five A's useful for the therapist*

*Ask* - Ask the person about his addiction

*Advise* – Advise the person about benefits of quitting the tobacco use.

*Assess* - Assess the person's will to quit the habit.

*Assist* – Assist the person to quit the habit with the help of friends and family members.

*Arrange* - Arrange the follow ups. Track the records . Be available for the person in case of relapse.

@ 4 D's these are helpful ways to stay away from the tobacco when the craving arises

*Drink* - Drink water

*Delay* - Delay the urge as much as possible

*Distract* – Distract yourself with some work or music or some other activity

*Deep Breathing* - Take deep breaths to calm your urges to use the tobacco

@ *Tobacco Diary*

Maintain a daily recording of your urges for the tobacco during the day and the way you cope up with it . It will give you an insight about your progress and it will motivate you.

@ *Substitution*

It is to overcome with the tobacco associated psychological dependencies

- *avoid caffeinated drinks to correct insomnia*
- *have a fibre rich diet to avoid constipation*
- *exercise regularly and eat healthy to keep the body in shape*
- *practice relaxation techniques to deal with anxiety*

@ *Social skills*

*Assertive skills* - these are to help you express yourself effectively and stand up for your point of view while respecting the rights and beliefs of others. These are helpful to deal with peer pressure.  
*Learn to say "NO"*.

@ *Nicotine Replacement Therapy ( NRT)*

- *Nicotine gums*
- *Nicotine patches*
- *Lozenges*
- *Nasal Spray*
- *Nicotine Inhaler*

@ *Pharmacological Intervention*

*Bupropin and Varenicline* are the drugs used for cessation. These are antidepressants.

They can be prescribed by medical practitioners.

@ *Support groups*

Virtual that is through multimedia or in person support groups are helpful in the process of quitting and staying away from tobacco. Other people's experiences can motivate to quit and stay tobacco free.