

# Smokeless Tobacco use can be Fatal

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## Abstract

Smokeless tobacco products are addictive and may also increase the risk of fatal heart attack, fatal stroke and certain cancers. Smokeless tobacco products have taken a backseat to smoking for decades, but are recently gaining ground in overall usage and use among young people due to aggressive marketing and new product development. Smokeless tobacco includes chew, spit, dip, snuff and a host of new dissolvable products. They are simply not a safe alternative to smoking and they can be as addictive as, or more addictive than cigarettes. Smokeless tobacco causes many significant health problems, including several types of cancer.

**Keyword:** Smokeless Tobacco; Fatal.

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## Introduction

According to WHO estimates, about 194 million men and 45 million women use tobacco in smoked or smokeless form in India [1]. There are approximately 5 million deaths due to tobacco consumption annually which is expected to reach 10 million by 2025. Currently over 20% of worldwide tobacco related mortality occurs in India [2].

Over time, smokeless tobacco products have gained popularity in the throughout the world. Smokeless tobacco is consumed without burning the product, and can be used orally or nasally. Oral smokeless tobacco products are placed in the mouth, cheek or lip and sucked (dipped) or chewed. Tobacco pastes or powders are used in a similar manner and placed on the gums or teeth. Fine tobacco powder mixtures are usually inhaled and absorbed in the nasal passages [3].

The nature of chewable areca nut and tobacco consumption in India has undergone a rapid transformation with the introduction of Pan masala and Gutka. These products are conveniently packed and aggressively advertised and marketed. Smokeless tobacco consumption, in India, shows a wide variation in different geographical areas and socioeconomic groups [1].

Easy affordability, lesser cost and misconceptions regarding its useful health effects are important contributory factors for increased smokeless tobacco consumption [4].

The prevalence of and dependence on areca nut use in India is increasing rapidly, in the form of consumption of pan masala, especially by the youth. This is in contrast to earlier forms of use with betel quid and mainly on social occasions. Pan masala is easily available in both rural and urban areas, and there are no age bars to the purchase and use of this substance [5].

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## *Types of Smokeless Tobacco*

Presently there are two chief kinds of smokeless tobacco that are available, namely chewing tobacco and snuff. Chewing tobacco is obtainable as loose leaf, plug, or twist. Snuff is available in the form of finely crushed tobacco that can be dry, moist, or in

sachets that resemble tea bag-like pouches. Generally, certain types of snuff can be made use of through sniffing or inhaling into the nose. However the majority of smokeless tobacco users put the substance in their cheek or between their gum and cheek. After sucking on, the tobacco users spit out the tobacco juices [6].

### *Health Problems of Smokeless Tobacco*

Some people have the habit of chewing tobacco frequently, while most people practice cigarette smoking. Both the forms of tobacco use cause many dangerous health problems. In the United States, the use of tobacco accounts for one in five deaths from lung cancer, cardiovascular and respiratory diseases.

The smoking facts reveal that tobacco smoke increases the risk of cardiovascular diseases. It consists of a high amount of carbon monoxide, which decreases the level of oxygen in the blood. The vital organs like brain, heart and lungs are deprived of sufficient oxygen, which affects their functioning.

People addicted to smoking are at a higher risk of high blood pressure, heart attack, aortic aneurysm, blood clots, hemorrhages and other cardiovascular diseases. Cigarette smoking increases the levels of triglycerides and clotting factors and reduces the levels of HDL cholesterol in the blood, leading to coronary heart diseases, stroke, cerebrovascular diseases and atherosclerotic peripheral vascular diseases.

Chewing tobacco increases the risk of oral health problems such as periodontal disease, mouth ulcers, candidiasis, oral lesions, oral leukoplakia, gingivitis, brown staining and sticky tar deposits in teeth, tooth decay, tooth abrasion, altered taste and bad breath. It can also lead to lip cancer, sore throat as well as a burning sensation on the tongue and lips [7].

Chronic obstructive pulmonary diseases (COPD) such as chronic bronchitis and emphysema can also result from smoking. Some other diseases caused by tobacco are peptic ulcers, asthma, pneumonia, diabetes, cataracts, acute myeloid leukemia, chest infections, tuberculosis, Crohn's disease, multiple sclerosis and diabetic retinopathy. Due to smoking, the level of vitamin A in the body is reduced, which can lead to early aging [8].

Tobacco use during pregnancy causes hazardous effects on the health of both, the pregnant woman and her baby. There is an increased risk of miscarriages as well as pregnancy-related complications like ectopic pregnancy, bleeding and

premature birth. There is also a possibility of low birth weight baby or stillbirth [9]. People, especially infants and children who come in contact with the smokers may also suffer from the passive effects of smoking. They may become more susceptible to respiratory problems like asthma and various infections of the throat and nose. There is also a higher risk of sudden infant death syndrome [10].

### *Besides These, Smokeless Tobacco Leads to the Following Problems*

- a. *Erodes Tooth:* The ingredients of tobacco consist of gravels, sand, and other harmful chemicals that erode the enamel of tooth. Continuous chewing leads to early loss of tooth.
- b. *Early Decay of Tooth:* Chewing leaves small particles in tooth that forms bacteria and plaque, it harms enamel and gums, which leads to decay of tooth.
- c. *Gum slump:* Chewing leads to decomposing of gums, the gums get infected and the grip on tooth loosens which exposes the sensitive area of tooth.
- d. *Bad Breath:* There is nothing as bad as bad breath of a person they are major turn off for people around them. The long-term habit of chewing and spitting is unacceptable and looks indecent.
- e. *Affects Eating Habit:* Eating habit of people who chews tobacco tends to be unhealthy, continuous chewing affects the taste bud and the sensitivity of them decreases. This leads to an increase in intake of more salt, sugar and spices in food as he feels a bland taste in his mouth<sup>[11]</sup>.
- f. *Spitting/drooling:* Because of the smokeless tobacco, the mouth makes saliva and needs to spit tobacco out the tobacco juice from time to time.
- g. *Tooth stains:* While not all smokeless tobacco users get bad tooth stains, many have stained teeth in the area where they hold smokeless tobacco in their mouth<sup>[11]</sup>.

### *Smokeless Tobacco Not an Alternative to Cigarettes*

Smokeless tobacco is a major health hazard, and is not considered a reliable alternative for smoking cigarettes. Twenty eight cancer-causing agents, also referred to as carcinogens, are present in smokeless tobacco. They enhance the threat of cancer of the oral cavity. Complications related to oral health are closely connected with smokeless tobacco use such

as leukoplakia, a lesion of the soft tissue that comprises a white patch or plaque that cannot be scraped off, and extensive damage to the gums. Smokeless tobacco use can result in addiction to nicotine and dependence on it. Adolescents who are hooked to smokeless tobacco are more prone to become cigarette smokers [12].

#### *Anti Tobacco Chewing Measures and Campaigns*

There has been a wave worldwide against the use of tobacco. There are various forums, centers, associations and organizations that are fighting against the use of tobacco. These institutions campaign against it and spread awareness among people who are addicted to them. These campaigns are very helpful in spreading the information about tobacco and its fatal effect. There has been an effective measure taken against tobacco, which comprises:

- Tobacco in any form is banned at public places
- Advertisements of tobacco and tobacco carrying product reduced or banned
- Rules and regulations on the use of harmful chemicals in tobacco
- Increase tax on them
- Restrict sale of tobacco to minors
- Put warnings and dangers on the tobacco products
- Ban of smoking in movies and TV
- Display of pictures and case study of people who suffered from effects at public places and forums.
- Health conferences at schools, colleges and offices for anti tobacco campaign informing about facts about tobacco [13].

#### *Anti Tobacco Drugs*

There has been various drugs introduced in the market that can help people to stop chewing tobacco, they are said to be very effective and safe to use. Chewing is not a simple habit that one can stop in a day it takes some time. The drugs reduce the urge to chew tobacco and works as substitutes without the harmful effects [14].

#### **Conclusion**

The tobacco use is becoming a potential health threat that will affect the younger generation in

India. Existing tobacco control programs are a good medium to incorporate education related to the risks of tobacco use. The challenge will be to make the prevention programs for pan masala as catchy and attractive as the advertisements that propagate them.

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