



## PREVALENCE OF SMOKELESS TOBACCO USE AND ITS CHALLENGES IN INDIA

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### INTRODUCTION

Tobacco products are divided into two types based on their consumption. Tobacco which is consumed by smoke after burning them is commonly known as smoking tobacco such as cigarette, bidi, hukka etc. Tobacco products which are consumed without burning them are called smokeless tobacco (SLT).<sup>[1]</sup> SLT could be consumed through oral or nasal route.<sup>[2]</sup> History revealed that smokeless tobacco had originated in pre historic times, practise of smokeless tobacco consumption started from eastwards and extended to South Pacific islands.<sup>[3]</sup> **Pindborg et al. (1992)** in his study mentioned the oral consumption practises of smokeless tobacco in Africa, North America, South East Asia, Europe and Middle East. Practise of tobacco consumption involves placing of tobacco piece or tobacco products in the mouth followed by chewing or sucking it for certain period of time. There are various types of smokeless tobacco available globally such as chewing tobacco (loose leaf, plug, or twist and may come in flavors), snuff tobacco (moist, dry, or in packets), dissolvable tobacco (lozenges, sticks, strips, orbs).<sup>[3,4]</sup> The People use tobacco for many different reasons—like stress relief, pleasure, or in social situations the reasons for the use of smokeless tobacco fall into two main themes as socio-cultural structure, and beliefs. Each included subtopics such as culture and living conditions, family and peer relationships. Beliefs related to psychological and beliefs related to material influences", "beliefs" the harm perceptions role.<sup>[5]</sup> The use of smokeless tobacco has adverse health effects, causing more than 7 million deaths annually globally. India has a large number of tobacco users, characterized by frequent smokers and those using smokeless tobacco, with synergistic effects accounting for a significant number.<sup>[6]</sup>

### Prevalence of SLT

Globally, 350 million people consume smokeless tobacco in any form.<sup>[7]</sup> Somewhere around 116 countries have reported that people consume smokeless tobacco in these countries. These are the countries present in Africa, America, Asia and Europe.<sup>[8]</sup> Consumption of smokeless tobacco thus becomes a global health issue after looking at the users of smokeless tobacco.

Nearly 86 percent consumers of SLT reside in South East Asia out of which 71 percent of world SLT user lives in India, Bangladesh and Myanmar.<sup>[9]</sup> According to available data, most of the SLT consumers reside in low- and middle-income countries with 237.3 million in India (2009–2010), 30.5 million in Bangladesh (2009), and 9.7 million in Pakistan (2014).<sup>[10]</sup>

India is the largest number of SLT users in the world. The prevalence of SLT users is higher among men compared with women.<sup>[9]</sup> In India about 199.9 million

adults consume of SLT regularly (21.4 % overall, 29.6% men and 12.8% women). The number of SLT users in rural areas (150.3 million) who compare to more than rural areas (49 million).<sup>[11]</sup>

The prevalence of tobacco varies with states and population. The prevalence of all types of tobacco use was higher in the north-eastern states of India as compared to other states. In most of the states of India, Smokeless tobacco use constitutes a major proportion of the overall tobacco use. The difference between maximum and minimum prevalence by study is also knowingly greater in males than females. The highest smokeless tobacco prevalence in men in Bihar state and Nagaland is the highest in double tobacco use (Smokeless tobacco and Smoking). Mizoram is the highest prevalence of Smokeless tobacco and Smoking use among female, among other north-eastern states dual tobacco consumption is highest in its neighbouring state.<sup>[12]</sup>

### Health effect of SLT

Consuming of smokeless tobacco has many oral effects like oral sub-mucous fibrosis loss of periodontal support, leukoplakia and erythroplakia and staining of teeth and composite restorations including oral cancer.<sup>[13]</sup> Risks from SLT include oral and pharyngeal cancer, cancer of the gums and buccal mucosa, oesophageal cancer, upper aero-digestive tract cancer (UADT), cervical cancer, ischemic heart disease (IHD) and osteoporosis.<sup>[14]</sup>

### Oral Health Effect

It has been observed that consumption of smokeless tobacco leads to various oral health related problems like bad breath, stained teeth, tooth loss, tooth decay, ulcers, red/white spots, difficulty in opening the mouth, numbness, and difficulty in swallowing food.<sup>[15]</sup>

In addition to this SLT use is associated with an increase in SBP and sufficient nicotine is absorbed from SLT products. Due to which the cardiac effect is on the activation of the nervous system, which causes the hypertensive effect. The use of SLT in relation to non-communicable diseases is a public health concern.<sup>[16]</sup> Apart from this, the use of tobacco in any form has to face various types of problems like cancer, low birth weight and pulmonary and heart diseases etc.<sup>[17]</sup>

Among women, SLT is associated with an increased risk of oral and pharyngeal cancer, cancer of the gums and buccal mucosa, oesophageal cancer, upper aero-digestive tract cancer, cervical cancer, and ischemic heart disease.<sup>[18]</sup> Smokeless tobacco has a disproportionate effect. By regularly consuming smokeless tobacco, physical changes can be observed in the oral cavity as well as in the oral health of the users.

### Myths and Misconceptions

There are many myths and misconceptions regarding the use of SLT especially in the rural population, as it helps in treating toothache, headache and stomach-ache. It is also believed to provide relief from depression and mental relaxation, relieve stress, aid in concentration, protect against snake and scorpion venom and relieve morning sickness in women during pregnancy.<sup>[19]</sup> Myth is a belief among people that is not always substantiated by fact. Poor education, cultural beliefs and social misconceptions are many reasons why myths are prevalent. It is transfer from one generation to another. It is difficult to break this chain as it is spread throughout the society. We need to expose the myths and make people aware. It is important to know about these myths and misconceptions prevalent in the society and there is a need to remove the misconceptions by providing health education along with good care to the people.<sup>[20]</sup> There are misconceptions in the society that the use of smokeless tobacco has antiseptic properties that lead to improved oral health, relief from toothache, better digestion and improved memory. The use of smokeless tobacco in India is becoming increasingly prevalent through these myths. Even today there are

misconceptions prevalent in rural areas and some urban population in India that tobacco is helpful for teeth cleaning.<sup>[21]</sup>

### Challenges in quitting SLT use

India is a major stakeholder in global tobacco control efforts and has always taken a leadership role in various sectors to address the challenge posed by tobacco. The country has taken several initiatives including legislative measures for tobacco control, ratification of WHO FCTC and implementation of National Tobacco Control Program. Indian anti-tobacco law is strong enough to comply with most provisions of WHO FCTC.<sup>[22]</sup>

Awareness of health care services can help inform the rural population about the adverse health consequences of smokeless tobacco. Hence more effort is needed for cessation aid to reach the urban and rural population of India. Most smokeless tobacco users in rural areas are not concerned about the negative consequences of smokeless tobacco on their personal health and have a feeling that they are in good health. Despite of the belief that smokeless tobacco is good for health, two-thirds of smokeless tobacco users have a 'bad' opinion about smokeless tobacco use. Hence People continue to use tobacco products despite being aware of the adverse health effects.<sup>[23]</sup>

Many of these smokeless tobacco products are consumed with areca nut and they are culturally acceptable. Effort is needed for cessation assistance to reach urban However, tobacco cessation activities need to be increased, and the public should be better informed about the availability and relevance of such interventions. There is a need to more actively target tobacco use young persons, female users, rural population and the economically disadvantaged. However, tobacco cessation activities need to be increased, and the public should be better informed about the availability and relevance of such interventions. There is a need to more actively target tobacco use young persons, female users, rural population and the economically disadvantaged. In India, greater effort is needed for cessation assistance to reach urban and rural population in India, greater and rural populations. However, tobacco cessation activities need to be increased, and the public should be better informed about the availability and relevance of such interventions. There is a need to more actively target tobacco use young persons, female users, rural population and the economically disadvantaged.<sup>[13]</sup>

### Global tobacco control agenda

World Health Assembly in 2003 agreed to The WHO Framework meeting on Tobacco Control (FCTC), which came into force in year 2005.<sup>[24]</sup> The World Health Organization (WHO) Framework meeting for Tobacco Control (FCTC) has inspired major changes in tobacco control globally. Although 180 countries have agreed that the WHO Framework Convention on Tobacco Control is the best approach to control the demand and

supply of smokeless tobacco.<sup>[25]</sup> According to the WHO FCTC, the World Health Organization (WHO) introduced a set of high-impact measures that help countries reduce tobacco demand. These measures include monitoring and prevention policies for tobacco use are protecting people from tobacco, helping people to quit tobacco use, warning people about the dangers of tobacco, banning tobacco advertising & promotion, and increasing taxes on all tobacco products.<sup>[26]</sup>

### COTPA

There are various laws for tobacco control in India. The Government of India enacted its Cigarettes and Other Tobacco Products Act 2003 (COTPA 2003) in 2004 to reduce tobacco use which leads to overburdening health budget. There are 32 Articles related to tobacco consumption and commerce. This Act includes section 4 ban of smoking in public places, and section 5 ban of advertising of cigarettes and other tobacco products.<sup>[27]</sup>

COTPA Article 6 does not allow tobacco products to be sold to a person below 18 years, and within 100 yards from the educational institution.<sup>[28]</sup> It will be necessary to implement Section 6B by the school administration to deal with the shopkeepers selling tobacco products.<sup>[29]</sup>

Tobacco control laws affect many issues and need to be implemented in a dynamically. Health, education, and police departments need to work together to implement a tobacco control policy. India is committed to the WHO Framework Convention on Tobacco Control to reduce tobacco consumption by 30% by 2025.<sup>[30]</sup>

### CONCLUSION

The use of smokeless tobacco is a global epidemic affecting health and the economy. The high prevalence of smokeless tobacco use is causing increasing health problems. Regulating the production, marketing and sale of smokeless tobacco as a public health priority. Smokeless tobacco is strongly associated with more consumers who belong to lower socio-economic status. In order to prevent health and economic harm due to the use of SLT, countries, especially developing countries, should devise specific strategies for SLT control. Community level and local government involvement in tobacco cessation could a viable option to curb the tobacco use.

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