A Brief Study on Smokeless Tobacco and its Users

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Abstract: Background: In 21st Century this addictive substance take toll in millions yearly, making it number one preventable cause of death. Tobacco use mostly affects the users and their families that come from low socio-economic background. Objectives: To Study the use of Tobacco in various socio-economic classes. Study Design: Cross Sectional Questionnaire based Study. Study Area: 403 Patients attending Indoor Patient Department of MIMER Medical College, Talegaon Dabhade, Pune. Results: People with low annual income were the most addicted to tobacco. Smokeless tobacco being most widely used form. Conclusion: Use of tobacco being maximum in men and in families with low income. There is need to educate the susceptible population about injury – physical, mental and economical caused by tobacco usage.

Keywords: tobacco, tobacco products, smokeless tobacco

1. Introduction

Tobacco products are products made entirely or partly of leaf tobacco as raw material, which are intended to be smoked, sucked, chewed, or snuffed. All contain the highly addictive psychoactive ingredient, nicotine. [1] Tobacco contains the alkaloid nicotine, which is a stimulant, and harmala alkaloids.[2] Dried tobacco leaves are mainly used for smoking in cigarettes, cigars, pipe tobacco, and flavored shisha tobacco. They can also be consumed as snuff, chewing tobacco, dipping tobacco and snus. Tobacco use is a risk factor for many diseases, especially those affecting the heart, liver, and lungs, as well as many cancers. In 2008, the World HealthOrganization named tobacco as the world’s single greatest preventable cause of death. [3] Around 80% of the world’s 1.1 billion smokers live in low- and middle-income countries. Around 80% of the 1.1 billion smokers worldwide live in low- and middle-income countries, where the burden of tobacco-related illness and death is heaviest. Tobacco users who die prematurely deprive their families of income, raise the cost of health care and hinder economic development. The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing more than 7 million people a year. More than 6 million of those deaths are the result of direct tobacco use while around 890 000 are the result of non-smokers being exposed to second-hand smoke. [4] These 7 million people every year and costs households and governments over US$ 1.4 trillion through healthcare expenditure and lost productivity. [5] Production of tobacco leaf increased by 40% between 1971, when 4.2 million tons of leaf were produced, and 1997, when 5.9 million tons of leaf were produced.[6] India has 96,865 registered tobacco farmers[7] and many more who are not registered. In 2010, 3,120 tobacco product manufacturing facilities were operating in all of India.[8] Around 0.25% of India’s cultivated land is used for tobacco production.[9]

"Tobacco threatens us all," says WHO Director-General Dr. Margaret Chan. "Tobacco exacerbates poverty, reduces economic productivity, contributes to poor household food choices, and pollutes indoor air."

The Impact of Tobacco Usage on:

Global Poverty: Around 860 million adult smokers live in low- and middle-income countries. Many studies have shown that in the poorest households, spending on tobacco products often represents more than 10% of total household expenditure – meaning less money for food, education and healthcare.

Children and education: Tobacco farming stops children attending school. 10%–14% of children from tobacco-growing families miss class because of working in tobacco fields.

Women: 60%–70% of tobacco farm workers are women, putting them in close contact with often hazardous chemicals.

Health: Tobacco contributes to 16% of all non-communicable diseases (NCDs) deaths.

Environment: Tobacco waste contains over 7000 toxic chemicals that poison the environment, including human carcinogens. Tobacco smoke emissions contribute thousands of tons of human carcinogens, toxicants, and greenhouse gases to the environment. And tobacco waste is the largest type of litter by count globally. [5]

Hence, Tobacco is an issue of Red alert in this Century taking toll in millions and costing trillions of dollars in expenditure of healthcare and lost productivity of working class men and women. We should tackle this issue with proper knowledge of Tobacco and its usage in various socio-economic statuses.

2. Materials and Method

This Study involved Observational study using a systematic Questionnaire in Marathi to evaluate 403 subjects which mainly include indoor patients of MIMER Medical College.
and Dr. Bhausaheb Sardesai Talegaon Rural Hospital, TalegaonDabhade. The study included volunteer individuals who consumed Tobacco based products. Non tobacco Consumers were excluded from this study. This study was conducted over a period of 3 months from January 2018 to March 2018.

Questionnaire included detailed personal history of their Tobacco consumption over the years and also their occupation and income.

All this data was collected and entered in excel sheet and was analyzed. Statistics was calculated and accordingly Graphs were plotted.

3. Result

The study was conducted among 403 volunteers from various socio-economic statuses. It was found that out of 403 volunteers 82.30%(n=331) were Males and Female being 17.70%(n=72) as shown in graph 1. These Individuals consumed tobacco in four different forms mainly – Mishri (Creamy Snuff) (18.1%)(n=73), Cigarettes 27.5% (n=111), Gutka (4.7%)(n=19), Loose Leaf(49.6%)(n=200) as shown in graph 2.

The study included the time period and frequency of Tobacco consumption. One pouch of tobacco contains 16g of smokeless loose leaf. As indicated in Graphs 3.a and 3.b, there are maximum individuals consuming Tobacco since 2-5 years and minimum individuals in interval of about half year. And maximum frequency is seen in 2 pouch of tobacco per week that is about 36.2%.

In relation to occupation there is maximum tobacco consumption by servicemen about 29.4%(n=118). This figure goes decreasing by occupations like farming, housewife, business, labor, retired respectively as shown in Graph 4.

If classified on basis of Socio-economic status maximum numbers of tobacco users are from families that earn about Rs. 1,000 to 5,000 per month. And it is minimal in individuals with monthly income more than Rs. 20,000 per month as shown in graph 5. In graph 7, the age wise prevalence of tobacco use was minimal in the youth below 20 with was increasing to the age group of 51-60 years, and then declined to advancing age indicating chronic users being slowly diseased by tobacco’s detrimental effect.

In addition to tobacco these individuals also consumed alcohol and betel nuts on a daily basis as shown in graph 6.

4. Discussion

Although Tobacco is carcinogenic, and a lot of people knowing this but still consume it on daily basis study also reveals about other addictions and its frequency of intake which has a cumulative effect on body, helping other to get general idea/information about these addictions and other substances mostly in use that supplements the effect and complication of tobacco intake. Tobacco has some of the other harmful chemicals in smokeless tobacco like Polonium 210, Lead 210, Cadmium, Cyanide, Arsenic, Polycyclic aromatic hydrocarbons, Benzene, Lead. This made us to think to do this project and put forward various steps to spread awareness by preparing different researches, articles and so was this project to learn about tobacco consumption. Suggesting the high prevalence rate of tobacco consumption by previous research this project aims to look into its socio-economic basis. According to study conducted by Agrawal et all the consumption of tobacco was found to be maximum among the poorest part of the society, the use of smokeless tobacco being maximum in this class. The use of tobacco was reducing from poor to middle class to richest class, significant part of income of the poor being spent on tobacco. Our study has found similar results where tobacco consumption is highest in the poor and decreases to the richer section. And smokeless tobacco being maximum in use in both of the studies. Previous studies by various authors suggest that tobacco consumption is high in rural population and our study population is from a semi urban area. According to John et all the cost of tobacco use was many times more than the expenditures on tobacco control by the government of India and about 16% more than the total tax revenue from tobacco. And according to health education journal’s study published on 30th April 2017 revealed that research output from low and middle income countries remained low given us scope to create awareness about tobacco control in these countries. Finally to conclude that use of tobacco being maximum in men and in families with low income and there is need to educate the susceptible population about injury – physical, mental and economical caused by tobacco usage.
References
