

## Prevalence of Smokeless Tobacco (SLT) consumption among patients seen at Altamash Institute of Dental Medicine, Karachi

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### Abstract

**Objectives:** To determine the prevalence of Smokeless Tobacco Consumption Among Patients Seen at Altamash Institute of Dental Medicine, Karachi.

**Study design:** Descriptive cross-sectional study.

**Place and duration:** This survey was conducted at Altamash Institute of Dental Medicine, Karachi. The survey was initiated on the March 2019 and was concluded on the May 2019.

**Method and Materials:** A total of 230-participants have participated in the study. A sample of 230-patients was selected by random sampling technique. A questionnaire was used to evaluate the prevalence of smokeless tobacco among patients.

**Results:** According to the results 87.82% were males, and 12.17% were females. Majority of the people were noted to be in their second decade of life and uneducated. The most common form of smokeless tobacco (SLT) being used was snuff 47.82%, with the least preference being given to paan with tobacco (13.04%). While the data showed that the main reason as to started the use of smokeless is pressure from friends and colleagues. Majority of the people had been using the product since more than 7-years, and they use the product 3-5 times in 1-day.

**Conclusions:** The findings of this study concluded that indulgence in smokeless tobacco habit usually starts as a pressure from friends and colleagues, youngsters and adults both can get addicted to this habit of consuming smokeless tobacco.

**Keywords:** Smokeless tobacco, snuff, personal choice, gutka, betel nuts

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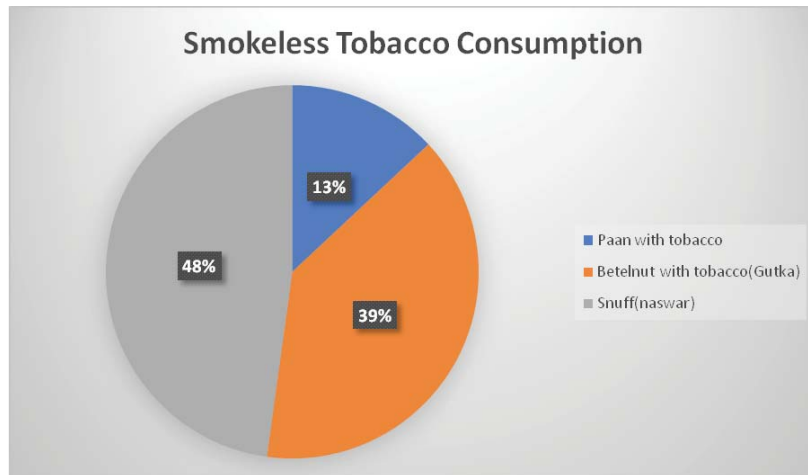
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### Introduction:

Smokeless tobacco (SLT) is tobacco consumed orally, not smoked. It has been in use for as long as other forms of tobacco consumption and its use has increased.<sup>1</sup> Smokeless tobacco (SLT) is mostly used in the form of paan with tobacco, betel nuts with tobacco (gutka), and snuff (naswar). The tobacco paan is the piper betel leaf filled with sliced areca nut, slaked lime, catechu and tobacco; gutka is combination of betel nuts, tobacco, aromatic spices with or without lime and calcium hydroxide; and the naswar is mainly tobacco with small amount of spices, lime, cardamom and menthol. The paan and gutka are orally chewable while naswar is placed in oral vestibules.<sup>2</sup>

Smokeless tobacco use is a significant health risk and cause of disease.<sup>3</sup> Over 300 million people use smokeless tobacco worldwide.<sup>4</sup> More than 250 million adult ST users are in low- and middle-income countries, the total burden of smokeless tobacco use is likely to be substantial<sup>5</sup> Chewing of SLT is an integral, traditional, and cultural component of population in different regions of the world; however, its use is particularly very common and widespread in Asian countries.<sup>6,7</sup> Smokeless tobacco is an addictive drug sharing many qualities with other drugs of abuse such as morphine and cocaine. Smokeless tobacco can be used to deliver psycho-active and dependence-producing levels of nicotine.<sup>8</sup> The adverse health effects of tobacco use including SLT are very well documented.<sup>9,10</sup>



Studies have found that betel, areca and tobacco chewing increases the risk of oral cancers up to 10-times, after adjusting for other covariates.<sup>11</sup> SLT is also associated with other diseases like dental diseases (dental caries, periodontitis, gingival bleeding) and various types of cancers.<sup>12</sup>

#### Material and Methods:

This survey is based on a cross-sectional study that is carried out in one of the leading dental institution and was conducted from March, 2019 to May, 2019 to determine the prevalence of smokeless tobacco among patients visiting the Dental outpatient department of Altamash Institute of Dental Medicine, Karachi, Pakistan; approved by the Ethical Committee of Altamash Institute of Dental Medicine. A sample of 230-patients was selected by random sampling technique. Data was collected using a self-administered structured questionnaire and analyzed by using SPSS version 20.

Data was collected using a self-structured questionnaire which had 2-parts. The 1-consisted of questions about the candidate's socio-demographic characteristics mainly age, gender, and qualification. The 2-consisted of questions that were related to smokeless tobacco. Variables focused in the study were related to their history of consumption of the specific form of smokeless tobacco (paan with tobacco, gutka, niswar), duration, frequency of its daily consumption, alongside inquiring about the reasons behind the addiction. Subject's knowledge regarding

the harmful effects and the urge to either quit or continue the habit was duly assessed.

#### Results:

A total of 230 questionnaires were distributed, among which 87.82% were males, and 12.17% were females. Majority of the people were noted to be in their second decade of life (36.52%), and uneducated (43.47%) when asked about their education. The most common form of smokeless tobacco (SLT) being used was snuff (47.82%), with the least preference being given to pnaan with tobacco (13.04%). When asked what was the main reason as to why they started the use of SLT, there was a close difference between the responses to relax physically/mentally (43.04%) and pressure from friends and colleagues (46.52%). 62.60% of the people agreed that they would still buy the product even if there was a severe hike in the cost. Majority of the people had been using the product since more than 7-years (62.60%), and when asked approximately how many times do, they use the product in one day, most said around 3-5 times a day (30.43%). It was also noted that most people were definitely aware of the harmful effects of SLT when asked (57.391%). When asked if they ever planned on leaving the habit, 41.73% of the users unfortunately denied, while only 15.65% people said that they would want to one day. 53.04% of the people stated that they did not notice any changes in their mouth since the start of SLT consumption, while only 46.95% people stated that they had.

#### Discussion:

In the study we conducted, efforts were made to assess the extent of smokeless tobacco among various participants. 230-kpeople participated in the survey, and it was noted that the majority of them were male, between 20-30 years of age, and with no form of education. The most common form of SLT product being used among participants was seen to be Snuff (naswar). Many people claimed peer pressure as being a main causative factor of them getting addicted. There is also this perception that as long as the product is available in the market, people will

buy the product no matter the price.

Another study conducted in 2016 concluded that people of low socioeconomic status and education are more susceptible to the use of SLT. It was also seen that the respondents suffering from SLT related diseases were 3.7 times as more knowledgeable about the effect of the practice of SLT than the respondents without diseases. People of any age can buy the product because of its widespread availability and lack of any strict policies.<sup>13</sup>

One study came to the conclusion that SLT related products were much more common than cigarettes among high school students (16.1% vs 13.7%) and the age at starting smokeless tobacco was also lower than for cigarettes (11.5 years versus 13.1 years). This study ultimately also came to the conclusion that due to the lack of anti-tobacco promotional advertisements; people are unaware of the harmful effects of prolonged SLT use.<sup>14</sup>

In another study, it was seen that betel nut (gutka) was the most common product. There was no relation between father's income and the amount of use, as most students were seen to be purchasing the product from their own money. Majority of them were aware of the fact that addiction can be deleterious to health and have tried to quit but to no avail due to lack of improper guidance. This study again mentioned the importance of the use of advertisements for the education of the masses.<sup>15</sup>

In a study conducted in Pakistan in 2018 reported that 116 (32%) males and 11 (8%) females used gutka (smokeless tobacco), under the influence of friends; whereas, 39 (10.8%) males and 19 (13.8%) females indulged in this habit due to family environment.<sup>16</sup>

Moreover, prolonged SLT use is also associated with severe health problems. For example, one study outlined the major health consequences associated with SLT use in South Asia include cancers of several sites with oral cancer being the most common, and poor reproductive out-

comes. There was also a relationship between the use of SLT and high blood pressure. In addition, the use of areca nut alone can predispose to diabetes mellitus and asthma problems.<sup>17</sup>

According to our study, majority of the participants were users of more than 7 years (62.60%), using the product around 3-5 times in a single day (30.43%). Even though majority were claiming to be aware of the harmful effects, they had no plan nor intention of stopping the habit as according to them, now it was 'too late' for them to stop now. When asked informally, some people complained of problems such as severe dental caries, burning sensations and loose teeth since they started SLT use.

#### **Conclusion:**

The findings of this study concluded that indulgence in smokeless tobacco habit usually starts as a Pressure from friends and colleagues, youngsters and adults both can get addicted to this habit of consuming smokeless tobacco. Such harmful substances dependency can lead to debilitating diseases of mouth and oral cancer therefore compromising the overall status of general health. Awareness programs should be planned to educate people and concerned authorities should take strict measures to control this menace.

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#### **Role and contribution of authors:**

Dr. Yousuf A. Lakdawala, conceived the concept, critically review the article and made final changes.

Dr. Sabeen Masood, collected the data, references and wrote the introduction writing.

Abdul Ahad Jamshed, collected the data and references and helped in interpretation of data.

Ahmed Tariq, collected the references and helped in discussion writing.

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