

## **Professional training to help people to quit smoking**

Type of study: Original study

Running title: To assess the readiness to quit smokeless tobacco among patients visiting a private dental college

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### **Abstract**

**Introduction:** Intake of smokeless tobacco has significantly increased within these years. Many campaigns and programmes are being organised to help people quit using these. This kind of addiction adds on many more health related issues. This is predominant among individuals with low socio-economic status, mental health, unemployment and many other factors make the addiction to this kind of use.

**Materials and methods:** A survey was conducted among dental students through an online platform creating google forms with verified questionnaires. The responses collected from 100 respondents were then formulated into excel sheets and after coding were transferred to SPSS software version 23 using descriptive analysis and chi square test using crosstabs.

**Results:** Results were analysed using SPSS using chi square test with a P value of <0.05 and was found to have around 74.36% of males through . Also people 48.1% were in preparation, 44.9% were in pre contemplation, 7.1% were in contemplation with respect to their readiness to quit.

**Conclusion:** Most of the respondents come under the preparation stage with 48.1% and others are under pre contemplation and contemplation stages.

**Keywords:** Chewable tobacco, Fagerstrom test, Novel Method, Socioeconomic status, Innovative technique.

## **Introduction**

Tobacco usage is alarmingly rising to a greater level leading to many systemic disorders because of this tobacco consumption. In India around one third of adults consume tobacco as per the reports of Global Adult Tobacco Survey GATS(1).

In many cultures people use tobacco to reduce stress because of peer pressure. Adolescents make more unsuccessful attempts to quit. Many young people have become addicted to this unknowingly before they have any kind of intention to quit(2). Many numerous aids that are available for tobacco cessation, including pharmacotherapies and many behavioural approaches one of them is trans-theoretical model (TTM) (3).

Many research on tobacco shows many mental illnesses like and patients with BD are paid pensions. Many highly professional players also use these to boost their performances and their practises(4). Comparatively smokeless tobacco is less dangerous as smoking but it still contains known carcinogens affecting humans which causes cancers(5).

Diabetic patients are risking themselves more by the consumption of tobacco as they are more prone to oral problems and oral infections(6). Consumption of tobacco leads to increased risk of oral pain, hypercholesterolaemia and BP(7). The main aim of the study is to understand the forms of tobacco use and the readiness level to quit the habit among chewable tobacco.(8)

Dental professionals are increasingly aware of tobacco's deleterious health effects, and about two-thirds of dentists surveyed reported having some involvement in smoking cessation activities. While more than 80 percent of dentists report either tobacco users reported that their dentists had advised them to quit using tobacco(6). The workshops provided didactic and interactive training to dental hygienists and dentists in identifying tobacco- using patients and counseling them to quit using tobacco; the actual interventions were carried out primarily by dental hygienists(9). Minimal Intervention practices to implement only the first four steps of the protocol with their cigarette-smoking patients were taken in use (10). The Extended Intervention for cigarette smokers and smokeless tobacco users included training the patient to set a quit date, providing a take-home video and conducting a follow-up telephone call to the patient(7). Military personnels as compared to civilians intake twice more smokeless tobacco and their usage is more among seniors. Lack of unawareness made people to make a partial substitution of tobacco consumption(11).

As it was a cross sectional study it was one of the reporting biases, social desirability, memory recall bias. Smokeless tobacco usage is very common followed by smoking and dual tobacco use. The pattern of tobacco use was found with GATS, India but in contrast to a study conducted in Goa where smoking was more prevalent than smokeless tobacco. Our team has extensive knowledge and research experience that has translate into high quality publications(12–16)(17–21)(22–26)

Aim of this study is to check the readiness among tobacco users to quit and to know the number of quit attempts made.

## **Materials and methods**

An online survey was conducted to check the readiness among tobacco users to quit and to know the number of quit attempts made by themselves.

**Fagerstrom** Test for Nicotine Dependence for Smokeless Tobacco(FTND-ST): In view of scarcity of instruments for smokeless tobacco users, Ebbert et al.(2006) modified the FTND so that it can be used in Smokeless Tobacco users.

**Readiness to change Questionnaire (RCQ):** Readiness to change smoking behaviour was assessed on the basis of the stage of change construct of the transtheoretical model (27). Individuals not willing to quit were allocated to the pre contemplation stage, those considering to quit in the next 6 months were classified in the

contemplation stage. Those who were planning to quit in the next 4 weeks and having had at least one 24 hour quit attempt in the last 12 months were allocated to the preparation stage.

A semi structured questionnaire was used to assess the readiness to quit smokeless tobacco among patients visiting a private dental college in chennai

**Statistical analysis**

The data were statistically analysed using the statistical package for social sciences version 23 (SPSS). Descriptive statistics was used for describing the demographic and clinical variables.

Association bar graphs were derived using chi square test with a P Value of <0.05 with significant values.

**Results**

Study sample had around 150 patients and were evaluated. According to gender, majority of respondents were males (74.36%) and females (25.64%) in the age group of 18 to 35 age were the lowest with 51.39% and with an average of 9.72%( Figure 1 2).Participants above 50 years showed more interest to quit the habit. Based on socioeconomic status people with low socio-economic status one more into the consumption ( table 1). Based on number of attempts, about 86.5% wanted to quit and had made various quit attempts (Figure 1)

**Figure 1: Distribution of study population based on their readiness to quit tobacco**

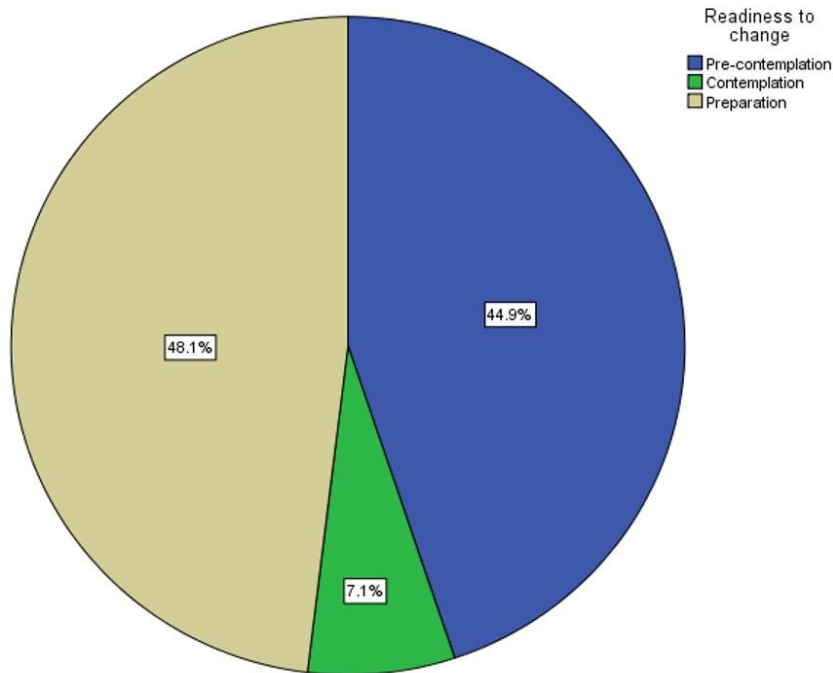


Figure1: Pie chart shows the distribution of readiness to quit among chewable tobacco users. Blue colour represents the precontemplation stage. Green colour represents the contemplation stage. Yellow colour represents the preparation stage. The results showed that people were more into preparation and were about 48.1% of them.

Figure 2: Distribution of study population based on Fagerstrom nicotine dependent score.

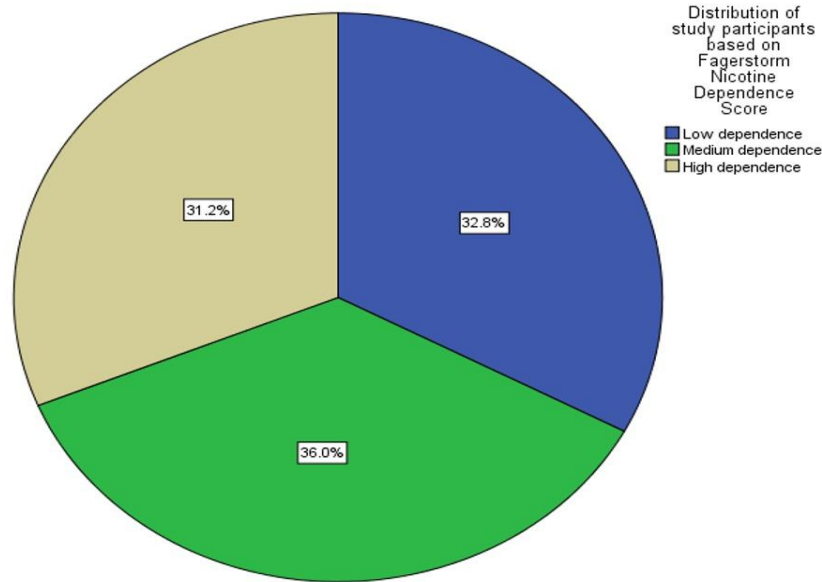


Figure 2: Pie chart shows the distribution of the study population based on the Fagerstrom nicotine dependent score. Blue colour depicts low dependence. Blue colour represents participants with low dependence and green colour represents medium dependence and yellow colour depicts high dependence. The maximum participants were in medium dependence level with 36.0% as compared to other levels.

Figure 3: Association of readiness to quit tobacco habit among different age groups

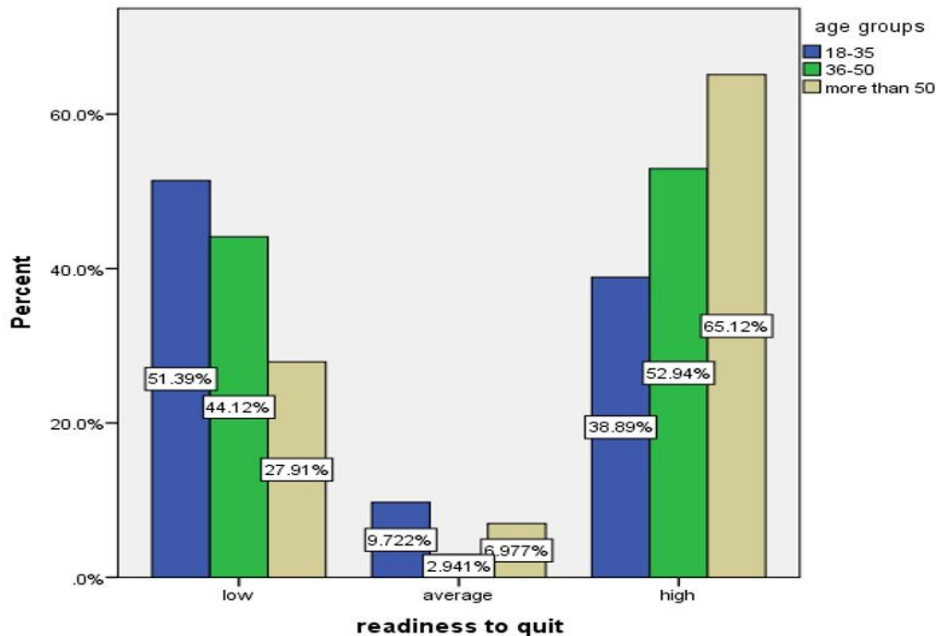


Figure 3: Bar graph shows the association of readiness to quit with different age groups. X axis represents the age groups and Y axis represents the percentage of responses. Blue colour represents the age group from 18-35, yellow colour represents the age more than 50 and green colour is for the age group of 36-50. The highest readiness to quit was seen among the age group of more than 50 with a percentage of 65.12% . The difference was statistically significant ( Chi- square test, P value of <0.05)

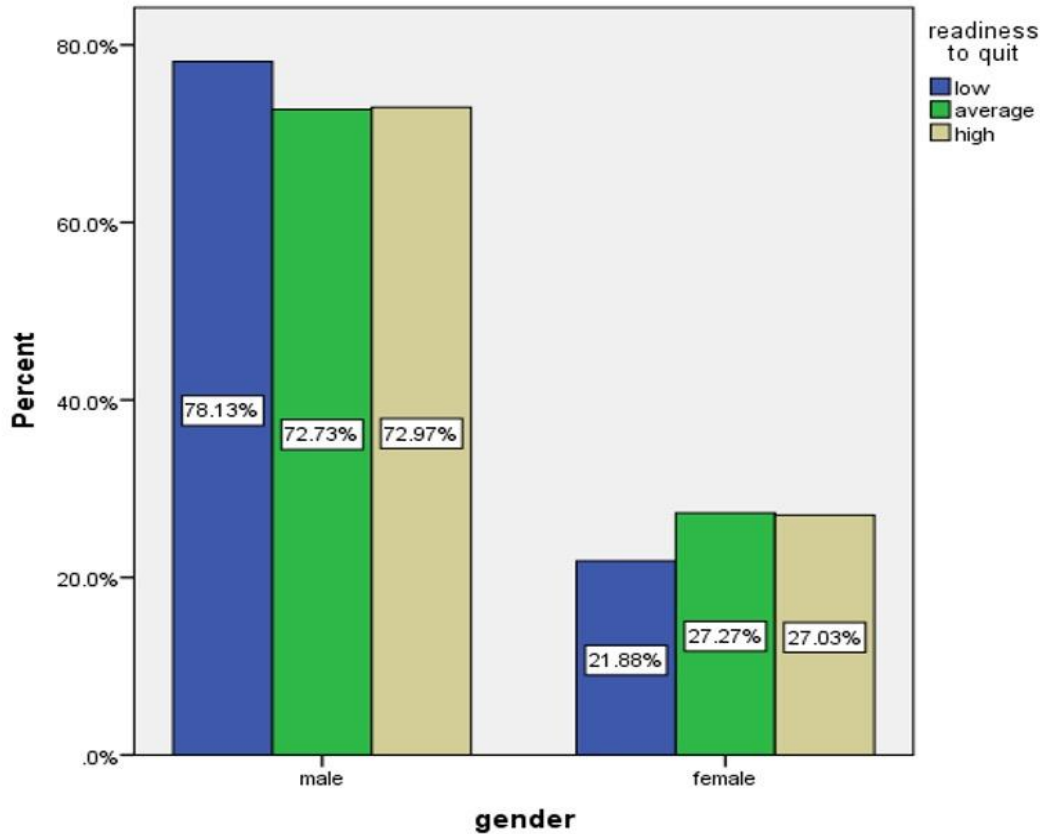


Figure 4: Bar graph shows the association of readiness to quit with the gender as the basis. X axis represents the readiness to quit among gender and Y axis represents the percentage of the responses in different categories.. Blue colour represents low readiness to quit , yellow colour represents highest readiness to quit and green colour is for average readiness to quit.. The lowest to quit was seen among the males with a percentage of 78% , which is statistically significant.

( Chi- square test, P value of <0.05)

**Discussion**

This study shows that more people are involved in chewable tobacco consumption and many people know the negative effects but still are addicted to this usage. Dependent users are afraid to quit because of their previous attempts leading to withdrawal symptoms. Web delivered cessation programs for smokeless users compared with basic control quit rates were significant(28). Many intervention programs which are effective with low cost are practised. Military personnels as compared to civilians intake twice more smokeless tobacco and their usage is more among seniors.

Lack of awareness made people undertake a partial substitution of tobacco consumption. As it was a cross sectional study it was one of the reporting biases, social desirability, memory recall bias(29). Smokeless tobacco

usage is very common followed by smoking and dual tobacco use(30). The pattern of tobacco use found with GATS(5), India but in contrast to a study conducted in Goa where smoking was more prevalent than smokeless tobacco(31).

Many studies show that it is evident to say that these chewable tobacco are potential cancer causing agents as their consumption causes proliferation of cells in the oral tissue.(6)

Despite high rates of conventional cigarette use among homeless youth, programs to help these youth quit tobacco use are generally not offered through the agencies where they typically seek services(32)-(33) Further, no published studies have developed tobacco cessation programs tailored to the needs of homeless youth(34). Effective and easily discernible strategies for reducing all forms of tobacco use among homeless youth are urgently needed.(35)

Limitation was that it was a cross sectional study so significance values might change. Future scope of the study is that more study and research on this topic will help the individuals with proper management and required counselling can help and save many lives from going into the wrong hands.

### **Conclusion**

High prevalence of chewable tobacco was seen in males with low socio-economic status and within the age of 18 to 35 years age. Also adolescents are more vulnerable to peer pressure and other factors which are leading into a false trap like consumption of chewable tobacco. Aim should be preventing people from consuming tobacco with any mode of intake or consumption. Counselling among the younger generation is very much required in order to avoid these consequences which can be prevented at a very early stage. Also dentists can help people from leaving this kind of addiction with proper counselling.

### **Author contributions**

Ms. Britina: Literature search, data collection, manuscript writing.

Dr. R. Pradeep kumar: Study design, data verification, manuscript drafting.

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Conflict of interest: There is no conflict of interest

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