



## Assessment of Readiness to Quit Smoking Behaviour among Smokers in Chennai, Tamil Nadu

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### ABSTRACT

**Background:** In the stages of the change model for smoking cessation, "willingness to quit" forms the starting point. The impact of the increasing burden of smoking among low and middle-income countries is well established. To determine the willingness to quit smoking among and quit attempts among smokers in Chennai, Tamil Nadu

**Methods:** A validated pre-tested Questionnaire was used to assess the willingness to quit. Responses were tabulated in Microsoft Excel and statistical analysis was done using SPSS version 27.0 and chi square tests.

**Results:** From the present study, it was found that 42.3% of the smokers belong to the pre contemplation stage, 17.5% of them belong to the contemplation stage, whereas 40.1% of them were ready to quit smoking. The p value for this was 0.049 (<0.05) and hence statistically significant.

**Conclusion:** From this study we can conclude that the majority of the smoker population has a high readiness to quit smoking. Smoking is a major public health problem. Continued effort to control and eliminate this abuse is a medical necessity. Hence, more workshops on the importance of smoking cessation should be conducted.

**Key words:** Cessation, Novel questionnaire, Quit, Readiness, Smoking

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### INTRODUCTION

The impact of the increasing burden of smoking among low and middle-income countries is well established. Around 80% of the world's smokers population live in low- and middle-income countries [1,2]. It is estimated that half of all deaths among individuals with mental illness are attributable to smoking. While significant progress has been made in reducing smoking use within the general population, rates of smoking remain high among individuals with mental illness, including individuals with depression and/or anxiety compared with those without such disorders [3]. Studies done in India reported the quitting rates of tobacco to be varied between 12% and 33%.

The willingness to quit smoking (tobacco) forms an important preliminary step for the behavioral change

in an individual. Smoking cessation often requires numerous attempts by people and may be accompanied by anxiety and depression during the quit attempt, due in part to withdrawal symptoms [4]. Identifying these subgroups of smokers who are willing to quit becomes critical in developing effective interventions, beneficial in helping smokers quit their habit. There is paucity of literature regarding willingness to quit and the factors associated with it in India [2]. Available quitting aids are both safe and effective in supporting cessation in smoking users and stopping smoking is associated with an improvement in mental health rather than deterioration [5]. Our team has extensive knowledge and research experience that has translate into high quality publications [6-25].

Hence the aim of the present study focuses on determining the willingness to quit smoking among and quit attempts among smokers in Chennai, Tamil Nadu.

### MATERIAL AND METHODS

A cross sectional study was conducted in Chennai among smokers visiting a private dental hospital. Smokers amongst the outpatients were included in the study. Smokers who were not willing to participate in the study were excluded from the study. Prior to the start of the study, ethical clearance was obtained from the

Institutional ethics committee. The anonymity of the participants was maintained. The sample size obtained was 158.

Data collection was scheduled in the month of February 2021. Data was collected using a self-administered questionnaire among 158 smokers who visited the dental outpatient department.

A structured and self-administered questionnaire was adopted from questionnaires previously done by [26]. The questionnaire consisted of two parts. The first section consisted of demographic data such as Name, age and level of education. The second section consisted of 25 questions pertaining to assess the readiness to quit smoking among smokers. The questionnaires were distributed to the participants through google forms at the hospital and were collected on the same day.

**STATISTICAL ANALYSIS**

Data was entered in Microsoft Excel and analysed using SPSS software (version 27.0). Descriptive Statistics and Chi soiree tests were used to assess the association between the educational levels of smokers with respect to the readiness to change behavior amongst smokers.

**RESULTS**

It has been observed that, Majority of the participants have not tried to quit smoking previously. 63.35% of all the participants are married. 60.85% of them have only qualified high school (Table 1).

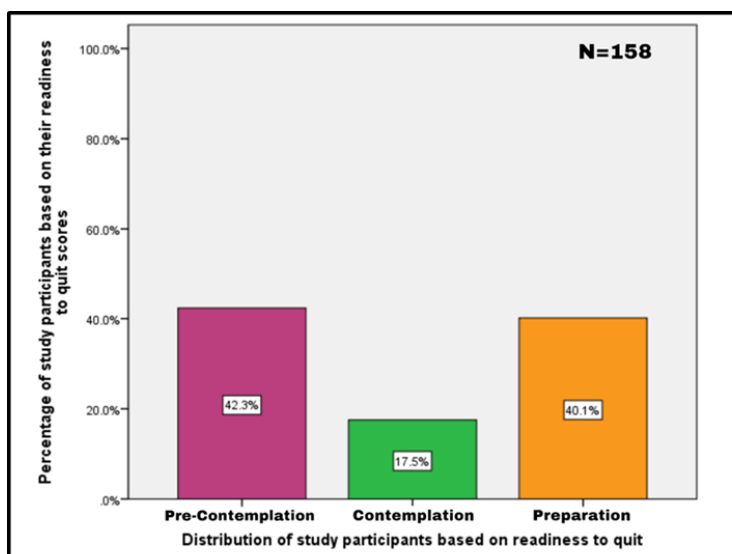
Figure 1 bar depicts the association between Readinesses to quit smoking in relation to gender. It can be observed that 52% of the males have a high readiness to quit smoking compared to 6% of the females. The X axis represents the gender of participants and the Y axis represents the % of responses of the participants. Red color represents high readiness to quit, yellow color

represents average readiness to quit and Green color represents low readiness to quit smoking. The p value is 0.049 Hence it is clinically significant.

The X axis represents the parameters for the readiness to quit smoking and the Y axis represents the percentage of study participants based on their quit scores. It was found that 42.3% of the smokers have a low readiness to quit smoking represented by Pink colour, 17.5% of them are contemplating, being represented by the Lemon

**Table 1: Sociodemographic characteristics of current smokers (N=158).**

Smoking related variables	N	Total sample%
Age in years		
18-25	43	27.83
26-35	38	24.28
35-45	32	20.33
46 and above	45	27.56
Marital status		
Unmarried	58	36.65
Married	100	63.35
Educational level		
Less than High School	35	22.39
High School	95	60.85
More than high school	28	16.76
Age at smoking initiation		
<15 years	28	18.29
16-18 years	78	50.21
>19 years	52	31.5
Duration of smoking		
>21 years	51	36.56
11-20 years	33	23.81
6-10 years	29	20.43
5 years or less	45	19.2
Number of cigarettes per day		
>31 cigarettes	16	11.42
21-30 cigarettes	36	26.03
11-20 cigarettes	55	39.73
less than 10 cigarettes	51	22.83



**Figure 1: Association between readiness to quit smoking in relation to gender.**

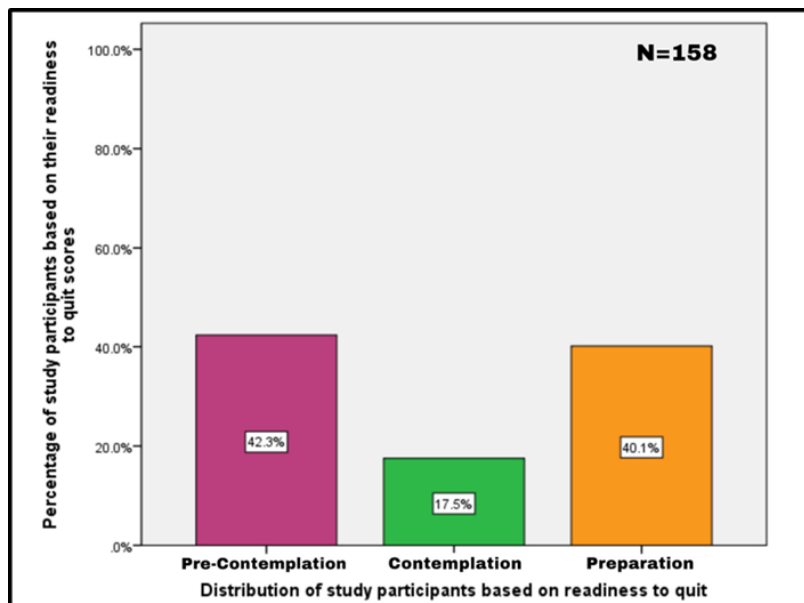


Figure 2: Stage of readiness to quit smoking among smokers in the study population.

Green color and 40.1% of the smokers are preparing to quit smoking which is represented by Orange color (Figure 2).

### DISCUSSIONS

This study was conducted to assess the willingness to quit smoking amongst smokers in Chennai. Studies done in India and other countries [27,28]. showed that smokers who had ever attempted to quit in the past year were more likely to quit again compared with never attempting, which was concurrent with our study results showing 53.8% of the smokers who attempted to quit previously were more motivated to quit again.

This study also found that willingness to quit was significantly higher by 72.1% among those smokers who had received some form of advice to quit by the dentist (in the preceding 12 months). This shows that dentists play a vital role in tobacco cessation and should never miss an opportunity to advise their patients who are smokers to quit smoking. Studies show that brief interventions by health practitioners are proven to reduce smoking as shown from studies in other countries [29,30].

Although some studies reported that education level was associated with increased willingness to quit smoking [31]. The facility-based cross-sectional study done in India showed that those who were less than 25 years of age were more willing to quit tobacco [30]. Another study from the United States analyzing data from the 2011 U.S. National Health and Wellness Survey showed that those in the age group of 18–44 years were more willing to quit compared with older individuals [32,33]. These study results were concurrent with our findings. Our team has extensive knowledge and research experience that has translate into high quality publications [13,20].

### CONCLUSION

Smoking is a major public health problem. Continued effort to control and eliminate this abuse is a medical necessity. From this study we can conclude that the majority of the smoker population have high readiness to quit smoking. Hence, more workshops on the importance of smoking cessation should be conducted.

### AUTHOR CONTRIBUTION

Hooriyah: Literature search, data collection, manuscript writing.

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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