

# Knowledge, attitude, and practices of smoking habits among transgender living in Chennai city

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## ABSTRACT

**Aim:** This study aims to determine the knowledge, attitude, and practices of smoking habits among transgender living in Chennai city. **Background:** Smoking is highly prevalent among transgender persons and contributes to health disparities. Guided by the theory of planned behavior, we identified beliefs related to attitudes, perceived behavioral control, and subjective norms, as well as transgender-specific variables, to explain variance in intention to quit smoking in transgender smokers. Many studies in the past 20 years have documented that transgender individuals smoke at rates that exceed the general population; yet, there have been few reports of smoking cessation interventions targeting this population. Stress, patronage of bars and clubs, and higher instances of alcohol use among the transgender community contribute to higher smoking rates. **Results:** From this result, it shows that 45% were not interested to control smoking, 44% were agreed that tobacco companies were using them to use the tobacco products, 65.1% were not care about the health warnings in the cigarette packets, 71% were not visited doctors to quit smoking, and 69.4% were not aware of oral gum and bone problems due to smoking. Smoking habit among transgender is more compared to others in Chennai city. **Conclusion:** No transgender-specific factors emerged as significant. It is hoped that this study will stimulate the development of interventions that improve the health of a vulnerable subpopulation and reduce health disparities based on sexual orientation.

**KEY WORDS:** Cancer, Nicotine, Smoking, Tobacco, Transgender

## INTRODUCTION

Smoking and tobacco use cause stained teeth, bad breath, and a diminished sense of taste.<sup>[1]</sup> Overtime, smoking can hinder your immune system, producing more concerning side effects that include a reduced ability to recover after surgery.<sup>[2]</sup> Due to this, smoking is also one of the most significant risk factors associated with gum or periodontal disease, which causes inflammation around the tooth. This irritation can affect the bone and other supporting structures, and its advanced stages can result in tooth loss.<sup>[3,4]</sup> The use of tobacco - especially smokeless tobacco - increases your risk of oral cancer as well, which can be aggressive due to the abundance of blood vessels and lymph nodes in your head and neck.<sup>[5]</sup> The effects of smoking on teeth can lead to tooth decay and pose a challenge with restorative dentistry.<sup>[6]</sup> Since tobacco causes tooth discoloration, the esthetic results

of this treatment are not always ideal - both extrinsic and intrinsic.<sup>[7,8]</sup> In addition, gum recession can cause uneven margins on crowns and other restorations.

Smoking leads to dental problems, including:

- Bad breath, tooth discoloration
- Inflammation of the salivary gland openings on the roof of the mouth
- Increased buildup of plaque and tartar on the teeth
- Increased loss of bone within the jaw
- Increased risk of leukoplakia, white patches inside the mouth
- Increased risk of developing gum disease, a leading cause of tooth loss
- Delayed healing process following tooth extraction, periodontal treatment, or oral surgery
- Lower success rate of dental implants
- Increased risk of developing oral cancer.

Smoking can cause bad breath and stained teeth, as well as gum disease, tooth loss, and damage to the sense of taste.<sup>[9,10]</sup> Tobacco smoke has around 7000 chemicals in

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it, around 70 of those cause cancer. Quitting the smoke will help to reduce the health risk risks for cancers in the mouth, throat, esophagus, and bladder drop within 5 years.<sup>[11]</sup> The risk for lung cancer drops by after 10 years. Lung cancer is the largest single cause of cancer-associated mortality. Smoking increases the risk of premature death in middle-aged men and giving up smoking earlier in life can prevent smoking-attributable premature death.<sup>[12]</sup> The smoking rate among transgender is striking - estimated to be twice that of heterosexual population. Transgender community smokes 3 times the rate of general community.<sup>[13,14]</sup> Stress, patronage bars and clubs facilitate higher instances of smoking and alcohol consumption among the transgender community. Smoking shortens the life of the people of 12 years and female around 11 years.<sup>[15,16]</sup> Poisons in tobacco that affects peoples' health are carbon monoxide gases found in car fumes and is fatal in large quantities. It replaces oxygen in the blood and starves organs of oxygen and stops them to function properly.<sup>[17,18]</sup> Lung disease due to smoking can take years to be noticed, often cannot be diagnosed until it is quite advanced.<sup>[19]</sup> There are many lung and respiratory problems caused by smoking. The aim of the study is to determine the knowledge, attitude, and practicing of smoking habits of transgender living in Chennai city.<sup>[20,21]</sup>

## MATERIALS AND METHODS

Cross-sectional questionnaire study was carried out to assess the smoking habits of transgender in Chennai, Tamil Nadu.. A total of 100 transgender participated in the study. The survey period extended for a period of 20 days in November 2017. A study involved smoking habits, number of cigarettes a day, brushing, using of pan and hookah, oral hygiene, and dental visits. The study subjects consisted of transgender from three prominent localities of the city where most of the transgender lives.

With 21 questionnaires (Attachment 1) which had been designed based on the primary objective of the study were used. The questionnaire was initially prepared in English, later translated into their regional (Tamil) language.

Section I: Includes their demographic details.

Section II: Includes the details of the questionnaire as follows:

- Knowledge on smoking habits: Number of cigarettes using per day
- Attitude on smoking habits: Assessment on oral hygiene and regular dental visit
- Practicing on smoking habits: Assessment on using of cigarettes, tobacco-related habits, and food habits.

### Statistical Analysis

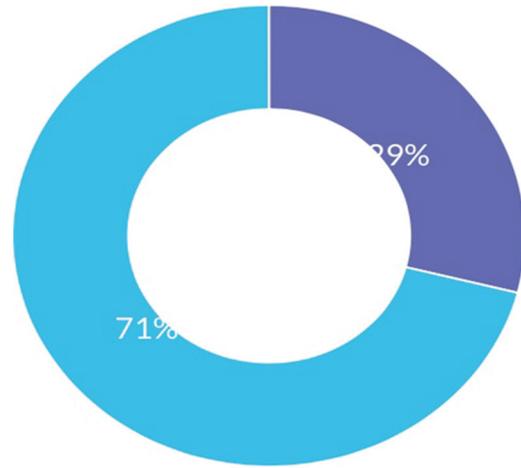
All the obtained data were entered into Microsoft Excel sheet and analyzed using the Statistical Package

for the Social Sciences (SPSS, IBM, USA) version 20. These results were analyzed.

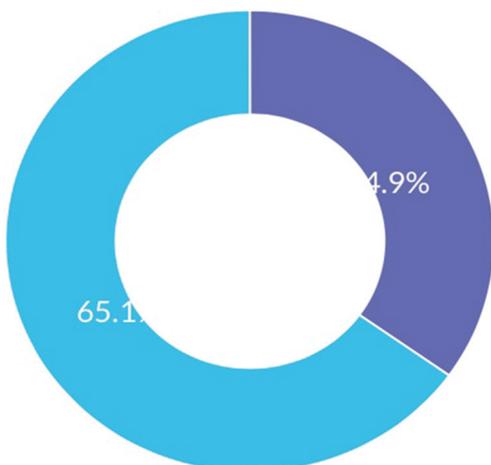
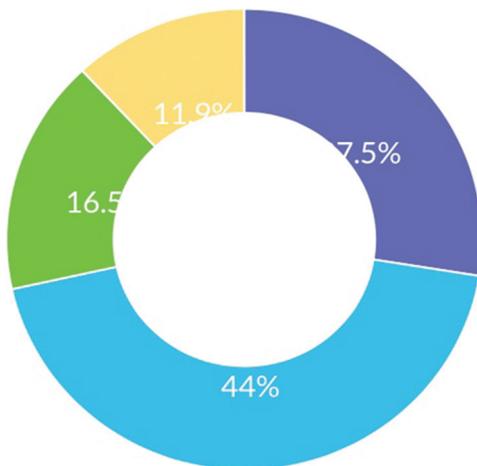
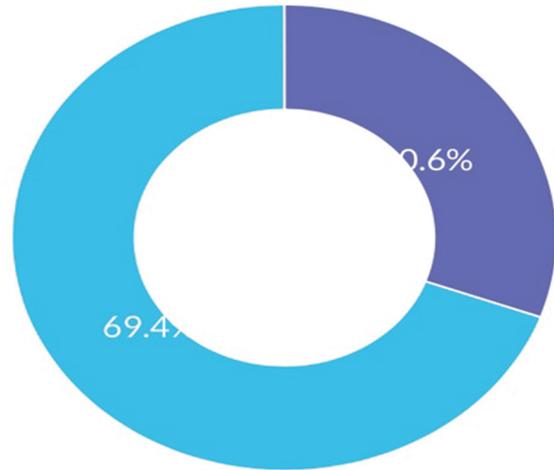
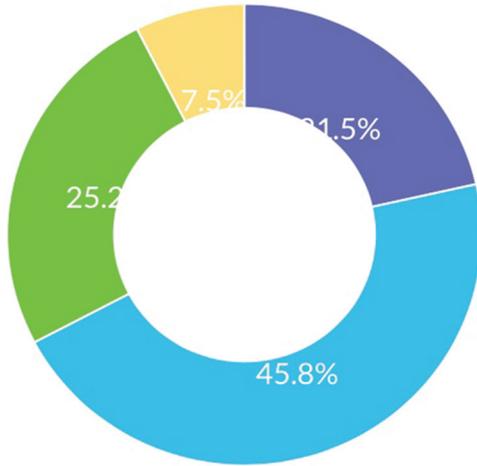
### Attachment 1: Questionnaires

1. How many times you smoke daily?  
(A) >2 or 3, (B) A full packet,  
(C) Not smoking daily.
2. At what age did you started smoking?  
(A) Minor, (B) Major,  
(C) Now only, (D) Not remembered.
3. Did you use pan or other tobacco stuffs?  
(A) Yes but rarely, (B) Yes daily,  
(C) Not using, (D) Daily number of times.
4. Did you aware of lung cancer due to smoking?  
(A) No, (B) Yes.
5. Did you addict to smoking?  
(A) Yes, (B) No.
6. Did you try to control smoking?  
(A) Yes tried lot, (B) Not,  
(C) Sometimes, (D) Difficult to control.
7. Cigarettes using is a part of transgender?  
(A) Strongly agree, (B) Agree,  
(C) Disagree, (D) No option.
8. Tobacco companies use advertising to get the transgender community to use the products?  
(A) Agree, (B) Strongly agree,  
(C) Disagree, (D) No opinion.
9. How many of you noticed the tobacco and cigarettes prevention messages for transgender young people on a website or while online?  
(A) None,  
(B) 1–3 times in the past 30 days,  
(C) 1–3 times/week,  
(D) Daily or almost daily.
10. Have you ever attempted to quit cigarettes or feel like having a cigarettes first thing in the morning?  
(A) I do not use tobacco,  
(B) Yes,  
(C) No.
11. Have you ever feel like having the cigarettes in the morning?  
(A) I have ever smoked,  
(B) I no longer smoke cigarettes,  
(C) No, I do not feel having cigarettes in morning,  
(D) Yes, sometimes, I have in morning.
12. Other than cigarettes did you use pipes or little cigars?  
(A) Yes, (B) No.
13. Did you heard about smokeless tobacco?  
(A) Yes, (B) No.
14. Did you visit doctor to quit smoking?  
(A) Yes, (B) No.
15. Did you heard about smokeless tobacco?  
(A) Yes, (B) No.
16. Have you smoked 100 cigarettes?  
(A) Yes, (B) No, (C) I don't know.
17. What is the long period of lifetime you have gone without smoking since you first started?  
(A) Week or less, (B) 1 week–1 month,  
(C) 6 months–1 year, (D) Longer than 1 year.

- 18. Are you interested in stopping smokers?  
 (A) Strongly, (B) A little,  
 (C) Not at all, (D) Somewhat.
- 19. Did you got bad breath due to smoking?  
 (A) Yes, (B) No.
- 20. Did you got tooth stain due to smoking?  
 (A) Yes, (B) No.
- 21. Did you aware of your oral gum and bone due to smoking?  
 (A) Yes, (B) No.



**RESULTS AND DISCUSSION**



This study evaluated smoking habits of knowledge, attitudes, and practice of transgender residing in Chennai. In our study, 6.2% of people were smoking 2–3 cigarettes daily and 18.7% were smoking a full packet daily and 47.7% were not smoking daily, age of the smoking was not remembered by 42.1%, major were 8.4%, not remembered were 42.1%, using pan and other tobacco stuffs were 26.6% using numbers of times daily, 7.3% were using rarely, 44% were not using, people aware of lung cancer no 10.2%, yes 89.8%, people addicted to smoking yes 17%, no 83%, people try to control smoking yes 21.5%, no 45.5%, sometimes 25.2%, cigarette using is being a part of transgender yes 23.9%, no 38.5%, disagree 20.2%, tobacco companies use advertising to get transgender community to use the products agree 17.5%, strongly agree 44%, disagree 16.5%, people seeing tobacco prevention message none 7.7%, past 30 days 39.3%, per week 8.4%, people attempted to quit smoking not using tobacco 5.8%, yes 34.9%, no 29.2%, people have cigarettes daily in the morning not smoking 2.4%, no longer smoking 45.4%, do not have in morning 17.6%, other than cigarettes using pipes yes 22%, no 78%, people noticed health warnings on cigarettes yes 49%, no 65.1%, people visited doctors to quit smoking, yes 99%, no 71%, people know about smokeless tobacco yes 6.1%, no 63.9%, people smoked 100 cigarettes

**Table 1: The survey of 100 transgender with 21 questionnaires**

Questions	Option A (%)	Option B (%)	Option C (%)	Option D (%)
1	7.5	6.2	18.7	47.7
2	8.4	3.4	26.2	42.1
3	7.3	22	44	26.6
4	10.2	89.8	-	-
5	17	83	-	-
6	21.5	45.8	25.2	7.5
7	13.9	38.5	20.2	17.4
8	17.5	44	16.5	11.9
9	4.7	7.7	39.3	8.4
10	5.8	34.9	29.2	-
11	2.4	45.4	17.6	4.6
12	22	78	-	-
13	49	65.1	-	-
14	99	71	-	-
15	6.1	63.9	-	-
16	23.1	59.3	17.6	-
17	4.3	22.9	10.5	12.4
18	0.6	32.4	23.1	13.9
19	23.4	76.6	-	-
20	1.8	68.2	-	-
21	0.6	69.4	-	-

in entire life yes 23.1%, no 59.3%, longest period of smoking week 4.3%, 1 month 22.9%, 6 months 22.9%, people interested in stop smoking 0.6%, a little 32.4%, not 23.1%, people get bad breath of smoking no 23.4%, yes 76.6, people got tooth stain because of smoking yes 1.8%, no 68.2%, people aware of oral gum and bone due to smoking yes 33%, and no 69.4% [Table 1].

From this results, pie diagram shows that 45% were not interested to control smoking, 44% were agreed that tobacco companies were using them to use the tobacco products, 65.1% were not care about the health warnings in the cigarette packets, 71% were not visited doctors to quit smoking, and 69.4% were not aware of oral gum and bone problems due to smoking. Smoking habit among transgender is more compared to others in Chennai city. Only 33.9% of people have intention to quit the habit. Thus, the rate of smokers among transgender is higher in population.

## CONCLUSION

Despite these limitations, we believe that this study contributes to our understanding of cessation motivation in an understudied population. More positive attitudes toward quitting and specific beliefs that cessation would make transgender smokers feel more like their ideal selves, improve the health of their lungs and longevity of life, and meet with the approval of partners and other important persons were related to greater motivation to quit. No transgender-specific factors emerged as significant. It is hoped that this study will stimulate the development of interventions that improve the health of a vulnerable subpopulation and reduce health disparities based on sexual orientation.

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