



Assessment Of Oral Hygiene And Life Style Pattern Among Transgender Population In Tamilnadu

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Abstract: Dental illnesses are found all around the world. Always good oral hygiene practices can minimize the negative effects of periodontal diseases. Assessing oral hygiene behaviour will help in improving their oral health status and also in planning oral health strategies specific to transgender population. The objective of this study is to assess the impact of oral hygiene practices and life style among transgender population residing in Tamilnadu. A cross-sectional survey was conducted among the transgenders residing in Tamilnadu. A structured questionnaire was used to get the data regarding oral hygiene practices and lifestyle patterns. Data related to oral hygiene and lifestyle were collected after getting the informed consent from each subject. A total of 250 transgenders were enrolled in this study, of which 81% are using tobacco and majority of them were non-vegetarian. 89% of them were using tooth brush for cleaning teeth and 75% of them had dental problems. Majority (85%) of them had visited dental clinic for their dental problem. Both government and private hospitals are used in equal proportion for their dental treatment. The major reason to visit the dentist was to fill their teeth. While assessing the life style, most of them were using face cream (71%) to improve their appearance followed by lipstick, eyeliner and nail polish. Most of them were thinking that smile is most important for them than talk due to their voice chance. For a better smile, they were using lipstick and frequent cleaning of their teeth (74%). Oral health status helps to influence the quality of life style among the transgender population. They should be educated and motivated to overcome the barriers and seek professional dental help. This necessitates a tailored intervention to satisfy the needs of this population in future.

Key words: Oral hygiene, stigma, life style, transgender, smile, malocclusion

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I. INTRODUCTION

Transgender community is one of our country's most socially disadvantaged groups. Transgender faces social stigma, discrimination, and financial instability in their day to day life. It leads to a variety of negative health outcomes. Transgender's health remains a poorly researched topic 1. The social stigma associated with this population has a significant impact on their access to oral health care. Transgender face discriminatory treatment by health care providers 2. Dental care providers with a fear of exposure to HIV expressed least regard and willingness to treat transgender regardless of their HIV status 3. Transgenders become addicted, believing that using alcohol, tobacco and other substances would solve their problem. Smoking and smokeless tobacco have deleterious effect not only on general health but also on oral health. Smoking is one of the important causes for periodontitis. The usage of cigarette and smokeless tobacco is higher among the transgender adults when compared with the cisgender adults 4. The social stigma and discrimination caused a fear among the transgender patients and made them to avoid visiting the health care facility. Lack of employment made them economically weak and forced them to sex work. Unsafe sexwork made them more prone to sexually transmitted diseases. All these factors affect the oral health badly. Particular attention is required to enhance their oral health. Healthy oral tissues are a basic requirement for a person's physical, social, emotional, and psychological growth and well-being. It has a significant impact on the quality of life. The presence and severity of dental problems varies from person to person. It is influenced by a variety of factors including gender, knowledge, attitude, cost of dental/oral care and access to it. Transgender people endure social isolation and it has been linked to an increase in periodontal disease 5. Neglecting oral diseases can result in tooth loss and have a severe impact on a person's quality of life owing to their inability to chew and talk. Loss of tooth also affect a person's appearance. Transgenders usually think that their facial appearance does not align with their gender. This has lowered their self-esteem. Makeup is one of the first step of the transgender in embracing their identity. The relationship between makeup and transgender is complex. Makeup can make them safe when going out in public. Makeup increased their self-esteem 6. Transgender give more importance to makeup as they reveal "who they are". Trans- woman Megan insists that "Makeup is not a mask" 7. Cosmetics may not make the woman but it makes being read as a woman. Makeup goes from being optional to essential. Transgender believe that external appearance is what makes someone a real woman 8. They failed to realise that good health is essential for healthy appearance. This ignorance made them to concentrate on makeup leaving behind their health. As we know that "Smile is the best makeup you wear", and "A

Good makeup is incomplete without a good smile". Oral health education is a crucial component of oral health promotion because it tries to foster positive attitudes, and encourage good oral health habits 9. Oral health issues have an impact on a community's quality of life 10. This is primarily due to a lack of understanding and a negative attitude toward the necessity of oral hygiene. Due to a paucity of gender identification data collecting, there is little information about the oral health conditions that impact transgender people and how their life style pattern are changed. To organise oral health-care systems and to reduce the periodontal disease morbidity, it is vital to first understand existing oral hygiene behaviours and oral health knowledge in the community. Assessing oral hygiene practices shall help in improving their oral health and also in planning oral health strategies specific to the present group. Many studies have been conducted among transgenders on stigmatization, substance abuse, mental health and general health. Very few studies about oral hygiene practices. To date up to our knowledge no study has been conducted correlating oral health parameters and life style measures which complement and contribute to the improvement of oral health and facial appearance. As said by Confucius, the Chinese philosopher "Behind every smile there is teeth". The knowledge, importance and expectations about the smile of transgender is researched in this study.

2. MATERIAL AND METHODS

A cross sectional survey was conducted among 250 transgender individuals. An interview-based, predesigned, structured, close-ended questionnaire based on the objective of the study, was used. Data related to their oral health and life style were collected. Convenient sampling and snow ball sampling technique was used to enrol the study subject. All procedures were followed in accordance with the ethical standards of Sree Balaji Medical College and Hospital, institutional Human Ethical committee (Ref. No. 002/SBMC/IHEC/2020/1367). Transgender individuals aged above 25 years were enrolled. Written consent was obtained from them for participating in the survey.

3. STATISTICAL ANALYSIS

All the information obtained from participants were analysed using SPSS (software, Statistical Package for Social Science version 24). Descriptive statistics was used to represent the data.

4. RESULTS

A total of 250 transgender population were enrolled to this study. The below table-I depicts the oral hygiene practices of these study group. Figure-I shows that around 81% of them having the habit of tobacco usage.

Fig-1 Tobacco Use

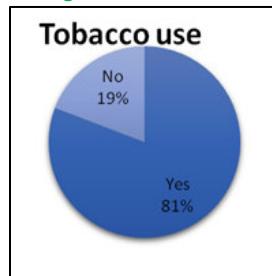


Figure-1 shows that only 19 percentage of them don't use tobacco products and majority of them (81%) have the habit of using tobacco products.

The below Figure-2 depicts the dietary pattern of the study population. Majority (96%) of the study population were non-vegetarian. Figure-2- Diet pattern

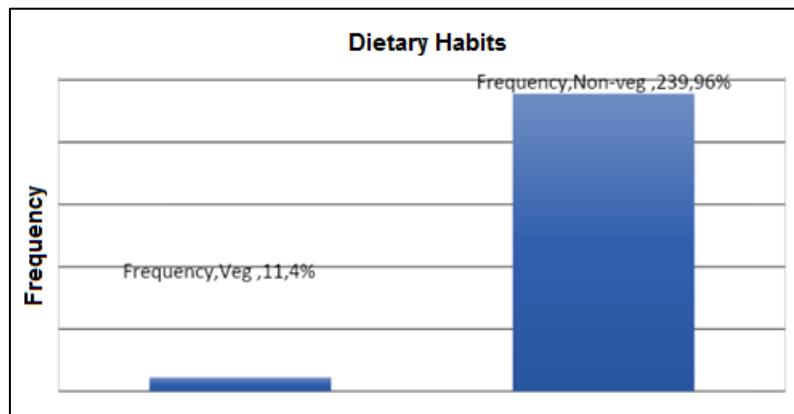


Fig-2 shows the dietary pattern of the study population. Majority(96%) of the study population were non-vegetarian and only 4% were vegetarians.

Table-1 depicts that majority of the study participants (86%) use tooth brush to clean their teeth. Around 75% of them had tooth problem. For the dental issues around 81% of them visit dentist for their treatment. Almost in equal percentage they prefer to go to government and private hospitals. Due to fear nearly 85% didn't approach dentist for their dental problem. Around 73% of them visited the dentist to get their caries teeth filled. and 14% of them visited for tooth stain removal.

Table-1: Oral hygiene practices

Variables	Frequency (n=250)	Percent
Brushing method		
Tooth brush	216	86.4
Finger	34	13.6
H/o tooth problem		
Yes	188	75.2
No	62	24.8
H/o Visit to dentist		
Yes	202	80.8
No	48	19.2
If yes type of hospital		
Government	101	50.0
Private	101	50.4
If no, reason		
Fear	41	85.4
Financial problem	7	14.6
Purpose to dental visit		
Teeth stain removal	34	13.6
Tooth pain	32	12.8
Filling	184	73.6

Table-1 shows majority of the participants (86%) use tooth brush to clean their teeth. Around 75% of them had tooth problem and around 81% of them visit dentist for their treatment. Almost in equal percentage they prefer to go to government and private hospitals. Due to fear nearly 85% didn't approach dentist for their dental problem. Around 73% of them visit dentist to fill their caries teeth followed which tooth stain removal(14%).

Fig-3 clearly shows that majority of the transgender (86%) uses tooth brush for cleaning their teeth and only 13.6% of transgender still uses their fingers for brushing.

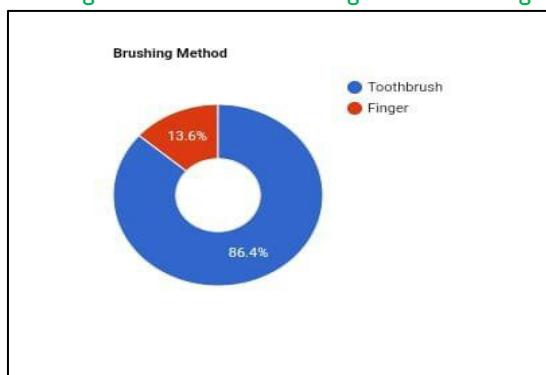


Fig-3 shows the method of tooth brushing. Majority of the transgender (86%) uses tooth brush for cleaning their teeth and only 13.6% of transgender uses their fingers for brushing.

Fig-4 highlights the preference of the hospital which the transgender chose to get their dental treatment done. Both government and private hospitals were equally chosen for their treatment.

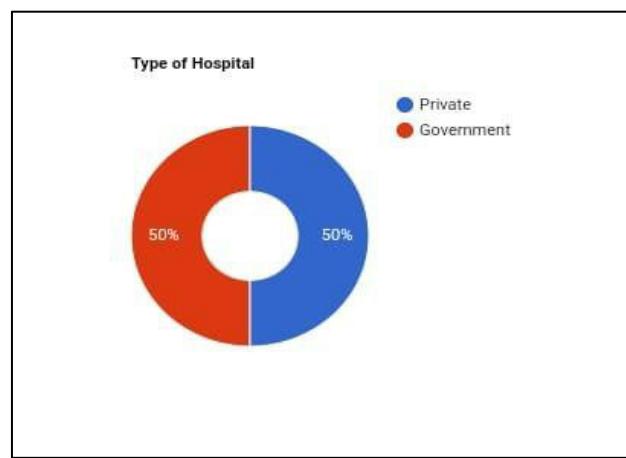


Figure-4 shows that both government and private hospitals were equally chosen for the treatment.

Figure-5 shows that the main reason for not visiting a dentist for their treatment was fear (85%) and only 14.6% stated their financial problem as the reason for not visiting a dentist for treatment.

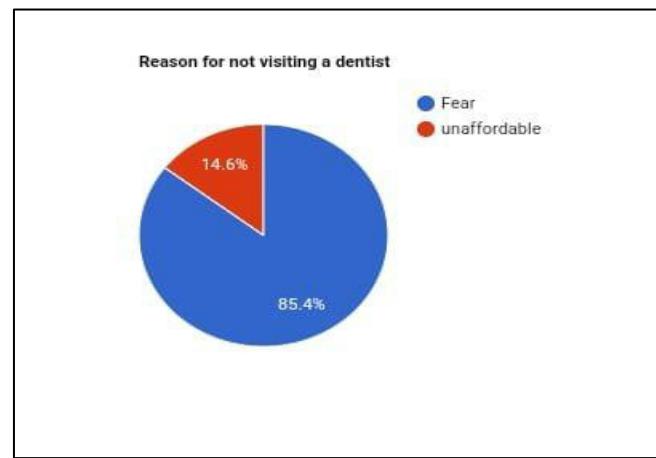


Figure-5 shows that majority (85%) of them stated their fear and only 14.6% stated their financial problem as the reason for not visiting a dentist for treatment.

Figure-6 shows that majority (73.6%) of them visited the dentist for filling their decayed teeth, 13.6% went for stain removal and only 12.4% went to treat their tooth pain.

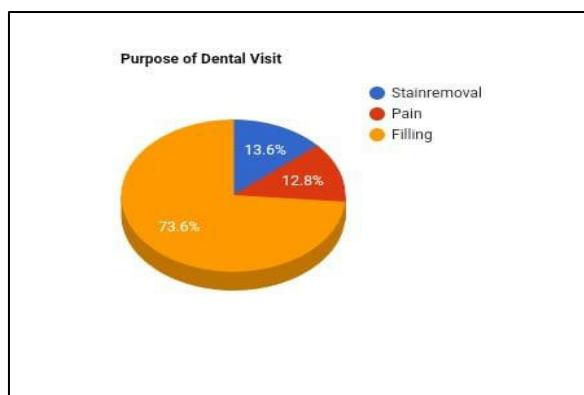


Fig-6 shows that majority (73.6%) of them visited the dentist for filling their decayed teeth, 13.6% went for stain removal and only 12.4% went to treat their tooth pain.

Life style of the transgender

From the below table-2 we can observe that most of the transgenders (82%) have been teased by others in the community, mostly for their appearance (96%). Around 80% of them were thinking that their appearance did not match with their costume. They believe that changing or improving their facial appearance may help them to match the costume than the body size. Majority (71%) used face cream; lipstick followed by eyeliner and nail polish to improve their appearance. 91% percentage of them talk less and smile frequently due to their voice change. They believe smile is more important (81%) than speech. To improve their smile they use lipstick and clean their teeth frequently (74%).

Table-2: Assessment of Life style among transgender

Life style questions	N	%
Have you ever teased by others		
Yes	205	82.0
No	45	18.0
If yes for what		
Appearance	240	96.0
Voice change	10	4.0
Do you think your appearance matches with costumes		
Yes	50	20.0
No	200	80.0
If no, what will help you to improve		
Improvement in facial appearance	219	87.6
Improvement in body size	31	12.4
Which cosmetics do you use the most to improve your appearance?		
Lipstick	33	13.2
Eyeliner	27	10.8
Nail polish	12	4.8
Face cream	178	71.2
How are you managing your voice change?		
Talking less and smiling frequently	228	91.2
Not at all talking in public place	22	8.8
Do you think your smile is important?		
Yes	203	81.2
No	47	18.8
What steps are you taking to smile better?		
Applying lipstick	44	17.6
Frequent teeth clean	20	8.0
Both	186	74.4
Do you think you are happy with your smile?		
Yes	222	88.8
No	28	11.2
What can be done to improve your smile		
Reduce the size of my teeth	25	10.0
Increase the size of my teeth	36	14.4
Want the teeth to go back	147	58.8
Want to close the gaps	42	16.8

Table-2 shows that majority of them (82%) have been teased by others for their appearance (96%). Around 80% of them believe that their appearance did not match with their costume. and they believe that changing or improving their facial appearance may help to

match with their costume.. Majority (71%) used face cream; lipstick followed by eyeliner and nail polish to improve their appearance . 91% percentage of them talked less and smiled frequently due to their change. They felt smile is more important (81%) than speech.. For a better smile they use lipstick and clean their teeth frequently (74%).

Fig-7 shows the preference of cosmetics used to improve their appearance. Face cream is used by 71.2%, lipstick 13.2%, eyeliner 10.8% and nail polish by 4.8% to improve their appearance.

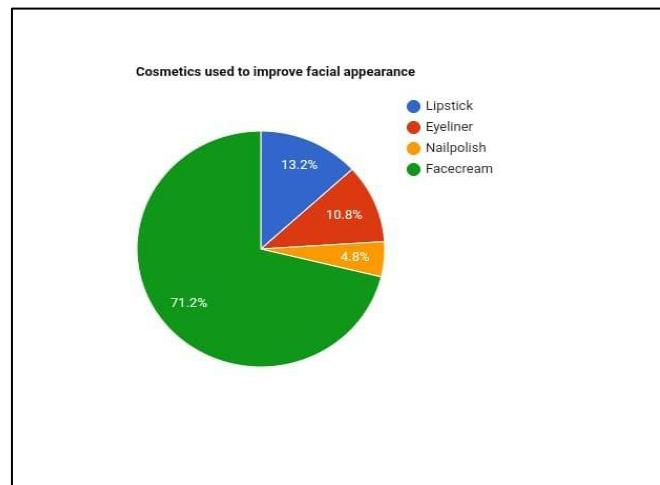


Figure-7 shows that majority of the study population (71.2%) uses face cream, 13.2% lipstick, 10.8% eyeliner and 4.8% uses nail polish to improve their appearance.

Figure-8 shows the views of the study population about what can be done to improve their smile. About 147 transgender (58.8%) wanted their teeth to go back, 42 (16.8%) of them wanted to close the gaps between their teeth, 36 (14.4%) wanted to increase the size of their teeth and 25 (10%) of them wanted to reduce the size of their teeth.

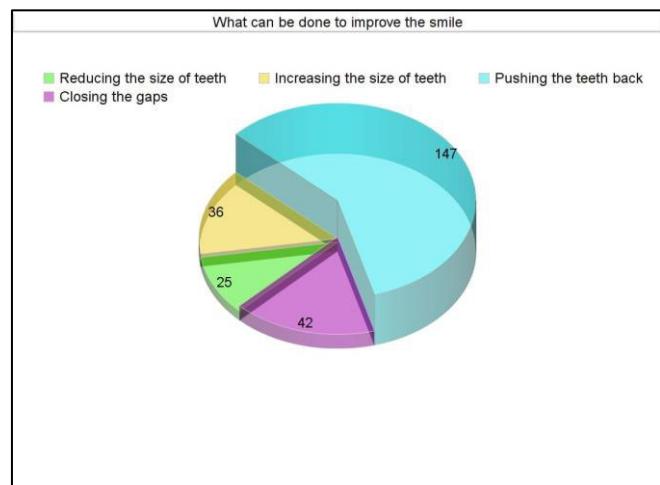


Fig-8 shows that about 147 (58.8%) of them wanted their teeth to go back, 42 (16.8%) of them wanted to close the gaps between their teeth, 36 (14.4%) wanted to increase the size of their teeth and 25 (10%) of them wanted to reduce the size of their teeth to improve their smile.

5. DISCUSSION

Oral diseases are a significant public health burden worldwide, yet many low- and middle-income nations, particularly India, pay insufficient attention to them. The research is the first of its kind to assess the impact of dental disorders on the quality of life of transgender people. There is no evidence on how transgender perceive oral health or interact with dental professionals. The physical appearance may also influence the socio-behaviour of the participants which indirectly affects dental treatment-seeking behaviour. Identity development and quality of life may be affected by sex, type of TGNC identity, sexual orientation, race/ethnicity, geographical location and socioeconomic status 11. Tobacco usage is one of the leading preventable causes of disease and death all over the world. Despite the

fact that tobacco usage is reducing in many nations, there are still differences among occupational groups 12. In this study, it was found that the majority of the transgenders are using tobacco products. and are taking non-vegetarian diet. Majority of them have the habit of using a toothbrush to clean their teeth. Most of them had dental problems and sought help of a dentist to address their dental issues Similar to our findings, previous studies have reported that transgender individuals experience a wide range of health disparities and poor health outcomes 13,14. Few of them avoided visiting a dentist because of fear and their reduced affordability. The major reason to visit the dentist was to get their caries teeth filled and to get relief for their tooth ache. Though, they have financial constrain, almost 50 percent of transgenders has visited private p dentist for their dental consultation. A study done by Muralidharan et al., showed

that there was no statistically significant difference seen across the various domains in the overall impact of the oral quality of life 15. In this study majority of them got teased by others due their physical appearance and voice change. Teasing and bullying has caused a great stress in their daily life and this repeated stress made them to suffer from chronic stress disorder. This is one of the major reasons limiting them to take care of their wellbeing 16. The stress and anxiety forced them to alcohol and tobacco abuse 17-19. Oral cavity is the gateway to the body and oral health has to be given importance same as that of general health 20,21. This study reveal that transgenders are conscious about oral health as majority of them have started visiting dentist for their oral health issues in spite of their low income. Lack of employment forced transgender to do sex work or begging for their income 22. Our study reveals that about 85.4% who have not visited the dentist reported their major concern as fear above their financial burden. This may be due to their perceived stigma and discrimination by the dental care providers. A study by Srinivasan Raj Samuel revealed the stigmatizing attitude and low regard and willingness to provide dental care is rampant among the dental residents due to their fear of exposure to HIV. Transgenders consider makeup is essential for them as it helps in complementing their transition and it is cheap, easily available and easily removable. This study reveals that majority of them uses face cream and lip stick to improve their facial appearance. Many told smile is important for them than speech. There is no data available to compare since this is a first study. Many of the participants felt that they need dental corrections such as closing the gaps, pulling the teeth will improve their smile. Enhancing smile will obviously improve the facial attractiveness 23. It is a proven fact that oral diseases greatly affect the quality of life. Malocclusion when in extreme is also considered as one of the causes for bullying 24. According to the World Health Organization, malocclusion is the third most common oral diseases. It is possible to implement programmes to increase social interaction abilities. Cognitive-behavioural therapy can assist people with facial disfigurement overcome social isolation, stress, and anxiety. Programs that teach and educate these individuals on how to effectively predict and control their emotions, respond positively to other's reactions, create self-confidence and esteem, and provide people with skills and tactics for dealing with physical challenges are recommended. However, the availability of such programmes in developing nations is extremely limited. Before such programmes are replicated in India, more research should be conducted to determine their compatibility with local cultural and societal challenges. More research should be conducted to determine their compatibility with local cultural and societal challenges. It is suggested that more follow up studies be conducted, as well as the use of more innovative health awareness programs. While collecting the data, we felt that they are not revealing the correction information for few questions. However, these set of data has been helpful in providing preventive oral

health education programs to the health professionals, so, we put sincere efforts to obtain the correct data from the study participants.

6. CONCLUSION

Transgenders are highly stigmatized group of population who are affected by chronic stress which limits them to take care of their wellbeing. This stress has forced them to harmful alcohol and tobacco consumption. Due to its low morbidity and mortality, oral health cannot be overlooked in any manner, as the health of the tissues (teeth, gums) of the "Mouth" (gateway) to our body is just as important as the health of other bodily tissues. Health is a nebulous concept that encompasses more than just the absence of disease and includes social, emotional, spiritual, and bodily aspects. Dental/oral illnesses clearly cause impairment and physical limitations, which have an impact on social, emotional, and psychological elements of life. The information obtained in this study helps to understand the common oral hygiene practices among transgender population, their awareness about oral treatment, willingness to spend for their dental treatment and overcoming the fear to visit the dentist. The fear among the transgenders should be removed by educating the dental care providers about the gender identity disorders. The prejudice about the transgenders must be ignored by the dental care providers. Life style pattern, it's essentiality in their transition and importance of oral health status to the transgender population is clearly assessed in this research. Makeup has become an essentiality to transgender. It helps in their transition. A tailored treatment plan is needed to satisfy the dental needs of this population in future. Efforts to increase the knowledge of oral effects of tobacco use and to reduce the habit are needed to improve oral health of this population. A database about the parameters of a smile which includes the size, shape and position of the teeth and the jaws and the soft tissue which overlay has to be created which helps in further research of this unexplored field of dentistry. Financial support and sponsorship

7. AUTHORS CONTRIBUTION STATEMENT

Dr. Manikandan Shanmugam the principal investigator conceptualized the study, carried out the research study and drafted the manuscript. Prof. Kurinchi Kumaran Navaneethakrishnan the research supervisor guided this study. Prof. Bhaskar Venkatachalam and Prof. Rajasigamani Kandasamy discussed the methodology and result. Dr. Krishna Prasanth Baalann contributed in analyzing the data.

8. CONFLICT OF INTEREST

Conflict of interest declared as none.

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