

Assessment of Oral Health and Oral Hygiene Practices of Transgender Community in Lahore

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Abstract

Objective: The objective of the current study was to assess the oral health of Trans-genders in Lahore City.

Material and Methods: This study was designed as a descriptive cross-sectional study to assess the oral health statuses and oral hygiene practices of trans-genders in Lahore city. The data was collected using a validated questionnaire. Prior to participating in the study, all participants signed a consent form.

Results: The study included 149 participants who were all trans-genders residing in Lahore city. Each participant was assessed and examined individually during the survey.

The age of the participants ranged from 19 to 60 years, with a mean age of 36.49 years (SD=10.036). The mean number of decayed teeth (D) was 3.4 (SD=1.531), while the mean number of missing teeth (M) was 2.94 (SD=1.497). On average, participants had 0.52 filled teeth (F) (SD=0.15), and the total DMFT score (T) ranged from 1 to 18, with a mean of 6.86 (SD=2.99).

Conclusion: Through this study, It was observed that caries experience among trans-gender community of Lahore is at high levels. Therefore, it is recommended that they undergo regular oral health checkups and take necessary preventive measures. This includes adopting proper brushing techniques and using other oral health aids to promote overall oral health.

Keywords: Oral Health, Oral Hygiene, Trans-genders.

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Introduction

Health is defined as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”. The programs for the prevention of oral complications concern education about oral hygiene and healthy eating, fluoride prophylaxis, periodic check-ups, sessions of professional oral hygiene, and secondary prevention programs.¹ Cultures

have diverse gender presentations and social categories, and there are numerous terms used to describe individuals who do not fit within a male-female binary.² The term "Transgender" typically refers to individuals whose gender identity or expression does not align with their assigned sex at birth.³ The marginalized communities of transgender and cisgender individuals in Pakistan are at significant risk of diminished quality of life that eventuate into poor oral hygiene practices in the population.⁴

There is a well-established link between oral health and overall health, meaning that poor oral hygiene can lead to various diseases and complications. Among transgender individuals, a common oral disease is Human Papilloma-virus, which may even lead to cancer.⁵ Maintaining good oral health is vital for overall health and quality of life. The connection between oral health knowledge and behavior is essential in this regard.⁶

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One's oral health status is significantly influenced by their oral health behaviors, which include habits such as regular tooth brushing, flossing, and dental checkups⁷. The transgender population often faces difficulties in disclosing their sexual identity or orientation when seeking dental care, leading to a perception of invisibility within society. This reluctance to disclose their status has resulted in the transgender community being labeled as "the nation's invisible population"⁸. Transgender are at a higher risk for engaging in various forms of addiction, such as tobacco, alcohol, and substance abuse, which can significantly impact both their general and oral health. Additionally, they may engage in unsafe oral sex and other harmful activities influenced by peers, which can further debilitate their health status.⁹ As a population with distinct sexual identities and orientations, the transgender community requires specialized consideration and inclusion in dental care delivery.^{10,11} In addition to facing barriers to accessing medical and dental care, the transgender community is also frequently denied general, oral health, and psychological assistance.¹² Research conducted in Pakistan indicates that stigma and discrimination against this population negatively impact their ability to access oral health care.¹³ As key healthcare providers, oral health professionals are in a unique position to address substance abuse issues and refer their dental patients to appropriate resources. Given the particular needs and challenges faced by the transgender community, it is crucial that dental care includes monitoring and preventative measures to ensure optimal oral health.¹⁴ Low Socioeconomic conditions, exposure to violence, prejudice and limited access to preventative healthcare services contribute to delays in the early detection and treatment of diseases. Transgender individuals are often marginalized in society, resulting in limited access to basic necessities, including oral healthcare. Dental education has been found to be effective in enhancing healthcare providers' comfort level, behavior, and communication skills when treating transgender patients.^{15,16} Raising awareness and increasing knowledge related to the transgender population could decrease stigma and barriers to dental care delivery and increase dental care worker's confidence in treating transgender individuals.¹⁷

Understanding the concerns and dental care goals of transgender patients is very important in improving their quality of life. While discrimination in patient care for transgender individuals has been widely reported, there is a lack of literature on the attitudes and behaviors of

dental care providers towards this population.

Methods

In this study, a descriptive cross-sectional design was utilized to assess the oral health of trans-genders residing in Lahore city. The sample size for the study was determined to be 149 participants using a statistical calculation with a 5% level of significance, an 8% margin of error, and an anticipated proportion of 10% trans-genders in the population. The data was collected using snowball sampling technique. The individuals established as transgender in their national identity cards were included in the study. We excluded the individuals with any kind of mental and physical disability. Data was collected by using Section-II questionnaire by M. Ovia, et al.²¹ Data about various variables related to oral health status including DMFT Score, Bleeding gums, mobile teeth, Xerostomia, Gingivitis and Halitosis was collected. A consent form was also signed by the participants in Urdu and English. To ensure the confidentiality of the participants, their names were masked by numbers after collection of the data. The collected Data was then entered and analyzed in S.P.S.S version 23.0®.s. Descriptive statistic was performed on all the variables. Categorical variables were presented in the form of frequencies and percentages. Quantitative variables were presented in Mean \pm SD. Bar charts and histograms were constructed for categorical and continuous variables respectively.

Results

The study had 149 individuals in total, all of whom were transgender residents of Lahore. Participants from rural origins made up 37 (24.8%) while those from urban backgrounds made up 112 (75.2%). They were evaluated and examined individually during the survey, and Table 1 provides the overall mean and standard deviation of their DMFT score. Out of 149 individuals, 146 (98%) did not clean their teeth, whereas 3 (2%) participants did brush their teeth after breakfast and dinner. Out of 149 people in this research, 89 (59.8%) reported that they experienced frequent mouth aches and 60 (40.3%) had no or infrequent of mouth aches. Only 2 (1.3%) patients did show some concerns on it, while 147 (98.7%) patients did not consider their oral and dental ache concerns to be critical. It is pertinent to mention that a large number of participants (n=134, 89.93%) reported the unaffordability to get the dental treatment done.

Of 149 participants of the study, 140 people (94%) had not had a dental appointment in the preceding two years,

whereas 9(6%) had gone a dental set up for some dental treatment. Overall, 2 (1.3%) people had gone to the dental clinics to have their teeth cleaned, 3(66.6%) patients had gone for treatment of their previous checkup, and 4(44.4%) patients had gone for their cavity checkup. Following a full dental examination, it was determined that 127(85.23%) individuals required dental treatment, with 97(65.1%) requiring multiple dental treatment procedures. 66 (44.3%) patients had tooth decay, 64 (43%) suffered from bleeding gums, 72 (48.3%) had dry mouth, 15 (10.20%) patients had mobile teeth, 75 (50.3%) patients changed their paste in last 1 year multiple times, 61(40.9%) patients had swollen gums, 76

(51%) patients had bad breath, 6 (4%) patients had misplaced teeth, and 60 (40.3%) patients smoked. 80 (54%) of research participants indicated they couldn't afford dental procedures, and 147 (98.7%) said they didn't take any dental condition seriously. It was also observed that use of addictive substances including such as smoking, chewing tobacco, gutka, and pan in high quantities and frequencies was highly prevalent (40%) among trans-genders.

Discussion

The present study aimed to evaluate the oral health status and oral health care behaviors of transgender people living in Lahore, Pakistan. The study's findings give important insights into the oral health status and challenges that this marginalized community faces, as well as the necessity for specific dental care interventions to improve their overall quality of life. Findings of this study align with previous literature, which emphasizes the importance of dental health in sustaining overall well-being and quality of life in all groups, including transgender people. However, transgender people frequently encounter specific difficulties to their oral health, such as prejudice, a lack of access to dental treatment, and participating in dangerous behaviors such as substance misuse. The results of our study on DMFT score among transgender individuals show that they have high prevalence of decayed, missing and filled teeth which is confirmed by another study done on oral health status in the same community in India²¹. Current study emphasizes the link between poor socioeconomic status and restricted access to preventative healthcare treatments among transgender people. Previous studies reports^{23,24} backs up this conclusion, demonstrating that transgender people are more likely to face healthcare inequalities due to economic circumstances. This highlights the importance of tailored interventions to enhance oral health availability and affordability for transgender people in lower socioeconomic strata. Unfortunately, only 6% of participants had visited a dentist in the past two years, while 94% had not. These results were in coherent with other studies done on transgender communities in South Asia²². These findings highlight the need for greater awareness and education on oral health and the importance of regular dental checkups.

Our study reported a high prevalence of smoking (40.3%) among transgender community which was a high concern for a community largely ignored for oral health care. Previous studies not only reported high prevalence

Table 1: Mean Age & DMFT of Patients

	N	Min.	Max.	Mean	Std deviation
Age	149	19	60	36.49	10.036
D	149	0	15	3.4	1.53
M	149	0	18	2.94	1.497
F	149	0	4	0.52	0.15
Total DMFT	149	0	18	6.86	2.99

Table 2: Oral Health Status and Oral Hygiene Practices Prevalent among Transgender Community.

Variable	Categories	Frequency (N)	Percentage (%)
Place of Residence	Urban	37	24.8%
	Rural	112	75.2%
Mouth Aches Frequency	Very often	89	59.8
	No/Less Frequent	60	40.3%
Brushing After Breakfast and Dinner	Yes	146	98%
	No	3	2%
Dental Visits in Past 2 Years	Yes	9	6%
	No	140	94%
Need for Dental Care and Treatment	Yes	127	85%
	No	22	15%
Affordability of the dental treatment	Can Afford	15	10%
	Cannot Afford	134	90%
Dental Examination			
		64	43%
Bleeding Gums		72	48%
Dry Mouth (Xerostomia)		15	10%
Mobile Teeth		61	40%
Gingivitis		75	50%
Paste Change		76	51%
Halitosis		6	4%
Misplaced Teeth		60	40%
Habitual Smokers			

of smoking but also of substance use.²⁵ A big proportion of our study individuals reported unaffordability of dental treatment. This was a big challenge for this community to report their dental problems and getting them treated. Another study supported our results which assessed the barriers for oral health care in transgender community.¹⁸ The high prevalence of periodontal diseases e.g. Gingivitis, Bleeding Gums, Halitosis as deduced by our study was ascertained by previous study done on periodontal status among transgender individuals.¹⁹

Our recommendation for future research is that urgent research should be carried out to identify key differences between male, female, and the newly accepted third gender to improve their quality of life and access to quality healthcare. Additionally, regulations must be implemented to prevent discrimination in their treatments. Individuals who identify as transgender may face challenges in accessing healthcare due to lower socioeconomic status and inferior quality of life, leading to potential neglect of their physical and oral health²⁰. This study was first of its kind in showing the oral health status and oral hygiene practices among the transgender community of Lahore. It also included the data on Smoking and other addictive substances. Our study didn't include soft tissue oral lesions in data collection. It is recommended for the future references to include the data on soft tissue lesions prevalent among transgender community in Pakistan and rest of the world as well.

Conclusion

Health is crucial for all individuals, including those who identify as transgender. Through this study, It was observed that caries experience among trans-gender community of Lahore is at high levels. Transgender community has high prevalence of missing and filled teeth because of past caries experiences. Regular oral health checkups are necessary for transgender individuals who may use smoking, chewing tobacco, gutka, pan, and other similar products. It is important to take proper oral health precautions, such as regular checkups and proper brushing techniques, along with the use of other oral health aids to maintain good oral health.

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Authors Contribution

MS: Conceptualization of Project

ST: Data Collection

MA: Literature Search

FSM: Statistical Analysis

SA: Drafting, Revision

ZQ: Writing of Manuscript