

KNOWLEDGE, ATTITUDES, AND PERCEIVED HEALTH RISKS OF SMOKELESS TOBACCO USE AMONG MALE RICKSHAW DRIVERS IN URBAN LAHORE: A COMMUNITY-BASED STUDY

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Abstract

Background

Smokeless tobacco is considered a significant public health issue worldwide. In low and middle-income countries like Pakistan, its use remains widespread. Moreover, it is also found more commonly in low-income occupational groups, especially rickshaw drivers, due to social acceptance, peer influence, and economic stress. Although drivers were aware of the health risks, misconceptions persisted, such as believing SLT was safer than smoking or helpful for digestion and stress relief. Therefore, this study aimed to explore the Knowledge, Attitudes, and Perceived Health Risks of Smokeless Tobacco Use Among Male Rickshaw Drivers in Urban Lahore.

Methods

This qualitative study involved semi-structured interviews with 13 male rickshaw drivers in Lahore were conducted. Drivers were selected through purposive sampling from various rickshaw stands across Lahore and face-to-face interviews were conducted. Data were collected until thematic saturation was achieved and analyzed through thematic analysis using NVivo software and manual coding to identify key patterns and themes.

Results

The findings revealed that most drivers initiated SLT use during adolescence, primarily due to family habits, peer influence, and workplace culture. Continued use was reinforced by misconceptions such as believing SLT is less harmful than smoking or beneficial for stress and digestion. Drivers said that peer influence, long working hours, and lack of quitting support made it hard for drivers to stop using SLT. Government and media campaigns were widely viewed as ineffective, while drivers suggested that stricter laws, affordable alternatives, and family or community encouragement could help reduce use.

Conclusion:

The study reveals that strong cultural acceptance, financial difficulties, and a lack of quitting support are the main reasons behind smokeless tobacco (SLT) dependence among rickshaw drivers. Targeted interventions focusing on education, workplace awareness, community engagement, and strong policy enforcement are essential to reduce SLT use and prevent its continuation across generations.

INTRODUCTION

Smokeless tobacco (SLT) remains a critical health risk all over the globe, responsible for nearly one-third of all oral cancer cases in 2022, with the highest burden being observed in South Asia, including Pakistan. (1). Globally, around 91% of SLT users live in low and middle-income countries, particularly in disadvantaged or rural communities. Among these high-risk groups, men are at higher risk of smokeless tobacco use compared to women, mainly due to cultural acceptance, peer influence, and occupational stress. Higher SLT use was found to be associated with severe health outcomes such as cancer, cardiovascular disease, and other tobacco-related illnesses (2), particularly among Asian, Middle Eastern, and African countries, it has been strongly linked with serious health problems (3).

Among all SLT consumption populations, some occupational groups, like rickshaw drivers, are especially found to consume SLT products. The reason behind high consumption among these groups includes their job nature, which includes long and hectic work hours, financial difficulties, stress, and workplace cultures where tobacco use is widely accepted (4). Moreover, it is also observed that SLT use is common among low-income populations, especially in low and middle-income countries. For instance, a survey in Lahore's slum areas showed that about 8.6 percent of adults used smokeless tobacco daily. The habit was most common among people aged 50–59 and those who were unemployed and struggling for daily life earnings, showing a clear link between poverty, job struggles, and tobacco use (5). Although people in Pakistan know about the harmful impacts of SLT products. Just as one of the literature studies indicates that around 86 percent of people were found familiar with SLT products, and 73 percent of respondents were found to be aware of serious health effects caused by these products, but still use them (6). Another study in low-income settings of Islamabad found that, even though

smokers understood tobacco was harmful, they were unable to quit because of the unavailability of proper services to support them (7).

In Pakistan, chewing tobacco is regarded as a socially accepted habit among men, especially in work environments and social gatherings, while women often face more restrictions (8,9). Men with unstable jobs, low income, and long work hours, like rickshaw drivers, are particularly vulnerable due to the cultural normalization of tobacco use and the challenges of their daily lives. Among high-risk working groups, rickshaw drivers represent a particularly vulnerable group in this context. They face long working hours, financial stress, and job insecurity, often in social environments where tobacco chewing is common. At rickshaw stands, SLT is frequently shared, making it appear normal and socially acceptable. Many drivers believe SLT helps them stay awake, manage stress, and fight fatigue, while others think it aids digestion. These perceptions reinforce the habit and make quitting harder, even when drivers are aware of health risks. (9). Despite widespread awareness of its harmful effects, many users struggle to quit because of limited access to cessation support and the deep-rooted social acceptance of the habit.

Extensive quantitative evidence supports the discussion regarding SLT use and associated factors, but there is a lack of qualitative studies exploring how occupational and cultural factors shape SLT use, especially in high-risk groups like rickshaw drivers. While quantitative studies are useful, they do not capture the personal experiences, cultural beliefs, and workplace factors that sustain tobacco use. Very few studies have addressed these issues, and those that exist are mostly small or localized. (10). This leaves an important gap in understanding the lived experiences of urban occupational groups such as rickshaw drivers.

Previous research mostly focused on numbers, such as how many people use SLT and what health problems

it causes in the general population or other workers. We still know very little about the everyday reasons, cultural habits, and personal beliefs that keep rickshaw drivers in Pakistan using SLT. The goals of this study are to: (1) understand the patterns and reasons why drivers use SLT, (2) explore what they know and believe about its health effects, and (3) learn about their attitudes toward quitting. By focusing on this high-risk group, often missed in national surveys, this research will provide community-based insights that can help design better health awareness programs and tobacco control policies. This study will help explain why rickshaw drivers use SLT, what they know about its harms, and how they feel about quitting. The findings can guide culturally relevant health programs and inform stronger policy measures against SLT.

Methodology

Study Design

This study used a qualitative, exploratory, and phenomenological design to gain in-depth understandings about rickshaw drivers' views and experiences of smokeless tobacco (SLT). A qualitative approach was considered useful in this setting, focusing on personal stories, daily routines, and social pressures that influence tobacco use. This approach allowed participants to express their experiences freely. The exploratory designs help to gather information related to SLT use and habit development, while the phenomenological approach helps to understand the lived experiences of rickshaw drivers. The Consolidated Criteria for Reporting Qualitative Research was used (11) to report complete detail of study

Study Setting and Drivers

The research was conducted on rickshaw drivers in Lahore. Lahore is chosen because it represents the vast group of people from different backgrounds who reside and work here. Busy rickshaw stands were chosen where drivers usually gather, making it easier to approach them. The study included male rickshaw drivers in Lahore who had been in this occupation of rickshaw drivers for at least one year, currently using smokeless tobacco, and willing to participate in the interview. drivers who did not use smokeless tobacco, had less than one year of driving experience, or were unwilling to participate were not included in the

study. Female rickshaw drivers were also excluded, as the focus of this research was limited to men.

Sampling Strategy

A purposive sampling technique was used to gather data. To capture diverse opinions, drivers of different ages, areas levels of work experience were included. We used purposive (non-probability) sampling because we wanted to gather meaningful insights about smokeless tobacco use. In qualitative research, purposive sampling is useful since it allows the researcher to select drivers who have direct experience with the issue, in this case, rickshaw drivers who currently use SLT (12). This approach works well for mobile groups like rickshaw drivers, who serve as a base for gaining depth of understanding.

Data Collection

Data were collected through semi-structured interviews using a flexible guide developed from an extensive literature review (10,13–16) by two teams of first six authors (ZN-WR, ZM-KI, SA-HM). Face-to-face interviews were conducted based on the principle of saturation and continued until no new information emerged. Initially, the interview guide was pilot tested on two rickshaw drivers and then subjected to minor revisions. The pilot testing data were not included in the main analysis section. The final guide is flexible and covers topics, including patterns of usage regarding SLT, habit formation, perceptions regarding benefits or harms to health, and awareness of health risks. Drivers were informed about the study purpose first before the start of the interview, and then informed consent was taken. Moreover, the right of withdrawal at any time was also given. Each interview lasted around 40-45 minutes and was carried out in either Urdu or Punjabi, depending on the participant's preference. All interviews were audio-recorded based on consent from Drivers; additionally, field notes were taken to capture additional details. No prior relationship was established with any of the drivers. 13 drivers were interviewed in total. Data collection continued until no new information was found (thematic saturation). This point was reached after the 11th interview. An additional 2 interviews were conducted to confirm robustness, saturation, and completeness of data.

Data Analysis

Interviews were transcribed in Urdu and then translated into English. The interviews were analyzed

Table 1: Analysis Approach

Braun and Clark's Analysis Method	
1.	Data Transcription
2.	Familiarization with Data
3.	Initial Coding
4.	Themes Generation
5.	Defining Themes, Subthemes, Codes
6.	Presenting Themes, Subthemes, Codes

The transcripts were read several times to understand the content. This led to the generation of initial codes that mark important ideas in the text. These codes were combined to form themes that showed common patterns in the data. The themes were then checked, refined, and clearly named before writing the report. To make sure the findings were trustworthy, two researchers coded some of the interviews separately and then compared their work. Any differences were discussed until they agreed on the final version. A codebook was prepared and used for the rest of the data. Regular team discussions also helped confirm that the themes truly represented what the drivers had shared. Moreover, all data were presented to a neutral third person unrelated to the study to ensure that there were no personal biases in the data. Informed consent was taken from each participant, and they were assured that their participation was voluntary and that they could withdraw at any time. To protect privacy, names and personal details were not recorded; instead, drivers were given codes. Interviews were conducted in safe, familiar places chosen by the drivers themselves to ensure comfort and openness.

Results

The rickshaw drivers belong to varied age groups, ranging between 30 and 70 years. The majority of

using NVivo software and the six-step method (mentioned below) of thematic analysis described by Braun and Clarke (2006) (17).

them were married. Education levels were found to be generally low, where many had never gone to school or had

only a primary level of education, while just a few had reached matric or a basic level of education. Their driving experience also varied a lot; some had only recently started driving, whereas others had been driving rickshaws for more than 25–30 years.

Their monthly income was also quite unequal, with some earning less than 25,000 PKR, while only a few earn more than 40,000 PKR. Despite these differences, most of them had large families to support, often with 5–10 dependents. Housing types were mixed, too; some owned homes, while others lived in rented homes. All of the drivers used items like *paan*, *naswar*, and *gutka*. Most had started this habit in their teenage years. For many, tobacco use had continued for decades, with some using it since childhood.

Table 2: Sociodemographic Characteristics of

Sr No	Age (years)	Marital Status	Education Level	Years of Driving Rickshaw	Monthly Income (PKR)	Family Dependents	Housing Type	Form of SLT Used
1.	70	Married (2nd marriage)	Primary Schooling	15	Less than 25,000	6	Own house	Paan, Naswar
2.	40	Married	No formal schooling	13	Less than 25,000	10	Own house	Naswar
3.	65	Married	Secondary Education	30	Less than 25,000	6	Rented	Paan
4.	34	Married	Under matric	10	More than 40,000	6	Own house	Naswar
5.	30	Married	Secondary Schooling	10	25,000-40,000	4	Joint family	Naswar
6.	48	Married	Secondary Schooling	10	25,000-40,000	6	Rented	Paan
7.	40	Married	Secondary Schooling	15	25,000-40,000	4	Mortgage house	Paan
8.	53	Married	No formal education	10	Less than 25,000	6	Not specified	Gutka, Paan
9.	55	Married	Primary Schooling	25	Less than 25,000	5	Rented	Gutka, Paan, Powder
10.	37	Married	No formal education	4	More than 40,000	7	Rented	Naswar
11.	42	Married	Primary Schooling	13	Less than 25,000	5	Own house	Paan,
12.	35	Unmarried	No formal education	3	Less than 25,000	6	Own house	Paan
13.	30	Married	No formal education	6	Less than 25,000	10	Rented	Paan

Participants

Thematic Analysis led to the identification of four major themes with a variety of sub-themes as presented below;

Theme 1: Initiation and Patterns of SLT Use

Subtheme 1.1: Early initiation, curiosity, and habit development

Young age is considered the age of independence, and at this point in life, youth are curious to experience things. They observe these things being used among their elders, friends, and relatives, and previously were not allowed to use these tobacco-type items. The majority of the participants, as mentioned, first used smokeless tobacco products; some were as young as 12 or 13, and they started out of curiosity, family, and friend influence. However, some of them also tried tobacco even at the school level. This represents what began as a small experiment in childhood has slowly turned into a habit. One Driver shared,

"I tasted my first paan when I was 15 years old, at that time, and I was studying in 9th grade at school. I bought the first betel leaf from the famous betel shop with my friend." (Int 1).

Another explained, *"My cousin used naswaar and suggested it to me, so I started using it when I was about 12 or 13 years old. We both used our elders' knowledge."* (Int 4).

One of the participants described how he used it for just the thrill and fun. In the beginning, it was only a one-time try, but slowly this thrill became a daily habit and part of his life.

"I began using tobacco in 2007 in the form of paan. At first, it was only out of curiosity and fun with a friend's money, but over time, it gradually turned into a regular part of my daily life. Now I cannot live without them." (Int 13).

Some of the participants justified the harmful impacts by saying that they don't use it at home, while others mentioned that they use smokeless tobacco products (pan, guttka, niswar) even in breakfast, based on the misconception that it will help in digestion. This represents the lack of proper awareness that these products act as slow poisons, having long-term impacts. As mentioned, *"I only use a pan when I drive a rickshaw; otherwise, I don't use it at home"* (Int 3).

Different driver perspectives represent how boredom can lead to routine use, where the act of chewing itself becomes a habit rather than a real need.

Subtheme 1.2: Influence of peers, family, and relatives

Rickshaw drivers influenced by their work peers develop the habit of using smokeless tobacco (SLT). Being on the road for long hours, observing other drivers or passengers using tobacco products, all encourage the use of smokeless tobacco products. This underscores how social surroundings and work conditions play an important role in leading drivers towards tobacco products.

"Almost all rickshaw drivers around my surroundings use niswar or pan frequently, that's why they feel nothing special, and I also use it. Also, I don't think it is harmful." (Int 1).

Another driver's view was: *"In our rickshaw-driving community, almost everyone uses tobacco in one form or another, gutka, paan, or naswar. Nobody questions anyone about it because it is considered normal in that circle. It is a source of pleasure and comfort"* (Int 10). Another one similarly described that *"in my surroundings, tobacco use is extremely common. I would estimate that 95 out of 100 people use it in some form—only a small 5% stay away"* (Int 11).

At the same time, several noted wider disapprovals. Muhammad Waleed stated, *"society does not view tobacco users positively; it's considered a bad habit. My own family has advised me many times to quit"* (Int.5). Zeeshan explained how family members also intervened: *"my family members insist to stop using niswaar specially my daughter has been said to leave these many times... for them its normal"* (Int.2).

Some participants shared that friends were also the most crucial factor for bringing them back to tobacco use. Even when they try to quit, the influence of close companions makes it harder to stay away. This shows how peer pressure can weaken personal efforts to give up the bad habit.

"Once I had completely quit it, but after some time, a friend persuaded me to use it again when he told me that it doesn't affect anything, and I agreed." (Int 1).

Theme 2: Perceptions and Misconceptions About Health Risks

Subtheme 2.1: Awareness of Harms and Partial Understanding

Smokeless tobacco (SLT) is regarded as harmful by the majority of drivers, but still, they are not willing to

avoid it. Some called it “poison” and linked it to serious problems like cancer, bad teeth, burning in the mouth, trouble breathing, and even deadly diseases. One of them explained, “*using it has destroyed my teeth. This is why oral cancer is common... I will still say that it is poison*” (Int.9). Another said, “*my blood pressure remains low and my teeth have been affected... I can’t eat anywhere. Maybe it’s the impact of tobacco*” (Int.13). These examples show that many participants had seen and felt the damage of SLT in their own lives.

However, a few of the participants have incomplete knowledge. Their responses spark confused responses. A few admitted they “*I do not know much about specific indications*” like cancer or ulcers (Int.2). Others felt that SLT was not very serious, saying things like, “*I personally have not yet experienced any major problems... I sometimes feel that naswar is mild compared to cigarettes or gutka*” (Int.10). Some even explained it through religious belief, saying that “*disease comes from Allah, not from addiction alone*” (Int.12).

Subtheme 2.2: Sources of health information

Participants described several ways they became aware of the harmful effects of tobacco, such as “*heard its messages on the radio many times*” (Int 2) and “*warning messages on cigarette packs*”, Int 5. However, many admitted that these warnings did not have much impact. One participant shared, “*I have seen warning messages on cigarette packs and heard many health warnings on TV and radio, but to be honest, we never paid attention to them*” (Int 4).

The majority of rickshaw drivers said they were aware of health warnings and campaigns, but they felt these efforts had little effect on actual behavior. The habit continued because of stress relief, boredom, social influence, and personal beliefs, which were stronger than the warnings.

“*I have seen warning posters, labels, and awareness campaigns, but I also notice that people have not stopped using them. I also used these products.*” (Int 11).

Theme 3: Perceived Benefits and Coping Mechanisms

Subtheme 3.1: Coping with Stress, Social and Spiritual Strain

Rickshaw drivers considered the smokeless tobacco-consumption habit as a coping strategy for managing

the stresses of daily life. Participants described that consuming pan and gutka helps them to work for hours daily, irrespective of tiredness, daily life problems, and financial worries. As one explained, it gave him “*mental peace*” (Int. 6), while another linked it to “*relief from constant household tension*” (Int. 8). Others admitted that tobacco “*holds no real value*” but was still used “*to pass the time*” during idle moments (Int 7).

Beyond physical relief, SLT also helped drivers manage their social and spiritual lives. One participant noted that it helped him “*stay quiet, avoid unnecessary conversations*” (Int 3), showing how it became a tool for self-control in social settings. Another shared that “*when I don’t use gutka, I feel more inclined to prayer*” (Int 8), suggesting that while SLT offered temporary calm, its absence created space for spiritual reflection.

Subtheme 3.2: Aid to digestion and appetite control

Mixed perceptions were achieved from participant views regarding the use of smokeless tobacco products for digestion. For some, it seems a useful thing to help in digestion, while others perceive it as an illness-causing thing. One Driver mentioned that he takes “*naswar after breakfast mainly for digestion*” (Int 5). At the same time, other participants associate SLT with discomfort and health problems. The same person who linked naswar to digestion also admitted that “*gutka caused stomach problems, but I cannot resist it*” (Int 5). Another reported, “*I feel burning in the stomach after use*” (Int 9). These experiences highlight the negative physical effects that users directly connect to SLT.

Theme 4 Quitting Tobacco

4.1 Barriers to Quitting

Rickshaw drivers shared mixed experiences of quitting tobacco. Some had managed to stop temporarily, one driver mentioned he “*stopped for 8 years but restarted*” (Int.5), while another said he *avoids it during Ramadan* (Int.8). For others, family influence was a major motivator, as his children told him, “*Until I don’t try myself, I cannot leave it on anyone’s saying*” (Int.13).

However, quitting proved difficult due to strong barriers. One driver explained that “*when I go out and spend time with friends, I feel like using it again... quitting or continuing is just a mental game*” (Int 4),

Drivers also described conditions that would support quitting, including counseling, substitutes, and family or government help. As another participant noted, *“if I can get proper support, whether from home or outside, I will definitely quit”* (Int 13).

4.2: Social and Structural Influences Family, community, religion, and government responses shaped how drivers viewed SLT use and its regulation. These influences could both encourage and discourage quitting.

In several cases, family members strongly discouraged SLT use. One Drivers explained that *“my family supports me in this, especially my daughter, who often tells me to stop, but this is my habit, I can't avoid it. I felt bad when all my peer group is using it and I say no. So I cannot quit it.”* (Int 7). Similarly, one man described how *“my family strongly discourages me from using it”* (Int 11). These accounts show how families actively advised against SLT and highlighted its harmful effects. At the same time, family influence could also perpetuate the habit. For instance, one driver admitted, *“My family members also use this. So, nothing special for me”* (Int 2). In other cases, peers and relatives normalized usage, making quitting harder.

4.3 Government and Media Role

The role of government and media in controlling smokeless tobacco (SLT) use is an important aspect to save vulnerable communities, like rickshaw drivers, from the harmful and long-lasting consequences of

smokeless tobacco products. Most Drivers expressed frustration at the lack of meaningful government action, while others emphasized that awareness messages exist but are not effective in changing behavior.

As one driver explained, *“our government has failed to take any real steps to stop tobacco use”* (Int.3), while another added that *“no real measures or support systems have been provided”* (Int.9). This indicates that drivers felt ignored by the authorities and thought that the government was not providing the rules or support needed to help them quit.

Awareness campaign's role was also mentioned, but many Drivers felt they were not meaningful. One driver stated, *“I've seen warning messages on cigarette packs and heard awareness messages on TV and radio, but, don't find them very impactful”* (Int.6), while another admitted, *“for me, these messages don't make much impact”* (Int.5). Even though drivers know and observe the warnings, they felt the campaigns were the same old perspective that these are not effective. This indicates that more innovative approaches should be employed to improve the behavior regarding tobacco use.

At the same time, most of the Drivers believed that stronger state intervention could make a real difference. As one put it,

“If the government implements certain strict policies against the production of tobacco, we will ultimately be able to quit” (Int 2).

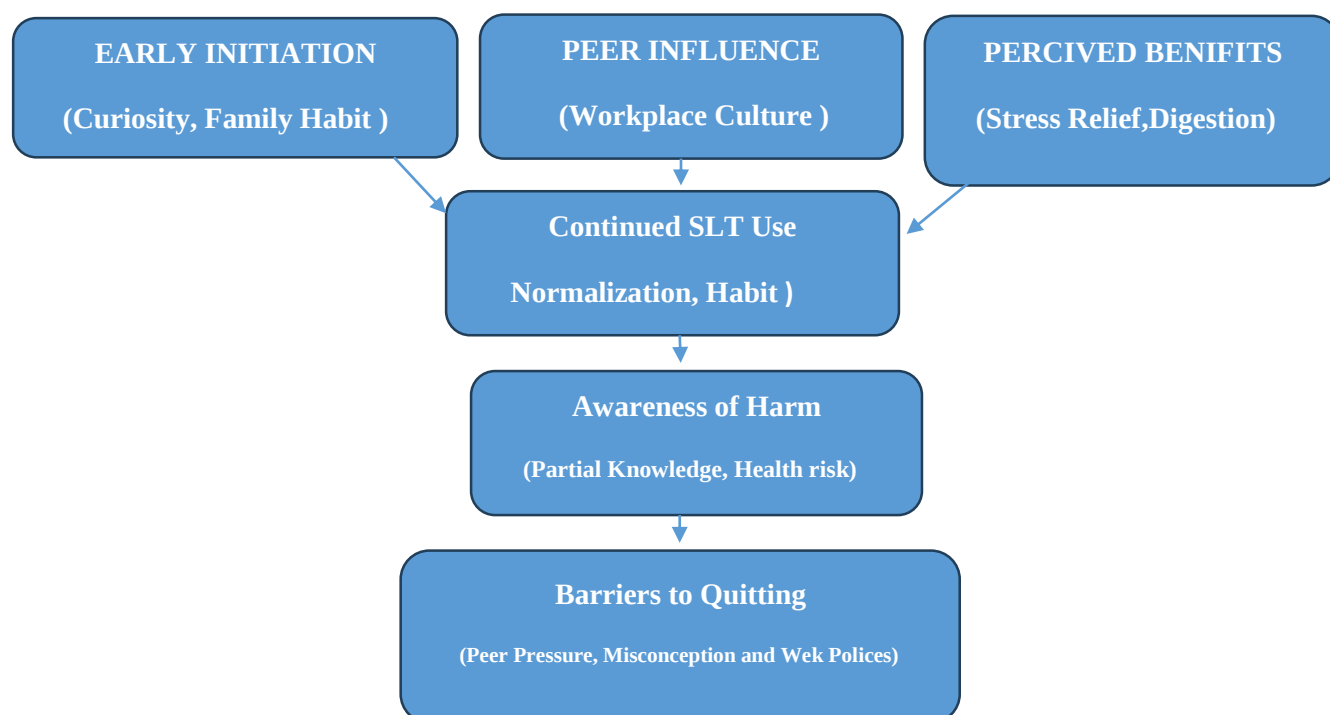


Figure 1: Summary of Themes, Subthemes, and Codes

Discussion

This study explored knowledge, attitudes, and perceived health risks of smokeless tobacco (SLT) use among male rickshaw drivers in Lahore. The results show that rickshaw drivers use smokeless tobacco for various reasons, including early initiation at a young age, peer pressure, stress, lack of knowledge, difficulty in quitting, and weak government control.

One of the main findings was that many rickshaw drivers started using smokeless tobacco (SLT) products in their adolescent ages, often due to curiosity, family habits, or encouragement from peers. Studies from Pakistan, India, and Bangladesh also show that people begin using smokeless tobacco products before the age of 15 (18). Regarding family influence, research within Pakistani youth also confirms that family habits and peer influence play a crucial role in leading youth towards initiation of SLT, consistent with this study's results. (19). However, studies also mentioned that starting at such a young

age is extremely devastating, as it increases the chances of becoming addicted and facing serious health problems later in life. (20). This additionally correlates with this study's results, where people who started using tobacco products at an early age have developed a strong habit in later ages, and now it has become difficult to avoid these product usages.

Smokeless tobacco (SLT) use has become a normal part of daily life at rickshaw stands, where drivers spend many hours together. This is similar to other studies in South Asia, which show that workplace friends and peer groups often encourage pan and gutka use, making quitting harder. (21). Using SLT seems normal even with awareness regarding harmful health impacts. Peer influence towards the use of SLT products was another major highlight aspect, which was not only observed in rickshaw drivers, but also other studies targeting different population groups in Pakistan show that friend group influence can serve as a major factor for

using SLT products. (22) SLT products usage was regarded as one of the coping mechanisms to deal with tiredness, money problems, and stress from work. Cheap price and easy availability serve as an important factor to convince the rickshaw drivers' community to use SLT products as a coping mechanism for stress and daily life tensions. Similarly, other Pakistani researchers also highlight that people often see chewing tobacco as a cheap way to feel relaxed or gain energy, rather than viewing it as harmful. (23).

Most rickshaw drivers agreed that SLT is harmful, but their understanding was often incomplete. Some linked it to mouth cancer or bad teeth, while others thought it helped with digestion or was less harmful than smoking. Similar misconceptions have been noted in the results of different countries, including Pakistan. For example, a study from Karachi indicates that although many people were aware of SLT, their knowledge of its real health effects was limited, and myths about its "benefits" were still common (24). This shows that knowing about SLT is not always enough to change habits. Rickshaw drivers mentioned how much they had quit using SLT products. Even when they tried and stopped for a while, they were followed again by initiation because of strong cravings and constant exposure to peers. A study from Udupi, India, showed a similar trend, where most auto-rickshaw drivers were aware of the harms of tobacco, but more than half had no interest in quitting, which highlights how addiction and social influence remain big barriers (13).

Most drivers felt that government laws and media campaigns were weak and had little impact. A few drivers, however, believed that strict laws and bans could help them quit. Even though they saw warning labels and advertisements, they usually ignored them. Findings from Pakistan, where tobacco laws are not strongly implemented, and smokeless tobacco is still easy to get and use (25). Likewise, another study on Naswar in Pakistan sellers found that weak rules and little government effort were big problems in controlling its use(26).

This study fills an important gap; as little qualitative work has been done on the lived experiences of smokeless tobacco (SLT) use among rickshaw drivers in Pakistan. Real experiences from drivers, showing how cultural, family, and money problems keep them

using SLT, were expressed in this research. Still, there are some limitations. The study was conducted in a single city with a small sample, so findings may not be generalizable. Experiences were prone to the risk of social desirability bias, also. Further, studies covering vast populations from diverse areas are required to fulfill this gap.

Conclusion

Study underscores that several factors, including personal, interpersonal, societal, and system-level factors, work together to lead high-risk groups like rickshaw drivers towards Smokeless Tobacco product usage. Therefore, combined level efforts that involve awareness of government-level action are required to help these groups quit SLT product usage and save the community from long-lasting impacts.

REFERENCE

1. Rumgay H, Nethan ST, Shah R, Vignat J, Ayo-Yusuf O, Chaturvedi P, et al. Global burden of oral cancer in 2022 attributable to smokeless tobacco and areca nut consumption: a population attributable fraction analysis. *The Lancet Oncology*. 2024 Nov;25(11):1413–23.
2. Siddiqi K, Shah S, Abbas SM, Vidyasagaran A, Jawad M, Dogar O, et al. Global burden of disease due to smokeless tobacco consumption in adults: analysis of data from 113 countries. *BMC Med*. 2015 Dec;13(1):194.
3. Hajat C, Stein E, Ramstrom L, Shantikumar S, Polosa R. The health impact of smokeless tobacco products: a systematic review. *Harm Reduct J*. 2021 Dec;18(1):123.
4. Arora P, Kaur G, Khokar A, Jindal AK. Prevalence and pattern of tobacco use among auto rickshaw drivers of South Delhi: a cross-sectional study. *Int J Community Med Public Health*. 2018 July 23;5(8):3464.
5. Razzaq S, Nagi ML, Athar U, Kazmi T, Alslamah T, Naz S, et al. Prevalence of tobacco consumption and the associated factors among the adults in an urban slum: Findings from the WHO STEPwise survey. *Tob Induc Dis*. 2022 Oct 31;20(October):1–12.
6. Irshad HA, Raja S, Jehanzeb H, Shaikh WA, Saleem U, Malik SAR, et al. Smokeless tobacco: knowledge, attitudes and usage in

- Pakistan. *J Health Popul Nutr.* 2025 Jan 24;44(1):19.
7. Hameed A, Malik D, Mohamed H. Barriers to Cigarette Smoking Cessation in Pakistan: Evidence from Qualitative Analysis. *J Smok Cessat.* 2021;2021:e4.
8. Khan ZR, Zaidi SJA, Riaz S, Mahboob U, Mirza S, Khalid F, et al. Rural Pakistan's smokeless tobacco epidemic: a need for tailored interventions. *BMC Oral Health.* 2025 May 28;25(1):818.
9. Ibrahim W, Anjum Y, Abdur R, Javeria A, Syed MH, Rabeea F, et al. Smokeless tobacco consumption among public and heavy load drivers in Karachi, Pakistan: A cross-sectional study. *J Public Health Epidemiol.* 2017 Nov 30;9(11):292-9.
10. A study on pattern of Tobacco use among Rickshaw pullers of district Gorakhpur, Uttar Pradesh, India. *Int J Acad Res Dev.*
11. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care.* 2007 Sept 16;19(6):349-57.
12. Tajik O, Golzar J, Noor S. Purposive Sampling. *IJELS [Internet].* 2025 May [cited 2025 Sept 26];(Online First). Available from: <https://doi.org/10.22034/ijels.2025.490681.1029>
13. Mohan S, Margaret B, Manjula. Perception towards tobacco consumption and its usage among auto rickshaw drivers of Udupi District, Karnataka, India: A cross-sectional study. *Clinical Epidemiology and Global Health.* 2022 May;15:101005.
14. Kaul S, Gupta A, Sarkar T, Ahsan S, Singh N. Substance abuse and depression among auto-rickshaw drivers: A study from the national capital region of Delhi, India. *Indian J Med Spec.* 2019;10(3):143.
15. Vaishnav B, Valiyil AS, Anand S, Ghosal A, Pailla R, Nair GR. Effects of Smokeless Tobacco Use on the Upper Gastrointestinal Tract Mucosa: Gross and Histopathological Changes. *Annals of African Medicine.* 2025 Apr;24(2):450-5.
16. Agrawal N, Aggarwal A, Gupta ND, Tewari RK, Gupta J, Garg AK. Oral Health Consequences of Use of Smokeless Tobacco in North India: A Cross-Sectional Survey. *Pesqui Bras Odontopediatria Clin Integr.* 2021;21:e0114.
17. Braun V, Clarke V. Supporting best practice in reflexive thematic analysis reporting in *Palliative Medicine*: A review of published research and introduction to the *Reflexive Thematic Analysis Reporting Guidelines (RTARG)*. *Palliat Med.* 2024 June;38(6):608-16.
18. Singh L, Jain P, Kumar C, Singh A, Lal P, Yadav A, et al. Trends in age of tobacco use initiation over time in Bangladesh, India and Pakistan: analysis of cross-sectional nationally representative surveys. *BMJ Open.* 2023 Dec;13(12):e067875.
19. Irshad HA, Raja S, Jehanzeb H, Shaikh WA, Saleem U, Malik SAR, et al. Smokeless tobacco: knowledge, attitudes and usage in Pakistan. *J Health Popul Nutr.* 2025 Jan 24;44(1):19.
20. Nasir SM, Sultana T, Hashmi S, Ahmed M. Patterns and predictors of periodontal disease and tooth loss among users of smokeless tobacco. *BMC Oral Health.* 2023 June 27;23(1):428.
21. Ibrahim W, Anjum Y, Abdur R, Javeria A, Syed MH, Rabeea F, et al. Smokeless tobacco consumption among public and heavy load drivers in Karachi, Pakistan: A cross-sectional study. *J Public Health Epidemiol.* 2017 Nov 30;9(11):292-9.
22. Siddiqui F, Croucher R, Ahmad F, Ahmed Z, Babu R, Bauld L, et al. Smokeless Tobacco Initiation, Use, and Cessation in South Asia: A Qualitative Assessment. *Nicotine & Tobacco Research.* 2021 Aug 29;23(10):1801-4.
23. Merchant KAR, Maqsood M. 13 PUBLICATIONS 317 CITATIONS SEE PROFILE. *Asian Pacific Journal of Cancer Prevention.* 2006;7.
24. Ibrahim W, Anjum Y, Abdur R, Javeria A, Syed MH, Rabeea F, et al. Smokeless tobacco consumption among public and heavy load drivers in Karachi, Pakistan: A cross-sectional

- study. J Public Health Epidemiol. 2017 Nov 30;9(11):292-9.
25. Riaz F, Nazir HA, Tariq H, Sohail H, Khattak SG, Ali H, et al. Risk Factors of Oral Cancer in Lahore, Pakistan: A Case Control Design.
 26. Monshi SS, Ibrahim J. Implementation of tobacco control measures in the Gulf Cooperation Council countries, 2008-2020. Subst Abuse Treat Prev Policy. 2021 Dec;16(1):57.

