



AN EXPLORATORY RESEARCH STUDY

2023

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List of **ABBREVIATIONS**

BISP - Benazir Income Support Program

CAPI - Computer-Assisted Personal Interviews

FGD - Focus Group Discussion

FSFW - Foundation for Smoke-Free World

HIES - Household Integrated Economic Survey

ICT - Islamabad Capital Territory

IDI - In-depth Interview

IDS - Innovative Development Solutions

KP - Khyber Pakhtunkhwa

NCD - Non-communicable Disease

WHO - World Health Organization

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Disclaimer: This paper is based on the data collected from the field. Findings, interpretations, and conclusions expressed by authors do not necessarily reflect the views of all the contributors or their institutions. This study is under the terms of the grant agreement with the Foundation for a Smoke-Free World, Inc., editorially independent of FSFW. The contents, selection, and presentation of facts, as well as any opinions expressed herein, are the sole responsibility of the authors, and under no circumstances should they be regarded as reflecting the positions of FSFW.

EXECUTIVE SUMMARY

A. PREAMBLE

Tobacco consumption and substance abuse are global challenges fuelled by a number of factors. One million people worldwide die every year due to second-hand smoke. Up to half of the current users will eventually die of a tobacco-related disease, with many of these users living in low- and middle-income countries. In Pakistan, 14.5% of tobacco users and 11.1% of cigarette smokers are uneducated, and approximately 29 million adults in Pakistan consume some form of tobacco. In 2019, the total cost of all smoking-attributable diseases and deaths in Pakistan amounted to Rs. 615.07 billion - with the burden of this cost being heavily gendered, and being incumbent on geographical location and age. As tobacco use in religious and ethnic minorities and marginalized communities is not widely researched, accurate and current data sets are not yet available. This further highlights the neglect of the needs of these communities and the lack of adequate services for them.

To bridge this gap, IDS has conducted a “Health Needs & Demands Assessment” to investigate the trends of tobacco users in marginalized and vulnerable communities of Pakistan in order to reduce the barriers to quitting or switching to safer nicotine delivery systems. It includes assessing the size and nature of tobacco use, availability of cessation services, perception of needs, and the effectiveness of various clinical solutions. The assessment also explores the cost implications of providing alternate and safe options for tobacco reduction.

B. SAMPLE & METHODOLOGY

A sample of 508 respondents was selected for the “Health Needs & Demands Assessment.” It was ensured that representation from the underprivileged and marginalized groups was reflected in the sample by including religious minorities, women, youth, and transgender groups. The sample was selected from 5 districts, i.e., Rawalpindi, and Faisalabad from Punjab, Peshawar from KP, Karachi from Sindh, and ICT. A total of 100 respondents were selected from each district. The tool design for the quantitative survey was a consultative effort grounded in research. Questions were identified with the help of a review of the literature and input from implementation partners.

The translation and piloting of the tool were done to check the relevance, comprehensibility, clarity, and ease of language used for the questions. The final version was used for training the enumerators for data collection and data input.

To validate and further probe the data trends emerging from the survey, FGDs, and IDIs were also conducted with healthcare professionals, media personnel, men, women, and transgender participants.

C. KEY FINDINGS AND TRENDS

Demographic information

Of the 508 total respondents, men formed 64.4%, women formed 9.3%, and transgender participants formed 26.4% of the sample. The sample was focused on the youth, with 28.9% falling in the age cohort of 18-29 years and 49.2% in the 30-44 years age group. The majority of the respondents identified themselves as Muslims (66%) while 21.5% were Christians and 11.4% were Hindus. Regarding education levels, 23.6% of the sample comprised illiterate/school dropouts while only 7% had university-level education. The ratio of women who were school dropouts and illiterate was higher than the other two gender groups.

The majority of the respondents (i.e., 48.3% men, 61.7% women, and 28.4% transgenders) reported a monthly income of below Rs. 25,000. On average, most respondents spent up to Rs. 5,000 on medical expenses per month.

The survey found that cigarettes were the most popular tobacco item. Most of the respondents had been using tobacco for between 1 and 10 years, starting in early adolescence (10-15 years).

Tobacco usage profile

This survey looked at the types of tobacco products consumed by respondents. Cigarettes were the most common type, followed by *chalia*, *paan*, and tobacco. There appeared to be a geographical preference for certain types of tobacco, with *mawa* being more popular in Karachi than in the rest of the country.

About 58% of the respondents fell in the household income bracket of Rs. 25,000. From among male and transgender respondents, 44% and 47% respectively spent Rs. 1,000-2,500 on cigarettes each month. Although 72% of the female respondents claimed that they smoked cigarettes, 59% of them selected “no expense” as their spending category, which raises questions about their means to access cigarettes without spending from their pocket.

Efforts to quit tobacco

Overall, 62.6% of those surveyed expressed a desire to quit using tobacco products. This finding was consistent across gender, and age cohorts. Most respondents had attempted to quit smoking or tobacco use earlier, with a slightly higher percentage of females and those in the 18-29 years age group. The most widely reported strategy to quit tobacco was gradually cutting down on its intake. Just over half of the respondents were successful in quitting for a significant period of time. The reasons for falling back into smoking or tobacco use varied depending on occupation and age.

Public health warnings influenced 56% of respondents to quit while 44% did not find them to be of much use. Only 27.4% of the respondents were aware of different means and ways to reduce or quit tobacco use and only 11% found recognition awards for quitters to be helpful. Information on how to quit and the harmful effects of smoking were found to be the most helpful.

Awareness and acceptance of safer alternatives

The study reveals an acute lack of awareness among smokers and tobacco users about cessation services or seeking help from their local healthcare providers. Only 1.8% of the respondents were aware of cessation facilities and merely 9.6% had sought support from a health professional. The study also found rampant skepticism among healthcare professionals regarding alternative nicotine delivery mechanisms owing to emerging data that indicates that such alternatives might be equally or more harmful than regular cigarettes. Health professionals were also of the view that alternatives might serve as motivators for non-tobacco users to eventually switch to cigarette smoking.

Another key finding that was consistent across all genders and age cohorts was the willingness of an overwhelming majority of tobacco users (75%) to quit if they were aware of alternatives that were 95% safer than the products that they were currently using. This last point is especially important because, despite such a high percentage of tobacco users ready to quit in favor of safer alternatives, only 20.7% of the respondents had ever heard of safer nicotine delivery systems.

This presents a two-pronged challenge for tobacco users hailing from marginalized groups. On the one hand, they are largely unaware of local cessation services and on the other hand, they either do not know of alternate nicotine delivery products or are discouraged from using them by skeptical healthcare providers. Resultantly, even though the majority of the users want to quit, they remain hooked on tobacco in the absence of necessary awareness and sustainable support.

D. RECOMMENDATIONS

The findings from this study indicate the need for a multi-dimensional intervention that considers various aspects of health assessment. This includes addressing misinformation and disinformation towards the public, a deeper understanding of the sources of this information, mapping cessation services, an in-depth analysis of people's journeys towards cessation, the development of standardized modules for cessation services, the evaluation of mass awareness generation and counseling interventions, and the need for longitudinal studies to understand the effects of products like e-cigarettes. These studies will help to develop a holistic guide to help tobacco users quit and ensure they have access to cessation services.

1. INTRODUCTION

1.1 NATIONAL TRENDS IN TOBACCO USAGE

Tobacco consumption and substance abuse are global challenges fuelled by several factors ranging from a lack of understanding of the issues involved to the marginalization of the users of these products and policies that further sideline the users. According to the WHO, in 2018, the tobacco epidemic was one of the major contributors to death and disease caused by NCDs killing nearly 8 million people a year; 1 million among them were non-smokers exposed to second-hand smoke.¹ Approximately one person dies every six seconds due to tobacco, accounting for 1 in 10 adult deaths. Up to half of the current users will eventually die of a tobacco-related disease. Nearly 80% of the more than 1 billion smokers worldwide live in low- and middle-income nations. Countries like Pakistan have seen a very slow decline in tobacco use possibly because of a lack of policies catering to the needs of smokers, especially those smokers who do not belong to the mainstream of society.

Estimates made using data from HIES 2018–19 indicate that tobacco is consumed in 45.5% of the households in Pakistan (48.8% in poor households and 37.9% in rich households).² Data on tobacco and cigarette use show that 14.5% of tobacco smokers and 11.1% of cigarette smokers are uneducated, with smoking behaviours decreasing with higher education levels in both genders.³ Estimates suggest that more than 29 million adults in Pakistan, 31.8% of adult men and 5.8% of adult women, consume some form of tobacco,⁴ including smokeless tobacco products such as *gutka*,⁵ *paan*,⁶ and *naswar*.⁷ Pakistan's mortality and morbidity rate from tobacco consumption is estimated to be in the top 15 globally:⁸ tobacco use causes 10.9% of all deaths in Pakistan amounting to approximately 163,000 deaths annually; 16.0% of all male deaths and 4.9% of all female deaths are attributed to tobacco.⁹

According to a recent study, the total costs of all smoking-attributable diseases and deaths in Pakistan in 2019 amounted to Rs. 615.07 billion,¹⁰ with the total cost for three major smoking-attributable diseases (cancer, cardiovascular and respiratory disease) at Rs. 437.76 billion i.e., 70% of the total. The burden of costs is heavily gendered and is also incumbent on geographical location and age; rural residents bear 61% of the total cost while males and those between the age of 35–64 years bear 77% and 86% of the total cost respectively.¹¹ Of particular concern are the high rates of oral cancer, with the Pakistan Medical Association reporting 1.5 million and rising cases, including many among children under the age of 12 years, resulting from *gutka* and the use of other smokeless tobacco products.¹²

1.2 RATIONALE FOR THE HEALTH NEEDS & DEMANDS ASSESSMENT

Tobacco usage among religious and ethnic minorities and marginalized communities, including the transgender community, is not a widely researched phenomenon, therefore, accurate and current data sets are not available. A lack of education, healthcare, and equal job opportunities has been documented in various reports resulting in systemic socio-economic inequalities. The research-in-hand provides important insights into how the compound effect of these factors pushes these groups into tobacco use.

¹WHO, "WHO Report on the Global Tobacco Epidemic, 2019," World Health Organization (Bloomberg Philanthropies, 2019), <https://apps.who.int/iris/bitstream/handle/10665/325968/WHO-NMH-PND-2019.5-eng.pdf?ua=1>.

²Abdul Basit et al., "Prevalence of Tobacco Use in Urban and Rural Areas of Pakistan; a Sub-Study from Second National Diabetes Survey of Pakistan (NDSP) 2016 - 2017," Pakistan journal of medical sciences (U.S. National Library of Medicine, May 2020), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7260914/>.

³WHO, "Global Adult Tobacco Survey" (WHO, 2014).

⁴WHO, "Global Adult Tobacco Survey (GATS) Pakistan 2014," World Health Organization (World Health Organization, May 2, 2019), <https://extranet.who.int/ncdsmicrodata/index.php/catalog/257>.

⁵A chewable tobacco concoction prepared with betelnut, tobacco, calcium hydroxide and artificial flavours.

⁶Betel leaf, consumed with various topping including betel nut, ground tobacco and calcium hydroxide.

⁷A powdered tobacco product

⁸"Tobacco," World Health Organization (World Health Organization, May 24, 2022), <https://www.who.int/news-room/fact-sheets/detail/tobacco>.

⁹"Global Burden of Disease (GBD) 2019," Institute for Health Metrics and Evaluation (University of Washington, 2021), <https://vizhub.healthdata.org/gbd-compare/>.

¹⁰Durre Nayyab et al., "Research: The Economic Cost of Tobacco-Induced Diseases in Pakistan (Report)," Tobacconomics (Pakistan Institute of Development Economics (PIDE), 2021), <https://w.tobacconomics.org/research/the-economic-cost-of-tobacco-induced-diseases-in-pakistan/>.

¹²Shahid Javed Burki et al., "The Economics of Tobacco and Tobacco Taxation in Pakistan," Tobacconomics (Institute for Health Research and Policy of the University of Illinois at Chicago, 2014), https://tobacconomics.org/uploads/misc/2014/05/PakistanReport_May2014.pdf.

The absence of any data on tobacco use in these communities strongly indicates the neglect of the unique needs of these groups. Accordingly, the paucity of cessation services for these communities may also stem from the non-availability of relevant analysis of their needs and demands. In equal part, this can also be attributed to a dearth of understanding of the specific nature of services that ought to be improved, expanded, or advocated for to achieve desired results. Through the health assessment of needs, demands, and availability of services in marginalized community groups, the critical gap between evidence and data can be significantly bridged.

This pilot is expected to inform the strategic initiatives of FSFW 2022-24 aimed to “Reduce barriers to quitting and/or switching from combustibles and other toxic tobacco products.”

Innovative Development Solutions funded through a grant from FSFW undertook a needs assessment exercise to assess the trends of smokers in marginalized and vulnerable communities of Pakistan to quit or switch to safer nicotine delivery systems.

This baseline study was conducted in five districts of Pakistan, including Islamabad, Rawalpindi, Faisalabad, Karachi, and Peshawar with vulnerable communities including females, transgenders, minorities, and youth (18 years and above) to find the answers to the following:

- Incidence of tobacco use in the focused communities
- Assessment of the size and nature of tobacco use
- Availability of cessation services
- Perceptions of smokers and tobacco users regarding their needs that would assist them to quit smoking or use safer nicotine delivery systems
- Assessment of appropriate and effective (clinical and cost) solutions

Though the questionnaire did not explore the cost implications for providing alternate and safer options for tobacco reduction, both from an individual and institutional perspective, nevertheless, some of the primary data reflected these aspects.

The second section of this report explains the methodological framework with details of sampling, tool development, piloting, data collection, and analyses. Section 3 presents the demographic composition of the sample.

Then, the key findings concerning tobacco cessation efforts and demands are discussed at length. Furthermore, the impediments to quitting and switching in the targeted communities vis-à-vis inequalities in access to services and awareness along with the use of available resources are deliberated upon in the report. The final section of the report presents the way forward in light of the findings and discussion.

2. METHODOLOGICAL FRAMEWORK

2.1 SAMPLE SIZE AND SELECTION

Sample selection for this study was done by applying a combination of sampling techniques. Determining geographic representation was difficult owing to time and resource constraints. To overcome this limitation, poverty scorecards developed under the EHASAS program and BISP were reviewed. Following the review, it became clear that the possibility of finding all the targeted community groups in metropolis city districts was higher. Therefore, five districts namely Faisalabad, Islamabad, Karachi, Peshawar, and Rawalpindi were selected. The purposive sampling technique was then combined with population proportion to respondents' size to further sharpen the sample selection. A total of 100 individuals from each district were selected, approximately, with an equal distribution of the poor, religious minorities, youth, and transgender. For identifying transgender groups, we also approached gender alliances and partners already working with the transgender community. The design was kept flexible to employ snowballing and maximum variation techniques to identify a case example as well as key informants.

The final sample composition comprised 508 respondents for the survey. Of the total 508 individuals across the five districts, male respondents accounted for 64.4% (N=327), females for 9.3% (N=47), and transgender respondents for 26.4% (N=134). With respect to the age distribution, 28.9% of the respondents were between 18-29 years while 49.2% were in the age cohort of 30-44 years, and 21.9% were 45 years or above.

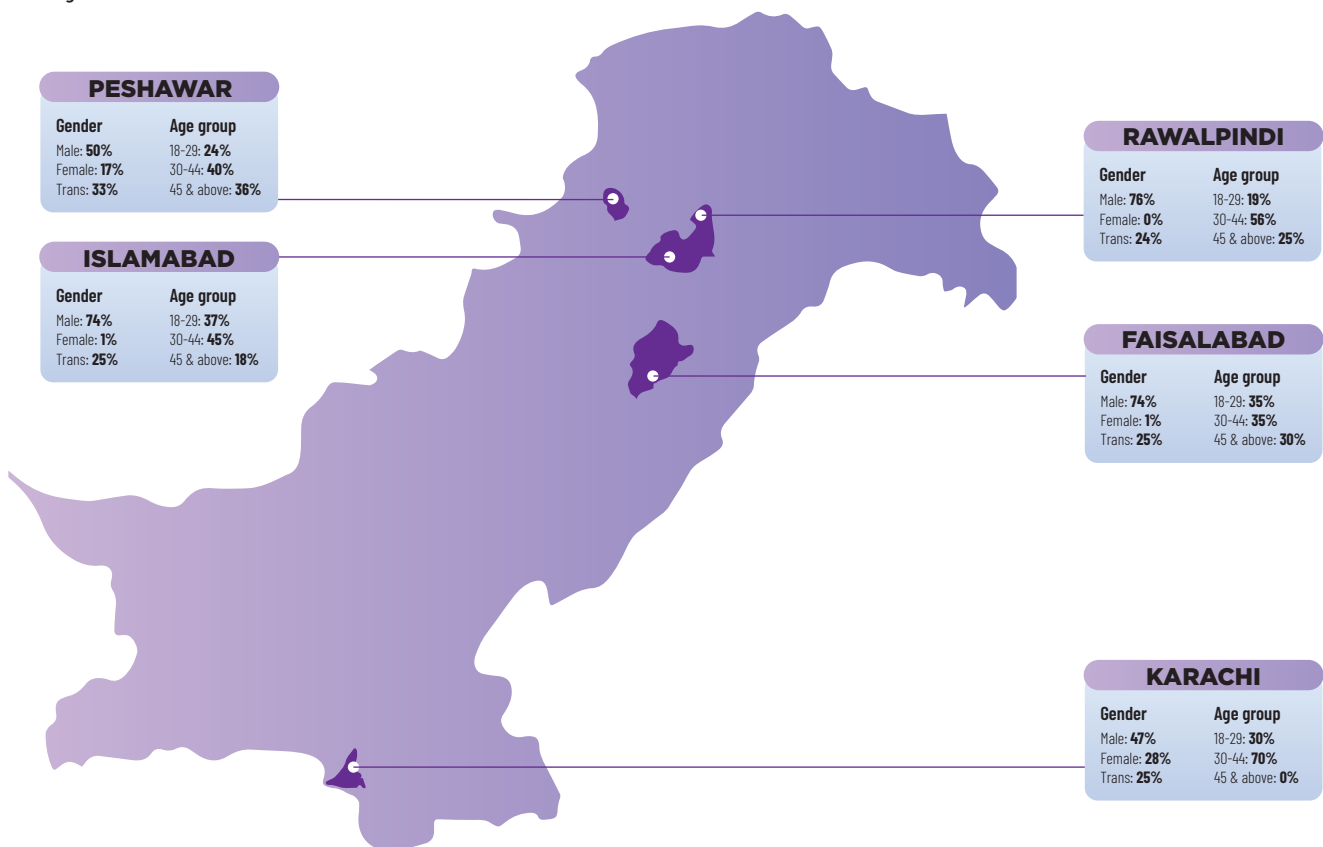


Figure 1: Respondents' district by gender and age group

Table 1 provides a further analysis of the respondents broken down by their area type, i.e., urban or rural. Of the 123 rural respondents, 84.6% were men, 2.4% women and 13% transgenders. Compared to the rural areas, more female tobacco users from urban settings were accessible and willing to participate in the survey. However, compared to male and transgender respondents, women still made-up merely 11.4% of the 385 urban survey participants. There were no statistically significant differences between rural and urban participants when analysed as per age cohorts.

AREA	MALE		FEMALE		TRANSGENDER		18-29 YEARS		30-44 YEARS		45 YEARS & ABOVE	
	N	%	N	%	N	%	N	%	N	%	N	%
RURAL	104	84.6	3	2.4	16	13.0	32	26.0	56	45.5	35	28.5
URBAN	223	57.9	44	11.4	118	30.6	115	29.9	194	50.4	76	19.7
TOTAL	327	64.4	47	9.3	134	26.4	147	28.9	250	49.2	111	21.9

Table 1: Respondent's area type (urban and rural)

2.2 TOOL DEVELOPMENT AND PILOTING

The process of tool development was consultative and grounded in research. The key information required from prospective respondents was determined by reviewing various health needs and demands assessments from across the globe, especially from developing countries such as Pakistan, and keeping the local realities in mind.

The first section of the tool captured the demographic profiles of the respondents while questions in the second section focused on aspects of tobacco harm reduction. After various rounds of survey tool iteration, the tool was finalized, translated into Urdu, and piloted.

Piloting was done in Karachi with 10 males and 10 females to gauge the clarity of questions, the relevance of response ranges and fields of information, style, and formatting of the tool. It was identified that a few questions (especially those seeking demographic information) were looking at collective family information. Similarly, in the tobacco cessation section, individual-level information had to be collected but it was not explicitly mentioned in the questions, thus causing ambiguity. Accordingly, those questions were rephrased for clarity while specifically mentioning the unit of inquiry.

Later, during the enumerators' training and app development, a few more revisions were made. For instance, it became clear that terms such as Tobacco Reduction Therapy, Nicotine Patches, and alternatives to tobacco, were to be described for the enumerators with examples. Similarly, for qualitative questions within the survey tool, probes were added to receive specific examples.

2.3 DATA COLLECTION AND ANALYSIS

The data collection process began with contacting the alliances and partners in the respective districts to seek their willingness to carry out the survey. In all, five partners were engaged – each was allocated 100 forms to be filled in equal numbers by men, women, transgenders, and religious minority groups. The gender of religious minority group respondents could have been any of the three denominations.

Enumerators from partner organizations were trained by the team comprising a research consultant, data analyst, and research coordinator. The enumerators were provided a question-by-question orientation of the entire tool, discussing possible response options, and the method to record the responses in the app. The group also conducted a mock survey to get hands-on practice in collecting meaningful information accurately as well as removing any ambiguities in the phrasing of questions, response options, or recording of data. The sessions covered ethical conduct in the field as well as research ethics such as receiving informed consent through signatures, and other means. The enumerators were explicitly told that if at any given point, the respondent refused to participate further, the survey should immediately be stopped without forcing the respondent to complete it.

In addition, four FGDs were conducted – two were conducted with health and media professionals and two with male and transgender respondents. Two IDIs were also conducted with female respondents.

Finding female respondents (smokers or those who had quit) from marginalized community groups proved to be a challenge. Of the total women respondents (N=47), more than half were from Karachi (N=28 i.e., 59.6%) whereas representation from the other three districts was negligible. Similarly, only 3 women respondents were categorized as belonging to rural areas, which did not account for adequate representation.

The CAPI app was designed to assist in the collection of quantitative data for the survey. The app allowed each of the enumerators to create and feed data into their own respective tabs. The survey tool was also printed and filled out manually in a few areas, and the data was later entered and digitally compiled. For FGDs and IDIs across districts, notes were recorded in writing; the majority of the respondents did not allow for the audio recording of their interviews.

Quantitative data was tabulated as per the analysis plan derived from the survey tool. Disaggregated data frequencies were calculated as per the main gender, geographic, and age categories. The trend analysis was done while also looking for a causal relationship between different variables. Qualitative data were analyzed both for existing and emerging categories, and explanation of quantitative trends was also looked at in the FGD and interview data.

2.4 LIMITATIONS OF THE STUDY

One limitation that was envisaged and stated at the time of proposal development was the self-reporting of information, and dependence on the respondent to identify the patterns and prevalence of tobacco use. The triangulation of reported data was ensured through cross-referencing questions and looking at the trends, with outliers excluded. However, it still leaves room for the respondents to share their perception of the practice rather than the actual practice.

The reluctance to share information particularly impacted access to young women smokers in marginalized communities both in urban and rural districts. It indicates the need to take such surveys to the community and school level as part of a broader campaign initiative. This would likely open up people and remove the stigma and judgment that curtailed access to specific groups during this study.

Carrying out a study of this nature in an unstable political and economic environment led to challenges in meeting timelines on the one hand and on the other hand, rapidly making the information trends dated or redundant. For instance, data collection was completed at the end of January 2023 with data analysis and the write-up being done in February 2023. However, the inflation rates in general and sales tax on tobacco, in particular, significantly increased in mid-February 2023. The expense of tobacco products developed by legitimate companies went up by 250% after the newly revised tax and federal excise duty.¹³

2.5 ETHICAL CONSIDERATION

The research team was fully aware of the sensitivities associated with marginalized and targeted communities, especially the transgender and queer populations. Therefore, full confidentiality of their identity was ensured. Moreover, the survey was carried out in safe and secure spaces, which were trusted by respondents. The enumerators were trained to observe discrete and respectful conduct in the field. It was also ensured that no moral judgment was passed or indicated by the data collectors on any experience or information shared by the respondents.

¹³Ghulam Abbas, "Cigarette Prices to Go up by over 250%," *Profit by Pakistan Today* (Pakistan Today, February 15, 2023), <https://profit.pakistantoday.com.pk/2023/02/15/cigarette-prices-to-go-up-by-over-250/>.

3. FINDINGS AND ANALYSES

This section presents key findings and trend analyses drawn upon from the quantitative survey questionnaire along with the insights generated from FGDs and IDIs with a range of respondents.

3.1 DEMOGRAPHIC PROFILE

As mentioned in the preceding section, the survey was conducted with 508 people in five districts. Male respondents accounted for 64.4%, females for 9.3%, and transgender respondents for 26.4% of the total. Female respondents (smokers or those who had quit) had significantly less representation in the overall sample across districts: only 47 females out of the 508 survey respondents. The majority of the women respondents were from Karachi (59.6%) and Peshawar (36.2%) whereas representation from the other three districts was negligible. Similarly, only 3 women respondents were categorized as belonging to rural areas, which does not account for adequate representation.

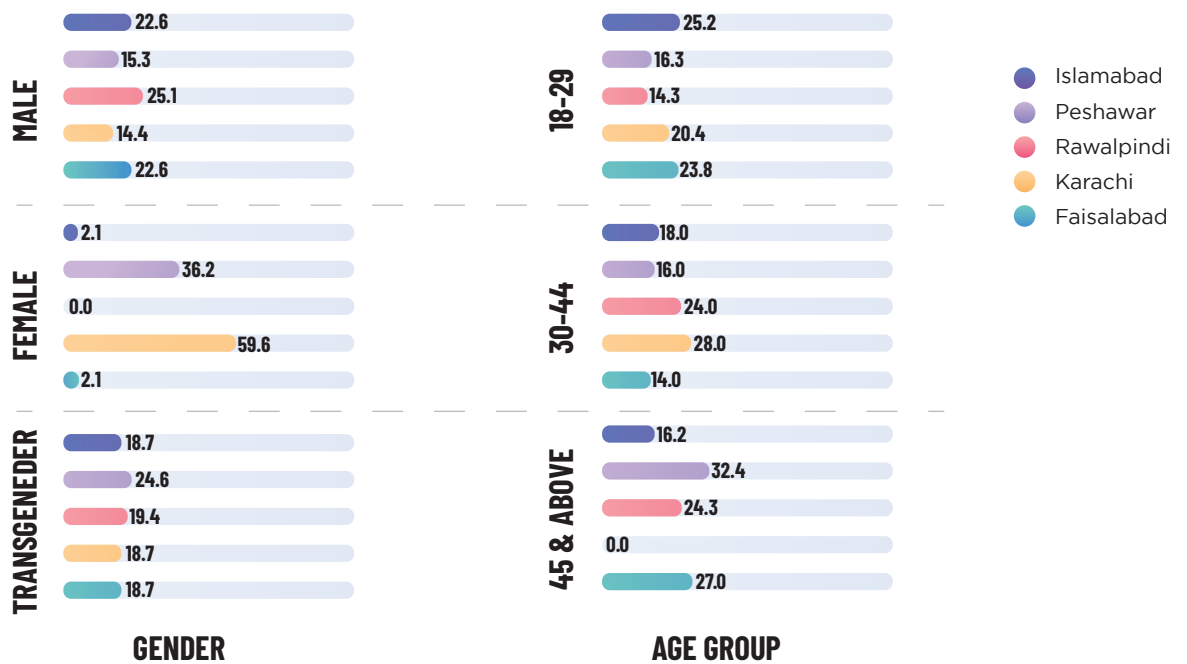


Figure 2: Respondents' district by gender and age group (%)

Across all the genders and age groups, the large majority of the participants belonged to urban centres. Annex E elaborates on the method adopted to calculate the percentages in Figure 3.

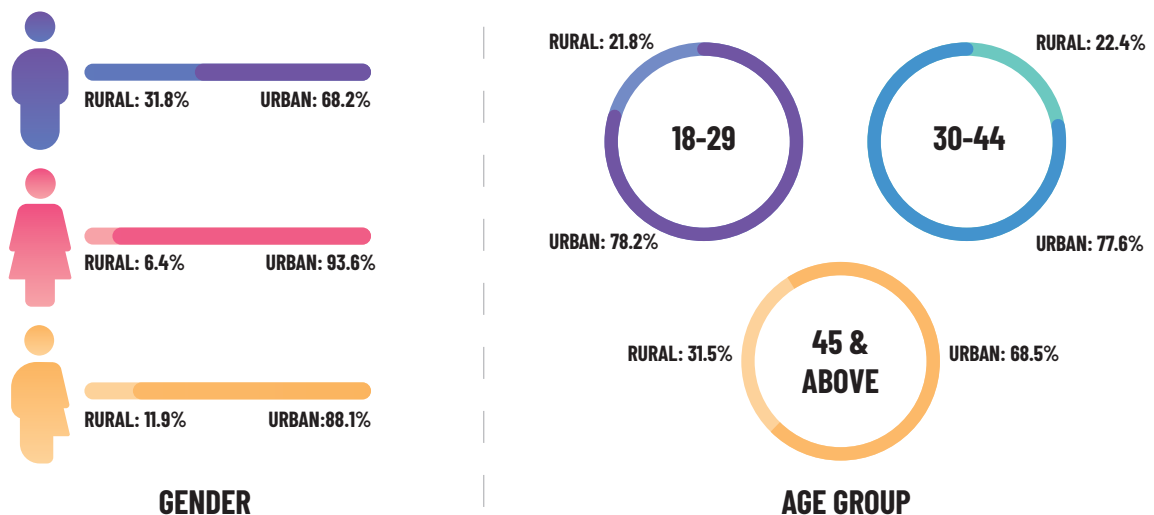


Figure 3: Respondents' area type by gender and age group (%)

Age-wise distribution of the sample purposely focused on youth with 28.9% falling in the 18-29 age group and 49.2% accounting for the 30-44 age group. Around 22% of the sample fell into the 45 and above age group.

As the purpose of the study was to explore the needs and demands of the marginalized groups (considering religious affiliation, education, and income backgrounds), the survey collected information on these aspects as well. With respect to religious affiliation, 66% of the sample identified themselves as Muslims while 21.5% belonged to the Christian and 11.4% to the Hindu community. Similarly, 93% of the transgender respondents identified themselves as Muslims whereas 33% of the female respondents belonged to the Hindu community with a negligible number from the Christian community. On the contrary, a sizeable number of male respondents (33%) identified themselves as Christians.

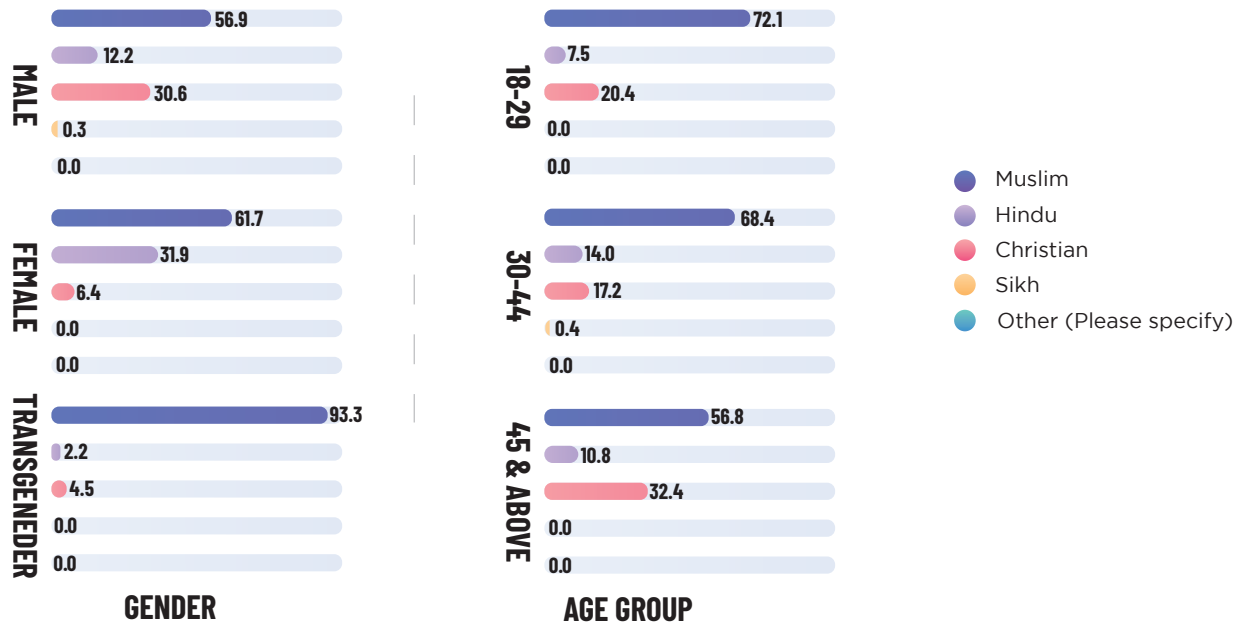


Figure 4: Respondents' religion by gender and age group (%)

Regarding the education level, 23.6% of the sample accounted for illiterate or school dropouts whereas 20% received primary-level education and 25% had middle school education. Only 7% (N=36) of the respondents had completed university-level education, of which there were zero women, 23 males, and 13 transgenders.

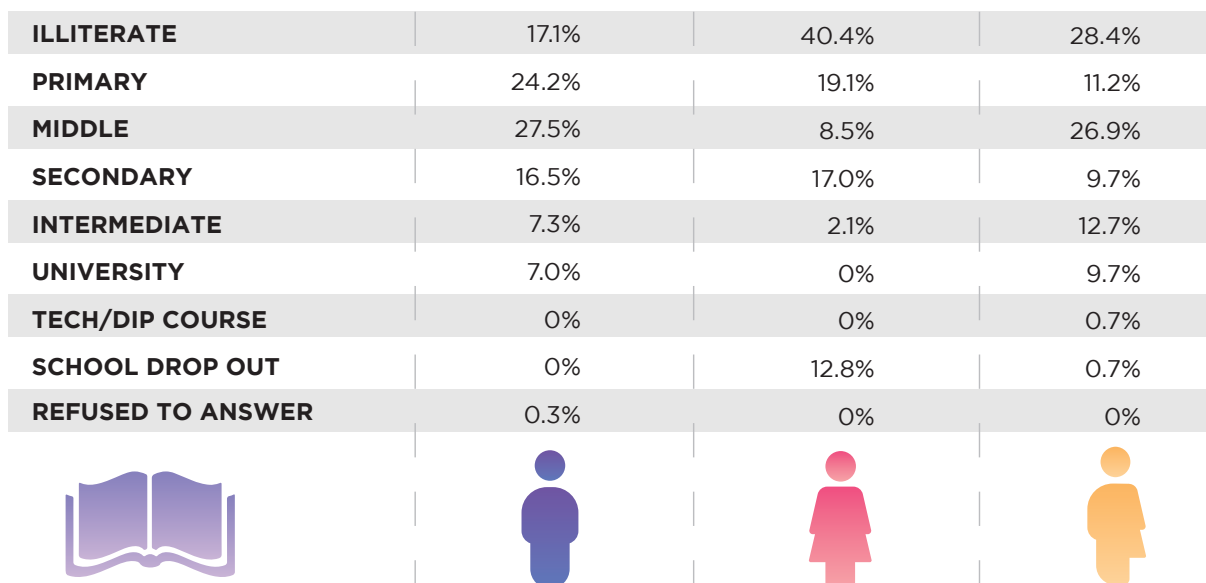


Figure 5: Respondents' education by gender (%)

3.1.1 Income Level & Core Household Expenses

Of the 508 respondents, the majority (comprising 48.3% males, 61.7% females, and 28.4% transgenders) reported that their monthly income was below PKR 25,000. This was followed by those who reported their monthly household income to be between PKR 25,001 and 50,000, (i.e., 31.8% male, 34% female, and 41% transgender). The respondents who lay in the highest income cohort, i.e., above Rs. 100,000 were exclusively male. Finally, 28% of the population indicated that they did not want to disclose their monthly income. The difference between age ranges was not stark with each range showing a sizeable percentage of respondents having incomes between 0 to 50,000.

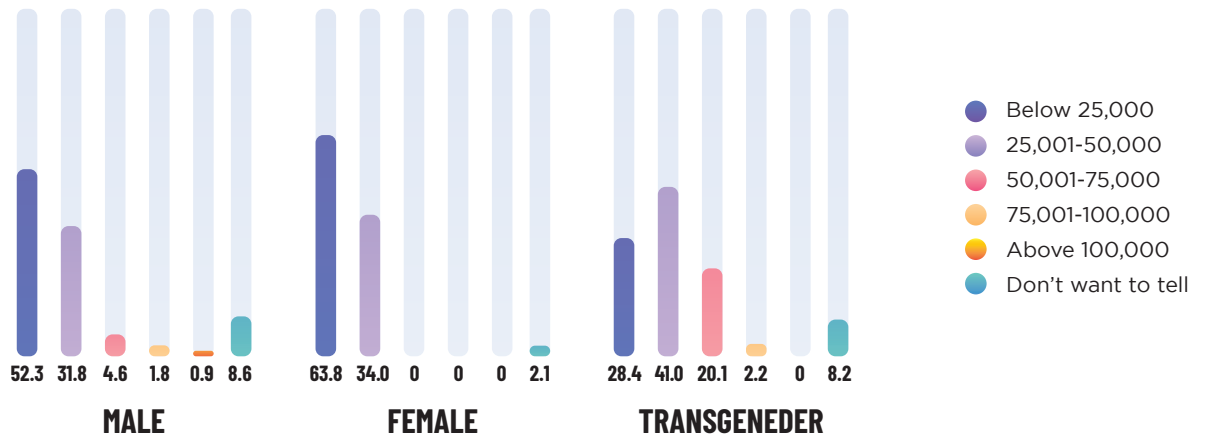


Figure 6: Respondents' monthly income by gender (%)

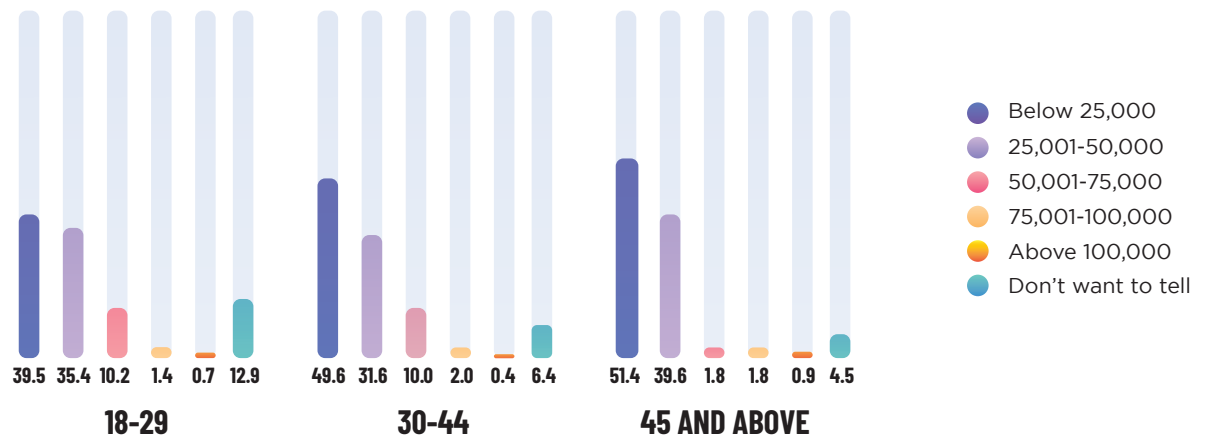


Figure 7: Respondents' monthly income by age group (%)

To get a sense of the spending priorities vis-à-vis tobacco compared to core household expenses, the respondents were asked to share their average monthly expenses on food, clothing, transport, house rent, education (of children), and medical. A direct or accurate comparison was not intended as we had asked for “individual” monthly income and “collective” or household monthly expenses.

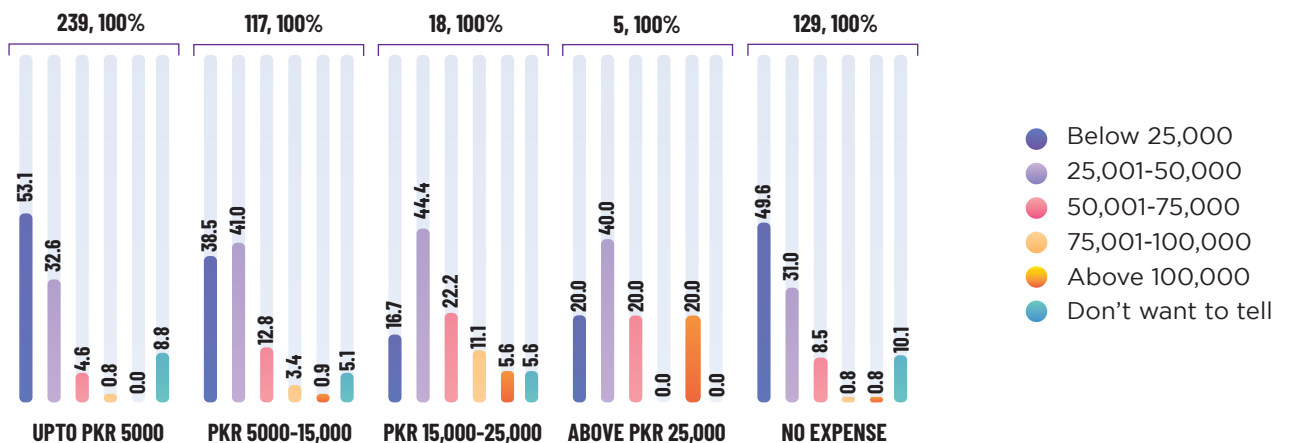


Figure 8: Household Income vs. expenses (%)

Annex C provides category-wise household expenses as reported by the sample. A gender-disaggregated analysis shows that 78% of males, 63.8% of females, and 48.3% of transgenders spend up to Rs. 5,000 on medical expenses per month. Similarly, 7.3% of males, 27.7% of females, and 15.7% of transgender respondents spent between Rs. 5,000 and 15,000 on medical expenses each month. The remaining categories reported either 0% spending or no expenditure at all. Looking at the age-wise distribution, most respondents across age groups selected up to Rs. 5,000 as their monthly medical expense.

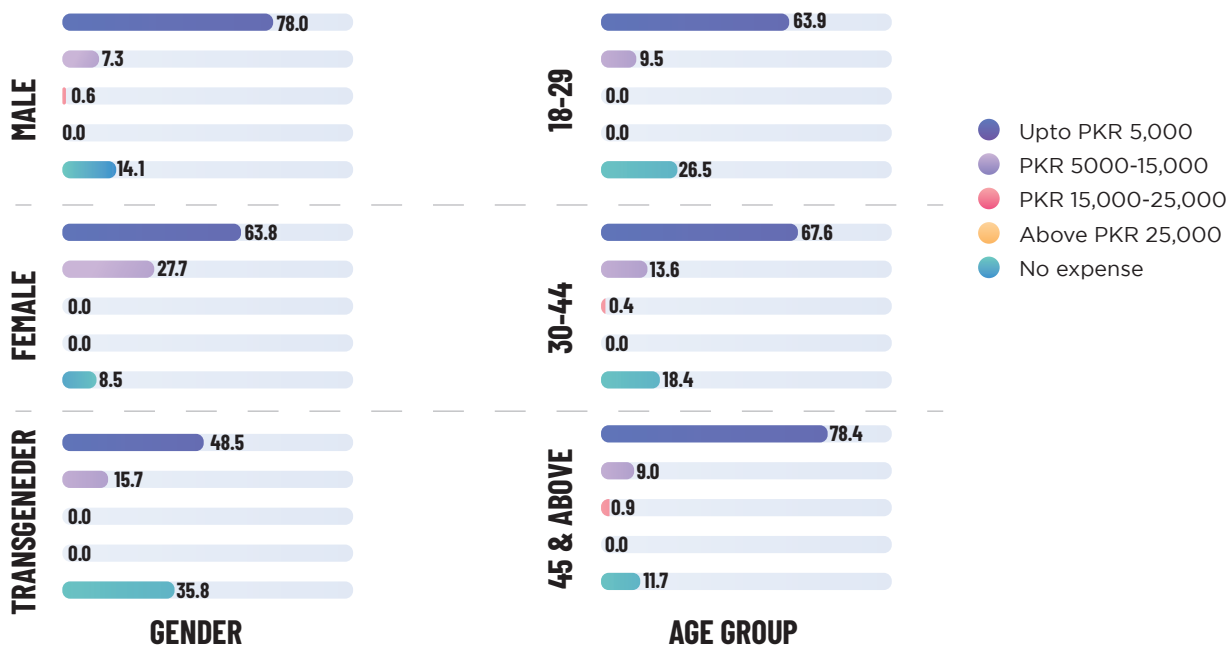
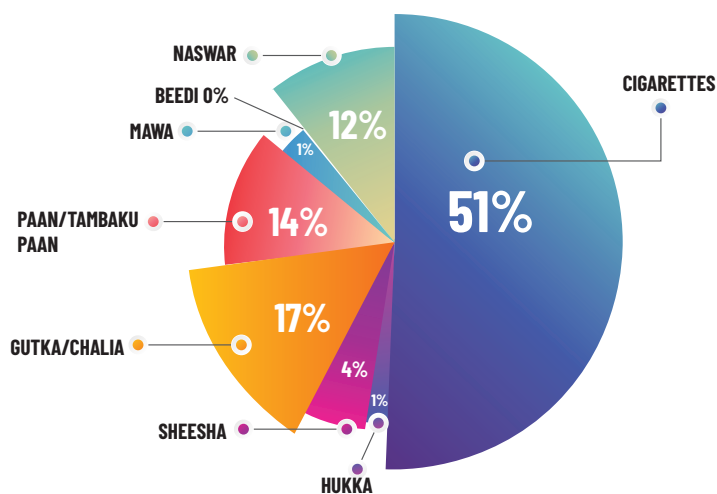


Figure 9: Monthly household medical expenses (%)

3.2 TOBACCO USAGE PROFILE IN MARGINALIZED SECTIONS IN SELECTED DISTRICTS

The respondents were asked about the different tobacco items that they consumed. The majority of the sample consisted of smokers using cigarettes followed by *chalia*¹⁴, and *paan*, users. There seems to be a geographical preference for certain tobacco items such as *mawa*.¹⁵ Several media reports indicate a high prevalence of *mawa* in Karachi.¹⁶ The small sample size of this study served as a limitation, however, it is pertinent to note that while *mawa* users formed merely 1% of the entire sample, the *mawa* users who participated in this research almost exclusively hailed from Karachi. As per the information extracted from the FGDs, *mawa* eaters supersede cigarette smokers in marginalized communities in the urban areas and towns of Sindh compared to that of KP or Punjab.



Note: The collective percentage does not sum up to 100% as this diagram is based on a multiple choice question in which respondents were encouraged to check all the responses that were relevant to them.

Figure 10: Tobacco items consumed by respondents. (%)

¹⁴Betel nut

¹⁵A type of chewable tobacco

¹⁶Sameer Mandhro, "Chewable Tobacco - Choice or Addiction?: The Express Tribune," Express Tribune (Express Group, July 8, 2022), <https://tribune.com.pk/story/2365288/chewable-tobacco-choice-or-addiction>

According to the survey, the majority of the respondents, especially females, and transgenders fell in the category of respondents who had been using tobacco for 1-10 years (59.2% males, 70.2% females, and 78.9% transgenders). Roughly 20% of the respondents across genders maintained that it had been 11 to 20 years since they had started using tobacco. Data disaggregated by age showed that approximately 96% of the respondents in the 18-29 years age cohort had been smoking for the last 10 years while a significant 61% of the respondents in the age bracket of 30-44 of years also reported the same.

96% of the respondents in the 18-29 years age cohort had been smoking for the last 10 years.

Analysis shows that the average starting age of tobacco usage is either early adolescence i.e., 10 years, or early teen years (14-15 years). Biological and hormonal changes in pre- and post-puberty years, body image, identity, and peer pressure among other contributing factors have been well-documented as the cause for risky behaviours during adolescent years. This then becomes the time when smoking or tobacco use is started initially to explore or experiment, or “feel the freedom” and later it becomes a habit and a hard-to-quit behaviour.

Analysis shows that the average starting age of tobacco usage is either early adolescence i.e., 10 years, or early teen years (14-15 years).

“All my friends used to smoke. That is how I started. It tasted bad but I would have *supari* (betelnut) with it. I didn’t have to buy it myself in the first few weeks – someone would offer. Then, I started buying it using my own money. I was working in a factory back then so I could get the cigarette on my way back. When I started working in a tailoring workshop, we weren’t allowed to take smoke breaks. That is how I switched to *mawa*. I know how to make *mawa*; all the male members of my family take it. I spend Rs. 150/packet; some days I eat two packets and some days one and a half packet gets me through the day. (Male FGD respondent, age 20).

“I started smoking looking at my elder brother. Getting a cigarette wasn’t a problem as I would steal it from his packet. First, I’d just smoke one or two cigarettes in fifteen days, then I became regular and started having 1 or 2 daily. I don’t mind telling people, but everyone judges you especially if you are a female. Getting your own packet is a problem; I cannot stand on a street and buy it from a stall.” (Excerpt from IDI, female).

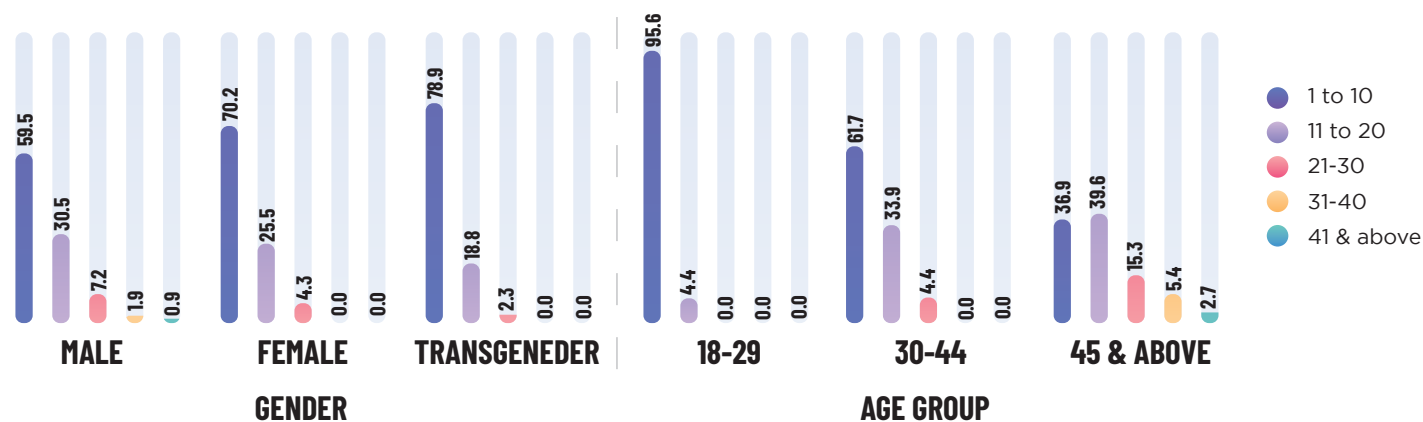


Figure 11: Number of years of tobacco usage (%)

3.2.1 Income Spent on Tobacco Products by Marginalized Groups

Data captured through this question helped to ascertain the monthly household income of the respondents compared to their average monthly spending on tobacco products.

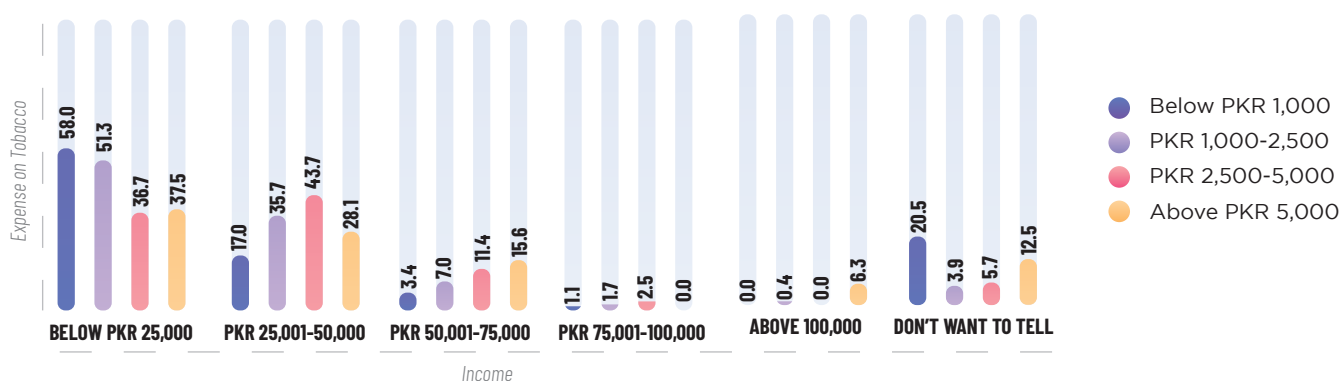


Figure 12: Income vs. tobacco expenses (%)

Figure 13 establishes a direct relationship between income and expenses made on tobacco, i.e., as the income increases so does the expense on tobacco.

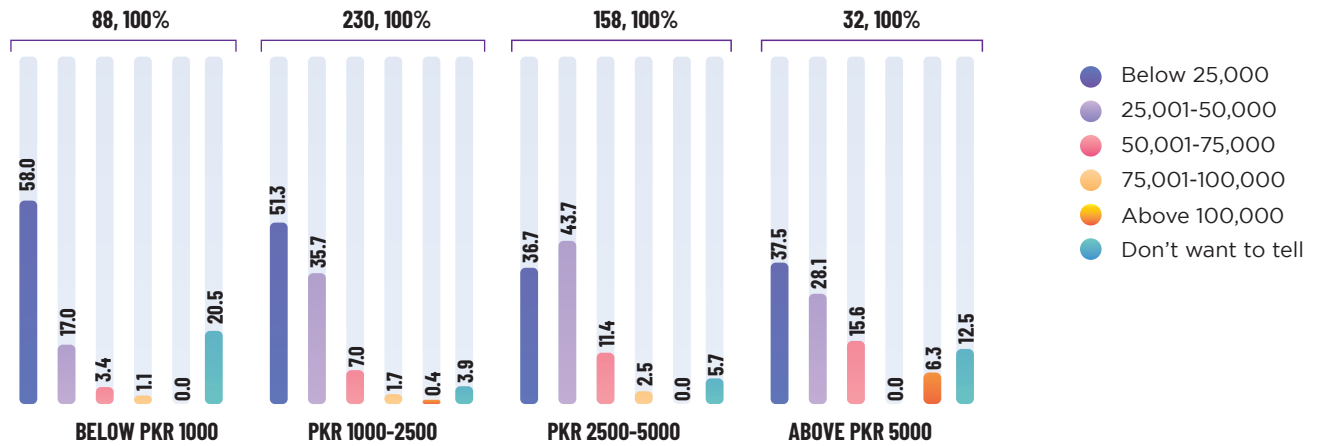


Figure 13: Income vs. tobacco expenses (%)

Overall, 58% of the respondents fell in the household income bracket of Rs. 25,000. The survey looked at the spending habits of the respondents on tobacco items including cigarettes, *gutka*, *chalia*, *niswar*, and *sheesha* among others. For instance, the majority of the male and transgender respondents maintained that they spent between Rs. 1,000-2,500 on cigarettes every month (around 44% males, 47% transgenders). On the contrary, 59% of the females selected the “no expense” category which poses questions about their ability to access cigarettes as 72% of the female respondents maintained that they smoked regularly.

Annex D provides the details of the item-wise expenditure on tobacco, disaggregated by gender and age.

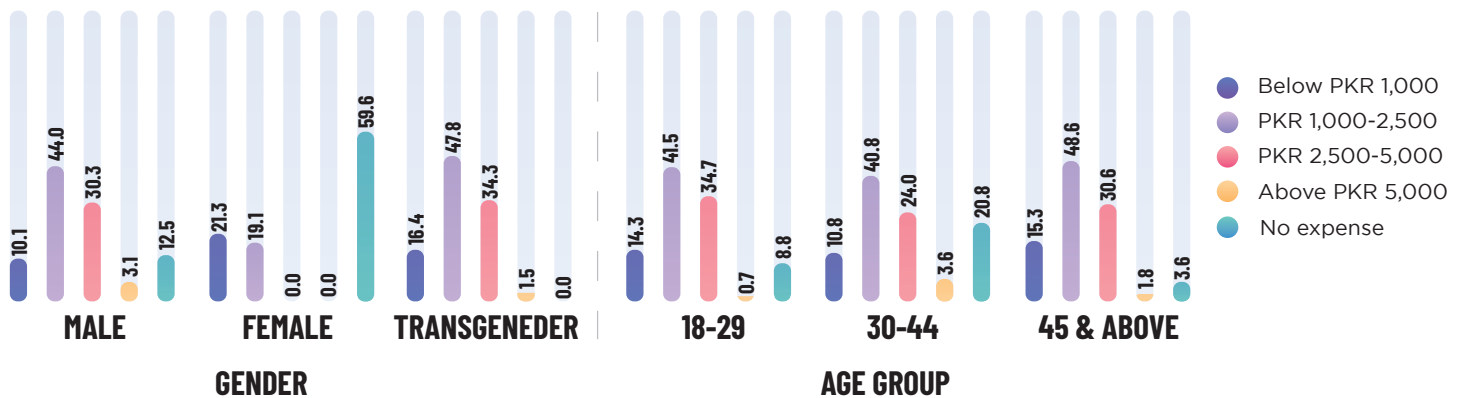


Figure 14: Monthly cigarette expense (%)

3.3 EFFORTS TO QUIT TOBACCO USE AND CONTRIBUTING FACTORS

Overall, 62.6% of those surveyed wanted to quit smoking and/or all forms of tobacco use. This number is consistent across all genders, with 62.4% of males, 83.0% of females, and 56.0% of transgender individuals responding positively. Additionally, the trend remains constant among age groups, with 61.9% in the 18-29 year range, 60.8% in the 30-44 year range, and 67.6% aged 45 and above reporting the same sentiment.

Overall, 62.6% of those surveyed wanted to quit smoking and/or all forms of tobacco use.

Do you want to quit smoking and/or all forms of tobacco use?

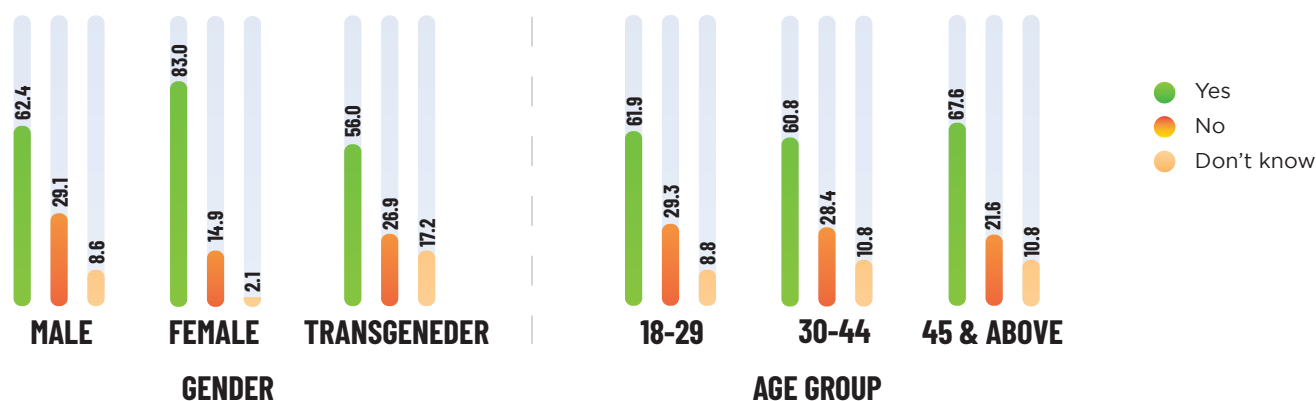


Figure 15: Respondents' desire to quit tobacco usage (%)

Of the 508 respondents, 309 (60.8%) had attempted to quit smoking/tobacco in the past. This trend is seen across all genders and age groups, with slightly higher overall percentages for females (85.1%) and those aged 18-29 years (55.1%). It is also worth noting that 70.3% of those aged 45 and above had attempted to quit at some point in the past.



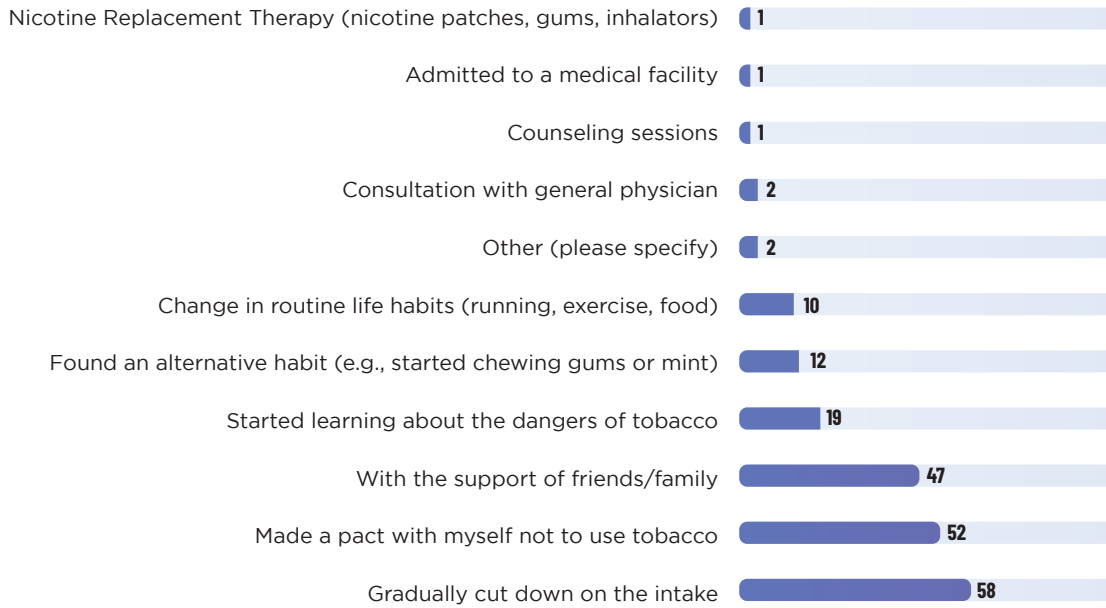
Figure 16: Respondents' efforts to quit tobacco usage (by age and gender) (%)

A little above 50% of the respondents across genders and age groups mentioned that they were able to successfully quit for a significant period – a few reported it to be as long as three to five years of complete tobacco cessation. The reasons for slipping back into smoking or tobacco use varied greatly depending on the occupation and age of the respondents. For some, it was a reunion or one sitting with a close friend where they smoked a cigarette “for old time’s sake” and then got hooked on to a cigarette a day which gradually increased to a packet a day. Male respondents who worked on daily wages said they smoked to improve their concentration and remain alert at work. The following excerpt from an FGD with men elaborates on the situation.

“I did not smoke; I used to have *mawa* or *gutka*. One pack of *mawa* would cost me Rs. 100 and would last for a good 10 hours. Two packets a day were enough to keep me focused on work. However, when my young friend died of mouth cancer, I got very scared. His family sold the house and jewellery (for his treatment), but he was gone within two months. That made me quit *mawa* and I switched to chewing gum and toffees because something has to be kept in the mouth for concentration and not falling asleep. My jaws would hurt because I wasn’t eating *mawa*, but I persisted for a whole year. I had to switch back to *mawa* again because toffees were costing me Rs. 300 a day and failed to keep me awake. I couldn’t afford it. I am still scared but I can’t work without eating *mawa*. I have reduced the quantity, and only eat one pack of Rs. 70. I brush my teeth regularly and do not keep *mawa* in my mouth while sleeping. There is nothing else I can afford to do to quit tobacco.”

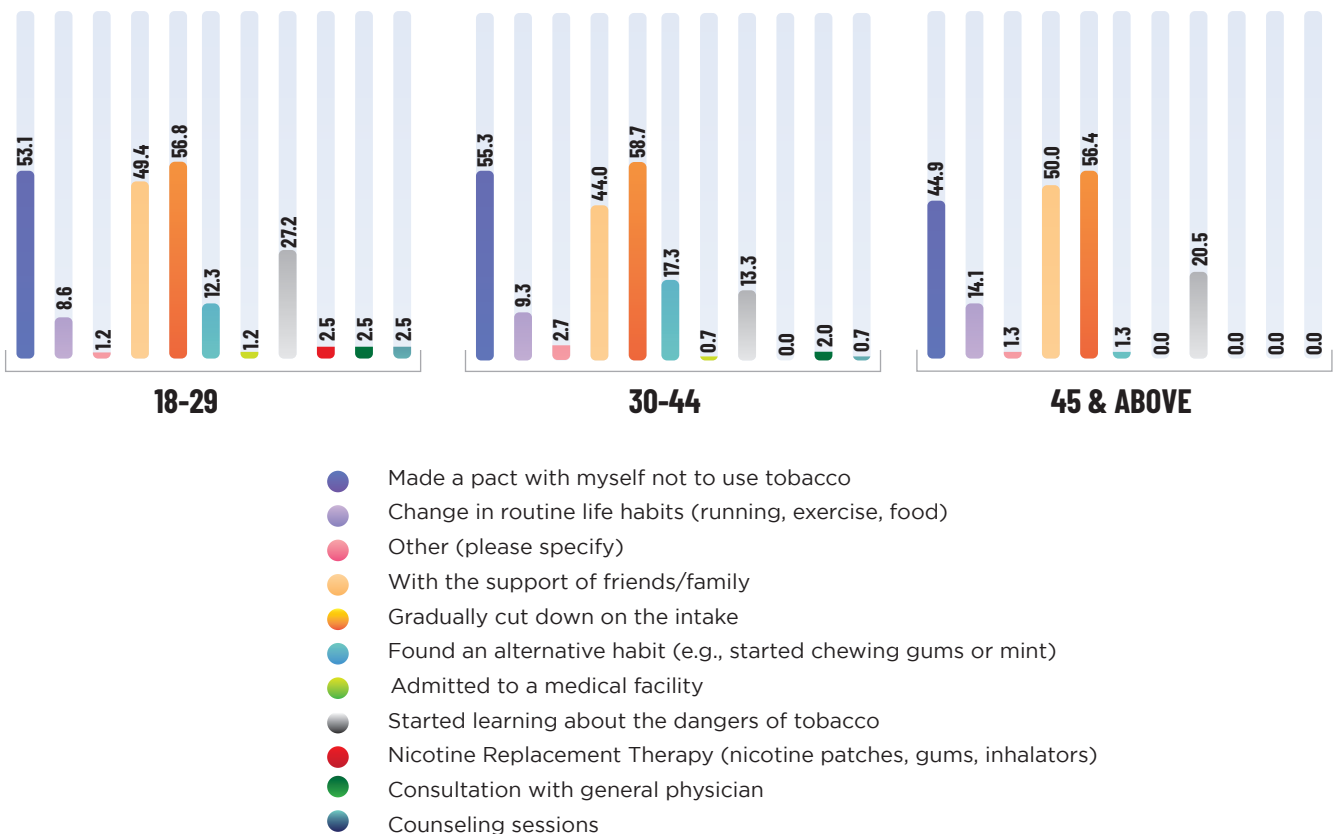
The most adopted strategy to quit tobacco was gradually cutting down on tobacco intake with 63.3% of male and 50% of female respondents using it. Additionally, 8.7% of the male respondents had added new habits to their routine such as running and exercising to quit tobacco use. The interview data revealed that the initiative to quit was often self- or family-led, and was seldom the result of a public health intervention

The interview data revealed that the initiative to quit was often self- or family-led, and was seldom the result of a public health intervention



Note: This is a multi-response question; the percentages are calculated based on the responses received against each type of strategy. For this reason, the collective percentage of all the strategies is not equal to 100.

Figure 17: Strategies adopted by the respondents to quit tobacco (by overall gender) (%)



Note: it is a multi-response question; the percentages are calculated based on each type of strategy's responses. That's why the collective percentage of all strategies is not equal to 100.

Figure 18: Strategies adopted to quit tobacco (by age group) (%)

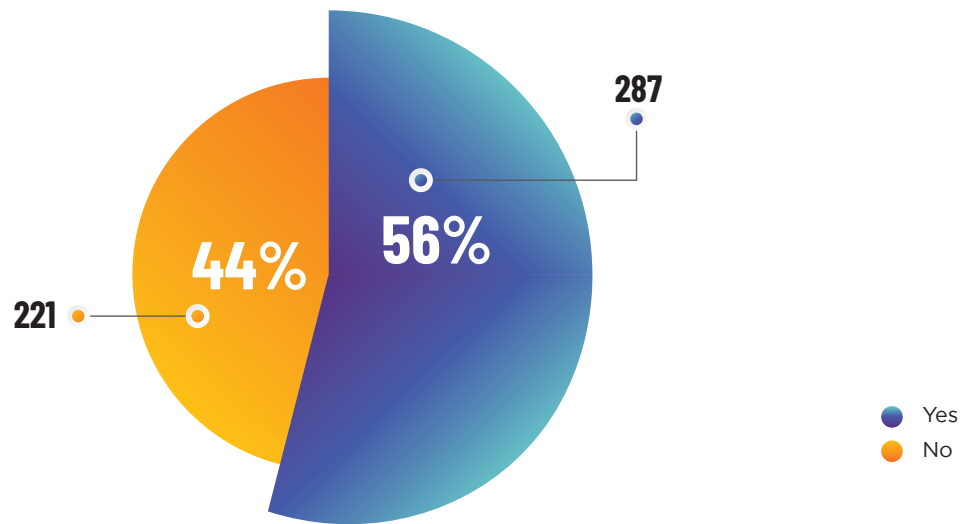


Figure 19: Health warnings' influence on respondents' decisions regarding tobacco usage (%)

When probed further about what led to or influenced their attempt at quitting tobacco, around 56% of the respondents attributed that public health warnings influenced them to quit while a sizeable 44% did not find the health warnings on cigarette packets or elsewhere of much impact. Gender and age disaggregated data show that transgenders, males, and those falling in the age cohort of 30-45 years strongly disagreed about the influence or effectiveness of warning messages and public health warnings.



Figure 20: Influence of warning messages on respondents' decision to quit tobacco (by age and gender) (%)

Only 27.4% of the respondents answered "yes" when asked if they knew what to do to reduce or quit tobacco (81 males, 19 females, and 38 transgenders to be precise). A sizeable percentage (44.7%) responded negatively when asked about strategies to quit tobacco. Cumulatively, 72.6% of the respondents did not have access to adequate information, and support for reducing or quitting tobacco.

Cumulatively, 72.6% of the respondents did not have access to adequate information, and support for reducing or quitting tobacco.

In the 18-29 age cohort, 46 people responded with a "yes" while 67 answered with a "no." In the 30-44 age group, 70 answered "yes" and 99 answered "no." In the 45 and above age group, 22 answered "yes" and 61 answered "no". In total, 138 people answered "yes" and 227 answered "no" when asked about reducing or quitting tobacco use.

A pattern emerging from both quantitative and qualitative data is that the marginalized population across age, gender, and religious affiliation is fairly cognizant of the health hazards of tobacco consumption – they may be informed by public health warnings or have witnessed the adverse outcomes in their close social group. However, they feel trapped in a vicious cycle and do not know "what" can be done to come out of the tobacco trap, exacerbated by habit, finances, or a simple lack of less hazardous and affordable alternatives.

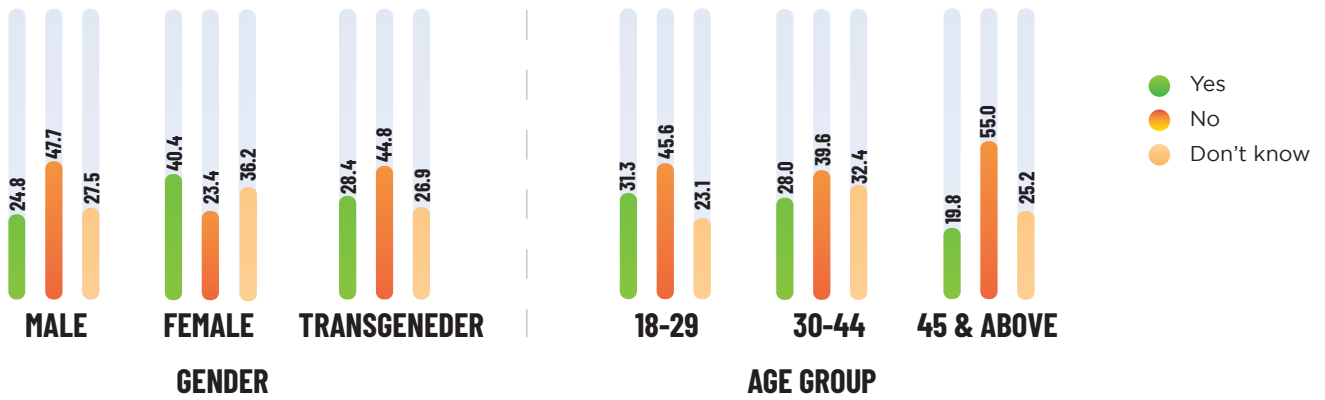


Figure 21: Respondents aware of what to do for quitting/reducing tobacco usage (%)

Information on how to quit and the harmful effects of smoking were found to be the most helpful with around 40% of the respondents finding both to be extremely helpful. Conversely, recognition awards for quitters were found to be the least effective method with only 11% finding this to be extremely helpful. Flipping the lens, this finding can also reflect on the efficacy and poignance of the way the information was packaged and shared as around 60% of the respondents said they did not find information on tobacco’s harmful effects or “how” to quit tobacco useful or did not want to answer the question.

What helped you in quitting tobacco intake and smoking?

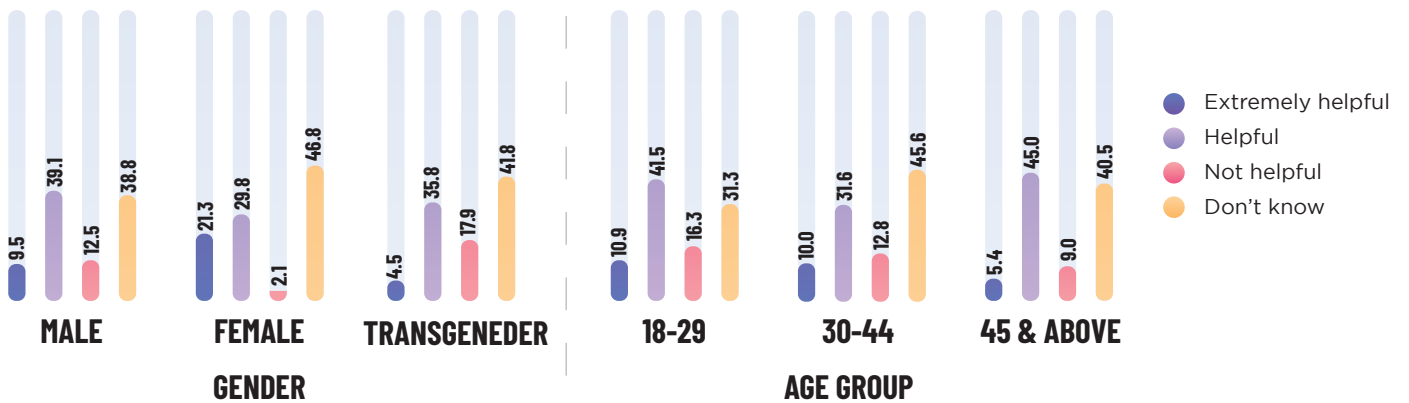


Figure 22: Information on how to quit (%)

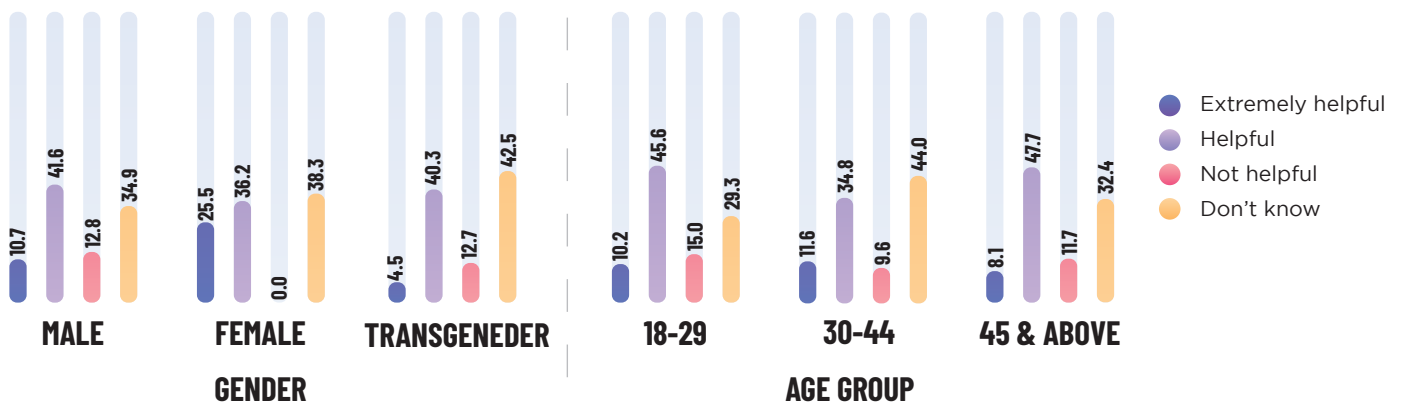


Figure 23: Information on harmful effects of tobacco usage (%)

4. SERVICE PROVISION FOR TOBACCO CESSATION

4.1 AVAILABILITY OF AND APPROACHING HEALTH PROFESSIONALS/ADVISORY FOR TOBACCO REDUCTION OR CESSATION

Only 9.6% of people who participated in the survey sought support from their local healthcare provider. This figure is slightly higher for those aged 18-29 years (10.9%) and lower for those aged 30-44 years (7.6%) or 45 and above (12.6%). It is also noteworthy that 23.4% of females had sought support compared to only 8.3% of males. Additionally, 8.2% of transgender individuals had sought support from their local healthcare provider.

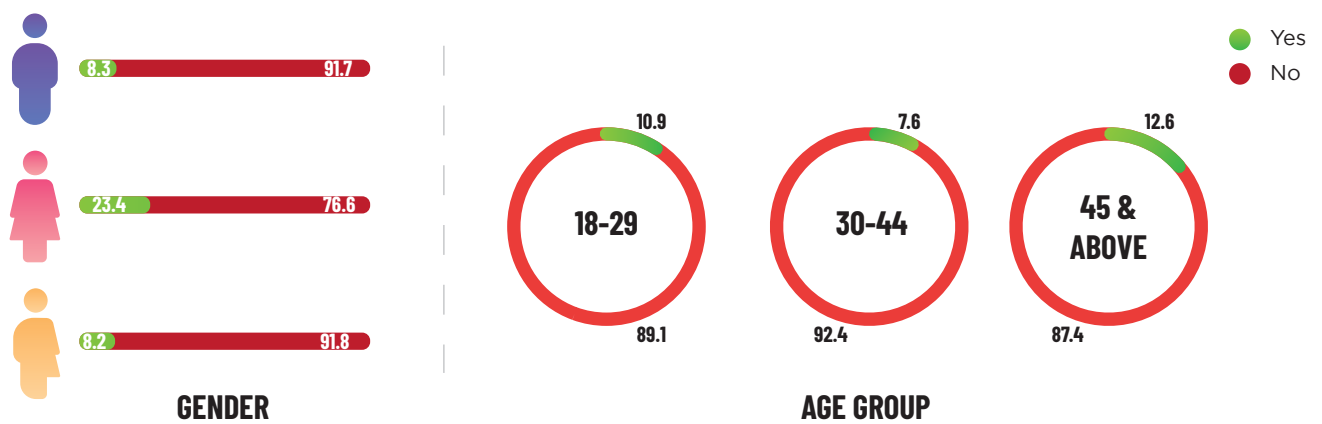


Figure 24: Number of respondents (by age and gender) who sought support from local health provider (%)

Has your doctor at any time during a consultation advised you to stop?

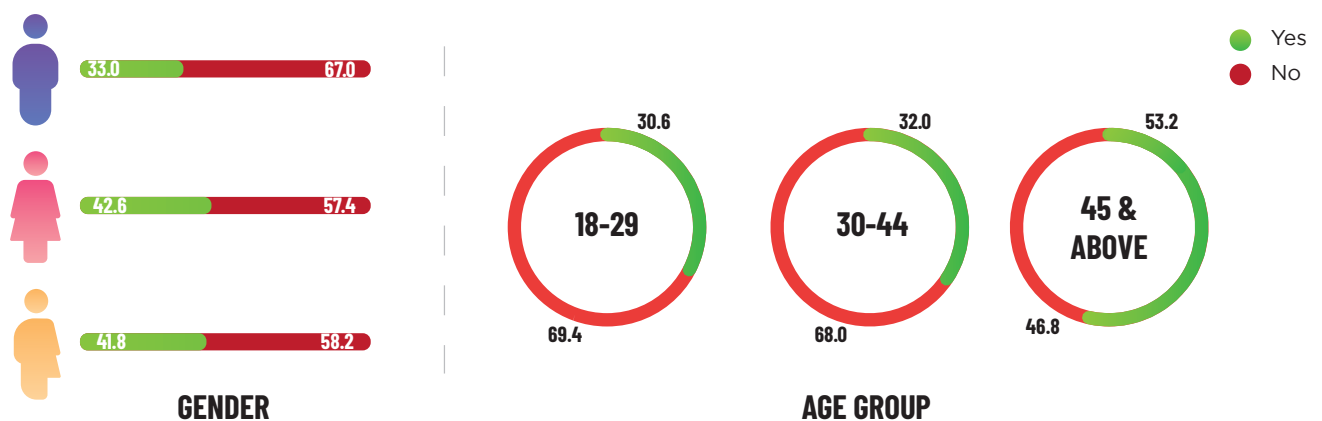


Figure 25: Doctors' advice on quitting (by age and gender) (%)

The results indicate that of those survey participants who did seek support from their local health provider, 36.2% had been advised by their doctor to stop tobacco use. This figure is lowest among those aged 18-29 years (30.6%) and highest among those aged 45 and above (53.2%). Additionally, the results demonstrate that the percentage of people who said their doctor had advised them to stop was higher among female participants at 42.6% than male participants at 33.0%.

When asked if there was a clinic or therapy center available in the local or city area which focused on tobacco cessation or harm reduction, only 6 people of the 508 people surveyed (1.8%) were aware of such a facility. Of those 2.7% of the overall sample size was in the 18-29 years age group, 0.8% were in the 30-44 years age group, and 1.8% were 45 years old or above. The large majority, 74.6% of those surveyed were not aware of any cessation clinics in their area. This was consistent across all age groups with 63.9% of the respondents aged 18-29 years, 67.6% of the respondents aged 30-44 years, and 73.0% in the 45 and above years age group being unaware of such facilities. Of the 23.5% respondents who were not aware of the availability of a clinic, 33.3% were in the 18-29 years age group, 31.6% were in the 30-44 years age group, and 25.2% were 45 years and above.

	GENDER								AGE GROUPS							
	MALE		FEMALE		TRANSGENDER		TOTAL		18-29		30-44		45 & ABOVE		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
YES	6	1.8	0	0.0	2	1.5	8	1.6	4	2.7	2	0.8	2	1.8	8	1.6
NO	244	74.6	25	53.2	75	56.0	344	67.7	94	63.9	169	67.6	81	73.0	344	67.7
DON'T KNOW	77	23.5	22	46.8	57	42.5	156	30.7	49	33.3	79	31.6	28	25.2	156	30.7
TOTAL	327	100.0	47	100.0	134	100.0	508	100.0	147	100.0	250	100.0	111	100.0	508	100.0

Table 2: Are you aware of any clinic or therapy centre available in your locality/city that focuses on tobacco cessation or harm reduction?

None of the females were aware of the tobacco cessation or reduction treatments.



Figure 26: Respondents receiving treatment in institutions (%)

The respondents who were not aware of cessation facilities outnumbered those who were aware by a large margin. In turn, an even smaller number from among those were aware of such facilities had actually sought help. The reasons for not seeking help were mainly limited to two options, i.e., “Do not want to be treated” and “Treatment was too expensive.”

Since none of the female respondents or those in the age group of 45 years and above knew of such facilities, accordingly, they did not attempt this question. This is an area where further inquiry is required while mapping the responses with geographic locations and income levels as well.

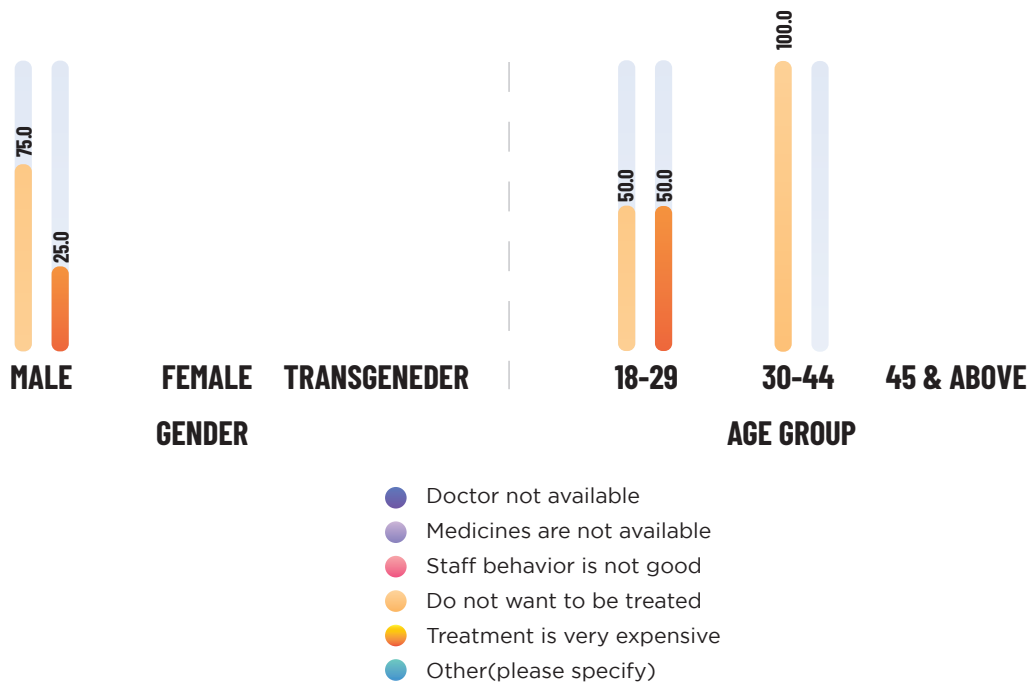


Figure 27: Respondents' reasons for not getting treatment (%)

4.2 AWARENESS AND ACCEPTANCE OF SAFER ALTERNATIVES

Out of the total respondents, only 20.7% (105 out of 508) affirmed that they had heard of the safer nicotine delivery systems. The age cohort of 18-29 years represented the highest percentage with 21.1%, while the lowest was 10.8% for respondents who were 45 years or older.

Out of the total respondents, only 20.7% (105 out of 508) affirmed that they had heard of the safer nicotine delivery systems.

E-cigarettes, USB devices, electronic nicotine devices, and Velo pouches were cited as commonly used items to reduce tobacco use. Healthcare professionals interviewed for this study maintained that the emerging data indicated that these devices were equally or even more harmful than regular cigarettes and that the tobacco industry was spreading false information about the credibility of these products. They also mentioned that emerging data also indicated that alternate products, when used by non-tobacco users could serve as a motivation for them to eventually switch to cigarettes. The following excerpt from the FGD with healthcare professionals further elaborates on their skepticism about alternative tobacco reduction devices and therapies:

“One concerning question that has come to our attention as a result of emerging research is whether the use of such alternates is reducing the consumption of cigarettes (tobacco) or are they contributing to the increased use of nicotine. Research on this is still ongoing. For many young people in universities, the use of alternates has become a fashionable way to consume nicotine. New electronic devices have the function mode to control the consumption of nicotine; for instance, you can set your device at 0-3% of nicotine. However, it is a point of concern that after regular use of these devices, users might feel inclined to switch to tobacco use if they were not previously tobacco users.” (Excerpt from FGD with healthcare professionals).

Of the surveyed individuals 75% stated that they would be willing to use a product that is 95% safer than smoking when quitting or switching from smoking and oral tobacco use. This finding was consistent across all genders and age groups, with the highest level of agreement among respondents aged 18-29 years (72.8%). The figures demonstrate the potential for a 95% safer product to be successful for smoking and oral tobacco use cessation.

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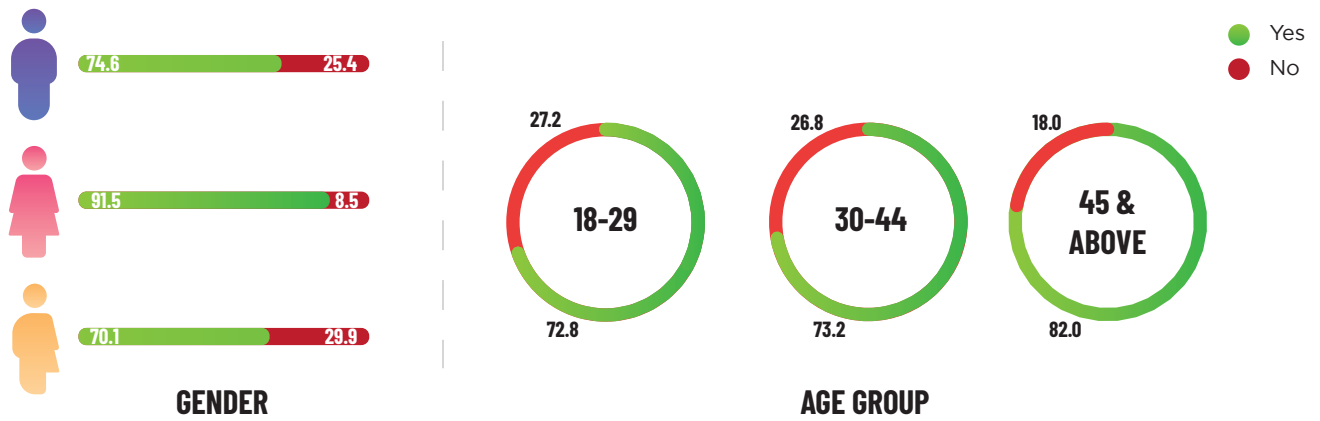


Figure 28: Acceptance of alternative products (by age and gender) (%)

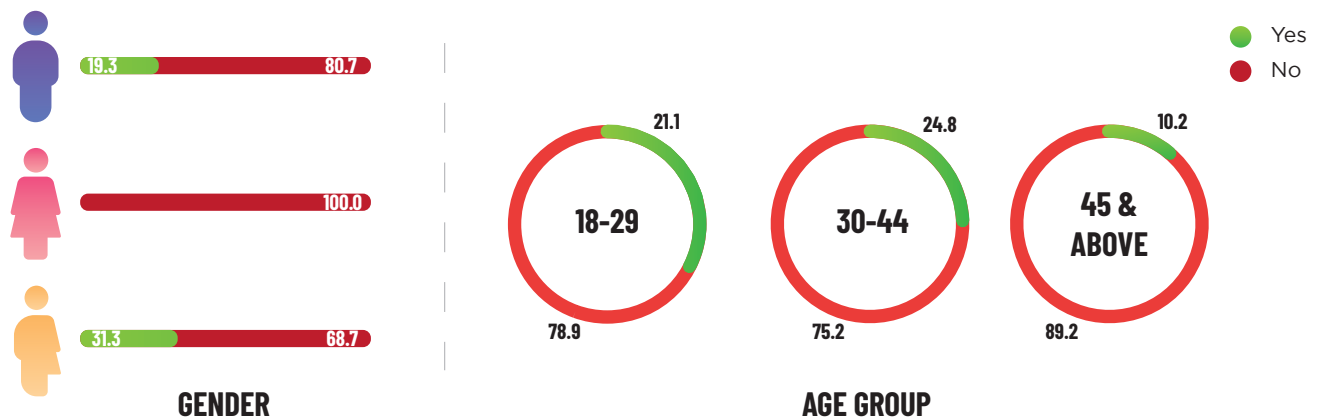


Figure 29: Knowledge about safer nicotine delivery system (by age and gender) (%)

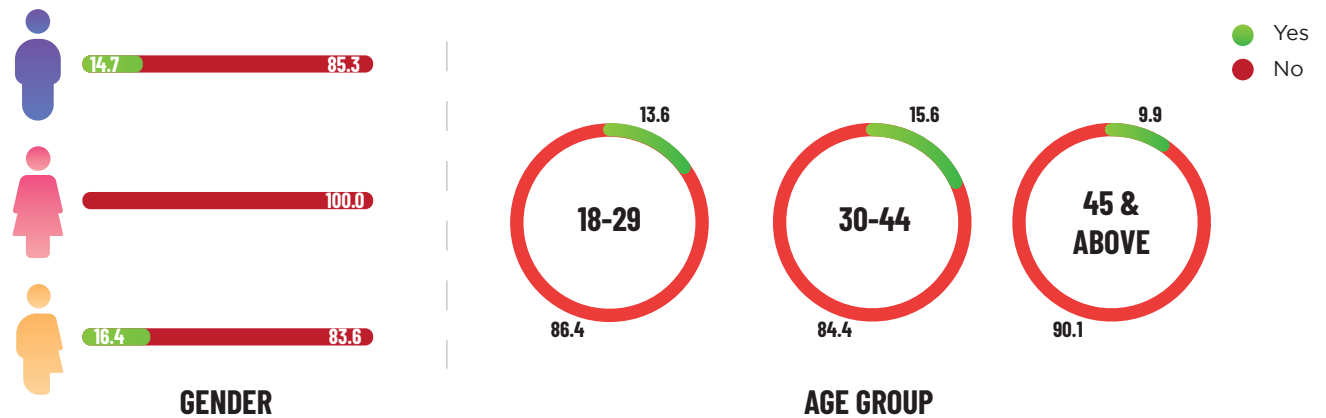


Figure 30: Available information about alternative products (by age and gender) (%)

The respondents were also asked if they wanted to express any demand or message to healthcare professionals, policymakers, and other stakeholders. The responses received varied albeit being shared by a dozen or two individuals in terms of frequency. For instance, there is a demand for free treatment with a stipend (0.4%) while some respondents also asked for reducing the price of medicines and alternative products if free and effective treatment cannot be provided. A more popular ask was to ban tobacco completely (7.7%) – this sentiment also reverberated when respondents mentioned the strategies that would prove effective for tobacco cessation. One-third of the respondents across genders and age groups (33.5%) demanded effective awareness programs and public campaigns.

This becomes more powerful a demand when read in conjunction with the lack of information on safe alternatives, perceptions of health professionals shared in the previous section, and the effectiveness of public health warnings. The need, therefore, is not just awareness programs but to provide crisp and useful information on what strategies work for quitting tobacco. Similarly, the presentation and dissemination of information should be done in an appealing and non-judgmental way using health facts. Shaming users and stigmatizing the issue, as the data has indicated, leads to a dismissive attitude or a non-sharing, high-risk approach.

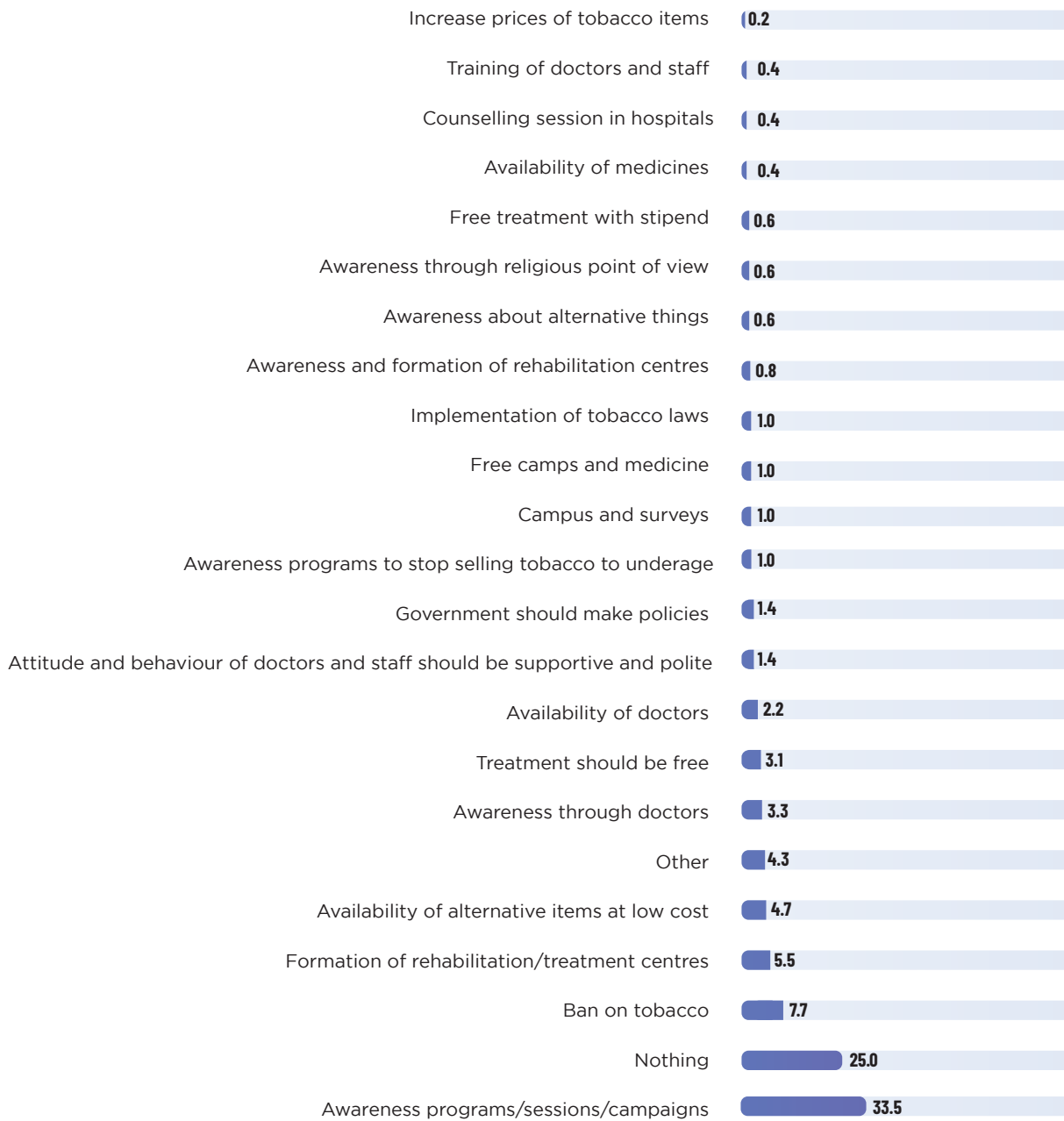


Figure 31: Respondents' messages for medical professionals and policymakers (%)

5. RECOMMENDATIONS AND WAY FORWARD

The marginalized populations across age, gender, and religions in Pakistan are fairly cognizant of the health hazards of tobacco consumption, and though a majority (60.8%) of the sample have attempted to quit smoking/tobacco use by gradually cutting down on tobacco intake, they were mostly unsuccessful in the long run.

The highlight of the findings from the study is that out of the 508 people surveyed, only 6 people (1.18%) were aware of any cessation services and clinics in their area and only 9.6% of the sample had sought cessation support from their local healthcare provider. We know that in developing countries the last-mile delivery of healthcare services defines the success or failure of public health initiatives. This is also true for tertiary health care services such as cessation clinics.

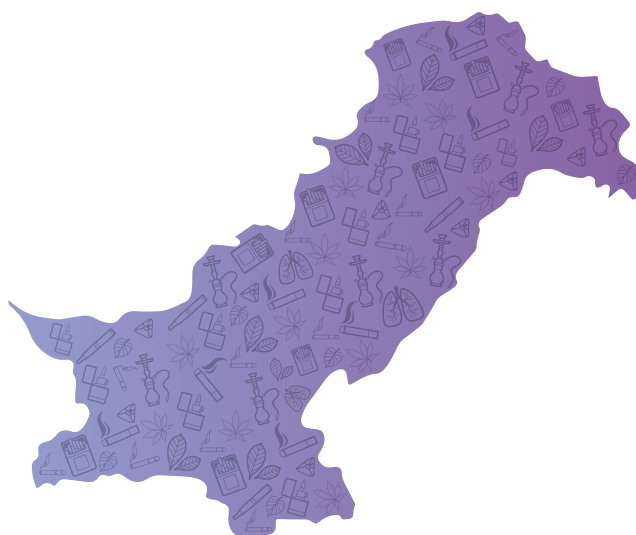
Of the surveyed individuals 75% stated they would be willing to use a product that was 95% safer than smoking when quitting or switching from smoking and oral tobacco use. This finding was consistent across all genders and age groups, with the highest level of agreement among the age group of 18-29 years (72.8%). The figures demonstrate the potential for a 95% safer product to be successful for smoking and oral tobacco use cessation. Yet, only 20.7% affirmed that they had heard of the safer nicotine delivery systems. To add to this, healthcare professionals interviewed for this study believed that e-cigarettes and Velo pouches were all equally or even more harmful than regular cigarettes. The FGD with healthcare professionals further elaborated on their skepticism and misinformation about tobacco harm reduction products. There is thus reason to deduce that these misconceptions result in healthcare providers not suggesting these products to smokers to aid cessation.

The problem faced by marginalized smokers on their journey to cessation is multi-dimensional. On one hand, they have limited knowledge of localized cessation services, and on the other hand, limited knowledge of alternate nicotine delivery products compounded by the skepticism of healthcare professionals. This entrenches the marginalized smoker further into the vicious circle of being unable to quit sustainably.

The findings clearly indicate that there is an immense need for multi-dimensional interventions that investigate a range of aspects/domains within the ambit of health assessment. These may include, but are not limited to:

- **Addressing misinformation and disinformation** – Targeted both towards the general public who are smokers or tobacco users trying to quit and towards healthcare professionals so as to provide holistic guidance to users trying to quit. The FGD brought to light the skepticism of the healthcare practitioners, however, a more detailed follow-up study is required to understand how deep the misinformation and disinformation have percolated; what is the source of this information and how it can be addressed specifically among last mile healthcare delivery providers.
- **A mapping of cessation services both publicly funded and private facilities or awareness centres** – This study has revealed the low level of awareness about cessation services amongst the people who need them the most. The geographical distribution of cessation services vis-a-vis disease burden, and socio-economic conditions need to be evaluated. An in-depth analysis needs to be conducted to answer the question of why do people not know of accessible cessation services.
- **Cessation services also need to be studied** to evaluate standardized modules being followed, the effectiveness of the facilities, the assessment of information shared, and the demography of their service users. These two studies together will provide a logical cohesive understanding of people's journey towards cessation in the formalized setting.

- While **mass awareness and counselling interventions** are important, they have not yet reached the capacity where they can holistically address the country's cessation needs unless alternatives to smoking and tobacco consumption are made available, accessible, and affordable to the masses. Subsequent studies are needed to evaluate best practices across similar socio-economic conditions and make recommendations for replicability. Further longitudinal studies are also required among the Pakistani youth to evaluate the gateway effect of products such as e-cigarettes.



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APPENDICES

APPENDIX A: RESEARCH INSTRUMENTS

Survey for Tobacco Cessation Needs Assessment

Section 1: Interviewer Information			
1.1: Name		1.2: Contact Number	

Date of Interview:

Section 2: Geographical Information			
2.1: District		2.2: Tehsil/Taluka	
2.3: Union Council		2.4: Revenue Village	
2.5: Area Type	<input type="checkbox"/> Rural <input type="checkbox"/> Urban	2.6: Home Address	

Section 3: Respondent's Demographic Profile			
3.1 : Respondent Name			
3.2 : Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Transgender	3.3 : Age (in completed years)	
3.4 : Respondent's Source of Income (multiple choice applicable)			
<input type="checkbox"/> Government/Semi-government job	<input type="checkbox"/> Private Job	<input type="checkbox"/> Own Business	<input type="checkbox"/> Daily Wage Laborer
<input type="checkbox"/> Farmer	<input type="checkbox"/> Looking for work	<input type="checkbox"/> Does not want to work	<input type="checkbox"/> Retired
<input type="checkbox"/> Refuse to Answer	<input type="checkbox"/> Other (please specify)		
3.5: Education			
<input type="checkbox"/> Primary	<input type="checkbox"/> Middle	<input type="checkbox"/> Secondary	<input type="checkbox"/> Intermediate
<input type="checkbox"/> University	<input type="checkbox"/> School drop out	<input type="checkbox"/> Illiterate	<input type="checkbox"/> Technical Diploma/Course
<input type="checkbox"/> Refuse to Answer			
3.6: Contact Number			
3.7: CNIC Number (If the identity card is not created or the number is not known, write 99999999999999)			
3.8: BISP / EHSAS ID Number (If there is no ID number, write Not applicable)			

4. Gutka / Chalia			
5. Paan / Tambaku paan			
6. Beedi			
7. Niswar			
8. Mawa			
9. Other (please specify)	9.1: Name		9.2: Amount

Section 4: Need Assessment for Tobacco Harm Reduction				
4.1: Do you want to quit smoking and/or all forms of tobacco use?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know	
4.2: If you have selected "NO", please state your reasons:	_____			
If you have selected "YES" or "Don't Know" in 4.1, please go to 4.3				
4.3: Is there anything that can motivate you to quit smoking and/or all forms of tobacco use? Please elaborate:				

4.4: Have you tried to quit smoking and/or all forms of tobacco use before?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
4.5: If "YES" is selected for Q.4.4, how did you try to quit? Select as many strategies as applicable.				
<input type="checkbox"/> Made a pact with myself not to use tobacco	<input type="checkbox"/> With the support of friends/family	<input type="checkbox"/> Gradually cut down on the intake		
<input type="checkbox"/> Found an alternative habit (e.g. started chewing gums or mint)	<input type="checkbox"/> Admitted to a medical facility Name _____	<input type="checkbox"/> Started learning about the dangers of tobacco		
<input type="checkbox"/> Nicotine Replacement Therapy (nicotine patches/gums/inhalators)	<input type="checkbox"/> Consultation with general physician	<input type="checkbox"/> Counseling Sessions		
<input type="checkbox"/> Changed in routine life habits (running, exercise, food)	<input type="checkbox"/> Other (Please Specify)	_____		
4.6: Did the health warnings for tobacco use on cigarette packs and other tobacco products influence your decision to quit?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
4.6a: If No, do you think these are	<input type="checkbox"/> Not effective	<input type="checkbox"/> Unclear messages	<input type="checkbox"/> Other: _____	
4.7: If you have not tried quitting smoking/use of tobacco before, please answer the following questions.				
4.7a: Do you know "what" to do to reduce tobacco use or quit?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know	
4.8: What helped you in quitting tobacco intake and smoking? Please tick all applicable responses				
Action/Strategy	Extremely helpful	Helpful	Not Helpful	Don't know

1. Information on how to quit				
2. Information on harmful effects of tobacco/smoking for you				
3. Alternatives of tobacco intake/smoking				
4. Affordable reduced harm/safe options (e.g. nicotine patch)				
5. Public awareness campaigns				
6. Tobacco cessation programme				
7. Ban on cigarette advertisement				
8. Make smoking products expensive				
9. Ban cigarette smoking in public places/streets/parks				
10. Have recognition awards for quitters				
4.9: What are the things that make you want to smoke and/or use other forms of tobacco (consumer appeal)? List the top three.				
1				
2				
3				
4.10: Have you ever sought support from your local health provider?			<input type="checkbox"/> Yes	<input type="checkbox"/> No
4.11: Has your doctor at any time during a consultation advised you to stop?			<input type="checkbox"/> Yes	<input type="checkbox"/> No
4.11a: If "YES", can you recall the advice?				
4.12: Are you aware of any clinic or therapy centre available in your locality/city that focuses on tobacco cessation or harm reduction?			<input type="checkbox"/> Yes	<input type="checkbox"/> No
4.12: Are you aware of any clinic or therapy centre available in your locality/city that focuses on tobacco cessation or harm reduction?				
4.13: If "YES", can you give us the following information on such clinics?				
4.13a: Name of the Institution:				
4.13b: Location				
	<input type="checkbox"/> Inside government hospital	<input type="checkbox"/> Private hospital	<input type="checkbox"/> Private clinic/ General Physician	<input type="checkbox"/> Community center /health camp
4.13c: How frequently this institute open for treatment				
	<input type="checkbox"/> Once in 1 week	<input type="checkbox"/> Twice in 1 week	<input type="checkbox"/> Monthly	<input type="checkbox"/> Quarterly
4.13d: How much does this institution charge for treatment? (Medicines/doctor fees etc.)				
	<input type="checkbox"/> Between 1,000-3,000/month/person	<input type="checkbox"/> Up to PKR 5,000/-per month/person	<input type="checkbox"/> Between PKR 5,000-10,000 /month/ person	<input type="checkbox"/> Don't know their fee
4.14: Are you getting your treatment in this institution?			<input type="checkbox"/> Yes	<input type="checkbox"/> No

4.14a: If NOT what are the reasons?	<input type="checkbox"/> Doctor not available	<input type="checkbox"/> Medicines are not available	<input type="checkbox"/> Staff behavior is not good	<input type="checkbox"/> Do not want to be treated
	<input type="checkbox"/> Treatment is very expensive	<input type="checkbox"/> Other (Please Specify)	_____	
4.14b: If "YES", how often do you go to this institution for treatment?	<input type="checkbox"/> Once in 1 week	<input type="checkbox"/> Twice in 1 week	<input type="checkbox"/> Monthly	<input type="checkbox"/> Quarterly
4.14c: Affordability (How much can you afford in a month?)	<input type="checkbox"/> PKR 1,000-3,000	<input type="checkbox"/> Up to PKR 5,000	<input type="checkbox"/> PKR 5,000-10,000	<input type="checkbox"/> Can't spend anything

Section 5: Tobacco Harm Reduction Products		
5.1: Have you heard of Safer Nicotine delivery systems like e-cigarettes, heat not burn devices, oral nicotine pouches, and any others?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.2: If "YES", where did you hear about it?	_____	
5.3: Do you feel you have enough information about these products?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.4: If I told you these products are 95% safer than smoking, would you like to use these for quitting or switching from smoking and oral tobacco use?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.5: Your main message to medical professionals and those looking after policies for health and tobacco control. (Please record exactly what they said – use their exact quotes).		

Thank you very much for your kind cooperation and spending your valuable time with me		

APPENDIX B: CONSENT FORM

Informed Consent Form for Research Participants

Title of study: Needs of Marginalized Smokers and Other Tobacco Users

Institute: Innovative Development Solutions

Purpose of this research study

This is an exploratory research focused on tobacco users from marginalized sections of the society. Through conducting a survey and interviews, the study aims to identify the willingness to quit tobacco use and the nature of support required for it.

We seek your consent to become our research participant. It will take you up to 40 minutes to fill out the survey questionnaire. Please note that your name, identity and personal information provided by you will be kept CONFIDENTIAL and not be known to anyone except for the researchers. Responses to the survey will be disaggregated and generalized during analysis and report writing.

Possible risks or benefits

There is no risk involved in this study except your valuable time. There is no immediate and direct benefit for you also. However, the research findings will be useful in creating products and services essential for tobacco cessation in Pakistan.

Right of refusal to participate and withdrawal

You are free to choose to participate in the study. You may refuse to participate or withdraw any time, we will appreciate it if you continue to participate or inform us in advance. Similarly, you can choose not to answer any question in the survey/interview.

AUTHORIZATION

I have read and understood this consent form, and I volunteer to participate in this research study. I also understand that the responses I have provided will only be used for tobacco cessation activities and awareness raising.

Participant's Name and Signature:

CNIC Number :

Date:

Name & Signature of Person Obtaining Consent:

Date:

APPENDIX C: HOUSEHOLD INCOME BY CATEGORY

The following graphs represent the amount (PKR) spent on different necessities including food, medical, rent and education.

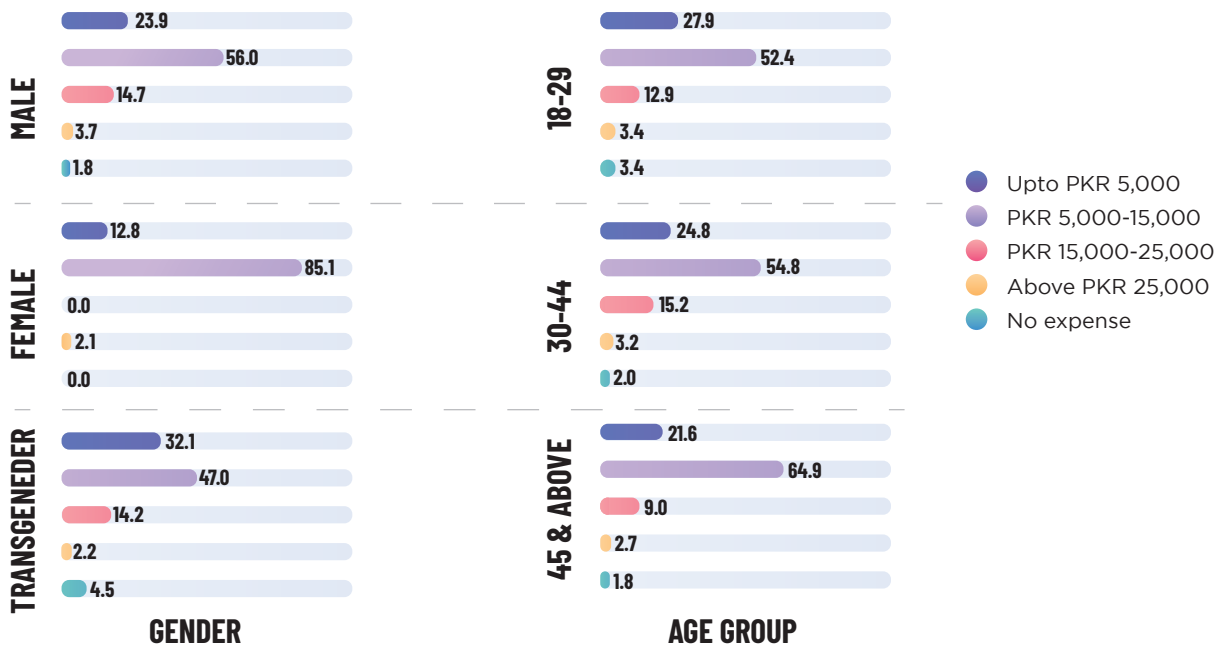


Figure 32: Monthly household expenses on food (%)

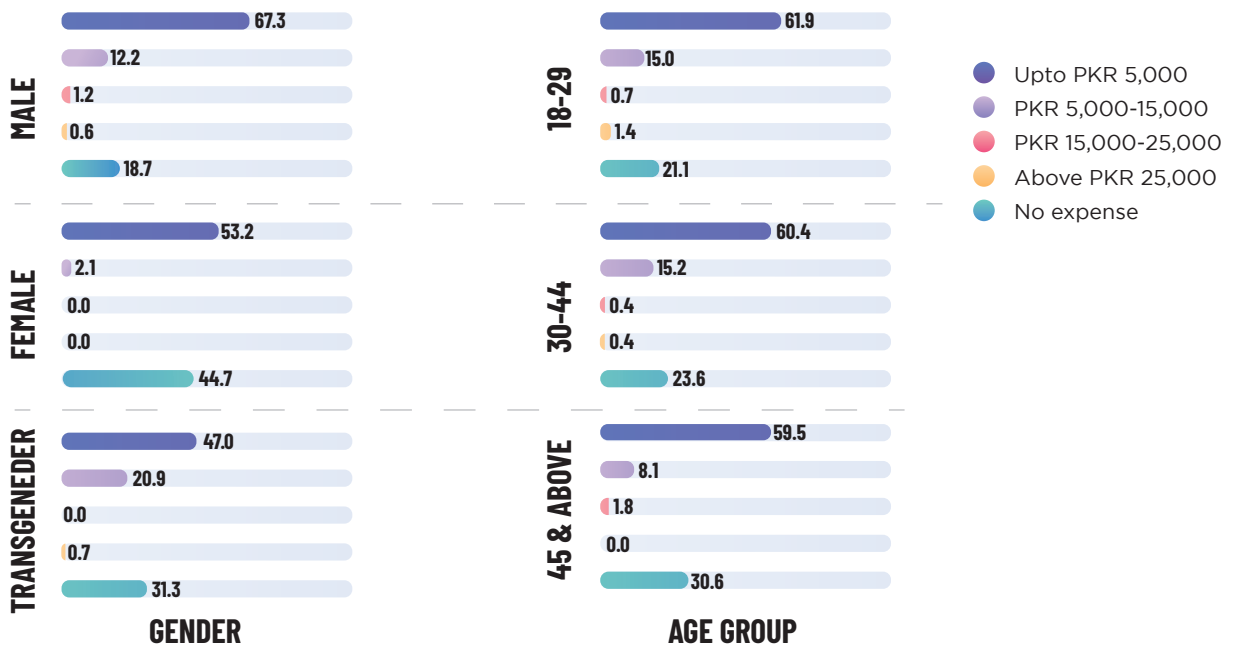


Figure 33: Monthly household expenses on transport (including petrol) (%)

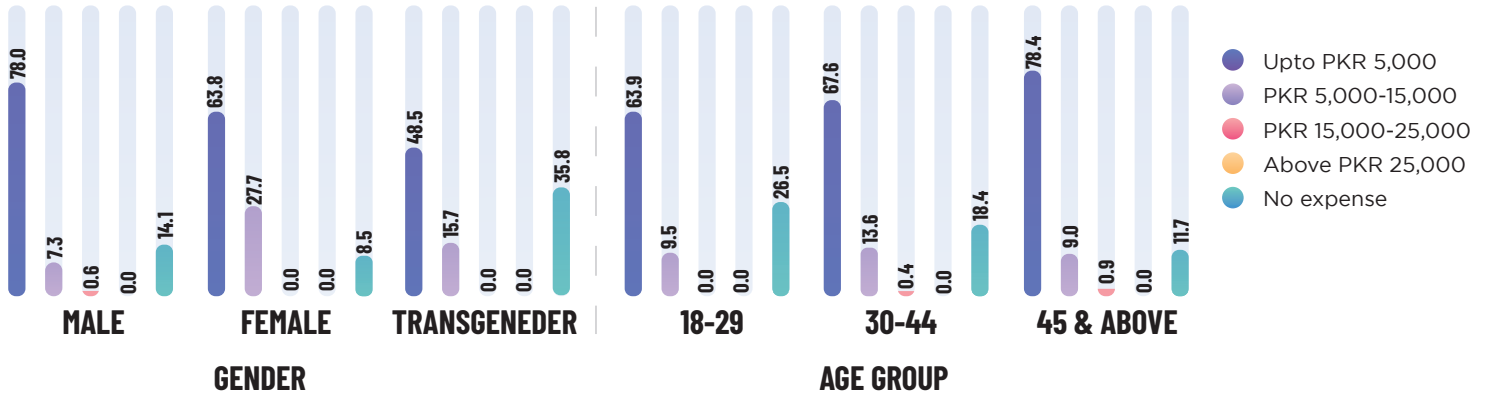


Figure 34: Monthly household medical expenses (%)

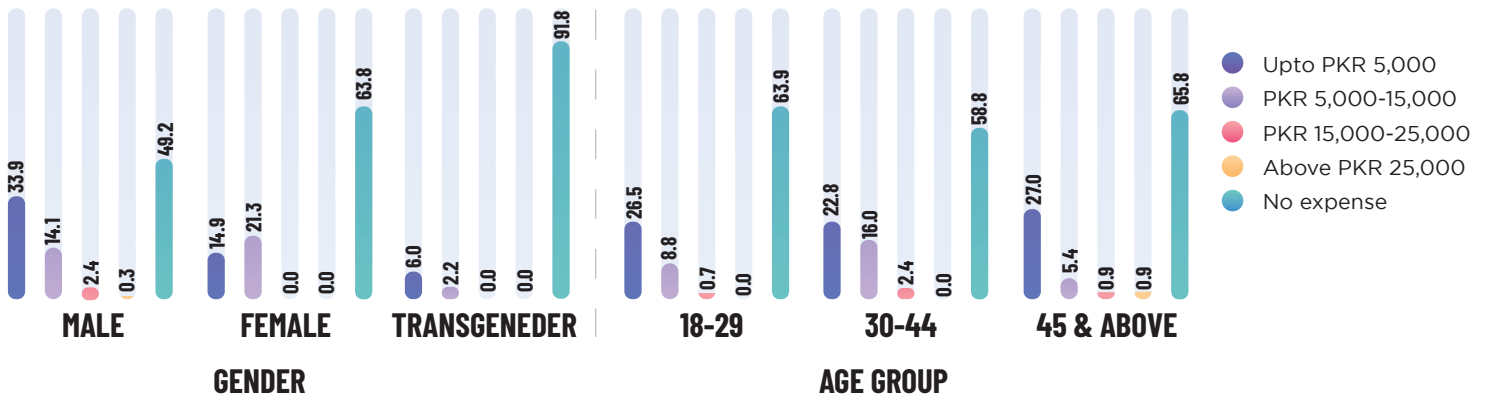


Figure 35: Monthly household expenses on education (%)

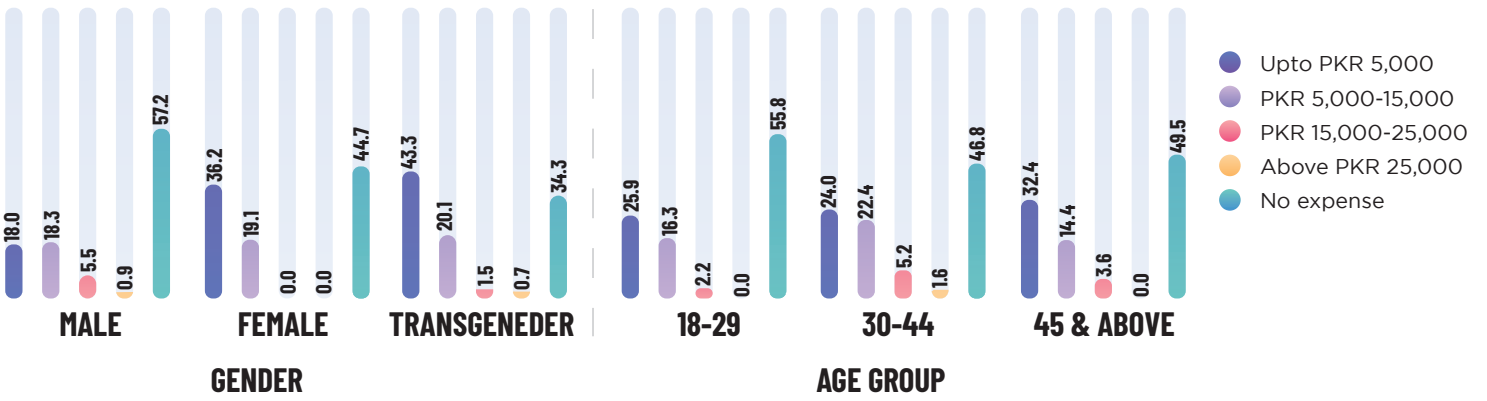


Figure 36: Monthly household expenses on house rent (%)

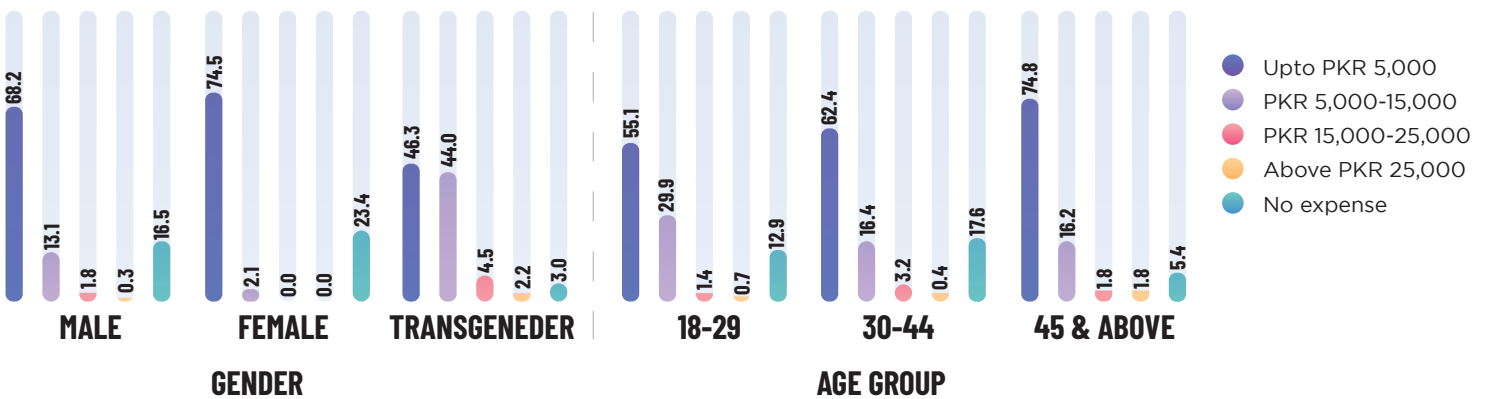


Figure 37: Monthly household expenses on clothing (%)

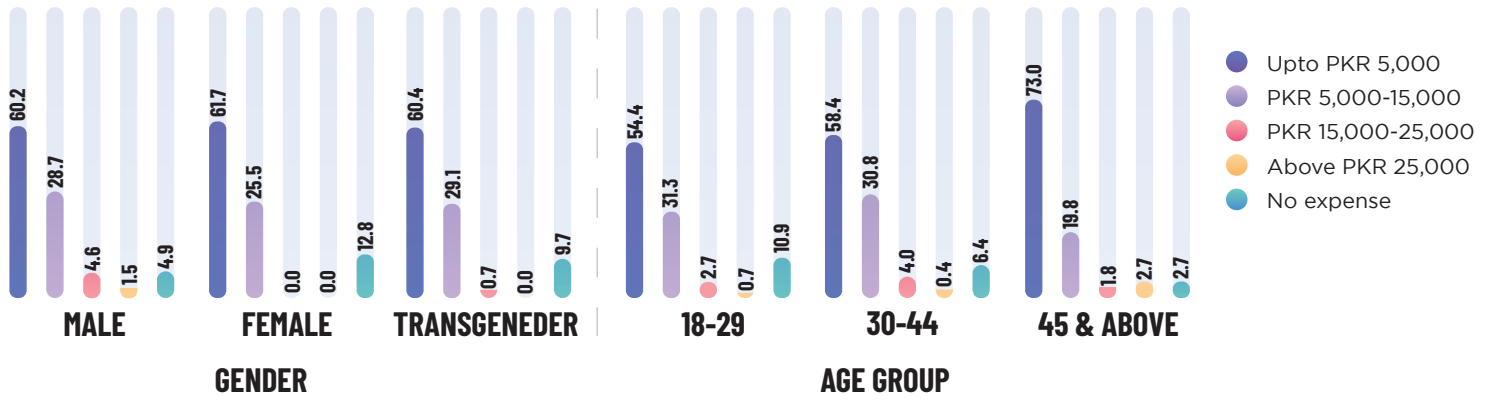


Figure 38: Monthly household expenses on utilities (%)

For how long have you been a tobacco user?

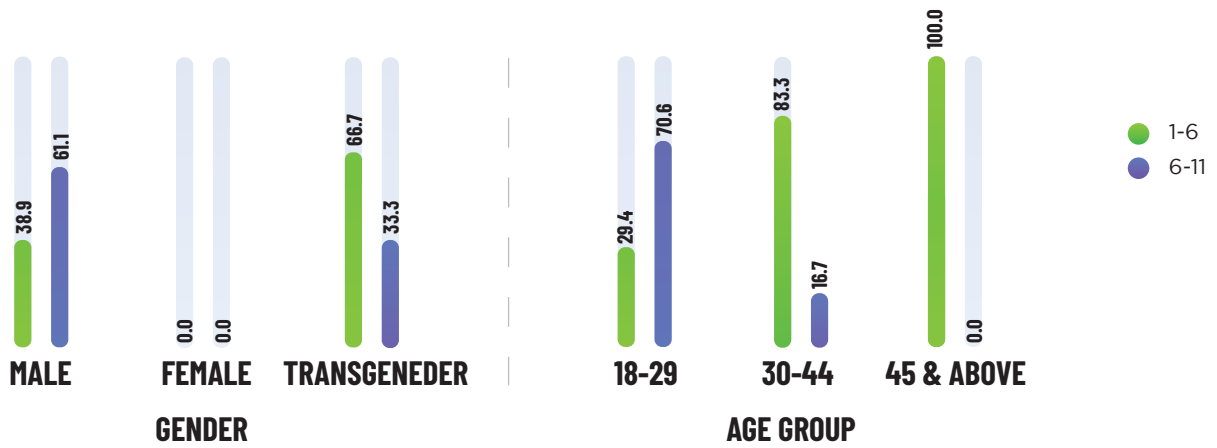


Figure 39: Respondents using tobacco since number of months (%)

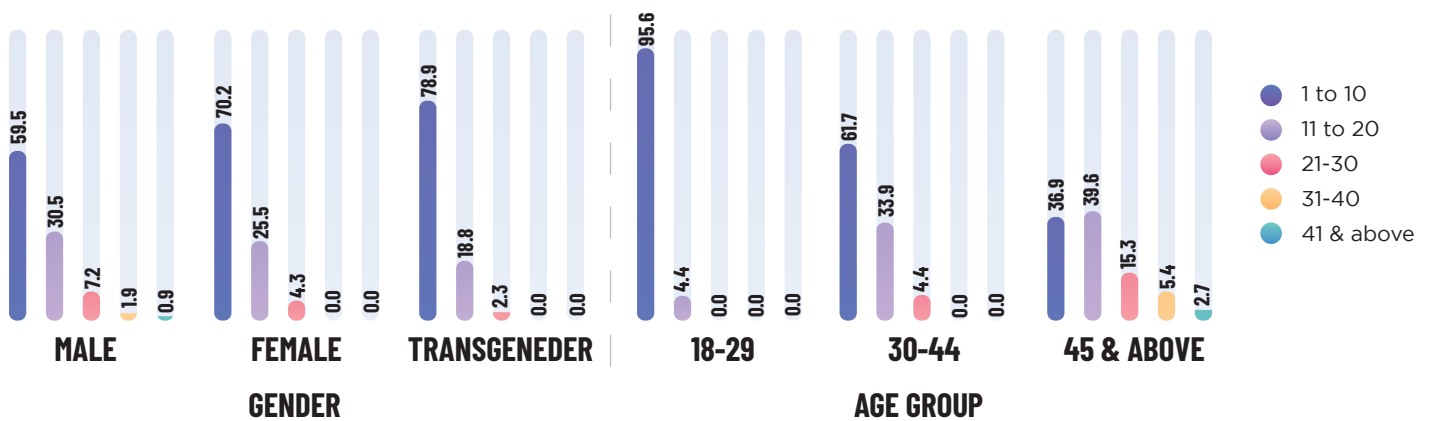


Figure 40: Respondents' tobacco use (in the number of years) (%)

Overall cost estimation on tobacco use

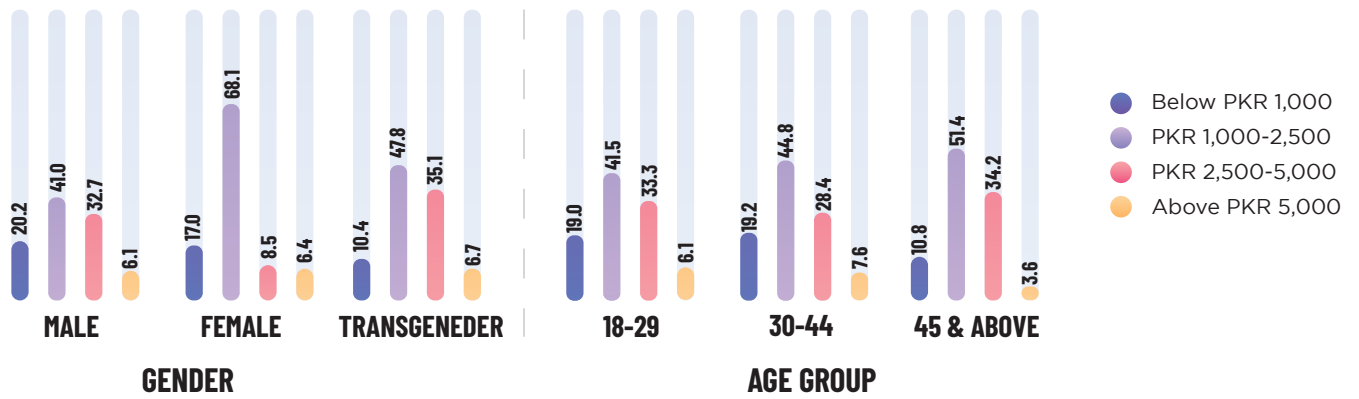


Figure 41: Overall cost estimation on tobacco use (%)

APPENDIX D: ITEM-WISE EXPENSE ON TOBACCO CONSUMPTION

The following graphs represent the amount (PKR) spent on different modes of tobacco use including cigarette, *gutka*, and *tambako paan*.

Monthly Respondent Expenses On

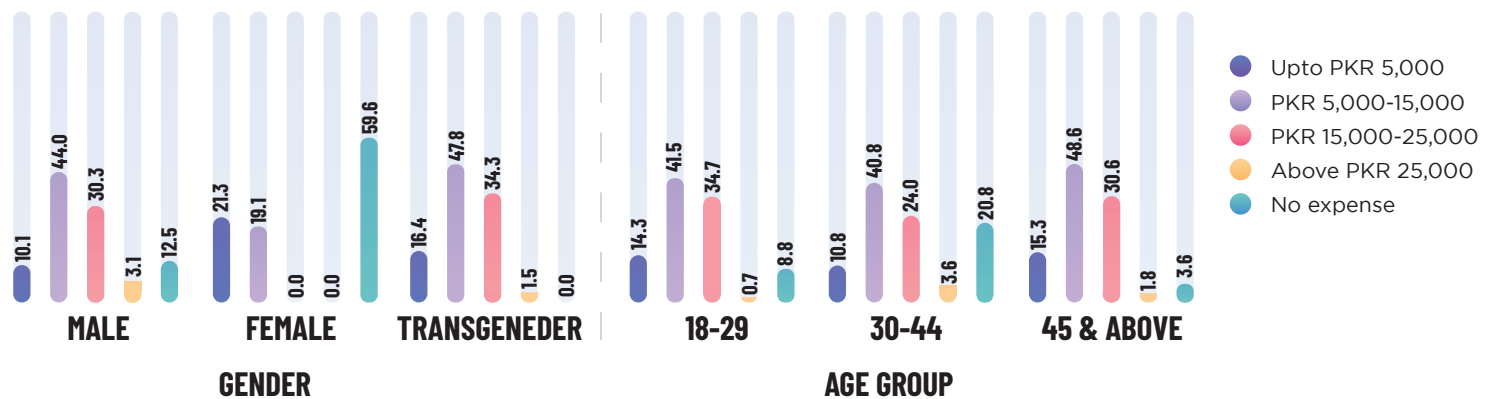


Figure 42: Monthly expense on cigarettes (%)

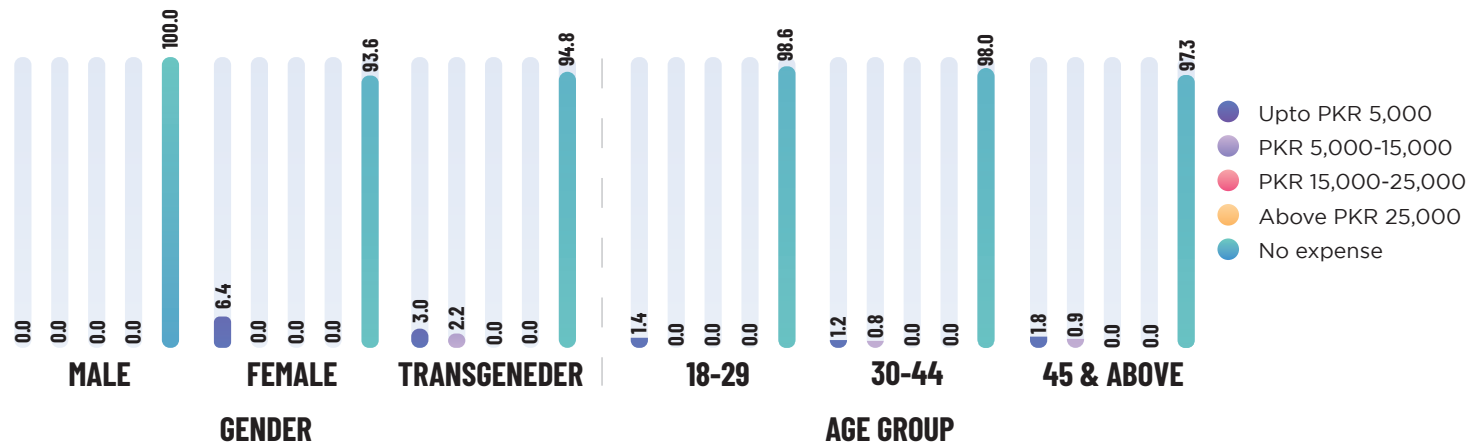


Figure 43: Monthly expense on hukkah (%)

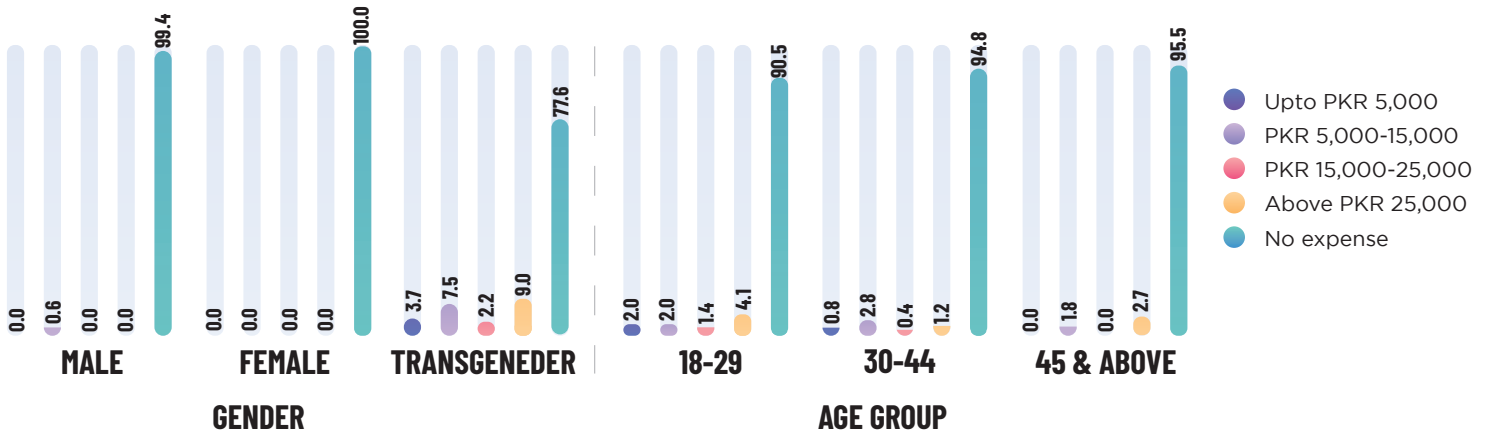


Figure 44: Monthly expense on sheesha (%)

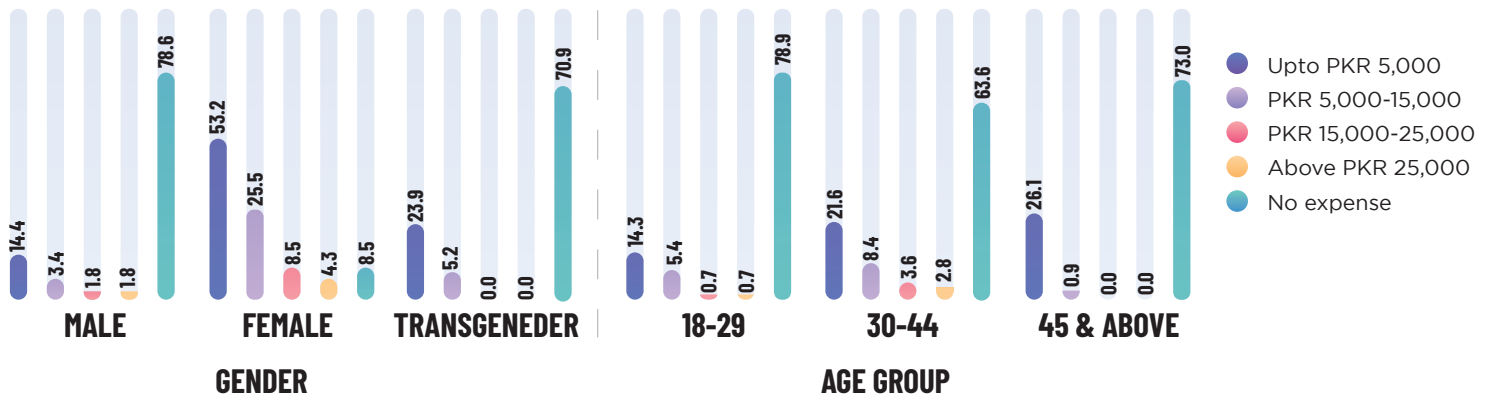


Figure 45: Monthly expense on Gutka/Chalia (%)

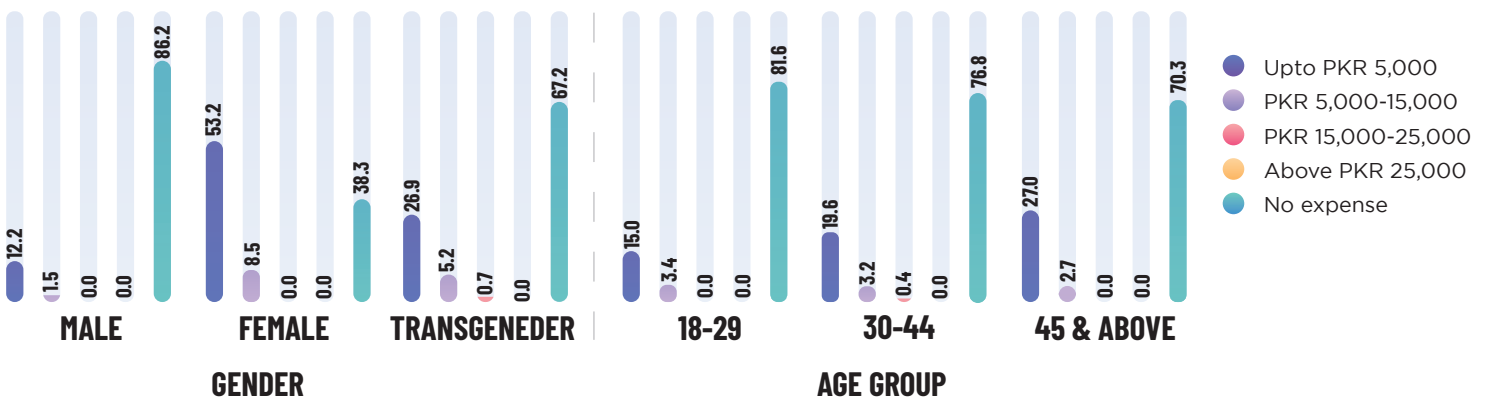


Figure 46: Monthly expense on paan/tambaku paan (%)

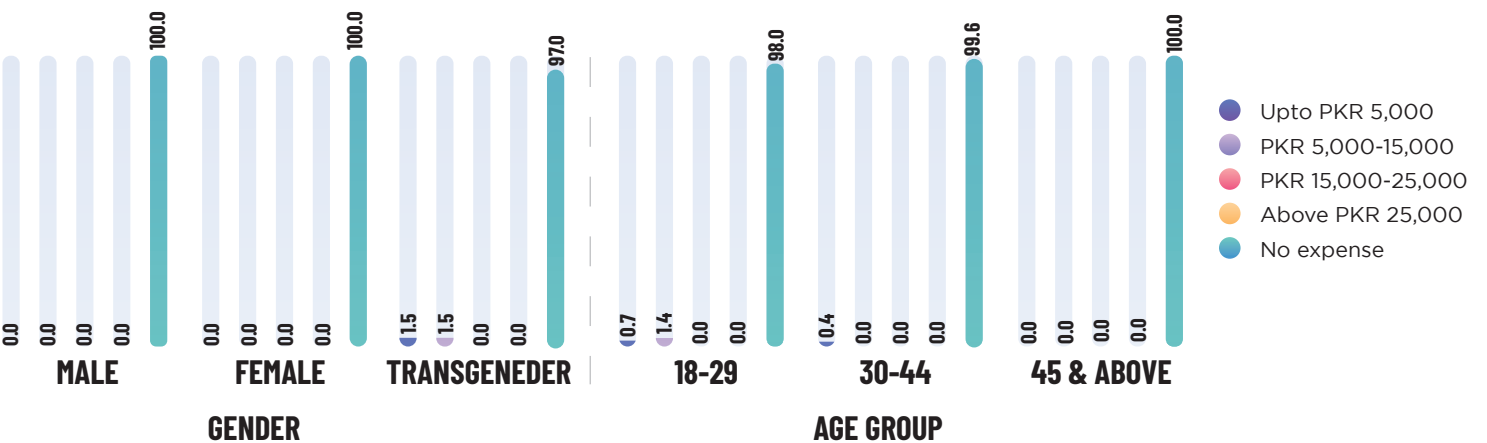


Figure 47: Monthly expense on beedi (%)

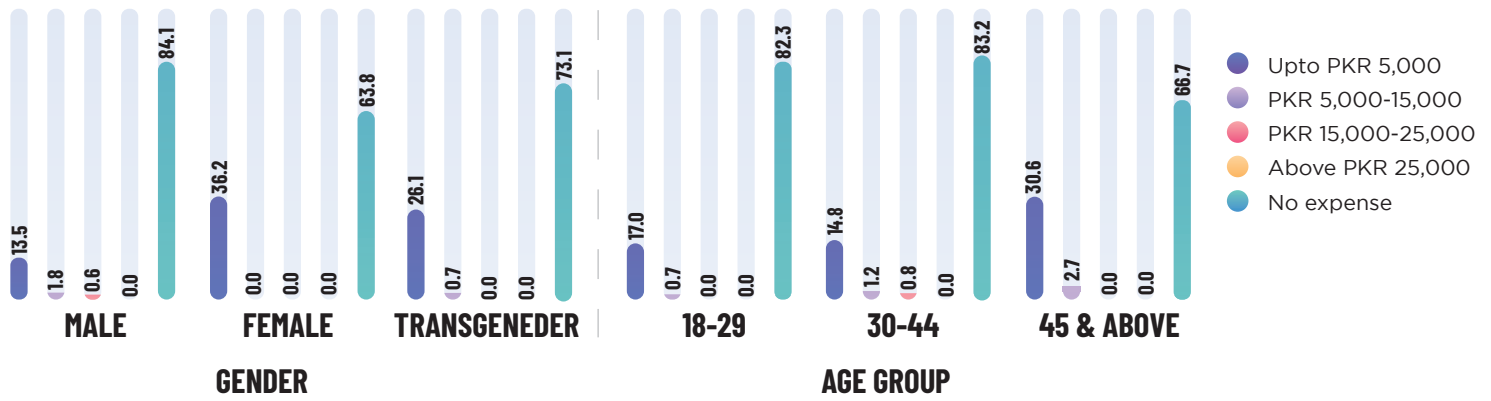


Figure 48: Monthly expense on niswar (%)

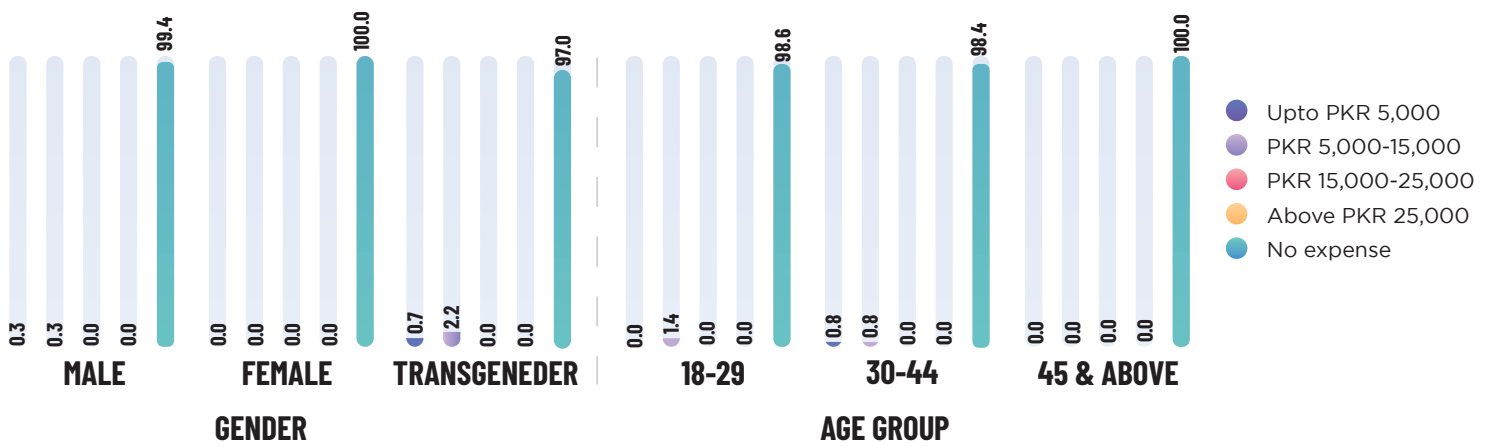


Figure 49: Monthly expense on mawa (%)

APPENDIX E: EXPLANATION ABOUT CALCULATION METHOD

Figure number in report	Computing method
Figure 3: Respondents' area type by gender and age group (%)	Number of male, female and transgender residing in the rural areas divided by total number of male, female and transgender respectively. The same calculation method was used for urban areas and age groups.
Figure 10: Tobacco items consumed by respondents. (%)	These are multi-response questions. We use the term indicator mode to refer to the situation in which the data are stored as a set of indicator variables. Please note that each item (e.g., each tobacco category) is represented by its own variable and calculated by its own number of received responses.
Figure 17: Strategies adopted by the respondents to quit tobacco (by overall gender) (%)	
Figure 18: Strategies adopted to quit tobacco (by age group) (%)	



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