

Heartfile



EVIDENCE AROUND TOBACCO & NEW NICOTINE PRODUCTS USE IN PAKISTAN



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Contents

1. Introduction:	1
2. Methodology	2
2.1 Market survey methodology:	2
2.2 Users survey methodology:	4
3. Limitations	4
4. Findings-market survey:	4
4.1 List of products observed:	4
4.2 List of Venues	5
4.3 Store types:	5
4.4 Proximity to educational institutions:	6
4.5 Product availability:	8
4.6 Advertising of TNNPs:	9
4.7 Graphic health warnings in stores:	10
4.8 Price promotions for TNNPs:	10
4.9 Product placement:	11
4.10 Product sampling and accessibility:	12
4.11 Age verification:	13
4.12 Source of supply:	13
4.13 Price range:	15
5. Summary of findings and observations-market survey for new nicotine products	16
5.1 General findings:	16
5.2 E-cigarettes, vapes and HTPs:	16
5.3 Nicotine pouches:	17
6. General findings-Users survey for new nicotine products:	18
6.1 Prior knowledge and harm perception about vapes/e-cigarettes:	18
7. Findings-Vape/e-cigarette users:	19
7.1 Age of vaping initiation:	19
8. Educational background of vape users:	20
8.1 Time of daily vaping initiation:	21
8.2 Frequency of vaping:	21
8.3 Types of vaping device used:	22
8.4 Vaping device characteristics and features:	22

8.5	Device malfunction:	23
8.6	Role of flavored e-cigarettes in vaping initiation:.....	23
8.7	Switching (smoking to vaping):	24
8.8	Switching (vaping to smoking):	25
8.9	Ownership of vaping device:	27
8.10	Pricing and purchasing of vaping devices:	27
8.11	Status of and reasons for quitting vaping:	29
8.12	Desire to quit vaping (current users):	31
8.13	Response to vaping market changes:	32
9.	Findings-Nicotine pouch users:	33
9.1	Age of initiation of nicotine pouch use:	33
9.2	Age of regular nicotine pouch use:	34
9.3	Education background of nicotine pouch users:	34
9.4	Types of nicotine pouches used:	35
9.5	Frequency of nicotine pouch use:	36
9.6	Appeal of lack of noticeability:	36
9.7	Switching (smoking to nicotine pouches)	37
9.8	Responses to market changes:	38
10.	Summary of findings and observations-new novel products users survey:	40
10.1	General observations:	40
10.2	Findings for users of vapes/e-cigarettes/HTPs:	40
10.3	Findings for users of nicotine pouches:	41
11.	Recommendations	41
12.	References	42

List of Figures

Figure 1: Types of stores surveyed.....	6
Figure 2: Proportion of TNNP-selling stores that are specialized vape stores.....	6
Figure 3: Educational institution within 100 m radius.	7
Figure 4: Educational institutions within 500 m radius.	7
Figure 5: Product availability - % of stores.....	8
Figure 6: Products advertised outside stores - % of stores.	9
Figure 7: Products advertised inside stores - % of stores.....	10
Figure 8: Percentage of stores that have graphic health warnings for TNNPs	10
Figure 9: Percentage of stores offering price promotions for TNNPs.	11
Figure 10: Percentage of stores that place TNNPs next to children's products.	11
Figure 11: Percentage of stores that allow customers to sample TNNPs inside the store.	12
Figure 12: Percentage of stores where TNNPs can be obtained without clerk's assistance.....	12

Figure 13:Age verification in stores selling TNNPs - % of stores.	13
Figure 14: Source of supply of nicotine pouches	14
Figure 15: Source of supply for ENDS.....	14
Figure 16: Price range of nicotine pouches in large cities - PKR.....	15
Figure 17: Price range of e-cigarettes/vapes in large cities - PKR.....	16
Figure 18: Prior knowledge of vapes/e-cigarettes.	18
Figure 19:Harm perception about vapes/e-cigarettes.....	19
Figure 20:Age of vaping initiation in Pakistan.....	19
Figure 21: Age of regular vaping initiation in Pakistan.....	20
Figure 22:Education background of vape users in Pakistan.....	20
Figure 23:Time of daily vaping initiation.....	21
Figure 24: Frequency of vaping among vape users.....	21
Figure 25:Types of vaping devices used.....	22
Figure 26:Characteristics and features of vaping devices	22
Figure 27: Vaping device malfunction	23
Figure 28:Role of flavored e-cigarettes in vaping initiation	24
Figure 29:Switching from smoking to vaping (among vape users).....	25
Figure 30:Reason for switching (smoking to vaping)	25
Figure 31:Switching (vaping to smoking)	26
Figure 32:Reasons for switching (vaping to smoking).....	26
Figure 33:Ownership of vaping devices	27
Figure 34:Price range of vaping devices.....	28
Figure 35:Method of purchase of vaping devices	28
Figure 36:Method of purchase for vape refills.....	29
Figure 37: Location of purchase for vaping products.....	29
Figure 38:Status of quitting vaping (among regular users)	30
Figure 39:Reasons for quitting vaping	30
Figure 40:Desire to quit vaping.....	31
Figure 41:Reasons for wanting to quit vaping.....	31
Figure 42:Vape users response in case of vaping products ban	32
Figure 43:Vape users response to 30% price hike in vaping products	33
Figure 44:Age of nicotine pouch use initiation	34
Figure 45: Age of regular nicotine pouch use	34
Figure 46: Education background of nicotine pouch users	35
Figure 47:Types of nicotine pouches used	35
Figure 48:Frequency of nicotine pouch use	36
Figure 49:Appeal of lack of noticeability of nicotine pouches	36
Figure 50:Switching (smoking to nicotine pouches).....	37
Figure 51:Reasons for switching from smoking to nicotine pouches.....	37
Figure 52:Response in case of nicotine pouch ban	38
Figure 53:Response in case of 30% price hike on nicotine pouches	39

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1. Introduction:

Tobacco and New Nicotine Products (TNNPs) are emerging nicotine-based products like electronic nicotine delivery systems (ENDS) including vapes and e-cigarettes, heated tobacco products (HTPs) and nicotine pouches, among others. As argued by scholarship on the tobacco industry, the last century was labelled as the “cigarette century”ⁱⁱ, whereas the 21st century is likely to benefit the tobacco industry (TI) through vaping and new nicotine products.^{iii iv} While the industry uses the concepts of “harm reduction” and “healthier alternatives to smoking” to justify unregulated entry of these new and emerging nicotine and tobacco products into national markets, the truth is these products typically contain nicotine and other toxic substances that can have harmful impacts on brain development and long-term consequences, particularly for children and adolescents, while also increasing the risk of cancer.^{v vi}

HTPs have two common components: an insert (such as a stick, capsule or pod) containing processed tobacco and a device to heat the tobacco. The heating source is usually electronic but may be a carbon tip. Tobacco inserts and devices are combined into an integrated tobacco product and are not intended to be used separately. Manufacturers have used four basic design approaches to HTPs, depending on the mechanism for transferring heat to the tobacco and whether the tobacco material is combined with or separate from the heating element (Table 1).

Table 1: Classification of heated tobacco products (HTPs)			
HTP Type	Heating Element	Tobacco	Example Products
1	Device with a carbon tip that is lit	Tobacco provided by the device manufacturer in an adjacent chamber of the device	Premier, Eclipse, PMI “Platform 2” (TEEPS)
2	Device with a coil or blade resistance heated by electricity	Specially designed tobacco sticks provided separately by the device manufacturer	Accord, Heatbar, IQOS, Glo
3	Device with a coil resistance heated by electricity that aerosolizes a liquid that passes through and warms the tobacco	Capsule containing tobacco and liquid provided separately by the device manufacturer	iFuse, PloomTech
4	Device with a mini oven heated by electricity	Loose tobacco not provided by the device manufacturer	Pax

HTPs release nicotine from tobacco by heating at a temperature lower than that of traditional cigarettes. The tobacco used is typically reconstituted, allowing manufacturers to manipulate the form and amount of nicotine. Humectants such as propylene glycol and glycerol are added to the tobacco to facilitate formation of an aerosol.

British American Tobacco’s (BAT) iFuse and JTI’s Ploom Tech (type 3) are hybrid ENDS – tobacco products that generate an aerosol with ENDS technology and pass the aerosol over tobacco before delivery to the user.

The tobacco industry has been investing heavily in spreading new nicotine products in Pakistan. It was reported over a year ago, that BAT pledged £1bn in Kenya and Pakistan to promote these products.^{vii} These products started pouring in to Pakistan during the COVID-19 pandemic and continue to spread throughout Pakistan, often pushed through public advertising and social media influencers.^{viii} Currently, the annual revenue of the e-cigarettes market in Pakistan is estimated at \$75 million per year (up from \$40 million in 2018).^{ix}

Pakistan has been a signatory to the Framework Convention on Tobacco Control (FCTC) since 2005. Although multiple laws and regulations exist in tobacco control domain, there is a serious policy void related to new nicotine products. Refuting the (FCTC), and World Health Organization (WHO) provisions to control these products, the industry claims that some of these products do not contain tobacco and should not be regulated under the tobacco control laws, despite clear evidence as to their harmful effects. While no evidence has yet been considered on policy for these products, the government has been imposing excise duty and import taxes on them, which amounts to tacit approval, which is exploited accordingly by the tobacco industry.

In lieu of this policy gap and the general lack of empirical evidence on the availability and use of these products in Pakistan, and gradual spread of these products, Heartfile and SDPI partnered to conduct a study on new nicotine products in the shape of a mapping and user survey across the country. This was conducted with an aim to understand the landscape in which these products have permeated in the national markets, and examine the availability, packaging, supply chain, marketing, advertising and use of new nicotine products in Pakistan to identify policy gaps, available policy options and current barriers to policy formulation, implementation, and compliance for control of these products in the country.

2. Methodology

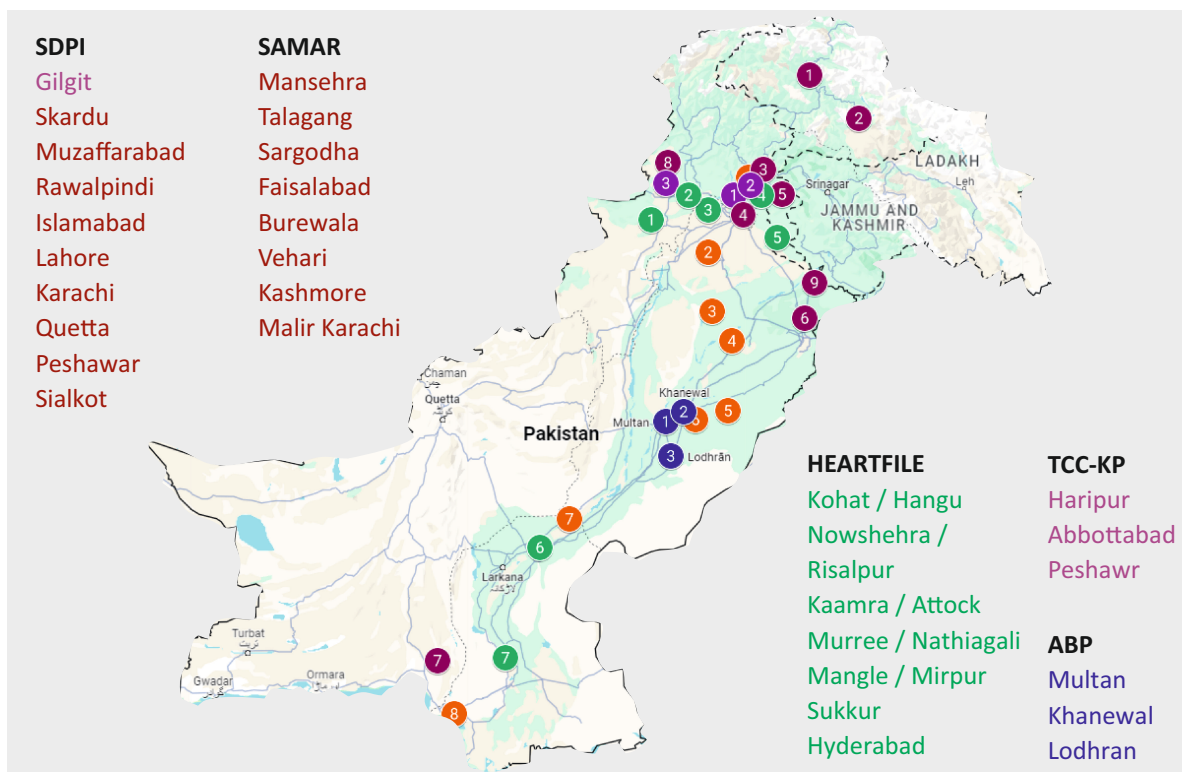
2.1 Market survey methodology:

The market survey was conducted using a systematic mapping technique.^{xii} Systematic mapping, does not attempt to answer a specific research question, but rather collates, expands, examines and catalogues the evidence. This evidence could be primary, secondary, or theoretical, related to the topic of interest. Systematic mapping studies are most appropriate to identify evidence for policy related questions.

The market survey process spanned over six stages. In the first stage all the stakeholders were engaged under the auspices of Vital Strategies. The scope, general questions and inclusion criteria were discussed during this stage and as a result, a protocol and survey guide with an agreed set of indicators was developed. In the second stage the survey teams were trained and sent to the field to search for evidence, using the survey guide to collect responses. Observation, recorded in the shape of photographs, was used extensively to substantiate the responses and note the unexpected findings from the survey. The evidence was screened in the third stage during frequent online and in-person meetings. The data was coded using SPSS in stage 4 of the process, focusing on all the indicators. The database was compiled and shared with the stakeholders for initial appraisal, during stage 5. In this last stage an in-depth and critical appraisal, visualizing the findings, data analysis and report writing was undertaken.

The market survey was conducted during February to September 2022 in twenty eight cities in three provinces; Punjab, Khyber Pakhtunkhwa, and Sindh, and two regions; Azad Kashmir, and Gilgit Baltistan.¹

¹ The geographic distribution can be accessed at <http://tinyurl.com/TNNP-surveyed-cities>



Map 1: Geographic Distribution of the Surveyed Areas

Map 1 above shows the areas surveyed by each of the five organizations in distinct colours. Products mapped included; E-cigarette/vapes, e-liquids and parts of e-cigarettes, HTPs (including accessories), tobacco free nicotine pouches, smokeless tobacco/Naswar, snus/s nuff, gutka, cigarettes, cigars/ cigarillos, bidis, and any other surrogate products.

Three consultative meetings were held between the partners to develop the 22 items survey guide. The research used purposive and convenience sampling due to the identification of all stakeholders involved in designing, giving, receiving, or administering the program or service being evaluated or who might otherwise be affected by the choices. ^{xiii} To make the sample reliable and valid and to map the availability of these items it was initially decided to survey 50 markets in each city. Employing purposive sampling this number was subsequently updated to 50 outlets in each city. A total of Twenty-eight (28) cities were surveyed and mapping data for 1273 outlets was collected. The cities were selected using convenience sampling, as in the past many stakeholders have been operating in these cities in the tobacco control interventions. Additional considerations included the security situation and travel restrictions, the size of the city/town, and the expected number of outlets in a particular town/city.

A pilot survey was conducted in the city of Lahore to examine the validity and reliability of the survey tool and expected results. Post-pilot survey meetings were held to update the questionnaire.

The questionnaire included sixteen indicators aiming to map the types of stores/outlets selling the novel nicotine and tobacco products, proximity of these stores from the nearest educational institution within 100 meters and within 500 meters, outside and inside advertisement, graphic health warnings, price promotions, visibility and placement of these products next to the children

items, age verification, supply source(s) of these products to the outlet, specialized/purpose-designed vape stores, price range of novel nicotine and tobacco products.

2.2 Users survey methodology:

The purpose of the Users Survey was to gather information on usage behaviours related to e-cigarettes, vapes, HTPs and nicotine pouches, among other new nicotine products. The target audience for the survey was Pakistanis who either currently use or have in the past used any of these products, with a sample size of 500. Responses were obtained with the help of an online questionnaire targeted at the aforementioned audience. Voluntary purposive sampling was used to find respondents who fit the above criteria. The users' questionnaire included around twenty indicators aimed at capturing user behaviour and beliefs, including prior knowledge, harm perception, age of initiation and regular use, frequency of use, switching, quitting, prices and purchasing methods, role of flavours, role of lack of noticeability, device malfunction, intention to quit, and potential responses to changes in prices or ban, among others. The anonymous responses were collated and analysed in Excel to determine user trends separately for vapes/e-cigarettes and nicotine pouches.

3. Limitations

The market study aspired to capture valid and reliable data from across Pakistan. However, the geographic and security compulsions, unexpected floods and rains disrupting the travel plans restricted access to certain areas. Although efforts were made to survey 50 outlets in each city; however, due to the absence of such large number of shops in smaller towns, in certain instances, two cities were combined to map the outlets. This provided the researchers with regional data from two combined cities. In some cases, where enumerators' responses were not accurate or contained errors, the forms were either invalidated/discarded or were refilled through subsequent rounds, wherever possible.

4. Findings – market survey:

4.1 List of products observed:

1. E-cigarettes/Vapes
2. E-liquid
3. Part of e-cigarettes (including accessories)
4. Heated Tobacco Products (HTPs)
5. Part of HTPs (including accessories/refill sticks)
6. Tobacco Free Nicotine Pouches (Velo etc.)
7. SLT Naswar
8. SLT Snus/Snuff/Tara etc.
9. Ghutka
10. Cigarettes
11. Cigars/cigarillos
12. Bidi/Biri
13. Surrogate (any product promoting tobacco products)



4.2 List of Venues

1. Convenience/grocery/general stores
2. Supermarket
3. Mall
4. Tobacco Shop
5. Vape shop
6. Pharmacy/Health store
7. Fuel stations/pumps
8. Gift shop
9. other

4.3 Store types:

The most common type of store where TNNPs are available are grocery/general stores, followed by tobacco shops and vape shops. Other stores where TNNPs are available include fuel station stores, supermarkets, gift shops and malls. Overall, only 5% of stores selling TNNPs are specialized vape stores, most of them in large cities, with nearly 50% of them concentrated in urban centres in Sindh.



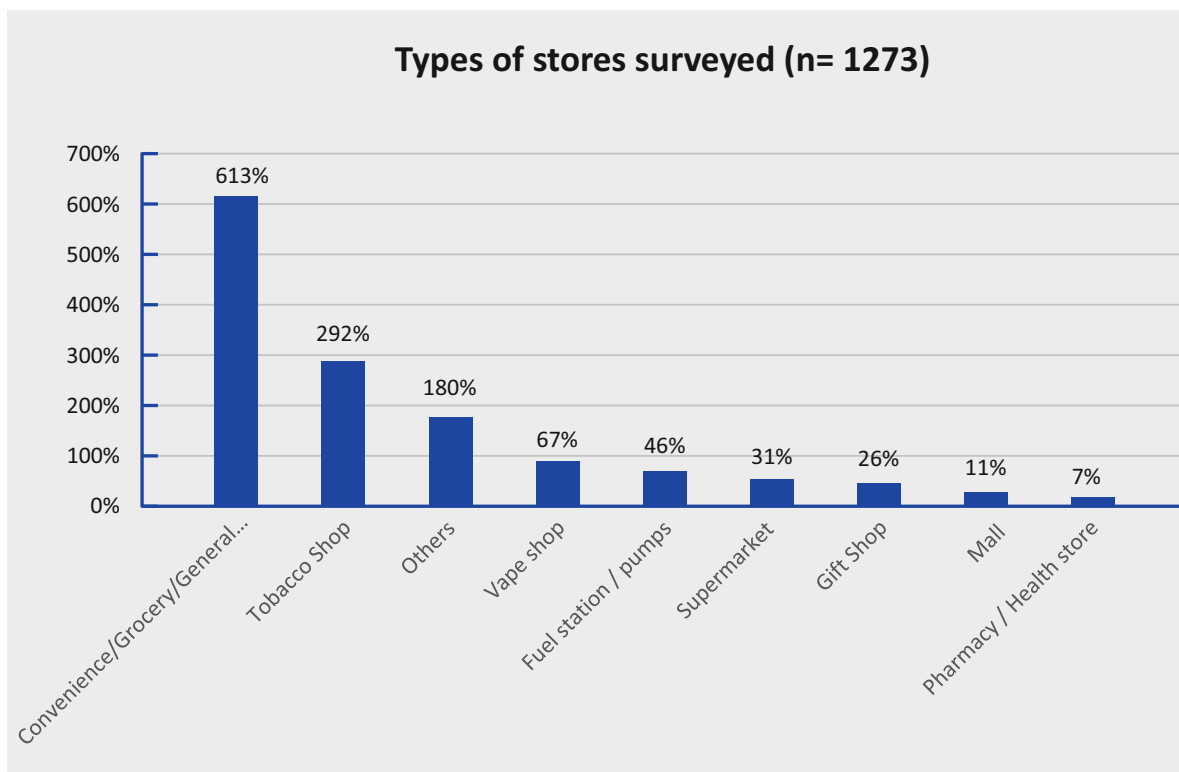


Figure 1 : Types of stores surveyed.

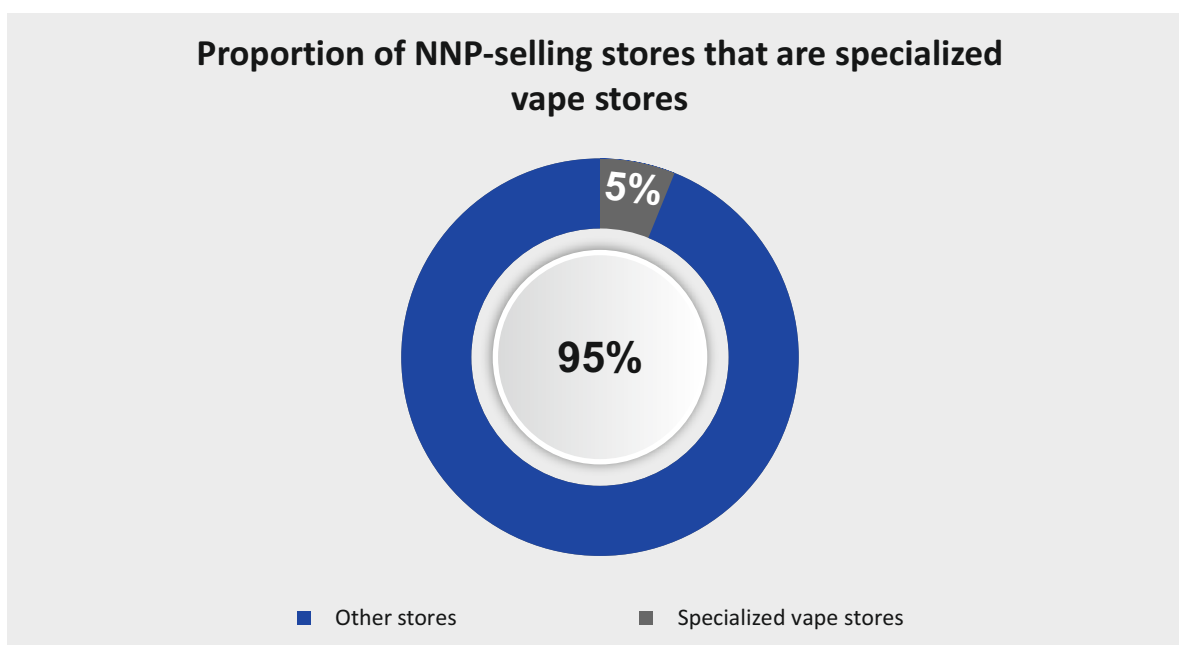


Figure 2: Proportion of TNNP-selling stores that are specialized vape stores.

4.4 Proximity to educational institutions:

About 45% of stores selling TNNPs in Pakistan are located within 100m of an educational institution while 64% of such stores are located within 500m of an educational institution (which can include government schools, private schools, government colleges, private colleges, madrassahs or

universities. This suggests that TNNPs are spatially accessible to a large subsection of the country's student population.

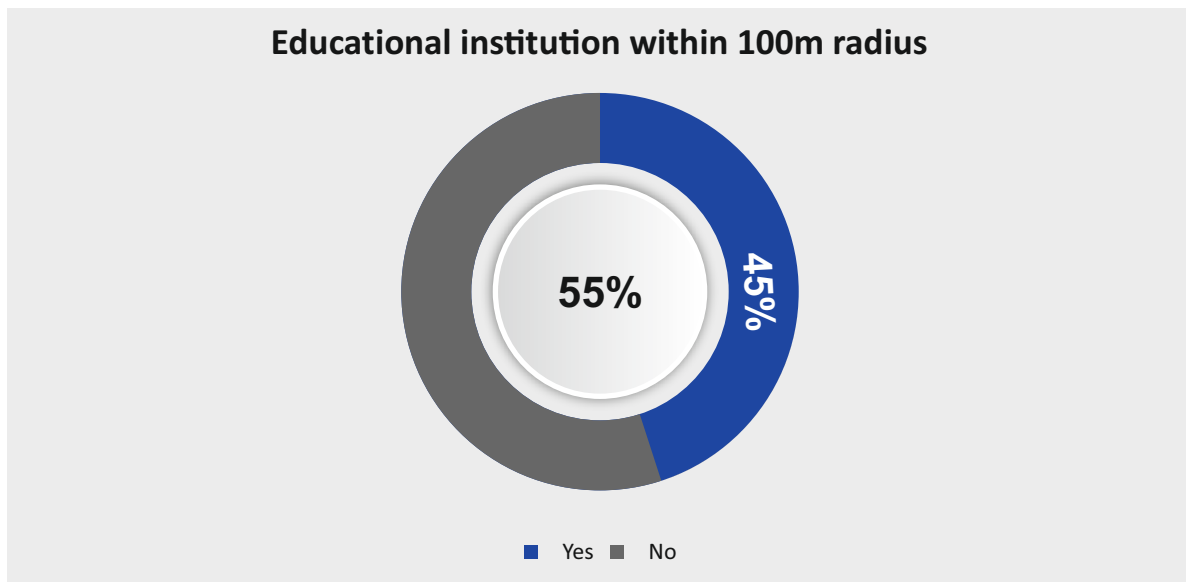


Figure 3: Educational institution within 100 m radius.

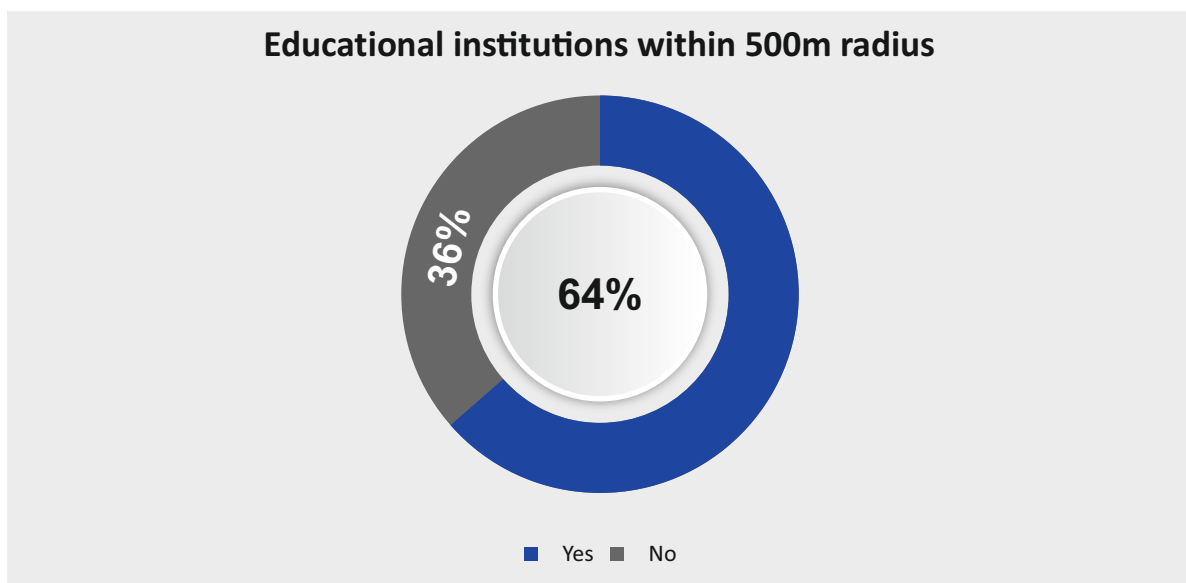


Figure 4: Educational institutions within 500 m radius.

4.5 Product availability:

While cigarettes, which are available in over 90% of stores, remain the most commonly available tobacco product, Tobacco Free Nicotine Pouches are the most commonly available TNNP in the country, available in 74% of stores. SLT (Naswar) and SLT (snus/snuff) are also widely available, in 66% and 60% of stores respectively. E-cigarettes and vapes were also available in a significant 38% of stores selling TNNPs across Pakistan.

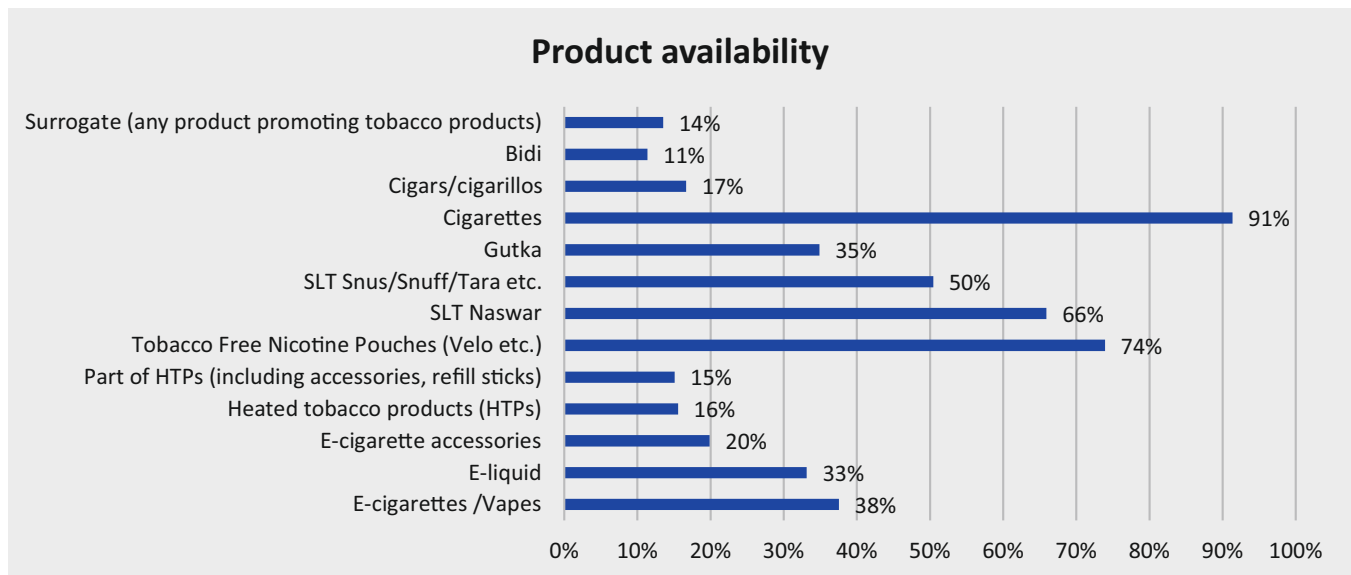


Figure 5: Product availability- % of stores

4.6 Advertising of TNNPs:

Cigarettes continue to be the most widely advertised product outside stores, with 32% of stores selling TNNPs displaying cigarette advertisements outside of shops. Tobacco Free Nicotine Pouches like Velo are also widely advertised in store exteriors, with nearly 25% of stores surveyed displaying such advertisements, followed by e-cigarettes/vapes, which are advertised externally in 12% of stores surveyed.

Internal advertising inside stores is less common across the board, with cigarette advertisements once again being the most common (seen in 37% of stores), followed by nicotine pouches (28%) and e-cigarettes/vapes (10%).

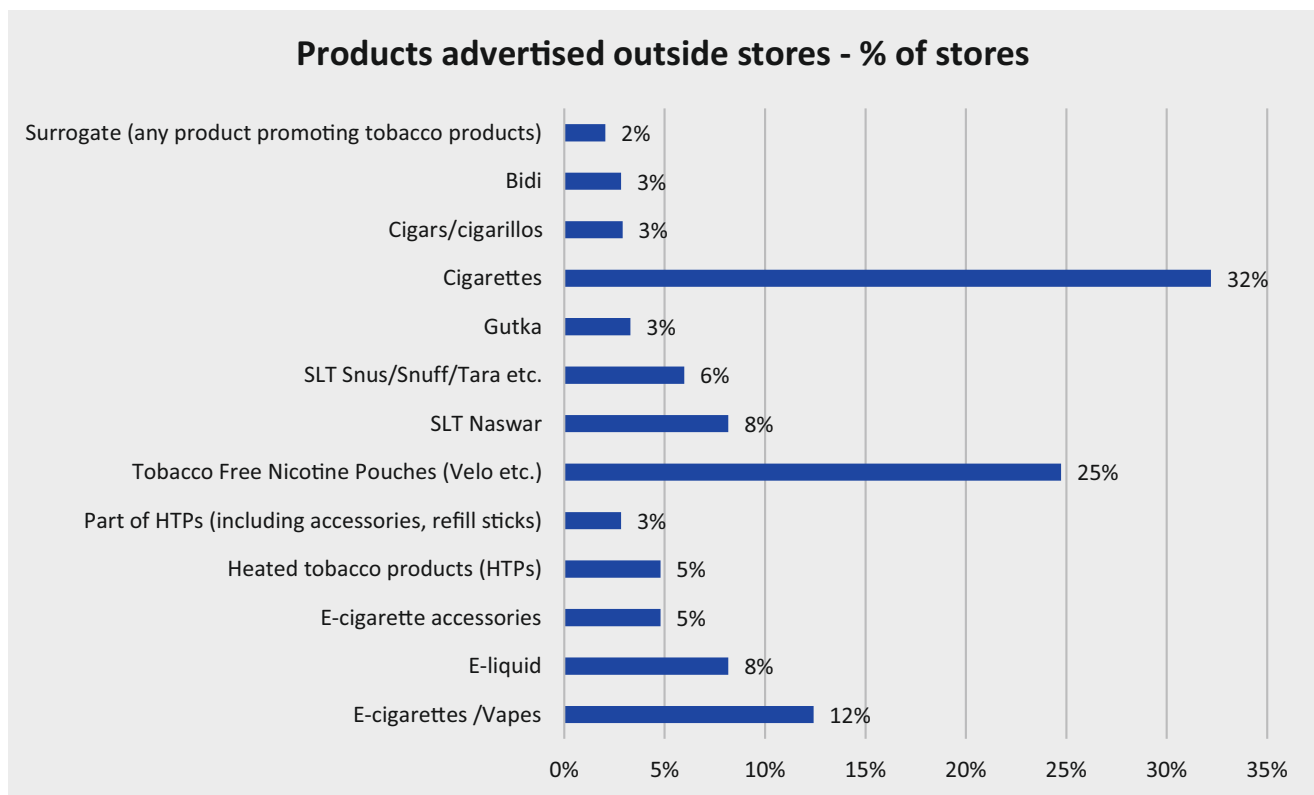


Figure 6: Products advertised outside stores - % of stores.

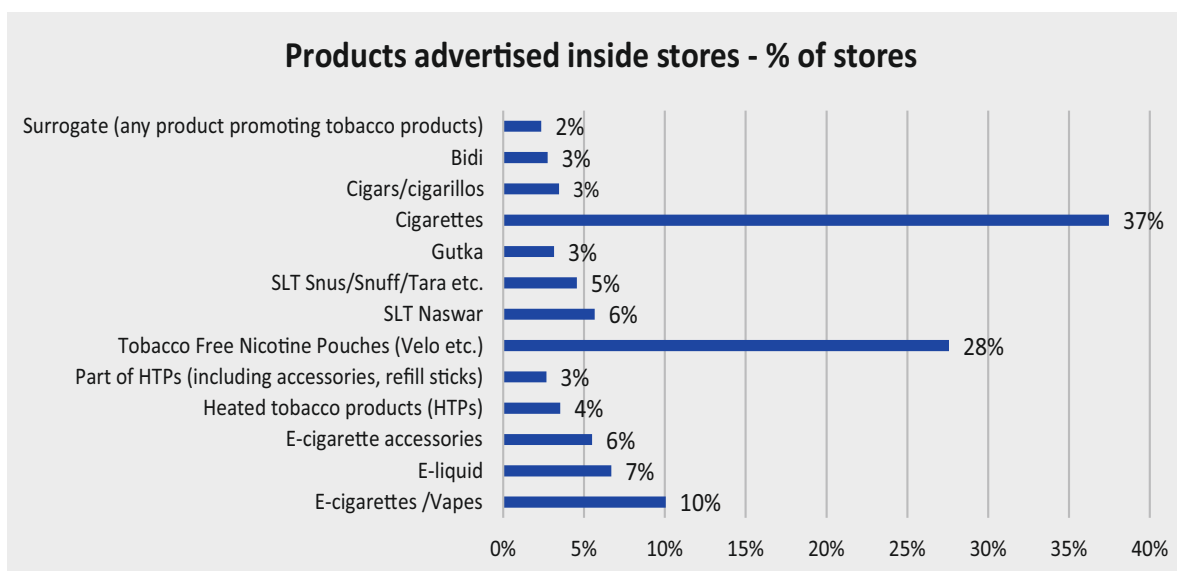


Figure 7: Products advertised inside stores - % of stores.

4.7 Graphic health warnings in stores:

The display of graphic health warnings for TNNPs in stores remains very limited. Only 11% of stores that sell TNNPs have a graphic health warning about the risks of TNNPs displayed in the store.

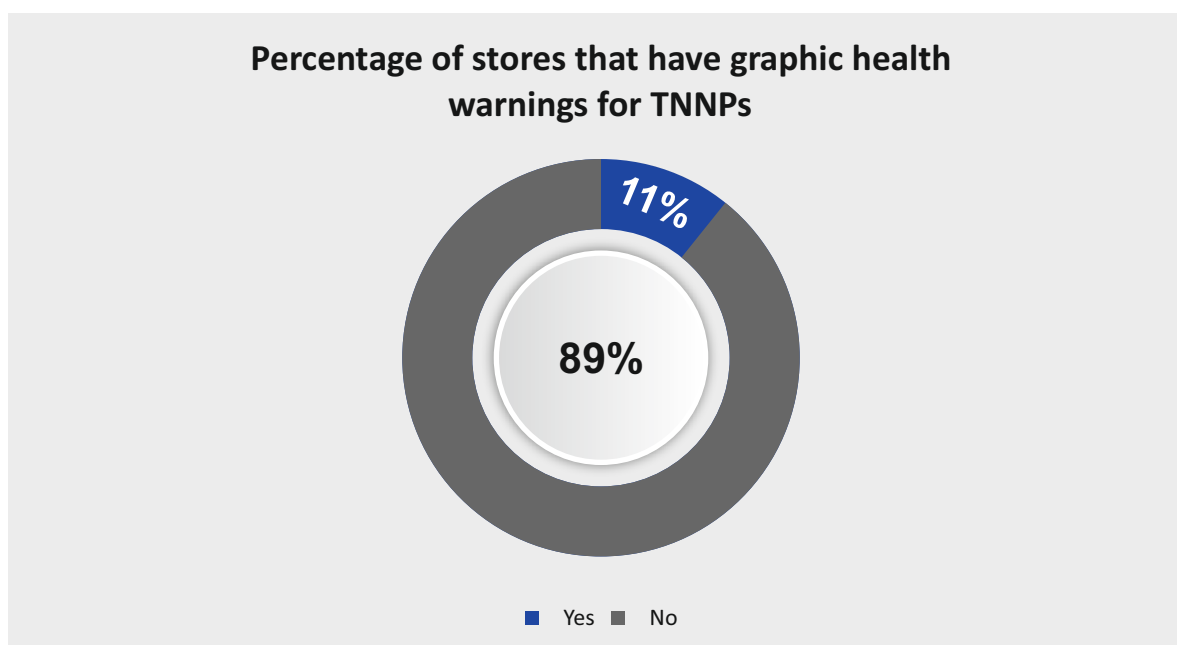


Figure 8: Percentage of stores that have graphic health warnings for TNNPs

4.8 Price promotions for TNNPs:

Only 7% of stores selling TNNPs also offer price promotions (like discounts, buy-one-get-one-free offers, etc.) to incentivize sale of those products.

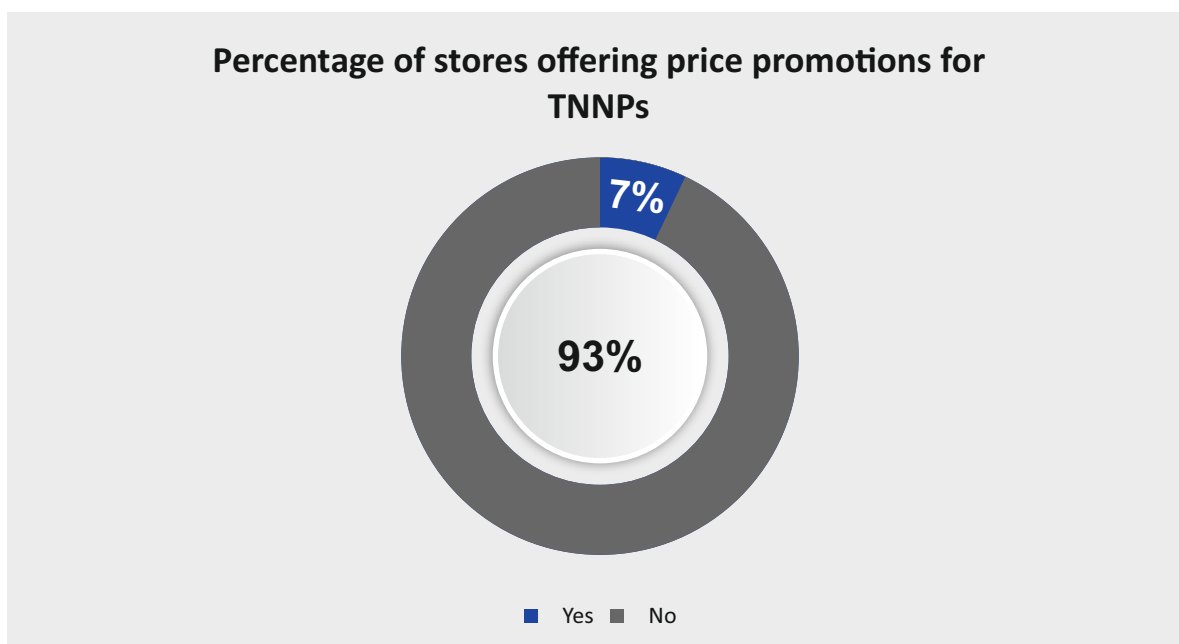


Figure 9: Percentage of stores offering price promotions for TNNPs.

4.9 Product placement:

Product placement of TNNPs remains a serious concern, with over 32% of stores placing TNNPs (like nicotine pouches in particular) within reach of children's products (like candies, chocolate, chewing gum, etc.). This suggests that a significant proportion of stores are making no effort to limit their accessibility to minors.

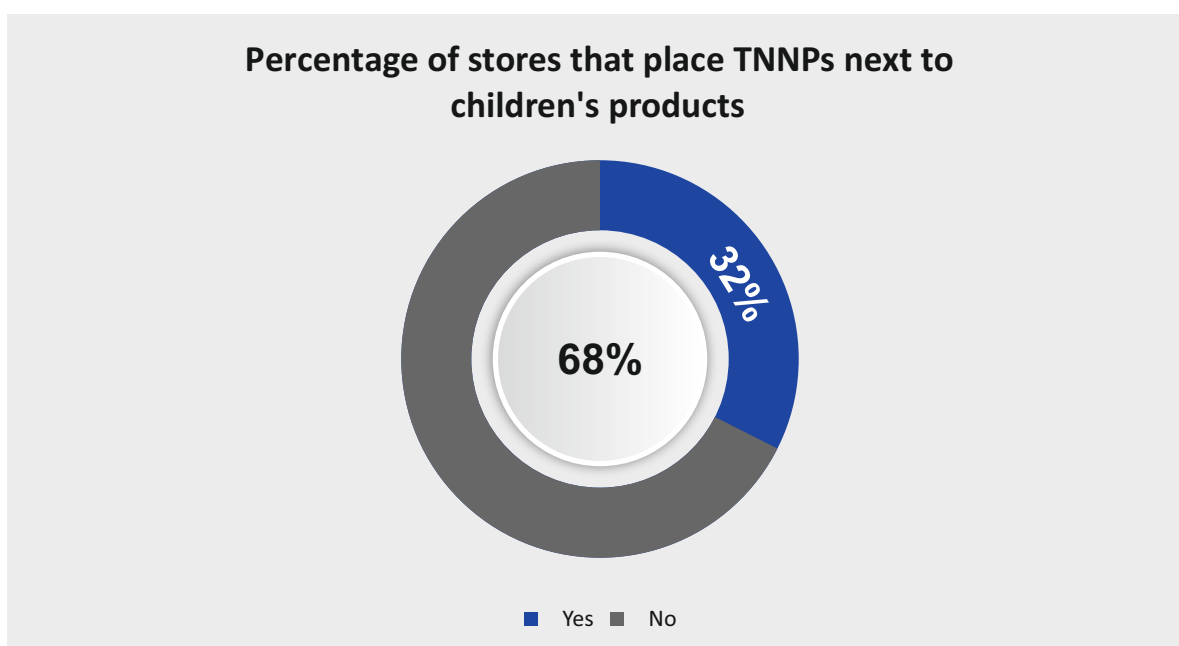


Figure 10: Percentage of stores that place TNNPs next to children's products

4.10 Product sampling and accessibility:

Only about 6% of stores across the county allow customers to sample TNNPs inside the store, while about 10% of stores allow customers to access TNNPs via self-service.

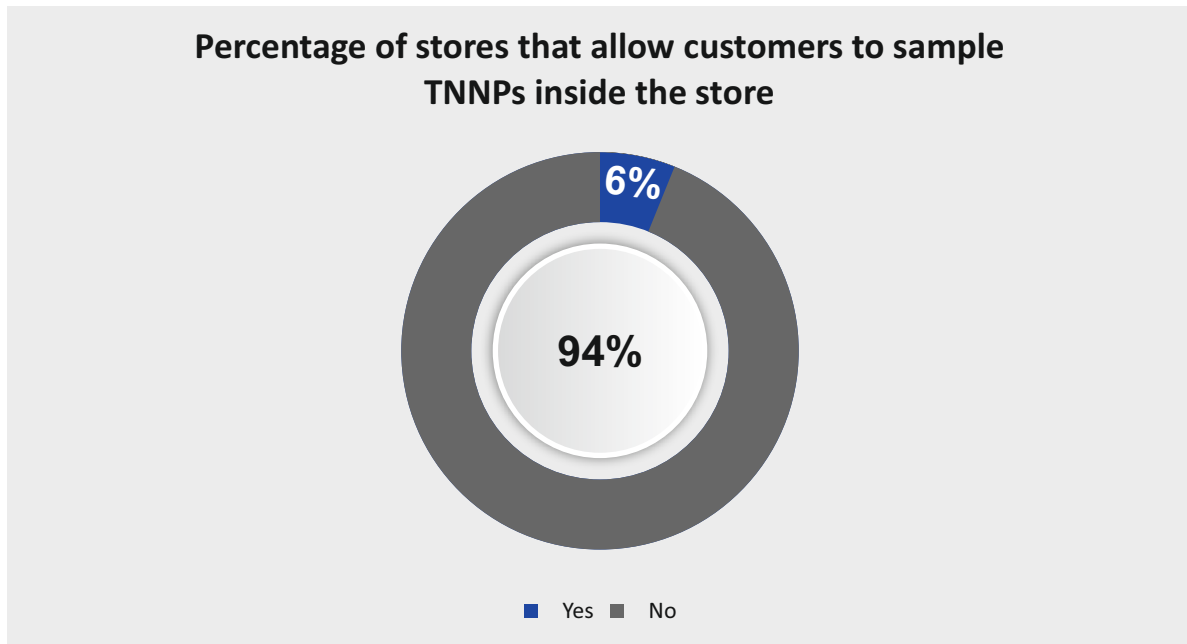


Figure 11: Percentage of stores that allow customers to sample TNNPs inside the store.

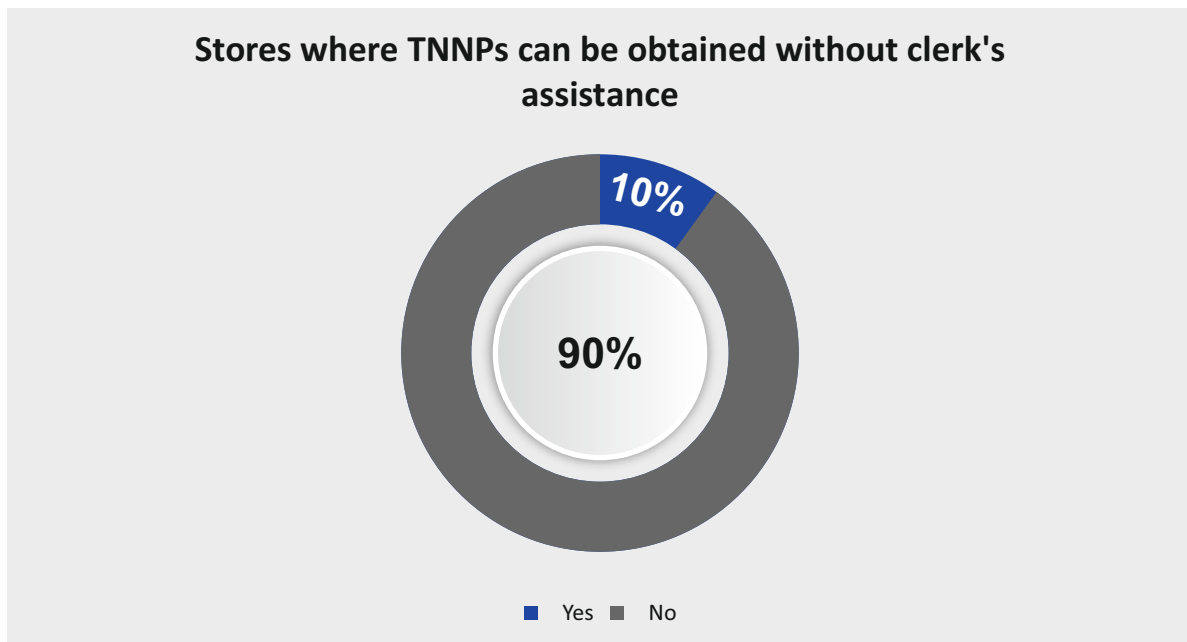


Figure 12: Percentage of stores where TNNPs can be obtained without clerk's assistance.

4.11 Age verification:

Nearly 50% of stores selling TNNPs reported that they do not verify ages via ID checks while selling TNNP products, while a further 14% said they only check occasionally, which raises serious questions about the lack of checks on sales of TNNPs to minors. It is likely, given the reliance on self-reporting in this survey, that the actual percentage of stores that conduct ID checks is far lower.

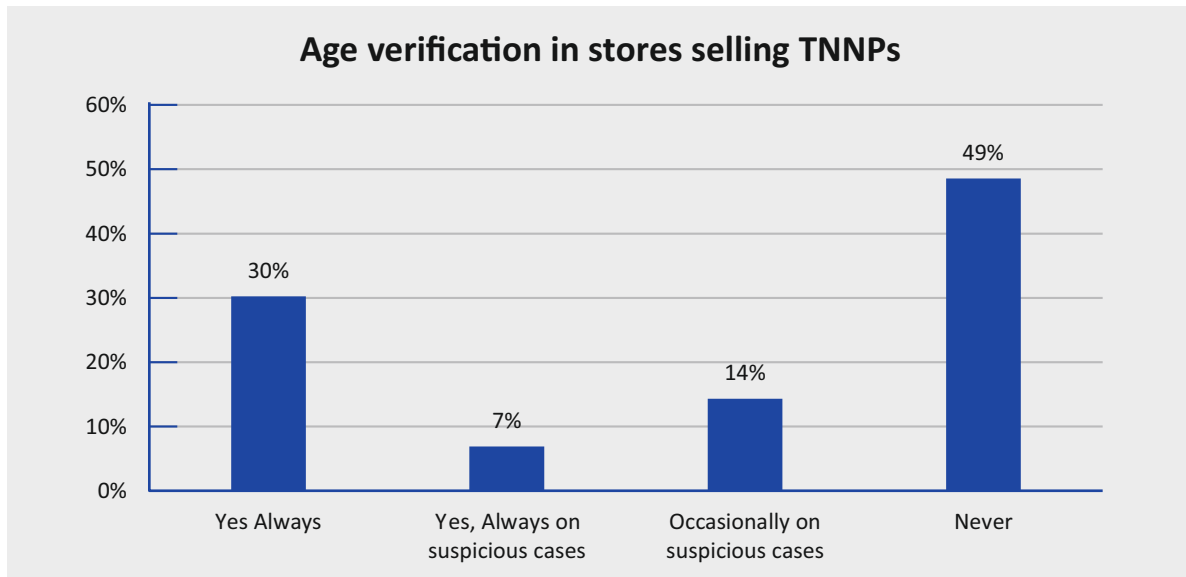


Figure 13: Age verification in stores selling TNNPs -% of stores.

4.12 Source of supply:

The results suggest that the tobacco industry remains the main source of supply for nicotine pouches, with 70% of stores reporting they were supplied with nicotine pouches by tobacco industry representatives, while 19% procured it from regular grocery suppliers. 8% of stores purchased them from an importer, while only 3% imported the pouches directly.

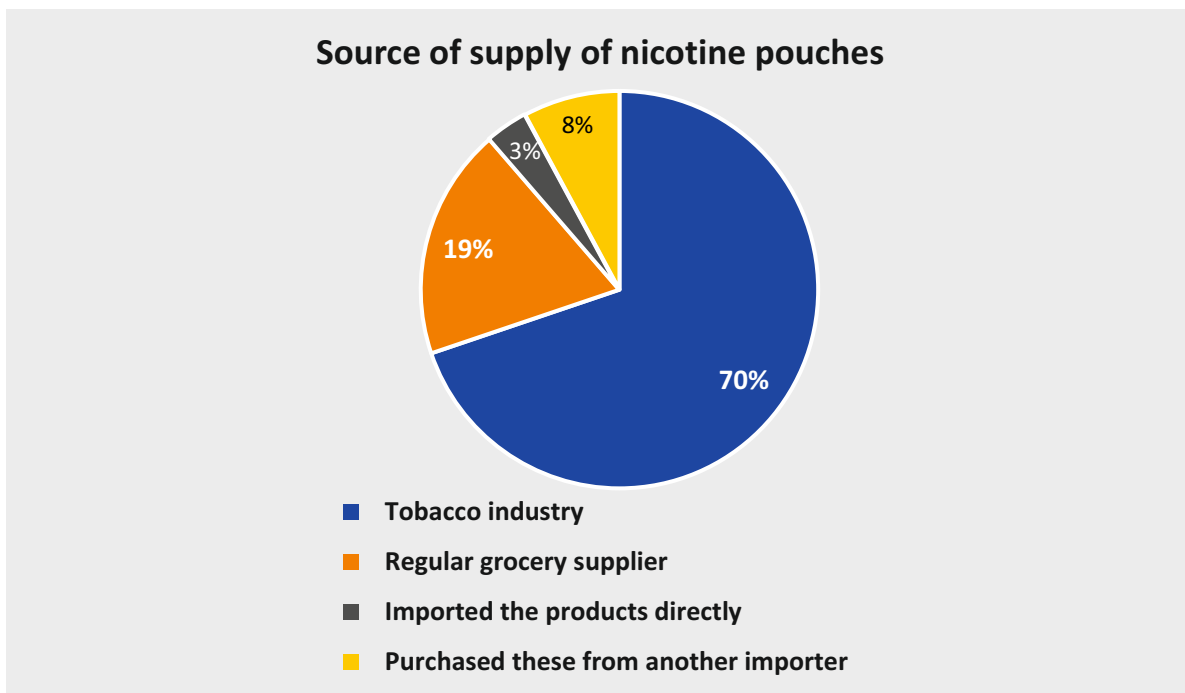


Figure 14: Source of supply of nicotine pouches

The supply source for electronic nicotine delivery systems (ENDS), which includes vapes and e cigarettes, is relatively more evenly distributed across the market, with the tobacco industry accounting for 27% of the supply, other importers accounting for 33%, direct imports by retailers accounting for 29% and grocery suppliers accounting for 11% of the supply of ENDS.

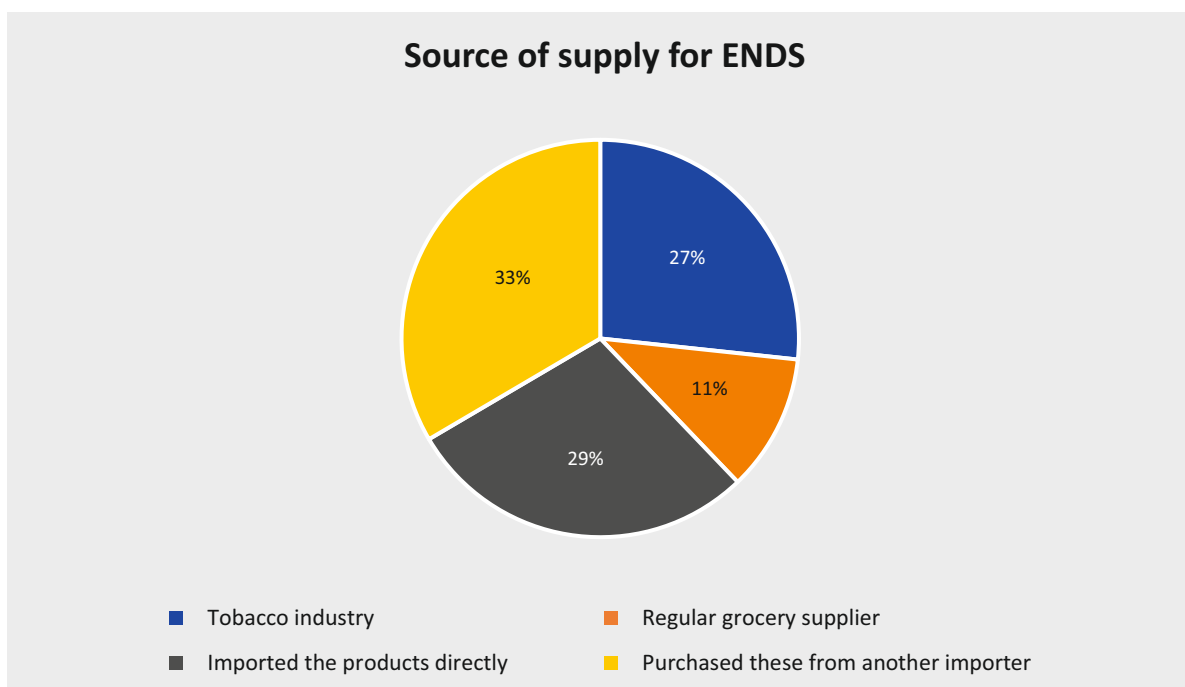


Figure 15: Source of supply for ENDS

4.13 Price range:

The price range for nicotine pouches varies only slightly across major cities, with a range of PKR 80 to PKR 120 (USD 0.36 to USD 0.54) in Islamabad, PKR 20 to PKR 120 (USD 0.09 to USD 0.54) in Lahore, 15 to 150 (USD 0.07 to USD 0.71) in Karachi and PKR 50 to PKR 130 (USD 0.22 to USD 0.62) in Peshawar.

On the other hand, the price of e-cigarettes/vapes varies far more across major cities, ranging from PKR 750 to PKR 20,000 (USD 3.36 to USD 90) in Islamabad, PKR 1200 to PKR 16500 (USD 12.37 to USD 73.90) in Lahore, PKR 1000 to PKR 23000 (USD 4.48 to USD 103) in Karachi, and PKR 400 to PKR 15000 (USD 1.79 to USD 67.18) in Peshawar. The results suggest T NNP prices are wide-ranging enough to capture a socio-economically diverse subset of the population.

It is important to note that the price of devices may far exceed the price of the consumables (inserts containing processed tobacco); however, the unit price of consumables is generally close to that of Combustible Cigarettes.

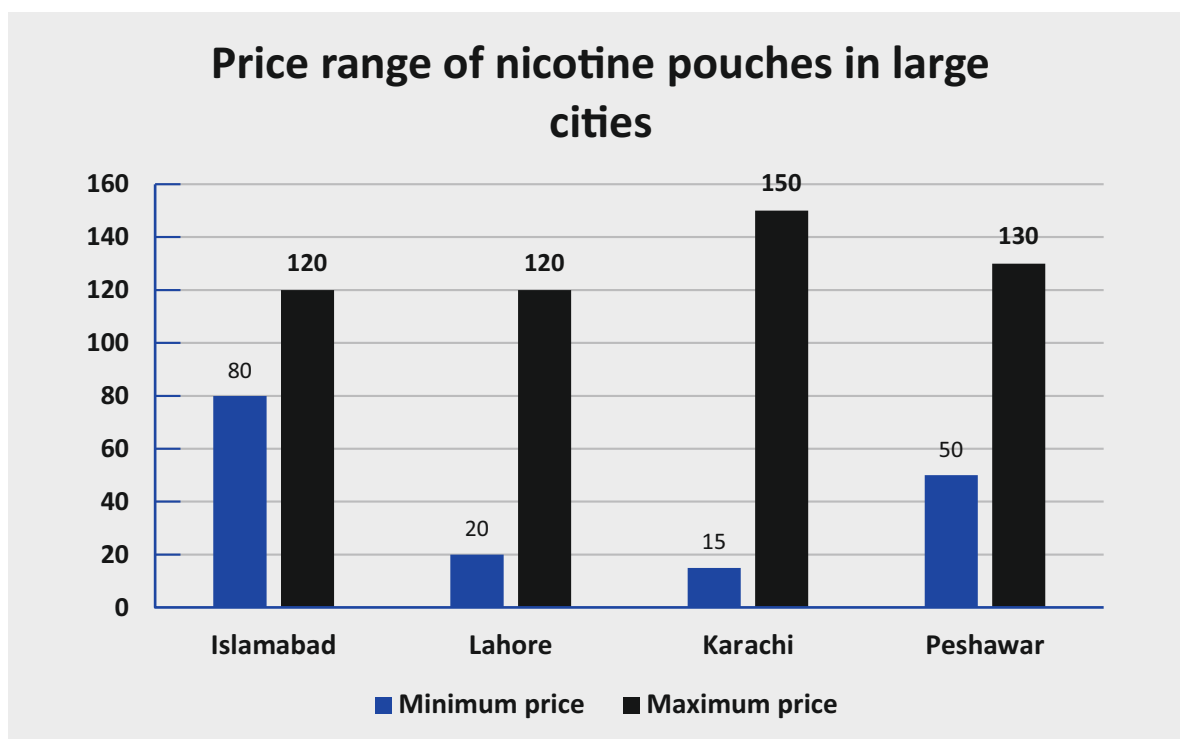


Figure 16: Price range of nicotine pouches in large cities - PKR

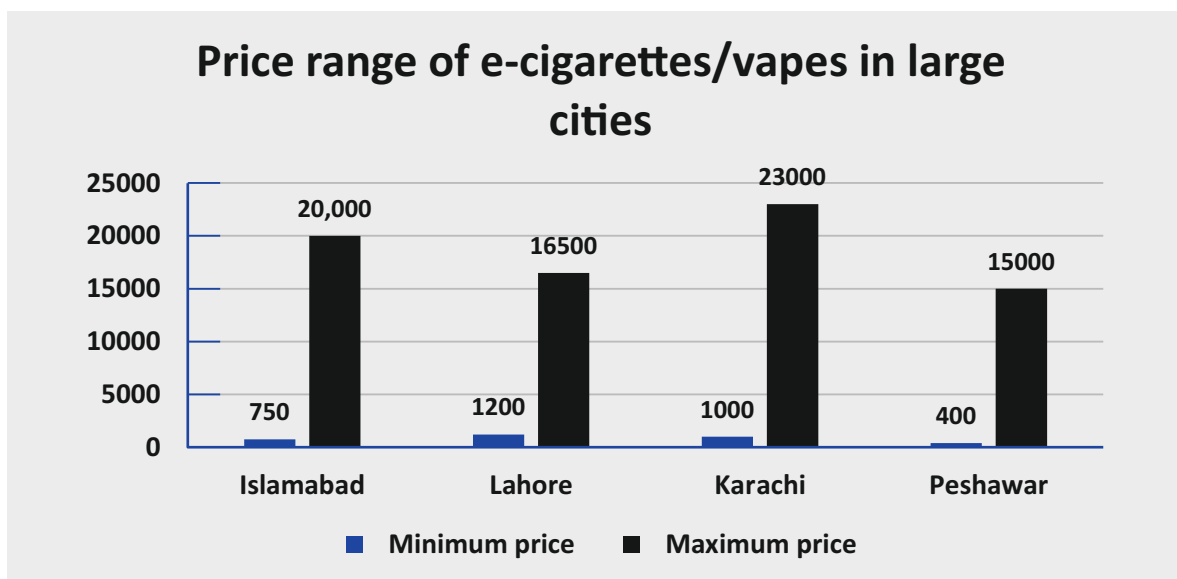


Figure 17: Price range of e-cigarettes/vapes in large cities - PKR

5. Summary of findings and observations - market survey for new nicotine products

5.1 General findings:

- »» Nicotine pouches are the most common TNNP found in stores around the country and are widely available in the vast majority of stores.
- »» About 64% of stores selling TNNPs are within a 500m radius of an educational institution.
- »» Graphic health warnings on TNNPs are very rarely displayed in stores selling them.
- »» Age verification for purchase of TNNPs through IDs is rare.

5.2 Ecigarettes, vapes and HTPs:

- »» E-cigarettes, vapes and HTPs are more prevalent in metro/big cities compared to non metro/small cities.
- »» A far lower number of shops sell and advertise e cigarettes, vapes and HTPs compared to nicotine pouches.
- »» Specialized vape shops are mostly concentrated in metro/big cities like Karachi, Lahore, Islamabad, etc. However, some non metro/small cities like Hyderabad, Sialkot and Mirpur also have specialized vape shops.

- »» HTPs are still relatively rarely available. In geographically smaller cities, grocery stores/ larger stores occasionally keep a few HTP items on the shelf but complained about low sales. One small grocery store in Kohat said that his investment in these HTPs has gone down the drain as the items have expired before they could be sold.
- »» Vape shops tend to target young consumers from the upper-middle/elite class. This was evident by the interior design/decoration of the vape shops. However, in some instances, low-cost options of e-cigarettes, vapes and HTPs are also available.
- »» Vape shops reported that they purchased these items from importers in big cities like Karachi, Rawalpindi and Peshawar or imported them directly. About a quarter get the products from industry representatives.
- »» None of the HTPs have a Graphic health warning.

5.3 Nicotine pouches:

Tobacco/Tobacco -Free Nicotine pouches are found across all the surveyed cities.

- »» A significant proportion of the supply of these pouches is domestically sourced, with local manufacturing now taking place.

These products are targeted to youth (from working class to upper middle class) and are found in most localities of cities.

- »» Tobacco-Free nicotine pouches by the brand name of “Velo”, a product of (BAT) have high availability in the markets of surveyed cities. Velo is available in different strengths (three dot, four dots and five dot) and multiple flavours. They are consistently priced (PKR 100 - 150, depending on flavour and strength) across the surveyed cities.
- »» Nicotine pouches are usually directly supplied by the tobacco industry through its distributors. The distribution rights of Velo lie with the same distributor as that of Gold Leaf and Capstan cigarettes. Almost all survey respondents confirmed the company representatives visit their shops regularly at least once and up to five times a week. Cash incentives are also commonly offered by distributors to retailers to encourage higher sales.
- »» Nicotine pouches are widely advertised. About a third of stores surveyed displayed advertisements of nicotine pouches within or outside their stores.
- »» While many store clerks claim to verify age upon sight for nicotine pouches, observations suggest ID checks for age verification are almost non existent, indicating easy access to these products for minors.
- »» In addition to the round plastic container packing of 20pcs , smaller plastic pouches of Velo containing 50 pcs are also in the market.
- »» Nicotine pouches are often placed close to children’s products like candy and chocolate.

»» While text warnings exist on nicotine pouches, graphic health warnings do not.

6. General findings –Users survey for new nicotine products

6.1 Prior knowledge and harm perception about vapes/e-cigarettes:

About three quarters of respondents had heard about vapes/e cigarettes prior to the survey, suggesting considerably widespread knowledge about the existence of these products. The perception of harm was distributed evenly, with 26% of respondents believing vapes were less harmful than cigarettes, 28% believing they were equally harmful and 26% believing they were more harmful, while 20% of respondents said they did not know or were unsure. (See Figures 18 and 19)

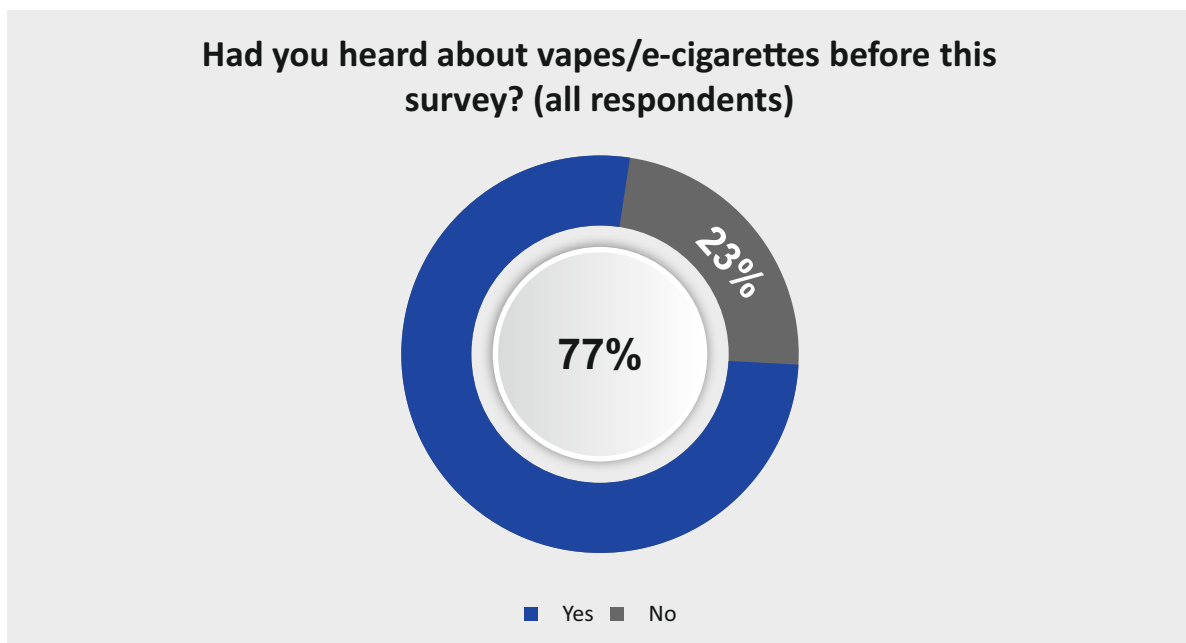
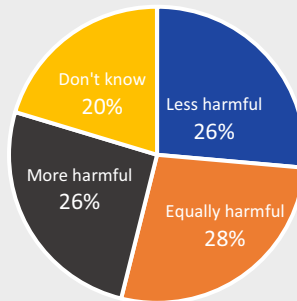


Figure 18: Prior knowledge of vapes/e-cigarettes.

In your opinion, how harmful are vapes/e-cigarettes compared to regular cigarettes? (all respondents)



■ Less harmful ■ Equally harmful ■ More harmful ■ Don't know

Figure 19: Harm perception about vapes/e-cigarettes.

7. Findings - Vape/e-cigarette users:

7.1 Age of vaping initiation:

Vaping is typically initiated at a young age. The vast majority of vape users (over 80%) tend to start vaping below the age of 35, with over 55% beginning to vape under the age of 25 (Figure 20). A significant proportion (15%) started vaping in adolescence or teenage years. The figures for regular vaping initiation are similar, with over 72% of users having begun vaping regularly before 35 years of age. Only a little over 5% of users began vaping or vaping regularly after 46 years of age. (Figure 20,21)

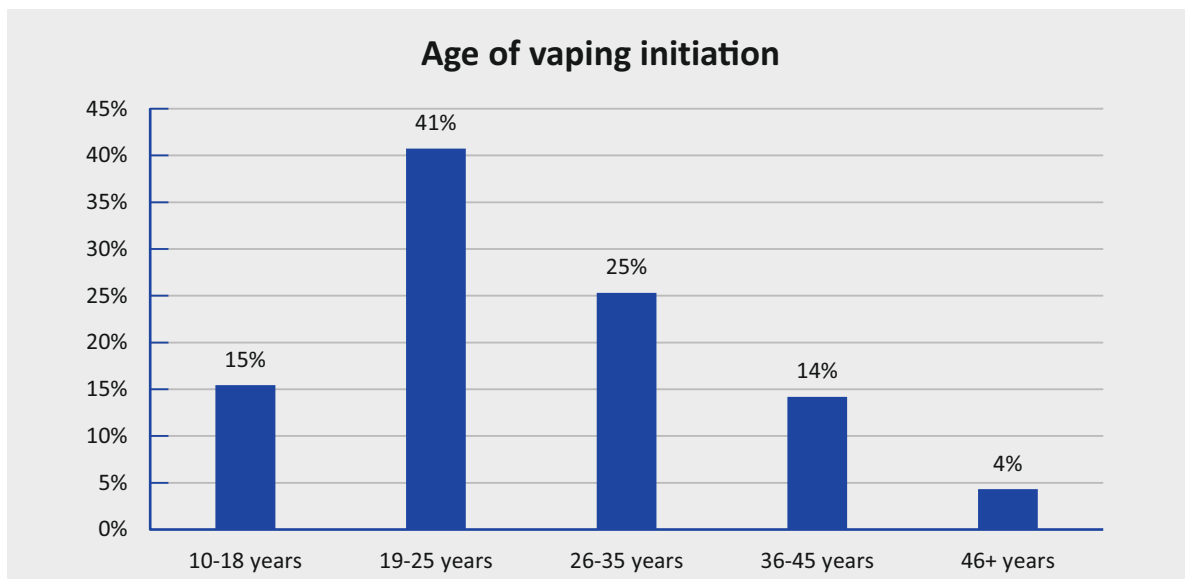


Figure 20: Age of vaping initiation in Pakistan

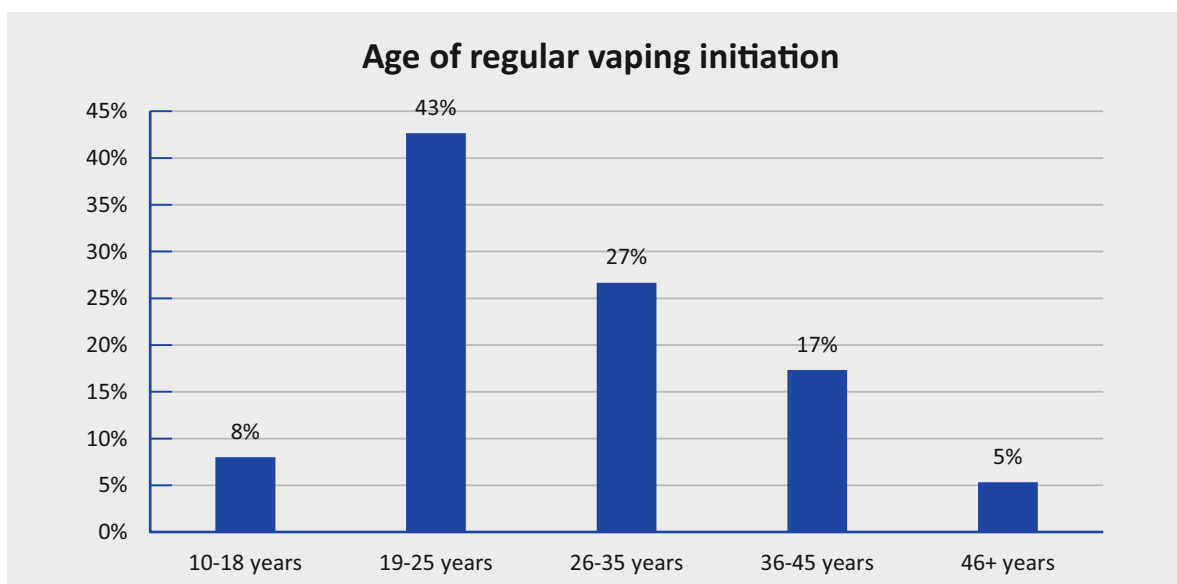


Figure 21: Age of regular vaping initiation in Pakistan

8. Educational background of vape users:

Most vape users in Pakistan tend to be educated, with over 94% of users having at least a high school degree, over 68% of users having a Bachelors' degree or higher and 34% of vape users having a master's degree or higher (Figure 22).

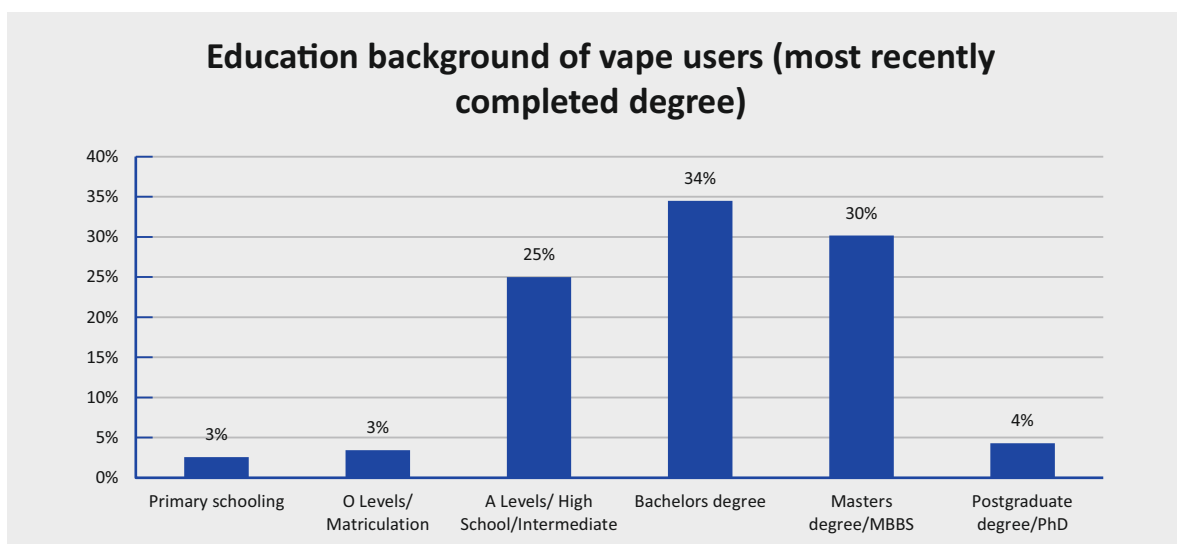


Figure 22: Education background of vape users in Pakistan.

8.1 Time of daily vaping initiation

The majority of vape users (60%) tend to vape within the first 30 minutes of waking up, with nearly 30% using their device within 5 minutes of waking up. Around 28% of users wait over 60 minutes before using their device for the first time in the day (Figure 23).

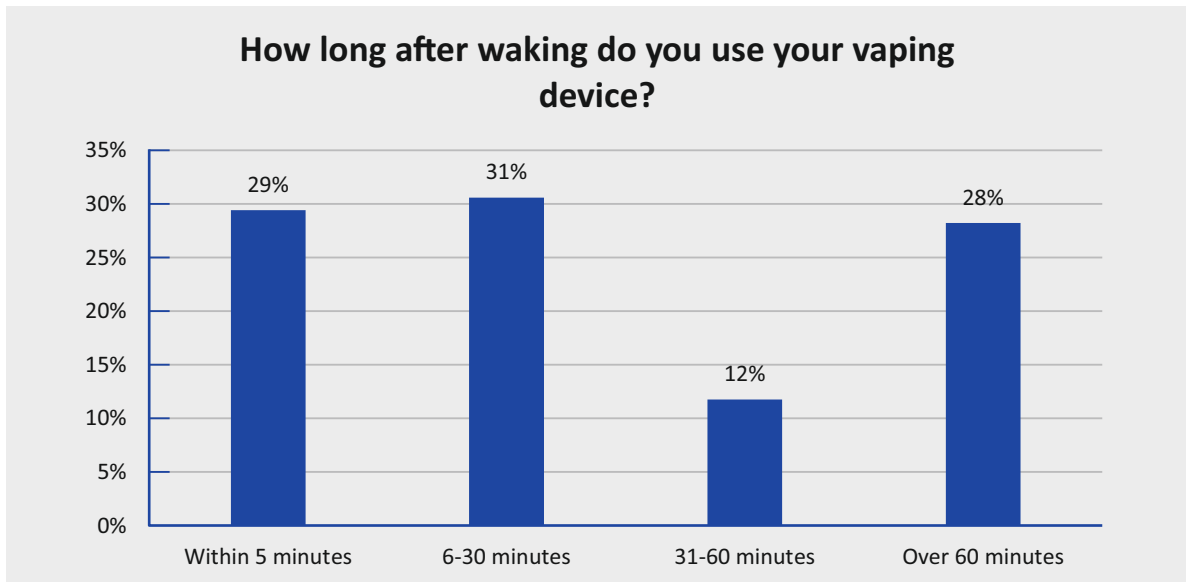


Figure 23: Time of daily vaping initiation

8.2 Frequency of vaping:

Nearly half of vape users (49%) tend to be heavy users, vaping more than 10 times a day. About a quarter of users only vape occasionally (once or twice a week), while vaping moderately (only 1-5 times a day) is relatively less common. Vape users thus tend to be either predominantly heavy users or occasional users (Figure 24).

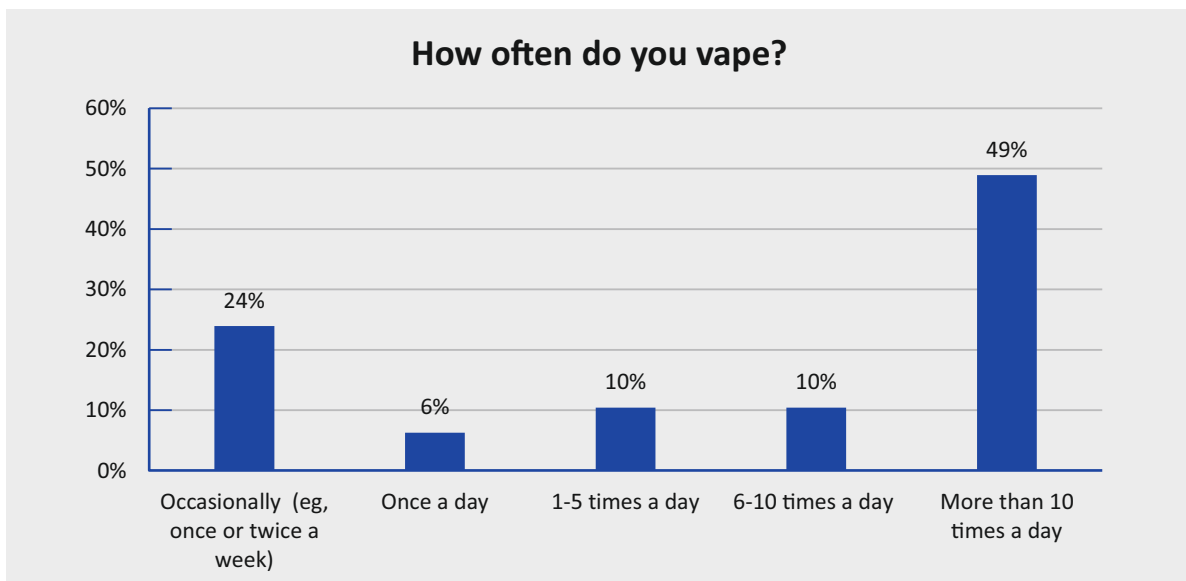


Figure 24: Frequency of vaping among vape users.

8.3 Types of vaping device used:

The most common types of vaping devices in use in Pakistan tend to be Electronic Nicotine Delivery Systems (ENDS) which are used by 83% of vape users, compared to 13% users who use Heated Tobacco Products (HTPs) like IQOS, Ploom, Glo etc (Figure 25).

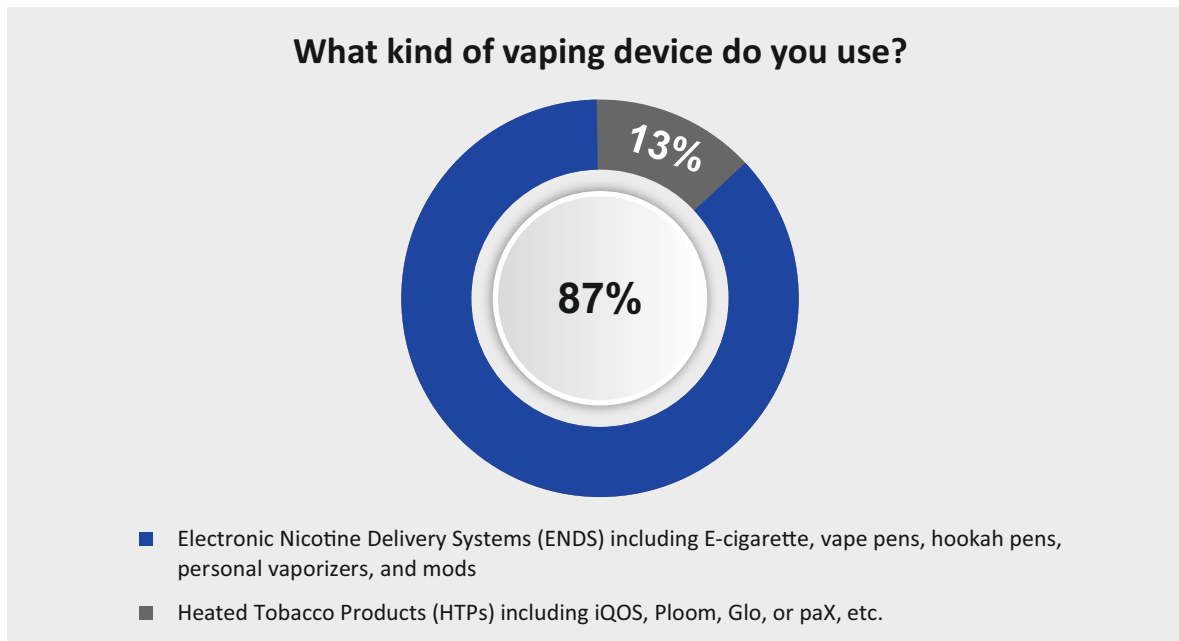


Figure 25: Types of vaping devices used.

8.4 Vaping device characteristics and features:

Among vape users, 90% report using a rechargeable device, 84% report using a device with a tank system, 74% report using a device with a cartridge, 85% report using a device that is refillable with e-liquid, while 54% report using a device with an adjustable voltage. (Figure 26)

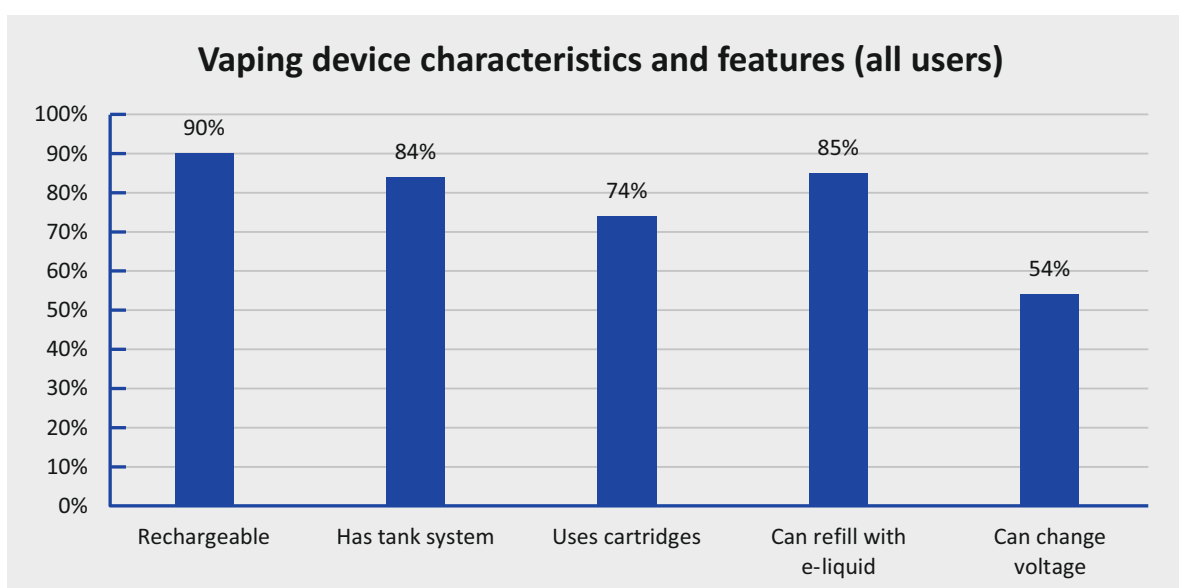


Figure 26: Characteristics and features of vaping devices

8.5 Device malfunction:

While vaping devices malfunctioning is relatively rare, nearly a fifth of users (18%) report having experienced a dangerous malfunction in their device (Figure 27)

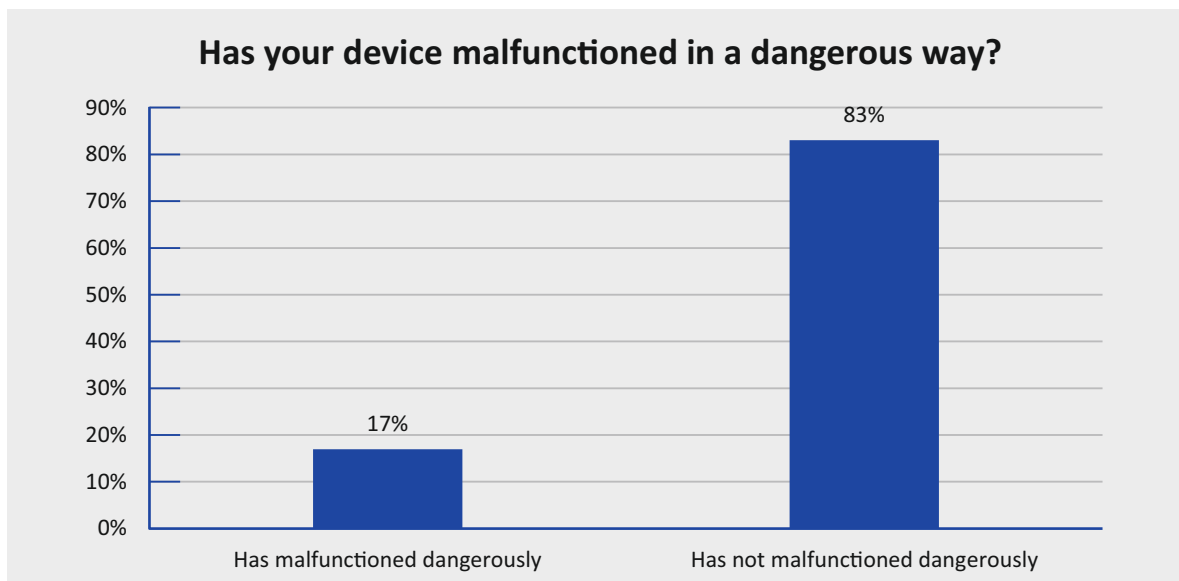


Figure 27: Vaping device malfunction.

8.6 Role of flavoured e-cigarettes in vaping initiation:

The World Health Organization defines "Attractiveness" of these products as

"Factors such as taste, smell and other sensory attributes, ease of use, flexibility of the dosing system, cost, reputation or image, assumed risks and benefits, and other characteristics of a product designed to stimulate use."

The overwhelming majority of vape users (91%) initiated vaping with the use of flavoured e-cigarettes, suggesting a significant role of flavours in the appeal and use of vaping devices (Figure 28). Common flavours mentioned by users include apple, strawberry, mint, berry, tobacco, coffee, mango, and lychee, among others.

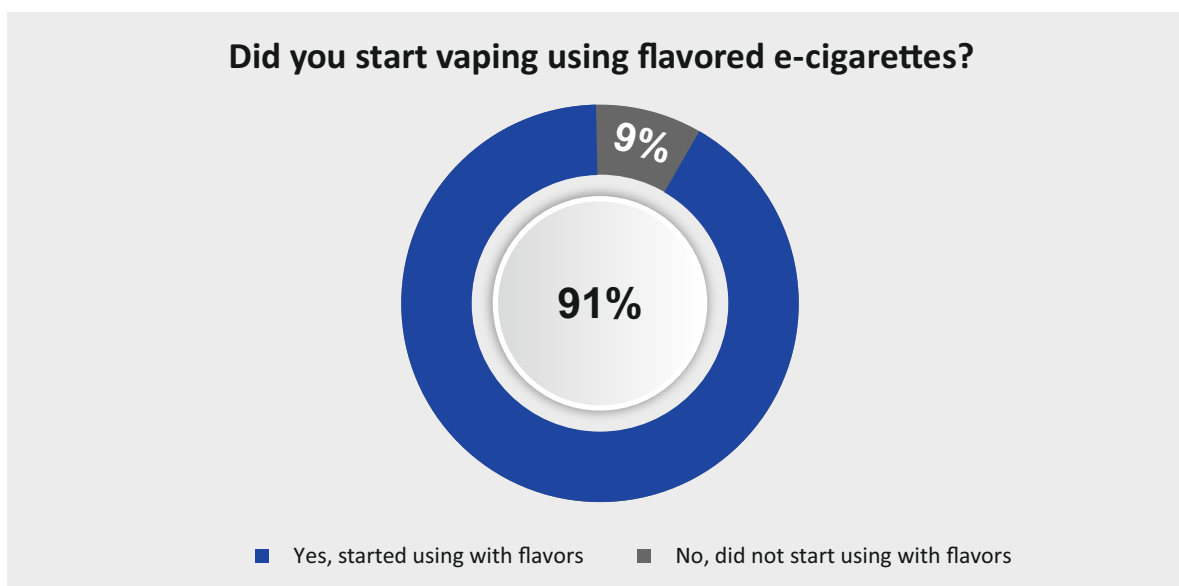


Figure 28: Role of flavoured e-cigarettes in vaping initiation.

8.7 Switching (smoking to vaping):

In a series of whole-offer tests with smokers, 10% of the study participants in Germany and 37% in the Republic of Korea had successfully switched to IQOS after 4 weeks. One study in England of people who had stopped smoking in the 12 months before the survey indicated that 0.4% of the participants had used HTPs in quitting CCs.

A significant smoking to vaping pipeline appears to exist with nearly half of vape users (48%) having switched from smoking to vaping. However, a majority of users began vaping without having been a smoker previously (Figure 29). The most common reason cited by vape users for switching from smoking is to quit smoking (49%) and to reduce the risk to health (38%), suggesting vaping is seen as less harmful than smoking and used as a tobacco quitting aid by a significant proportion of users (Figure 30).

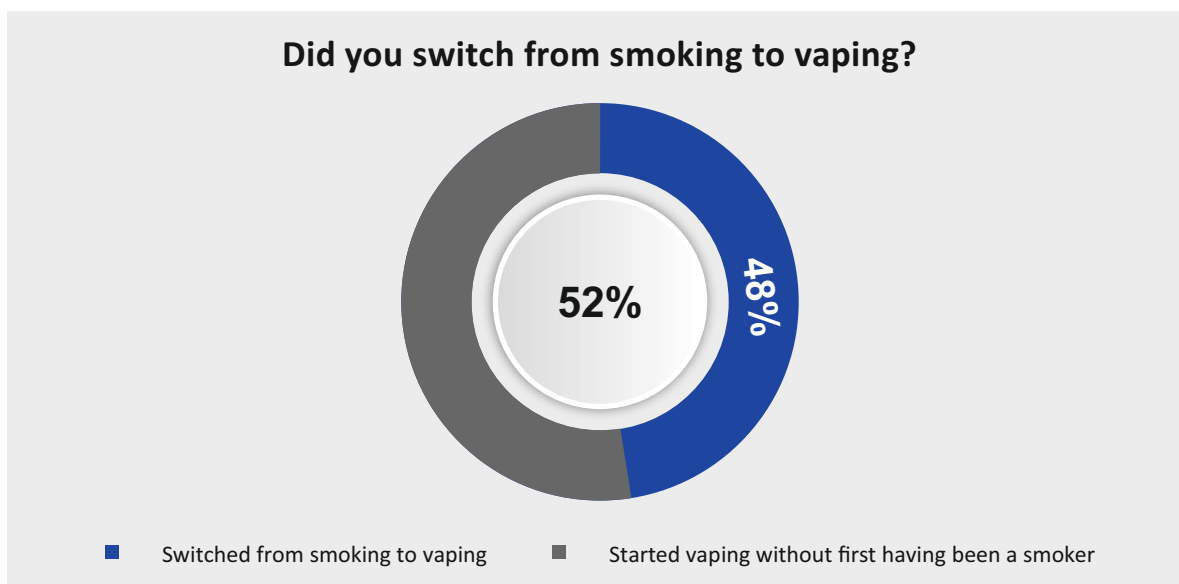


Figure 29: Switching from smoking to vaping (among vape users)

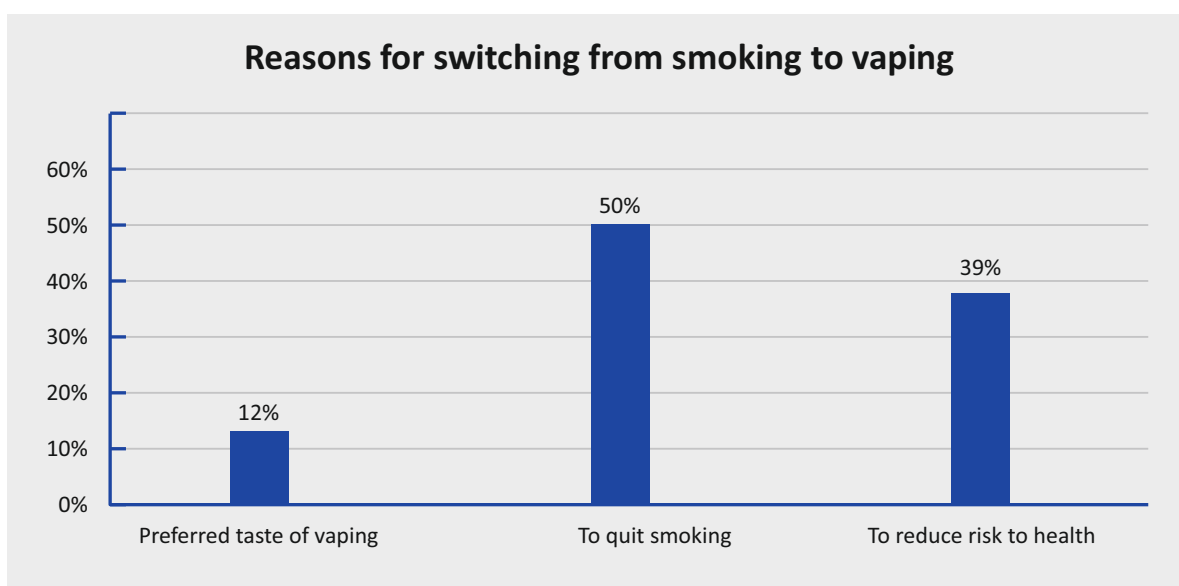


Figure 30: Reason for switching (smoking to vaping)

8.8 Switching (vaping to smoking):

A relatively small proportion of users switched from vaping to smoking (24%) (Figure 31). Reasons for switching from vaping to smoking included a preference for the taste of smoking (43%), followed by wanting to quit vaping (35%), and to reduce the risk to health (22%) (Figure 32). This suggests that the taste of tobacco-based cigarettes remains a major part of its appeal compared to vaping. The

data also suggests that a significant minority of users consider smoking less risky for health than vaping.

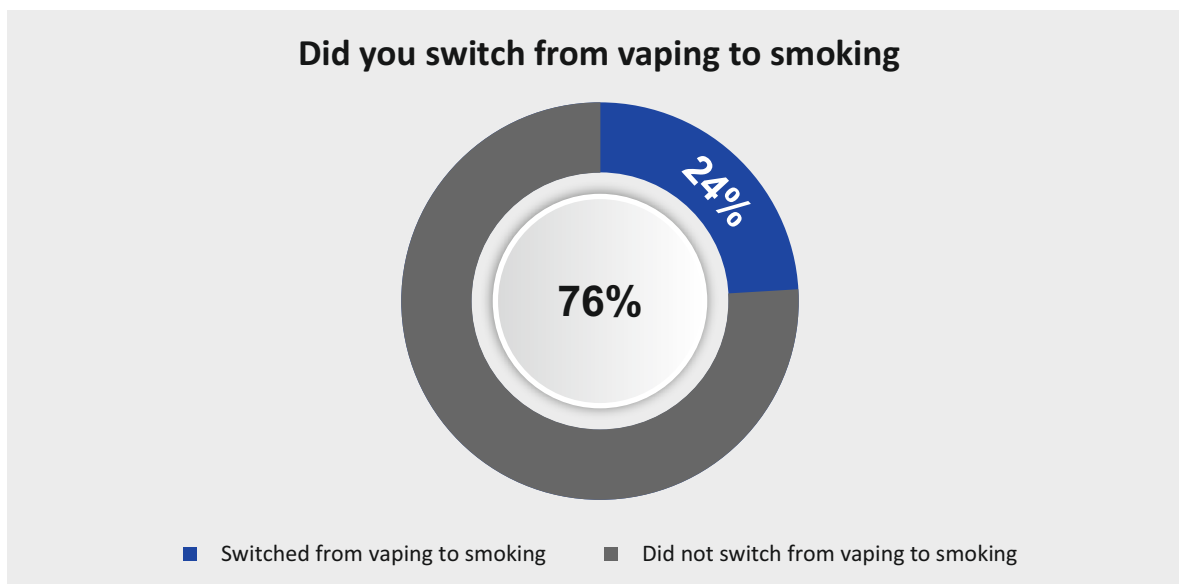


Figure 31: Switching (vaping to smoking)

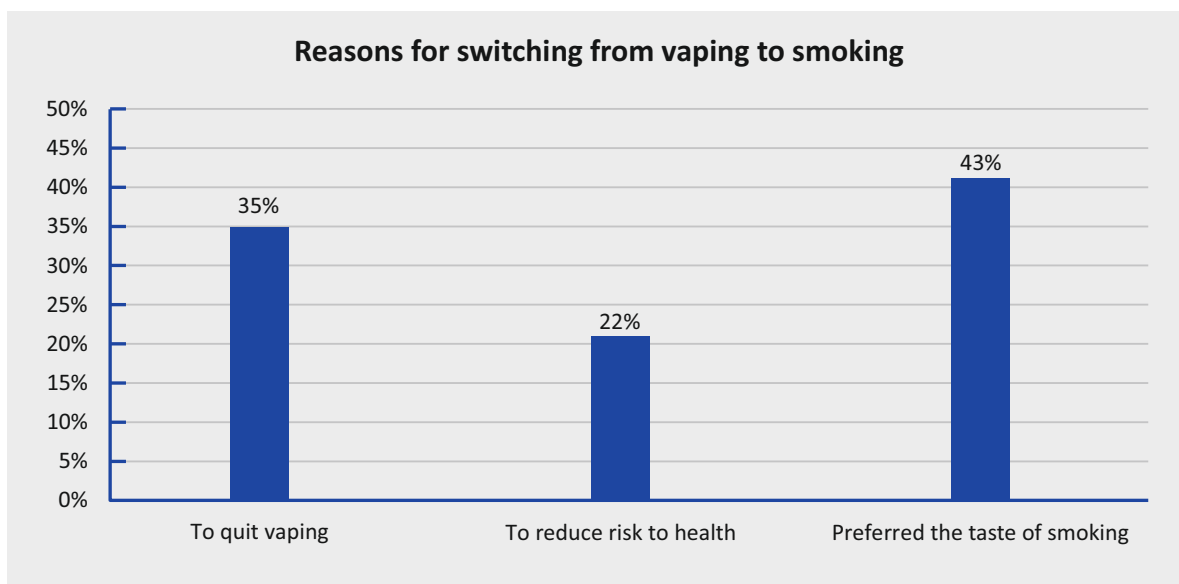


Figure 32: Reasons for switching (vaping to smoking)

8.9 Ownership of vaping device:

The vast majority of current vape users (81%) own their own e-cigarette or vape pen (Figure 33).

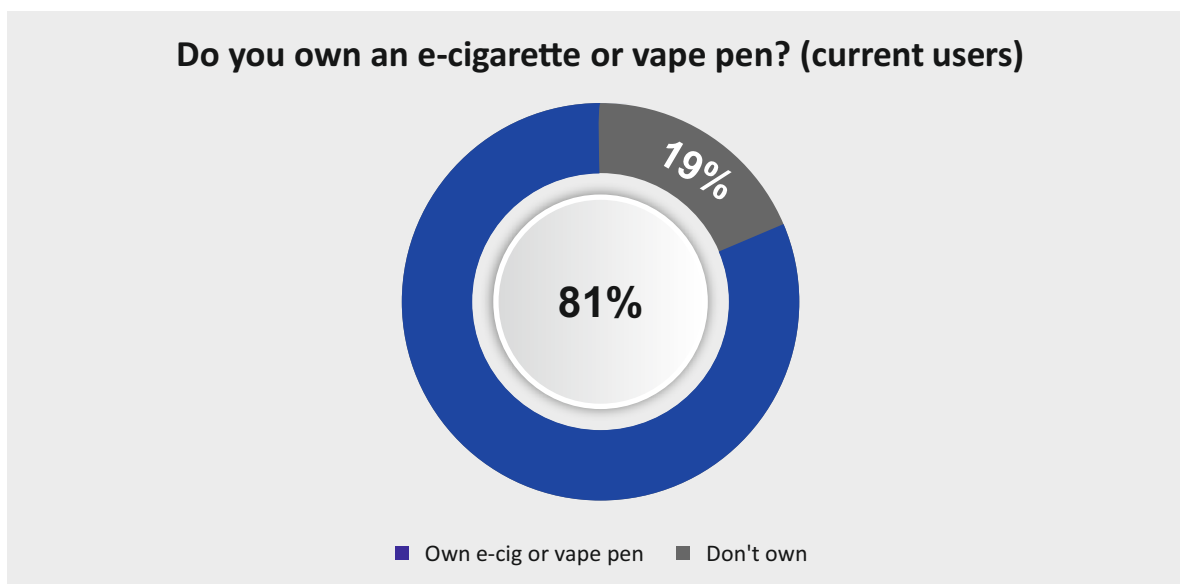


Figure 33: Ownership of vaping devices

8.10 Pricing and purchasing of vaping devices:

Most vaping devices (93%) under use by Pakistani vape users cost under PKR 10,000, while about 48% cost less than PKR 5000. About 52% of vaping devices cost in excess of PKR 5000, while very few users report devices bought in excess of 10,000 (Figure 34). The vast majority of users (73%) tend to purchase vaping devices from specialized vape stores (Figure 35), which is also the store type where most users (69%) buy their refills from (Figure 36). Nearly 80% of vape users in Pakistan are able to buy vape products within their own city of residence, with about 12% getting them from another Pakistani city and another 9% purchasing them from outside the country (Figure 37).

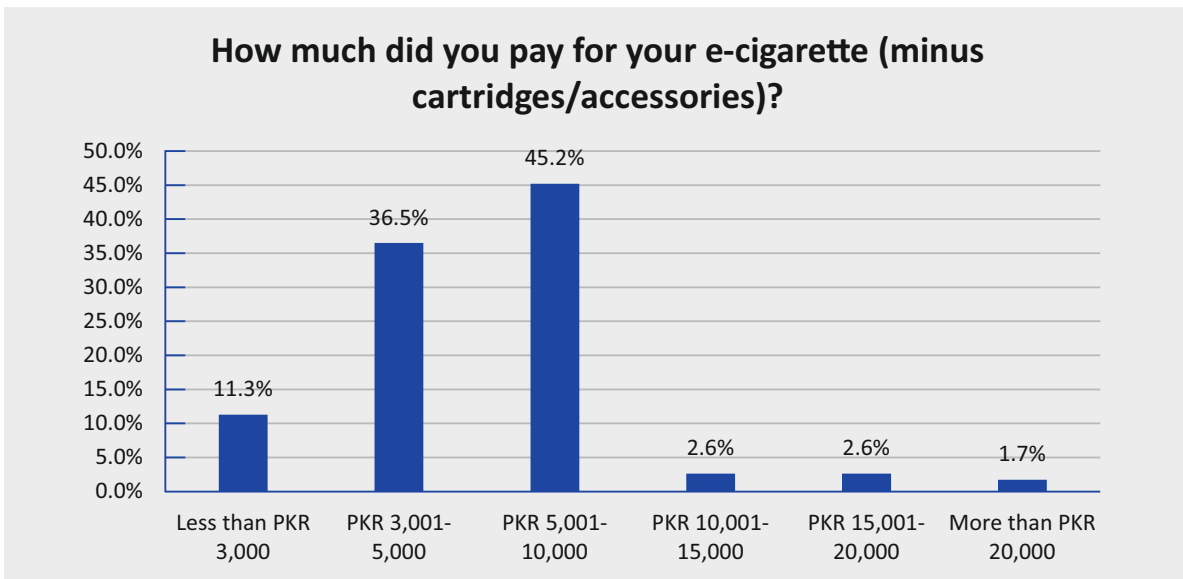


Figure 34: Price range of vaping devices

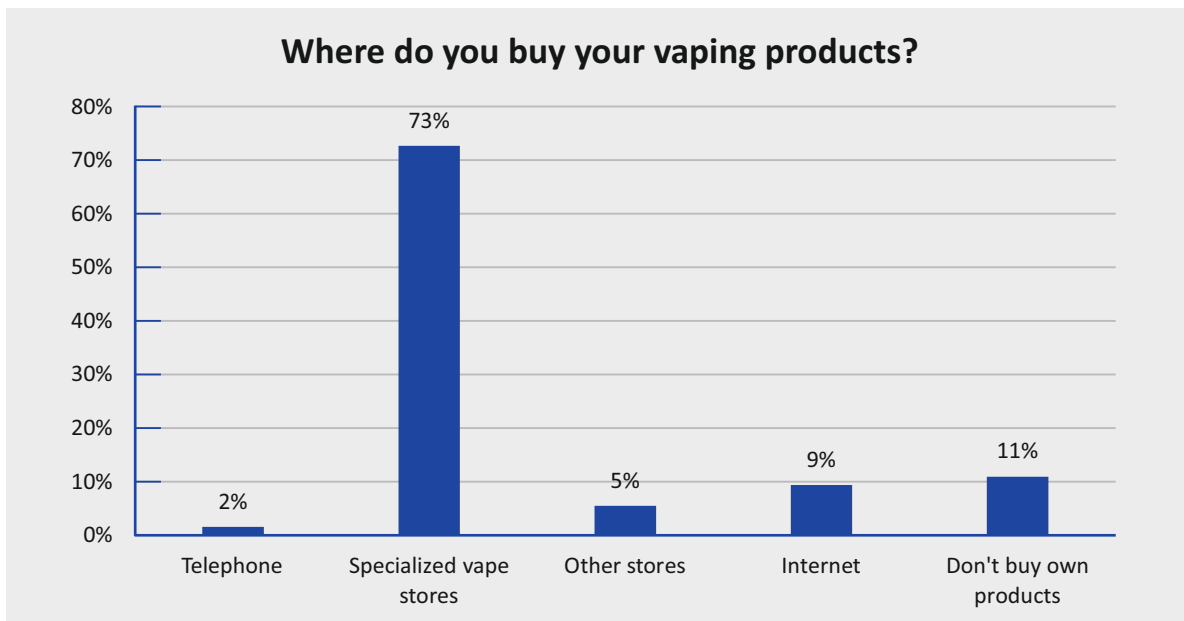


Figure 35: Method of purchase of vaping devices

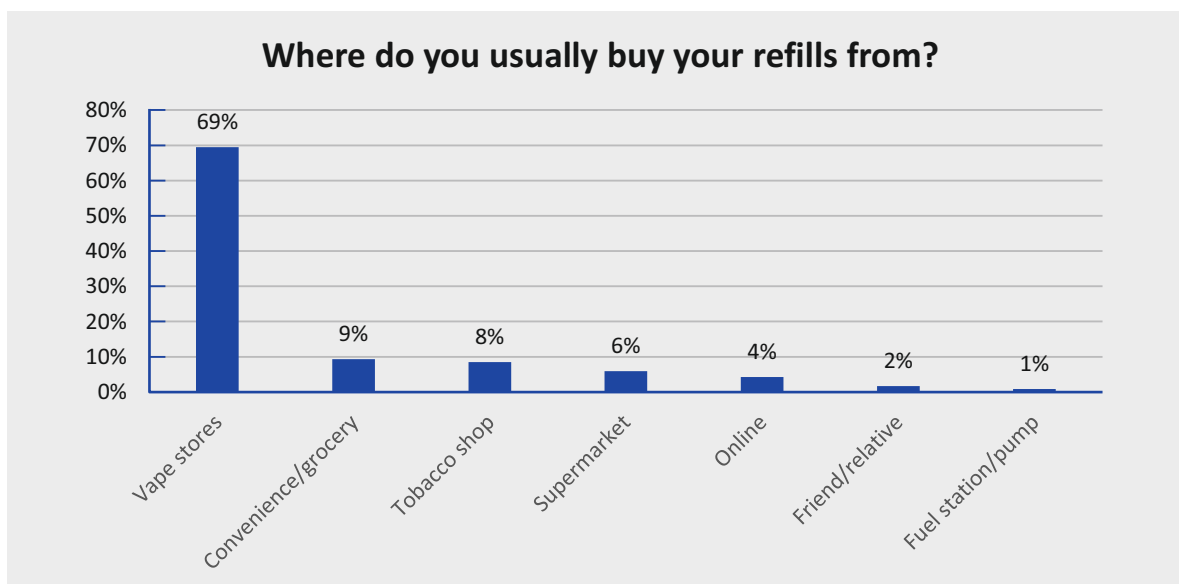


Figure 36: Method of purchase for vape refills



Figure 37: Location of purchase for vaping products

8.11 Status of and reasons for quitting vaping:

Sutanto et al. (34) indicated that, in 2018, 63.2% of HTP users in Japan also smoked cigarettes, and, in 2019, 94.4% of dual users were smoking daily and only 0.5% were predominant HTP users (37) suggesting HTPs may not be adequate substitutes for cigarettes.

A significant proportion of regular vape users (42%) have quit vaping in recent years (Figure 38). Reasons for quitting vary, with 31% suggesting it was to reduce health risk, 30% citing the addictive nature of vaping, and 30% suggesting a lack of enjoyment as the reason (Figure 39).

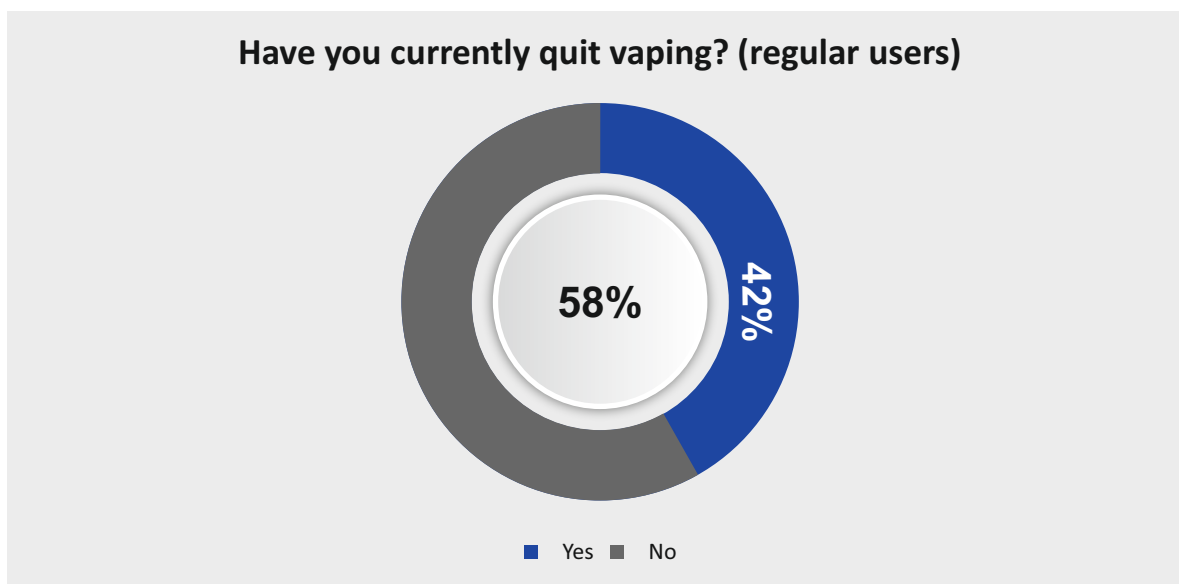


Figure 38: Status of quitting vaping (among regular users)

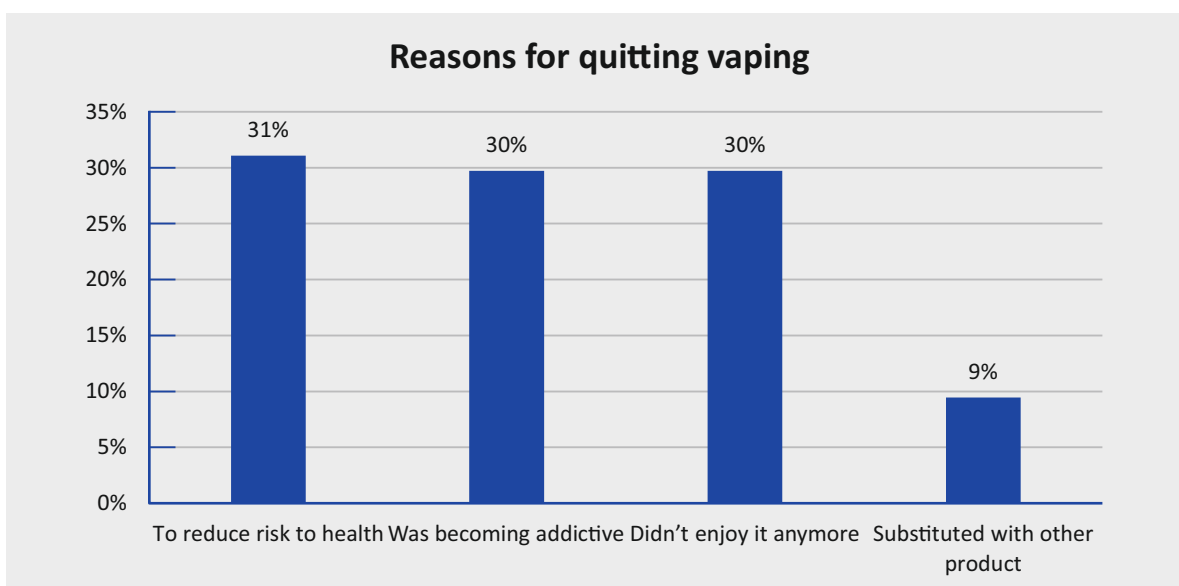


Figure 39: Reasons for quitting vaping

8.12 Desire to quit vaping (current users):

Among current users, nearly half (47%) wish to quit vaping (Figure 40). Nearly half of current users want to quit for health reasons, while 29% cite its addictiveness and 17% cite a lack of enjoyment with vaping (Figure 41).

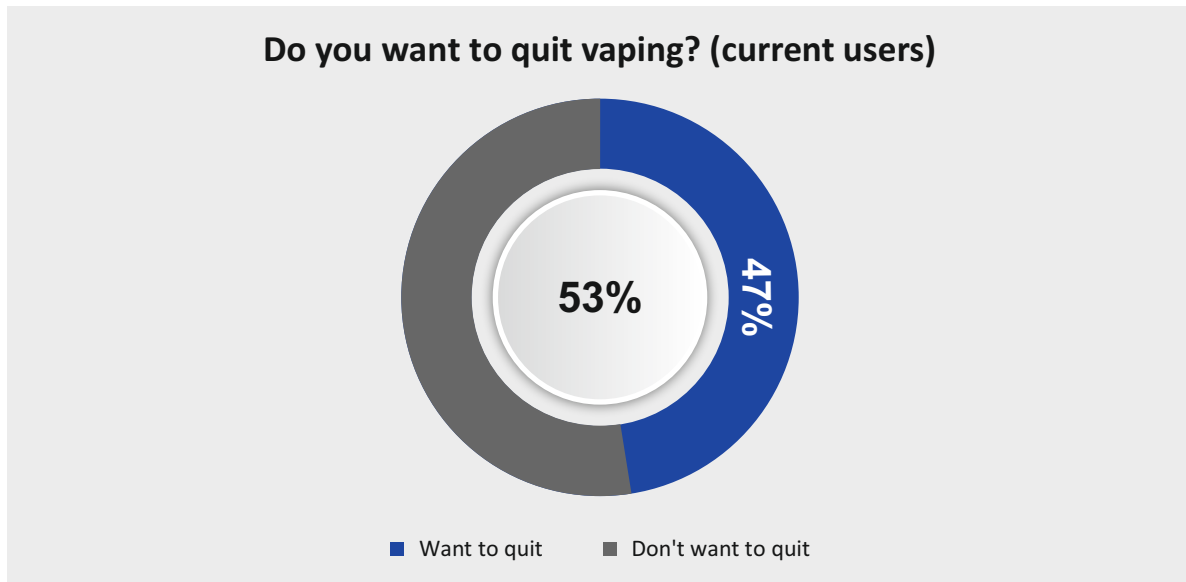


Figure 40: Desire to quit vaping

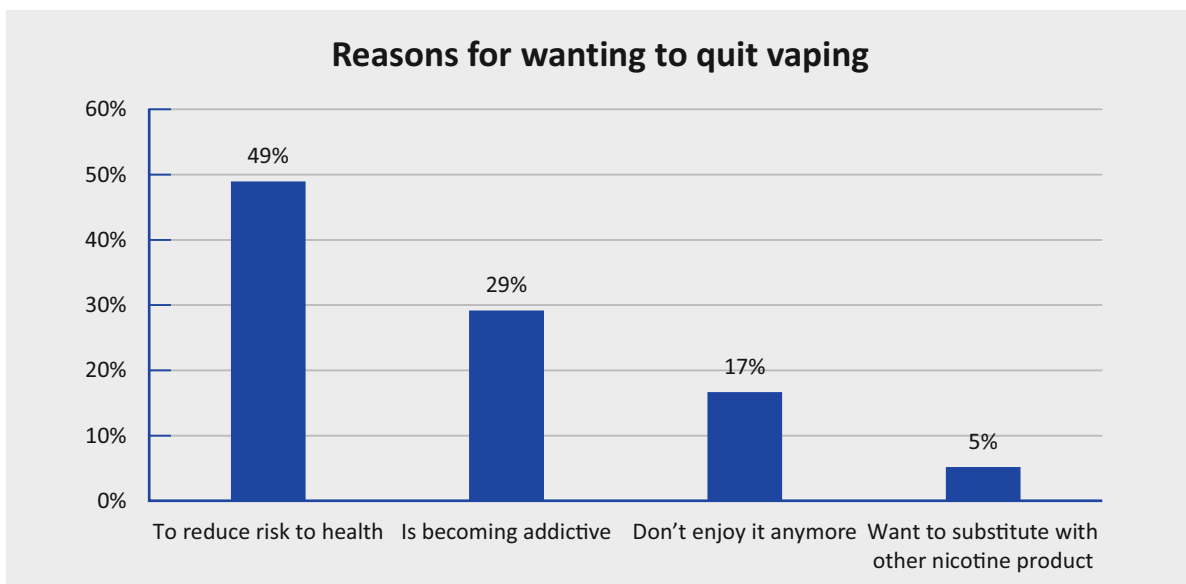


Figure 41: Reasons for wanting to quit vaping.

8.13 Response to vaping market changes:

About a third of current vape users (33%) suggest they will switch to smoking if vaping products are no longer available in the market. About a fifth (21%) of users suggest they will quit using nicotine altogether, while smaller proportions suggest they will switch to nicotine pouches (15%) and Naswar (9%) in case of a ban (Figure 42).

The impact on user behaviour of a hypothetical 30% price hike is different – in this case, 32% of users say they will reduce consumption, 24% suggest they won't change anything, while smaller proportions of users suggest they will switch to tobacco (14%) or nicotine pouches (14%) (Figure 43).

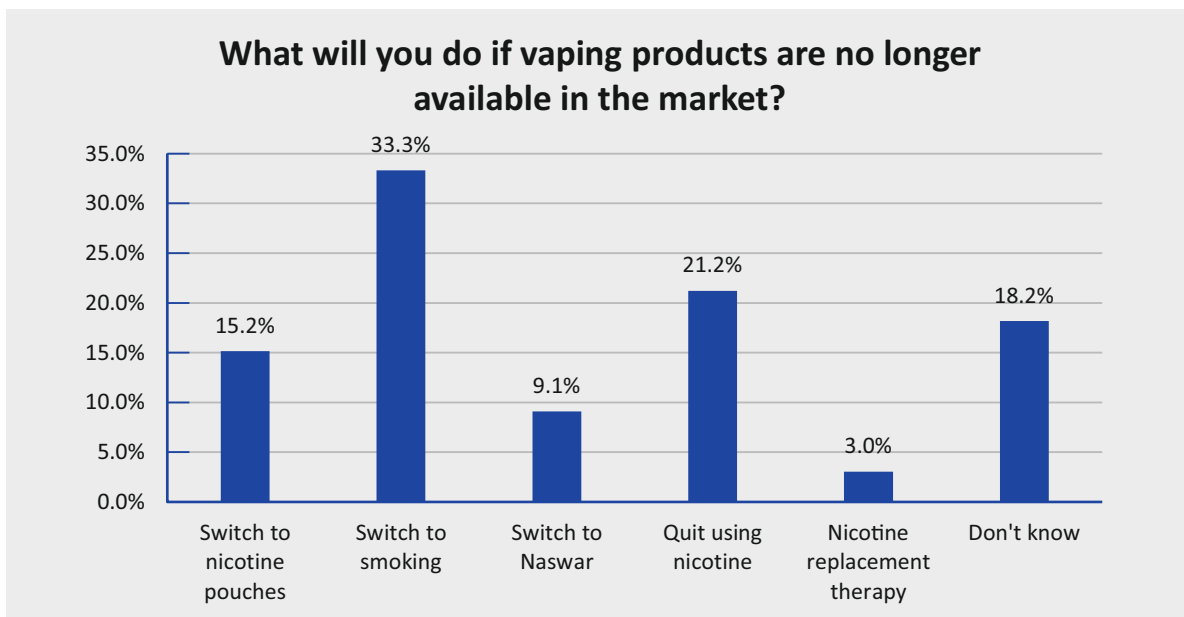


Figure 42: Vape users response in case of vaping products ban

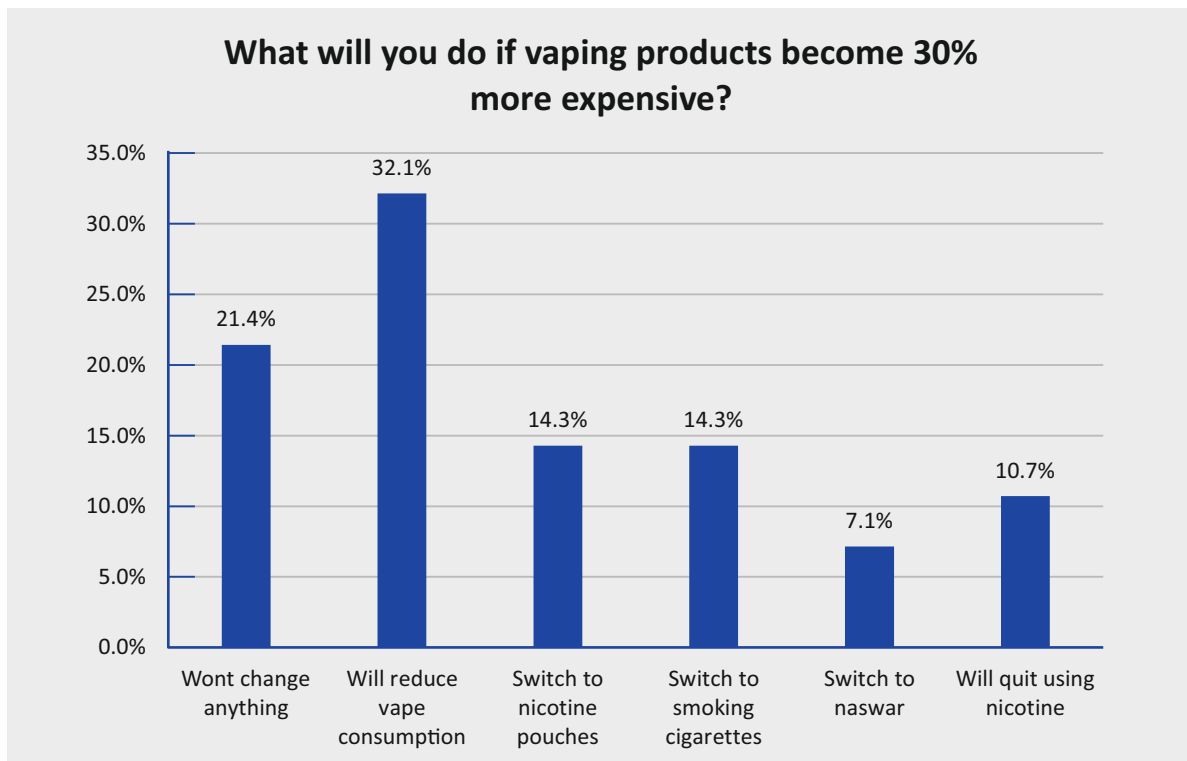


Figure 43: Vape users response to 30% price hike in vaping products

9. Findings - Nicotine pouch users:

9.1 Age of initiation of nicotine pouch use:

Nicotine pouch users are also predominantly young, with 85% of them having started under 35 years of age and 41% of them being in the 19-to-25-year age bracket. A significant proportion (11%) started nicotine pouch usage in their early adolescence or teen years (10 to 18 years of age) (Figure 44). About 36% of current users began regular use between 19 to 25 years of age while 36% began regular use between 26 to 35 years of age (Figure 45).

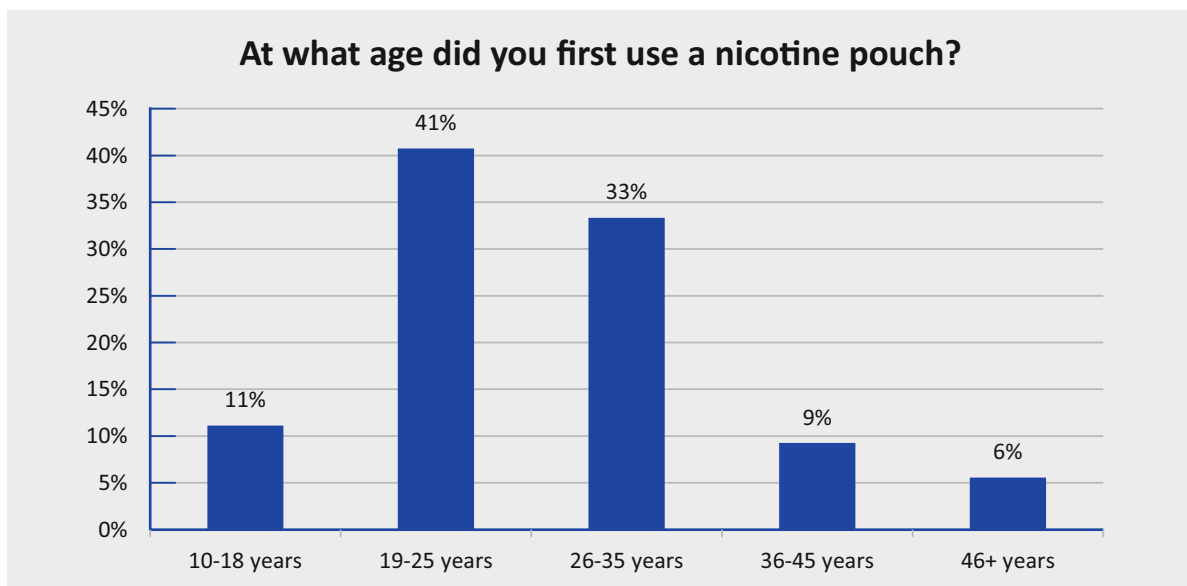


Figure 44: Age of nicotine pouch use initiation

9.2 Age of regular nicotine pouch use:

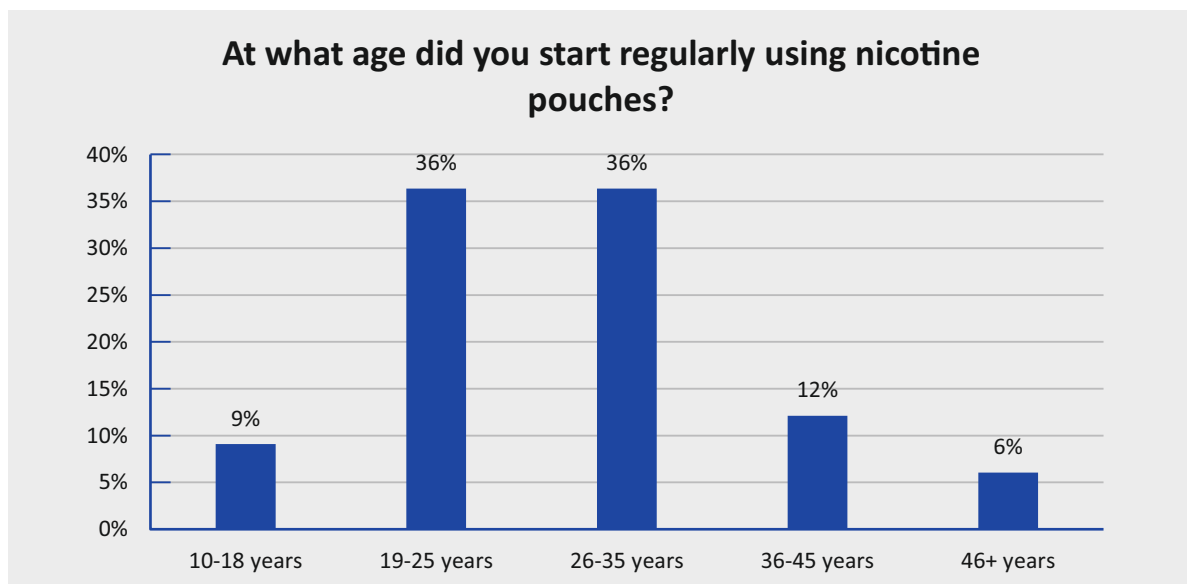


Figure 45: Age of regular nicotine pouch use

9.3 Education background of nicotine pouch users:

Nicotine pouch users also tend to be relatively educated with 89% having completed at least high school and 73% having a Bachelor's degree or higher (Figure 46).

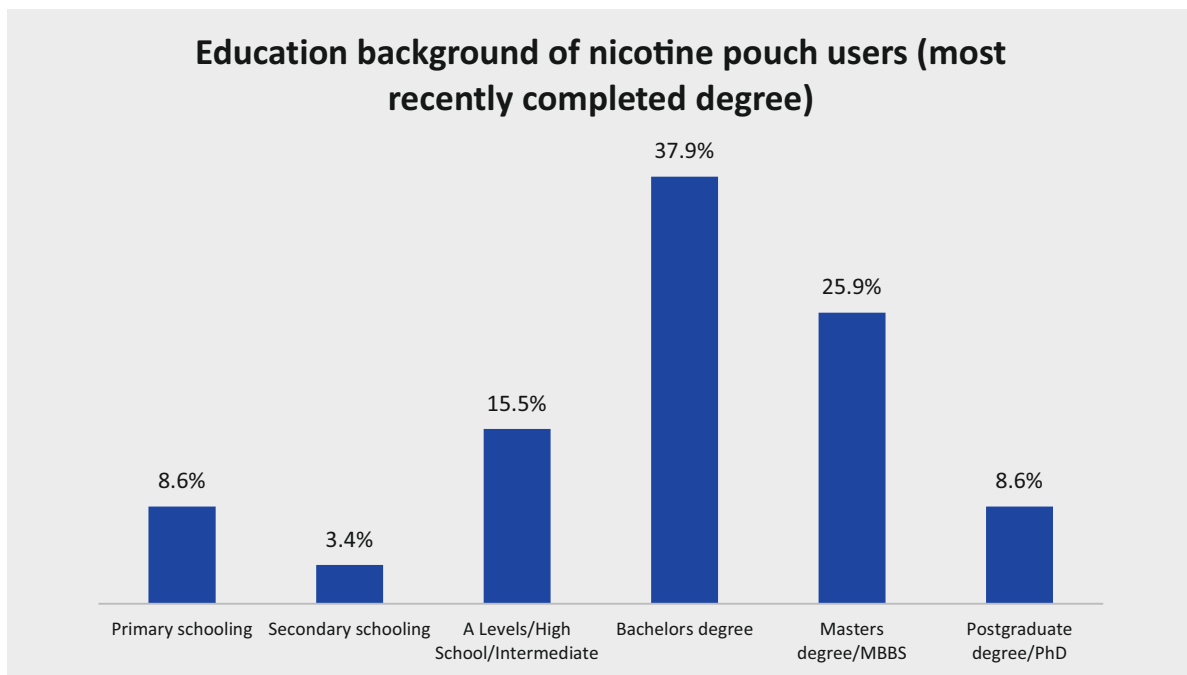


Figure 46: Education background of nicotine pouch users

9.4 Types of nicotine pouches used:

Nicotine pouches like Velo are the most common type of pouch used by 74% of current users, compared to snus/snuff/Tara which is used by 26% (Figure 47).

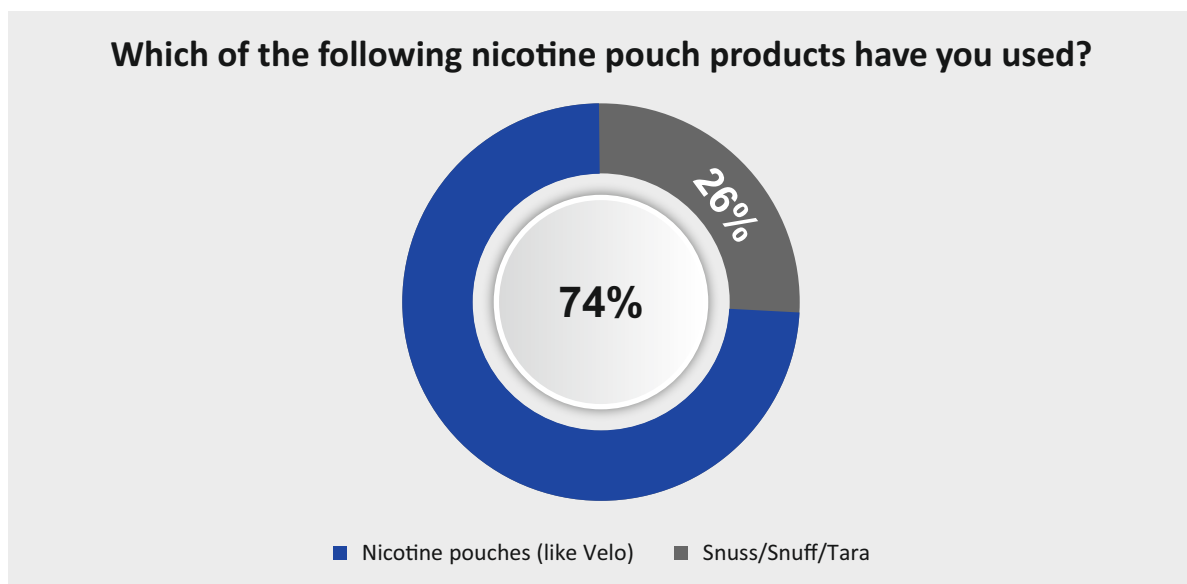


Figure 47: Types of nicotine pouches used

9.5 Frequency of nicotine pouch use:

Over two thirds of current nicotine pouch users (67%) use it at least twice or more a day, while over a third (37%) use it at least six times or more a day. A little over a quarter of users (27%) use it less than daily (once or twice a week). (Figure 48).

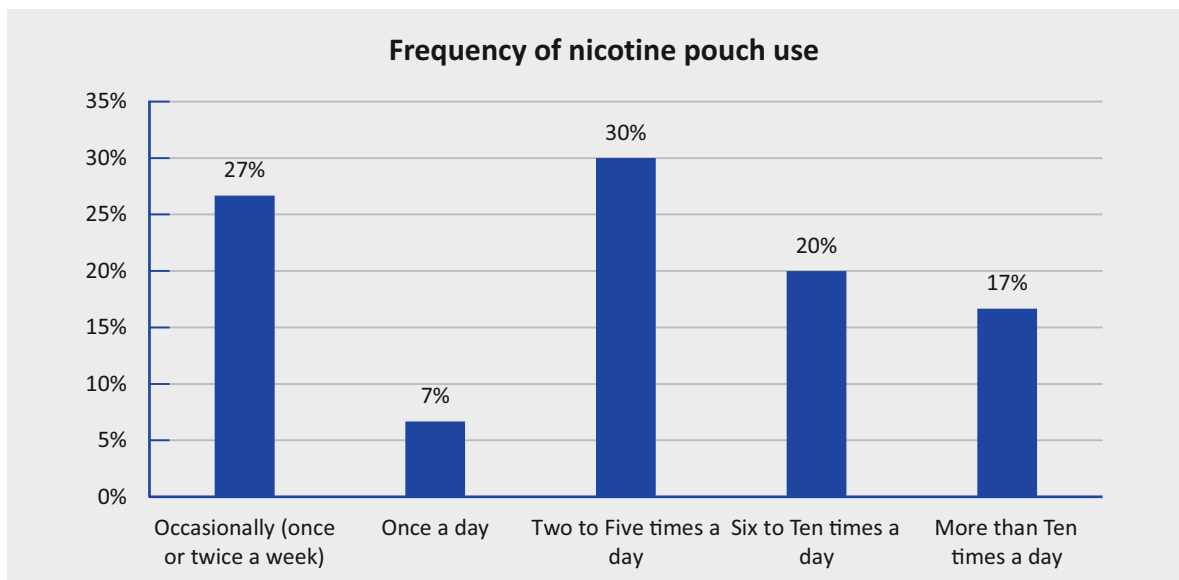


Figure 48: Frequency of nicotine pouch use

9.6 Appeal of lack of noticeability:

The vast majority of users of nicotine pouches (84%) agree that the lack of noticeability of nicotine pouches is a significant part of their appeal. About a third (34%) of users consider this to be 'extremely true'. (Figure 49)

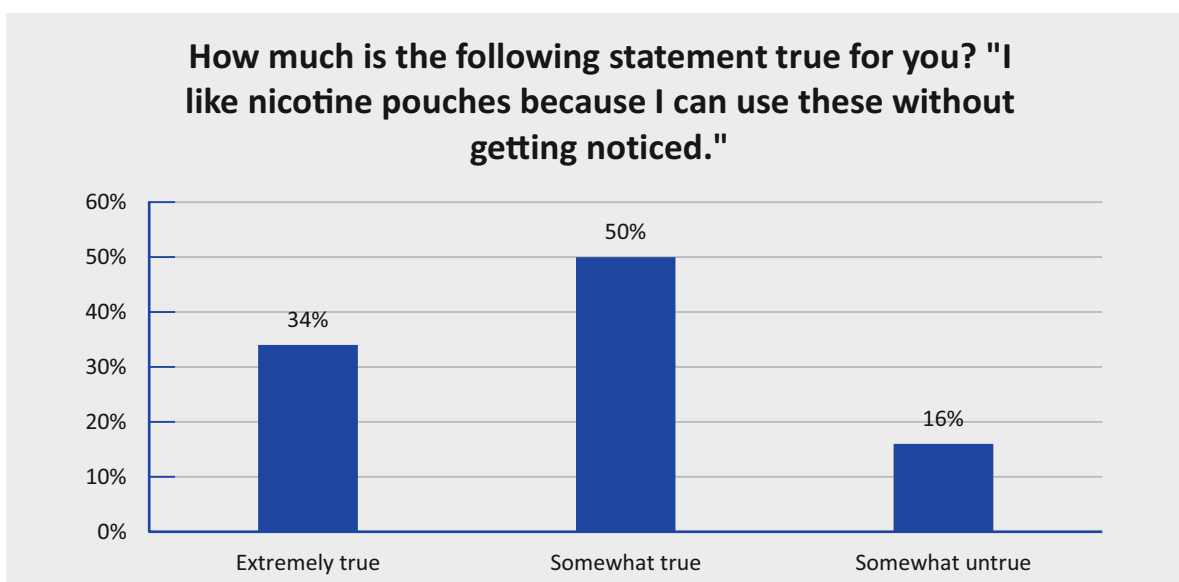


Figure 49: Appeal of lack of noticeability of nicotine pouches

9.7 Switching (smoking to nicotine pouches)

Most nicotine pouch users (59%) initiated its use without having been a smoker before, whereas 41% of them switched from smoking to nicotine pouches (Figure 50). The reasons for switching were predominantly to quit smoking (47% of those who switched) and to reduce health risks (42% of those who switched) (Figure 51).

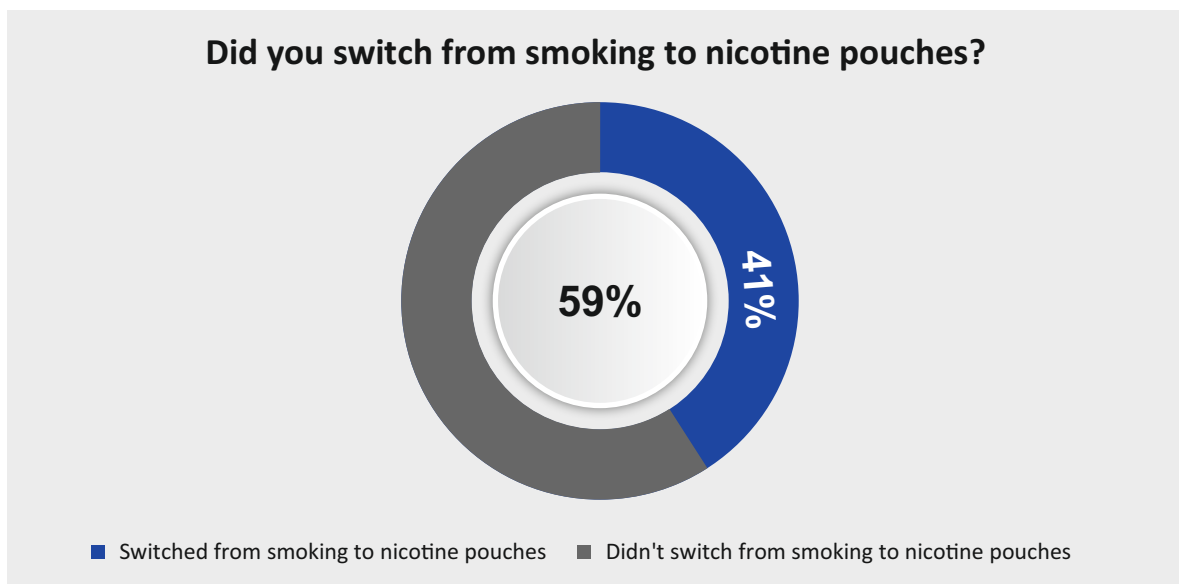


Figure 50: Switching (smoking to nicotine pouches)

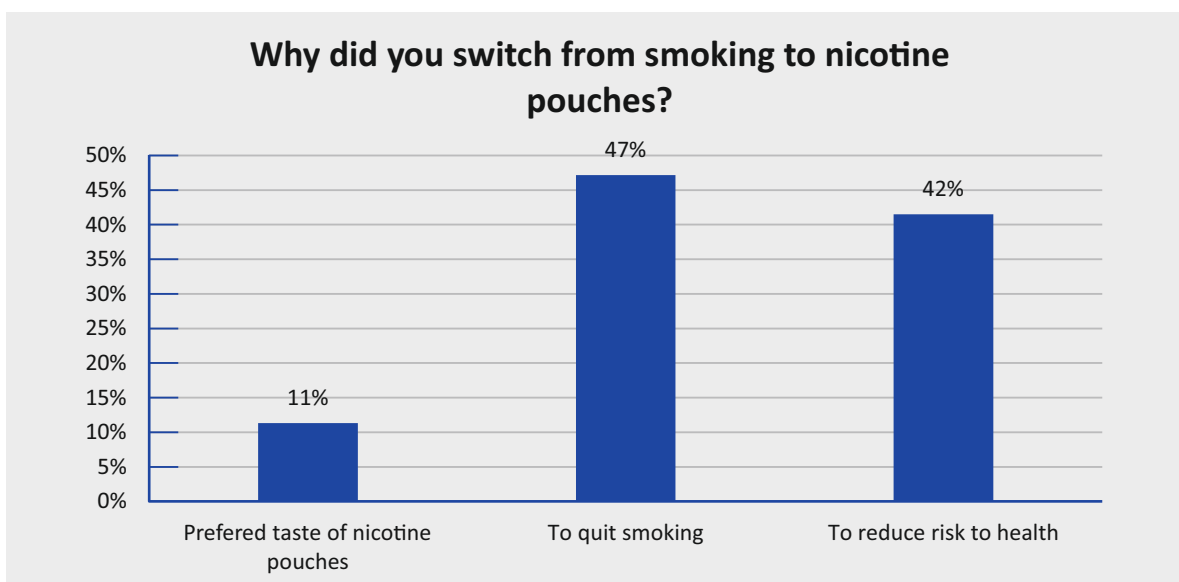


Figure 51: Reasons for switching from smoking to nicotine pouches.

9.8 Responses to market changes:

In case of a ban on nicotine pouches, nearly a third (31%) suggest they will quit using nicotine altogether whereas nearly a quarter (24%) suggest they will switch to smoking cigarettes. A smaller proportion (16%) say they will switch to Naswar while 11% suggest they will try nicotine replacement therapy. Very few nicotine pouch users (5%) will consider switching to vapes (Figure 52).

In case of a 30% price hike in nicotine pouches, nearly a quarter (24%) suggest they will quit nicotine, while 17% each say they will reduce consumption or switch to Naswar. Nearly a fifth of users (19%) suggest they will not change their consumption due to a 30% price hike, while a smaller proportion (9%) say they will switch to cigarettes. (See Figure 53)

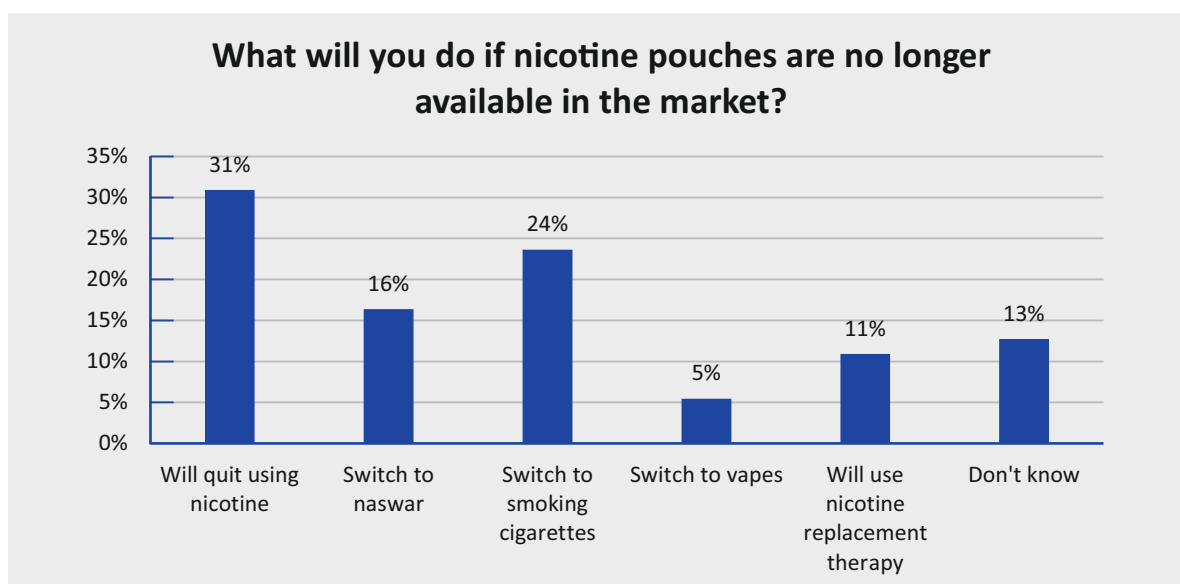


Figure 52: Response in case of nicotine pouch ban

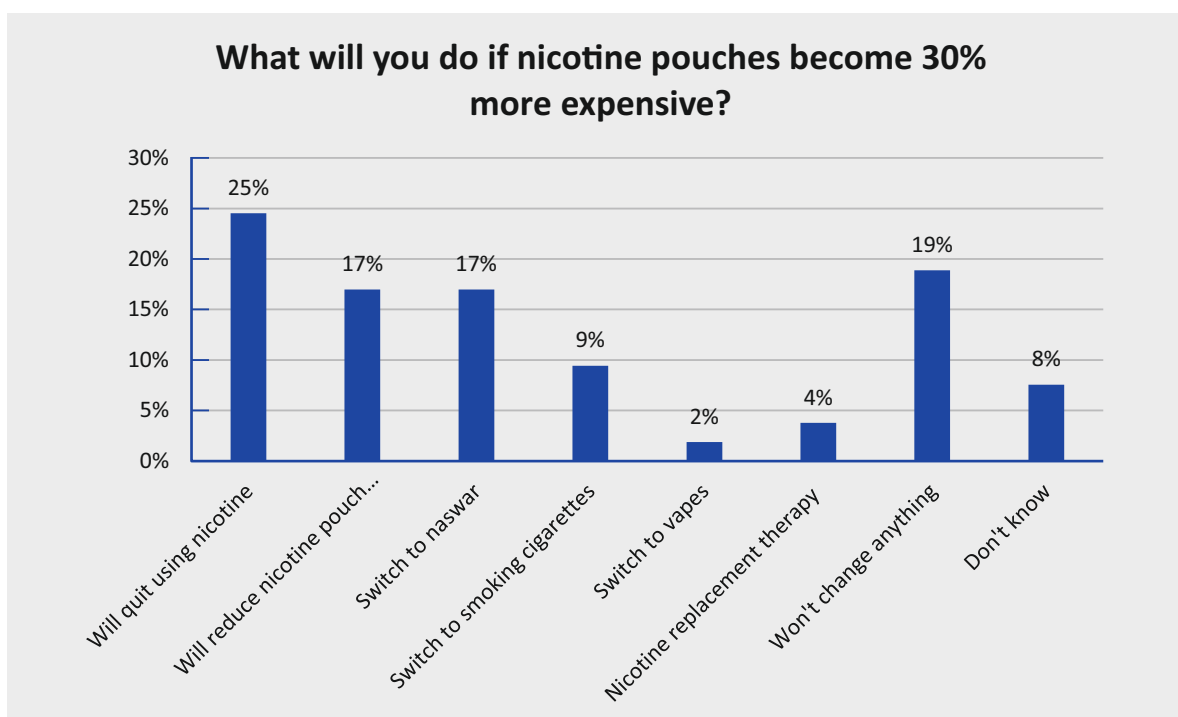


Figure 53: Response in case of 30% price hike on nicotine pouches

10. Summary of findings and observations – TNNP users survey:

10.1 General observations:

- »» There is general awareness about vapes and nicotine pouches.
- »» A majority of respondents believe vapes to be equally (28%) or less harmful (26%) to cigarettes.
- »» Many TNNP users (both vapes and nicotine pouches) are also concurrently smokers.

10.2 Findings for users of vapes/e-cigarettes/HTPs:

- »» Vaping initiation occurs at younger ages (teenage to early 20s).
- »» Vape users tend to be educated, with most having at least a bachelor's degree.
- »» Nearly half of vape users are heavy users (using it more than 10 times a day) while nearly a quarter are occasional users.
- »» ENDS (e-cigarettes and vape pens) are the most common vaping devices in use.
- »» Most vaping devices are rechargeable, refillable and have tanks and cartridges. About half have an adjustable voltage.
- »» About one fifth of users have reported dangerous malfunctions in their device.
- »» Flavors are a major part of the appeal of e-cigarettes, with the overwhelming majority of vape users having initiated vaping with flavoured e-cigarettes.
- »» About half of vape users did not previously smoke. But nearly a third of regular vape users are also current cigarette smokers.
- »» For those who switched from smoking, the reasons were health risks and a desire to quit smoking.
- »» Most vape users own their devices.
- »» About half of vaping devices cost less than PKR 5000 and the vast majority cost less than PKR 10,000.
- »» Specialized vape stores are the most common source of vapes and refills.
- »» Most users are able to buy vaping products from their own city.

- »» A significant proportion of one time vape users have quit in recent years, citing addictiveness and health risks.
- »» Almost half of current vape users indicate their desire to quit vaping.
- »» About a third of vape users suggest they would switch to smoking if vaping products are banned while around a fifth suggest they would quit.
- »» In case of a 30% price hike, about a third of users suggest they would reduce consumption, while over a fifth suggest they will not change anything.

10.3 Findings for users of nicotine pouches:

- »» Velo is by far the most common nicotine pouch in use.
- »» Most nicotine pouch users are young, with over half of users starting under the age of 25.
- »» The vast majority of nicotine pouch users are educated, with a Bachelor's degree or higher.
- »» Over two thirds of nicotine pouch users use it at least twice a day or more.
- »» Lack of noticeability is a significant part of the appeal of nicotine pouches for users.
- »» The majority of nicotine pouch users did not switch from smoking. For those that did, health risks were the main reason.
- »» Nearly a third of current users suggest they will quit if nicotine pouches are banned. However, close to a quarter suggest they will switch to smoking, while a smaller proportion will switch to Naswar.
- »» If nicotine pouch prices are hiked by 30%, about a quarter of users suggest they will quit and 17% suggest they will reduce consumption.

11. Recommendations

- »» The availability, affordability, and sales of HTPs, vapes & e-cigs are still low as of now in non-metro/small cities. There is an opportunity to act now while their customer base remains relatively small to limit any chances of explosive growth.
- »» While nicotine pouches are widely available and affordable, they are being targeted to youth across all income segments and have begun to be locally manufactured, presenting considerable health risks on their own and increasing the chances of youth making the transition towards tobacco products.
- »» Instead of creating a regulatory framework, a comprehensive and immediate ban on both these types of novel products (e cigarettes/vapes and nicotine pouches) including their imports is likely the most practical and most effective way to go about this.

- »» As all HTPs, vapes & e-cigs have a single entry point in the country (given there is virtually zero local production), an import ban could largely eliminate them from the domestic market. Limited domestic demand, given the high prices and limited consumer base of these products, allows for a ban to take effect without significant complications.
- »» An import ban on these products at this stage will maintain low domestic demand, ensure savings of precious foreign exchange and reduce chances of them becoming a gateway toward tobacco use.
- »» Therefore, an outright ban on imports of tobacco and new novel products like nicotine pouches, HTPs, vapes & e-cigarettes, reinforced with local bans on production, manufacturing, storage, supply, sale and advertisement, is highly recommended to avert a new public health problem looming into our country.
- »» However, close policy attention must be paid to the not-insignificant proportion of T NNP users (particularly for vape users) who could switch to cigarettes in case of a complete ban, with policies in place to ensure this does not result in a rise in tobacco consumption.

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