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The availability and marketing of nicotine pouches at tobacco-selling points-of-sale in Pakistan

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Abstract

Introduction: Nicotine pouches are gaining popularity among young people. Within five years of their introduction, Pakistan has become the third-largest market for Velo, a leading brand among nicotine pouches. However, more information is needed to know about the availability and marketing of these products at point-of-sale (POS).

Methods: In August 2023, we surveyed 711 POS across nine districts covering all four provinces of Pakistan. We collected data on the availability of different brands of nicotine pouches and their flavours, nicotine strengths, prices, and pack features. Furthermore, we recorded any POS advertising in a subsample of 382 POS.

Results: In Pakistan, nicotine pouches were available in all four provinces, eight of nine surveyed districts, and 56 of 711 (7.9%) POS. Urban settings had wider availability and more variety than rural settings. Velo, available in six flavours and three different strengths, captured 85% of the market. On average, nicotine pouches cost 133 Pakistani Rupees (SD 18.9, range 100-190 PKR) or 0.44 US dollars. Display stands advertising nicotine pouches were observed in 12.3% (46/382) POS.

Conclusions: Nicotine pouches are widely available across Pakistan. A range of flavours and strengths are being sold at an affordable price, making it attractive, particularly for young people. Continued surveillance of these products is needed. Their perceptions and use, and their impact on the tobacco uptake in youth, also need further research.

Implications: We observed widespread availability of Velo and the growing nicotine pouch market in Pakistan, underscoring the urgent need for regulation. These

products appeal to youth with diverse flavors and affordability, raising concerns about experimentation leading to addiction. Policymakers must prioritize regulating manufacturing, sales, and marketing to limit youth access. Limited research in Asia necessitates longitudinal studies to explore oral health impact of using these products. Continued monitoring of promotions at points of sale, along with studies on youth perceptions, usage patterns, and influence on tobacco uptake, is critical for effective policy development.

Introduction

The tobacco industry has been diversifying its product line to include nicotine pouches, which are gaining popularity among adolescents and young adults in many countries.[1,2] Nicotine pouches are products containing tobacco-derived or synthetic nicotine, which are intended to be placed between the lip and gum. Marketed as tobacco-free alternatives for nicotine delivery, nicotine pouches have emerged as a novel product in the nicotine market.[3] They come in various flavours like menthol, fruit, and tobacco, potentially attracting users away from traditional tobacco products.[4]

The global sale of nicotine pouches has risen from 292 million units in 2018,[5] to over 20 billion units in 2023,[6] with continued growth forecast.[7] These products accounted for approximately 0.2% of the global tobacco market in 2023;[6] nicotine pouches are included within the tobacco category, as some have nicotine derived from tobacco leaf. While the vast majority of global sales of nicotine pouches are in the United States (US), they are available in an increasing number of markets.[6]

One country in which there has been a rapid increase in nicotine pouch sales is Pakistan.[8] With 24 million tobacco users, Pakistan is considered a high tobacco burden country.[9] In addition to smoking (12.4%), smokeless tobacco use (7.7%) is also prevalent.[9] Tobacco advertising including point-of-sale advertising and product display, sales to minors, and smoking in public places are prohibited.[10] Additionally, cigarette packs are required to have a written and graphic health warning.[10] However, there is no prohibition on the sale of e-cigarettes or nicotine pouches.[11] Nicotine pouches were introduced in the country in 2019[5] and by 2022 Euromonitor International reported sales of over 400 million units, with British American Tobacco (BAT) having 100% of the market.[12] By the end of 2022, BAT announced that monthly sales of Velo, their flagship nicotine pouch brand, had reached 40 million units in Pakistan, making it the company's third-largest nicotine pouch market.[13] It is now the fourth-largest global market, with 695 million units sold in 2024 and the highest year-on-year growth of any country.[6] Recently, Pakistan Tobacco Company Limited (PTC), a BAT-owned subsidiary, announced its aim to export Velo to Japan which will potentially generate 100 million USD in revenue annually.[14] This expansion to the international market further highlights the exponentially growing nicotine product industry in Pakistan.

Pakistan is an important country for nicotine pouches given that smokeless tobacco has approximately 40% of the total tobacco market, being used by an estimated 10 million people.[15] The smokeless tobacco sold in Pakistan is highly carcinogenic and responsible for 7% of the disability-adjusted life years lost globally each year.[16] As such, nicotine pouches may replace a substantial proportion of the smokeless

tobacco market share. Tobacco industry journals suggest that this has happened within Sweden, another market where smokeless tobacco use is common, where sales of snus (similar to nicotine pouches but containing tobacco) are reported to have declined while demand for nicotine pouches has grown.[17] When considering their potential public health impact, use among naive nicotine users, particularly children and young people, also requires consideration. However, an important first step is understanding the availability of nicotine pouches in Pakistan at POS, the products available, their prices, and the presence of retail marketing.

For tobacco companies and other nicotine pouch manufacturers, Pakistan is an important test market for South Asia. Given the absence of research on nicotine pouches in Pakistan, a market with higher sales than anywhere else in Asia,[19] and limited evidence about the retail marketing of these products, we explored the availability of nicotine pouches in Pakistan and whether they are advertised at points-of-sale (POS).

Methods

Study design

To explore the availability and marketing of nicotine pouches at tobacco and/or nicotine pouches retail outlets, named hereafter as POS, we conducted a cross-sectional survey in August 2023 across all four provinces and the Federal Capital Territory of Islamabad in Pakistan.

Sampling strategy

We purposely selected nine districts, two from each province (one predominantly rural, the other predominantly urban) *plus* the Federal Capital Territory of Islamabad, also a district. Using proportional stratified random sampling, we selected 72 Enumeration Blocks (EBs), the smallest administrative unit consisting of 200–250 households, within these nine districts. The number of EBs selected in each district was proportional to the district's respective population. We aimed to recruit 720 POS, 10 per EB. In the absence of official POS registers, we used consecutive sampling as part of the field work. A POS was considered eligible if it sold any tobacco and/or nicotine pouches. These included general/departmental stores, petrol pump/gas station stores, paan (betel quid) shops, grocery stores, exclusive tobacco shops, discount shops, mobile vendors/carts, and/or stationary carts. Within each EB, every POS meeting the criteria for inclusion was selected until the required sample size was achieved. Due to one EB having only one eligible POS, the total number of eligible POS recruited was 711.

Data collection

From each POS in an EB, all unique brands of nicotine pouches and their variants were purchased. If the same brand was available in multiple flavours and/or strengths (of nicotine), all of these variants were purchased. But if a brand variant was purchased from a shop within an EB, it was not purchased again from the other shops in the same EB. This allowed us to gather a sample of nicotine pouches with maximum brand variation within each EB efficiently. However, if in the same EB, a

brand variant only differed in price from an already purchased one, it was also purchased. The information on the types of nicotine pouches, their brands, flavours, strengths (nicotine concentration), price and the presence (and type) of any health warning was recorded in a tablet-based application developed on Qualtrics. From a subsample of 382 (54%) POS, we also gathered data on POS advertising (e.g. posters, stickers etc.) including the presence of any display stands (dedicated/branded stands).

Each nicotine pouch purchased was stored separately in a zip-lock bag with a unique ID (EB code, shop ID and product ID), purchase price and date. Products from each EB were packed in a larger zip-lock and sent to the central office where information, e.g., brand variant, flavour, strength, price, weight, and health warning (if any) was recorded in the database.

Data analysis

The data were analysed using SPSS version 21. Descriptive statistics were computed to explore the availability and distribution of nicotine pouches across districts and to compare them across urban and rural EBs. Frequencies were calculated to find the most common nicotine pouches available on the market. The mean purchased price and range in price of available nicotine pouches were also calculated. The frequency of POS advertisements and their types were also recorded.

Results

Nicotine pouches were found being sold in all four provinces and eight out of nine districts in our sample (supplementary file 1-Figure 1a and 1b). However, these were available in 50% (36/72) EBs and in only 7.9% (56/711) POS across our sample. In these POS, we bought 182 nicotine pouches. Among these 182 pouches, Velo was the most common (n=156, 85.7%) brand, followed by Shiro (n=23, 12.6%) and Ubbs (n=3, 1.6%).

There were significant variations between districts; nicotine pouches were more widely available with more variety in predominantly urban districts (supplementary file 1-Figure 1a and 1b): Islamabad (n=28), Karachi (n=62), Quetta (n=28), and Rawalpindi (n=35) as compared to those predominantly rural: Badin (n=0), Dera Ismail Khan (n=8), Nasirabad (n=2), and Rajanpur (n=15), with one exception i.e. Peshawar (n=6). Other than Velo, which was available in all districts, Shiro was only available in Karachi and Ubbs only in Quetta.

Variations were also found at sub-district level (EBs). Compared to urban EBs where nicotine pouches were being sold in 68% (23/34) of cases, these were available in only 34% of rural EBs (n=13/38).

While there are regulations that prohibit tobacco advertising including point-of-sale advertising and product display in Pakistan,[10] but in our subsample of 382 POS, we still recorded 46 (12.3%) POS having branded display stands. Eighteen POS (4.7%) used other forms of advertisement e.g. posters, billboards, panaflex and stickers.

Among individual brands of nicotine pouches, Velo was available in six different flavours and three different strengths (6mg, 10mg, and 14mg of nicotine); Shiro was available in three different flavours and two different strengths (8mg and 14mg of nicotine) and Ubbs was available in three different flavours and two different strengths (6mg and 11mg of nicotine).

The average cost for all nicotine pouches purchased was 133.6 Pakistani Rupees (PKR) (SD 18.9, range 100-190 PKR) or 0.44 USD, 36% cheaper than the average price of a cigarette pack (209 PKR or 0.68 USD). Velo was slightly more expensive at 139 PKR (SD 14.9, range 100-190 PKR) or 0.45 USD than Ubbs (130 PKR or 0.43 USD); Shiro was the least expensive at 100 PKR or 0.33 USD.

Almost all the nicotine pouches had the same written health warning, i.e. "*may cause an allergic reaction*". It was written in English on all purchased pouches; graphic health warnings were absent. This was similar across all districts, and no difference was found in urban and rural areas.

All nicotine pouches collected had standard packaging (shape and size); including the brand name, ingredients, weight, words and/or images suggesting flavour, text or image suggesting strengths and an age limit of above 18 mentioned. All Velo pouches indicated that they were manufactured in Pakistan by BAT.

Discussion

Globally, there has been a lack of attention to, and vigilance of, nicotine pouches.[19] We found nicotine pouches being sold in a range of flavours and strengths at affordable prices in all four provinces of Pakistan. Velo, a leading brand of nicotine pouches, was the only product available in the majority (85%) of stores. Velo was also the only product advertised at POS.

We identified a very small number of nicotine pouch brands in Pakistan, with one of these (Ubbs) only found in Quetta, near the Afghan border. Velo dominated the market, which is consistent with reports that BAT had 100% of the market share in 2022.[19] While Velo is the market leader for nicotine pouches outside the US,[20] Zyn (a Philip Morris International brand) is the global market leader.[21] Zyn has entered the Pakistani market since we completed our data collection. As some countries have witnessed a rapid proliferation of nicotine pouch brands,[22] continued surveillance is necessary to monitor market changes in Pakistan. This includes the strength of products available. While all products we identified contained 14mg of nicotine per pouch or less, increasingly high-strength brands, with up to 97.5mg per pouch, are available in other markets.[22]

We acknowledge that the regulations governing POS advertising for nicotine products do not yet exist in Pakistan, we still recorded the presence of branded display stands and advertising at POS. While we observed display stands for both Velo and Shiro, Velo was the only brand advertised. A limitation of our study is that we focused exclusively on availability and marketing at the POS. Despite our intention, we are unable to offer any insight into availability online and marketing in non-retail channels. Several studies, mostly in the US, have explored marketing in non-retail channels,

e.g., between 2019 and 2021, three nicotine pouches (Zyn, On! and Velo) were found to be most commonly marketed on radio and television, and to a lesser extent online, on mobile devices and in print.[18] Additionally, a content analysis of the POS advertisements was not performed. Therefore, we did not capture the extent and variability of marketing strategies used for nicotine pouches, particularly in ways that might appeal to adolescents. Studies in the US have also reported on advertising content, including a focus on novelty, modernity, and use in different contexts. For instance, Velo advertisements portrayed use in the workplace, at bars or clubs, during leisure activities, transportation, sports, cooking or with alcohol.[23] For Velo and ZYN advertisements that included people, at least two-fifths, featured those most identifiable as young adults.[23] Research in Pakistan exploring marketing of these products in non-retail channels, and content analysis of advertising, would be of value.

Policymakers in Pakistan should make a note of the widespread availability of nicotine pouches and their easy access to youth. While this study offers insights into the availability, distribution, packaging, and sales practices of nicotine pouches, these products remain unregulated in Pakistan. Nicotine pouches have been proposed as potentially less harmful alternatives to traditional tobacco products. They may expose users to fewer harmful chemicals, potentially reducing the risk of cancer and other health issues.[24] However, the harm reduction concept remains debated, as some experts worry these products could perpetuate nicotine addiction or attract non-users, especially youth.[25] The U.S. Food and Drug Administration (FDA) has authorized certain nicotine pouches, acknowledging their reduced harm compared to traditional tobacco but stressing they are not risk-free.[26] Research on their impact on oral health is limited, with some studies suggesting potential mucosal changes but no definitive link to oral cancer. Further long-term studies are needed to fully understand their health effects.[27]

Therefore, establishing a regulatory framework is imperative to enforce health warnings in local languages, restrictions on sales to minors, and bans on advertising and promotion, including at points of sale and through online channels. Such regulations are essential to prevent these products from reaching youth. As there remains a paucity of research on nicotine pouches, particularly in Asia,[28] continued monitoring of how these products are marketed at the POS, and indeed on other channels, is needed, as is research exploring youth awareness, perceptions and use of these products and any impact on adult tobacco use behaviours.

Implications

We observed widespread availability of Velo and the growing nicotine pouch market in Pakistan, underscoring the urgent need for regulation. These products appeal to youth with diverse flavors and affordability, raising concerns about experimentation leading to addiction. Policymakers must prioritize regulating manufacturing, sales, and marketing to limit youth access. As a manufacturer and exporter of nicotine pouches, Pakistan could significantly impact public health more widely. This was exemplified when in the guise of boosting country's economy, Pakistan Tobacco Company asked the government for permission to manufacture and export 10-cigarette packs to Sudan.[29] Any new laws to regulate the manufacturing of nicotine pouches in Pakistan should apply to exports too. Limited research in Asia necessitates longitudinal studies to explore the oral health impact of using these

products**.** Continued monitoring of promotions at points of sale, along with studies on youth perceptions, usage patterns, and influence on tobacco uptake, is critical for effective policy development.

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Declaration of interest
All authors declare no conflict of interest.

Author contributions
All authors contributed to the conceptualization of the study and finalizing the study tool. MF supervised data collection, conducted analysis and drafted the manuscript. CM contributed to the introduction and discussion. SAK and ZK reviewed the manuscript. SA managed data based and supported MF in analysis. AK led the project implementation and contributed to the introduction and methodology. KS reviewed the manuscript and finalized the discussion. All authors have reviewed the manuscript and approved it for submission.

Data availability
Data and corresponding codebook can be shared upon request.

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Figure 1a and 1b: The availability of nicotine pouches across nine districts of Pakistan

Figure 1a: The figure shows map of Pakistan with respect to number of points-of-sale (POS) selling nicotine pouches across nine study districts. The darker shade shows districts with highest number of POS.

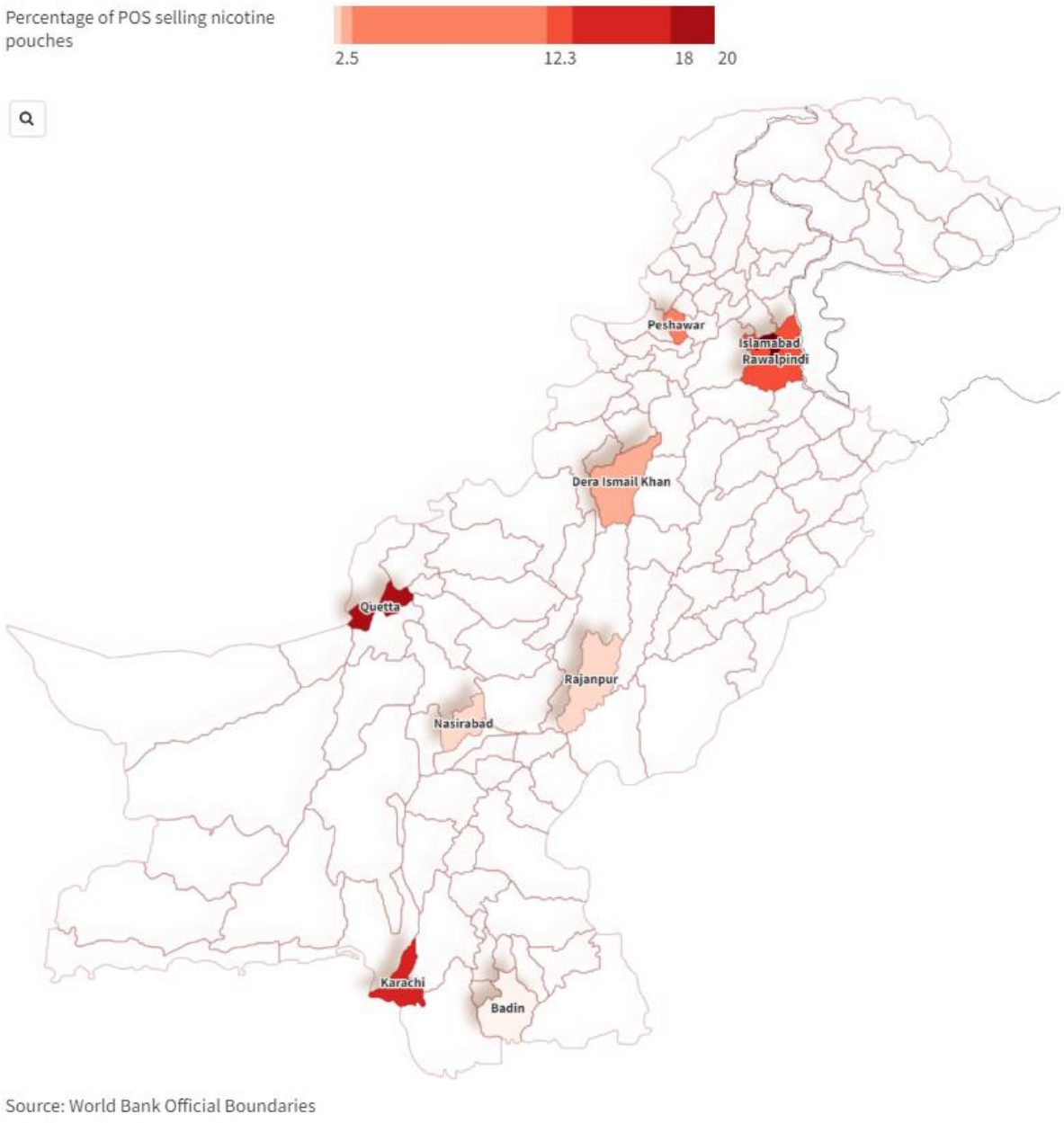
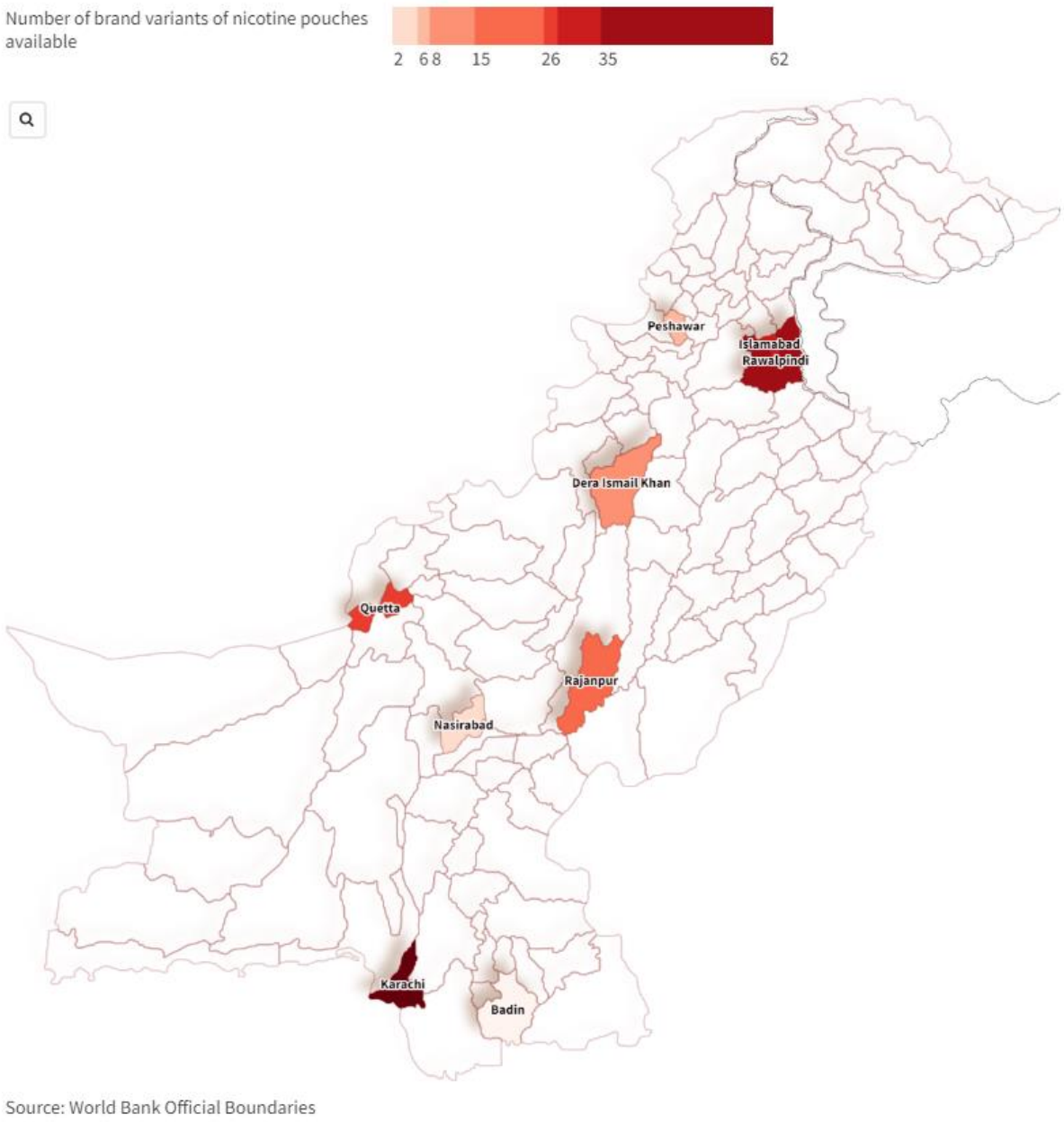
Figure 1b: The figure shows map of Pakistan with respect to availability of nicotine pouches across nine study districts. The darker shade shows districts with highest number of pouches availabile and vice versa.