

# FOUNDATION FOR A **Smoke-free world**

Rapid Assessment of Smoking and Vaping in Pakistan during COVID-19 Lockdown



# A Project of ARI



# **Table of Contents**

EXECUTIVE SUMMARY	
1 INTRODUCTION	7
2 DATA AND METHODOLOGY	9
2.1 DATA	9
2.2 SAMPLING METHODOLOGY	9
2.2.1 SAMPLE SIZE AND ITS ALLOCATION	9
2.2.2 SAMPLE SELECTION PROCEDURE	10
2.3 DATA ANALYSIS	10
3 RESULTS AND DISCUSSIONS	10
3.1 RESPONDENT CHARACTERISTICS	10
3.2 AVAILABILITY AND ACCESSIBILITY OF VAPING AND SMOKING PRO	ODUCTS 11
3.3 UTILIZATION OF VAPING AND SMOKING PRODUCTS DURING COVI	D-19 13
3.4 VAPING AND SMOKING PERCEPTION DURING COVID-19	16
4 REFERENCES	19

# List of Tables

Table 1:	Sample Size	2	9
----------	-------------	---	---

# List of Figures

Figure 1: Respondents Age	11
Figure 2: Respondents Education	11
Figure 3: Availability of Vaping and Smoking products	12
Figure 4: Accessibility of Vaping and Smoking Products	12
Figure 5: Consumption behavior of vaping during lockdown	13
Figure 6: Smokers considering switching to vaping to reduce COVID-19 risk?	14
Figure 8: Stocking of vaping and smoking products during lockdown	14
Figure 9: Buying vaping and Smoking products during lockdown	15
Figure 10: Vaping and Smoking at home before Covid-19	15
Figure 11: Vaping and Smoking at home during Covid-19	16
Figure 12: Amount of vaping and Smoking during Covid-19	16
Figure 13: Vaping and Smoking Risk during Covid-19	17
Figure 14: How near you are in quitting vaping and Smoking because of Covid-19.	17
Figure 15: Money for buying vaping and Smoking products	18
Figure 16: Reason for not spending money on vaping or Smoking	18

# **Executive Summary**

This rapid assessment survey has been conducted by Pakistan Alliance for Nicotine and Tobacco Harm Reduction (PANTHR), a project of Alternative Research Initiative, on the impact of Covid-19 on combustible smoking and vaping in 11 districts. Pakistan's This rapid perception study assessed availability and accessibility of vaping and smoking during the lockdown and the impact of Covid-19 on them. PANTHR collected primary qualitative data from 120 respondents in 11 districts – Islamabad, Rawalpindi, Lahore, Faisalabad, Sialkot, Multan, Peshawar, Abbottabad, Quetta, Karachi and Hyderabad - by conducting interviews telephonically. With the consent of the have respondents, interviews been recorded. All study respondents, smokers and vapers, are male, and mostly between 18-35 years old. There are significantly more smokers than vapers in the age bracket 35 years and above.

Availability of vaping products remained restricted during the lockdown. A little less than one-third of the vapers (31.7%) said vaping products are available to them during the shutdown. However, combustible smokers did not face any problems in this regard. Smokers (76.7%) said cigarettes are easily available to them during the shutdown. Most of the vaping

outlets in Pakistan are in cities – mainly in the upscale localities of Karachi, Lahore, Islamabad and Rawalpindi. Additionally Covid-19 cases have been reported in Pakistan's major cities, leading to lockdown of markets since late March. Compared to 100 odd vaping outlets in combustible cigarettes are Pakistan, available on millions of shops across the country. Along the easy availability, combustible cigarettes are much cheaper than e-cigarettes and their associated products. Vapers (81.7%) and smokers (80%) continue to vape or smoke during lockdown. However, 11.7% vapers said they partially switched to smoking. On the other hand, one-fifth of the combustible smokers in the 11 cities said they thought about shifting to vaping to reduce the risk of getting Covid-19.

Both vapers (76.7%) and smokers (73.3%) did not stock vaping and smoking products during the shutdown. Half of the vapers (51.7%) said they have been able to buy vaping products during the lockdown. On the other hand, 91.7% smokers said they have been buying cigarettes during the lockdown. Most vapers (60%) and smokers (66.7%) did not vape or smoke at home before the Covid-19. As most of the smokers and vapers in Pakistan are young and male, they would not vape or smoke at their homes or in front of their elders. During the lockdown, more vapers (71.7%) and smokers (70%) decided not to vape or smoke at home.

Respondents reported decrease in their vaping and smoking during the lockdown. Nearly two-thirds of vapers (63.3%) reported decrease in their vaping. However, 41.7% smokers said they are smoking less. Smokers (41.7%) believe smoking increased the risk of getting Covid-19. However, only one-third vapers (33.3%) think they are at risk because of vaping.

Smokers (66.7%) see no change in their smoking habit because of Covid-19. Similarly, a little more than half of the vapers (53.3%) have no plan to rethink vaping. However 12 smokers said they were more near to ready to quit smoking because of Covid-19. Similarly, 23.3% vapers were thinking about giving up vaping.

As most of the vapers in Pakistan come from middle class and rich families, currently there seems to be no problem in buying vaping products. Vapers (71.7%) said they have money to buy vaping products during the lockdown. However, 28.3% said they don't have money to spend on vaping products, which are expensive. Smokers (80%) said they have monetary resources during the lockdown to buy cigarettes.

# **1** Introduction

More than 23.9 million people use tobacco in Pakistan. This makes the country to have one of the largest smoking populations in the world, with grave health consequences, especially for the poor and the marginalized. The probability of dying between age 30 and exact 70 from any of cardiovascular diseases, cancer, diabetes and chronic respiratory diseases are higher in Pakistan than in India, Bangladesh and Sri Lanka. The rate of quitting smoking in Pakistan is one of the lowest in the world -2.6%. On the other hand, the use of Safer Nicotine Delivery Systems (SNDS) is a nascent phenomenon in Pakistan. The people and business operators of SNDS keep a low key to avoid regulations and/or policies that could affect their business concerns. There are no clear or defined regulations for the use of SNDS including imports, manufacturing or product contents. Predominantly e-cigarettes are the main SNDS used in Pakistan, mainly by the users from the middle, upper middle and the upscale urban localities. However, a few also use Juul, IQOS, and SNUS. In a policy vacuum, e-cigarettes are legally imported from China. In 2017-18, the finance minister told the National Assembly that ecigarettes in Pakistan were "not properly classified and subject to only 3%" customs duty, adding that "keeping in view the harmful effect on health, it is proposed that electric cigarettes may be properly classified with 20% customs duty."

With no exact estimates about the number of vapers in Pakistan, it is estimated their number may be around 30,000-35000. The number of vaping outlets in Pakistan is steadily increasing. Today the country has more than 100 outlets, almost all of them in city districts such as Karachi, Lahore, Islamabad, Rawalpindi, Peshawar, etc. The prices of vaping products are higher than the conventional cigarettes. The most expensive duty paid cigarette packet in Pakistan costs a little more than a dollar while the price of vaping kit starts from 24 dollars and goes up to 162 dollars. This is mainly because vaping products are imported. The kits are imported from China and the flavors from the US, UK and Malaysia.

According to WHO, when you breathe in infected droplets, touch a contaminated surface, the COVID-19 virus reaches the body when you touch your eyes, nose or mouth. Virus particles insert their genetic material and develop fever, cough and pain in the throat. In addition, in severe conditions, the virus reaches the lungs and causes inflammation and difficulty in breathing, and patients need a ventilator. Studies indicate smokers are twice likely to contract influenza than non-smokers. Smokers have also been shown to have higher mortality in the previous epidemic of infectious viruses (Park, Jung & Kim, 2018; Arcavi, & Benowitz, 2004). As smoking affects the immune system, it makes smokers more vulnerable to infectious diseases (Zhou, Chen, & Peng, 2016). According to the recent study on the association of COVID -19 and smoking by using systematic review of the evidences from the previous recent five study with limitation of data, found that it can influence the development of the disease; smoking is most likely associated with COVID-19 adverse outcomes (Vardavas, & Nikitara, 2020).

This rapid assessment has been conducted on the impact of Covid-19 lockdown on combustible smoking and vaping in Pakistan's 11 districts.

The specific study objectives are;

- Assess availability, accessibility and use of vaping and smoking during lockdown;
- Evaluate the trends of use of vaping and smoking during the pandemic;
- Assess the perception of risk and awareness of vaping and smoking during the COVID-19 pandemic.

# 2 Data and Methodology

#### 2.1 Data

For this study, PANTHR has collected primary qualitative data from 120 KIIs (60 vapers and 60 smokers) in 11 districts – Islamabad, Rawalpindi, Lahore, Faisalabad, Sialkot, Multan, Peshawar, Abbottabad, Quetta, Karachi and Hyderabad. Semi-structured questionnaire was prepared in English for collecting reliable and quick response data. The questionnaire was translated into Urdu for the understanding of enumerators. For verifying the questionnaire's consistency and flow of questions' reliability, it was re-translated from Urdu to English. The questionnaires focus on availability, access and consumption behavior of vaping and smoking during the COVID-19 lockdown in Pakistan.

#### 2.2 Sampling Methodology

#### 2.2.1 Sample size and its allocation

Qualitative research needs smaller sample size for measuring and exploring objectives and scope compared to the quantitative research. Qualitative sample sizes have to be sufficiently large to obtain enough data to adequately depict the objective, scope and address the research questions. In other words, qualitative research is the attainment of saturation at the optimum level. For the grounded theory, Morse (1998) proposed 30 - 50 interviews, while Creswell (1998) suggested 20 - 30. For this study, we interviewed 120 KIs to obtain enough saturation for the smoking and vaping responses. Additionally, KIIs were further divided into across 11 districts of Pakistan by using population proportionate to potential response (Table 1).

Province	District	Sample for Vapers	Sample for Smokers
ICT	Islamabad	6	6
Punjab	Rawalpindi	б	6
	Sialkot	4	4
	Lahore	10	10
	Faisalabad	4	4
	Multan	4	4

#### Table 1: Sample Size

Sindh	Hyderabad	4	4
	Karachi	10	10
KP	Peshawar	4	4
	Abbottabad		4
Balochistan	Quetta	4	4
Total		60	60

#### 2.2.2 Sample selection

The study has used predefined potential respondents' data from the previous study on Knowledge, Attitude and Practice (KAP) on vapers, conducted by ARI in December 2019 in 11 districts of Pakistan. Further, this study has used snowball sampling technique to identify combustible smokers in 11 districts of Pakistan. Interviews were conducted on telephone. With the consent of the respondents, the interviews were recorded.

#### 2.3 Data Analysis

This study presents a qualitative descriptive data analysis. In this regard, the grounded theory is the most common technique to develop theory on the behalf of grounded data collected (Corbin & Strauss, 1990; Lawn, Pols, & Barber, 2002). Furthermore, descriptive analysis has been employed to assess rapidly nicotine and combustible smoking availability and consumption in Pakistan during COVID-19 lockdown.

# **3 Results and Discussions**

### 3.1 Respondent Characteristics

Most of the study respondents, smokers and vapers, are young and male. Most are 18-35 years old. However, in the age bracket 35 years and above, there are significantly more combustible smokers than vapers. Combustible smoking and vaping seem to be prevalent among young adults. But there is a huge difference in the number of smokers and vapers in Pakistan. According to GATS report (2014), 23.9 million use various products of tobacco in Pakistan (smoke and smokeless). Of them, 15.6 million adults are smokers while 3.7 million are smoke

shisha in Pakistan. On the other hand, no exact figures are available on the number of vapers in Pakistan. Some estimates put the number vapers between 30000 and 35000.



Figure 1: Respondents Age

The prevalence of combustible smoking is across all educational levels compared to combustible smoking. Because of its prices and fewer outlets in Pakistan, vaping is limited to middle calls and the rick.



Figure 2: Respondents Education

# 3.2 Availability and Accessibility of Vaping and Smoking products

Availability of vaping products remained restricted during the lockdown. A little less than onethird of the vapers (31.7%) said vaping products are available to them during the shutdown. However, combustible smokers did not face any problems in this regard. Smokers (76.7%) said cigarettes are easily available to them during the shutdown. Most of the vaping outlets in Pakistan are in cities – mainly in the upscale localities of Karachi, Lahore, Islamabad and Rawalpindi. Additionally Covid-19 cases have been reported in Pakistan's major cities, leading to lockdown of markets since late March. Compared to 100 odd vaping outlets in Pakistan, combustible cigarettes are available on millions of shops across the country. Along the easy availability, combustible cigarettes are much cheaper than e-cigarettes and their associated products.



Figure 3: Availability of Vaping and Smoking products

Unavailability of vaping products during the lockdown also hampered access to them during the shutdown. Only 41.7% vapers in the 11 districts said they have access to vaping products as they restricted themselves to their homes. Though vaping outlets in Pakistan make available their products online, it seems the lockdown also affected the online delivery of vaping products. Smokers however have not faced any such problem during the shutdown.



Figure 4: Accessibility of Vaping and Smoking Products

# 3.3 Vaping and Smoking during Covid-19

Predominantly vapers (81.7%) in the 11 districts have continued to vape despite the issues of availability and accessibility. However, 11.7% vapers partially switched back to combustible smoking and 3.3% partially quit vaping. This may be due to the easy availability of combustible cigarettes during the lockdown.



Figure 5: Consumption behavior of vaping during lockdown

WHO says "smokers are likely to be more vulnerable to COVID-19 as the act of smoking means that fingers (and possibly contaminated cigarettes) are in contact with lips which increases the possibility of transmission of virus from hand to mouth. Smokers may also already have lung disease or reduced lung capacity which would greatly increase risk of serious illness." Additionally there have been constant media reports on linking Covid-19 with smoking. This, it seems, has forced one-fifth (20%) of the smokers in Pakistan's urban centers to think about switching to vaping to reduce the risk of coronavirus. However, 80% smokers continue to smoke without any thought to giving up smoking or switching to vaping.

<sup>&</sup>lt;sup>1</sup> WHO. Q&A on smoking and Covid-19, [https://www.who.int/news-room/q-a-detail/q-a-on-smoking-and-covid-19]



Figure 6: Smokers considering switching to vaping to reduce COVID-19 risk?

Both vapers (76.7%) and smokers (73.3%) did not stock vaping and smoking products during the shutdown. As Pakistan did not announce a blanket lockdown, respondents did not worry about the availability of vaping and smoking products. The lockdown was imposed in phases, first by the Sindh government and then followed by the Punjab, Khyber Pakhtunkhwa and Balochistan governments.



Figure 7: Stocking of vaping and smoking products during lockdown

Half of the vapers (51.7%) said they have been able to buy vaping products during the lockdown. On the other hand, 91.7% smokers said they have been buying cigarettes during the lockdown. Less than 10% smokers faced in any difficulty in buying cigarettes compared to 48% vapers who were unable to buy e-cigarettes and accessories.



Figure 8: Buying vaping and Smoking products during lockdown

Most vapers (60%) and smokers (66.7%) did not vape or smoke at home before the Covid-19. As most of the smokers and vapers in Pakistan are young and male, they would not vape or smoke at their homes or in front of their elders.



Figure 9: Vaping and Smoking at home before Covid-19

During the lockdown, more vapers (71.7%) and smokers (70%) decided not to vape or smoke at home. This may due to unavailability of vaping products and the culture of not vaping or smoking at home or in front of families.



Figure 10: Vaping and Smoking at home during Covid-19

Respondents reported decrease in their vaping and smoking during the lockdown. Nearly twothirds of vapers (63.3%) reported a decrease in their vaping. However, 41.7% smokers said they are smoking less during the lockdown. Smokers (40%) did not see any change in their smoking habit. Nearly one-fifth respondents (18.3%) said they are smoking more during the lockdown. Only one-fourth vapers did not see any change in their vaping while 11.7% said they have vaped more during the lockdown.



Figure 11: Amount of vaping and Smoking during Covid-19

# 3.4 Vaping and Smoking Perception during Covid-19

Smokers (41.7%) believe smoking increased the risk of getting Covid-19. Only one-third vapers (33.3%) think they are at risk of getting the virus because of vaping. Most vapers (58.3%) did not believe vaping increased the risk of getting Covid-19. Similarly, 40 smokers said they were not risk of getting the virus because of smoking. However, more smokers

(18.3%) than vapers (8.3%) did not know about the risk of getting the virus because of smoking or vaping.



Figure 12: Vaping and Smoking Risk during Covid-19

Smokers (66.7%) see no change in their smoking habit because of Covid-19. Similarly, a little more than half of the vapers (53.3%) have no plan to rethink vaping. Smokers (12%) said they were more near to ready to quit smoking because of Covid-19. Similarly, 23.3% vapers were thinking about giving up vaping. However 23.3% vapers and 21.3% smokers were less near to reducing vaping and smoking because of Covid-19.



Figure 13: How near you are in quitting vaping and Smoking because of Covid-19

As most of the vapers in Pakistan come from middle class and rich families, currently there seems to be no problem in buying vaping products. Vapers (71.7%) said they have money to buy vaping products during the lockdown. However, 28.3% said they don't have money to spend on vaping products, which are expensive. Smokers (80%) said they have monetary

resources during the lockdown to buy cigarettes. Easily and readily available, the prices of cigarettes in Pakistan are among the lowest in the world.



Figure 14: Money for buying vaping and Smoking products

Vapers and smokers who reported no money to spend on vaping products seem to be struggling with the economic fallout of the pandemic. Nearly two-thirds of vapers reported not much income to spend on the vaping products. While the rest (35.5) said because of the lockdown they are not spending money on vaping. For 91.7% smokers lack of income is the main reason for not spending money on buying cigarettes.



Figure 15: Reason for not spending money on vaping or Smoking

## **4** References

- Arcavi L, Benowitz NL. Cigarette smoking and infection. Arch Intern Med. 2004;164(20):2206-2216. doi:10.1001/archinte.164.20.2206.
- Corbin, J., & Strauss, A. (1990). Grounded Theory Research: Procedures, Canons and Evaluative Criteria. *Qualitative Sociology*, *13*(1).
- Creswell, J. W. (1998). *Qualitative Inquiry and Research design: Choosing among Five Traditions*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Lawn, S. J., Pols, R. G., & Barber, J. G. (2002). Smoking and quitting: a qualitative study with community-living psychiatric clients. *Social Science and Medicine*, *54*, 93–104.
- Morse, J. M. (1998). Designing funded qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 220–235). Retrieved from <u>http://fmx.sagepub.com/cgi/doi/10.1177/1525822X9901100103%0Apapers3://publicatio</u> <u>n/doi/10.1177/1525822X9901100103</u>
- Park JE, Jung S, Kim A. MERS transmission and risk factors: a systematic review. BMC Public Health. 2018;18(1):574. doi:10.1186/s12889-018-5484-8.
- Vardavas, C. I., Nikitara, K. (2020). COVID-19 and smoking: A systematic review of the evidence. Tobacco Induced Diseases, 18(March), 20. https://doi.org/10.18332/tid/119324
- Zhou Z, Chen P, Peng H. Are healthy smokers really healthy? Tob Induc Dis. 2016;14(November). doi:10.1186/s12971-016-0101-z.