### tepav Health Economics

# TEPAV MONITORING BULLETIN ON TOBACCO CONTROL POLICIES

' NEWSLETTER

September 2022 | Issue:1

## TEPAV Monitoring Newsletter on Tobacco Control Policies, September 2022 <sup>1</sup>

This newsletter has been prepared by TEPAV with the purpose of regularly sharing data and information on tobacco use in Turkey. This first issue of the Monitoring Newsletter features a comparative analysis of survey results conducted by TEPAV in February 2022 and Turkey results of the Global Adult Tobacco Survey (GATS).

The exhaustive analysis on the consumption of tobacco products in Turkey is based upon the microdata obtained through nationally representative surveys. Compared to many other data sources, national-level surveys that monitor tobacco use in various countries are carried out under varying sample conditions in different years, and therefore, there exists no current standardization among the countries. In this newsletter, the results of the survey conducted by TEPAV are used to analyze the tobacco use trends in Turkey in more detail. The survey was conducted as computer-aided telephone interviews with 2000 respondents and in 12 cities that represent the 12 NUTS-1 regionse of Turkey in February 2022, namely (İstanbul (TR1), Balıkesir (TR2), İzmir (TR3), Bursa (TR4), Ankara (TR5), Antalya (TR6), Kayseri (TR7), Samsun (TR8), Trabzon (TR9), Erzurum (TRA), Malatya (TRB), Gaziantep (TRC)).

TEPAV's research is important and meaningful, since the most recent official data on tobacco use in Turkey are from TURKSTAT's Turkey Health Survey (2019)<sup>2</sup> and Global Adult Tobacco Survey (2016) and there is no official survey available since then. Considering the advantages and disadvantages of the currently available data sources, it was decided to include the GATS micro datasets in the comparison for detailed statistics on tobacco use prevalence, age at initiation, cessation trends in different demographic groups. The results of the survey that has been conducted to assess tobacco use in Turkey will be evaluated and discussed, in comparison to GATS 2012 and 2016 results.

#### 1. Tobacco Use Prevalence and General Information

Respondents are categorized into four groups based on their tobacco use, namely: "daily smokers", "occasional smokers", "past smokers" and "non-smokers". The share of those who use tobacco

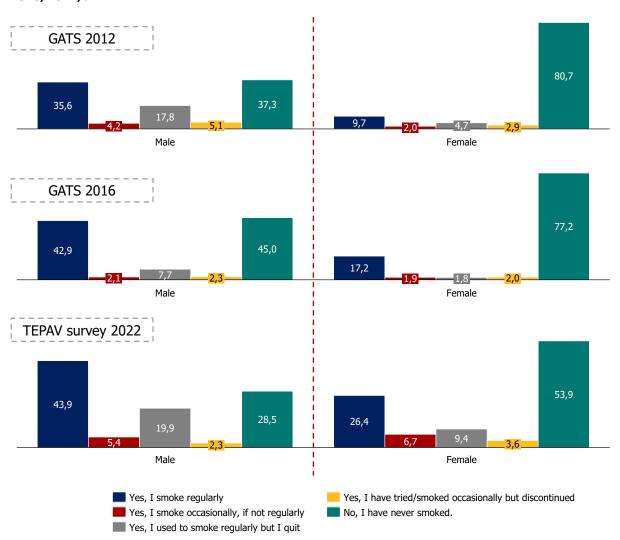
<sup>&</sup>lt;sup>1</sup> Disclosure: This study was funded with a grant from the Foundation for a Smoke-Free World, Inc. ("FSFW"), a US nonprofit 501(c)(3) private foundation. FSFW had no role in the planning or execution of this study, data analysis, or publication of results.

 $<sup>^2</sup>$  Turkey Health Survey (2019) was carried out with households within the borders of the Republic of Turkey and was prepared in order to obtain information on the health indicator, which is an important development indicator, and to close the knowledge gap in the current structure.

products occasionally but not every day is quite low, and it is evident that the vast majority of users actually use tobacco every day.

**2022 TEPAV** data indicates that the ratio of never smokers, both in women and men, is declining rapidly. In contrast, the proportion of those who have used tobacco regularly and quit in the past has increased steadily from 2012 to 2022 for both men and women. The ratio of never smokers among men has fallen from 37.3 percent in 2012 to 28.5 percent in 2022, while among women it dropped from 80.7 percent to 53.9, respectively. The ratio of past smokers, on the other hand, has increased among men from 17.8 percent in 2012 up to 19.9 percent in 2022, and among women, from 4.7 percent up to 9.4 percent, respectively.

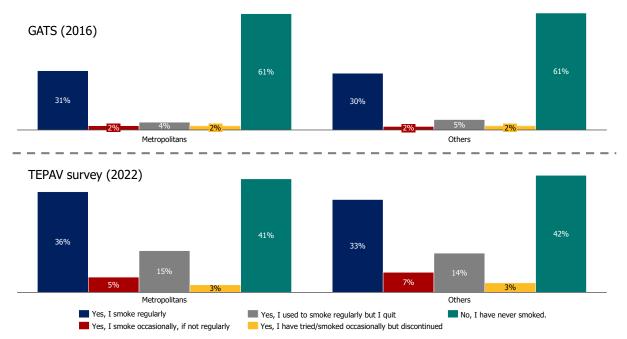
Figure 1. The percentages of the responses to the question "Do you or did you smoke?" in 2012, 2016, 2022, %



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February 2022)

It is observed that the share of regular smokers in metropolitan areas is somewhat higher, compared to other provinces. Comparing the aggregated data for Ankara, Izmir, and Istanbul in 2022 with the data for the other nine cities (Antalya, Balıkesir, Bursa, Gaziantep, Kayseri, Samsun, Trabzon, Erzurum, and Malatya), it is observed that the share of regular smokers is 3 percentage points higher in the first group. When compared with the GATS survey in 2016, the difference between metropolitan areas and other cities has increased albeit limitedly in the intervening time period.

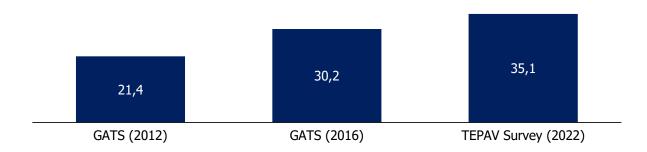
Figure 2. The ratio of the responses to the question "Do you or did you smoke" in metropolitans\*, 2016, 2022, %



Source: Global Adult Tobacco Survey (2016), TEPAV survey (February 2022)

The findings of the February 2022 survey of TEPAV show that 35.1 percent of adults are daily smokers in Turkey. According to GATS data, the percentage of smokers aged 15 and older in Turkey was 21.4 in 2012 and 30.2 in 2016 yet this ratio increased up to 35.1 percent in 2022 according to TEPAV data. Compared with the GATS data in the previous years, the increase in the prevalence of daily smoking is remarkable. While this figure was 21.4 percent in the GATS survey in 2012, it reached up to 30.2 percent in 2016, and to 35.1 percent in 2022.

Figure 3. The share of daily smokers, 2012, 2016, 2022, %



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February 2022)

<sup>\*</sup>Metropolitans aggregated as Istanbul, Ankara, and Izmir.

Based upon an analysis by gender, it is observed that the share of women among smokers has increased significantly over time. The share of women among smokers was estimated as 24.6 percent in the GATS survey 2012, 28 percent in the GATS survey 2016, and 37.6 percent in TEPAV Survey February 2022.

75,4

72,0

62,4

37,6

GATS (2012)

GATS (2016)

TEPAV Survey (2022)

Male

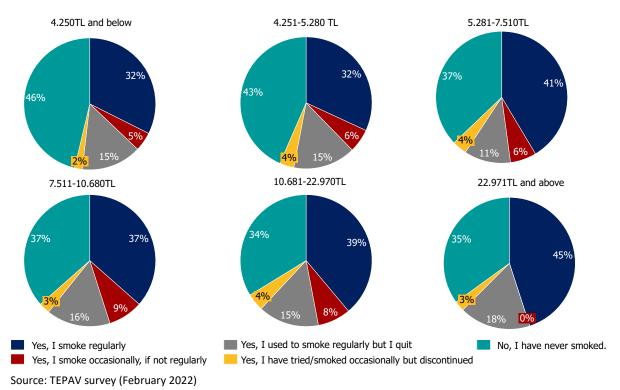
Female

Figure 4. Distribution of smokers by gender, 2012, 2016, 2022, %

Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February 2022)

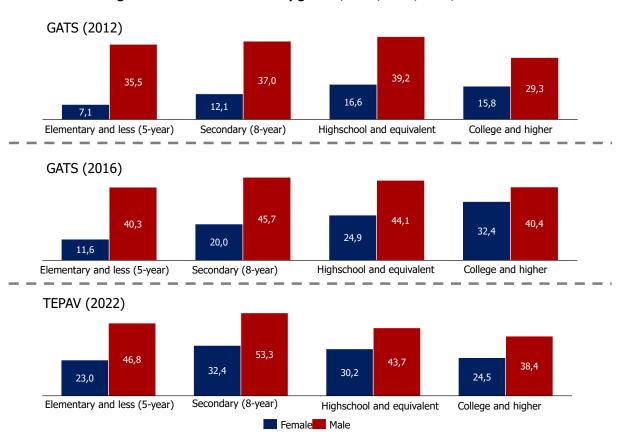
As the household income increases, the prevalence of smoking increases as well. Assessing the responses to the question "do you or did you smoke?" by the household income level, it is observed that the share of those who respond as "no, I have not" decreases and "yes, I smoke regularly" increases as the income level increases. However, the share of former smokers does not change substantially with income level.

Figure 5. Distribution of the responses to the question "Do you or did you smoke" by household income level, 2022, %



Considering tobacco use in different education groups, it is striking that the rate of smoking increases with the level of education. TEPAV February 2022 survey reveals that the group with the highest rate of tobacco use is eight-year primary school graduates, both for men and women. Accordingly, 23 percent of primary school graduates are smokers. Nevertheless, the smoking rate among women who have at least a high school degree has shown an increase since 2012 and maintained its high level in recent years. Among men, the correlation between smoking and the level of education appears to be weaker, and as the level of education increases the rate of tobacco use somewhat decreases.

Figure 6. Distribution of the responses as "Yes, I smoke regularly" to the question "do you or did you smoke?" according to the level of education by gender, 2012, 2016, 2022, %



Source: Global Adult Tobacco Survey (2016), TEPAV survey (February 2022)

Among daily smokers, an increase is observed in the share of those who smoke the first cigarette of the day within 5 minutes of waking up. The time of the first cigarette after waking up is deemed as an indicator of nicotine dependence level. While the share of smokers who smoke their first cigarette within 5 minutes after waking up was 15 percent in the 2012 GATS survey, , it increased by 11 points in 10 years, reaching up to 26 percent. The high and increasing level of addiction narrows the scope of smoking cessation policies implemented in Turkey.

+73% 35,6 34,8 32,3 26,7 26,4 26,0 26,0 21,9 21,3 17,2 16,0 15,0 KYTA (2012) KYTA (2016) TEPAV anketi (2022) Within 6-30 minutes Within 31-60 minutes After 60 minutes minimum Within 5 minutes

Figure 7. The time elapsed to smoke the first cigarette after waking up (2012, 2016, 2022), %

No downward trend is visible in the prevalence of tobacco use; moreover, the age they start smoking has gone down. According to the GATS 2012 and 2016 findings, 64.6 and 68.7 percent of smokers started to smoke before the age of 18, respectively. TEPAV's 2022 survey indicates that this share fell below 57 percent, and the age to start smoking has shifted to 19-24 and 25-34 age ranges, in other words to the time after high school.

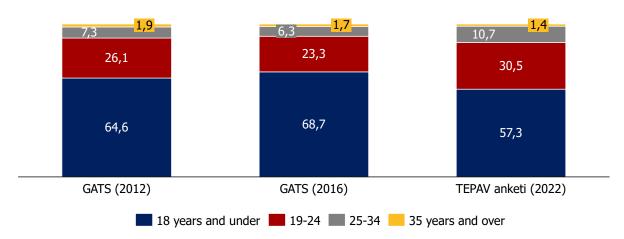


Figure 8. The age to start smoking, 2012, 2016, 2022, %

Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February 2022)

#### 2. Quitting Tobacco Use

No significant difference has been observed among the sexes in the willingness to quit smoking. The responses to the question "Do you want to quit smoking now?" were 50.8 percent "yes" for both sexes, 49.1 percent in women, and 52 percent in men.

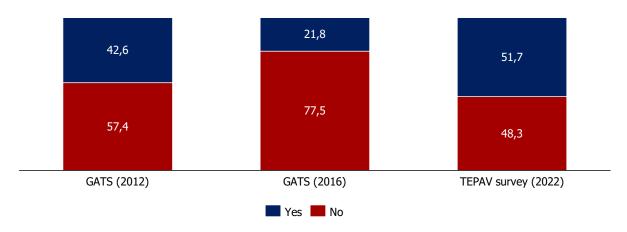
49,2 50,8 49,1 50,9 52,0 48,0 No Yes Female Male

Figure 9. Responses to the question "Do you want to quit smoking now?", 2022, %

Source: TEPAV survey (February 2022)

There has been an increase in the share of smokers who have tried to quit smoking in the last 12 months. When compared with the findings of GATS 2012 (42.6 percent) and 2016 (21.8 percent), this figure was estimated as 51.7 percent in the February 2022 TEPAV survey, which is higher than those in the previous surveys.

Figure 10. Responses to the question "Did you try to quit smoking in the last 12 months?", 2012, 2016, 2022, %



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February 2022)

The main motivation for wanting to quit smoking is health issues/desire to be healthier. Considering the responses to the question "What was the main reason you wish to quit smoking?", the main motivation appears to be health issues. According to the GATS data, health issues are followed by "demand by my family/friends", and "cigarette prices", with the lowest share being "smoke cessation campaigns". TEPAV survey in February 2022 offered Covid-19 as one of the response options and it turned out to be the fourth reason with 2.8 percent for willingness to quit. The most unlikely reasons appear to be "warning labels on the package", and "difficulty in finding a place to smoke", at 0.9 percent and 0.5 percent, respectively.

**GATS 2012** 62.6 22,2 Health issues Smoking cessation I don't know Cigarette prices Demanded by my family/friends campaigns **GATS 2016** 36,1 26,2 23,0 6.6 1,6 1.6 Health issues Cigarette prices Smoking cessation Demanded by my I don't know Others No answer family/friends campaigns TEPAV survey 2022 69,7 16,1 8,3 2,8 1,8 0,9 0,5 Willing to COVID-19 concerns Wish to Dislike by my Warning labels Trouble Others become reduce costs family on packages finding healthier places to smoke

Figure 11. Responses to the questions "What was the main reason you wish to quit smoking?", 2012, 2016, 2022, %

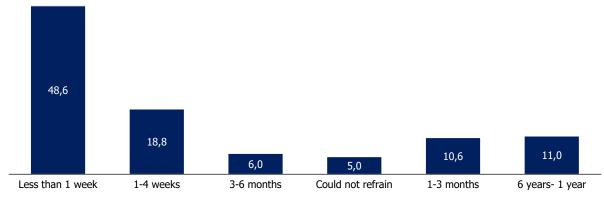
Most of the smokers who tried to quit smoking in the last 12 months attempted to quit smoking on their own without receiving any support. GATS 2012 survey data shows that 93.6 percent of smokers and 2016 survey data shows that 63.9 percent of smokers tried to quit tobacco use on their own without any support while this rate was 80.2 percent in February 2022. According to TEPAV survey data, 8.3 percent of respondents applied to "Smoking Cessation Help Line" ALO 171, which was activated in 2010, and other responses were "by myself, with nicotine gum, patch, spray, etc." at 7.2 percent, and "by using a product similar to a cigarette" at 4.1 percent. GATS 2012 and 2016 survey data offers "smoking cessation clinics" as a second method whereas it is one of the least used methods with 1.4 percent in the 2022 TEPAV survey.

93,6 63,9 **GATS 2016 GATS 2012** 5,3 4,9 0,6 0,6 1,2 3,3 By myself, With the help Through With the Through Through By myself, With the help Through With the Through Through without any nicotine help of traditional of a smoking Smokina of a smoking without any nicotine help of traditional Smoking supports gums, prescripti medicines Cessation cessation supports prescripti medicines cessation aums, Cessation patches ons for Help Line patches, ons for clinic Help Line sprays etc. smoking smoking cessation cessation TEPAV survey 2022 80.2 8,3 3,2 3,2 2,3 1.4 By using a By With the Through By going With the Others product myself, assistance Smoking assistance to a without Cessation similar to special of of family cigarette smoking another Help Line physician supports medical ALO 171 cessation clinic specialist

Figure 12. Responses to the question "Did you utilize any of the below in the last 12 months to quit tobacco use?", 2012, 2016, 2022, %\*

The duration of abstinence after quitting smoking is less than a week for almost half of the respondents. Considering the responses to the question "How long did your non-smoking time last after you tried to quit smoking for the last time?", it appears that 48.6 percent of respondents could stay away from cigarettes only for less than a week. While 18.8 percent of the respondents could refrain from cigarettes for 1-4 weeks, 5 percent indicated they could not refrain from smoking.

Figure 13. Responses to the question "How long did you abstain from smoking the last time you tried to quit smoking?", 2022, %

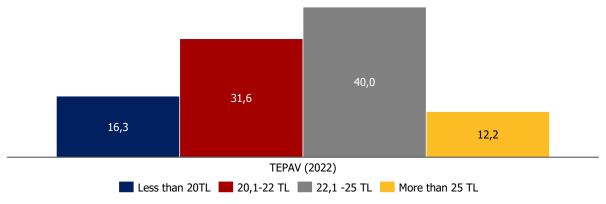


Source: TEPAV survey (February 2022)

#### 3. Economy - Cigarette Packs

The smokers in Turkey predominantly smoke medium-priced cigarettes. It is observed that the preferences of smokers within a specific price range remain mostly unchanged despite the increased prices over the years. In February 2022, 40 percent of smokers paid around 22.1-25 TL for a pack of cigarettes. The consumption preferences of consumers gravitate towards medium-priced cigarettes.

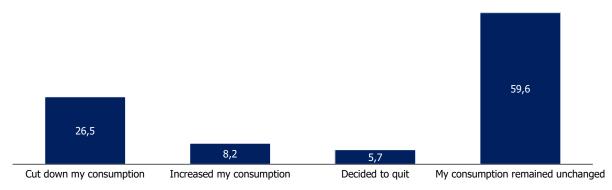
Figure 14. Responses to the question "How much do you typically pay for a pack (20 cigarettes) of cigarettes?", 2022, %



Source: TEPAV survey (February 2022)

It is evident that the price increase imposed on cigarettes in Turkey had a limited impact on consumption. Considering the responses to the question "Did the recent price increases affect your tobacco use?", 59.6 percent of respondents said "remained unchanged", while 26.5 percent stated their tobacco use decreased, 5.7 percent said they decided to quit and 8.2 percent indicated that they increased their consumption.

Figure 15. Responses to the question "Did the recent price increases affect your tobacco use?", 2022, %



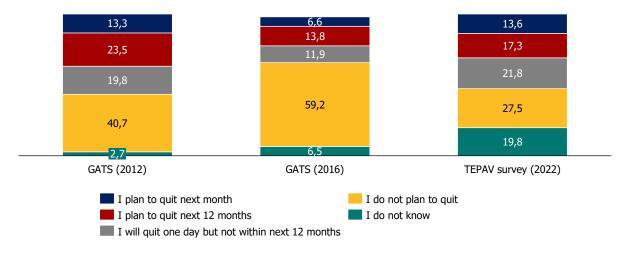
Source: TEPAV survey (February 2022)

#### 4. The Perception of Tobacco Users

When asked if they plan to quit smoking, a lower percentage of users than in previous surveys stated that they did not plan to quit. However, the ratio of "I do not know" responses (19.8 percent) has increased substantially compared to the GATS 2012 (2.7 percent), and GATS 2016 (6.5 percent). The comparison of survey results indicates no specific tendency towards planning to quit. The share of smokers planning to quit in a month was similar in the 2022 survey (13.3 percent) to the survey in 2012

(13.6 percent). The share of smokers who intend to quit smoking within at most a year was 36.8 percent in 2012 whereas it was 20.4 percent in 2016, and 30.9 percent in 2022.

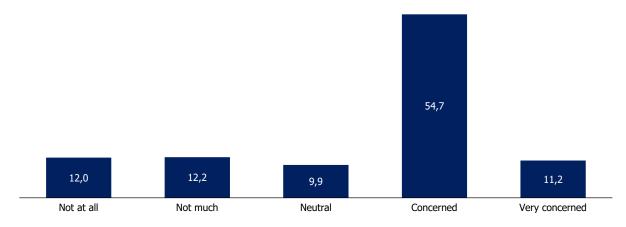
Figure 16. Responses to the question "Which of the following would describe the best your thoughts about quitting smoking?", 2012, 2016, 2022, %



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February 2022)

Most of the respondents in Turkey (65.9 percent) are concerned or very concerned that smoking could be harmful to their health in the future. Whereas, the responses to the question "are you concerned that smoking could be harmful to your health in the future?" were "not much" at 12.2 percent, "not at all", at 12 percent, "very concerned" at 11.2 percent, and "neutral" at 9.9 percent.

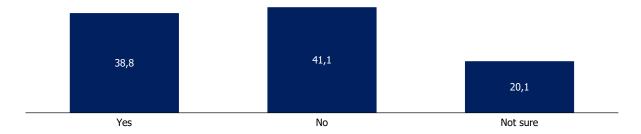
Figure 17. Responses to the question "Are you concerned that smoking could be harmful to your health in the future?", 2022, %



Source: TEPAV survey (February 2022)

**41.1** percent of the respondents do not think that they could quit smoking. When the smokers were asked the question "do you think you can quit smoking right now if you want to?", 41.1 percent stated they could not and 38.8 percent replied they could.

Figure 18. "Do you think you can quit smoking right now if you want to?", 2022, %

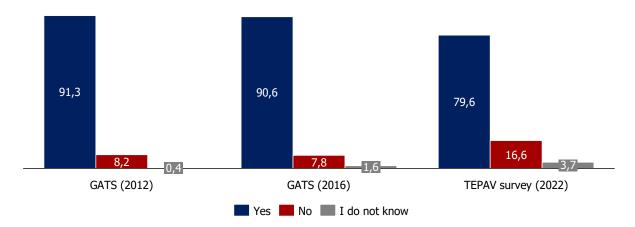


Source: TEPAV survey (February 2022)

#### 5. Illicit Use

The percentage of those who state that there is no tax stamp on the products they buy is higher in 2022 than in the previous surveys. While 8.2 percent and 7.8 percent of users stated that they buy products without a tax stamp, respectively in 2012 and 2016, this ratio increased up to 16.6 percent in 2022. The ratio of those, who do not know if the products have a tax stamp or not, has also increased while the reduction rate in the sale of products with a tax stamp became remarkable (from 91.3 percent to 79.6).

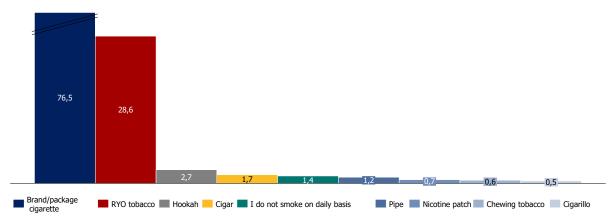
Figure 19. Responses to the question "Do you buy labeled products?" (2012, 2016, 2022), %



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February 2022)

Normally the vast majority of smokers use branded/packed cigarettes on a daily basis. Furthermore, 28.6 percent of tobacco users mention that they use RYO tobaccos on a daily basis.

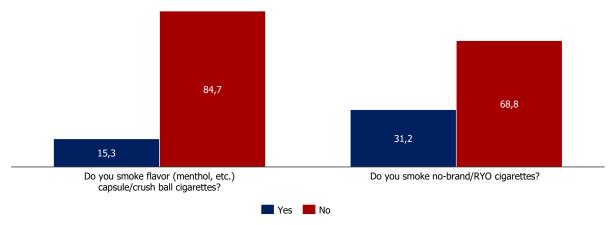
Figure 20. Responses to the question "Which of the following products normally do you use?", 2022, %



Source: TEPAV survey (February 2022)

The questions that were asked to specify the prevalence of illicit and untaxed tobacco products revealed that the prevalence of using those products is remarkably high. 31.2 percent of respondents stated that they use off-brand/roll your own tobacco. The share of users who smoke flavor capsule/crush ball cigarettes is 15.3 percent.

Figure 21. Responses to the question "Do you smoke off-brand/roll-your-own tobacco and flavor capsule/crush ball cigarettes?", 2022, %



Source: TEPAV survey (February 2022)

Tobacco products are most frequently bought from grocery stores, kiosks, news vendors, etc. 73.1 of respondents procure tobacco products from grocery stores, etc. while 16.5 percent purchase from tobacco shops. 20.4 percent of respondents buy tobacco products from individual sellers or other illicit channels such as the internet.

Figure 22. Responses to the question "The last time you bought cigarettes/tobacco for yourself, where did you procure cigarettes/tobacco products from?", 2022, %

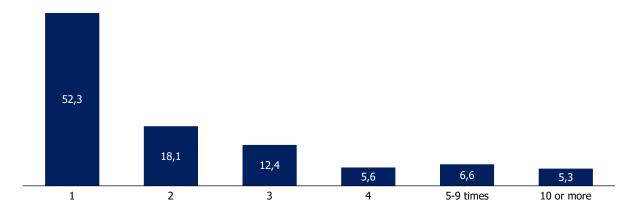


Source: TEPAV survey (February 2022)

#### 6. Former Tobacco Users

Nearly half of the past smokers have tried to quit smoking at least two times and 52.3 percent has quit smoking by trying only once. Considering the responses to the question "how many times didyou try to quit smoking?", 18.1 percent of the past smokers stated that they quit in the second attempt, 12.4 percent in the third attempt, and 5.6 percent in the fourth attempt.

Figure 23. Responses to the question "How many times did you try to quit smoking?", 2022, %

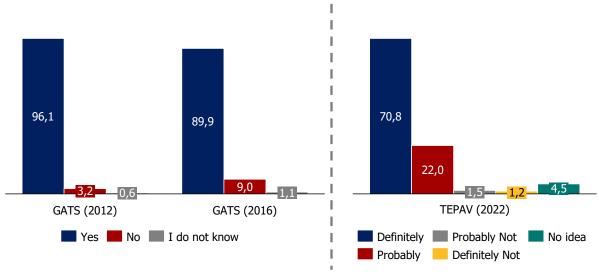


Source: TEPAV survey (2022)

#### 7. Knowledge, Attitude, and Perception

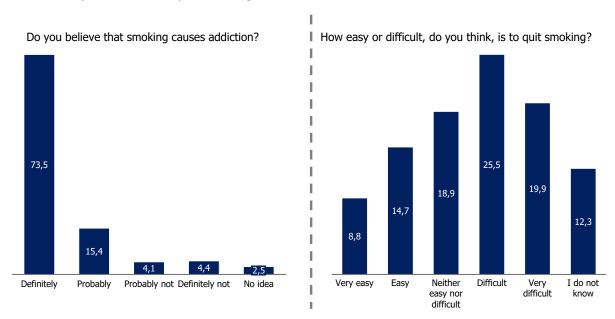
According to the survey conducted by TEPAV in February 2022, 70.8 percent of respondents think that smoking will definitely cause serious diseases while 22 percent think it is probable. Considering the GATS 2012 and 2016 data, while 96.1 percent of respondents replied "yes" to this question, this figure decreased to 89.9 over the years. In the 2022 survey, the share of respondents who think that smoking will definitely or probably cause a serious disease is at a comparable level with those who answered "yes" to this question in the 2012 and 2016 surveys. Therefore, it is safe to say that the perception level in Turkey about the harms of smoking to health has not undergone a significant change over time, and a vast majority of adults think that smoking is harmful to health.

Figure 24. Responses to the question "Do you think smoking causes a serious disease?", 2012, 2016, 2022, %



The share of respondents who believe smoking definitely causes addiction is 73.5 percent. At the same time, a great majority of tobacco users think that it is difficult to quit smoking. 45.4 percent of respondents find it "difficult" or "very difficult" to quit smoking.

Figure 25. Responses to the questions "Do you think smoking causes addiction?" and "How easy or difficult, do you think, is to quit smoking", 2022, %

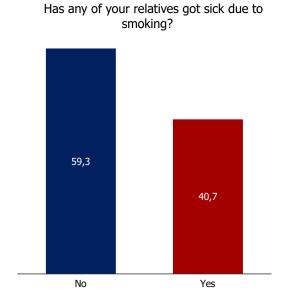


Source: TEPAV survey (February 2022)

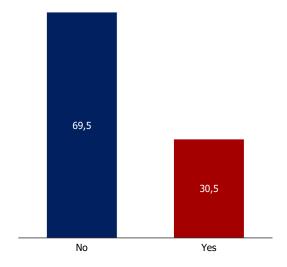
Respondents predominantly stated that they have a relative who has suffered from a disease associated with smoking or passed away because of smoking. According to February 2022 Survey, 40.7 percent of the adult population has a relative who became sick due to smoking, and 30.5 percent

has a relative who passed away due to smoking. These statistics manifest that the negative effects of smoking on health are known by society.

Figure 26. Responses to the question "Do you have any relatives who became sick due to smoking?" and "Do you have any relatives who passed away due to smoking?", 2022, %



Do you have any relatives who passed away due to smoking?



Source: TEPAV survey (February 2022)