tepav Health Economics

TEPAV MONITORING BULLETIN ON TOBACCO CONTROL POLICIES

NEWSLETTER

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TEPAV Monitoring Newsletter on Tobacco Control Policies September 2023¹

This newsletter has been prepared by TEPAV with the purpose of regularly sharing data and information on tobacco product use in Turkey. The 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 micro-data 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 8000 respondents and in 12 cities that represent the 12 NUTS-1 regions of Turkey in February, June, October and December 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)2 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 aggregated results of the four surveys 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 five different categories according to tobacco product use status: "daily smokers", "occasional smokers", "past smokers", "tried/occasional smokers but discontinued" and "never smokers". It is observed that the vast majority of users actually use tobacco

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every day, and the share of those who use tobacco products not every day but occasionally is quite low.

2022 TEPAV aggregated data indicates that the ratio of both men and women who have never used tobacco products is rapidly decreasing, while the proportion of regular smokers is increasing. When the distribution of smokers by gender is analyzed (Figure 1), it is clear that the percentage of female smokers is considerably lower than the percentage of male smokers. In particular, there is a significant difference between men and women who have never smoked. On the other hand, the ratio of never smokers decreased from 37.3 percent in 2012 to 33.9 percent in 2022 for men and from 80.7 percent to 61.8 percent for women. The ratio of past smokers decreased from 17.8 percent in 2012 to 16.8 percent in 2022 for men, and among woman, increased from 4.7 percent up to 8.9 percent, respectively. The proportion of men who used tobacco regularly and quit in the past decreased from 2012 to 2016, but increased again in 2022. Among women, the percentage of regular smokers has increased steadily since 2012, while the proportion of never smokers has decreased over the years.

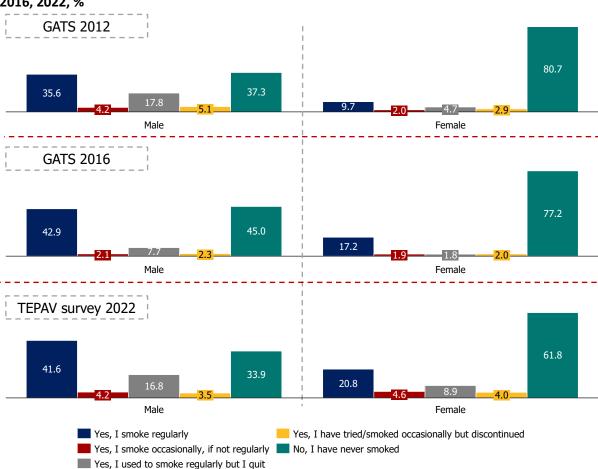


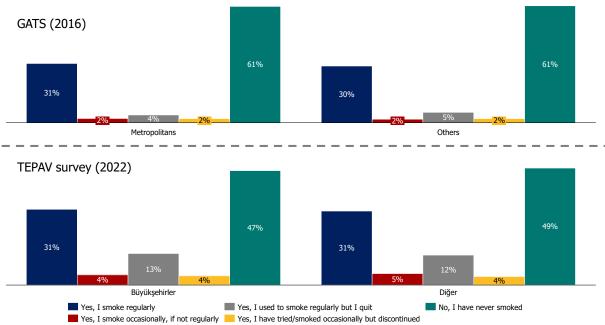
Figure 1. The percentages of the responses to the question "Do you or did you smoke?" in 2012, 2016, 2022, %

Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

There is no significant difference in the regular smokers in metropolitan areas compared to other provinces. In 2022, when the aggregated data of Ankara, Izmir and Istanbul are compared with the other nine provinces of Antalya, Balıkesir, Bursa, Gaziantep, Kayseri, Samsun, Trabzon, Erzurum and Malatya, the share of regular smokers is the same percentage. Compared to the 2016 GATS survey,

the difference between metropolitan cities and other provinces has not changed significantly in the intervening period (Figure 2).

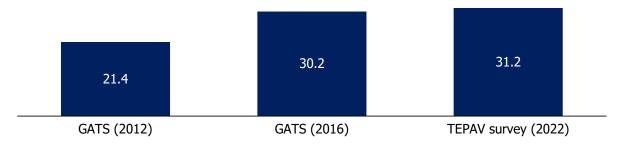
Figure 2. The ratio of the responses to the question "Do you or did you smoke" in metropolitans*, 2016, 2022, %



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

According to the findings of TEPAV 2022 survey, 31.2 percent of adults in Turkey are regular daily smokers. According to GATS data, tobacco smokers aged 15 and older in Turkey were 21.4 percentage in 2012 and 30.2 percent in 2016, while this ratio was 31.2 percent in 2022 according to TEPAV data. Compared to the GATS data conducted in previous years, the increase in the prevalence of people who use tobacco on a daily basis is remarkable (Figure 3).

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



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

Over the years, the share of men who regularly smoke cigarettes has decreased while the share of women has increased. When the distribution of regular smokers by gender is analyzed, the share of female smokers was 24.6 percent in the GATS 2012 survey, 28.0 percent in the GATS 2016 survey and 33.3 percent in the TEPAV 2022 survey (Figure 4). When GATS and TEPAV data are considered together,

^{*}Metropolitans aggregated as Istanbul, Ankara and Izmir.

in the ten years between 2012 and 2022, approximately 1.15 percent of men quit smoking each year, while there is an increase of approximately 3.53 percent among women.

75.4

72.0

66.7

GATS (2012)

GATS (2016)

Male

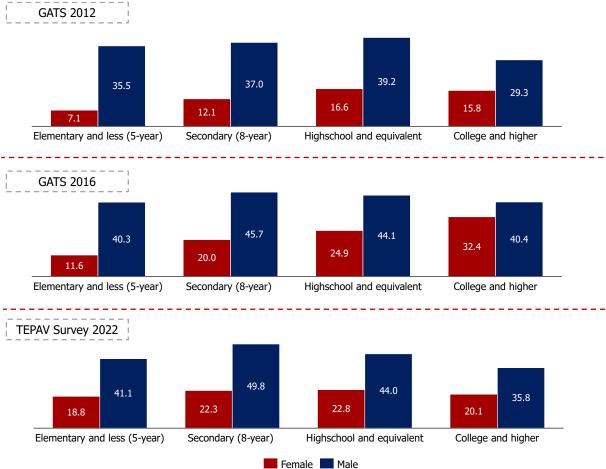
Female

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

Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

Considering tobacco use by gender of different education groups, it is observed that the highest share of cigarette use among women is observed at the high school and equivalent education level. According to the 2022 TEPAV survey, the education group with the highest smoking rates is eight-year primary school graduates for men and high school and equivalent school graduates for women. Nevertheless, the smoking rate of both men and women with primary school education and below have increased since 2012 and maintained its high level in recent years (Figure 5). On the other hand, the correlation between smoking and educational attainment appears to be weaker for men than for women, and as the level of education increases the rate of tobacco use somewhat decreases among male users.

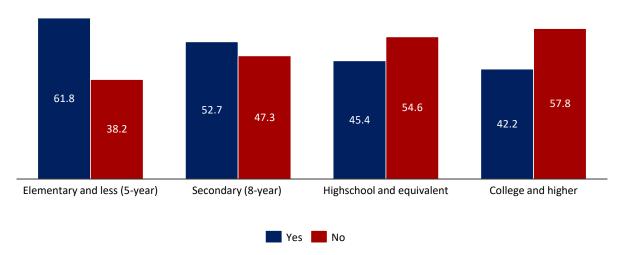
Figure 5. Distribution of the responses as "Yes, I smoke regularly" to the question "do you or did you smoke?" according to the level of education by gender, 2012, 2016, 2022, %



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

Willingness to quit smoking decreases as the level of education increases. When the willingness of the participants to quit smoking is compared according to their level of education, 57.8 percent of university graduates state that they do not want to quit smoking, while this rate is 38.2 percent in the primary school or below graduates group (Figure 6).

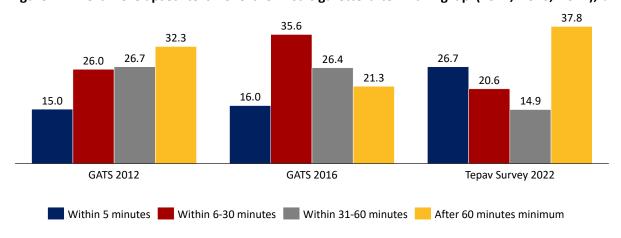
Figure 6. Distribution of responses to the question "Do you currently want to quit smoking?" by level of education, 2022, %



Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

Among regular 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 that elapses to smoke the first cigarette after waking up is seen as an indicator of the level of addiction. As seen in Figure 7, while the share of smokers who smoke their first cigarette within 5 minutes after waking up was 15 percent in the GATS 2012 survey, it increased by 11.7 points to 26.7 percent in 10 years.

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



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

Although the share of smokers who started smoking before the age of 18 has decreased over the years, it is still quite high. According to 2012 and 2016 GATS findings, 64.6 percent and 68.7 percent of smokers started smoking before the age of 18, respectively. In the survey conducted in 2022, this share decreased to 60.7 percent, and the age of starting smoking shifted to 19-24 and 25-34 age ranges (Figure 8), in other words, to the time after high school education.

68.7 64.6 60.7 29.2 26.1 23.3 8.4 GATS (2012) GATS (2016) TEPAV survey (2022) 18 years and under 19-24 25-34 35 years and over

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

Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

2. Quitting Tobacco Use

No significant difference has been observed among the sexes in the willingness to quit smoking (Figure 9). The responses to the question "Do you want to quit smoking now?" were 48.8 "yes" for both sexes, 48.7 percent in women, and 48.9 percent in men.

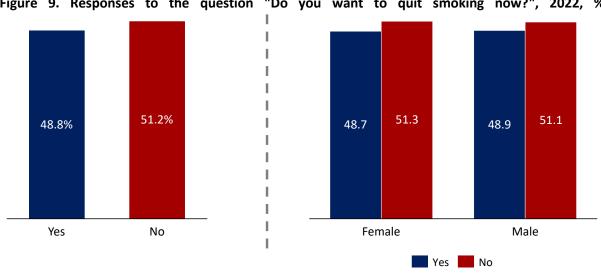
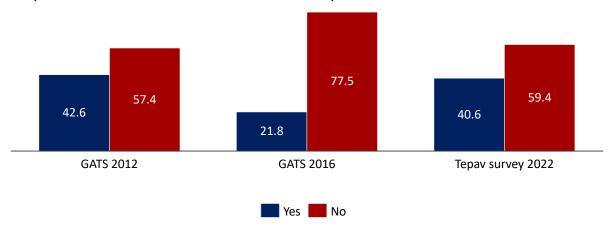


Figure 9. Responses to the question "Do you want to quit smoking now?", 2022, %

Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

The share of smokers who have tried to quit smoking in the last 12 months has increased over time. As observed in Figure 10, compared to the GATS 2012 (42.6 percent) and 2016 (21.8 percent) findings, this rate was measured at 40.6 percent in the 2022 TEPAV survey, higher than in 2016.

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



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

The main motivation for wanting to quit smoking is a health issue/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 (Figure 11). According to GATS data, health issues are followed by "demand by my family/friends" and "cigarette prices", while "smoking cessation campaigns" has the lowest share. In the 2022 TEPAV survey, COVID-19 was offered as one of the response options, and it turned out to be the fifth reason with 1.8 percent for willingness to quit. "Trouble finding a place to smoke" and "publications in media against smoking" are the lowest reasons with 0.4 percent and 0.2 percent, respectively. Unlike the 2012 and 2016 survey findings, in the 2022 survey, "disliked by my family" has been replaced by "wish to reduce costs", and "disliked by my family" became the third reason, so the results indicate that the increase in cigarette prices may be a motivation.

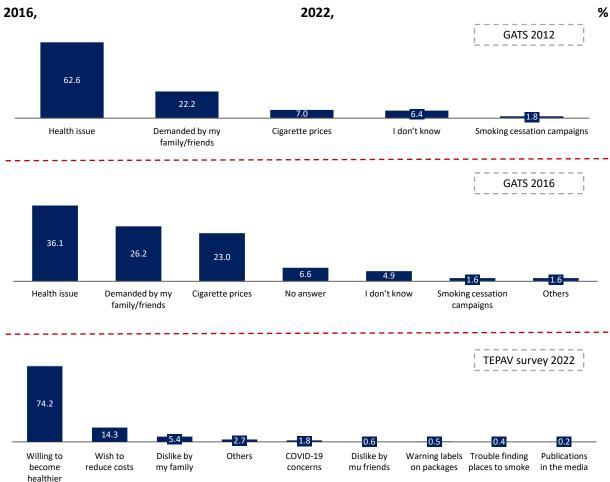


Figure 11. Responses to the question "What was the main reason you wish to quit smoking?", 2012,

Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

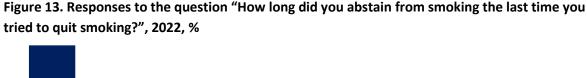
Most of the smokers who tried to quit smoking in the last 12 months attempted to quit smoking on their own without receiving any support. According to GATS 2012, and 2016 survey data 93.6 percent and 63.9 percent of smokers respectively tried to quit tobacco use without any support, while this rate is 85.2 percent in 2022 (Figure 12). According to TEPAV survey data, 3.3 percent of the participants tried to quit "through nicotine gums, patches, sprays etc.." and 2.7 percent used "ALO 171 Smoking Cessation Help Line". These options were followed by "with the help of prescription" and "with doctor support" with 1.8 percent. In the 2012 and 2016 GATS survey data, "with the help of a smoking cessation clinic" was the second most used method; as opposed to the 2022 TEPAV survey, where it was one of the least used methods with 0.7 percent.

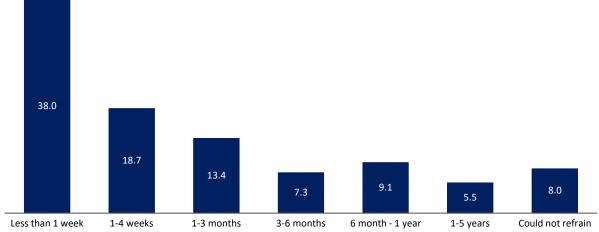
93.6 63 9 GATS 2012 **GATS 2016** 1.6 0.6 0.6 By myself, With the With the Through Through Through By myself, With the With the Through Through Through help of a nicotine without any help of Smoking traditional without any help of a nicotine traditional Smoking help of supports smoking prescripti Cessation gums, medicines supports smoking prescripti gums, medicines Cessation patches cessation ons for Help Line cessation ons for patches, Help Line clinic smoking sprays etc clinic smoking sprays etc cessation cessation TEPAV Survey 2022 85.2 3.3 By myself, without Through nicotine Through ALO 171 With the help of With doctor support Using a cigarette-With the help any supports gums, patches, Smoking Cessation prescripti ons for like product of a smoking Help Line smoking cessation cessation clinic

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, %

Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

The duration of abstinence after quitting smoking is less than one week for the majority of the participants. When the answers to the question "How long did you stay away from cigarettes the last time you tried to quit smoking?" are analyzed, 38.0 percent of the participants stated that they could stay away from cigarettes for less than 1 week. While 18.7 percent of the participants could stay away from cigarettes for 1-4 weeks, 8.0 percent stated that they could not stay away from cigarettes (Figure 13).



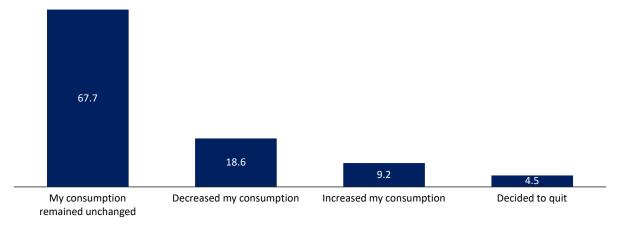


Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

3. Economy - Cigarette Packs

It is evident that the price increase imposed on cigarettes in Turkey had a limited impact on consumption (Figure 14). Considering the responses to the question "Did the recent price increases affect your tobacco use?", 67.7 percent of respondents said "remained unchanged", while 18.6 percent stated their tobacco use decreased, 4.5 percent said they decided to quit and 9.2 percent indicated that they increased their consumption.

Figure 14. Responses to the question "Did the recent price increases affected your tobacco consumption?", 2022, %



Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

4. The Perception of Tobacco Users

When asked whether they had a plan to quit smoking, the percentage of those who stated that they did not know was higher than in previous surveys. As seen in Figure 15, the percentage of respondents who answered "I don't know" (20.0 percent) has increased significantly compared to GATS 2012 (2.7 percent) and GATS 2016 (6.5 percent). When the survey results are compared, there is no clear trend regarding cessation planning. However, the percentage of respondents who stated that they "do not plan to quit" decreased significantly in the 2022 survey compared to GATS 2012 (40.7 percent) and GATS2016 (59.2 percent).

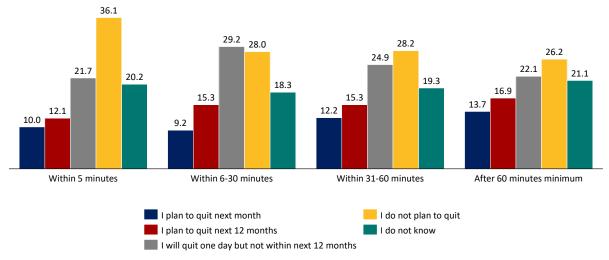
13.3 6.6 11.6 13.8 15.0 23.5 11.9 59.2 29.5 40.7 20.0 GATS (2012) GATS (2016) TEPAV survey (2022) I plan to quit next month I do not plan to quit I plan to quit next 12 months I do not know I will guit one day but not within next 12 months

Figure 15. 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, June, October, December 2022), TEPAV calculations

Those who smoke within the first 5 minutes after waking up do not plan to quit smoking. Among respondents who smoke at least 60 minutes after waking up, 13.7 percent plan to quit smoking within the next month and 16.9 percent plan to quit smoking within the first year (Figure 16). This trend is not observed in participants who smoke within the first 5 minutes after waking up, but 36.1 percent of those who smoke within the first 5 minutes do not plan to quit smoking.

Figure 16. Responses to the questions "How long after waking up do you smoke your first cigarette?" and "Which of the following best describes how you feel about quitting smoking?", 2022, %

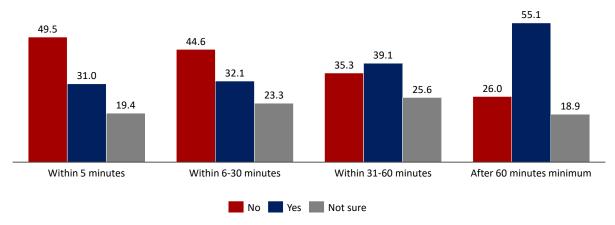


Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

More than half of the participants who smoke at least 60 minutes after waking up think that they can quit smoking at any time. When the answers to the question "How long after waking up do you smoke your first cigarette?" are evaluated together with the answers to the question "Do you think you could quit smoking right now if you wanted to?", it is observed that the participants who smoke their first cigarette one hour after waking up believe that they can easily quit smoking (Figure 17). Similarly, 39.1 percent of the participants who smoked their first cigarette at least half an hour after

waking up thought that they could quit smoking, while the majority of the participants who smoked within the first 5 minutes and 6-30 minutes did not think that they could quit smoking.

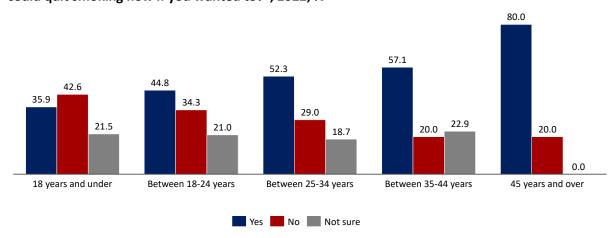
Figure 17. Responses to the questions "How long after waking up do you smoke your first cigarette?" and "Do you think you could quit smoking right now if you wanted to?", 2022, %



Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

Those who started smoking at older ages are more likely to believe that they can quit smoking (Figure 18). When the age of starting smoking is compared with the beliefs about being able to quit smoking, 80.0 percent of the participants who started smoking after the age of 45 think that they will be able to quit smoking, while this rate is 57.1 percent among the participants between the ages of 35-44. While 42.6 percent of the participants who started smoking before the age of 18, 34.3 percent of the participants who started smoking between the ages of 18-24 stated that they thought that they could not quit smoking at any time.

Figure 18. Responses to the questions "How old have you been smoking?" and "Do you think you could quit smoking now if you wanted to?", 2022, %

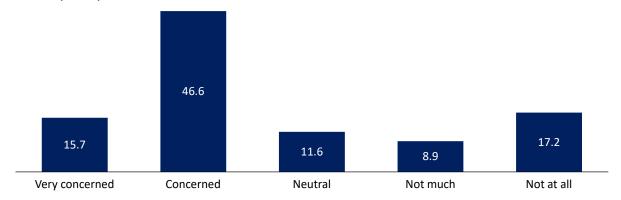


Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

Most of the respondents in Turkey (62.3 percent) stated that they were very concerned or concerned that smoking could be harmful to their health in the future. Those who answered "I am concerned" to the question "Are you worried that smoking will harm your health in the future?" were followed by

"not at all" with 17.2 percent, "very concerned" with 15.7 percent, "neutral" with 11.6 percent and "not much" with 8.9 percent (Figure 19).

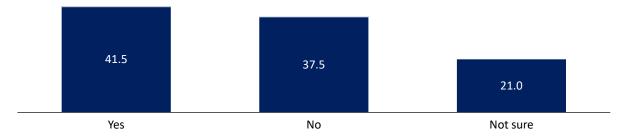
Figure 19. Responses to the question "Are you worried that smoking will harm your health in the future?", 2022, %



Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

41.5 percent of the participants think that they could quit smoking (Figure 20). When current smokers were asked the question "Do you think you could quit smoking right now if you wanted to?", 41.5 percent stated that they could quit while 37.5 percent stated that they could not quit smoking.

Figure 20. Responses to the question "Do you think you could quit smoking right now if you wanted to?", 2022, %



Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

While those who think that smoking will cause a serious disease want to quit smoking, those who do not want to quit smoking believe that smoking will not cause a serious disease. In response to the question "Do you think smoking can cause a serious disease such as lung cancer?", 56.8 percent of those who answered "definitely" and 39.9 percent of those who answered "probably" want to quit smoking. On the other hand, 75.8 percent and 81.3 percent of those who answered "probably not" and "definitely not", respectively, do not plan to quit smoking (Figure 21). The health hazards of smoking can be seen as a motivation for smokers to quit smoking.

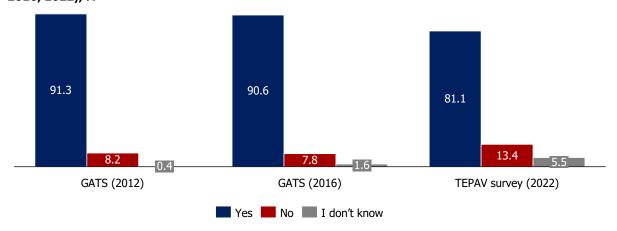
81.3 75.8 62.6 60.1 56.8 43.2 39.9 37.4 24.2 18.7 Definitely Probably Probably not Definitely not No idea Yes No

Figure 21. Responses to the questions "Do you think smoking can cause a serious disease like lung cancer?" and "Do you currently want to quit smoking?", 2022, %

5. Illicit Use

The percentage of respondents who stated that the products they purchased do not have tax stamp on them is higher in 2022 compared to previous surveys (Figure 22). While this percentage was 8.2 percent in 2012 and 7.8 percent in 2016, it has reached 13.4 percent in 2022. While the rate of those who do not know whether the product has a tax stamp or not has also increased, the rate of decrease in the sales of products with banderoles in 10 years (from 91.3 percent to 81.1 percent) is remarkable.

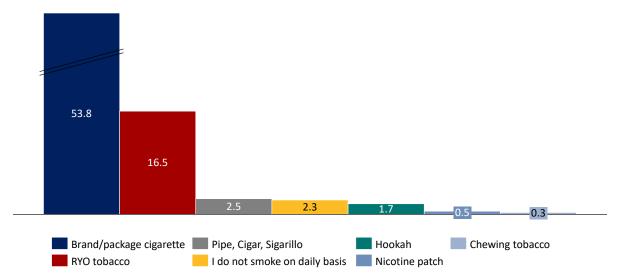
Figure 22. Responses to the question "Were there banderoles on the products you bought?" (2012, 2016, 2022), %



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

The majority of tobacco users normally use brand/pack cigarettes on a daily basis. In addition, 16.5 percent of smokers stated that they regularly use rolled tobacco every day (Figure 23).

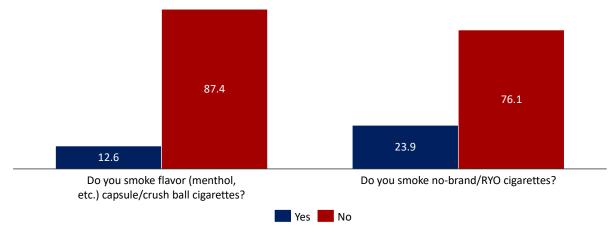
Figure 23. Responses to the question "Which of the following products do you normally use every day?", 2022, %



Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

The question asked to determine the prevalence of illicit tobacco products used revealed that the use of these products is not negligible. As seen in Figure 24, 23.9 percent of the users stated that they use unbranded/open rolled tobacco. The rate of those who use cigarettes containing capsule/explosive flavors was 12.6 percent.

Figure 24. Responses to the questions "Do you use unbranded/open rolled tobacco and cigarettes with capsule/explosive flavors?", 2022, %



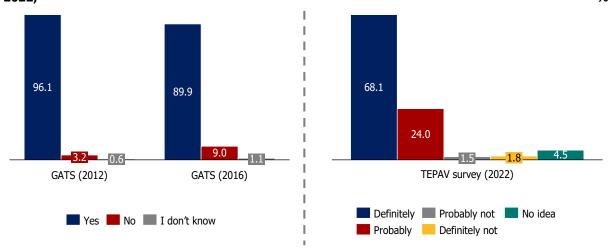
Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

6. Knowledge, Attitude, and Perception

According to the survey conducted by TEPAV in 2022, 68.1 percent of respondents think that smoking will definitely cause a serious illness, while 24.0 percent think that it will probably cause a serious disease. When the GATS 2012 and 2016 data are analyzed, it is seen that the percentage of those who answered "Yes" to the question decreased from 96.1 percent to 89.9 percent over the years. In the 2022 survey, the percentage of respondents who think that smoking will definitely or probably cause serious illness is comparable to the percentage of those who answered "Yes" in the 2012 and 2016 surveys (Figure 25). Therefore, it can be said that there has been no significant change in the

perception of the harm of smoking to health in Turkey over time and the majority of adults think that smoking is harmful.

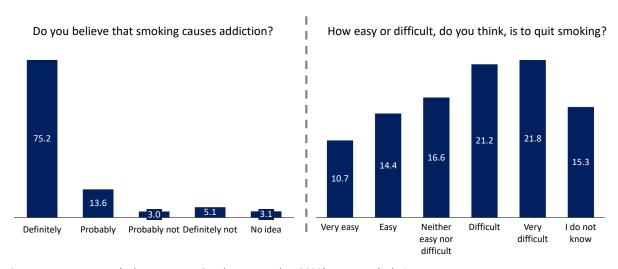
Figure 25. Responses to the question "Do you think smoking causes a serious illness?", 2012, 2016, 2022,



Source: Global Adult Tobacco Survey (2012, 2016), TEPAV survey (February, June, October, December 2022), TEPAV calculations

The share of respondents who believe smoking definitely causes addiction is 75.2 percent. At the same time, the majority of tobacco users think that it is difficult to quit smoking. 43.0 percent of the participants stated that it was "difficult" or "very difficult" to quit smoking (Figure 26).

Figure 26. Responses to the questions "Do you believe that smoking is addictive?" and "In your opinion, how easy or difficult is it to quit smoking?", 2022, %



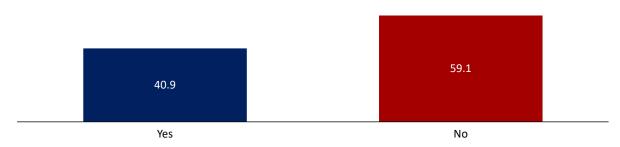
Source: TEPAV survey (February, June, October, December 2022), TEPAV calculations

A significant number of respondents reported that they had a close acquaintance whose health was adversely affected by smoking or who had died. According to the 2022 survey, 40.9 percent of the

adult population had a relative who became ill or lost their life due to smoking (Figure 27). These statistics show that the negative effects of smoking on health are well known by the public.

Figure 27. Responses to the questions "Has any of your close acquaintances got sick because of smoking?" and "Have any of your close acquaintances lost their lives because of smoking?", 2022 (the percentage of those who responded positively to at least one question and the percentage of those who responded negatively to both questions, %)

Have any of your close acquaintances become ill or died because of smoking?



Kaynak: TEPAV anketi (Şubat, Haziran, Ekim, Aralık 2022), TEPAV hesaplamaları