

**TEPAV Tobacco Control Policy Research Team<sup>1</sup>****HOW IS THE TOBACCO INDUSTRY CHANGING?<sup>2</sup>**

Over the course of the last decade, the tobacco industry has been evolving, with the introduction of new products such as electronic cigarettes and heated tobacco products. The retail sales figures of conventional versus new products reveal several market trends in the tobacco industry. These trends provide input to future tobacco control policies in Turkey. The main takeaways are:

POLICY NOTE

- Conventional tobacco products have long dominated the tobacco market, but the rise of new products is an intriguing development for the industry.
- The introduction of new products has not caused a sudden drop in the demand for conventional products. However, it looks as though these new products will expand their share in the market, and they may be the industry's growth engine in the coming years.
- New products are not globally spread-out; in fact, the demand is limited to countries such as the USA, Japan, the UK, France, Italy, Russia, South Korea, and Canada.
- The latest 2019 figures point out that the e-cigarette prevalence rate remains negligible in Turkey. Yet, the prevalence rate among university students might be much higher according to surveys conducted with the participation of university students.
- Several research questions still need to be studied regarding the introduction/adoption of new products in Turkey.

<sup>1</sup> This policy note was prepared by the TEPAV Tobacco Control Policy Research Team. Team members include Aseña Caner, Sibel Güven, Ayşegül Taşöz Düşündere, Taylan Kurt, Egecan Alan Fay, and Bihter Erbaş.

<sup>2</sup> This evaluation note reiterates findings and updates figures and statistics, when possible, from the report titled, "The Economics of Curbing Smoking in Turkey: A Scoping Review Supply, Demand, Health, and Public Policy Aspects." The report and note were funded with a grant from the Foundation for a Smoke-Free World, a U.S.-based nonprofit 501(c)(3) private foundation with a mission to end smoking during this generation. The Foundation accepts charitable gifts from PMI Global Services Inc. (PMI); under the Foundation's Bylaws and Pledge Agreement with PMI, the Foundation is independent from PMI and the tobacco industry. The contents, selection, and presentation of facts, as well as any opinions expressed are the sole responsibility of the authors and under no circumstances shall be regarded as reflecting the positions of the Foundation for a Smoke-Free World, Inc. and TEPAV.

TEPAV, "The Economics of Curbing Smoking in Turkey: A Scoping Review Supply, Demand, Health, and Public Policy Aspects."

**Considering their usage histories, the tobacco industry's products can be categorized into two main product groups: conventional products and new/alternative products.** While the first recorded usage of tobacco is dated centuries ago, different consumption modes such as cigarettes, pipes, and snuffs were popular in different periods of history.<sup>3</sup> Bearing in mind their past and present retail sales figures on the market, conventional products can be defined to include cigarettes, cigars, cigarillos, pipe tobacco, fine-cut tobacco, chewing tobacco, and moist snuff.<sup>4</sup> Although these conventional products have a long history, new products such as electronic cigarettes (e-cigarettes), Heated Tobacco Products (HTPs), and tobacco-free oral nicotine were released to the market only in 2003, 2014, and 2003, respectively.<sup>5</sup> In this study, a deliberate distinction between “conventional tobacco products,” which have a long history, and “new products” is made for two reasons. First, when comparing conventional to new products, the time that has elapsed to understand the adverse health effects of the two categories of products and the effort required to prove these effects should be taken into account. Secondly, in this study, “the tobacco industry” is meant to include new products, even though some of the new products do not contain tobacco at all. Nevertheless, it should be noted that most tobacco companies manufacture both traditional and new products.<sup>6</sup>

**Conventional tobacco products have long dominated the tobacco market, but the rise of new products is an intriguing development for the industry.** As depicted in Figure 1, traditional tobacco products have dominated the retail sales of the tobacco industry.<sup>7</sup> Yet, new products made their visible debut into the tobacco market beginning in 2013, where they carved out a 1 percent share of the entire tobacco industry's retail sales. Furthermore, new products have increased their share in the market five-fold in 7 years, to a 5 percent share in 2020. Predictions reveal that by 2025, these new alternative products will hold nearly 10 percent of all tobacco product retail sales.<sup>8</sup>

---

<sup>3</sup> American Cancer Society, 'Tobacco Atlas Third Edition'.

<sup>4</sup> Euromonitor International, 'Passport Statistics', TEPAV calculations.

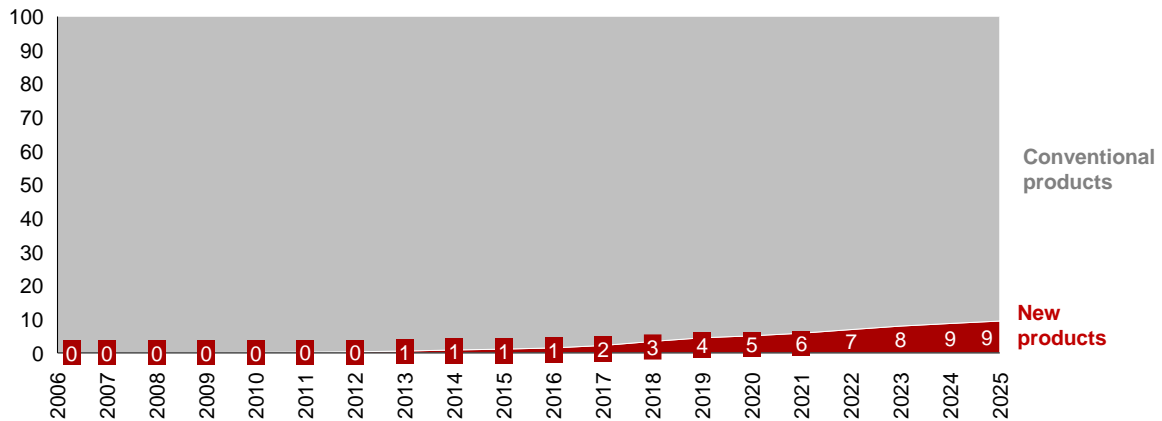
<sup>5</sup> Legislative Council Secretariat of Hong Kong Special Administrative Region of the People's Republic of China Research Office, "Fact Sheet: Health Effects of E-Cigarettes and Heated Tobacco Product"; Euromonitor International, "Passport Statistics"; Nordic Spirit, "History of Nordic Spirit Nicotine Pouches."

<sup>6</sup> Euromonitor International, 'Passport Statistics', TEPAV calculations.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

**Figure 1 - Breakdown of the tobacco industry’s retail sales by conventional and new products, % of \$ RSP, 2006-2025\***



**Source:** Euromonitor International Passport Statistics, TEPAV calculations

Note: The data provided for 2021 to 2025 are Euromonitor predictions. Conventional products include cigarettes, cigars, cigarillos, pipe tobacco, fine-cut tobacco, chewing tobacco, and moist snuff. New products include e-cigarettes, HTPs, and tobacco-free oral nicotine.

**Preliminary analyses reveal that introducing new products has not caused a sudden drop in the market size of conventional products due to the substitution effect. Still, the share of new products in the market will continue to increase, and these new products may become the industry’s growth engine in the upcoming years.** Table 1 below depicts the market sizes and growth figures of individual conventional and new tobacco products, where cigarettes stand out as the primary consumption mode.<sup>9</sup> For all forms of conventional tobacco products, except for chewing tobacco, sales have increased in the last decade and are predicted to continue to grow by 2025. Notwithstanding, the market share of cigarettes has decreased from 92 percent to 84 percent between 2006 and 2020. This decrease is accompanied by a notable increase in the market share of new products. E-cigarettes, for example, jumped from being a 90-million-dollar to a 21 billion-dollar industry between 2006 and 2020, expanding their market share from 0 percent to 2.5 percent. Likewise, the heated tobacco industry, which did not exist in 2006, became a 21-billion-dollar industry by 2020. Above all, the predicted growth rates for the conventional products remain in single digits in the upcoming years, while new products’ predicted growth rates have all been double-digit figures. Nevertheless, a decline in the conventional tobacco market is not foreseen, and by 2025 the global tobacco industry will be worth more than one trillion dollars with the booming sales of new products.<sup>10</sup>

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

**Table 1 - Sales of conventional and new tobacco products by sub-categories in the world, RSP, 2006-2025**

	Billion \$				CAGR		
	2006	2016	2020	2025	2006-2016	2016-2020	2020-2025
<b>Tobacco industry</b>	507	755	850	1,079	4%	3%	5%
<b>Conventional products</b>							
Cigarettes	466	684	717	847	4%	1%	3%
Cigars	11	17	35	56	5%	19%	10%
Cigarillos	4	4	7	7	1%	13%	2%
Pipe tobacco	3	5	6	9	6%	5%	9%
Fine-cut tobacco	13	22	28	41	5%	7%	8%
Chewing tobacco	6	1	1	1	-14%	-3%	-1%
Moist snuff	5	11	13	15	8%	5%	3%
<b>New products</b>							
E-cigarettes	0	10	21	40	60%	21%	14%
Heated tobacco products	-	1	21	55 *		100%	22%
Tobacco-free oral nicotine	-	-	1	7 *			42%
<b>Share of cigarettes within the tobacco industry's total retail sales</b>	92%	91%	84%	79%			

**Source:** Euromonitor International Passport Statistics, TEPAV calculations

Note: The data provided for 2021 to 2025 are Euromonitor predictions. The width of the shaded colors increases as the respective value increases within the individual column. CAGR is the abbreviation of "Compound Annual Growth Rate." \* Indicates missing computations due to the absence of the data.

**New products are not a globally spread-out phenomenon, and the demand is limited to countries such as the USA, Japan, the UK, France, Italy, Russia, South Korea, and Canada.** In fact, the overall global sales of the tobacco industry are concentrated in a small number of countries, including Turkey.<sup>11</sup> In particular, out of 189 countries, only 15 countries purchased 79 percent of all tobacco products being sold globally (see Figure 2).<sup>12</sup> On the other hand, e-cigarettes and HTPs have much more concentrated markets than conventional tobacco markets (except for smokeless tobacco products). For instance, while the United States of America (USA) and the United Kingdom (UK) are the primary markets with a combined total market share of 59 percent, the top five countries account for 78 percent of the total e-cigarettes sales (see Figure 2). Likewise, Japan dominates the market for HTPs, with 46 percent global sales, whereas the top five countries have a 76 percent market share.<sup>13</sup> This higher concentration of the new products with respect to already concentrated conventional tobacco markets may be due to the lack of access to these products as well as various government rules and measures that are in place to prevent new products from establishing a market.<sup>14</sup> For example, the government has not deemed using e-cigarettes illegal in Turkey, but purchasing an e-cigarette device legally on the market is virtually impossible due to restrictions on their imports and sale.<sup>15</sup> From another perspective, Figure 3 verifies a growing dichotomy in the global sales of tobacco products. While some markets, such as India, Indonesia, and Turkey, remain "traditional" by keeping their old consumption habits, countries such as the USA, Japan, the UK, France, Italy, Russia, South Korea, and Canada have changed their consumption patterns towards developing a preference for new products.

<sup>11</sup> Ibid.

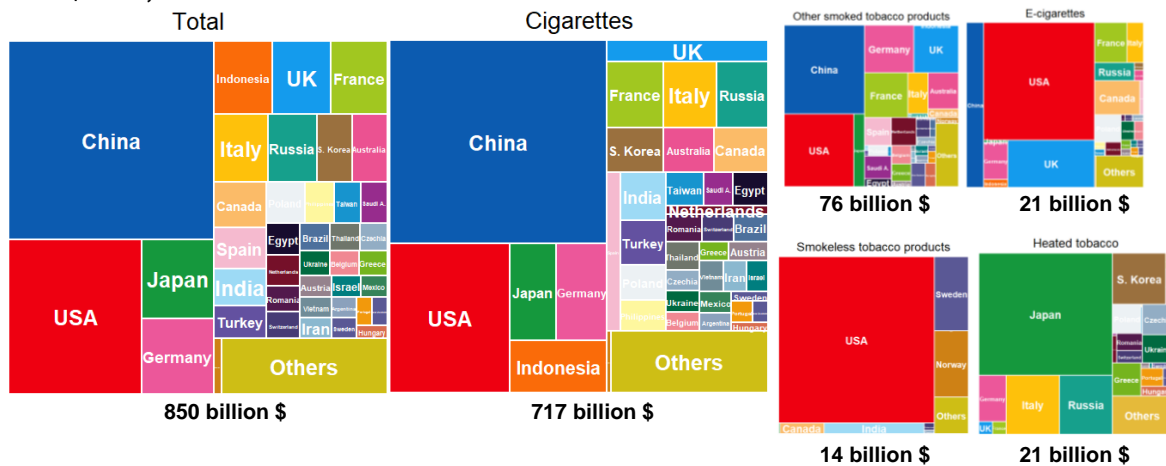
<sup>12</sup> The top 15 markets for retail sale volume of cigarettes (in descending order) are, China, the United States of America (USA), Japan, Germany, Indonesia, the United Kingdom (UK), France, Italy, Russia, South Korea, Australia, Canada, Spain, and Turkey.

<sup>13</sup> Euromonitor International, 'Passport Statistics', TEPAV calculations.

<sup>14</sup> Global Center for Good Governance in Tobacco Control, "E-Cigarette Ban & Regulation: Global Status as of February 2020."

<sup>15</sup> T.C. Resmi Gazete, 2149 Sayılı 25.02.2020 Tarihli Elektronik Sigara ve Benzeri Cihazlar ile Bazı Tütün Mamulleri ve Tütün Mamulünü Taklit Eder Tarzda Kullanılan Mamullerin İthaline İlişkin Karar.

**Figure 2 - Breakdown of retail sales of conventional and new tobacco products by countries, % of \$ RSP, 2020**



Source: Euromonitor International Passport Statistics, TEPAV calculations

**Figure 3 - Breakdown of retail sales by product type in top 15 countries (with the highest retail sales volume), \$ RSP, 2020**

Total retail market size, billion \$	Rank	Country	Product breakdown, %
254.0	1	China	91.6 Cigarettes, 7.5 E-cigarettes
128.7	2	USA	73.2 Cigarettes, 10.6 Other smoked tobacco products, 8.3 Smokeless tobacco products, 7.3 E-cigarettes
35.4	3	Japan	66.7 Cigarettes, 6.0 Other smoked tobacco products, 27.1 Heated tobacco
33.9	4	Germany	77.1 Cigarettes, 18.6 Heated tobacco
26.8	5	Indonesia	99.3 Cigarettes
26.4	6	UK	66.8 Cigarettes, 21.6 Other smoked tobacco products, 11.2 E-cigarettes
26.0	7	France	75.9 Cigarettes, 20.1 Other smoked tobacco products, 3.6 E-cigarettes
22.9	8	Italy	80.2 Cigarettes, 9.7 Other smoked tobacco products, 8.1 Heated tobacco
20.6	9	Russia	87.6 Cigarettes, 8.9 Heated tobacco
15.0	10	S. Korea	88.9 Cigarettes, 10.7 Heated tobacco
14.9	11	Australia	79.8 Cigarettes, 19.7 Other smoked tobacco products
14.9	12	Canada	86.0 Cigarettes, 4.8 Other smoked tobacco products, 7.6 E-cigarettes
13.3	13	Spain	83.1 Cigarettes, 15.1 Other smoked tobacco products
12.0	14	India	96.0 Cigarettes, 3.6 E-cigarettes
10.7	15	Turkey	99.5 Cigarettes

Legend: Cigarettes (light grey), Other smoked tobacco products (dark grey), Smokeless tobacco products (medium grey), Heated tobacco (red), E-cigarettes (blue)

Source: Euromonitor International Passport Statistics, TEPAV calculations

Considering that e-cigarettes and HTPs are not legally available on the Turkish market, assessing the possible impact of the tobacco industry’s global transformation becomes more challenging in Turkey. Even though there are no official data on the usage of HTPs in Turkey, the latest releases of the Global Adult Tobacco Survey (GATS) and the Turkey Health Survey (THS) include questions for the first time for e-cigarette usage in Turkey in 2016 and 2019, respectively.<sup>16 17</sup>

The latest figures indicate that the e-cigarette prevalence rate remains negligible in Turkey’s overall adult population. Yet, the prevalence rate among university students might be much higher according to surveys conducted with the participation of

<sup>16</sup> Türkiye İstatistik Kurumu (TÜİK), “Türkiye Sağlık Araştırması Mikro Veri Seti 2019: Meta Veri.”

<sup>17</sup> Centers for Disease Control and Prevention (CDC), “Global Adult Tobacco Survey (GATS) Public Use Data File Codebook: Turkey 2016.”

**university students.** According to the 2016 Turkish GATS data, among adults, only 2.2 percent have tried e-cigarettes, 1.3 percent were current e-cigarette users, 0.3 percent were daily users, and 1 percent were occasional users.<sup>18</sup> Furthermore, according to Turkey's latest 2019 statistics conducted with almost 10 thousand households, 3.4 percent of adults had ever used an e-cigarette, and 0.9 percent were current e-cigarette users.<sup>19</sup> However, the small number of studies conducted with the participation of university students reveal higher estimates.<sup>20</sup> Although the reviewed studies indicate varying ranges of results, most of them point to a 3 percent rate of e-cigarette use among university students.<sup>21</sup> It is also noteworthy that university students' e-cigarette experience rates (30 percent on average for four articles) are much higher than the general household surveys' findings.<sup>22</sup>

In comparison, in the USA, the largest market for e-cigarettes globally, a National Center for Health Statistics (NCHS) data brief shows that 14.9 percent of adults have tried an e-cigarette, and 3.2 percent were current e-cigarette users in 2018.<sup>23</sup> Keeping in mind that comparing different survey results may have some limitations due to the differences in the underlying surveying protocols, the e-cigarette prevalence rate in Turkey is much lower than the rate in the USA. Yet, the current studies reveal that the prevalence of e-cigarettes, especially among the youth in Turkey, may require further attention.

## Conclusion

The current restrictive legislation and consumer preferences are two possible reasons why the new alternative products, such as e-cigarettes and HTPs, are not common in Turkey. Yet, it is noteworthy that these products are common in many countries such as the USA, Japan, the UK, France, Italy, Russia, South Korea, and Canada, and their demand is rising. Furthermore, the global sales of these new products are anticipated to accelerate.

Unlike conventional cigarettes, e-cigarettes and HTPs have only been commercially available on the global market since 2003 and 2014, respectively. Considering that alternative products are relatively new on the market, more time is required for clear scientific evidence on the long-term effects to compare with conventional products. Yet, from a policy perspective, considering this ongoing global trend, there are numerous

---

<sup>18</sup> Centers for Disease Control and Prevention (CDC), 'Global Tobacco Surveillance System Data (GTSSData) Adults (GATS) Turkey 2016', TEPAV calculations.

<sup>19</sup> TurkStat, 'Türkiye Sağlık Araştırması Mikro Veri Seti 2019', TEPAV calculations.

<sup>20</sup> Sayılı et al., "Spor Bilimleri Fakültesi Öğrencilerinde Elektronik Sigara Farkındalığı ve Kullanım Düzeyleri"; Ogan et al., "Use of and Awareness about Electronic Cigarette among Medical School Students"; Horasan et al., "Use of Tobacco Products Among a Turkish Foundation University Students, Izmir 2018"; Saçlı, "Üniversite Öğrencilerinde Elektronik Sigara Hakkındaki Bilgi Düzeyi ve Elektronik Sigara Kullanım Sıklığının Değerlendirilmesi"; Özpulat and Öztaş, "Üniversite Öğrencilerinin E-Sigara Kullanım Düzeyleri ve E-Sigara Kullanımına İlişkin Görüşleri."

<sup>21</sup> Saçlı, "Üniversite Öğrencilerinde Elektronik Sigara Hakkındaki Bilgi Düzeyi ve Elektronik Sigara Kullanım Sıklığının Değerlendirilmesi"; Özpulat and Öztaş, "Üniversite Öğrencilerinin E-Sigara Kullanım Düzeyleri ve E-Sigara Kullanımına İlişkin Görüşleri"; Horasan et al., "Use of Tobacco Products Among a Turkish Foundation University Students, Izmir 2018."

<sup>22</sup> Sayılı et al., "Spor Bilimleri Fakültesi Öğrencilerinde Elektronik Sigara Farkındalığı ve Kullanım Düzeyleri"; Saçlı, "Üniversite Öğrencilerinde Elektronik Sigara Hakkındaki Bilgi Düzeyi ve Elektronik Sigara Kullanım Sıklığının Değerlendirilmesi"; Özpulat and Öztaş, "Üniversite Öğrencilerinin E-Sigara Kullanım Düzeyleri ve E-Sigara Kullanımına İlişkin Görüşleri"; Ogan et al., "Use of and Awareness about Electronic Cigarette among Medical School Students."

<sup>23</sup> Centers for Disease Control and Prevention (CDC), "Electronic Cigarette Use Among U.S. Adults, 2018"; Euromonitor International, "Passport Statistics."

## HOW IS THE TOBACCO INDUSTRY CHANGING?

research questions that need to be studied and answered prior to any policy-related discussions in Turkey. The possible research questions include the following key concepts: awareness of and attitudes towards e-cigarettes, dual use of e-cigarettes with combustibles, the gateway effect of e-cigarettes, and cessation impact.<sup>24 25</sup>

In Turkey, all tobacco products are subject to a high (in fact, one of the world's highest) tax schedule. As e-cigarettes and HTPs are not legally available on the market, they are not subject to any taxation in the country.<sup>26</sup> In this context, regular surveys are needed to find out whether there is a shift in consumer preference to e-cigarettes or HTPs in Turkey to remedy a possible loss in tax revenue.

---

<sup>24</sup> TEPAV, "Why Study Turkey's Tobacco Control Policies?"

<sup>25</sup> TEPAV, "The Economics of Curbing Smoking in Turkey: A Scoping Review Supply, Demand, Health, and Public Policy Aspects."

<sup>26</sup> World Health Organization (WHO), "WHO Report on the Global Tobacco Epidemic, 2019: Offer Help to Quit Tobacco Use- Appendix VII - Table 9.1 Taxes and Retail Price for a Pack of 20 Cigarette Most Sold Brand."

## References

- American Cancer Society. "Tobacco Atlas Third Edition." Atlanta, Georgia, 2009. <https://www.afro.who.int/publications/tobacco-atlas-3rd-edition>.
- Centers for Disease Control and Prevention (CDC). "Electronic Cigarette Use Among U.S. Adults, 2018," 2020. <https://www.cdc.gov/nchs/data/databriefs/db365-h.pdf>.
- . "Global Adult Tobacco Survey (GATS) Public Use Data File Codebook: Turkey 2016," 2019. <https://nccd.cdc.gov/GTSSDataSurveyResources/Ancillary/DownloadAttachment.aspx?DatasetID=3410>.
- . "Global Tobacco Surveillance System Data (GTSSData) Global Adult Tobacco Survey (GATS) Turkey National Micro Data 2016," 2017. <https://nccd.cdc.gov/GTSSDataSurveyResources/Ancillary/DownloadAttachment.aspx?DatasetID=3410>.
- Euromonitor International. "Passport Statistics," 2021. <https://www.portal.euromonitor.com/portal/statisticsevolution/index>.
- Global Center for Good Governance in Tobacco Control. "E-Cigarette Ban & Regulation: Global Status as of February 2020," 2020. <https://landing.ggtc.world/2020/02/24/e-cigarette-ban-regulation-global-status-as-of-february-2020/>.
- Horasan, Gönül, Dilek Soysal, Şenay Yıldız, and İlgi Şemin. "Use of Tobacco Products Among a Turkish Foundation University Students, Izmir 2018." *Tobacco Induced Diseases* 16, no. 3 (2018). <https://doi.org/10.18332/tid/94647>.
- Legislative Council Secretariat of Hong Kong Special Administrative Region of the People's Republic of China Research Office. "Fact Sheet: Health Effects of E-Cigarettes and Heated Tobacco Product," 2018. <https://www.legco.gov.hk/Research-Publications/English/1718fs09-Health-Effects-Of-E-Cigarettes-And-Heated-Tobacco-Products-20180803-E.PdF>.
- Nordic Spirit. "History of Nordic Spirit Nicotine Pouches," 2021. <https://nordicspirit.co.uk/events/history-of-nicotine-pouches>.
- Ogan, Nalan, Ayse Baha, Onur Coskun, and E. Eylem Akpınar. "Use of and Awareness about Electronic Cigarette among Medical School Students." *Eurasian Journal of Medicine and Oncology* 3, no. 1 (2019): 6–13. <https://doi.org/10.14744/ejmo.2018.0059>.
- Özpuolat, Funda, and Duygu Öztaş. "Üniversite Öğrencilerinin E-Sigara Kullanım Düzeyleri ve E-Sigara Kullanımına İlişkin Görüşleri." *Ankara Sağlık Bilimleri Dergisi (ASBD)* 9, no. 2 (2020): 146–60.
- Saçlı, Aslı. "Üniversite Öğrencilerinde Elektronik Sigara Hakkındaki Bilgi Düzeyi ve Elektronik Sigara Kullanım Sıklığının Değerlendirilmesi." İzmir Kâtip Çelebi Üniversitesi Tıp Fakültesi, 2019.
- Sayıllı, Uğurcan, Özden Aksu Saymna, Eray Yurtseven, and Ethem Erginöz. "Spor Bilimleri Fakültesi Öğrencilerinde Elektronik Sigara Farkındalığı ve Kullanım Düzeyleri." *Namık Kemal Tıp Dergisi* 8, no. 3 (August 26, 2020): 419–28. <https://doi.org/10.37696/nkmj.749077>.
- T.C. Resmi Gazete. 2149 Sayılı 25.02.2020 Tarihli Elektronik Sigara ve Benzeri Cihazlar ile Bazı Tütün Mamulleri ve Tütün Mamulünü Taklit Eder Tarzda Kullanılan Mamullerin



İthaline İlişkin Karar (2020).  
<https://www.resmigazete.gov.tr/eskiler/2020/02/20200225-23.pdf>.

TEPAV. "The Economics of Curbing Smoking in Turkey: A Scoping Review Supply, Demand, Health, and Public Policy Aspects," 2020.

———. "Why Study Turkey's Tobacco Control Policies?," 2021.

Türkiye İstatistik Kurumu (TÜİK). "Türkiye Sağlık Araştırması Mikro Veri Seti 2019: Meta Veri," 2020. <https://www.tuik.gov.tr/media/microdata/pdf/turkiye-saglik-arastirmasi.pdf>.

TurkStat. "Türkiye Sağlık Araştırması Mikro Veri Seti 2019," 2020.

World Health Organization (WHO). "WHO Report on the Global Tobacco Epidemic, 2019: Offer Help to Quit Tobacco Use- Appendix VII - Table 9.1 Taxes and Retail Price for a Pack of 20 Cigarette Most Sold Brand," 2019. [https://www.who.int/docs/default-source/tobacco-hq/global-tobacco-report-2019/table-9-1-taxes-and-retail-price-for-a-pack-of-20-cigarette-most-so.xls?sfvrsn=afb960ef\\_4](https://www.who.int/docs/default-source/tobacco-hq/global-tobacco-report-2019/table-9-1-taxes-and-retail-price-for-a-pack-of-20-cigarette-most-so.xls?sfvrsn=afb960ef_4).