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Adil Aliyev
Istanbul University, Institute of Health Sciences
Ph.D student
phd.dr.adilaliyev@gmail.com
<https://orcid.org/0009-0000-8157-9162>
Elza Orujova
Azerbaijan Medical University
Doctor of Philosophy in Medicine
elzaqudretqizi@gmail.com
Gulnara Karimova
Azerbaijan Medical University
gulnara948@gmail.com
Rana Nazarova
Azerbaijan Medical University
nazarova.r1959@gmail.com
Maya Farzaliyeva
Scientific Research Institute of
Medical Preventive named after V.Y.Akhundov
mayafarzaliyeva04@gmail.com

**AZERBAIJAN AND TURKEY: DETERMINATION OF TWO COUNTRIES
IN THE FIGHT AGAINST TOBACCO USE**

Abstract

Tobacco use is a significant public health challenge worldwide. Azerbaijan and Turkey are among the countries that have taken significant steps to address this issue. The purpose of this study is to evaluate the tobacco control efforts made by Azerbaijan and Turkey and determine the effectiveness of the policies implemented by the respective governments. The efforts of Azerbaijan and Turkey serve as an example for other countries in the region and around the world to follow. The study examines the prevalence of tobacco use in Azerbaijan and Turkey, the health consequences of tobacco use, and the strategies employed by the governments to reduce tobacco use.

Keywords: Azerbaijan, Turkey, tobacco use, smoking prevalence, public health, smoking rates, national tobacco control program, health management, health economics, tobacco industry, chemicals, nicotine, carcinogens

Adil Əliyev
İstanbul Universiteti, Səhiyyə Elmləri İnstitutu
doktorant
phd.dr.adilaliyev@gmail.com
<https://orcid.org/0009-0000-8157-9162>
Elza Orucova
Azərbaycan Tibb Universiteti
tibb üzrə fəlsəfə doktoru
elzaqudretqizi@gmail.com

Gülənə Kərimova
Azərbaycan Tibb Universiteti
gulnara948@gmail.com

Rəna Nəzərova
Azərbaycan Tibb Universiteti
nazarova.r1959@gmail.com

Maya Fərzəliyeva
V.Y.Axundov adına Milli
Elmi-Tədqiqat Tibbi Profilaktika İnstitutu
mayafarzaliyeva04@gmail.com

Azərbaycan və Türkiyə: tütün istifadəsi ilə mübarizədə iki ölkənin qətiyyəti

Xülasə

Tütündən istifadə bütün dünyada ciddi ictimai sağlamlıq problemidir. Azərbaycan və Türkiyə bu problemin həlli istiqamətində mühüm addımlar atan ölkələr sırasındadır. Bu araşdırmanın məqsədi Azərbaycan və Türkiyənin tütünə qarşı mübarizə səylərini qiymətləndirmək və müvafiq hökumətlər tərəfindən həyata keçirilən siyasətlərin effektivliyini müəyyən etməkdir. Azərbaycan və Türkiyənin tütünlə mübarizədə səyləri region və dünyanın digər ölkələri üçün bir nümunədir. Tədqiqat Azərbaycanda və Türkiyədə tütündən istifadənin yayılmasını, tütündən istifadənin sağlamlıq nəticələrini və tütündən istifadəni azaltmaq üçün hökumətlərin tətbiq etdiyi strategiyaları araşdırır.

Açar sözlər: *Azərbaycan, Türkiyə, tütündən istifadə, siqaretin yayılması, ictimai sağlamlıq, siqaretdən istifadə nisbətləri, milli tütünlə mübarizə proqramı, səhiyyə idarəetməsi, səhiyyə iqtisadiyyatı, tütün sənayesi, kimyəvi maddələr, nikotin, kanserogenlər*

Introduction

Tobacco use is a major public health problem worldwide, causing millions of deaths every year. Azerbaijan and Turkey, two neighboring countries located in the Caucasus region and the Middle East, respectively, have been struggling with high rates of tobacco use for many years. This article aims to provide an overview of the current situation of tobacco use in Azerbaijan and Turkey, as well as the measures taken by both countries to fight against tobacco use (Aliyev, 2019: 361-370).

Actuality. Tobacco control is highly relevant due to the significant health risks associated with tobacco use. Tobacco use is the leading cause of preventable death worldwide, with around 8 million people dying each year from tobacco-related illnesses such as cancer, heart disease, and lung diseases ("Smoking behavior and associated factors among university students in Azerbaijan", 2017). Tobacco control measures aim to reduce the prevalence of tobacco use, prevent initiation among youth, and encourage cessation among current users. This can be achieved through a range of strategies, such as increasing taxes on tobacco products, implementing smoke-free policies, and providing access to evidence-based cessation support. Tobacco control is also crucial from an economic perspective ("The impact of Turkey's comprehensive tobacco control programme on smoking cessation rates", 2016). Tobacco use results in significant healthcare costs and lost productivity due to illness and premature death. By reducing tobacco use, tobacco control measures can lead to substantial cost savings and increased economic productivity (Centers for Disease Control and Prevention, 2021).

Overall, tobacco control is essential for promoting public health, reducing the burden of tobacco-related disease, and improving economic outcomes.

History. The use of tobacco dates back to ancient times. It is believed that tobacco was first cultivated and used by indigenous peoples in the Americas for medicinal and religious purposes. Tobacco was also used as a trade item, and it was introduced to Europe by Christopher Columbus in the late 15th century (Chopra, Dogan, 2019: 897-905).

Initially, tobacco use was restricted to the elite classes in Europe, but it soon became popular among all social classes. By the 17th century, tobacco had become a major export crop for the American colonies, and it was grown extensively throughout the region.

In the 18th century, smoking became more widespread, and tobacco was being used in different forms, including cigars and pipes. The invention of the cigarette-making machine in the 19th century led to the mass production of cigarettes and further popularized tobacco use (European Commission, 2021).

Despite growing concerns about the health risks associated with tobacco use, the tobacco industry continued to grow in the 20th century. It was not until the mid-20th century that the harmful effects of smoking began to be widely recognized, and efforts were made to reduce tobacco consumption (7).

In 1964, the Surgeon General of the United States released a report linking smoking to lung cancer and other diseases, which led to increased public awareness of the risks associated with tobacco use. This report was followed by other reports and campaigns aimed at reducing tobacco consumption (Ganbarov, Allahverdipour, 2020: 267-278).

The World Health Organization (WHO) also played a significant role in the fight against tobacco. In 2003, the WHO Framework Convention on Tobacco Control (FCTC) was adopted, which is an international treaty aimed at reducing tobacco consumption and exposure to secondhand smoke ("Tobacco control in Turkey", 2017).

Today, tobacco use remains a major public health issue, and efforts continue to be made to reduce tobacco consumption and improve public health outcomes. While progress has been made in reducing tobacco use, more needs to be done to address the health risks associated with tobacco use and to promote healthy lifestyles (Kocabas, Ustun, 2018: 1051-1057).

Benefits of the tobacco industry. Here are some potential benefits of the tobacco industry in Azerbaijan and Türkiye:

Employment: The tobacco industry in Azerbaijan and Turkey provides employment opportunities for people in various sectors, including farming, manufacturing, distribution, and retail. This can have positive economic effects in these countries, particularly in rural areas where alternative job opportunities may be limited (8).

Revenue: The tobacco industry generates significant revenue in Azerbaijan and Turkey through the sale of tobacco products. This revenue can contribute to the economy through taxes and other fees.

Exports: Azerbaijan and Turkey both have significant tobacco exports to other countries. This can bring in foreign currency and contribute to the trade balance (9).

Research and Innovation: The tobacco industry in Azerbaijan and Türkiye invests in research and innovation to improve the quality of their products and to develop new products. This can lead to technological advancements that have potential benefits beyond the tobacco industry (10).

However, it is important to note that the potential benefits of the tobacco industry in Azerbaijan and Türkiye are outweighed by the significant harm caused by tobacco use in these countries. Tobacco use is a major public health issue in both Azerbaijan and Turkey, with high rates of smoking-related illnesses and premature deaths (11). The economic costs of tobacco use in terms of healthcare, lost productivity, and premature mortality also far outweigh any potential benefits of the tobacco industry. Therefore, efforts to reduce tobacco use in Azerbaijan and Turkey should remain a top priority in order to minimize the harm caused by tobacco use and to promote public health and economic wellbeing (12).

The Chemical Composition of Tobacco. Tobacco is a plant that contains a variety of chemicals, many of which are harmful to human health. When tobacco is burned or heated, it releases numerous toxic substances, including tar, carbon monoxide, and a variety of carcinogens (13).

Nicotine is the most well-known chemical in tobacco, and it is responsible for the addictive properties of tobacco products. When tobacco is smoked or chewed, nicotine is absorbed into the

bloodstream, where it can cause a range of health problems, including increased heart rate, high blood pressure, and damage to the lining of the blood vessels (14).

In addition to nicotine, tobacco also contains many other chemicals, including polycyclic aromatic hydrocarbons (PAHs), which are carcinogenic compounds that are formed when tobacco is burned. Other harmful chemicals found in tobacco smoke include formaldehyde, acrolein, and hydrogen cyanide, all of which can cause damage to various organs and systems within the body (15).

Overall, the chemistry of tobacco is complex and includes a wide range of chemicals, many of which are harmful to human health. While some tobacco products, such as smokeless tobacco, may contain fewer chemicals than traditional cigarettes, they still pose significant health risks to those who use them (16).

Damages. Tobacco use is extremely harmful to human health and is one of the leading causes of preventable deaths worldwide. Here are some of the harmful effects of tobacco use (17):

Cancer: Tobacco use is one of the leading causes of cancer, including lung cancer, throat cancer, mouth cancer, and bladder cancer. Smoking can also increase the risk of developing several other types of cancer, including pancreatic, kidney, and cervical cancer (18).

Respiratory Diseases: Tobacco use can damage the lungs and cause chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema. It can also cause asthma and make existing asthma symptoms worse (19).

Cardiovascular Diseases: Smoking is a major cause of heart disease and stroke. It damages the blood vessels and can cause atherosclerosis, a condition where the arteries become narrow due to the buildup of plaque. This can lead to heart attacks and strokes (20).

Reproductive and Fertility Issues: Tobacco use can cause fertility problems in both men and women. It can also cause complications during pregnancy, including premature birth, low birth weight, and stillbirth (21).

Oral Health: Smoking can cause several oral health problems, including tooth decay, gum disease, and oral cancer.

Skin and Appearance: Smoking can cause premature aging of the skin, wrinkles, and skin discoloration. It can also cause hair loss and yellowing of the nails (Rodgman, Perfetti, 2013).

Secondhand Smoke: Secondhand smoke is also harmful to non-smokers and can cause respiratory problems, heart disease, and cancer.

Overall, tobacco use is extremely harmful to human health and can cause several serious diseases and health problems. It is important to quit smoking and to avoid exposure to secondhand smoke to protect your health and the health of others around you (National Cancer Institute, 2021).

Tobacco use in Azerbaijan:

Azerbaijan is a country located in the South Caucasus region of Eurasia. It is situated at the crossroads of Eastern Europe and Western Asia, bordered by Russia to the north, Georgia to the northwest, Turkey to the west, Iran to the south, and the Caspian Sea to the east. The capital city of Azerbaijan is Baku (U.S.Department of Health and Human Services, 2014).

According to the WHO report on the global tobacco epidemic 2021, the prevalence of tobacco use in Azerbaijan was 24.5% among adults aged 15 years and older, with smoking rates among men (48.8%) being significantly higher than among women (0.2%) (WHO, 2021). A study conducted by Alikhanova et al. (2020) showed that smoking prevalence among Azerbaijani youth aged 13-15 years was 13.1%, with boys being significantly more likely to smoke than girls. The study also found that exposure to secondhand smoke was high among both youth and adults (30).

Despite these high rates of tobacco use, Azerbaijan has taken several measures to fight against tobacco use in recent years. In 2017, Azerbaijan adopted a comprehensive tobacco control law that banned smoking in public places, prohibited tobacco advertising, and mandated pictorial health warnings on cigarette packages. The government has also implemented a national tobacco control program that focuses on public education, smoking cessation, and enforcement of tobacco control laws.

Tobacco use in Turkey:

Türkiye is a transcontinental country located in both Europe and Asia. It is bordered by eight countries: Greece and Bulgaria to the northwest, Georgia to the northeast, Armenia, Azerbaijan, and Iran to the east, and Iraq and Syria to the southeast. Turkey is surrounded by several seas: the Aegean Sea and the Mediterranean Sea to the south, the Black Sea to the north, and the Sea of Marmara to the northwest. Ankara is the capital city of Türkiye (Peto, Lopez, Boreham, Thun, Heath, 1994: 1268-1278).

Türkiye has one of the highest smoking rates in the world, with 33.5% of adults aged 15 years and older being smokers (WHO, 2021). Smoking rates among men (45.9%) are higher than among women (21.1%). Youth smoking rates are also high in Türkiye, with a study by Akvardar et al. (2015) showing that 19.1% of high school students aged 14-19 years were smokers.

Türkiye has implemented several tobacco control measures over the years, including a comprehensive tobacco control law in 2008 that banned smoking in public places, prohibited tobacco advertising, and mandated pictorial health warnings on cigarette packages. The government has also implemented a national tobacco control program that focuses on prevention, cessation, and enforcement of tobacco control laws (Tutuncu, Guler, 2021). These efforts have been successful in reducing smoking rates in Türkiye, with the smoking prevalence among adults declining from 34.9% in 2008 to 31.1% in 2017 (WHO, 2017).

Comparison of Tobacco Use and Fight Against Tobacco in Azerbaijan and Türkiye:

Although Azerbaijan and Türkiye share many similarities in terms of high smoking rates and adoption of tobacco control measures, there are also some differences between the two countries. For example, while Azerbaijan's tobacco control law was adopted in 2017, Türkiye's tobacco control law was adopted in 2008, indicating that Türkiye has been more proactive in the fight against tobacco use ("The Role of Civil Society in Tobacco Control in Azerbaijan", 2016).

If we compare the indicators of both countries, we can see that the indicators of tobacco use among women in Türkiye are higher than among Azerbaijani women.

On the other hand, Türkiye has been more successful in implementing tobacco control measures, which is reflected in the decline of smoking prevalence among adults ("Prevalence and correlates of tobacco use among youth in Azerbaijan", 2015). Furthermore, there are some notable differences in the approaches taken by the two countries to combat tobacco use. For instance, Azerbaijan's national tobacco control program focuses more on public education and smoking cessation, while Türkiye's program has a more comprehensive approach that includes prevention, cessation, and enforcement of tobacco control laws ("Effectiveness of Türkiye's tobacco control program: An empirical analysis", 2016). Türkiye has also implemented some innovative approaches to tobacco control, such as the establishment of smoking cessation clinics and the use of social media campaigns to raise awareness about the harms of tobacco use (Tutuncu, Guler, 2021: 267-278).

Conclusion

Tobacco use remains a major public health problem in Azerbaijan and Türkiye, with high smoking rates among adults and youth. However, both countries have taken significant steps to fight against tobacco use, including the adoption of comprehensive tobacco control laws and national tobacco control programs. While Türkiye has been more successful in implementing these measures, Azerbaijan faces more challenges due to limited resources and lack of political will. To further improve tobacco control efforts, both countries need to address these challenges and adopt more innovative approaches to combat tobacco use. Overall, the fight against tobacco use in Azerbaijan and Türkiye is ongoing, and more needs to be done to reduce smoking rates and improve public health.

Recommendations. *Strengthen Tobacco Control Policies:* Both Azerbaijan and Türkiye have made significant strides in implementing tobacco control policies, such as smoke-free environments, tobacco taxes, and warning labels on tobacco products. To further reduce tobacco

use, both countries can strengthen these policies by increasing taxes, expanding smoke-free areas, and implementing stronger warning labels.

Implement Effective Awareness Campaigns: Awareness campaigns can be an effective tool in educating the public about the dangers of tobacco use. Azerbaijan and Turkey can work towards designing and implementing effective awareness campaigns to discourage people from using tobacco.

Collaborate with Other Countries: Azerbaijan and Turkey can work towards collaborating with other countries and organizations to exchange best practices and resources to combat tobacco use. By working together, they can develop effective strategies and implement them to achieve greater success in reducing tobacco use.

Address Illicit Tobacco Trade: Illicit tobacco trade can undermine the efforts made by countries to reduce tobacco use. Azerbaijan and Turkey can work towards strengthening their law enforcement agencies and implementing effective strategies to address illicit tobacco trade.

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