


*Original Article / Araştırma Makalesi*

**A SWOT ANALYSIS OF THE TÜRKİYE HEALTHCARE SYSTEM: A  
PHYSICIANS' PERSPECTIVE**

**Türkiye Sağlık Sisteminin SWOT Analizi: Hekimlerin Bakışı**

Mustafa FİLİZ<sup>1</sup> 

<sup>1</sup>Artvin Çoruh University, Faculty of Business Administration, Artvin

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**ABSTRACT**

The aim of this study is to conduct a SWOT analysis of the Türkiye healthcare system from the viewpoint of physicians. The sample for this study consisted of 22 physicians who voluntarily participated. A qualitative research approach was employed, utilizing semi-structured interview forms for data collection. Data were gathered both face-to-face and online. The obtained data were coded, and similar codes were categorized and themed. This study incorporated both SWOT analysis and content analysis methods. When examining the findings, physicians highlighted easy access and availability as the strong aspects of the Türkiye healthcare system. However, the system's weaknesses were predominantly identified as issues concerning healthcare professionals. On the other hand, medical tourism was pointed out as the most significant opportunity awaiting the health system, whereas the escalating violence towards healthcare workers was perceived as the biggest threat. The Türkiye Healthcare System stands out with strengths such as ease of access and advanced technological infrastructure, as well as opportunities like medical tourism. However, it also harbors pressing challenges, including violence against healthcare workers and medication shortages. It is anticipated that many of these issues will be addressed when the balance between demand and supply is achieved.

**Keywords:** Healthcare system, Physician, SWOT.

**ÖZ**

Bu çalışmada hekimlerin bakış açısıyla, Türkiye sağlık sisteminin SWOT analizinin yapılması amaçlanmıştır. Çalışmanın örnekleminin gönüllü katılım sağlayan 22 hekim oluşturmaktadır. Çalışmada nitel araştırma yaklaşımı kullanılmış olup yarı yapılandırılmış görüşme formları ile veriler toplanmıştır. Katılımcılardan yüz yüze ve çevrimiçi olarak veriler toplanmıştır. Elde edilen veriler kodlanmış ve birbirine benzeyen kodlar kategorileştirilerek temalaştırılmıştır. Çalışmada, SWOT analizinden ve içerik analizinden yararlanılmıştır. Elde edilen bulgulara bakıldığında zaman, katılımcı hekimlerin Türkiye sağlık sisteminin güçlü yönü olarak erişim ve ulaşılabilirliğin kolay olmasını, sistemin zayıf yönü olarak ise daha çok sağlık çalışanların sorunlarını vurgulamışlardır. Diğer yandan sağlık sistemini bekleyen en önemli fırsat olarak sağlık turizmi belirtilmiş ve sağlık sistemini bekleyen en büyük tehdit ise sağlık çalışanlarına yönelik artan şiddet olarak değerlendirilmiştir. Türkiye sağlık sistemi, erişim kolaylığı, teknolojik altyapı gibi güçlü yönleri ve sağlık turizmi gibi fırsatlarıyla dikkat çekerken; sağlık çalışanlarına yönelik şiddet ve ilaç eksikliği gibi acil çözüm gerektiren sorunları da barındırmaktadır.

**Anahtar kelimeler:** Sağlık sistemi, Doktor, SWOT.

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## INTRODUCTION

Healthcare systems around the world are critical to meeting the health needs of societies. In recent years, the healthcare system in Türkiye has undergone profound transformations. These transformations have been actualized through a series of reforms and strategic plans targeting the enhancement of the accessibility and quality of healthcare services (Ş. Çavmak & D. Çavmak, 2017). Ensuring equitable access to health services, one of the primary objectives of nations, enhancing the quality of health services, and instigating advancements in various health indicators have become increasingly paramount in the effective control of health expenditures compared to before (Daştan & Çetinkaya, 2015).

The World Health Organization (WHO, 2000) Report defined the health system to encompass all activities whose primary goal is to promote, restore, and maintain health (Murray & Frenk, 2000; WHO, 2000). The health sector and healthcare services primarily constitute this sector, with core activities that are instrumental for its existence. The overarching goal of these supply and demand elements within the health services is to ensure individual health, thereby promoting a healthier community. This objective covers the provision and demand for health services directed towards the environment, society, and individuals, with the ultimate goal being the establishment of a healthier world (Sargutan, 2003). Healthcare systems have evolved their models with the aspiration of delivering healthcare services most effectively within increasingly complex legal, financial, and political management structures. Although a general classification can be challenging, four primary system models are globally recognized: the Beveridge model, the Bismark model, the national health insurance model, and the out-of-pocket model. The principal distinctions among these systems revolve around healthcare providers, the mode of healthcare service payments, and the differentiation of financial risks between those providing and receiving health insurance (TaMcCanne, 2013; tar, 2011).

There are a number of payment methods for healthcare workers in healthcare systems. Each method has its own advantages and disadvantages. Each country prefers an appropriate method based on factors such as its culture, economy, and social structure.

The main payment methods for healthcare workers include line-item budgets, per-case payments, per-service payments, per-capita payments, Diagnosis Related Groups (DRGs), and global budgets. Line-item budgets and global budgets are fixed payments made for a specified period of time. Global budgets allow for reallocation of funds between service categories, whereas line-item budgets do not, which is the fundamental difference between the two. These

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methods are commonly used in hospitals in low- and middle-income countries (Waters & Hussey, 2004).

**Per-case payment:** In this method, each patient who receives health services for a particular disease is considered a case and a predetermined fee per case is paid to service providers based on a fixed amount (Akyürek, 2012).

**Per service payment:** Similar to per case payment, in this method, each patient receiving healthcare services for a specific disease is considered a case, and a predetermined fee per case is paid to service providers based on a fixed amount (Akyürek, 2012).

**Per capita payment:** In this payment method, health service providers are paid a fixed fee per person for a certain period of time. It is based on determining an amount of payment to cover all healthcare services provided to an individual during a certain period (Akyürek, 2012).

**DRG (Diagnosis Related Groups):** DRG is a method of classifying inpatient stays into groups based on clinical and cost data, and assigning similar diseases to similar groups. The method is based on grouping diseases based on the main diagnosis and procedures performed, while determining the costs during the treatment process in relative rather than monetary terms (Ministry of Health, 2014).

In Türkiye, health services provided by both the public and private sectors are largely financed by public funds, while health service providers receive reimbursement from the Social Security Institution (SSI) as compensation for the services they provide (Official Gazette, 2013).

All prices for services and procedures covered by the SSI, reimbursement scheme are listed in the Health Implementation Communiqué. However, the method of reimbursement for any service obtained from a healthcare service provider may vary depending on factors such as the urgency of the service, the type of service, and the characteristics of the healthcare service provider (Ministry of Development, 2014). After using the per service payment model for a long time in Türkiye, a transition was made from per service payment to diagnosis-based package payment for hospitalized patients undergoing surgical procedures with the Fiscal Budget Implementation Communiqué of 2005. With this implementation, package prices were determined for over 2000 surgical procedure diagnoses, and different prices were applied considering the complexity and costs of the service based on the class of the healthcare service provider. Subsequently, with the Treatment Aid Implementation Communiqué published in the Official Gazette dated July 1, 2006, invoices issued for healthcare services provided to outpatient patients started to be paid using the "per case payment method" (Official Gazette,

2006). Currently, the fees for outpatient and inpatient treatment services provided by healthcare service providers categorized by the Ministry of Health are covered by the SSI, taking into account the procedures and prices listed in the Health Implementation Communiqué annexed lists, depending on the scope and quality of the healthcare service. The fees for inpatient treatment procedures at healthcare service providers that can be categorized as second and third levels are invoiced to the SSI using either the "diagnosis-based procedure payment" or the "per service payment" method (Official Gazette, 2013).

Various methodologies exist to evaluate the efficacy of a healthcare system. In this study, an assessment has been conducted via SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis focusing on physicians, an essential segment of the healthcare system. For strategic planning in health enterprises and ensuring the healthy development of a health business, the SWOT analysis holds significant relevance (Tao & Shi, 2016). The SWOT analysis can be characterized as a study of strategic importance. Through a SWOT analysis, an organization can conduct the following assessments:

- Analyze the strong points of the organization.
- Analyze the weak points of the organization.
- Analyze the opportunities available to the organization.
- Analyze the threats faced by the organization and take preventive measures against them (Filiz, 2022).

There are numerous studies in the literature that have employed the SWOT analysis technique. Here, however, information will be provided only about studies specifically related to the subject. Dereziuk, Yaremyna, Holovchanska-Pushkar and Baidiuk (2023), have emphasized the paramount importance of the SWOT analysis for strategic management and, in particular, for efficient hospital administration.

Wazir, Shaikh and Ahmed (2013), conducted a SWOT analysis of family planning and primary healthcare services in Pakistan. According to their study, recent rapid achievements were highlighted as strengths, while the inefficiency and insufficiency in employing female staff were underscored as weaknesses. Declining staff motivation was posited as a threat, while the government's commitments on the subject were highlighted as opportunities.

Laksham (2019), carried out a SWOT analysis related to the use of drones in healthcare services. The study identified quick access to medications, swift delivery of medical supplies to patients, and time savings as primary strengths. However, the lack of trained personnel and inadequacies in infrastructure, such as landing pads, were determined as significant

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weaknesses. The ongoing development of drone technology and its expanding utilization in various sectors were considered opportunities, while occasional attacks on drones by military and illegal organizations were viewed as threats (Laksham, 2019).

Eriş (2019) performed a SWOT analysis from the perspective of health tourism in the Şanlıurfa province. The study pinpointed that resources required for the provision of health services, such as facilities, qualified healthcare manpower, and medical devices, pose significant barriers to the development of health tourism in Şanlıurfa.

Morita et al. (2023) in their SWOT analysis regarding the use of ChatGPT in public health, determined that while ChatGPT presents numerous positive developments, potential threats like misleading information, loss of health data, and breaches of privacy should also be duly considered.

In their study, Behzadifar et al. (2023) conducted a SWOT analysis of health technologies within the Iranian healthcare system. According to the research, alongside strengths such as the highest level of government official support for the use of health technology, weaknesses were identified, such as significant gaps in current practices and the system not operating optimally. From the perspective of health technology development, opportunities include the regional organization of the Iranian healthcare system and the government's receptiveness to new policies. However, a deteriorating economy and the rising exchange rate of the dollar were highlighted as the major threats.

Zaman (2023) carried out a SWOT analysis of ChatGPT's application in healthcare services. The study emphasized strengths associated with the use of ChatGPT in healthcare services, such as increased patient engagement and advancements in medical education, while also pointing out weaknesses like misleading data. Opportunities identified include remote patient monitoring and the provision of personalized healthcare services. Conversely, potential threats noted were patients self-medicating and the risks arising from information pollution.

Sulaiman, Mohammed and Al-Dabbagh (2023) conducted a SWOT analysis and determined that while the healthcare system in Iraq's Kurdish Region possesses its strengths and opportunities for further modernization, it confronts more pronounced weaknesses and threats. Vital legislation, such as medical councils, health insurance, public-private sector regulations, accreditation, and food and drug administration are lacking. The absence of a regional health policy and strategic plan was identified as significant threats. Regarding opportunities, the various government institutions in Iraq's Kurdish Region, represented by the

legislative and executive bodies, have expressed a commitment to taking decisive measures to mitigate all identified weaknesses and threats in the healthcare system.

In their study, Prasuna and Rachh (2023) conducted a SWOT analysis focusing on challenges related to data security and data privacy within the healthcare sector. Accordingly, strengths in healthcare services were identified as health awareness and mobile applications, while weaknesses were pinpointed as ineffectively protected systems and infrastructure issues. Opportunities encompass investments in the sector for diverse facilities and the noted increases in research and development activities. Threats were listed as breaches of data privacy, data thefts, and cyberattacks that cast doubt on data security.

Physicians are pivotal elements of any healthcare system. Hence, their experiences, expectations, and challenges play a determining role in the overall performance of the health system (S. Kisa & A. Kisa, 2006).

The objective of utilizing a SWOT analysis is to deeply investigate the strengths, weaknesses, opportunities, and threats of Türkiye's healthcare system, shedding light on current challenges and potential opportunities faced by physicians. This information can aid policymakers, administrators, and other relevant stakeholders in crafting strategies and policies that are more responsive to the needs of physicians (Jones & Fulop, 2021).

Table 1 provides summary information on national and international studies conducted using SWOT analysis in the literature.

**Table 1.** Literature Review

Author	Year	Type	Sample	Results
Wazir et al.	2013	International	Primary care workers	Recent advancements are seen as strengths, while low employment of women is perceived as a weakness.
Laksham	2019	International	Institutions using drones in healthcare	Accidental drone crashes are identified as a weakness, while time and cost savings are seen as strengths.
Morita et al.	2023	International	Use of ChatGPT in public health	Potential threats such as misleading information, loss of health data, and privacy breaches are highlighted in ChatGPT.
Behzadifar et al.	2023	International	Evaluation of health technology	Strong support from higher government levels is a strength, while operational challenges are highlighted as weaknesses.
Zaman	2023	International	Use of ChatGPT in healthcare services	Increased patient engagement and significant contributions to medical education are strengths, while presenting incorrect data is a weakness.
Sulaiman et al.	2023	International	Overall evaluation of the healthcare system	Legislative gaps concerning healthcare systems are weaknesses, while serious steps taken by government agencies to address issues are considered strengths.

Prasuna & Rachh	2023	International	Data security and privacy in healthcare services	Health awareness and mobile applications are strengths, while inadequately protected systems and infrastructure problems are weaknesses.
Eris	2019	National	Evaluation of province-based health tourism	Lack of qualified healthcare manpower and medical devices are identified as major weaknesses in health tourism.

The unique value of this study lies in its comprehensive SWOT analysis of the Türkiye healthcare system from a physician's perspective. While numerous studies exist in the current literature on healthcare systems, a SWOT analysis based on the experiences and perceptions of physicians specific to Türkiye is notably limited.

- **Physician-Centric Approach:** This study positions the experiences and views of physicians, one of the key actors directly influencing the health system, at its core. The challenges faced by physicians, their motivations, and their perspectives on the system play a critical role in shaping the overarching healthcare system. This perspective has not been adequately addressed in prior similar studies.

- **Comprehensive SWOT Analysis:** This research seeks to illuminate the current challenges and potential opportunities encountered by physicians by comprehensively addressing strengths, weaknesses, opportunities, and threats. This provides policymakers and administrators with in-depth insights, guiding them to formulate strategies and policies more attuned to the needs of physicians.

- **Up-to-date Information:** The healthcare sector is in constant evolution. This study, taking into consideration the most recent health reforms and policy shifts in Türkiye, analyzes how physicians are responding to these changes.

- **Comparative Perspective:** The study juxtaposes the experiences of physicians in Türkiye with similar challenges and opportunities noted in the international literature, delineating where Türkiye's healthcare system stands in relation to global health systems.

In conclusion, this research not only offers an in-depth analysis of Türkiye's healthcare system but also centers on the experiences and views of physicians, illuminating the current challenges and opportunities in the healthcare sector. This can make significant contributions to the development of health policies and strategies.

## **MATERIAL AND METHOD**

### **The Aim and Type of The Research**

The aim of this study is to conduct a detailed SWOT analysis of the Türkiye healthcare system from the perspective of physicians. The type of this study is qualitative research.

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## Population and Sample

This study focuses on the experiences of physicians practicing their profession in any institution. Participants were selected based on purposive sampling. Purposive sampling allows for an in-depth exploration of information-rich situations, determined by the objectives of the study (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2012). In selecting participants, criterion sampling, one of the purposive sampling methods, was considered. Criterion sampling takes into account situations that meet a predefined set of criteria, which can be predetermined or defined by the researcher (Yıldırım & Simsek, 2011). The criterion for this study is "physicians who have been practicing their profession for at least two years." The study reached 22 physicians and data collection ceased when data saturation was deemed achieved, signifying repetitive information.

## Data Collection Instruments

Qualitative research aims to uncover the subjective perspectives and conceptual worlds of participants, striving to see the world through their eyes. In this regard, the interview technique is employed in qualitative research to reveal participants' perspectives (Kus, 2009). In this study, semi-structured interview forms were used to elucidate the perspectives of physicians. The form was developed through literature review and consultation with experts in the field. The interview form comprises two sections: the first section queries participants' demographic information through seven questions; the second section encompasses statements related to the SWOT analysis. More specifically, it focuses on strengths, weaknesses, opportunities, and threats. Questions included in the interview form are:

- Do you believe the Türkiye Health System has strengths? What are your thoughts?
- Are there weaknesses in the Türkiye Health System? What are your views on this?
- Do you perceive any upcoming or potential opportunities for the Türkiye Health System? What are your thoughts?
- Do you see any impending or potential threats to the Türkiye Health System? What is your perspective on this?

To determine participants' demographic characteristics, a total of seven questions concerning age, gender, professional experience, type of hospital employed in, marital status, type of education, and region worked in were asked. Participant confidentiality was maintained by assigning code names like D1, D2, D3... D19, D20, D21, and D22.

The SWOT Analysis was first introduced by Prof. Heinz Weihrich, a management professor at the University of San Francisco, in an article for "Long Range Planning." During



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a time when strategic planning was still dominant, preceding strategic marketing, the article garnered significant attention and secured its place in strategic planning publications. To this day, the tool remains relevant (Cebecioglu, 2006).

### **SWOT Analysis**

The term SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats. In Türkiye literature, the acronym GZFT, representing the Türkiye words for strong, weak, opportunity, and threat, is sometimes used (Filiz, 2022). SWOT analysis is a technique employed to identify the strengths and weaknesses of an examined organization, technique, process, or situation, as well as to detect opportunities and threats arising from the external environment. It is one of the techniques that facilitate scientific situational analysis (Aktan, 2005). By examining an organization's weaknesses, potential external threats are identified in advance to prevent them from causing harm. Additionally, a comprehensive analysis process is required to leverage potential opportunities by looking at the organization's strengths (Filiz, 2022).

### **Data Collection**

Before initiating the interviews for the study, three experts knowledgeable about the Türkiye Health System (two in health management and one academician) were consulted to ensure the clarity of the interview questions. The interview form was finalized based on the feedback from these experts. Most of the physicians who agreed to participate in the research were interviewed twice. The initial interview was predominantly conducted via telephone, during which participants were briefed about the research. This ensured that respondents had a clear idea of what was expected during the interview. The second interview was conducted face-to-face with three physicians, via the Zoom platform with fourteen physicians, and over the phone with five physicians. Nearly half of the interviews (n:10) were completed with audio recording. An audio recording device was not used for some participants due to their preference (n:9) and for others because the researchers deemed it unnecessary (n:3). The busy working hours of the participants made it challenging to conduct interviews and reach out to them, resulting in a few interviews (n:6) being brief. Consequently, most of the data was collected after working hours or during weekends (n:16). Utmost care was taken to ensure the comfort and well-being of the participants. The data was gathered between 08.06.2023 and 15.09.2023, spanning a period of over three months. The average interview duration was approximately 17.3 minutes.

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## **Data Analysis**

Upon review of the collected data, it was coded by the researchers. Following coding, similar codes were categorized and themed. The study employed both SWOT and content analysis methodologies. After the interviews, they were transcribed using Microsoft Office Word 2019. Within the context of the obtained data, a coding list was generated, and words and sentences were assigned to relevant codes. Subsequently, each question was individually assessed, and a content analysis was performed.

## **Limitations of the Research**

As with every study, there are inherent limitations to this research:

### **Sample Limitation**

As the research was conducted with only 22 physicians, the generalizability of findings is limited. Results might vary with a broader participant group. Approximately one-third of the interviewed physicians were stationed in the Eastern Anatolia region. This may suggest that the results might not reflect regional differences.

### **Interview Duration**

The brief nature of the interviews may have limited the participants from fully expressing their experiences and opinions. Conducting interviews via Zoom and phone implies that non-verbal communication cues, such as body language, were not observed, potentially leading to loss of some nuances. Considering these limitations, one must exercise caution when interpreting the results and bear these constraints in mind when generalizing the findings.

### **Ethical Permissions**

In terms of the ethical appropriateness of the research, an application was made to the Artvin Çoruh University Scientific Research and Publication Ethics Committee. Ethical approval was obtained from the committee with the reference E-18457941-050.99-94572, dated 07.06.2023. Prior to data collection, participating physicians were thoroughly informed about the research and their informed consents were obtained.

## **RESULTS**

Times Table 2 presents the demographic characteristics of the physicians who participated in the study.

**Table 2.** Descriptive Findings

<b>Variables</b>	<b>n</b>	<b>%</b>	<b>Variables</b>	<b>n</b>	<b>%</b>
<b>Gender</b>			<b>Age</b>		
Female			24-30	11	50.0
Male			31-40	4	18.17
<b>Education Level</b>			<b>Professional Experience</b>		
Bachelor's Degree	20	90.90	41-50	5	22.73
Specialist Degree	2	9.10	51-60	2	9.10
<b>Marital Status</b>			<b>Region of Employment</b>		
Married	10	45.45	1-3	7	31.82
Single	12	54.55	4-10	4	18.18
<b>Type of Hospital Employed</b>			<b>Region of Employment</b>		
Public Hospital	9	40.90	11-20	5	22.73
Family Health Center	7	31.80	20 years and above	6	27.27
University Hospital	1	4.55	<b>Region of Employment</b>		
City Hospital	1	4.55	Eastern Anatolia	8	36.35
Private Hospital	1	4.55	Southeastern Anatolia	2	9.10
Research Hospital	1	4.55	Black Sea	3	13.64
Provincial Health Directorate	2	9.10	Marmara	3	13.64
			Mediterranean	3	13.64
			Central Anatolia	1	4.53
			Aegean	2	9.10

Based on Table 2, among the physicians who participated in the study: 50.0% were aged between 24-30. 54.55% were single. 40.90% work in a public hospital. 90.90% hold a bachelor's degree. 68.18% were female. 31.82% have professional experience ranging from 1-3 years. 36.3% were based in the Eastern Anatolia region.

Regarding the opinions of the physicians on the Türkiye health system, findings from the content analysis are presented under four distinct headings. Due to participants fitting multiple categories, the total numbers in tables can occasionally exceed the actual number of participants.

### **Findings on the Strengths Aspects of the Türkiye Health System**

Upon analysis of the responses regarding the strengths aspects of the Türkiye health system, prominent themes and a general evaluation emerged:

#### **Highlighted Themes**

##### **Access and Availability**

Many responses emphasized advantages related to access, such as rapid access, easy availability, the presence of family health centers in every neighborhood, easy access to desired specializations, and swift interventions through ambulance or helicopter services (n:16).

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## **Quality and Technology**

Answers highlighted advanced development of the health system in comparison to many other countries, high technological standards (such as robotic surgery), opportunities to train qualified personnel, and the presence of modern equipment (n:9).

## **Financial Opportunities and State Support**

The provision of health services for free or with state support, and a portion of costs being covered by the state, constituted another significant theme (n:7).

## **Patient Satisfaction and Patient-Centric Approach**

The emphasis on patient satisfaction, the provision of choices in selecting doctors and nurses, and other elements focused on patient needs were highlighted (n:7).

## **Special Practices and Systems**

The control of appointment systems, smart drug utilization, and vaccination systems were among the unique applications and systems praised (n:6).

## **Health Tourism**

The increase in health tourism and the preference of foreign patients for procedures, such as cosmetic surgeries, in Türkiye were frequently mentioned (n:5).

## **Education and Skilled Personnel**

Positive aspects related to education, such as the quality of education, training of proficient students, provision of successful practical training, and production of skilled personnel, were emphasized (n:5).

In a general overview of the responses addressing the strengths aspects of the Türkiye Health System, it's observed that accessibility, financial support, technological advancements, patient satisfaction, educational quality, and health tourism are prominent themes. It can be inferred that participating physicians appreciate the health system for these attributes, and these elements constitute the strong points of the Türkiye health system.

## **Findings Pertaining to the Weak Aspects of the Türkiye Health System**

When responses concerning the weak aspects of the Türkiye health system were analyzed, the following key themes emerged:

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## **Challenges Faced by Health Workers**

Predominant issues include high workloads, security concerns, incidents of physician assaults or homicides, insufficient financial and non-financial remuneration, strenuous working conditions, and unauthorized working hours (n:12).

## **Management and Organizational Issues**

Notable concerns relate to the non-implementation of referral systems, hierarchical inadequacies, intra-hospital rotation problems, and administrative challenges (n:9).

## **Resource and Equipment Insufficiency**

Issues highlighted encompass the excessive unnecessary diagnostic procedures, a lack of medical devices, and the non-expansion of new technologies (n:9).

## **Uneven Distribution of Services**

Several participants emphasized the insufficiency of health establishments in rural areas, shortages of doctors and health personnel in certain regions, and unnecessary emergency visits (n:8).

## **Lagging Behind in Education and Science**

Negative perceptions about scientific and technological backwardness and a decline in the quality of medical education have been highlighted (n:7).

## **Economic Issues**

Factors such as the importation of drugs from abroad, insufficient salaries, and cash flow challenges in procuring medical drugs have been underscored as significant economic challenges (n:7).

## **Patient and Service Utilization Problems**

The nature of the patient profile, indiscriminate use of services, and patients seeking care at incorrect health service levels were also specified (n:7).

In summary, when evaluating responses concerning the weak aspects of the Türkiye Health System, the most salient themes include challenges faced by health workers, resource and equipment insufficiencies, educational setbacks, and managerial issues. It can be inferred that the participating physicians are discontented with the health system in these regards.

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## **Findings Pertaining to the Opportunities Faced by the Türkiye Health System**

Upon evaluating the responses concerning the opportunities faced by the Türkiye health system, the following key themes emerged:

### **Health Tourism**

Türkiye's potential in health tourism and the opportunity to attract foreign exchange through increased investment in this sector were frequently emphasized (n:10).

### **Technological Innovations and Infrastructure**

The potential benefits associated with Türkiye's medical devices, treatment methods, and technological infrastructure were underscored (n:7).

### **Economic Opportunities**

Owing to the cost-effectiveness of its health services, Türkiye was highlighted as an appealing destination for international patients (n:5).

### **Young and Dynamic Population**

The presence of a young and dynamic population in Türkiye was identified as a unique opportunity for the health sector (n:4).

### **Education and Educational Infrastructure**

Innovations in education and the potential to induct well-equipped graduates into the health sector were viewed as significant opportunities (n:4).

### **Rapid and Easy Access**

The advantage of swift and straightforward access in the Türkiye health system was also mentioned as a distinct opportunity. (n:3)

### **Geopolitical Position**

Türkiye's geographical and geopolitical location was cited as an advantage, offering benefits for both health tourism and the trade of medical devices (n:3).

In a comprehensive review of the responses addressing the opportunities the Türkiye Health System faces, the potential of health tourism stands out as the most salient opportunity. Alongside this, Türkiye's young population, educational infrastructure, technological innovations, and economic advantages also figure prominently among the significant opportunities for the system. The emphasis on health tourism in particular suggests a need for more active capitalization on this potential.

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## **Findings Pertaining to the Threats Faced by the Türkiye Health System**

Upon examining the responses concerning the threats faced by the Türkiye health system, the following principal themes emerged:

### **Violence**

The escalating violence directed at healthcare workers was frequently highlighted as a threat in numerous responses (n:10).

### **Shortage of Drugs and Equipment**

Due to the high exchange rate, the inability to procure drugs and medical equipment, leading subsequently to an inability to administer treatments, was a concern echoed by many (n:8).

### **Rapid Depletion of Resources**

The swift exhaustion of health resources and its associated challenges were frequently emphasized (n:7).

### **Brain Drain**

The emigration of skilled healthcare professionals to foreign countries was identified as a significant threat (n:6).

### **Decline in Education and Quality**

Deficiencies in the training of healthcare personnel and a decline in quality were frequently cited threats (n:5).

### **Scientific Lag**

Türkiye's lag in scientific knowledge and its continued dependency on external sources for this knowledge were also noted as threats (n:4).

Among the threats faced by the Türkiye Health System, the most prominent are the rapid depletion of resources, brain drain, shortage of drugs and medical equipment, violence towards healthcare workers, scientific lag, and inadequacies in health education. Particularly, the emphasis on violence directed at healthcare professionals underscores the gravity of this issue. Strategic measures need to be implemented to mitigate these threats and minimize their adverse effects.

## DISCUSSION

In this study, we conducted a comprehensive SWOT analysis of the Türkiye Health System from a physician's perspective. Our detailed analysis revealed that the Türkiye health sector has notable strengths but also encounters significant challenges. The findings obtained are shown in Table 2 to summarise.

**Table 3.** Summary of the Findings

	<b>Strengths</b>	<b>Opportunities</b>
<b>Positive</b>	<ul style="list-style-type: none"> <li>• Access and availability</li> <li>• Quality and technology</li> <li>• Financial opportunities and state support</li> <li>• Patient satisfaction and patient-centric approach</li> <li>• Special practices and systems</li> <li>• Health tourism</li> <li>• Education and skilled personnel</li> </ul>	<ul style="list-style-type: none"> <li>• Health tourism</li> <li>• Technological innovations and infrastructure</li> <li>• Economic opportunities</li> <li>• Young and dynamic population</li> <li>• Education and educational infrastructure</li> <li>• Rapid and easy access</li> <li>• Geopolitical position</li> </ul>
	<b>Weaknesses</b>	<b>Threats</b>
<b>Negative</b>	<ul style="list-style-type: none"> <li>• Challenges faced by health workers</li> <li>• Management and organizational issues</li> <li>• Resource and equipment insufficiency</li> <li>• Uneven distribution of services</li> <li>• Lagging behind in education and science</li> <li>• Economic issues</li> <li>• Patient and service utilization problems</li> </ul>	<ul style="list-style-type: none"> <li>• Violence</li> <li>• Shortage of drugs and equipment</li> <li>• Rapid depletion of resources</li> <li>• Brain drain</li> <li>• Decline in education and quality</li> <li>• Scientific Lag</li> </ul>

In the following section, we will compare our findings with existing literature to assess their alignment or divergence.

### Strengths

The Türkiye health system is accentuated for its conspicuous advantages in terms of accessibility, quality, technological advancements, and financial resources. Notably, rapid and widespread access, cutting-edge technological facilities, and state-supported initiatives emerge as the system's most potent strengths. Furthermore, patient satisfaction and a patient-centric approach are pivotal factors augmenting the efficacy and success of the system. With the health transformation program, Türkiye has reorganized its health system, especially instituting a universal health insurance system following the social security reform. As a result of these modifications, citizens have experienced enhanced access to health services and improvements in financial protection against high health expenditures for the low-income segment (Organisation for Economic Co-Operation and Development [OECD], 2008). As of 2012, it has been mandated that all citizens in Türkiye be incorporated into the General Health Insurance system (Official Gazette, 2012). According to Allen et al. (2017), individuals with health



insurance are generally inclined to utilize health services more frequently compared to those uninsured. Insurance coverage facilitates access to treatment for individuals by alleviating their financial burden. This is applicable for both scheduled hospital visits (e.g., regular check-ups, screening tests) and emergency situations (Allen et al., 2017). Viewed from this perspective, one can attribute the positive outcomes of the health reforms Türkiye has implemented in recent years. Given the transformative changes and progress through these reforms, it can be argued that these positive strides represent the robust side of the system.

### **Weaknesses**

Like every health system, despite the aforementioned positive aspects, there are significant challenges confronting the Türkiye health system. Issues faced by healthcare professionals, especially violence, working conditions, and both material and moral rights, have surfaced as critical areas that require immediate attention. Challenges related to management and organization, resource shortages, and inequitable distribution of services have also been identified as impediments in the healthcare sector. Notably, violence directed towards healthcare professionals is increasingly becoming a concern, not just in Türkiye but in many countries worldwide. Such incidents are more frequently reported, particularly in intensive care units, emergency departments, and psychiatric clinics. In an environment where employees feel unsafe, both the morale and motivation of the staff decline, negatively impacting the quality and efficiency of health services (Caruso et al., 2022). Concerns about working conditions and material and moral rights also parallel challenges faced by healthcare workers in numerous countries. Such issues can lead to burnout among professionals, early retirements, and a decline in the quality of healthcare services (Kelly, Gee & Butler, 2021). Challenges associated with management and organization, resource shortages, and the inequitable distribution of services are commonly cited difficulties in the health systems of many developing and developed countries. Specifically, access to health services in rural areas is notably more restricted compared to urban settings. Additionally, due to resource shortages, waiting times for certain services can be extended, subsequently diminishing patient satisfaction (Nguyen et al., 2016). Factors such as the recent increase in physician emigration from Türkiye, the loss of healthcare workers due to the February 6th Maras earthquake, alongside Türkiye's rising population and increasing number of immigrants, have led to a decrease in healthcare supply and a surge in demand. These elements must be taken into consideration when evaluating the system's vulnerabilities. The primary challenges encountered in the health sector often transcend national boundaries, constituting a global issue. Addressing such problems should not be

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confined solely to national policies and strategies but should also be bolstered by international collaboration and the sharing of experiences, as many of these issues can be universal in nature.

### **Opportunities**

The participating physicians emphasized Türkiye's potential in health tourism, suggesting the country could emerge as an international hub in this sector. Technological innovations, economic advantages, and a youthful population are envisaged as significant opportunities for further system enhancement. Türkiye's geographical and geopolitical position is also highlighted as offering considerable benefits, not only for health tourism but also for the trade of medical devices. In Türkiye, there are approximately 1.000 geothermal sources, and leveraging each one could lead to substantial developments. Furthermore, it's noteworthy that under the Ministry of Health's accreditation system for health tourism, the count of authorized private hospitals, universities, and medical centers has reached 371. Within the framework of this accreditation system, 277 of these authorized entities are private hospitals and medical centers. This accreditation not only ensures quality but also provides tax advantages, amplifying its importance. Foundation university hospitals account for 29, public hospitals for 46, and public university hospitals for 19 of these accreditations. Additionally, there are 50 healthcare facilities providing services at European standards accredited by JCI. City Hospitals are anticipated to play a pivotal role in increasing Türkiye's share in health tourism (Ministry of Health, 2018). The quality of healthcare services, combined with favorable pricing policies and the country's advanced medical infrastructure, can position Türkiye as a preferred destination in this sector. Particularly in areas like cosmetic surgery, dental treatments, eye surgery, and thermal tourism, Türkiye can emerge as an attractive option for many countries. Moreover, Türkiye's unique bridging position between Asia and Europe bestows it with a strategic advantage in international health tourism. For patients, especially from neighboring countries and Central Asia, Türkiye is conveniently accessible for medical treatments. The opportunities Türkiye presents in health tourism and the healthcare sector are of paramount importance. However, the full realization of this potential hinges upon the implementation of sustainable strategies and policies.

### **Threats**

Prominent threats confronting the Türkiye Health System include violence, shortages of drugs and equipment, rapid depletion of resources, and the brain drain phenomenon. These threats can severely jeopardize the system's sustainability and effectiveness. Violence directed towards healthcare professionals has evolved into a pressing issue not just in Türkiye, but also

on a global scale. Such confrontations may arise from discrepancies between patient or their relatives' expectations and the actual provision of healthcare services. High patient volume and extended wait times in emergency departments, in particular, may escalate the likelihood of such incidents. A surge in violence against healthcare workers can erode trust in the sector and demotivate professionals. The role of the media in this context is particularly crucial. Scientific evidence indicates that excessive coverage of violent incidents in social media and news can amplify real-world aggression. Studies suggest that exposure to media violence can desensitize individuals to real-world violence and, for some, contribute to aggressive behavior (Huesmann, 2007; Huesmann & Taylor, 2006; Ministry of Health, 2018). A notable study conducted by researchers at the University of Pennsylvania in 2013 found that individuals exposed to more violent news are more likely to exhibit aggressive behavior. The study also revealed that this effect is particularly strong among individuals already at risk of violent behavior due to past aggression or mental illness (Huesmann, 2007). The researchers also discerned a pronounced effect among the youth. A study found that the disproportionate public fear and outrage concerning violent crimes is, at least partially, attributed to the media's distorted representation of these crimes (O'Hear, 2020). Given the media's potential to desensitize individuals to violence and portray it as a normal and acceptable means of conflict resolution, it is evident that comprehensive and detailed coverage of violent events may be more harmful than beneficial. Another concern is the potential for media violence to instruct individuals on how to exhibit violent behaviors. For instance, those exposed to media violence might learn novel methods to harm others or discern that violence is an effective means to achieve their goals. The impact of media coverage on violence warrants meticulous examination.

Exploring other threats faced by the Türkiye Health System, occasional shortages of drugs and equipment can be encountered in many health systems. However, when such issues become chronic, they can diminish the quality of treatments. In Türkiye, procuring certain specific medications can occasionally be challenging, attributable to international supply chain issues or economic reasons. An increased demand for health services, combined with demographic shifts like an aging population, can lead to rapid resource depletion, making service sustainability a challenge. Brain drain, a common problem in developing countries, is also observed in Türkiye, with qualified health professionals migrating abroad in search of better working conditions and quality of life. Such a trend can negatively impact the capacity and quality of the national health system. The threats highlighted by physicians reflect significant challenges confronting the Türkiye Health System. Overcoming these challenges is

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feasible through the implementation of apt strategies and policies. Both nationally-focused measures and international collaborations and experience sharing can offer effective solutions against these threats.

## CONCLUSION

Upon conducting this SWOT analysis, the Türkiye Health System appears to possess a comprehensive and multifaceted structure. Noteworthy strengths of the system include its accessibility, technological infrastructure, government support, and patient satisfaction. Furthermore, it has been identified that there are significant opportunities in areas such as health tourism, technological innovations, economic advantages, and a youthful population.

However, one must not overlook the system's weaknesses and threats. Prominent concerns that require immediate redress include violence directed at healthcare workers, brain drain, and shortages in drugs and equipment. If these issues are not addressed, they could have detrimental effects on the sustainability and quality of the health system.

Occasionally, the visible problems can be symptomatic of underlying, less evident issues. From the interviews and data analysis conducted in this study, it seems that the core problem is the strain on the healthcare supply due to overwhelming demand, with healthcare workers, as the providers, feeling the brunt of this strain. Balancing the demand and supply dynamics is projected to alleviate many challenges. On the other hand, it is anticipated that a more mindful and constructive focus on the topic of violence against healthcare workers, rather than the prevalent exaggerated media coverage, would be more beneficial.

The research suggests several recommendations for improvement:

**Violence against healthcare workers:** Comprehensive sociological and psychological studies are needed to delve into the causes and effects of violence and determine appropriate solutions. It is anticipated that a more cautious approach to news related to this issue, especially on social media, would be beneficial.

**Health Tourism:** Strategic planning is essential to maximize Türkiye's potential in this sector, focusing on target markets and specific services in health tourism.

**Technological innovations:** More investments in research and development (R&D) are necessary to rapidly integrate new technological practices and medical devices.

**Education:** To enhance the quality of health education and address scientific regress, national and international collaborations should be encouraged.

**Economic issues:** Alternative sources should be explored to address challenges in drug and medical equipment supply, with strategies developed to promote domestic production.

Brain drain: Detailed studies on the reasons for healthcare professionals migrating abroad are needed, followed by the formation of policies to reverse this trend and boost motivation.

In summary, this SWOT analysis provides an overview of the Türkiye Health System. The findings assist in better comprehending the current status of the system, while also serving as a guide for future strategic planning.

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