

HEALTH TOURISM AND EMERGENCY MEDICINE: A CASE STUDY**Ali Cankut TATLIPARMAK (M.D)*** **Muhammed Furkan ÖZDEN (M.D)**** **Asst. Prof. Sibel KAHRAMAN AK (PhD)***** **Lect. Rabia SANIR****** **Assoc. Prof. Sarper YILMAZ (MD)******* **ABSTRACT**

The objective of this study is to analyze the tourist patients admitted to Arnavutköy State Hospital for one year. This hospital is the closest hospital to Istanbul Airport and is one of Turkey's largest transportation hubs. An observational, descriptive, and retrospective case study design was used for this study. Study participants were foreign nationals who applied to Arnavutköy State Hospital without a Republic of Turkey Identity Card. In terms of patient volume, emergency medicine accounted for 60.9% of patients, surgical departments for 25.8%, and medical branches accounted for 13.3%. A total of 57.7% of the income derived from these foreign patients was received from the Emergency Department, 25.0% by the surgical departments, and 17.3% by the medical departments. A total of 1021 foreign patients were admitted to the Emergency Department, accounting for 57.7% of the total foreign patient revenue. The application rate for foreign patients was highest from Asian countries (n=1282, 76.5%), followed by the European continent (n=204, 12.2%). The impact of emergency services in health tourism may be missed if authorities consider health tourism only as therapeutic travel.

Keywords: Health Tourism, Emergency Services, Tourism, Economy, Surgical Departments, Medical Departments, Second Level Hospital.

JEL Codes: I10, I11, I19.

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Makale Geçmişi/Article History

Başvuru Tarihi / Date of Application : 3 Mart / March 2023

Düzeltilme Tarihi / Revision Date : 15 Mayıs / May 2023

Kabul Tarihi / Acceptance Date : 21 Haziran / June 2023

SAĞLIK TURİZMİNDE ACIL SAĞLIK HİZMETLERİ: BİR VAKA ÇALIŞMASI

ÖZET

Bu çalışmanın amacı, Arnavutköy Devlet Hastanesi'ne bir yıl boyunca başvuran yabancı uyruklu hastaları analiz etmektir. Çalışmanın yürütüldüğü hastane İstanbul Havalimanı'na en yakın hastanedir ve Türkiye'nin en büyük ulaşım merkezlerinden biridir. Bu çalışma için gözlemsel, tanımlayıcı ve retrospektif bir vaka çalışması tasarımı kullanılmıştır. Çalışmanın katılımcıları, Arnavutköy Devlet Hastanesi'ne Türkiye Cumhuriyeti Kimlik Kartı olmadan başvuran yabancı uyruklu kişilerdir. Hasta hacmi açısından, hastaların %60.9'unu acil tıp, %25.8'ini cerrahi bölümler ve %13.3'ünü tıbbi branşlar oluşturmuştur. Bu yabancı hastalardan elde edilen gelirin %57.7'si Acil Servis, %25.0'ı cerrahi bölümler ve %17.3'ü tıbbi bölümler tarafından sağlanmıştır. Toplam yabancı hasta gelirinin %57.7'sini oluşturan 1021 yabancı hasta Acil Servise başvurmuştur. Yabancı hastalar için en yüksek başvuru oranı Asya ülkelerinden (n=1282, %76.5) gelirken, bunu Avrupa kıtası (n=204, %12.2) takip etmiştir. Yetkililer sağlık turizmini sadece tedavi amaçlı seyahat olarak değerlendirirse, acil servislerin sağlık turizmindeki etkisi gözden kaçabilir.

Anahtar Kelimeler: Sağlık Turizmi, Acil Servisler, Turizm, Ekonomisi, Cerrahi Branş, Dahili Branş, İkinci Basamak Hastane.

JEL Kodları: I10, I11, I19.

1. INTRODUCTION

A variety of transportation facilities and ease of access to these facilities are gradually propelling the traveling sector to the top of the list of service industries (Weston et al., 2019). Various studies have revealed that these sectors have a significant impact on the economy: they generate US\$ 7.6 trillion in revenue. Globally, these sectors contribute more than 10% of Gross Domestic Product (GDP), 7% of trade, and 30% of services exports (International Finance Corporation, 2017).

A growing number of countries are allocating more resources every year to improve the quality of health services since it is an investment in human capital. A growing proportion of the GDP is allocated to the health sector by developed countries every year in order to protect and improve human health, which is also a fundamental element of economic development. While the share of tourism revenue is negatively affecting the economies of some countries, it can also create a profit sector for some of them (especially those with a high income from travel and tourism) (Becerren, Balcı İzgi and Fırat 2021: 1-10).

In terms of global economic growth, tourism is one of the fastest-growing sectors. By creating jobs, increasing exports, supporting investments, and developing infrastructure, it significantly impacts socioeconomic processes. In spite of this, there has been a devastating impact on tourism development worldwide due to the COVID-19 pandemic (Mastronardi, Cavallo and Romagnoli, 2020).

The "human factor" should not be ignored alongside the material effects of an increase in tourism income. The human factor impacts tourism because tourism is created by individuals' actions and influenced by factors such as health, the economy, and culture. We now have a new term to describe this phenomenon: health tourism. In spite of the fact that different sources define health tourism as the act of traveling to other countries in order to receive health services, this definition is incomplete and does not account for the full spectrum of health tourism (Kördeve, 2016). Essentially, health tourism consists of three components. According to the definition, the first component is traveling to different cities and countries for treatment. Another one is related to the health problems that tourists experience during their travels. Thirdly, people should engage in physical and intellectual activities to maintain a healthy lifestyle. However, due to the difficulty of measuring the other two components and the lack of clarity, the first component is analyzed more extensively than the other two. It is evident that the health tourism industry is expanding every day. In light of the growing population at hotels, airports and beaches, revealing their positive and negative effects on the hospital and health sector may influence and guide regional, national, and international policies.

The aim of this study is to evaluate the hospital admissions of tourists who presented to Arnavutköy State Hospital, which is the closest health institution to Istanbul Airport, the busiest airport in Türkiye, for a period of one year.

2. METHODS

This research was designed as an observational, descriptive, and retrospective case study. The data of the study were accessed through the Hospital Information Management System (HIMS). This study included patients admitted to Arnavutköy State Hospital without Republic of Türkiye Identity Cards and who were not citizens of the Republic of Türkiye.

2.1. The Hospital where the Research was Conducted

Arnavutköy State Hospital built by the Special Provincial Administration started accepting patients in the Ali Küçük District Polyclinic in May 2010. It has the distinction of being the first public-bed institution of Arnavutköy. The construction started in 2008 by the special administration of Istanbul province, with a land area of 17,000 m², a living area of 5,742 m², a closed area of 30,350 m² and a capacity of 201 beds and started the activity process with the appointment of the founding team on 30.12.2009. In this process, the infrastructure was established by providing service purchases and

material purchases, and with the appointment of doctors and health personnel, outpatient clinic patients started to be accepted in July 2011. Emergency service, inpatient services, operating room and intensive care units were opened respectively and the number of patients reached 700 thousand per year. General Intensive Care, Neonatal Intensive Care, Palliative Care, Eswl, Delivery room are available in the hospital. In addition, the hospital equipped with devices produced with the latest technology such as CT, MR, Mammography, Echo, Digital X-ray etc. A compact archive has been established in administrative processes, and information processing has been activated. It tries to be a modern hospital with HBYS, PACS, digital archive, security camera systems, IP phone infrastructure. In accordance with the standards of the Ministry of Health of the Republic of Türkiye, the hospital is classified as a 2nd level hospital. In other words, it is neither affiliated with a medical faculty nor does it perform training or research. Due to its limited capabilities, it is not suitable for all surgeries and applications in internal medicine and surgery.

Patients whose data could not be accessed for any reason were excluded from the study. The Ethics Committee of the Haseki Training and Research Hospital of Health Sciences University granted ethics approval for this study. The study was approved by the hospital administration. Study participants were kept anonymous. The Declaration of Helsinki was followed in all studies. An evaluation of nationality, clinic, and total hospital bill amount (in %) was carried out. The data were analyzed using Microsoft Excel and SPSS 22.

3. RESULTS

The study included 1676 foreign patients admitted to Arnavutköy State Hospital in 2022. Thirty-nine patients, whose data could not be obtained, were excluded from the study. The mean age of the patients was 34.43 ± 16.72 years. 884 patients were female (52.7%) and 792 patients were male (47.3%). In terms of admissions by department, the emergency department (1021 patients, 60.9%) accounted for the highest number (1021 patients, 60.9%) (Table 1).

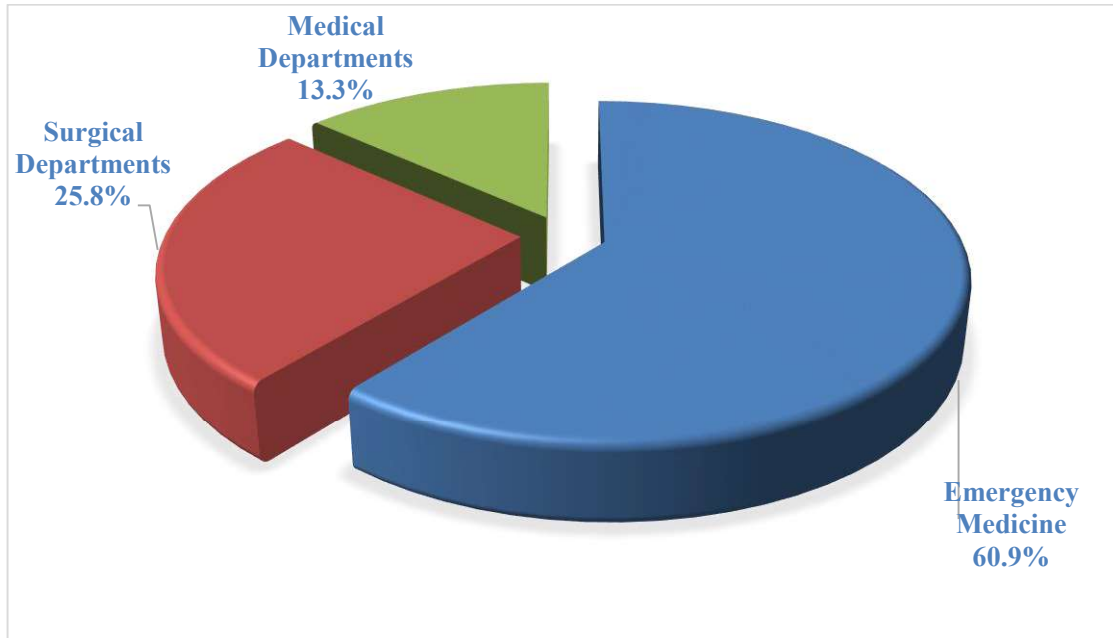
Table 1. Number of Admissions and Accrued Billings of Foreign Patients According to Clinics

Departments		Number of patients	(%)	Revenue (%)
Emergency Medicine		1021	60.9	57.7
Surgical Departments	General Surgery	64	3,8	5.2
	Obstetrics and gynecology	132	7,9	5.1
	Orthopedics	106	6,3	5.0
	Neurosurgery	40	2,4	3.7
	Intensive Care Unit	16	1,0	3.7
	Ophtalmology	12	0,7	0.6
	Urology	19	1,1	0.4
	Cardiovascular surgery	13	0,8	0.5
	Otolaryngology	31	1,8	0.8
Medical Departments	Internal Medicine	78	4,7	9.7

	Family Medicine	15	0.9	1.7
	Neurology	21	1.3	1.3
	Pulmonology	7	0.4	1.3
	Physiatry	38	2.3	1.2
	Infectious Diseases	19	1.1	1.0
	Pediatrics	20	1.2	0.6
	Cardiology	17	1.0	0.4
	Dermatology	4	0.2	0.1
	Psychiatry	3	0.2	0.0
	Total	1676	100	100

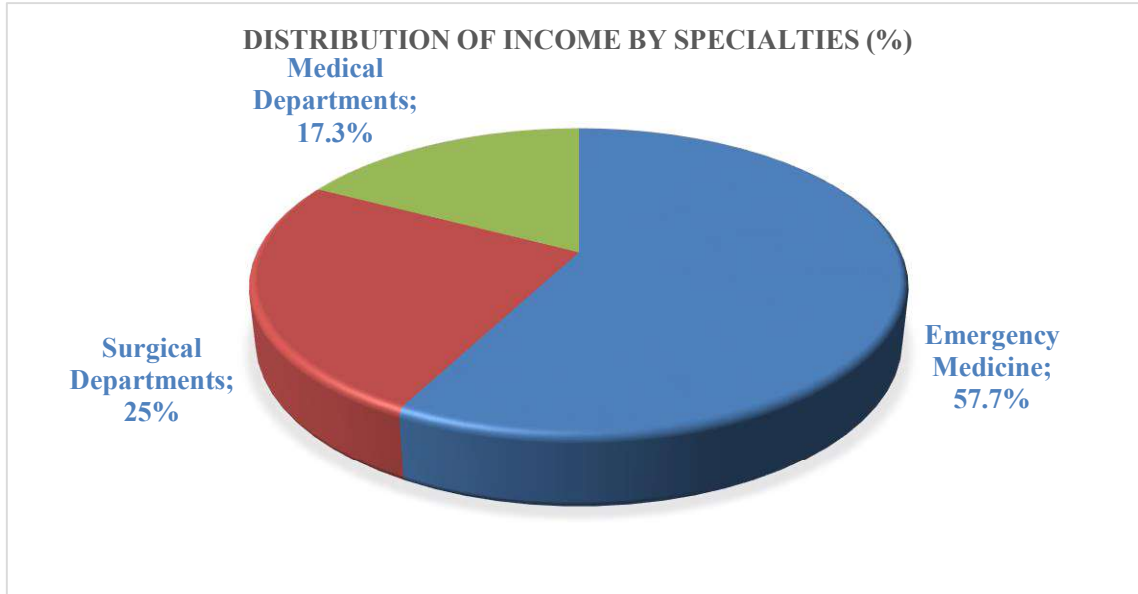
As determined by department, Emergency Medicine accounted for 60.9% of patients, Surgical departments accounted for 25.8%, and Medical departments accounted for 13.3% (Figure 1).

Figure 1. Number of Patients by Specialty (%)



A total of 1021 foreign patients were admitted to the emergency department, accounting for 57.7% of total foreign patient income. In terms of the number of patient applications, Internal Medicine (9.7%), the second highest revenue generator, ranked fourth after Emergency Medicine (n=1021, 60.9%), Obstetrics and Gynecology (n=132, 7.9%) and Orthopedics (n=106, 6.3%). Figure 2 shows the distribution of foreign patient income according to branches, with 57.7% coming from the Emergency Department, 25.0% from Surgical Departments, and 17.3% from Medical Departments (Table 1).

Figure 2. Distribution of Income from Foreign Patients Admitted to the Hospital by Specialties (%)



When foreign patients admitted to the hospital were evaluated according to their nationalities, it was seen that Turkmenistan had the highest income rate (15.3%). Data on the ten countries with the highest income percentages in 2022, where patients from 86 different nationalities applied, is presented in Table 2. Turkmenistan patients most commonly visited the Emergency Department (n=150, 53.8%) and 35.4% of their bills were related to visiting the emergency department. Syrian nationals without a Turkish Republic Identity Card were the second most common foreign national patient group admitted to the hospital (n=287).

Table 2. Income Data by Nationality for the 10 Countries with the Highest Revenue Rates

Nation	Number of patients	(%)	Revenue rate (%)
Turkmenistan	279	16.6	15.3
Syria	287	17.1	9.7
Iraq	45	2.7	9.7
Uzbekistan	145	8.7	5.9
Russian Federation	57	3.4	5.4
Azerbaijan	99	5.9	4.8
Pakistan	70	4.2	4.4
Afghanistan	69	4.1	3.7
Kyrgyzstan	22	1.3	3.6
Georgia	34	2.0	3,0

Using geographical data to evaluate foreign patient admissions, Asian countries were found to have the highest admission rate 76.5% (n=1262), followed by Europe (12.2%) with 204. The least

number of applicants were from South America (n=3) and Australia (n=3), and patients from all continents except Antarctica, which had no countries (Table 3).

Table 3. The Number of Patients and the Invoice Amount Accumulated by Continent

Continent	Number of patients	(%)	Revenue rate (%)
Asia	1282	76.5	73.3
Europea	204	12.2	15.6
Africa	137	8.2	8.8
North America	47	2.8	1.3
Australian	3	0.2	0.9
South America	3	0.2	0.1
Total	1676	100	100

4. DISCUSSION

An analysis of health tourism components reveals the following: The first component: As society has become increasingly wealthy, people are increasingly demanding luxury services to improve their health. The growing interest in health tourism is seen as one of the most important developments witnessed in the tourism services market (Altın, Bektaş, Antep and İrbán 2012). Statistics from the Ministry of Health show that Türkiye saves nearly 60 percent compared to other countries when it comes to medical operation costs. Türkiye, for example, has an average cost of 14 thousand dollars for a heart by-pass, while the USA has an average cost of 123 thousand dollars. In Israel, spinal fusion surgery can cost 33500 dollars whereas in Türkiye, it can be performed for 16800 dollars (Kilavuz, 2018). Besides mandatory medical operations, Türkiye is a popular destination for hair transplants and aesthetic procedures. In Türkiye, hair transplants cost an average of a thousand Euros, whereas in Europe and the US, the cost is ten thousand Euros and thirty thousand dollars. There is no doubt that surgical operations are the primary focus of health tourism. Nevertheless, due to the fact that the hospital where this study was conducted is a health establishment in which all surgeries are not possible, it appears that emergency department, rather than surgical clinics, have the greatest number of patients and income, while medical branches are significantly less profitable in terms of health tourism income than surgical branches. Currently, there is insufficient data on how emergency services are accounted for in total health expenditures in the Turkish health system. It is known, however, that 130 million patients presented to emergency departments throughout Türkiye in 2022 (Beştemir and Aydın, 2022). These increased numbers are expected to increase emergency services' contribution to hospital working capital. A second circumstance is that Türkiye's efforts to reduce health care costs have made it a preferred destination for countries with low incomes such as Turkmenistan, Syria, Iraq and Uzbekistan. Turkish health tourism has been more popular among people from the Asian continent than other continents. Health tourism is thought to be influenced by low costs and close proximity.

Despite being classified as travel medicine, it includes conditions associated with travel, such as infectious diseases, trauma, altitude sickness, sunburn, embolisms, jet lag, and many others (*Devlet Hava Meydanları İşletmesi*, 2023; Tunalı and Turgay, 2017). As the closest public hospital to the Istanbul Airport, the hospital where the study was conducted is usually the first choice during times of acute travel. In particular, Istanbul airport has a strategic location as it is the largest airport in Türkiye and has welcomed 164 million 83 thousand 783 domestic and foreign passengers as of October 24, 2022, in the 4 years since its opening; with an average of 1156 daily movements, this airport is the busiest in Europe (*Eurocontrol*, 2022). In addition, international travel is increasingly moving toward developing countries and more exotic parts of the world, and travelers tend to be more adventurous and daring, which in turn increases risky behaviors during travel, which need to be investigated further (Chen & Wilson, 2008).

Our study reveals the relevance of a second-level hospital to health tourism. Aside from private and tertiary health institutions that can perform surgical and interventional procedures, level 2 hospitals have become increasingly important in the second component of health tourism, which involves tourists visiting Türkiye who may experience health problems during their stay. Furthermore, the fact that a majority of the patients cared for and the majority of the costs incurred in health tourism can be credited to emergency services is a very strong indicator that emergency services should play an important role in any health tourism policies that states make and develop in the future.

Medical tourism data may have little relevance to travel tourism (Glinos, Baeten, Helble and Maarse, 2010). Due to the increased travel of people, it is necessary to treat individuals' health problems along with tourism, so this aspect of health tourism should not be overlooked. For international tourism, many countries also require health insurance. Health insurance is mandatory for most visa-required trips, but travel health insurance is not mandatory for trips to countries that do not require a visa, but it is helpful if you encounter any injuries or illness. In most cases, these patients turn to the emergency department of a hospital as their first point of contact. However, in most emergency departments, even though these patients have insurance, they are expected to pay in cash following treatment and their insurance will reimburse them afterwards. Despite this presenting a major problem to tourists, public hospitals employ employees, especially those who are involved in health tourism, to work during the day between the hours of 8 a.m. and 17 p.m. The majority of patients, however, seek treatment at any time, as shown in this study. A quality service is hindered by this.

Lastly, as societies age, people are seeking various forms of active leisure time to maintain their physical and mental health, and travel contributes significantly to this (Pelegrín-Borondo, Araújo-Vila, Fraiz-Brea, 2020). With the inclusion of tourists who travel to spas and thermal regions in this

component, it is also possible to make analyses with regard to component 3 under the umbrella of health tourism even though it is a difficult component to measure.

The literature has a very limited amount of studies which highlight the role of emergency services in the health tourism industry. Studying tourist patients admitted to a hospital and focusing on this issue is the first study of its kind. This may be due to the fact that health tourism is mostly limited to travel for treatment purposes.

Limitations:

The study was conducted in a state hospital of second level. Further studies are needed to evaluate state and private 3rd level hospitals, which perform more frequent surgical interventions and have physicians from every branch of medicine. In the study, patients with foreign national status who applied to the hospital and underwent insurance procedures were included. Medico-legal reasons made it impossible to differentiate between patients working and living illegally in Türkiye.

5. CONCLUSION

Health tourism can be overlooked if authorities ignore the other two components and only consider it as travel for therapeutic purposes. Emergency services are a valuable component of health tourism, as they can perform limited interventions but provide uninterrupted service for a long time. However, emergency services account for a large proportion of hospital revenues from foreign patients, especially at the second level.

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Hakem Değerlendirmesi: Dış bağımsız.

Çıkar Çatışması: Yazar çıkar çatışması bildirmemiştir.

Finansal Destek: Yazar bu çalışma için finansal destek almadığını beyan etmiştir.

Teşekkür: -

Peer-review: Externally peer-reviewed.

Conflict of Interest: The author has no conflict of interest to declare.

Grant Support: The author declared that this study has received no financial support.

Acknowledgement: -
