The Development and the Policies of Health Systems in Türkiye and Saudi Arabia: A Comparative Study (1960-2020)

Türkiye ve Suudi Arabistan'da Sağlık Sistemlerinin Gelişimi ve Sağlık Politikaları: Karşılaştırmalı Bir Çalışma (1960-2020)

Tasnim ALEKHWAN [1]

Research Article
Received: 22.08.2024; Revised: 23.10.2024; Accepted: 17.10.2024

ABSTRACT

This study sought to compare Saudi Arabia's and Türkiye's health systems from 1960 to 2020. A comparative approach was used, using historical data, such as demographic information, life expectancy, infant mortality rate, urban and rural population, and the number of health professionals and individuals per health professional. The budgets of the Ministry of Health were also reviewed. The state budget, gross domestic product, the number of hospitals and beds, and their distribution between each country's private and public sectors are also analyzed. The study reached several conclusions, including that Türkiye and Saudi Arabia have made major changes in health care to make it better and more accessible over the past 60 years. The way health care is paid for differs, as Türkiye has a universal system, and Saudi Arabia uses public and private insurance. Access to health care services has become easier now in both countries, but there are still problems in obtaining affordable and available treatment. Improving the quality of health care and maintaining patient safety are important focuses in both countries. They are investing in new infrastructure and technology. Health care systems in Türkiye and Saudi Arabia have their unique characteristics.

Keywords: Health system, health policies, Türkiye, Saudi Arabia, health indicators, health service, health service quality

ÖZ

Bu çalışma, Suudi Arabistan ve Türkiye'nin sağlık sistemlerini 1960'tan 2020'ye kadar karşılaştırmayı amaçlamıştır. Tarihsel veriler kullanılarak karşılaştırmalı bir yaklaşım benimsenmiştir; bu veriler arasında demografik bilgiler, yaşam beklentisi, bebek ölüm oranı, kentsel ve kırsal nüfus, sağlık profesyonellerinin sayısı ve her sağlık profesyoneline düşen birey sayısı yer almaktadır. Sağlık Bakanlıklarının bütçeleri de incelenmiştir. Devlet bütçesi, gayri safi yurtiçi hasıla, hastane ve yatak sayısı ile her iki ülkedeki özel ve kamu sektörleri arasındaki dağılımları da değerlendirilmiştir. Çalışma, Türkiye ve Suudi Arabistan'ın son 60 yılda sağlık hizmetlerini daha iyi ve daha erişilebilir hale getirmek için önemli değişiklikler yaptığını ortaya koymuştur. Sağlık hizmetlerinin ödeme şekli farklılık göstermektedir; Türkiye evrensel bir sisteme sahipken, Suudi Arabistan kamu ve özel sigorta kullanmaktadır. Her iki ülkede de sağlık hizmetlerine erişim artık daha kolay hale gelmiş olsa da, uygun fiyatlı ve ulaşılabilir tedavi alma konusunda hâlâ sorunlar bulunmaktadır. Sağlık hizmetlerinin kalitesini artırmak ve hasta güvenliğini sağlamak, her iki ülkede de önemli odak noktalarıdır. Yeni altyapı ve teknolojiye yatırım yapmaktadırlar. Türkiye ve Suudi Arabistan'daki sağlık hizmeti sistemleri kendilerine özgü özelliklere sahiptir. Yüksek kaliteli, uygun fiyatlı sağlık hizmeti sunma konusunda zorluklarla karşılaşmaktadırlar.

Anahtar Kelimeler: Sağlık sistemi, sağlık politikaları, Türkiye, Suudi Arabistan, sağlık göstergeleri, sağlık hizmeti, sağlık hizmeti kalitesi

[1] Işık University, School of Graduate Studies, 21BUSI5118@isik.edu.tr, **ORCID:** 0009-0006-6798-902X

1. Introduction

Healthcare systems act as the cornerstone for building societies and providing wellness to individuals. Such services are provided through different methods from country to country, depending on their economic, political, and social factors. In Saudi Arabia, the health care system is in totality based on public services provided free of charge by the government to the citizens, and a private sector that is increasingly playing its role in health care through public and private health insurance. On the other hand, Türkiye has also developed a model where the whole focus is on comprehensive health insurance for all based on one network of both public and private sectors combined, with very heavy control by the government over the quality of care and its accessibility by all.

Over the past 20 years, many international organizations such as the World Bank and the World Health Organization (WHO) have called on governments around the world to enhance private sector participation in healthcare provision, especially through privatization. This push stems from patients' increasing demand for better quality care, rising healthcare costs, and sometimes restricted access to health services. As a result, governments in both developed and developing countries are seeking to reform their healthcare policies. As a result, these countries' experiences in developing health systems and policies varied (Almutairi and Moussa, 2014).

In general, three main models of health systems and healthcare policies have been observed globally: the public sector, the private sector, and a combination of both. In a public healthcare system, the state owns and operates healthcare services, providing patients with free access to medical care. Sweden is an example of a country where the state is responsible for and financing healthcare services throughout the country (Reed et al., 2019).

On the other hand, some countries opt for a predominantly private healthcare system where private healthcare entities own and manage healthcare services. Patients insured in this system usually visit specific healthcare providers, and the services provided are determined according to the terms of the patients' health insurance and agreements concluded between providers and insurance companies. The United States embodies such a system. Public healthcare in the United States is primarily limited to specific population groups through programs such as Medicare, Medicaid, and Child Health. The insurance program targets exclusively the elderly, the poor, and poor children (Atasever, 2018).

Comparing the healthcare systems between Türkiye and Saudi Arabia can serve as valuable case studies and provide insights for both Saudi Arabia and Türkiye.

Second, Saudi Arabia, a Middle Eastern country rich in natural resources with a growing industrial sector and middle class, has moved from traditional medical practices to a free, state-owned healthcare system for its citizens and a large number of expatriates. The country is now moving towards privatization in healthcare policy. Comparing these developments with Türkiye's healthcare systems could provide valuable lessons for Saudi Arabia as it navigates its own healthcare policy transitions. Comparative analysis of health systems that have experienced similar situations, such as combining health systems in Türkiye, can facilitate the assessment of their respective strengths and weaknesses. This could also provide insight into a potential strategy for Saudi Arabia to develop its healthcare system in the future. In a global trend, many countries have moved from traditional to modern medicine, as well as from public sector dominance to a mix of public and private models. In the current study, the country that will be compared with Saudi Arabia is Türkiye due to many pivotal reasons.

These include that the unique geographical location in strategic areas where both countries are in a strategic position contributes much to influencing their health policies, with great regional influence. Second, both countries' healthcare systems have undergone significant changes in recent decades, albeit with different models: the Republic of Türkiye relies on comprehensive health insurance based on its health transformation plan, whereas the Kingdom of Saudi Arabia uses a combination of public and private insurance. Third, because of burgeoning economies, Türkiye and Saudi Arabia are in better positions to develop health infrastructures and invest in the most modern medical technologies. Lastly, both countries grapple with growing population concerns that also create demands for high-quality health services, thus making any comparison between them instructive with regard to how each handles these problems.

The study is limited to 2020 which marks the beginning of the COVID-19 pandemic to exclude the impact of the pandemic.

From a different perspective, the delivery of healthcare services differs between developed and developing countries partly due to differences in resource allocation. Inadequate resource allocation and high healthcare costs in a country can push individuals to search for alternative options such as traditional medicine. There is also a mixed health system that relies on the private and public sectors to provide healthcare. Saudi Arabia and Türkiye are generally considered mixed health systems.

Comparing the determinants of healthcare development in Saudi Arabia and Türkiye serves several purposes.

1.1 Objectives of the Study

The study aims primarily to shed light on the health system and health policies in Saudi Arabia and Türkiye. The study also aims to provide general concepts related to health, health policies, and the most important health indicators within the framework of the health system in both countries; and to reach results and recommendations of value to both researchers and decision-makers in both Saudi Arabia and Türkiye.

2. Health System Meaning and Services

The health system includes the resources, actors, and institutions involved in financing, organizing, and providing health activities. The health system finances all services provided to protect or improve health through the prevention, diagnosis, and treatment of diseases, injuries, and other physical and mental disorders in individuals, and the costs incurred as a result of these services.

2.1. The Concept of Health

Health has been considered one of the most important values since human existence. This concept has been defined in different ways depending on the historical period and cultural structure in which it is discussed. Especially in the past 150-200 years, with increasing expectations about the definition of health, the concept of health has emerged with different definitions ranging from the ability to survive, not to get sick, the ability to carry out daily tasks, and feeling happy, and maintaining a state of complete well-being (Aydın and Ulusoy, 2021).

Until the definition established by the World Health Organization (WHO), the concept of health was evaluated from a narrower perspective such as the absence of disease or disability in an individual. According to the definition contained in the 1946 Constitution of the World Health Organization, health is not only the absence of disease and disability in an individual but also a state of complete physical, spiritual, and social well-being (Şahin, 2017).

2.2. The Health System

There are different definitions of the concept of health systems in the literature. According to Vincent and Staines (2019) a health system is a system that aims to end a disease state through

economic, institutional, and human resources. Romer (2002) defined a health system as the direction of resources, organization, financing, and management to provide health services to a community. The World Health Organization defines a health system as all activities whose main objective is to protect, improve, and maintain health (Alkadi, 2016).

2.3. Health Services

Health services can be defined as a set of planned studies that are carried out to protect the health of people, prevent the occurrence of diseases, apply the necessary treatment when they become ill, and provide opportunities for people with disabilities to meet their needs without relying on anyone and others, to increase the health status of society and ensure that every individual lives a healthy and long life. These studies can be mainly divided into three groups: preventive health services, curative health services, and rehabilitation services (Alkadi, 2016).

-Preventive health services: These are services provided to healthy people to prevent diseases before they occur. Health education, maternal and child health, immunization, prevention of local epidemic diseases, healthy nutrition, social assistance services, combating harmful habits, worker health and occupational safety, and school health services can be given as examples of such services provided to individuals and society (Vincent and Staines, 2019).

-Curative health services: These are services that are implemented for the purpose of healing individuals whose health has deteriorated, who have been injured in some way, or who have lost their physical and mental health. This group of services is divided into levels such as primary, secondary, and tertiary healthcare services. Outpatient care services are provided in primary care, which is the gateway to the healthcare system. Secondary healthcare services include services provided to individuals who cannot receive treatment in primary care or who require inpatient treatment, and tertiary care includes qualified services provided in inpatient treatment institutions where advanced medical technologies are used (Vincent and Staines, 2019).

-Rehabilitative health services: These are services that are implemented to improve individuals with physical or mental disabilities, are long-term, and are the most difficult to obtain results.

Although the way services are delivered varies from country to country, the principles that health services are essential and mandatory for all countries and should be provided equally to all have been made clear by the World Health Organization in the Declaration of Essential

Health Services at the conference held in Alma-Ata, the capital of Kazakhstan, in 1978. According to the definition established by the World Health Organization, primary health services are health services provided by means acceptable to the general public of society, with individual participation, at a cost that can be covered by the country and society. These services, which constitute the core of health services in the country, are an integral part of the general social and economic development (Atasever, 2018).

3. The Health System in the Kingdom of Saudi Arabia

3.1. The First Phase from 1925 to 1951

Before 1925, access to and quality of healthcare services was poor. There was a shortage of health professionals, financial resources, and equipment to provide such services. The health condition of the population, in general, and the treatment techniques were quite diverse. Traditional practices were different in different regions. In the Najd region, which is now Riyadh and Qassim governorates, traditional practice was the main source of health service provision. Religious or spiritual treatment was common while physical interventions included moxibustion, phlebotomy, bone placement, and midwifery (Alsulame, Khalifa and Househ, 2015).

In the Hijaz region, which now includes the provinces of Mecca and Medina, the resources needed to provide healthcare were available through an international commitment to pilgrims visiting this region. Some hospital-level care already existed in this area, but access to and quality of services in these hospitals was either poor or inadequate, coupled with a lack of staff (Almutairi and Moussa, 2014).

In 1925, King Abdulaziz established a health department to allow access to and improve the quality of healthcare services. He established a public health organization in the same year, called the Office of Health and Relief. In 1926 onwards, the Healthcare Services Bill was passed which included 111 provisions to guide the implementation of the health system regarding the structure and responsibilities of the Health and Aid Office, and the structural and administrative systems for hospital operations (Almutairi and Moussa, 2014).

3.2. The Second Phase from 1951 to 1981

The establishment of the Ministry of Health in 1951 marked a major shift from the Office of Health and Relief, leading to a shift in the provision of free health services in Saudi Arabia. This period witnessed the imposition of treatment fees in private hospitals, the growth of public

and private sector hospitals, an increase in human resources, and a significant rise in health expenditures from US$1.73 million to US$1,821.6 million (Alsulame, Khalifa and Househ, 2015). These changes aim to enhance the quality of healthcare services and preventive care programs. In addition, the adoption of the Declaration of Alma Alta in 1978 aimed to improve access to healthcare services, enhance the health status of the population, strengthen the management of health services, and encourage research into health issues (Almutairi and Moussa, 2014).

3.3. The Third Phase from 1981 until Now

Until 1999, most Saudi citizens and expatriates obtained free healthcare services from public or private providers. However, in response to the need to expand the availability of healthcare and align with global medical advances, the Saudi government has reformed its health policy by inviting the private sector to contribute to healthcare services (Reed et al., 2019).

The New Saudi Health System (NSHS) was created in the 21st century with the aim of ensuring equal access and improving the quality of healthcare services throughout the Kingdom of Saudi Arabia. The primary goal of the NSHS is to leverage the capabilities of the private sector to meet the healthcare needs of insured individuals, while also intervening to provide public healthcare services in cases where private services are deemed inappropriate, unavailable, or inaccessible. Health insurance companies are expected to play a pivotal role in bridging the gap between healthcare service providers and patients or employers (Al Khashan et al., 2021).

The initial phase of the National Health Insurance System was launched in mid-2002 for a period of three years, mandating health insurance for all expatriates and Saudi citizens working in the private sector. During this phase, other Saudi citizens had the option of either requesting free healthcare services in public hospitals or choosing private sector services by paying directly for the care they received. In addition, they can choose to purchase an insurance plan for private healthcare services. Building on the insights gained from the first phase, the subsequent phase of the National Health Security System aims to cover all Saudi citizens (Reed et al., 2019).

When examining health indicators in relation to outcomes, it is clear that the quality of healthcare services is a critical factor in assessing the effectiveness of service delivery. As shown in the above analysis, countries face difficulties in identifying appropriate methods or frameworks to regulate access to healthcare services and improve their quality for the population (Alhazmi, 2021).

4. The Health System in Türkiye

4.1. The First Phase from 1920 to 1960

The Ministry of Health of the Republic of Türkiye was established by Law No. 10.3 of May 2, 1920, which was accepted by the Grand National Assembly of Türkiye, and the first work was carried out to solve the problems that emerged after the First World War and determine the necessary legal legislation (Aktaş, 2019).

In this period, since there was no established organization, regulatory infrastructure, or legal organization that could meet the needs of that period regarding health services, everything had to be restructured. For this reason, it can be said that the beginning of the current health infrastructure dates back to this period. Primarily, the Ministry of Health focused on post-war restructuring based on the conditions of the period and the creation of key legislation to establish the country's health system and the foundations of the public health system were laid in this period. As the first Minister of Health in the first parliamentary session, Dr. Abdülhak Adnan Adıvar was appointed to this position. Adnan Adıvar was elected Vice-President of Parliament in 1921 and left office (Atasever and Bağcı, 2020).

In addition to the restructuring of the WHO, the country's health needs were identified for the first time in this period (Frenk, & Moon, 2013):

• Expanding the state health organization,
• Increase the number of doctors and other health workers.
• Opening model hospitals,
• Training health personnel,
• Opening the birth and childcare center,
• Opening a tuberculosis clinic,
• Combating epidemic diseases such as malaria and trachoma,
• Combating social diseases such as syphilis,
• Bringing health and social organization to the villages,
•In addition to these identified needs, great efforts have been made to spread state health organizations and units throughout the country, and the necessary measures have been taken to ensure the adequacy of the health workforce in terms of quantity and quality. Health workers and health organizations, which had been completely inadequate in the early years of the Republic, began to recover in this period. Dormitories for medical students were established, and compulsory service was introduced for graduates of medical schools. Schools and courses

other than medical colleges were opened to train healthcare workers (Şantaş, 2020).

The Ministry of Health is responsible for appointing and promoting health personnel, and the management of health personnel is centralized in one center. Discipline was brought into the structure by linking the training, recruitment, promotion, and appointment of employees to a particular system. In addition, by keeping the salaries of employees working in preventive health services higher, the goal was to make work in government medical offices and preventive health services more attractive (Şahin, 2017).

• In 1928, the Law for the Proper Performance of Medicine and Medical Arts No. 1219 was issued, defining the powers and responsibilities of healthcare workers and service discipline (Şahin, 2017).

•The law establishing the Central Hygiene Institution entered into force on May 10, 1928. Within the scope of this law, the Hygiene Institution was established by integrating chemistry in Sivas and Ankara. During this period, a total of 50 laws and 18 regulations were prepared and entered into force.

• In 1930, Public Hygiene Law No. 1593 was issued, which served as the constitution of the health services, thus defining the principles of sub-policies or practices in the health services.

• In 1936, the Law of the Ministry of Health, Social Assistance, and the Civil Servants No. 3017 was issued. With these laws, the establishment of the central and regional bodies of the Ministry was completed and their powers and responsibilities were clarified. The foundations of today's health administration and practices were shaped by similar laws, especially the laws mentioned above (Şahin, 2017).

In 1946, the Supreme Council of Health approved the first ten-year national health plan and began planning studies in health services. With this plan, which aims to integrate all health services and spread them throughout the country, all services have become the duty and responsibility of the central government.

This plan, also called the Behçet Öz Plan, aims to divide the country into seven health regions and organize each region in a way that it gains efficiency according to its own needs. As a precaution against this situation, the goal was to accelerate primary healthcare services by opening maternal and child health centers, branches, and stations in 1952 (Şantaş, 2020).

4.2. The Second Phase from 1960 until 1980

This period, which began with the military intervention on May 27, 1960, is also called the period of socialization in health services. The new government formed as a result of the coup stressed the need to pay special attention to health services. In this context, the aim was to eliminate negative developments in health services with the articles of the 1961 Constitution and make health and social security services a basic and constitutional duty of the state. In addition, in this period, the State Planning Organ (DPT), an intersectoral structure, was created, and in this context, all sectors were reorganized, and the planned development period began (Ceylan, 2017).

The development that left its mark on health policy and regulation in the 1960s was Law No. 224 on the Nationalization of Health Services, which entered into force in 1961. The basic principles approved by this law (Atasever and Bağcı, 2020):

• Equal service: Health is an inherent human right. In this context, everyone should benefit from health services equally in accordance with social justice.
• Continuous service: Service must be provided to everyone, everywhere, and at all times.
• Integrated service: Social health services and the principle of diversified service in a narrow area are essential.
• Stepped service: Since it is not compatible with modern health services for every patient to apply directly to the hospital, patients must first apply to primary care institutions and then, if necessary, be referred to secondary care institutions.
• Service priority: The law must adopt the principle of giving priority to protection services in general and to groups at risk (women and children) in particular.
• Participatory service: This law is based on public participation.
• Team service: Health services are teamwork, and the job description of the team that will work in this sector is important.
• Audit service: This concept, which was not mentioned before, reveals the importance and necessity of auditing.
• Appropriate service: The appropriateness of health services to the community, workforce, and resources is important.
•Service according to population: Service units and service scope should be planned according to population standards.

4.3. The Third Phase from 1980 until Now

Until the 1980s, the Turkish healthcare system was largely shaped by the public sector. After the decisions of 24 January 1980, the belief that public health services were the primary responsibility and the policies relating to this changed dramatically. The government began to encourage the privatization of health services, which had previously been left to free market conditions. Public funding allocated to health services gradually decreased, and privatization efforts accelerated with changes in the structure of service units (Atasever, 2018).

Today, Türkiye's healthcare system is a mix of public and private healthcare services. Comprehensive healthcare service is provided through the application of public health insurance. Anyone covered by Social Security Institution (SSI) can receive free treatment services in hospitals that contract with SSI. The system was shaped by the Health Transformation Program implemented in the early 2000s. The changes made in family medicine and primary healthcare services constitute the third phase of the reform. In addition, within the scope of the reform, major changes have been made in the quality of healthcare and the way people benefit from services (Atasever, 2018).

These changes aim to legitimize the transition to a market mechanism in order to ensure the effectiveness and efficiency of health services. In this context, 112 emergency health services were provided free of charge, and hospital treatment became mandatory in emergency cases. Family medicine practice was introduced. In 2005, Social Insurance Institution (SSK) Hospitals became affiliated with the Ministry and the General Health Insurance (GSS) system was established in the same year. Again, in 2005, cooperation between the public and private sectors in health institutions began. In 2007, primary healthcare services became free. In the same year, cancer screenings became free (Aktaş, 2019).

In 2008, international expenses were paid for diseases that could not be treated locally, and private hospitals were prevented from imposing differential fees for diseases such as emergency, intensive care, and cancer, and prohibiting the imposition of differential fees on qualified hospital beds, and payment of differential fees for epidemic diseases of all kinds, work accidents, and occupational diseases even if not insured. In 2010, the full-time system was introduced in universities and hospitals affiliated with the Ministry of Health (Atasever, 2018).

In the same year, the practice of joint use of universities and hospitals affiliated with the Ministry of Health was introduced, paving the way for green card holders to benefit from emergency rooms and intensive care units in private hospitals. In 2011, the State Security

Investigations covered the costs of treatment for traffic accident victims. With the regulations introduced in 2018, the debts of university hospitals were paid, and it was stipulated that no additional fees would be charged for surgeries performed on cancer patients (Atasever, 2018).

Given the increasing demand for new technologies, the public sector's sole responsibility for relevant development financing may cause problems in resource allocation. Within the scope of sharing these financial risks, it can be said that health services today are implemented primarily by the public sector and then the private sector, and through delivery methods in which both elements are intertwined. Which public or private health institutions are prevalent and dominate the system are the result of the countries' previous social and political conditions (Aktaş, 2019).

5. Literature Review

The comparison of health systems between countries has been an important subject taken up by various academic literature. Many studies, based on historical analysis and comparative approach, have been conducted regarding the development of healthcare systems in Saudi Arabia and Türkiye. It has been identified from research that both countries have undergone significant changes in their healthcare policies over the last decades and their methods of financing healthcare or the health system itself have had fundamental differences.

5.1. Developments of Saudi Arabian Healthcare System

Most of the research are concentrated on the development of Saudi Arabian Healthcare system, which has undergone changes from the 1960s. Over the years, the Kingdom has transformed its fully state-based health care model to a hybrid model of the private and public sectors, boosting the role of the private health insurance component over recent years. A study conducted by Albejaidi (2010) stated that the privatization in the Saudi healthcare system contributed to the improvement in the level of health services but could not fully solve the problem of access to services in rural and remote areas.

In another study, Almalki, Fitzgerald and Clark (2011) discussed issues or problems the health system is facing in attaining quality and sustainability amidst increasing population growth.

5.2. The Turkish Health System and its Development

Major transformations have also been realized in the Turkish health system, especially due to the implementation of the universal health insurance system. A study by Tatar et al. (2011)

shows that the transformations in Turkish health policies, especially after the implementation of the Health Transformation Plan in 2003, contributed toward improving access to health care and reducing disparities in service provision between rural and urban areas. However, it indicated that the context of growing demands is along with the challenges of financing health care and continuity of quality.

Only a few studies have compared health care systems in Saudi Arabia and Türkiye because a study conducted by Jabbour et al. (2012) provides evidence that both countries face difficulties in offering comprehensive health care with high quality. The financing modes and infrastructure, however, are different between the two, with the latter having a universal health insurance system while Saudi depends on the mixed model between public and private insurances. Furthermore, it was noted that in Türkiye, much emphasis is given to preventive care, while curative care took precedence in Saudi Arabia.

The literature suggests that over the past decades, both Saudi Arabia and Türkiye achieved major improvements in their health care systems, but still, both have deficiencies pertaining to accessibility, quality, and financing. Whereas the Turkish system is more preventive-care-oriented, the Saudi system is characterized by privatization and over-reliance on both public and private insurance as methods of delivering health care.

6. Empirical Framework of the Study

In this study, a comparative approach was used, as historical data was used, such as demographic information, life expectancy, infant mortality rate, urban and rural population, in addition to the number of health professionals (doctors, nurses, dentists, health employees) and the number of individuals for each health professional. The budget of the Ministry of Health was also reviewed. Data were taken from the website of the Ministry of Health in each of the two countries, in addition to data from the World Health Organization between the years 1960 and 2020, to identify the development of health services and determine the shares of the state and the private sector in the system.

The purpose of determining health statistics for countries is to harmonize health statistics among countries, monitor the health performance of countries more easily, and increase efficiency in health. It is possible to raise the health level of a community to the next level by obtaining information about the health status of that community. In this case, studying countries' health statistics is of great importance.

6.1. A general comparison of the health system between Türkiye and Saudi Arabia

Table 1

GDP Comparison between Türkiye and Saudi Arabia

	Türkiye GDP – Historical Data			Saudi Arabia GDP – Historical Data		
Year	GDP	GDP per capita	Annual growth rate of GDP	GDP	GDP per capita	Annual growth rate of GDP
2020	$720.34B	$8,639	1.86%	$734.27B	$20,398	-4.34%
2015	$864.31B	$11,050	6.08%	$669.48B	$20,442	4.69%
2010	$776.97B	$10,623	8.43%	$528.21B	$17,959	5.04%
2005	$506.31B	$7,369	8.99%	$328.46B	$13,463	5.57%
2000	$274.29B	$4,278	6.93%	$189.51B	$8,795	5.63%
1995	$169.32B	$2,855	7.88%	$143.34B	$7,589	0.21%
1990	$150.66B	$2,773	9.27%	$117.63B	$7,350	15.19%
1985	$67.23B	$1,367	4.24%	$103.90B	$8,060	-9.79%
1980	$68.82B	$1,561	-2.45%	$164.54B	$16,176	5.65%
1975	$46.04B	$1,161	7.17%	$46.77B	$5,922	-8.93%
1970	$17.86B	$503	3.23%	$5.38B	$881	58.65%
1965	$11.97B	$381	2.82%	$4.24B	$735	54.26%
1960	$7.57B	$275	0.00%	$3.87B	$675	51.12%

Source: WHO (2022)

By comparing Gross Domestic Product (GDP) data, the GDP growth rate, and the per capita GDP in both Saudi Arabia and Türkiye, we notice that the GDP in Saudi Arabia in 1960 amounted to about $3.87B, and the per capita GDP reached $675, and in Türkiye the GDP in 1960 was about $7.57B and the per capita was $275. In 1990, the GDP in Saudi Arabia reached $117.63B and the per capita was $7,350. In Türkiye, the GDP reached $150.66B and the per capita was $2,773. We note that the per capita GDP in Türkiye is less much, equivalent to about a third of the per capita GDP in Saudi Arabia. In 2000, the GDP in Saudi Arabia was about $189.51B and the per capita GDP was about $8,795.

As for Türkiye, the GDP amounted to $274.29B and the per capita GDP was $4,278. In 2010, the GDP in Saudi Arabia amounted to $528.21B and in Türkiye it was less. Much at $776.97B, and the per capita GDP in Saudi Arabia amounted to about $17,959 and in Türkiye about $10,623. As for the year 2020, the per capita GDP decreased significantly in Türkiye to $8,639, while it rose in Saudi Arabia to $20,398. This indicates the great financial capabilities in Saudi Arabia compared to Türkiye, which provides the possibility of allocating large sums of money to the health system and developing it in Saudi Arabia more than in Türkiye. Huge fluctuations around the GDP growth rates have been recorded in Türkiye and Saudi Arabia. For instance, Türkiye had positive growth in several years, such as 8.43% in 2010, 8.99% in 2011, and 9.27%

in 2014, while in 2020, it had a contraction of -2.45%. On the other hand, Saudi Arabia showed high growth rates, especially in 2016 with 15.19%, but it also faced huge contractions in years such as 2015 with -4.34%, 2016 with -9.79%, and 2020 with -8.93%. Whereas Türkiye shows relative stability in the growth of its GDP, Saudi Arabia does face sharp fluctuations. While Türkiye needs to work on making its economy more stable, Saudi Arabia needs to ensure that declines in its economy are managed correctly to continue sustainable growth for the future, specifically under the umbrella of Vision 2030.

Table 2

Population Comparison of Türkiye and Saudi Arabia

	Türkiye					Saudi Arabia				
Year	Population	Fertility Rate	Density (P/Km²)	Urban Pop %	Urban Population	Population	Fertility Rate	Density (P/Km²)	Urban Pop %	Urban Population
2024	86,260,417	1.85	112	77.4 %	66,795,292	37,473,929	2.33	17	83.7 %	31,350,546
2023	85,816,199	1.86	112	77.1 %	66,156,581	36,947,025	2.36	17	83.5 %	30,846,442
2022	85,341,241	1.88	111	76.7 %	65,482,895	36,408,820	2.39	17	83.3 %	30,329,753
2020	84,135,428	1.92	109	75.8 %	63,803,445	35,997,107	2.47	17	81.3 %	29,255,576
2015	79,646,178	2.19	103	72.3 %	57,616,730	32,749,848	2.64	15	80.2 %	26,249,243
2010	73,195,345	2.14	95	70.0 %	51,225,748	29,411,929	2.85	14	76.5 %	22,512,101
2005	68,704,715	2.22	89	67.0 %	46,065,593	24,397,644	3.24	11	79.3 %	19,358,664
2000	64,113,547	2.51	83	63.9 %	40,942,328	21,547,390	4.12	10	76.9 %	16,579,826
1995	59,305,490	2.79	77	61.3 %	36,333,494	18,888,857	4.95	9	78.0 %	14,739,559
1990	54,324,142	3.13	71	58.8 %	31,923,032	16,004,763	5.83	7	78.1 %	12,503,513
1985	49,175,673	3.76	64	52.4 %	25,769,960	12,890,245	6.70	6	74.3 %	9,581,553
1980	44,089,069	4.43	57	43.7 %	19,252,765	10,171,710	7.19	5	63.1 %	6,415,124
1975	39,673,590	5.07	52	41.2 %	16,333,819	7,897,544	7.37	4	54.9 %	4,334,558
1970	35,540,990	5.63	46	37.5 %	13,334,557	6,106,191	7.58	3	46.5 %	2,840,506
1965	31,374,536	6.03	41	33.8 %	10,601,023	4,978,922	7.66	2	37.7 %	1,877,805
1960	27,510,980	6.38	36	31.5 %	8,657,857	4,165,563	7.63	2	30.7 %	1,277,054

Source: WHO (2022)

Table 2 includes Population, Fertility Rate, Density (P/Km²), Urban, and Urban Population in Turkiye and Saudi Arabia (WHO, 2022).

We notice, comparing Saudi Arabia and Türkiye from 1960 to 2020, that the population in Türkiye in 1960 reached 27,510,980, while in Saudi Arabia in the same year it was much less, at 4,165,563. The population in both countries has increased significantly, as it doubled in Türkiye and reached in the year 2000 about 64,113,547, and in Saudi Arabia it quadrupled, a significant increase, as it reached 21,547,390 in 2000. In 2020, the population in Saudi Arabia reached 35,997,107 and in Türkiye 84,135,428.

Regarding the fertility rate in both Türkiye and Saudi Arabia, we notice in comparison that in 1960 the fertility rate in Türkiye reached 6.38, while in Saudi Arabia it reached 7.63. This

percentage decreased significantly in Türkiye, where it reached about 3.13 in 1990, and in Saudi Arabia it decreased to a lesser extent, reaching 5.83. In 2000, this percentage decreased and reached only 2.51 in Türkiye, and in Saudi Arabia it reached 4.12. In 2020, the fertility rate in Türkiye reached about 1.85, while in Saudi Arabia it decreased significantly to 2.33.

As for population density, in Türkiye in 1960 it was about 36 (P/Km²), and in Saudi Arabia it was much lower, about 2 (P/Km²). In 2000, population density was about 83 (P/Km²), and in Saudi Arabia it was much lower, about 10 (P/Km). Km²) In 2010, the ratio reached 95 (P/Km²) in Türkiye, and in Saudi Arabia it was much lower at 14 (P/Km²). In 2020, the ratio in Türkiye reached 111 (P/Km²), and in 2020 it was about 17 (P/Km²). We note through comparison that the population density in Türkiye is much higher than in Saudi Arabia. As for the urban population in Saudi Arabia and Türkiye, we note that the number of urban residents in 1960 in Saudi Arabia was 1,277,054, and in Türkiye it was much higher, reaching about 8,657,857. The number of urban residents in Saudi Arabia increased significantly until 2020, reaching 31,350,546, and in Türkiye the number of urban residents in 2020 reached about 66,795,292.

6.2. A Comparison between Health Indicators in Türkiye and Saudi Arabia

The Ministry of Health is currently the main government provider and funder of healthcare services in the Kingdom of Saudi Arabia, and these services constitute 60% of the total health services in the Kingdom of Saudi Arabia. Other government agencies include referral hospitals (such as King Faisal Specialist Hospital and Research Centre), Security Forces Medical Services, Army Forces Medical Services, National Guard Health Affairs, Ministry of Higher Education Hospitals (teaching hospitals), and Aramco. Hospitals and health services at the Royal Commission for Jubail and Yanbu, school health units affiliated with the Ministry of Education, and the Red Crescent Society. With the exception of referral hospitals, Red Crescent Society and teaching hospitals, each of these agencies provides services to a specific population, usually employees and their families. In addition, they all provide health services to all residents during crises and emergencies (Omar M. Al-Nozha ,2024).

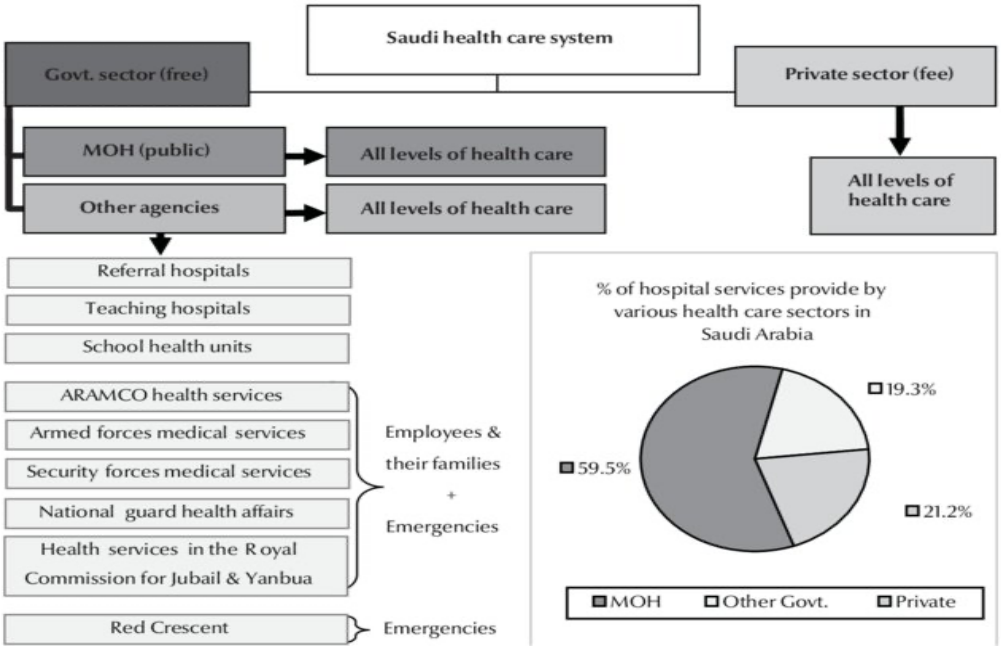
Advances in health services, along with other factors such as improving and facilitating access to public education, increasing health awareness among the community and improving living conditions, have contributed to the significant improvements in the health indicators mentioned earlier. However, it has been noted that despite the multiplicity of health service providers, there is no coordination or clear communication channels among them, which leads to wastage of resources and duplication of efforts. For example, there are great opportunities to benefit from

equipment, laboratories, training methods, and well-trained staff from different countries. However, as a result of weak coordination, utilization of these opportunities is limited within each sector. In order to overcome this problem and provide the population with modern, fair, affordable, organized and comprehensive healthcare, a royal decree in 2002 led to the establishment of the Health Services Council headed by the Minister of Health. Health includes representatives of other governmental and private health sectors (Omar M. Al-Nozha, 2024).

Although the Council's goal was to develop a policy for coordination and integration among all healthcare services authorities in the Kingdom of Saudi Arabia, no significant progress has been achieved so far in this area.

Figure 1

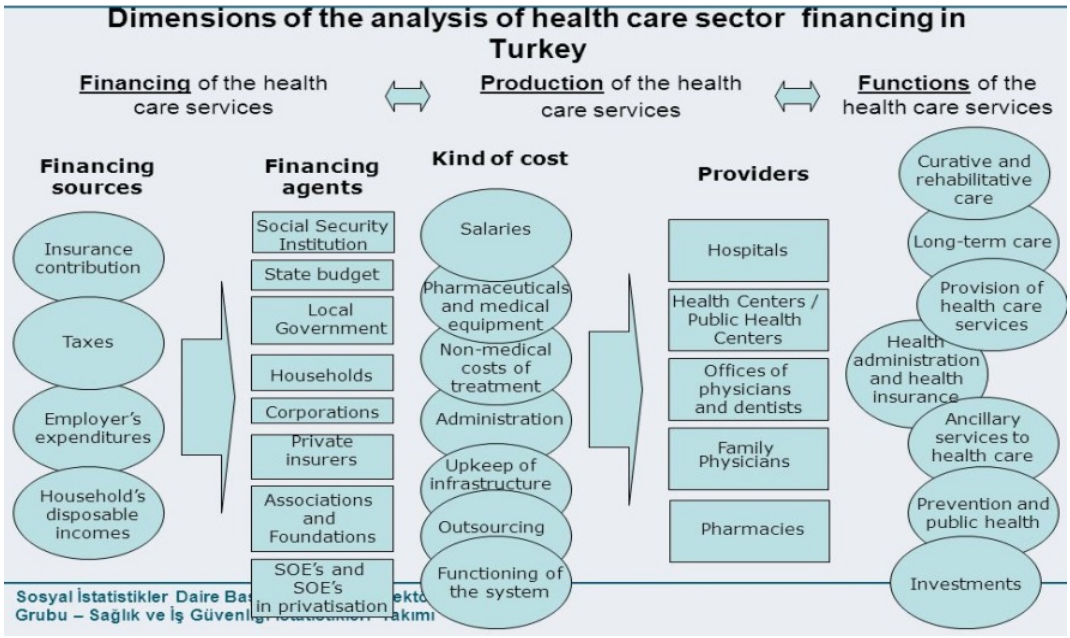
Health System Structure in Saudi Arabia



Source: Al Khashan et al. (2021)

Figure 2

Health System Structure in Türkiye



Source: Atasever and Bağcı (2020)

According to the Constitution of the Republic of Türkiye, healthcare is public property, it is the duty of the state, and the Ministry of Health is responsible for health services. Health services are provided by public, semi-public, private and non-profit institutions. Health services are financed through taxes, Social Security premiums, private insurance premiums, and out-of-pocket payments. With the accelerated reforms in the past 20 years and the Health Transformation program started in 2003, the Turkish health system was reorganized, and the public health insurance system was put into effect with the social security reform. As a result of these changes, citizens' access to health services has been improved, and there has been an improvement in the financial protection situation of low-income levels versus high health expenditure. As of 2012, all citizens must be included in the public health insurance system (Atasever and Bağcı, 2020).

The healthcare system in Türkiye is diverse and integrated. This system includes several components of health institutions that work in coordination and cooperation. These components include public hospitals run by the Ministry of Health, private hospitals, and university-affiliated hospitals, all of which play a major role in providing health services in Türkiye. The health system consists of multiple levels of healthcare, including primary, secondary and tertiary care. At the primary care level, the family medicine system comes at the top of the list

as it is an essential element in providing primary health services. Public and private hospitals provide healthcare services at the secondary care level. Finally, research and training hospitals and public and private university hospitals provide healthcare services at the tertiary care level (Ulusoy & Aydın, 2021).

Table 3

Number of Hospitals in Türkiye and Saudi Arabia

	Number of Hospitals in Turkiye				Number of Hospitals in Saudi Arabia			
Year	State Hospitals	Private Hospitals	Other* Hospitals	Total Hospitals	State Hospitals	Private Hospitals	Other* Hospitals	Total Hospitals
1960	435	71	30	536	145	53	8	206
1980	677	90	43	810	213	78	12	303
2000	754	267	58	1079	457	245	25	727
2005	793	293	57	1143	678	312	67	1057
2010	843	489	45	1377	879	564	89	1532
2015	865	562	36	1463	967	590	90	1647
2020	899	587	54	1540	1013	756	113	1882

Source: WHO (2022)

Table 3 includes Number of Hospitals in Turkiye in Turkiye and Saudi Arabia (WHO, 2022).

The comparison of hospitals in both countries, Türkiye and Saudi Arabia, indicates the current major trends in the evolution of their healthcare systems. For example, in 1960 there were about 536 hospitals in Türkiye, with the majority of them being state operated 435 hospitals. While in Saudi Arabia, there were only 206 hospitals, with 145 of them being government operated.

Whereas in 2000, the number increased to about 1,079 hospitals, including 754 public and 267 private hospitals. In the same period, the healthcare structure in Saudi Arabia was expanded to 727 hospitals, with 457 public hospitals and 245 private facilities.

In 2010, the number of hospitals in Turkiye increased to 1,377, with 489 categorized as private hospitals. Saudi Arabia developed quite significantly to reach 1,532 hospitals, with 564 private hospitals.

In comparison, in 2020, there were 1,540 hospitals in Türkiye, while in Saudi Arabia, it was topped with a total number of 1,882 hospitals, including 756 private facilities.

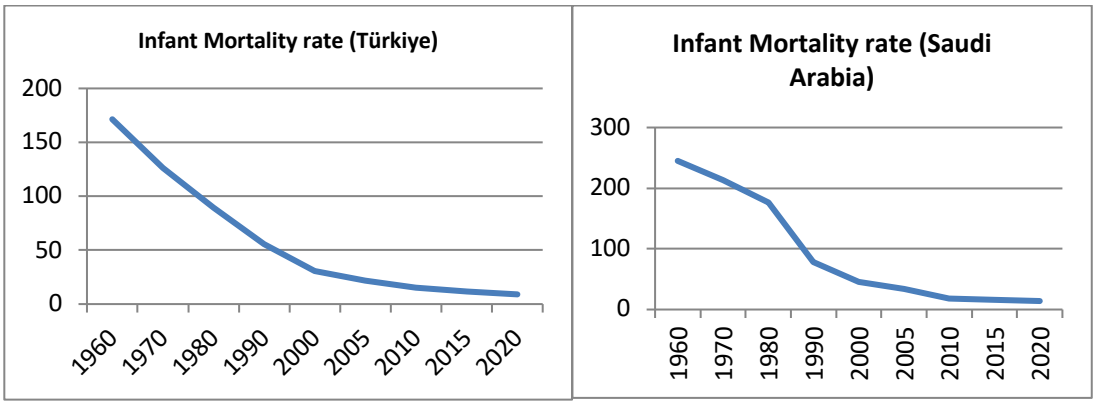
This brings us to the "Other" category. In a broad sense, these are hospitals that are not identified as belonging to either state or private ownership. It should also be pointed out clearly in the text so that one is well-briefed on health care in the two countries.

The discussion in Table 3 on the health indicators of Türkiye and Saudi Arabia would be even more inclusive if such a health indicator evolution is linked to a historical timeline of the health

system reforms in those countries. It can explain how changes in health policies and investments over the decades affect access to and quality of care.

Figure 3

Infant Mortality Comparison between Türkiye and Saudi Arabia

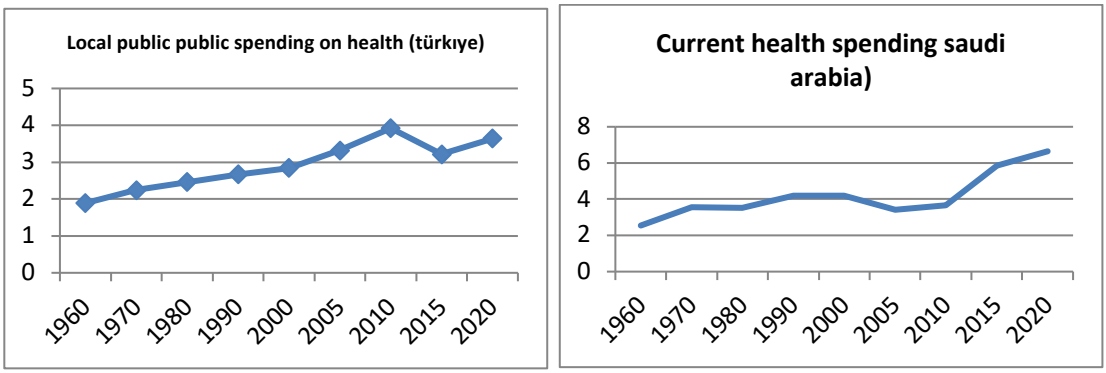


Source: World Health Organization (2022)

Regarding the infant mortality rate per 1,000 births in Saudi Arabia and Türkiye, we note that the mortality rate in Türkiye is lower than in Saudi Arabia from 1960 to 2020, as it reached 245 in 1960 in Saudi Arabia and about 171 in Türkiye, while in 1990 it reached about 78 in Saudi Arabia and 55.5 in Türkiye. In 2010, the percentage in Saudi Arabia reached 18, while in Türkiye it was 15.4. In 2020, this percentage decreased in both Saudi Arabia and Türkiye, as it reached 14 in Saudi Arabia, and 9 in Türkiye. We notice, by comparison between Saudi Arabia and Türkiye, that the infant mortality rate declined in both Saudi Arabia and Türkiye as a result of the development of healthcare system in both countries during the period from 1960 to 2020.

Figure 4

Health Spending Comparison between Türkiye and Saudi Arabia

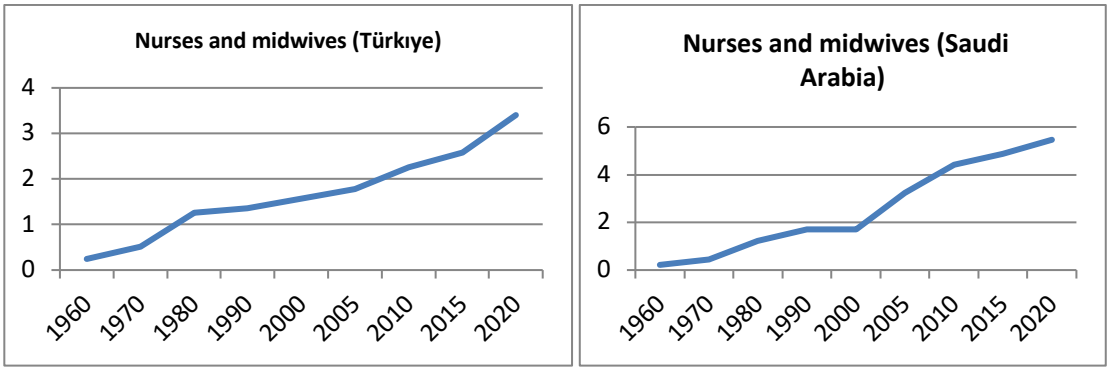


Source: World Health Organization (2022)

As for spending on health as a percentage of the GDP in Saudi Arabia and Türkiye, we note that the percentage of spending in Saudi Arabia on health as a percentage of the GDP amounted to about 2.5461 in 1960, while in Türkiye it amounted to 1.89, and in 2000 the percentage in Saudi Arabia reached 4.21 and in Türkiye a much lower percentage. By 2.84, as it reached 3.64 in 2010 in Saudi Arabia, a lower percentage than Türkiye, where the percentage reached 3.92, in which spending on health developed from 2005 to 2010, but this percentage declined significantly from 2010 in Türkiye compared to Saudi Arabia, where it reached 6.646 and in Türkiye only 3.64.

Figure 5

Nurses (per 1000 people) Comparison between Türkiye and Saudi Arabia

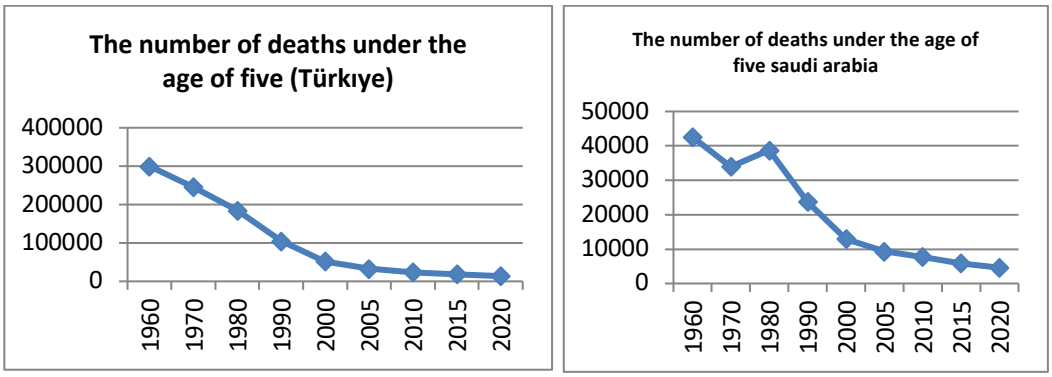


Source: World Helath Organization (2022).

We compared Türkiye and Saudi Arabia regarding the availability of midwives and nurses per 1000 population during the period from 1960 to 2020 that the percentage in Saudi Arabia in 1960 was 0.217, while in Türkiye it was higher at 0.244, and in Türkiye the percentage of availability of nurses and midwives relative to the population remained higher. From Saudi Arabia until 1980, when it reached 1,214 in Saudi Arabia, while it reached 1,254 in Türkiye, but the percentage increased from 1980 in Saudi Arabia compared to Türkiye, where it reached 1,694 in 2000 in Saudi Arabia and 1,564 in Türkiye, and in 2010 the percentage increased in Saudi Arabia compared to Türkiye, where it reached 4,413 in Saudi Arabia compared to 2,256 in Türkiye. In 2020, the percentage of availability of midwives and nurses per 1,000 population was 5,464 in Saudi Arabia compared to 3,403 in Türkiye. This indicates the development of population coverage in Saudi Arabia at a higher rate than Türkiye in terms of the availability of nurses and midwives relative to the population.

Figure 6

The Number of Death under 5 Years Comparison between Türkiye and Saudi Arabia

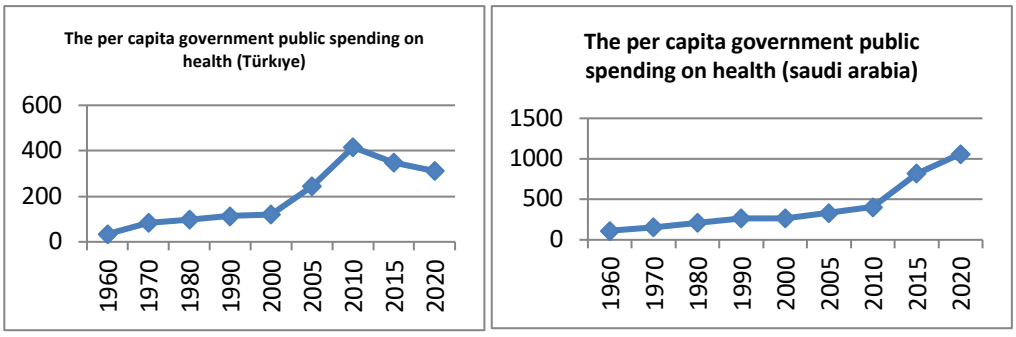


Source: World Health Organization (2022)

We noted a distinction between Saudi Arabia and Türkiye in terms of deaths of children under the age of 5 that the number of deaths in Saudi Arabia reached 42,553 in 1960, while in Türkiye the number reached 299,913, as child deaths began to decrease from 1960 in both countries due to the development of the health system, as it decreased in Saudi Arabia. By approximately 35% and reached 12,975 in 2000, while it decreased in Türkiye by more than 50%, as the number of deaths reached 52,287 in 2000, and the number of deaths continued to decrease in both countries, reaching in 2020 in Saudi Arabia 4,599 and in Türkiye 13,640. This indicates the development of the healthcare system in for both countries, the results indicate that the death rate for children under the age of 5 decreased in Türkiye by 95% between 1960 and 2020, while it decreased by a smaller percentage in Saudi Arabia by 89% between 1960 and 2020.

Figure 7

The per capita health spending comparison between Türkiye and Saudi Arabia



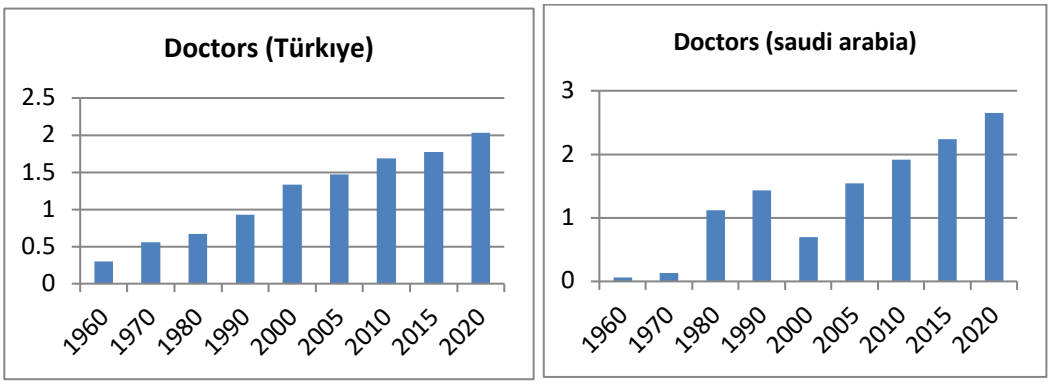
Source: World Health Organization (2022)

Regarding government health spending per capita in both Türkiye and Saudi Arabia, denominated in dollars, we note through comparison that in 1960, the per capita GDP of

government spending on health in Saudi Arabia amounted to $113 compared to only $34 in Türkiye, and in 2000 the per capita GDP in Saudi Arabia reached $266 compared to 121 dollars in Türkiye. In 2010, the per capita GDP continued to increase more in Türkiye and surpassed Saudi Arabia, reaching about $416 compared to only $405 in Saudi Arabia. However, this share developed after 2010 very significantly in Saudi Arabia compared to Türkiye, where the per capita GDP of government spending on Health in Saudi Arabia is five times that of Türkiye, about 1,621 in Saudi Arabia compared to only 312 in Türkiye.

Figure 8

Doctors (per 1000 people) compared between Türkiye and Saudi Arabia



Source: World Health Organization (2022)

We notice, through the comparison between Saudi Arabia and Türkiye in terms of the percentage of doctors available per 1,000 of the population, that in 1960 the percentage in Saudi Arabia reached 0.061, while the percentage was much higher in Türkiye, where it reached 0.3 per 1,000 of the population, and in 1970 the percentage in Saudi Arabia began to increase more than Türkiye, where in 1990 it reached about 1.433 in Saudi Arabia compared to Türkiye, where the percentage was lower at 0.932. In 2010, the percentage in Saudi Arabia reached 1.92, while in Türkiye it reached 1.687. In 2020, the percentage in Saudi Arabia was 2.648, while in Türkiye it was 2.036, as we notice through the comparison between Türkiye and Saudi Arabia: Saudi Arabia greatly outperformed Türkiye in terms of providing the percentage of doctors available to the population from 1970. This indicates the development of health policies in Saudi Arabia from 1970 until 2020 if the percentage of increase in the number of doctors was lower in Türkiye during the study period than in Saudi Arabia.

7. Discussion

A comparative analysis of the healthcare systems in Saudi Arabia and Türkiye reveals similarities and differences. Saudi Arabia has moved from a traditional healthcare model to one that includes privatization, particularly under the Saudi National Health System (NSHS). The Ministry of Health in Saudi Arabia has shifted its focus from quantity to quality of healthcare services over the past six decades, emphasizing the importance of both aspects.

The Turkish healthcare system initially aimed to control epidemic diseases and later evolved into a social care model that prioritizes preventive health strategies to prevent avoidable diseases. The Turkish government's strong financial and political support played a crucial role in the development of health insurance policies.

Türkiye's healthcare system also focuses on preventive and curative care. Responsibility for providing healthcare is shared between the government and private investors, who operate within an open market economic framework. While insurance plans in Türkiye are effective, they suffer from limitations in terms of coverage.

In Saudi Arabia, an increase in state revenues has facilitated widespread access to healthcare services for the population. However, the country has experienced significant population growth, averaging about 4 % per year over the past decade. The decline in accessibility has been accompanied by an increase in demand for high-quality healthcare services due to diseases of abundance. Therefore, it is crucial for each of the key stakeholders in Saudi Arabia to make sustainable contributions to the appropriate healthcare model. First, the state must ensure access to and quality of primary healthcare for the entire population, as well as specialized care at the hospital level, through appropriate regulation and financing of health insurance coverage, following the example of Türkiye. In addition, public health and preventive healthcare programs, along with promotional services, must remain a priority and a major focus of state policy. Second, the private sector should contribute to an open market environment, allowing the forces of supply and demand to determine options for healthcare services. While the state's role in regulating the quality of these services is essential, access to them may not be directly controlled.

8. Conclusion and Recommendations

The analysis suggests several policy recommendations for the Kingdom of Saudi Arabia. First, given the significant rise in the birth rate, it is necessary to give priority to implementing a

comprehensive family health promotion program in line with the cultural and religious standards of the population. This would ensure effective delivery of maternal and child healthcare services at both primary and hospital levels. In addition, enhancing access to public healthcare services and providing institutional and financial support should be designed to accommodate the high birth rate in Saudi Arabia.

Additionally, health spending in Türkiye as a proportion of GDP is significantly lower compared to Saudi Arabia. This underscores the need for a gradual increase in health spending, as GDP is a reflection of a country's overall macroeconomic development.

Any efforts to improve the quality of healthcare services must take into account factors such as life expectancy, child mortality rates and adult mortality rates. It is worth noting that the high child mortality rate emphasizes the importance of implementing an evidence-based maternal and child health care program.

This comparative analysis also provides evidence and insights into the impact of health policy reforms in Saudi Arabia compared to Türkiye, including:

Access to healthcare: While the government ensures equality and access to healthcare in Saudi Arabia, there are disparities in rural and remote areas. Challenges include long waiting times for specialty appointments, limited guidance on preventive health services, and lack of choice in healthcare providers. The Kingdom of Saudi Arabia has been committed to promoting public health and providing healthcare services to all Saudi citizens since 1992, as set out in Article 31 of the New Basic Law: Rights and Duties of the Saudi State. NSHS is expected to fulfill this commitment, particularly by addressing gaps and improving service quality.

Effective legislation to regulate: The role of the state is not only limited to providing healthcare services to meet the needs of its people, but also includes developing legislation and systems that support access to these services, meet patients' expectations, and ensure equity through regulation and resource allocation. Having a workable policy to regulate the private sector is crucial given the contextual constraints of Saudi Arabia.

An appropriate hybrid model of healthcare involves the continuing contribution of both the public and private sectors. Private healthcare services remain critical, especially in rural and remote areas with limited access to traditional medical practice. The regulation of the quality of these services can be supervised by the state and international organizations. Likewise, insurance-related privatization policy initiatives should prioritize key target groups such as

morbidity/mortality and age, such as children under 5 years of age and older people aged 65 years and above. On the other hand, state interventions in public and preventive healthcare services, as well as health promotion, should be aligned with privatization initiatives. According to Al Khashan et al. (2021), the increase in visits by Saudi women to obstetrics and gynecology clinics is a positive indicator of their awareness of their health condition and is also linked to a decrease in the infant mortality rate in the country.

Bibliography

Aktaş, Püren, (2019). "Birinci Basamak Sağlık Hizmeti Sunucularının Kapıtutuculuk İşlevi ve Bu İşlevin Sağlık Sistemi Üzerindeki Etkileri" *Hacettepe Sağlık İdaresi Dergisi*, 22(4): 879-892.

Al Khashan H., F. Abogazalah, S. Alomary, M. Nahhas, A. Alwadey, B. Al-Khudhair, F. Alamri, N. Aleisa, N. Mahmoud, and M. Hassanein, (2021). "Primary Healthcare Reform in Saudi Arabia: Progress, Challenges and Prospects." *East Mediterranean Health Journal,* 27(10): 1016-1026.

Albejaidi, Fahd Mohammed, (2010). "Healthcare system in Saudi Arabia: An analysis of structure, total quality management and future challenges." *Journal of Alternative Perspectives in the Social Sciences*, 2(2): 794-818.

Alhazmi, Fahad, (2021). "A Critical Review of Healthcare Human Resource Development: A Saudization perspective." *Health*, 13(12): 1496-1510.

Alkadi, Sarah Hamad, (2016). "The Healthcare System in Saudi Arabia and its Challenges: The Case of Diabetes Care Pathway." *Journal of Health Informatics in Developing Countries*, 10 (1): 1–29.

Almalki, M., G. Fitzgerald, and M. Clark, (2011). "Health care system in Saudi Arabia: An overview." *Eastern Mediterranean Health Journal*, 17(10), 784-793.

Almutairi K.M. and M. Moussa, (2014), "Systematic Review of Quality of Care in Saudi Arabia. A Forecast of a High Quality Healthcare." *Saudi Medical Journal,* 35(8): 802–809.

Alsulame, K., M. Khalifa, and M. Househ, (2015). "eHealth in Saudi Arabia: Current Trends, Challenges and Recommendations." *Studies in Health Technology and Informatics*. 213: 233–236.

Atasever, Mehmet, (2018). *Türkiye'de Sağlık Hizmetlerinin Finansmanı ve Sağlık Harcamalarının Gelişimi*, Ankara.

Atasever, M., and H. Bağcı, (2020). *Türkiye Sağlık Sistemi*. Akademisyen Kitabevi.

Avanzas P., I. Pascual, and C. Moris, (2017). "The Great Challenge of the Public Health System in Spain." *Journal of Thoracic Disease,* 9(Suppl 6): 430.

Ceylan, Begüm, (2017). "Sağlık Hizmetlerinde Kullanıcı Katkılarının İlaç Tüketimine Etkisi: Hastalar ve Eczaneler Üzerine Bir Değerlendirme," Master's Thesis, Süleyman Demirel Üniversitesi, Isparta.

Frenk, J., & Moon, S. (2013). *Governance challenges in global health.* The New England Journal of Medicine, 368(10), 936-942

Jabbour, S., R. Giacaman, M. Khawaja, I. Nuwayhid, and R. Yamout (2012). *Public health in the Arab world*. Cambridge University Press.

Omar M. Al-Nozha MD,(2024), Key aspects of the Saudi healthcare system reform and the potential impact on the main stakeholders: A qualitative study, *Journal of Taibah University Medical Sciences*. 19(3):598-610.

Reed, S., A. Göpfert, S. Wood, D. Allwood, and W. Warburton, (2019). Building Healthier Communities: The Role of the NHS as an Anchor Institution. *The Health Foundation*. London.

Şahin, Dilek, (2017). "Sağlık Göstergeleri Bakımından Türkiye'nin Avrupa Birliği Ülkeleri Arasındaki Yeri: İstatistiksel Bir Analiz." *ÇAKÜ Sosyal Bilimler Enstitüsü Dergisi*, 8(2): 55-77.

Şantaş, Gülcan, (2020). "İç Göç, Sağlık Hizmetleri Kullanımı ve Sağlık Statüsüne İlişkin Kavramsal Bir İnceleme." ACU Sağlık Bilimleri Dergisi, 11(1): 1-7.

Tatar, M., S. Mollahaliloğlu, B. Şahin, S. Aydın, A. Maresso, and C. Hernández-Quevedo, (2011). "Turkey: Health system review." *Health Systems in Transition*, 13(6): 1-186.

Ulusoy H., and J. C. Aydın, (2021). "Birleşik Krallık Sağlık Sistemi", D. Tengilimoğlu, and Z. Öztürk (eds.), *Karşılaştırmalı Sağlık Sistemi* (257-264). Ankara: Nobel.

Vincent, C., and A. Staines, (2019). "Enhancing the Quality and Safety of Swiss Healthcare." *Bern: Federal Office of Public Health*.

World Health Organization. (2022). *World health statistics 2022: Monitoring health for the SDGs, sustainable development goals.* Retrieved October 15, 2023, from https://www.who.int/publications/i/item/9789240051157