Health Care Systems in Transition

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Foreword

The Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of a health care system and of reform initiatives in progress or under development. The HiTs are a key element of the work of the European Observatory on Health Care Systems.

HiTs seek to provide relevant comparative information to support policy-makers and analysts in the development of health care systems in Europe. The HiT profiles are building blocks that can be used:

- to learn in detail about different approaches to the organization, financing and delivery of health services;
- to describe the process, content and implementation of health care reform programmes;
- to highlight challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health care systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries.

The HiT profiles are produced by country experts in collaboration with the Observatory's research directors and staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides the detailed guidelines and specific questions, definitions and examples needed to compile a HiT. This guidance is intended to be flexible to allow authors to take account of their national context.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health care system and the impact of reforms. Due to the lack of a uniform data source,

quantitative data on health services are based on a number of different sources, including the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) Health Data and data from the World Bank. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

The HiT profiles provide a source of descriptive information on health care systems. They can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health care systems. This series is an ongoing initiative: material is updated at regular intervals. Comments and suggestions for the further development and improvement of the HiT profiles are most welcome and can be sent to observatory@who.dk. HiTs and HiT summaries are available on the Observatory's website at www.observatory.dk. A glossary of terms used in the HiTs can be found at www.euro.who.int/observatory/Glossary/Toppage.

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The Observatory team working on the HiT profiles is led by Josep Figueras, Head of the Secretariat, and research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is carried out by Suszy Lessof.

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Introduction and historical background

Introductory overview

Country brief

Turkey is the confluence of East and West, a historical country where the two continents and cultures of Europe and Asia meet and blend. Geographically, Turkey is located in the Northern Hemisphere, almost equidistant to the North Pole and the equator. Mainland Anatolia, the birthplace of many great civilizations, has always been a bridge for commerce and a gateway between cultures because of its land connections to three continents and the sea surrounding it on three sides.

The land area of Turkey, including lakes, is 814 578 km^2. Turkey is bordered by Georgia and Armenia to the north-east, the Islamic Republic of Iran to the east, Iraq and Syria to the south and Greece and Bulgaria to the west.

The Mediterranean Sea turns into the Aegean Sea along the west coast of Turkey, facing Greece. In the northern part of the Aegean, Çanakkale Bogazi (the Dardanelles) give passage to the Marmara Denizi (Sea of Marmara), which then opens into the Black Sea through the Istanbul Bogazi (the Bosporus). This spectacular strait separates the European from the Asian side of Turkey's largest city, Istanbul.

The Republic of Turkey was created in 1923 from the Turkish remnants of the Ottoman Empire, once one of the largest empires in the world. The Ottoman Empire collapsed after the First World War, and Kemal Atatürk, the founding father of the Republic, fought Italian, French, Greek and British armies to reclaim the land that Turkey now possesses. The Republic was proclaimed on 29 October 1923.

Fig. 1. Map of Turkey[1]

Source: World Factbook 2002.

Atatürk transformed his military leadership into leadership in economics, political science, manufacturing and engineering. Forced to rebuild a country that had been destroyed by war, he aimed to modernize it as quickly as possible. After Atatürk's death in 1938 two major parties ran the government for many years. In 1945 Turkey joined the United Nations, and in 1952 it became a member of the North Atlantic Treaty Organization (NATO). During this time, Turkey's most pressing problems were economic. Political struggles between those on the left and those on the right emerged during the 1960s, leading to military coups on 27 May 1960, 12 March 1970 and 12 September 1980. The periods of military rule were relatively short, however, lasting for only three years in each case, before giving way to more democratic systems of government.

Turkey's political life has been characterized by numerous elections and governments, particularly in the last two decades. Political instability has prevented stable, long-term strategies and policies, as new administrations have tended to put a stop to the policies of their predecessors and adopt a "different" approach.

[1] The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Care Systems or its partners concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

Political and administrative structure

Turkey's first constitution was prepared in the second half of the nineteenth century and adopted in 1876, during the last period of the Ottoman Empire. The second constitution (1921) was promulgated during the war of independence following the First World War and included rules necessitated by the conditions and requirements of the struggle for independence. Since the founding of the Republic, three different constitutions have been introduced in Turkey, in 1924, 1961 and 1982.

The military coup of 27 May 1960 was an important turning point in Turkey's history. One of the major changes caused by this event was the preparation and implementation of a new constitution. This constitution was presented to the public in a referendum on 9 July 1961, and a substantial majority voted in favour of it (61.5%, with a turnout of 81%). The new constitution was a long and detailed document, introducing a number of key changes, including the separation of powers. Legislative power was vested in two chambers: the Grand National Assembly and the Republican Senate. Executive power rested with the President and the Council of Ministers, provided that their actions were within the limits delineated by law. Judicial power was to be exercised in independent tribunals on behalf of the nation. An important addition was the introduction of the Constitutional Court to ensure that laws were compatible with the constitution. The government was given responsibility for establishing various social regulations and reforms. In terms of basic rights and freedoms, the 1961 constitution was also detailed. It remained in force (with additions by the 1971 military regime) until 1982.

The 1982 constitution was approved by an even higher majority in a public referendum (91%, with a turnout of around 90%). Unlike the 1961 constitution, this constitution introduced regulations to restrict freedom in the country, widening the executive reach of government. While these changes allowed successive governments to operate more easily, it inevitably led to a neglect of human rights and related problems. In response to growing public and international concern for rules that would ensure more democratic decision-making, the government and the Grand National Assembly pledged to amend the constitution, and even to change it completely. Some minor attempts were undertaken, but the pledge has never been fulfilled.

According to the 1982 constitution, Turkey is a republic and a nation vested with unconditional, unrestricted sovereignty. The Republic of Turkey is a democratic, secular, social and legal state. The people exercise their sovereignty directly through elections, and indirectly through the authorized branches within the constitutional framework. The legislative, executive and judicial branches exercise power. Legislative power is vested in Turkey's parliament, the Grand

National Assembly, and cannot be delegated. The President of the Republic and the Council of Ministers exercise executive power and carry out functions in accordance with the constitution and other laws. Independent courts exercise judicial power.

The state is organized centrally and locally. The central administration, excluding the legislative and the judicial branches, comprises the Prime Minister's office and the various ministries. In addition, there are organizations related to the ministries.

The legislative branch

The Grand National Assembly has 550 elected members and carries out its activities in accordance with internal regulations. The constitution and the internal regulations specify that the Grand National Assembly should carry out its work through commissions. Commissions are formed to cover different policy areas and prepare legislation, although the General Assembly of the Grand National Assembly has the final word on legislation. Citizens can lodge complaints with the Petition Commission. In addition to the special functions and authority mandated by the constitution, the Grand National Assembly adopts, amends and abrogates laws, supervises the Council of Ministers, gives authority to the Council of Ministers to promulgate decrees having the force of law and adopts the budget.

The executive branch

The executive branch is comprised of the President and the Council of Ministers. Some administrative units are specifically mentioned in the executive section of the constitution. They include higher education institutions, public professional organizations, the Turkish Radio and Television Corporation, the Atatürk High Institution of Culture, Language and History and the Department of Religious Affairs.

The judicial branch

Independent courts and supreme judiciary organs exercise judicial power. The judicial section of the constitution establishes the principle of the legal state and is based on the independence of courts and judges and the guarantee of the rights of judges. The Constitutional Court, the High Court of Appeal, the Council of State, the Military High Court of Appeal, the High Military Administrative Court of Appeal and the Jurisdictional Conflict Court are the supreme courts mentioned in this section of the constitution. The Supreme Council of Judges and Public Prosecutors and the Audit Court have special functions in accordance with the judicial section.

The President

The President is the head of state and as such represents the Republic of Turkey and the unity of the Turkish nation. The President enforces the constitution and coordinates the work of the different state branches. He or she has legislative, executive and judicial functions and powers. The President's legislative functions consist of convening the Grand National Assembly when required, publishing laws and sending them back to the Grand National Assembly to be discussed again (as needed), holding referenda on constitutional amendments when he or she considers it necessary, filing suits with the Constitutional Court if the constitution is violated by law or by the internal regulations of the Grand National Assembly, and deciding to call new Grand National Assembly elections. The President's judicial functions are limited to selecting members of the supreme courts.

The Council of Ministers (the Cabinet)

The Council of Ministers is comprised of the Prime Minister and various other ministers. The Prime Minister is appointed by the President from the Grand National Assembly. The Prime Minister chooses ministers from the Grand National Assembly, or from those eligible for election as members of the Grand National Assembly, and they are appointed by the President. Because ministers are usually members of the Grand National Assembly, it is not always clear whether they operate on behalf of the executive or legislative branch of the government. Governments take on their duties when they obtain a vote of confidence from the Grand National Assembly. Members of the Council of Ministers are jointly responsible for executing general policies. The creation, abolition, functions, powers and organization of the ministries are regulated by law. Every ministry has a separate function and system of organization.

The National Security Council, presided over by the President, is composed of the Prime Minister, the Chief of the General Staff, the Minister of Defence, the Minister of Interior Affairs, the Minister of Foreign Affairs, the Commanders of the Army, Navy and Air Force and the General Commander of the Armed Guard.[2] This council makes decisions regarding national security policy and informs the Council of Ministers of these decisions. The Council of Ministers gives priority to the decisions of the National Security Council on the measures it deems necessary for preserving the existence and independence of the state, the integrity and indivisibility of the country and the peace and security of society.

[2] The Armed Guard is a special division of the armed forces and is responsible for security matters within the armed forces and in areas where it is logistically difficult to have a civilian police force (such as rural areas).

Administrative divisions

For administrative purposes, Turkey is divided into 80 provinces (*il*) and 900 districts (*ilce*). Population centres are designated as cities (*sehir*), towns (*ilçe*) or villages (*koy*), depending on the size of their population. The organization and functions of the administration are based on the principles of centralization and local administration, and regulated by law.

The Ministry of Interior Affairs appoints the provincial governor (*vali*) and the district administrator (*kaymakam*). They represent the state at the provincial and district levels, where they coordinate and administer state policy. Provinces are subdivided administratively into cities, districts, towns and villages.

Locally elected assemblies include the general provincial assembly (*il genel meclisi*), the municipal assembly (*belediye meclisi*) and the village council of elders (*ihtiyar heyeti*). The mayors of cities, district centres and towns are also directly elected, as are village heads (*muhtar*).

Economic policy

Prior to 1980, Turkey followed an economic policy based on substituting goods manufactured in Turkey for imports. In January 1980, a comprehensive stability programme aimed at launching substantial economic reforms was prepared and implemented by Süleyman Demirel's government. These reforms marked a turning point in Turkey's economic, political and social life. Huge steps were taken towards liberalizing the economy. The military coup in September interrupted the process of reform, but once the army took over, a new government was set up and Turgut Özal (previously Undersecretary of the State Planning Organization) was appointed as the Minister of State for the Economy. He became Prime Minister after the 1983 elections. The reforms implemented during this period changed the economic structure of Turkey from a system that relied on central administration to one based on market mechanisms.

In the last two decades, Turkey's economy has been characterized by erratic bouts of rapid short-term growth and high inflation, preventing the economy from fulfilling its long-term growth potential. From 1994 onwards, high public deficits and net repayment of public external debt increased the pressure on Turkey's financial markets. This pressure, combined with these markets' lack of depth, led to sustained, high real interest rates. A further factor contributing to high real interest rates was the high and volatile inflation rate. Between 1992 and 1999, the annual real growth rate averaged less than 4%, but the real interest rate paid on domestic debt averaged 32%. Such rates increased the public sector's borrowing requirements, creating a vicious cycle of debt and

interest payments, pushing Turkey into an increasingly difficult financial position. As the impact of rising real interest payments made itself felt in the second half of the 1990s, it became clear that the revenue and expenditure balance of the public sector needed to be permanently improved in order to stop the cycle of increasing debt and interest rates.

The following expenditure factors have contributed to the rising public deficit of the past decade:

- an increase in the unmonitored expenditure of extrabudgetary funds, revolving funds and local administrations, together with increases in expenditure by the state banks and in their financial losses generated by bad debts and unpaid credits (the latter mostly credits given for political purposes);
- a lack of transparency in public expenditure that undermines fiscal discipline and the integrity of the budget;
- excess employment in the public sector and wage and salary increases not linked to productivity;
- a large increase in the number of public investment projects, many of which are costly and unproductive;
- rapidly increasing deficits of the social security institutions due to a deteriorating actuarial balance;
- agricultural support policies that do not meet real needs; and
- the existence of a large system of inefficiently managed state economic enterprises operating at high cost and low productivity.

High growth between 1995 and mid-1998 was followed by a recession, the economy having weathered the Asian crisis but proving vulnerable to the emerging-market crisis following the default of the Russian Federation. The second half of 1998 was also difficult because economic activity declined and international confidence weakened as a result of the world financial crisis, but the Turkish policy response, building on an anti-inflationary programme launched in early 1998, stabilized the macroeconomic environment and instigated a decrease in the inflation rates.

A comprehensive economic programme was adopted in early 2000 to reduce inflation and provide a favourable environment to revive growth. In addition to a tight fiscal policy and comprehensive structural reforms, exchange rate targets were announced in line with the target for inflation and monetary policy, which was set in a framework that strictly linked liquidity creation to the inflow of external capital. The programme aimed to reduce inflationary expectations quickly, but the current account deficit seriously exceeded the programme's

level due to the real appreciation of the Turkish lira above initial expectations as a result of inflation rates higher than envisaged, rapid recovery of domestic demand, rising prices of crude oil and natural gas and the continuing fall of the euro against the United States dollar. This development led to growing concerns in both domestic and international markets about whether the exchange rate regime could be sustained and to doubts about financing the current account deficit. In February 2001, negative developments just prior to the Treasury action led to a total loss of confidence in the government's programme and a serious run on the lira. On 19 February, demand for foreign exchange reached US $7.6 thousand million, leading to another economic crisis, probably the most severe to date. In April 2001, another programme was put into place to overcome Turkey's economic problems through restructuring and the achievement of lasting stability.

National income reached US $204 thousand million in 1998, with a gross domestic product (GDP) per person of US $3171 (Table 1, Fig. 2). The recent economic crisis, from which Turkey has not yet recovered, caused a decrease in GDP in 2001.

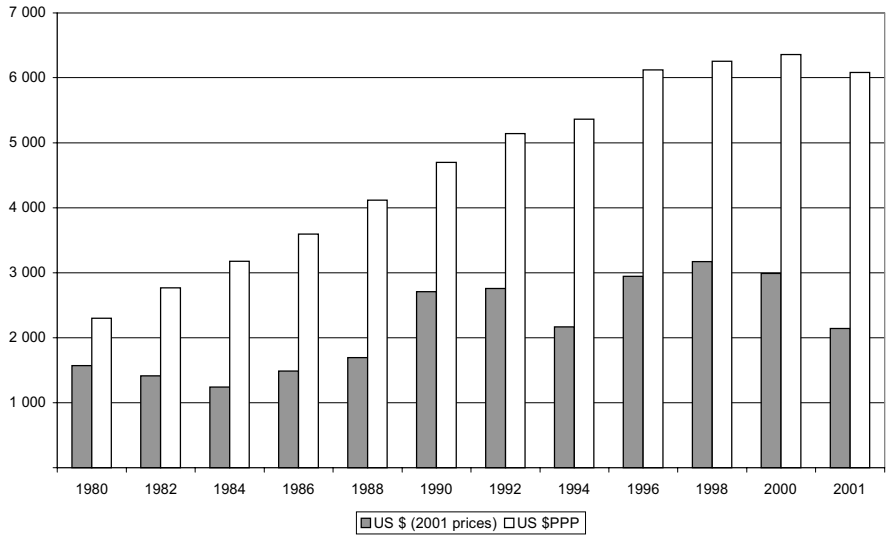
Table 1. GDP per person at current prices, 1980–2001

Year	US $ (2001 prices)	US $PPP
1980	1 570	2 299
1982	1 412	2 768
1984	1 238	3 179
1986	1 487	3 598
1988	1 693	4 119
1990	2 711	4 699
1992	2 757	5 143
1994	2 169	5 362
1996	2 947	6 123
1998	3 171	6 256
2000	2 987	6 359
2001	2 143	6 082

Source: State Planning Organization 2001.
GDP: gross domestic product; PPP: purchasing power parity; US $: United States dollars.

Income in Turkey is very unequally distributed, which has important consequences for the structure of Turkish society. Studies of income distribution have been carried out since the 1960s, with little improvement in the situation over time. Surveys reveal that the share of the lowest household income quintile has ranged from 3 to 5% and the share of the middle income quintile from 10 to 14%, while the share of the highest income quintile has been over 50% for three decades (see Table 2).

Fig. 2. GDP per person at current prices, 1980–2001



Source: State Planning Organization 2001.
GDP: gross domestic product; PPP: purchasing power parity; US $: United States dollars.

Table 2. Income distribution by household quintile, selected years (in %)

	1963	1968	1973	1986	1987	1994
First (lowest) quintile	4.5	3.0	3.5	3.9	5.2	4.9
Second quintile	8.5	7.0	8.0	8.4	9.6	8.6
Third quintile	11.5	10.0	12.5	12.6	14.1	12.6
Fourth quintile	18.5	20.0	19.5	19.2	21.2	19.0
Fifth (highest) quintile	57.0	60.0	56.5	55.9	49.9	54.9

Source: TUSIAD 2002.

Turkey is a candidate country for membership of the European Union (EU). EU acknowledgement of Turkey's candidacy at the Helsinki Summit held in December 1999 marked a substantial improvement in Turkey's relationship with the European Union.[3]

The National Programme for the Adoption of the Acquis was approved by the Cabinet in March 2001. Harmonization measures taken by the Ministry of Health include work on the Law on Health Professions' Associations and Federations, and the *Regulation on specialty training* has been revised within the framework of EU directives.

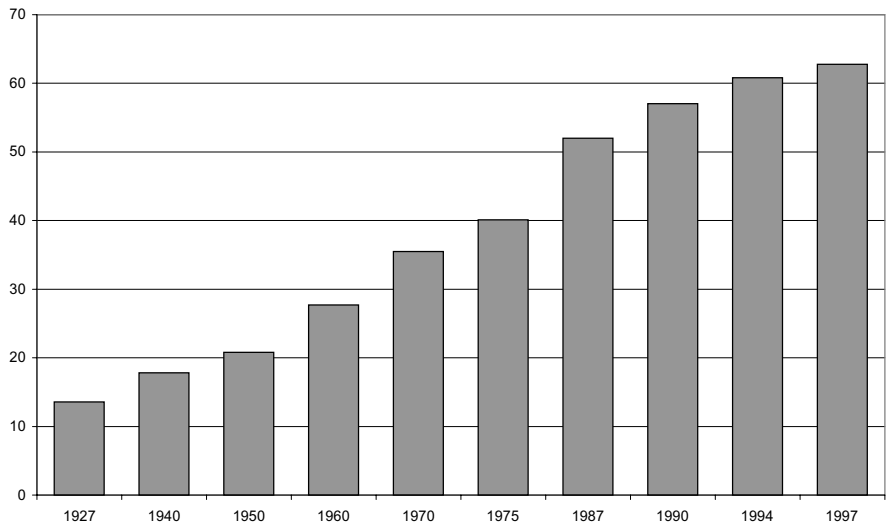
[3] At the Luxembourg Summit in 1997, Turkey had not been accepted as a candidate country, although 11 other European countries were. In response to that decision, Turkey froze its relations with the EU for almost two years.

Turkey expects to be given a date to begin accession negotiations at the EU summit in Copenhagen in December 2002. Possible reasons for the delay in receiving a date include violations of human rights within Turkey. However, the Turkish parliament has recently passed a number of laws with a view to taking important steps towards meeting the Copenhagen criteria.

Demographic indicators

Turkey's population is approximately 66 million (see Fig. 3 and Fig. 4). The annual population growth rate is 1.5%. The population growth rate has steadily declined from 2.5% in 1980 to 2.2% in 1990 and 1.5% in 1995 and 1999. The population of Turkey is projected to be about 90 million by 2025.

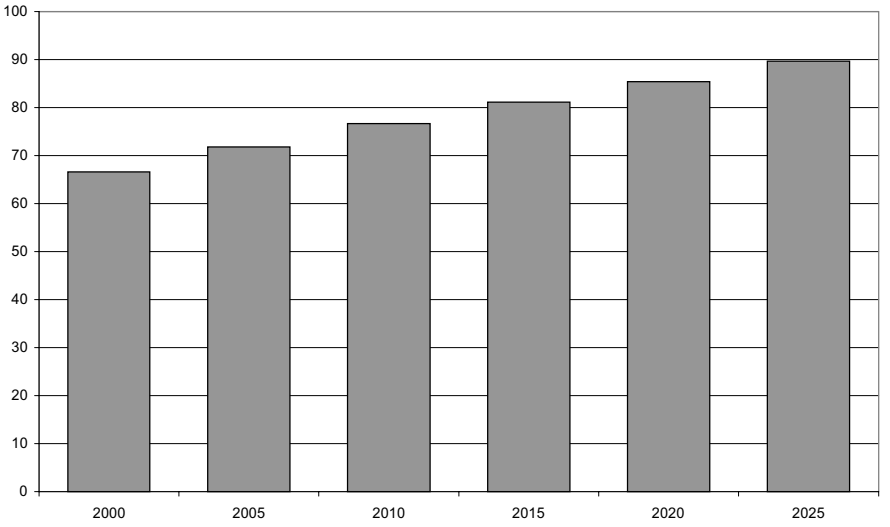
Fig. 3. Population (millions), 1927–1997



Source: State Institute of Statistics 2000.

One of Turkey's most important demographic characteristics is the high proportion of young people in the population. Children 4 years and younger constitute 29.5% of the population, while individuals aged 65 and above constitute only 5.5%. Table 3 shows that the Turkish population is expected to undergo a demographic transition, ageing considerably by the year 2025. The proportion of the population between 0 and 14 will probably decline to less than a quarter of the population, and the proportion of elderly people will almost double, although the age composition is still expected to be much younger than that of western European countries.

Fig. 4. Population projections (millions), 2000–2025



Source: United Nations Population Reference Bureau 1999.

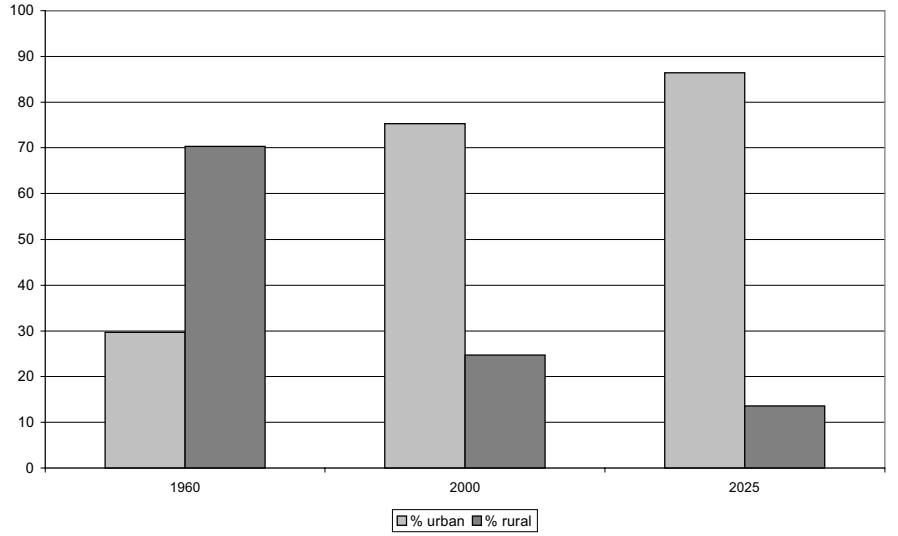
Table 3. Historical and projected percentages of the population in different age groups, 1990–2025

	1990	2000	2010	2020	2025
0–4	35.5	29.5	26.0	23.6	22.7
5–64	60.5	65.0	67.9	68.7	68.3
65+	4.0	5.5	6.1	7.7	9.0

Source: TUSIAD 2002.

There have also been striking changes in the urban and rural populations (see Fig. 5). In 1960, 70% of the population lived in rural areas and 30% in urban areas. Today, 25% of the population lives in rural areas and 75% in urban areas. This ratio is projected to be 14% rural and 86% urban in 2025. Rapid urbanization has been mainly caused by high rates of migration from rural to urban areas and from the eastern part of the country to the western part, rather than by changes in death and birth rates. Administrative reclassification has also contributed to the increasing percentage of people described as living in urban areas.

Fig. 5. Population of rural and urban areas (millions), 1960–2025



Source: United Nations Population Reference Bureau 2002.

Health indicators

High infant and adult mortality rates demonstrate that the health status of Turkey is poor compared to other countries with similar per person income levels. Infant mortality per 1000 live births in Turkey was 36.8 in 1999 (*1*), compared to 9.6 in Poland in 2000, 5.6 in the Czech Republic in 2000, 14.7 in Lithuania in 1997, 9.1 in Hungary in 2000 and 9.2 in Slovakia in 2000 (*2*). There are significant regional variations in infant mortality. Under-five mortality is also high, at 52.1 per 1000 in 1999; again, the rate varies according to region. In 1999, the crude birth rate was 21.4 per 1000, the crude death rate 6.8 per 1000, and the annual population growth rate was 1.5%. According to statistics from the World Health Organization (WHO), the maternal mortality rate in 1998 was 130 deaths per 100 000 live births (*2*), although other sources quote a much higher rate of 180 (*3*).

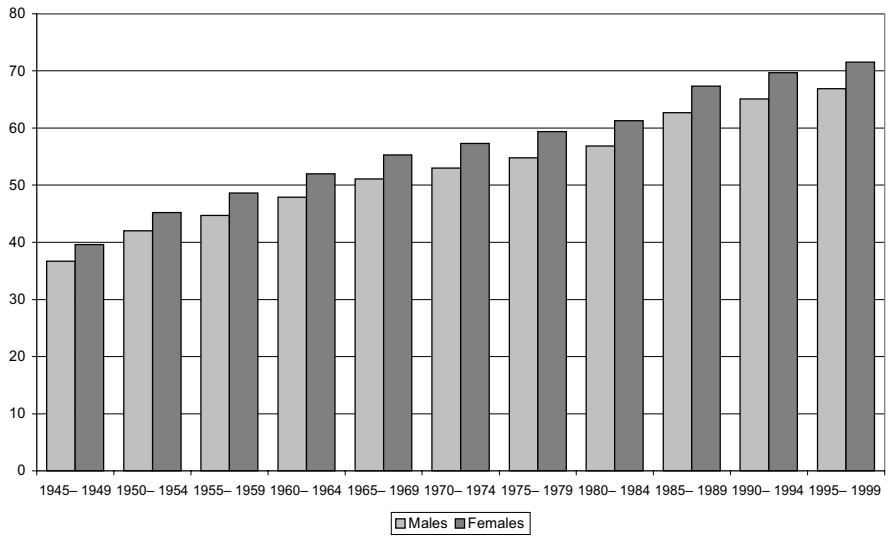
The latest estimates put life expectancy in Turkey at 71 years for women and 67 years for men (*4*). This is well below the 1998 EU average life expectancy at birth of 80.5 years for women and 74.4 for men (*5*). It is also lower than the 1999 average for all of Europe of 77.6 years for women and 69.5 years for men (*2*). There are also regional variations within Turkey in life expectancy at birth.

Table 4. Basic health indicators, 1965–1999

	Annual population growth (%)	Crude birth rate (per 1000 population)	Crude death rate (per 1000 population)	Infant mortality (per 1000 live births)	Total fertility rate	Life expectancy at birth (years)
1965–1969	2.52	30.0	13.5	158.00	5.31	54.9
1970–1974	2.50	34.5	11.6	140.40	4.46	57.9
1975–1979	2.06	32.2	10.0	110.79	4.33	61.2
1980–1984	2.49	30.8	9.0	82.96	4.05	63.0
1985–1989	2.17	29.9	7.8	65.22	3.76	65.6
1990–1994[a]	1.85	23.5	6.7	50.56	2.80	67.3
1995–1999[a]	1.62	21.4	6.5	39.02	2.45	68.6

Sources: State Institute of Statistics 2000, State Planning Organization 2002.
Note: [a] average end-of-year estimates for the five years in the range.

Fig. 6. Life expectancy at birth, 1945–1999



Source: Ministry of Health 2001a.

Table 5. Rankings of healthy life expectancy at birth based on disability-adjusted life expectancy (DALE) in countries with similar income levels

Country	Overall	Males	Females
Croatia	73.00	69.12	76.68
Hungary	71.93	67.61	76.25
Poland	73.95	69.80	78.09
Slovakia	73.45	59.15	72.36
Russian Federation	65.43	69.26	77.64
Turkey	69.80	67.00	72.10

Source: WHO Regional Office for Europe health for all database.

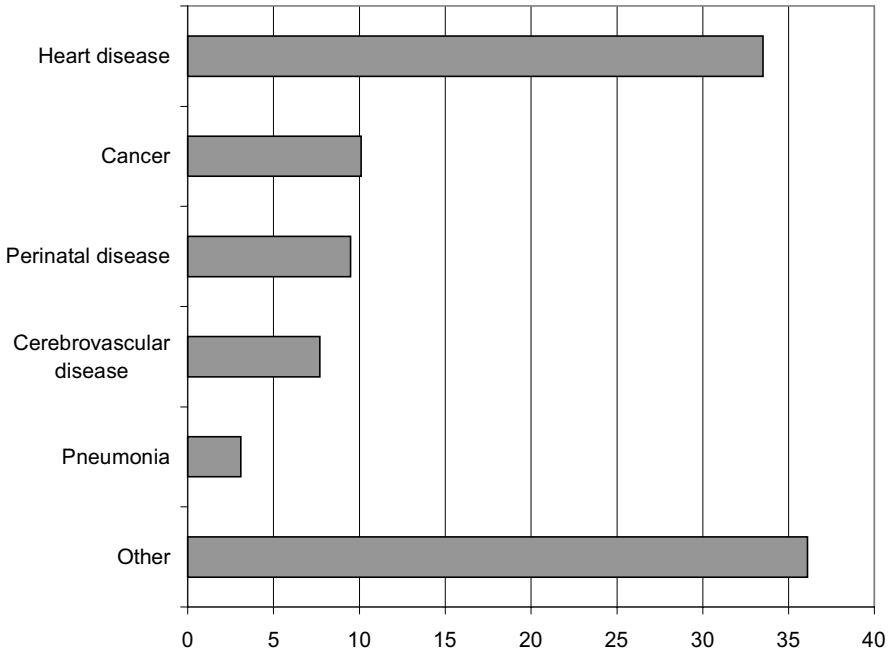
Because Turkey's health information systems are poor, the exact prevalence and incidence rates for various diseases and causes of death cannot be determined. Table 6 and Fig. 7 show the most important diseases in Turkey's epidemiological profile.

Table 6. Main causes of death by age, 2000

Stage in life	Main causes of death
0–12 months	Infectious and perinatal diseases
1–5 years	Infectious diseases and complications typically associated with malnutrition
Adolescence to 24 years	Accidents
25–44 years	Heart disease and accidents
45–64 years	Heart disease and smoking-related respiratory disorders

Source: Ministry of Health 2001a.

Fig. 7. Major causes of mortality (annual deaths per 10 000 population), 1995

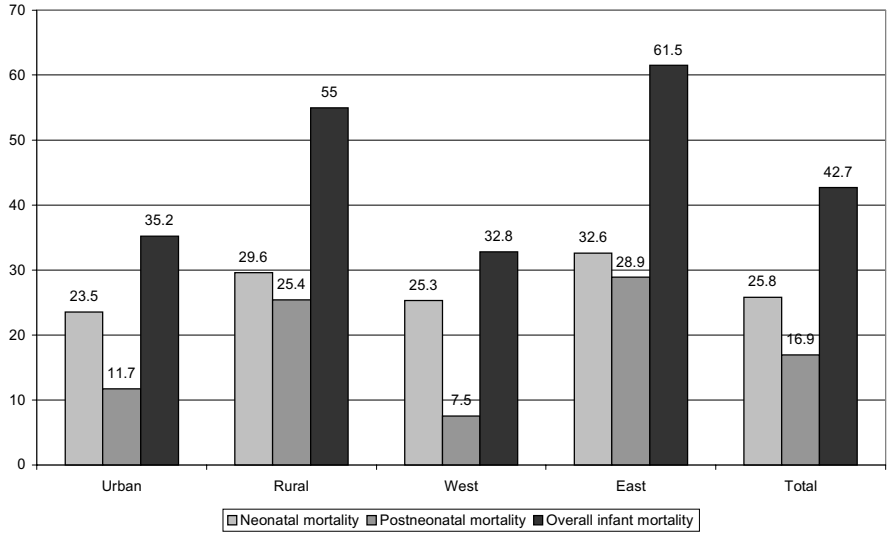


Source: Ministry of Health 1997.

Inequality in health status is widespread. Infant mortality is a good indicator of the unequal distribution of health and unequal access to preventive health care services. Fig. 8 shows the differences in neonatal, postneonatal and infant mortality rates between western and eastern Turkey and between rural and urban areas. While the quality of epidemiological data in Turkey is questionable, particularly for rural areas, it seems clear that the most important causes of mortality among children aged 1–4 years old are infectious diseases and their complications, mostly associated with malnutrition.

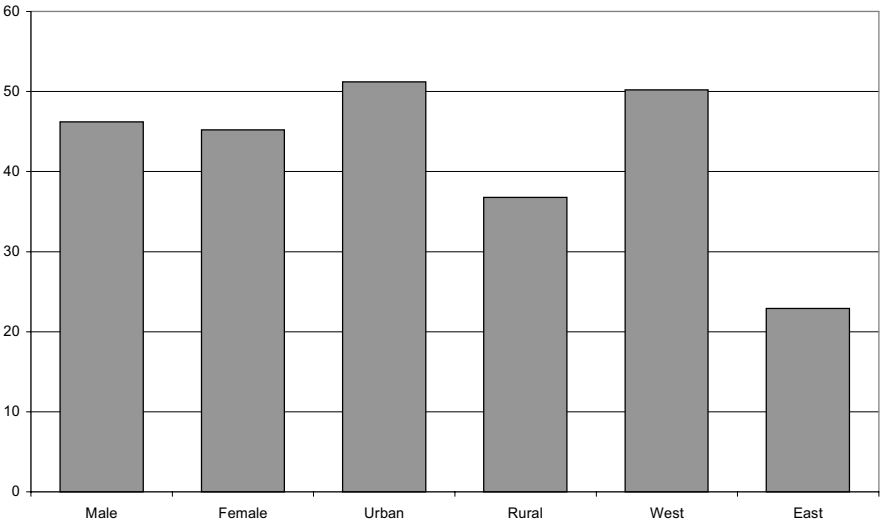
Turkey's current vaccination schedule is based on WHO criteria. Vaccination rates vary among different regions and settings (see Fig. 9). Other measures such as the correct implementation of the schedule also vary substantially. Vaccination rates are higher in the urban and western regions of Turkey and are positively correlated with the educational status of the mother.

Fig. 8. Infant mortality per 1000 live births, 2000



Source: State Institute of Statistics 2000.

Fig. 9. Percentage of fully immunized children (vaccinated once for bacillus Calmette–Guerin (BCG) and measles, and three times for diphtheria, pertussis and tetanus (DPT) and poliomyelitis), 1998



Source: Hacettepe University 1998.

Historical development of the health care system

The first years of the Republic and the era of Dr Refik Saydam

Under the Ottoman Empire, the only laws passed regarding health care concerned emergency services during times of war. These services were carried out by the Health Directorate under the Ministry of Interior Affairs. A Ministry of Health was established in May 1920, and arrangements for health care services were institutionalized during the early years of the Republic. The Republic's first Minister of Health, Dr Refik Saydam, contributed to the construction and organization of health services. During this period, the main objectives of the health care system were to establish preventive care and eradicate highly prevalent infectious diseases.

Refik Saydam created incentives for medical education by offering free accommodation and scholarships. As a result, the number of doctors grew from 554 in 1923, to 1182 in 1930 and 2387 in 1940, when the population was about 13 million. Most nurses and health officers at the time were male; the conservative mores of a relatively closed society prevented girls from going to

school in the early years of the Republic. Preventive care was given top priority, and the doctors assigned to this work had extra incentives, which secondary and tertiary care doctors did not. Private practice was forbidden and all doctors were obliged to work for the Ministry of Health, but they were well paid.

Refik Saydam believed that local governments (municipalities) should provide curative services, so local authorities delivered secondary health care. He also believed that the central government should take responsibility for guiding and coordinating these curative services. During this period, the first model hospitals were built and institutions were created to combat common diseases such as malaria, tuberculosis and syphilis. The Ministry of Health was organized vertically, with an emphasis on specific diseases.

Developments from 1945 to 1960

The Second World War affected every sector of the Turkish government. Although Turkey was not involved in the war, health indicators deteriorated during the war, and there were malaria, typhus and smallpox epidemics. In 1945, the Extraordinary Law on Malaria Prevention was passed, and in 1949, it was agreed that the Tuberculosis Prevention Association would combat tuberculosis in urban areas, while the Ministry of Health would be responsible for addressing it in rural areas. Unfortunately, the Ministry of Health was not as successful as expected, and in 1960 it established the Tuberculosis Prevention Directorate. Today, tuberculosis control is organized through five regional tuberculosis control commissions. Each province also has tuberculosis control groups, which in turn operate 260 tuberculosis control dispensaries.

The Social Insurance Organization (*Sosyal Sigortalar Kurumu*, abbreviated SSK) was founded in 1945, initially to provide manual labourers with social insurance. Mother and child health centres were set up in 1952 to provide prenatal and postnatal health.

After the Second World War, it was argued that preventive and curative services should be provided together. This integrated service approach gained increasing attention and led to a change of attitude in the provision of health services. Health centres were established with the new goal of carrying out curative services alongside preventive services. Each centre was assigned 2 doctors and 11 other health care personnel to serve an average population of about 20 000.

In the post-war era, the Ministry of Health was given responsibility for all health care services. Municipal hospitals were handed over to the Ministry of Health and preventive care personnel moved to hospitals, planting the seeds of the present situation, in which preventive care is almost totally neglected.

Focusing on curative services did not solve Turkey's health problems and actually increased the shortage of human resources for primary care. The lack of nurses was a major factor in the underperformance of curative services during this period.

The nationalization of health services

The 1960s saw significant developments in Turkish health care. The Law on the Nationalization of Health Care Delivery (Law Number 224) and the Law on Population Planning (Law Number 554) introduced major changes. It was acknowledged that health care services should be delivered equitably, continuously and in accordance with the population's priorities. In comparison to health policy in the early years of the Republic, the aim of policies in this period was to provide integrated health services in a horizontal structure.

More specifically, the 1961 Law on the Nationalization of Health Care Delivery attempted to establish a national health service. It aimed to provide health care to citizens free (or partly free) of charge, subsidized by contributions from citizens and allocations from the government budget (tax revenue). The law's objective was to extend health care, including preventive and environmental health services and health education, to the whole country, and to make it easily and equally accessible to everyone.

In 1963, health care delivery and infrastructure planning were included in the five-year development plans. The objectives of the first five-year development plan were:

- to give preventive care top priority;
- to plan public health services through the Ministry of Health;
- to distribute health care personnel evenly;
- to promote community health services;
- to encourage the domestic pharmaceutical industry and the establishment of private hospitals;
- to establish universal health insurance; and
- to set up revolving funds in government hospitals.[4]

The extent to which these objectives have been met is still subject to much debate.

[4] Revolving funds (döner sermaye) are legal institutional arrangements used to collect additional resources for government institutions. Health institutions establish financial relations with public or private organizations or individuals and charge them directly for services provided. The revenue raised from these charges is then distributed to members of staff.

The first five-year plan aimed to have one health post per 7000 population and one health centre per 50 000 population. In the third five-year plan, the targets were to have one health post per 3000 population, a health centre per 10 000 population, 26 hospital beds per 10 000 population and an extension of the nationalization programme to cover two thirds of the country. The fourth five-year plan aimed for 18.5 beds per 10 000 population and to socialize the health care system for the entire country. In the fifth five-year plan, the aim was to have 26 beds per 10 000 and set up 720 new health centres and 4215 new health posts. Five-year plan targets generally involved improving the health care system's infrastructure, but the sixth five-year plan included targets that would demonstrate Turkey's improving developmental status, such as reducing the infant mortality rate to 50 per 1000 live births and increasing life expectancy at birth to 68 years. The sixth five-year plan also aimed at increasing the number of health care professionals such that there were 1011 people for every doctor, 4845 people per dentist, 3655 people per pharmacist, 736 people per nurse–midwife and 2838 people per health officer or male nurse.

Health insurance for all remains an issue, and the nationalization of health services has not been entirely successful. Of the 67 provinces that then comprised the country, 19 were included in the nationalization programme in 1972 and 49 in 1983. Shortages of human resources and misinterpretation of the legislation on nationalization delayed the achievement of these targets, and the lack of doctors and medical and technical equipment were an important reason why the government did not achieve satisfactory results. The introduction of compulsory government service for doctors in 1982 partially compensated for the shortage of human resources, but it did not prove to be as effective as intended due to the lack of infrastructure at health centres.

The goal of enabling people to go first to health centres instead of to hospitals could not be achieved. This problem persists today as a major issue. Inequality in the distribution of health services and insufficient equipment are also ongoing issues.

Between 1986 and 1989, the government adopted the Basic Law on Health Services, the Education, Youth, Sports and Health Taxes Law and the Law on Launching Health Insurance through Bag-Kur (the Social Insurance Agency of Merchants, Artisans and the Self-employed), as well as amending health care laws already in force. The issue of general health insurance, which was addressed in the first five-year plan, was revisited during the First National Health Congress held in March 1992.

A new national health policy and a growing private sector

Between 1988 and 1993, the Ministry of Health was active in implementing a national health policy and a programme of health care reform (the first health project). The Ministry of Health and the State Planning Organization carried out a major study to identify current needs and set objectives for future action with sound and achievable targets. During the same period, the Ministry of Health developed a new national policy. However, the reform programme was interrupted by a change of government in 1993, and a new round of political power struggles pushed the reform agenda further down on the list of priorities. Between 1993 and 1997, Turkey had six different Ministers of Health.

Health care reform was discussed extensively at the First National Health Congress in 1992 (see the section on Health care reforms). Activities aimed at implementing the resolutions of this congress were intensified in subsequent years. A loan agreement between Turkey and the World Bank for the Second Health Project was signed in 1994. A series of draft laws on issues such as health care funding, the personal health insurance system, the integration of basic health services with curative health services, primary health care and family medicine were submitted to the Grand National Assembly at the beginning of 1995. When the Draft Law on Primary Health Care Services and Family Medicine becomes law it will be extended across the country in stages, using pilot projects.

The programme of health care reform prepared by the Ministry of Health in 1996 was also included in the seventh five-year plan, covering 1996–2000. The studies carried out in conjunction with this programme established several main objectives:

- to initiate the implementation of universal health insurance as soon as possible, with the goal, based on principles of social justice, of providing everyone with access to health care;
- to separate service provision from financing in order to ensure the support of those who need health services rather than of the institutions providing health services;
- to give hospitals autonomy in order to help them provide efficient high-quality services and free them from centralized administration, thereby initiating competition among state-controlled health services;

- to adopt the family medicine model[5] in primary health services and to promote preventive as well as curative health services; and
- to structure the Ministry of Health so that it can determine health policies for the whole country, establish and monitor high standards in health care delivery and provide preventive as well as curative health services.

The plan to attract private sector investment in health services was successful, particularly during the second half of the 1980s, largely due to generous government subsidies. Government incentives for private hospital investment have resulted in the building of many private hospitals in the last 15 years, especially with the support of other incentives, such as the subsidy of imported equipment.

Nevertheless, these health care reforms did not succeed in solving long-standing problems such as the loss of confidence in public health services, the fact that a significant proportion of the population remained without any form of social security coverage, the concentration of one third of the hospital beds and almost half the doctors in the three largest cities or other inequalities in the geographical distribution of health care personnel. The targets of successive five-year plans were often copied from one plan to another, while the same criticisms of the health care system were articulated in nearly identical sentences in each plan. The plans have been therefore little more than expressions of good intentions.

[5] The adoption of the family medicine model has been controversial in Turkey. While family doctors are synonymous with general practitioners in most countries, they are distinct here. All medical school graduates can work as general practitioners, who are not regarded as specialists. These doctors usually work in health centres providing preventive and primary health care. Family doctors are specialists, receiving an additional three years of training with a largely curative focus. They are eligible to fill any post, although they mainly work in mother and child health care and family planning units. The number of family doctors increases every year despite strong opposition to the family doctor scheme, particularly from some public health professionals who fear that primary health care will be adversely affected by further expansion of the scheme.

Organizational structure and management

Organizational structure of the health care system

Turkey's health care system has a highly complex structure that is at once centralized and fragmented. The current system is the result of historical developments rather than a rational planning process. Consequently, decision-making and implementation bodies vary in form, structure, objectives and achievements.

Health care is provided by public, quasi-public, private and philanthropic organizations, but relations among them are not well structured or regulated. Health care is financed by the government (through the Ministry of Finance), social security institutions (the Social Insurance Organization (SSK), the Social Insurance Agency of Merchants, Artisans and the Self-employed (Bag-Kur) and the Government Employees' Retirement Fund (GERF)) and out-of-pocket payments. For more information on these different sources of funding, see the section on health care financing and expenditure.

Table 7 groups the agencies directly and indirectly involved in health care according to whether they formulate policy, have administrative jurisdiction over the delivery of health care, provide it or finance it.

Planning, regulation and management

Health policy-making in Turkey is fragmented and unevenly distributed among different stakeholders. The overall responsibility for planning, coordinating, financially supporting and developing health institutions to provide equitable, high quality and effective health services is divided among the Ministry of

Table 7. Organizations involved in the health care system

Role	Organization
Policy formulation	Grand National Assembly State Planning Organization Ministry of Health Council of Higher Education Constitutional Court
Administrative jurisdiction	Ministry of Health Provincial health directorates
Health care provision: public	Ministry of Health SSK University hospitals Ministry of Defence Other
Health care provision: private	Private hospitals Private practitioners and specialists Outpatient polyclinics and diagnostic centres Laboratories and diagnostic centres Pharmacists Other
Health care provision: philanthropic	The Red Crescent Foundations
Health care financing	Ministry of Finance SSK Bag-Kur GERF Private health insurance companies Self-funded schemes International agencies

Bag-Kur: Social Insurance Agency of Merchants, Artisans and the Self-employed, GERF: Government Employees' Retirement Fund, SSK: Social Insurance Organization.

Health, the military, parliamentary commissions (see the section on political and administrative structure) and others.

The Grand National Assembly is the country's ultimate legislative body and regulates the health care sector as well as all other aspects of government policy. It is responsible for approving the five-year development plans submitted by the State Planning Organization, which reports directly to the office of the Prime Minister.

The State Planning Organization has two separate planning roles. It is responsible for strategic planning, which takes the form of preparing five-year development plans, and it is also responsible for investment appraisal and planning, and must approve any new capital investment in health care. Unfortunately, there appears to be a significant lack of coordination between the State Planning Organization's strategic and investment roles in the planning

process. This lack is partly due to an inadequate strategic planning process; because policy objectives are not determined in a sufficiently detailed and systematic fashion, they cannot provide a well-defined framework for investment planning. The procedure for investment planning is more clearly established and more detailed, and the State Planning Organization's influence in this area is stronger, as it has the power to veto capital investment for statutory health care providers, whereas its role in implementing strategic plans is restricted to monitoring only. Under such circumstances, there is a danger that investment planning will take place without reference to changes in policy determined by strategic planning.

Though the Ministry of Health has some has responsibility for setting policy objectives for the health sector or for planning the delivery of health care, it is primarily concerned with administering the health services provided under its auspices (that is, through its hospitals and other health facilities).

Once the government has approved its budget, the Ministry of Health allocates resources for recurrent expenditure and capital investment. The Research, Planning and Coordination Unit in the Ministry of Health coordinates budget-setting and budget allocations. It also monitors the implementation, by the ministry's general directorates and departments, of specific measures related to the annual programmes of the five-year plans. See below for more information on the role and structure of the Ministry of Health.

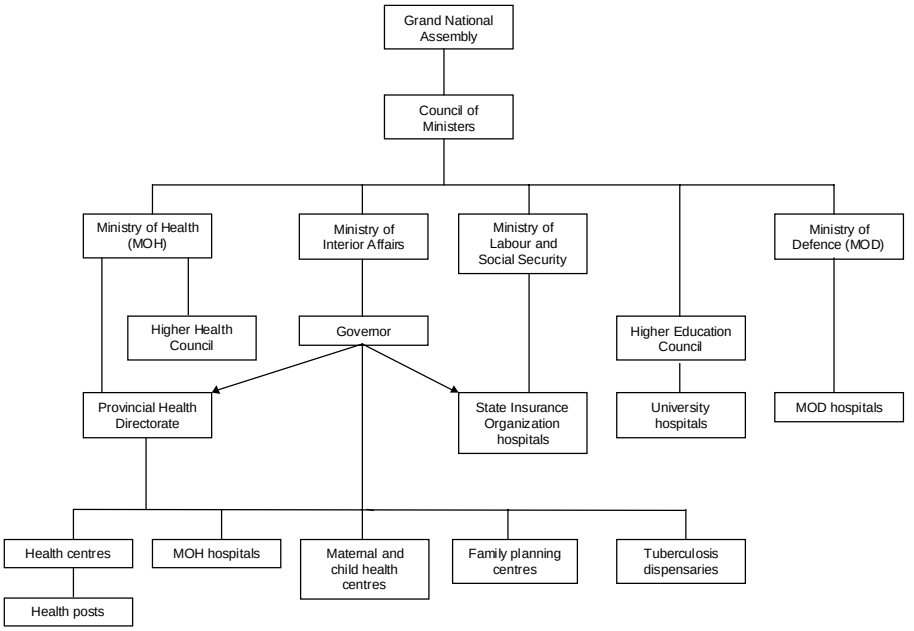
Although the Council of Higher Education is responsible for university hospitals (see below), it does not contribute to formulating health policy when it is consulted by the State Planning Organization and the Ministry of Health during the planning process. Each university hospital is an autonomous agency and does not come under the jurisdiction of any central planning authority. Individual hospitals are not involved in planning cycles in which strategic objectives, short-term measures and implementation are monitored and adjusted.

The Constitutional Court ensures that existing laws and legislation conform to the constitution.

Government involvement in the health care system

Fig. 10 presents the organizational structure of the statutory health care sector. The Ministry of Health is the major provider of primary and secondary health care and the only provider of preventive health services in Turkey. At the central level, the Ministry of Health is responsible for Turkey's health policy and health services. At the provincial level, health services provided by the Ministry of Health are administered by provincial health directorates accountable to provincial governors.

Fig. 10. Organization of the statutory health care sector



Source: Ministry of Health 2001a.

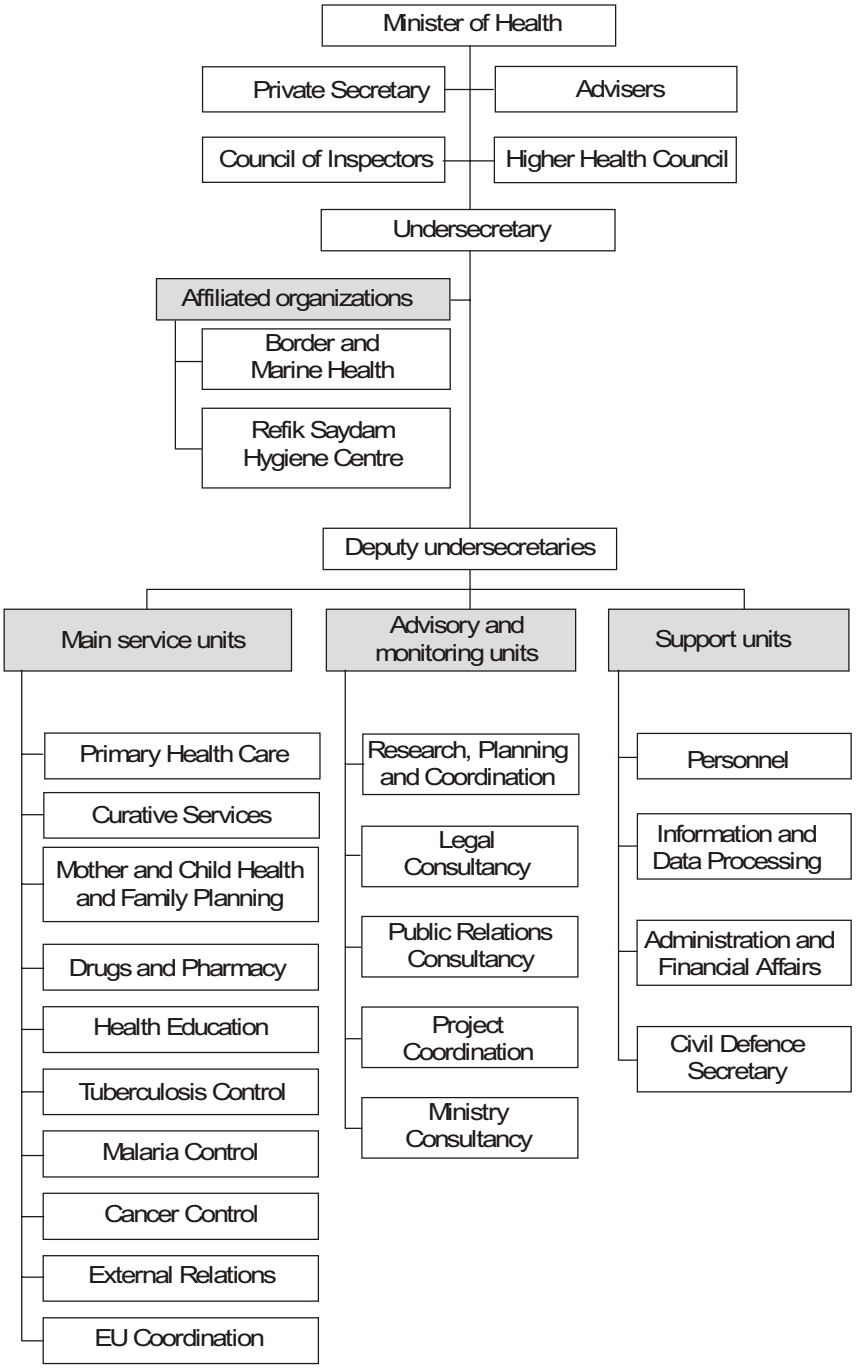
The Ministry of Health

The central level

The Ministry of Health operates an integrated system of health care, providing primary, secondary and tertiary care. It is responsible for:

- global planning and programming of health care delivery systems;
- approving capital investment (although this function is defined in legislation, as explained above, the State Planning Organization performs global planning);
- developing programmes for communicable and noncommunicable diseases;
- implementing some environmental health programmes;
- promoting mother and child health and family planning;
- regulating the production, prescription and dispensing of pharmaceuticals;
- producing and/or importing vaccines, serum, blood products and medications;
- maintaining health precautions in ports of entry; and
- building and operating health care facilities.

Fig. 11. Central organization of the Ministry of Health



Source: Ministry of Health 1997.

Fig. 11 shows how the Ministry of Health is organized at the central level. At the top of the ministry is the Minister of Health, supported by a private secretary. The Council of Inspectors and a group of advisers report directly to the Minister. The Council of Inspectors is responsible for inspecting legislative procedures, monitoring the activities of ministry personnel and ensuring that hospitals satisfy the criteria established by law and by Ministry of Health policy.

The Higher Health Council

The Higher Health Council meets approximately twice a year, at the Minister's request, to discuss health status and major health problems in the country. The Council is made up of experts from the Ministry of Health and the Ministry of Labour and Social Security who are approved by the President. It is also the ultimate consultative and decision-making body in malpractice cases.

The Undersecretary and deputy undersecretaries

Below the Minister are the Undersecretary and five deputy undersecretaries. The deputy undersecretaries do not have specific responsibilities. The Research, Planning and Coordination Unit, the Legal Consultancy and the Public Relations Consultancy report to the Undersecretary. The General Directorate (GD) of Border and Marine Health and the Refik Saydam Hygiene Centre also report to the Undersecretary. While both of these bodies are affiliated to the Ministry of Health, their budgets remain outside the Ministry. The Refik Saydam Hygiene Centre acts as the referral centre for provincial public health laboratories across the country.

General directorates

The next level down in the Ministry of Health hierarchy consists of general directorates and departments responsible for delivering health services. The General Directorate of Primary Health Care is in charge of the strategic and operational management of health centres, health posts and, to a lesser extent, some environmental health services. It is also responsible for controlling communicable diseases, for instance through immunization programmes. The General Directorate of Curative Services is in charge of Ministry of Health hospitals and develops programmes for noncommunicable diseases. The General Directorate of Mother and Child Health and Family Planning implements programmes for maternity, family planning and selected childhood problems through health centres. The General Directorate of Health Education primarily operates vocational schools for training nurses, midwives, health officers and other personnel. However, since vocational schools were transferred to the Council of Higher Education in the early 1990s, this general directorate's responsibilities have been less clear cut. The General Directorate of Pharmacy

and Drugs is responsible for regulating drugs, including their licensing, registration and pricing. In addition to these five general directorates, there are three vertically organized departments for the control of tuberculosis, malaria and cancer. Finally, additional support functions within the Ministry are fulfilled by the General Directorate of Personnel, the Department of Administrative and Financial Affairs and the Civil Defence Secretary.[6]

The provincial level – provincial health directorates

Provincial health directorates administer the health services provided by the Ministry of Health at the provincial level. Each of the 80 provinces has a health directorate led by a director who is accountable to the governor of the province (see Fig. 12). The provincial governor is appointed jointly by the President, the Prime Minister, the Minister of the Interior and, technically, the Minister of Health, and is accountable to the central government. The Ministry of Health appoints provincial health directorate personnel with the approval of the provincial governor.

The directorates' administrative responsibilities are primarily personnel and estate management. They also make technical decisions pertaining to health care delivery, such as the scope and volume of health services. Units that provide health care or have health care-related functions at the provincial level consist of:

- health centres
- health posts, mainly in rural areas
- mother and child health and family planning centres
- tuberculosis dispensaries
- hospitals
- public health laboratories (in some provinces).

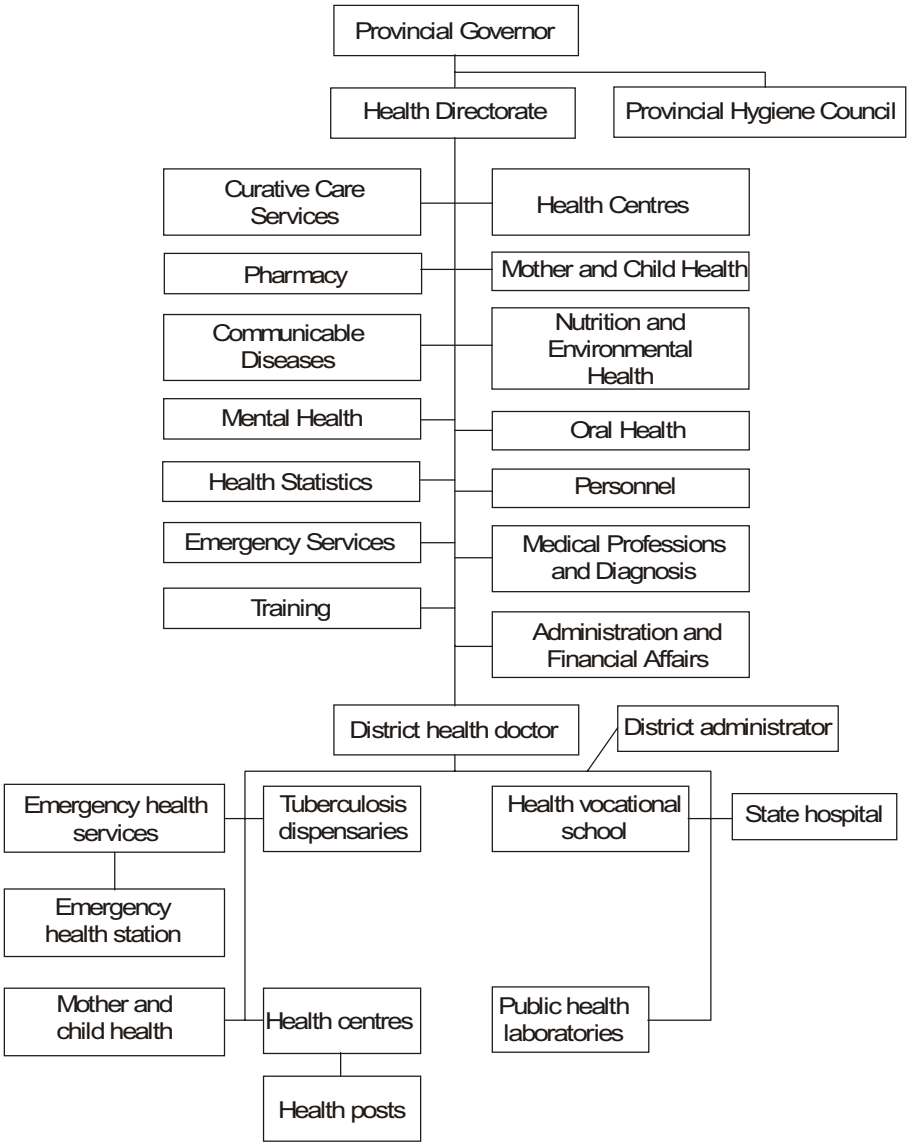
For further information on these various entities, please see the health care delivery section.

Coordination among different levels of the Ministry of Health

There are several key issues regarding the organization of the Ministry of Health, both at the central and the provincial level. At the general directorate level within the Ministry, the demarcation of health service responsibility into defined areas of activity is, in principle, good management practice. However, there is considerable overlap of responsibility among the general directorates, which

[6] The Civil Defence Secretary organizes the population in the event of natural disasters or wars, initiating and coordinating an immediate civil response if statutory or military forces should prove insufficient.

Fig. 12. Provincial organization of the Ministry of Health



Source: Ministry of Health 1997.

causes some difficulty in coordinating the overall operation of the ministry. This lack of coordination is a major management weakness.

The Ministry of Health is expected to deliver effective health care across the country, with appropriate distribution to different provinces and service

areas. The existing level of coordination among general directorates does not appear to be sufficient to ensure the desired distribution of resources to each area of service delivery. Responsibilities and lines of accountability are not defined well enough to enable the performance of individual directorates to be monitored effectively.

Communication links between the Ministry of Health and the provincial health directorates are also weak, leading to delays and difficulties in carrying out instructions. This weakness is partly due to the organizational structure at the central level, because instructions to the provinces are issued by more than one general directorate or department.

Communication must be directed through the office of the provincial governor, which can lead to delays. As a result general directorates sometimes communicate directly with the corresponding branch managers in the provincial health directorates. Under such circumstances, confusion may well arise, especially if more than one general directorate is attempting to communicate with the provincial health directorates.

Upward communication from individual health posts through provincial health directorates and on to the Ministry of Health may also experience some delay, which can cause problems for individual health posts trying to obtain swift responses to emergency requests, particularly if a general directorate is contacted by several provincial health directorates at once. This problem is compounded by the fact that provincial health directors appear to need to refer even relatively minor decisions to a higher level. There are two possible explanations for this phenomenon. On one hand, provincial health directors are unlikely to have appropriate training and often lack the relevant capacity and necessary skills to either carry out their responsibilities or make decisions. On the other hand, a very centralized decision-making process does not leave the provincial health directors with sufficient room to act on their own initiative. They therefore find it easier and more expedient to refer decisions to a higher level, in order to avoid the possibility of making the wrong decision and losing their current position. A recent survey of provincial health directors in the 23 cities covered by the Second Health Project and in the cities affected by the recent earthquakes showed that they retain their posts for an average of approximately two years.

The Ministry of Finance

The general state budget administered by the Ministry of Finance is the main source of financing for health care services provided by the Ministry of Health, the Ministry of Defence, university hospitals and other public institutions in Turkey. The General Directorate of Budget and Fiscal Control is positioned

under the Department of Administrative and Financial Affairs in the Ministry of Health, but although it is fully engaged in preparing Ministry of Health budgets, it is under the jurisdiction of the Ministry of Finance. The Ministry of Finance also manages the GERF, for which it determines contribution rates and benefit conditions (see below, and the section on health care financing and expenditure).

The Ministry of Defence

The Ministry of Defence has its own health care infrastructure, with 42 hospitals run exclusively for the use of military personnel and their dependants. One of these hospitals provides undergraduate and postgraduate medical education; another provides postgraduate education only for military medical staff.

The Council of Higher Education

The Council of Higher Education is responsible for university hospitals. During the 1980s and 1990s, the number of medical faculties increased, and there are now 50 medical schools in Turkey. Each medical school has its own university hospital, which acts as a referral centre for tertiary care but also provides primary and secondary care. These hospitals are each directed by a chief doctor (*bashekim*), a managerial position filled by a clinician who reports to the dean of the medical faculty.

The Ministry of Labour and Social Security

The Ministry of Labour and Social Security has jurisdiction over the SSK, which is the second largest provider of health care in Turkey.

Other public entities

As Ministry of Health hospitals do not always provide effective service, other public entities have, over time, established their own hospitals and polyclinics – for example, the Ministry of National Education, the Ministry of Internal Affairs, the postal service and the railways.

Social security institutions

Turkey has three main social security institutions:

1. the SSK, the insurance scheme for private sector employees and blue-collar public sector employees;
2. Bag-Kur, the insurance scheme for self-employed people; and
3. the GERF, which insures retired civil servants.

SSK (Social Insurance Organization)
The SSK was founded in 1945 as a pension fund for workers in the private sector. It was placed under the authority of the Ministry of Labour, with benefits restricted to contributing workers and their dependants, as at that time there was no well-structured Ministry of Health from which health services could be purchased. Even though the reforms of the 1960s led to a substantial improvement in the health services provided by the Ministry of Health, these services were not enough to handle high levels of demand. The SSK therefore set up its own health facilities for exclusive use by its members, creating another major player in the health care system (see the section on health care financing and expenditure). Today, the SSK insures private sector employees and blue-collar public sector workers.

Bag-Kur (Social Insurance Agency of Merchants, Artisans and the Self-employed)
Bag-Kur added health insurance to its traditional role as the pension fund for self-employed people in the late 1980s. Contributing members are entitled to benefits covering all outpatient and inpatient diagnosis and treatment. Unlike the SSK, Bag-Kur does not operate its own health facilities, but contracts with other public providers, including the SSK. For further information on Bag-Kur, see the section on health care financing and expenditure.

GERF (Government Employees' Retirement Fund)
The GERF is primarily a pension fund for retired civil servants, but also provides other benefits, including health insurance. For further information on this fund, see the section on health care financing and expenditure.

Private providers of health care

Private hospitals

Before the late 1980s, a few private hospitals, mainly in Istanbul, were established by ethnic minorities (such as Greeks and Armenians) and foreigners (Americans, the French, Italians, Bulgarians and Germans). Private Turkish enterprises were limited to small clinics with fewer than 50 beds, often specializing in maternity care and functioning as operating theatres for private specialists.

During the economic liberalization of the late 1980s, the government provided substantial incentives for investment in private hospitals. A few initiatives took place in the early 1990s, and by the end of the decade over 100 new private hospitals had been established across the country, particularly in

the larger cities. In contrast to the first generation of private hospitals established prior to liberalization, many of these new hospitals offer integrated diagnostic and outpatient services and luxurious inpatient hotel facilities to attract self-paying, fee-for-service patients. According to the Ministry of Health, Turkey had 83 private hospitals in 1981 and 257 in 2001.

Health care provided by private entities appears to be more responsive to demand. As a result, government agencies purchase some of their services from private hospitals. For example, the SSK already purchases cardiovascular surgical services from private hospitals and has recently decided to purchase other services, such as cataract surgery.

Most private hospitals are located in cities with large populations such as Istanbul, Izmir and Ankara. However, they often build their facilities in less developed parts of these cities and provide an inexpensive and poor quality service. Some of these hospitals fail to meet the minimum requirements of the Ministry of Health, sacrificing quality for the sake of low prices, which suggests that the Ministry of Health does not manage its regulatory function well with respect to private hospitals.

A recent development in the last ten years has been the establishment of private medical schools, which either have their own private hospitals or contract other private hospitals as teaching facilities. However, the quality of training they provide and the value of this development have been questioned and are a matter of concern.

Private practitioners

There is a long-standing tradition in Turkey that most doctors working for public agencies also work privately after office hours, because public sector salaries are low and patients think that they can obtain better service from private practitioners. Patients visiting private practitioners pay for services out of pocket, regardless of their membership of any social insurance organization. Patients with voluntary (private) health insurance might receive partial reimbursement from their insurance companies.

Outpatient polyclinics, laboratories and diagnostic centres

In parallel to the establishment of private hospitals, the 1990s saw the development of private polyclinics and diagnostic centres, primarily when specialists with private practices banded together to set up outpatient centres to generate more income through diagnostic services. These polyclinics and diagnostic centres are convenient for patients, who can access a range of services under one roof.

Doctors specializing in fields such as microbiology, biochemistry, radiology and pathology operate their own laboratories and diagnostic centres. Economic liberalization in the 1990s led to a reduction in import regulations and a rise in convenient methods of financing the purchase of equipment. Since then, the lack of regulatory and planning measures has caused a boom in the amount of high-technology diagnostic equipment available in Turkey.

Pharmacists

As Turkey has no self-dispensing doctors, private pharmacists have a monopoly on the sale of all outpatient drugs. (Hospital pharmacies provide inpatient drugs.) Health centres also provide medicines for specific programmes and for areas without private pharmacies. Social security institutions pay individual private pharmacies directly for the prescriptions of their members.

Others

With the exception of acupuncturists, other private providers of health care are neither legally recognized nor permitted to practise in Turkey.[7] Though rare, some people do practise as dentists and chiropractors without any official training, while others, mainly from the newly independent states of the former Soviet Union and countries in east Asia, practise alternative medicine. The exact number of these providers is not known.

Philanthropic providers of health care

The Red Crescent

The Red Crescent was founded in 1868. Its main function is to provide aid in natural and war-related catastrophes. It also provides health care through its dispensaries and rehabilitation centres and during military manoeuvres. In addition, it provides health and social services to Muslim pilgrims en route to Makkah (Mecca) and Al Madinah (Medina) in Saudi Arabia, and to Christian pilgrims in Efes (Ephesus).

The Red Crescent in Turkey consists of the General Headquarters in Ankara and 648 local branches across the country, at city and district levels. Members are elected to the General Headquarters and the local branches and carry out their tasks on an honorary basis. A Directorate General, made up of experienced and expert paid staff, was established to regulate the services of the General Headquarters according to the aims and principles of the Turkish Red Crescent.

[7] A committee established under the Ministry of Health's General Directorate of Curative Services examines and approves licenses for acupuncturists.

The Directorate General has 18 departments devoted to activities such as financial donations, blood donations, disaster relief, international action and first aid, working at the General Headquarters and various units in the provinces. In addition to a central warehouse in Etimesut (Ankara) and 7 regional warehouses, the Turkish Red Crescent also runs 22 blood centres, 7 blood stations, 38 dispensaries (of which 1 is a medical centre), 21 soup kitchens, 6 day nurseries and 4 houses for the elderly.

Foundations

Foundations are traditional entities that have existed in Turkey since the time of the Ottoman Empire. Up until the 1980s, the inefficiencies and constrained budgets of statutory social services created a fertile ground for foundations, but new laws introduced during the period of economic liberalization in the 1980s created many more opportunities for foundations by encouraging the formation of nongovernmental organizations to provide social services previously only provided by government agencies. The easy process of establishing a foundation, with added incentives such as tax exemption, led to the emergence of new foundations in many areas, including health care. The inadequacy of statutory social services, combined with a growing belief that the state is not solely responsible for providing social care, created an environment in which these new foundations flourished.

Some of the health care-related foundations in Turkey deal with public health problems, particularly family planning issues. There are also numerous foundations working on specific diseases such as diabetes, cancer, phenylketonuria and AIDS.

Most public hospitals, including the university hospitals, have created foundations (quasi-public non-profit institutions with tax-exempt status) to bypass cumbersome bureaucratic rules for recruiting personnel and spending their own revenue. However, some of these foundations may have developed into instruments to further private interests rather than public services.

Other organizations

The Turkish Medical Association and other professional organizations are neither well organized nor distinguished by clearly defined responsibilities. In future, their responsibilities might expand to include the adaptation of clinical practice to European norms, at least in some areas of specialization.

Decentralization of the health care system

As described above, Turkey's health care system is centralized yet fragmented. Decision-making and implementation bodies vary in form, structure, objectives and achievements.

The Ministry of Health is strongly centralized (see Fig. 11). Even though each province has its own provincial health directorate structured to solve a wide range of health problems (see Fig. 12), local decision-making is not encouraged. Dealing with local health problems that require local solutions is therefore extremely difficult and becomes a bureaucratic process, since the central organization must be informed of or consulted in every decision. See above for a more detailed discussion of the lack of coordination between the central and provincial levels of the Ministry of Health.

Health care financing and expenditure

Main system of financing and coverage

Sources of health care financing

Mechanisms for financing health care in Turkey have never been clearly defined. The 1961 attempt to establish a national health service envisaged the use of substantial tax revenue, although it also made some reference to patient contributions. However, the growth of the Social Insurance Organization (SSK) and the Government Employees' Retirement Fund (GERF), as well as the establishment of the Social Insurance Agency of Merchants, Artisans and the Self-employed (Bag-Kur), set in motion a system of health insurance, and a universal health insurance scheme has been an objective of every five-year plan since 1963.

Today, Turkey has three main sources of health care financing:

1. *the general government budget* funded by tax revenue and allocated mainly to the Ministry of Health, the Ministry of Defence, university hospitals, other public agencies and the health care expenditure of active civil servants;
2. *social security contributions* obtained from members of the SSK, Bag-Kur and the GERF; and
3. *out-of-pocket payments* in the form of direct payments to private doctors and institutions, premiums paid for voluntary health insurance and co-payments.

Health care financing in Turkey is complicated by the high number of agencies involved in providing and financing health care and the many transactions that take place among them. The agencies involved in financing

health care are discussed in the following sections. For a discussion of out-of-pocket payments, please see the section on complementary sources of financing.

The general government budget

The general government budget is funded by tax revenue and prepared by the Cabinet, the State Planning Organization and the Higher Planning Council. It is then discussed and amended by the Grand National Assembly and administered by the Ministry of Finance. It is the main source of financing for the health services provided by the Ministry of Health, the Ministry of Defence, university hospitals and other public agencies. Health services for active civil servants and their dependants are also financed through this general government budget.

The Ministry of Health, the largest single provider of health care in Turkey, is predominantly financed by tax revenue that is channelled through the general government budget (see Tables 8 and 9). Since 1988, a major additional source of tax revenue has become available to the Ministry of Health through special funds from earmarked excise duties on fuel, cigarettes, alcohol and the sale of new cars. A third source of income for the Ministry of Health is the revolving funds, into which fees are paid by insurers and individuals. These have become progressively more important as a source of financing.

Table 8. Sources of Ministry of Health income (millions of US dollars), 1992–1998

Source	1992	1993	1994	1995	1996	1997	1998
General government budget	1 451	1 647	1 022	1 208	1 379	1 602	1 720
Revolving funds	231	226	235	376	479	530	701
Special funds	140	88	36	41	29	49	60
Total	1 822	1 961	1 293	1 625	1 887	2 181	2 481

Sources: Tokat 1996, 1997 and 1998.

Table 9. Sources of Ministry of Health income (%), 1992–1998

Source	1992	1993	1994	1995	1996	1997	1998
General budget	79.6	84.0	79.0	74.5	73.0	73.4	69.4
Revolving funds	12.7	11.5	18.2	23.0	25.4	24.3	28.2
Special funds	7.7	4.5	2.8	2.5	1.5	2.3	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Tokat 1996, 1997 and 1998.

The general government budget provides about 70% of the Ministry of Health's income. The Ministry of Health's budget had been decreasing as a proportion of the general government budget, but after economic growth

resumed in 1996, its percentage increased considerably in 1997, before declining to 3% in 1998 (see Table 10). It has since declined even further.

Table 10. Percentage of the general government budget allocated to the Ministry of Health, 1993–2002

Years	1993[a]	1994[a]	1995[a]	1996[a]	1997[a]	1998[a]	1999[b]	2000[b]	2001[b]	2002[b]
%	4.56	3.72	3.70	2.76	4.00	3.00	2.81	2.26	2.66	2.4

Sources: [a] Tokat 1996, 1997 and 1998 and [b] Ministry of Health 2002.

Table 11. General government budget allocations for health care to public agencies (millions of US dollars), 1992–1998

	1992	1993	1994	1995	1996	1997	1998
Ministry of Health	1 820	1 960	1 292	1 626	1 888	2 181	2 480
University hospitals	553	595	433	475	697	742	1 127
Ministry of Defence	285	315	227	283	340	401	506
Other ministries	421	435	465	440	578	655	635
Total	3 080	3 305	2 417	2 824	3 503	3 979	4 748

Sources: Tokat 1996, 1997 and 1998.

The Ministry of Health spends a major portion of its budget on curative services (see Fig. 13).

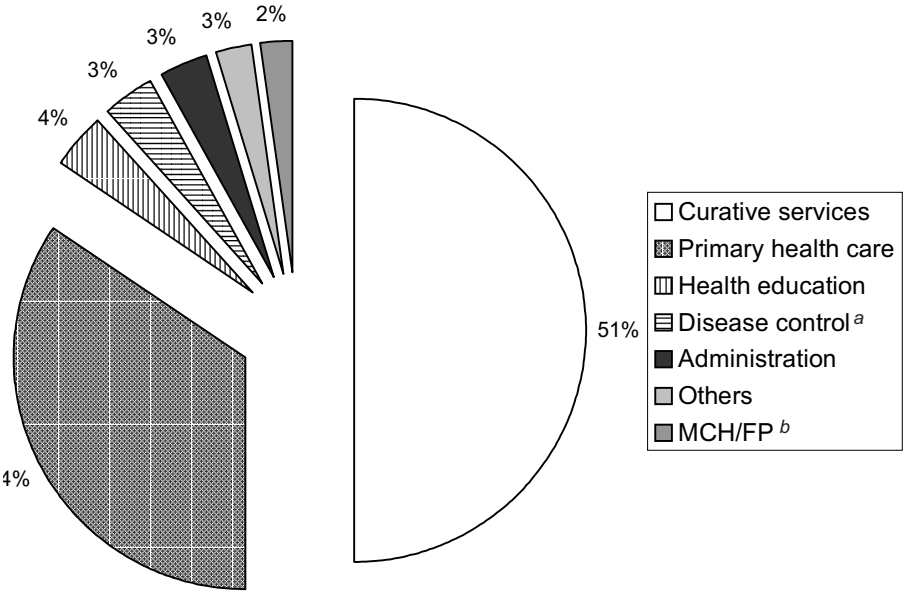
The Green Card scheme was established in 1992 and is directly funded by the government for people earning less than a minimum level of income (defined by law). In 1997, almost a million Green Cards were issued (see Table 12). Green Card holders have free access to outpatient and inpatient care at Ministry of Health hospitals and when referred to university hospitals. The scheme also covers their inpatient pharmaceutical expenses, but it does not cover the cost of outpatient drugs. Since 1994, expenditure has exceeded government allocation, leading to annual deficits.

Social security schemes

Turkey has three main social security schemes:

1. the SSK, the insurance scheme for private sector employees and blue-collar public sector employees;
2. Bag-Kur, the insurance scheme for self-employed people; and
3. the GERF, which insures retired civil servants.

Fig. 13. Distribution of the Ministry of Health's budget, 2002



Source: Ministry of Health 2002.
[a] Tuberculosis control, Malaria control, Cancer control; [b] MCH: Mother and child health, FP: Family planning.

Table 12. Green Card applications and expenditure, 1992–2001

Year	Number of applications	Green Cards granted	Government allocation (millions of liras)	Total expenditure (millions of liras)
1992[a]	910 873	365 509	127 650	7248
1993[a]	2 060 849	1 845 832	761 975	668 248
1994[a]	1 498 213	1 460 111	1 352 000	2 250 000
1995[a]	1 507 504	1 325 276	3 718 465	5 992 752
1996[a]	970 889	716 338	7 187 500	9 710 532
1997[a]	1 298 526	953 912	18 998 950	23 159 012
1998[b]	1 345 953	1 093 465	30 000 000	53 579 962
1999[b]	1 352 148	961 186	36 970 000	111 880 334
2000[b]	1 610 828	1 404 677	90 000 000	167 091 891
2001[b]	1 674 706	1 300 309	85 634 921	304 471 251

Sources: [a] Tokat 1996, 1997 and 1998 and [b] Ministry of Health 2002.

SSK (Social Insurance Organization)

The SSK is an integrated institution that insures private sector employees, blue-collar public sector employees and their dependants and provides them with health services. Its different branches cover health care, maternity care, occupational diseases and injuries, and pensions. While it is estimated that the SSK covers 7 million active workers, 3 million pensioned individuals and 24 million dependants, the number of dependants covered may be overestimated, as discussed in the section on levels of coverage.

SSK health services are funded almost entirely through contributions made by employees and employers. Contribution rates are specified as a fixed percentage of an employee's salary, as shown in Table 13. Further sources of funding include:

- fees paid on behalf of non-members using SSK facilities (such as Bag-Kur members); and
- co-payments to cover part of the cost of outpatient drugs (20% for active members and their dependants and 10% for pensioned members).

Table 13. SSK contribution rates as a percentage of total salary

Type of premium	Employees	Employers
Health care	5.0	6.0
Maternity	0.0	1.0
Occupational disease and injury	0.0	1.5–7.0
Pension	9.0	11.0
Total	14.0	19.5–25.0

Source: State Insurance Organization 1999.

SSK health care funds are spent on health services provided by:

- its own health facilities;
- other health facilities (such as Ministry of Health hospitals, university hospitals or private institutions); and
- contracted doctors.

SSK benefits are restricted to contributing workers and their dependants. SSK provides its 34 million beneficiaries with health care benefits in kind through its network of approximately 120 hospitals, 214 health stations and 168 dispensaries (which are for exclusive use by its members). SSK hospitals may have one or more dispensaries and polyclinics connected to them, but these facilities are not necessarily in the same province as the hospital. Members normally use SSK health services, but they may also be referred to Ministry of Health hospitals, university hospitals or, less frequently, private institutions.

An agreement signed between the SSK and the Ministry of Health in 1989 enables SSK beneficiaries to be treated in Ministry of Health facilities. With prior approval, SSK members can also be treated in university hospitals. In 1991, the SSK began to contract with private hospitals and diagnostic centres for selected services such as cardiovascular diagnosis and surgery, microsurgery, magnetic resonance imaging (MRI) and computed tomography (CT) scanning. The SSK pays for the cost of drugs, spectacles and dental and other prostheses supplied by private retailers. It does not provide or pay for preventive services. SSK also produces generic drugs, mainly for cost-containment purposes, although in the past it has been criticized for the poor quality of these drugs.

There are four levels to the SSK central authority. Central health department managers (curative services, health disability and health services procurement) report to five assistant general managers, who report to the General Manager, who in turn reports to the Minister of Labour and Social Security. Regional health offices have been established in four regions: Ankara, Istanbul, Izmir and Zonguldak. Each region has several hospitals and many dispensaries. Regional managers responsible for these facilities report directly to the manager of one of the three central health departments. The hospitals' chief doctors, who act as hospital managers in areas without a regional management structure, also report to one of these central health department managers. Therefore, many staff members, often more than 50, report to a single manager. Organizationally, this is not the most effective way to maintain control, and the central managers can be overloaded.

Historically, the contributions collected for health care have exceeded the SSK's expenditure on health care. Although efforts were made to ensure that the various insurance branches of the SSK were self-financing, surplus income from health care contributions was used to subsidize the activity of other branches, such as pensions. In 1994 and 1995, however, health care expenditure actually surpassed health care contributions (see Table 14). This deficit was caused by the inefficient provision of health services, poor control over contracted health services and the absence of a proper management information system. Since 1995, the SSK has also suffered from an overemphasis on cost-containment at the expense of quality. Today it is common for SSK members to complain about the accessibility and quality of its health services.

The SSK finds it difficult to collect contributions from employees and employers on a regular basis. When it experiences a deficit because it is unable to collect all its contributions, the government steps in to make up the difference, thereby adding to Turkey's chronic high inflation. In 1998, health care expenditure per active member of the SSK reached US $277, although the estimated expenditure per person covered is only about US $50 (see Table 26).

If, however, there are fewer dependants covered than estimated, this per person figure would be correspondingly higher.

Table 14. SSK health care contributions and expenditure (millions of US dollars), 1992–1998

	1992	1993	1994	1995	1996	1997	1998
Health care contributions	1 321	1 417	758	698	1 078	1 414	1 622
Health care expenditure	1 062	1 099	788	980	1 060	1 279	1 533
Surplus or deficit	259	318	–30	–282	18	135	89

Sources: Tokat 1996, 1997 and 1998.

Note: The significant fall in contributions and expenditure between 1993 and 1994 can be attributed to the economic recession and the devaluation of the Turkish Lira against the US dollar during this period.

Bag-Kur (Social Insurance Agency of Merchants, Artisans and the Self-employed)

Bag-Kur added health insurance to its traditional role as the pension fund for self-employed people in the late 1980s. Beginning in 1986 with a few pilot provinces, the health insurance scheme now covers the whole country.

Bag-Kur insures an estimated 15.0 million people, of which 3.3 million are active members, 1.3 million are pensioned and 10.4 million are dependants. As discussed in the section on levels of coverage, the accuracy of these figures can be questioned, based on the large proportion of the population without health insurance. A substantial proportion of these uninsured people are eligible for membership of Bag-Kur (because they are self-employed) but choose not to become members, either because they are unable or unwilling to make contributions, or because the administrative procedure is inaccessible. However, Bag-Kur's main problem is the low rate of participation in the health insurance scheme; only about 3.3 million members make contributions to the scheme.

Contributions to the health insurance scheme are collected along with contributions for pensions and other benefits. The contributions for pensions and other benefits are calculated at a rate of 20% of the average notional income of insured individuals, and health insurance contributions at a rate of 12% of the same figure. The average notional income of insured individuals is determined by multiplying a scale value corresponding to 1 of 24 steps with a regularly updated index, supplied by the Ministry of Finance, that reflects the inflation of earnings. Members can, within limits, choose the step at which they make their contributions. The incentive to contribute above the lowest step is that pensions are paid at a variable rate according to the final step attained.

Bag-Kur's health benefits are almost uniform, the exception being that for contribution steps 1 to 10, reimbursement is based on charges for second-class

accommodation in hospital, whereas for steps 11 and above the scheme pays for first-class accommodation. Otherwise, all contributing members and dependants are entitled to the same benefits, covering all outpatient and inpatient diagnosis and treatment, including surgery and drugs, but not general practitioner consultations or the purchase of prostheses. The combination of contributions that vary with income and virtually uniform benefits creates an internal cross-subsidy among Bag-Kur members, which is similar to the internal cross-subsidy in the SSK.

Bag-Kur's health insurance scheme works on a reimbursement basis. Unlike the SSK, Bag-Kur does not operate its own health facilities, but contracts with other public providers, including the SSK, who treat Bag-Kur members if they can provide proof of membership. Bag-Kur then reimburses the provider at standard rates determined by the Ministry of Health and the SSK. Bag-Kur members must pay a co-payment of 10% (pensioned members) or 20% (active members and dependants) for drug costs. No co-payment is required for long-term drug therapy for certain conditions, such as cancer and chronic illnesses. For Bag-Kur, the cost of outpatient drugs is a heavy burden.

Until 1994, Bag-Kur's health insurance contributions exceeded its health care expenditure. Since 1994, however, this has no longer been the case, and expenditure now exceeds contribution income (see Table 15). The main reason for this deficit is Bag-Kur's lack of control over the utilization of health services. While fraud and abuse are a feature of every type of health insurance scheme in Turkey (including the SSK, the GERF and voluntary health insurance), they are more widespread with Bag-Kur because Bag-Kur does not have a well-established administrative infrastructure throughout the country. People without health insurance make use of the policies of Bag-Kur members, and doctors tend to allow this to increase access to services. Furthermore, Bag-Kur estimates that it only succeeds in collecting monthly premiums from about 65% of its active members.

Table 15. Bag-Kur health insurance contributions and health care expenditure (millions of US dollars), 1992–1998

	1992	1993	1994	1995	1996	1997	1998
Health care contributions	228	162	127	168	183	279	286
Health care expenditure	76	97	101	176	222	325	760
Surplus or deficit	152	65	26	–8	–39	–46	–474

Sources: Tokat 1996, 1997 and 1998.

GERF (Government Employees' Retirement Fund)
The GERF was primarily established as a pension fund for retired civil servants, but it now provides them with other benefits, including health insurance. The GERF's income is derived from four sources:

1. current contributions from employees (11% of salary) and the government as employer (18% of salary);
2. a subsidy from the government's general budget;
3. the interest on deposits; and
4. other investment income.

The Ministry of Finance manages the GERF, determining contribution rates and benefit conditions. Unlike the other social security schemes, none of the contributions collected from retired civil servants is earmarked for health care. The health insurance section of the GERF is therefore financed by a subsidy from the general budget that is paid directly to the ministries employing civil servants, and that covers the health care costs of retired civil servants and their dependants. The GERF covers the cost of all ambulatory and inpatient care, including prostheses, although members must make a co-payment of 10% towards the cost of outpatient drugs. Hospital accommodation varies with civil service rank and may include private institutions when public facilities are inadequate, but patients normally use Ministry of Health and university hospitals. If necessary, the GERF can send patients abroad and will cover the full cost of this treatment.

The level of government subsidy to the health insurance section of the GERF has grown rapidly in recent years, as it has no control over its health expenditure, simply paying retrospectively for its members' treatment on the basis of the bills presented by providers.

As with the other social security institutions, the GERF has no capacity to analyse costs or utilization rates.

Levels of coverage
Since the Law on the Nationalization of Health Care Delivery was passed in 1961 (see the section on historical background), Turkish citizens have had access to primary care health services that are largely free at the point of use. The Basic Health Law of 1987 differed substantially from the 1961 legislation in providing for the extension of general health insurance, specifying that individuals who are not members of any social security scheme will be registered by the state and pay contributions to the state.

However, estimating the proportion of the population covered by the social security system in Turkey is not an easy task. It is also a controversial issue.

According to data from the State Planning Organization (see Table 16), 87% of the population has some kind of social security coverage for health care. However, this figure may be too high. The main reason for possible miscalculations of the number of people covered by social security is that each social security institution knows only how many active and pensioned members it has, so numbers of dependants are estimates based on the average household size in Turkey. Data from 1998 show that the average household size in urban areas was 4.0 and in rural areas 4.9. Social security institutions take this figure and calculate that each active and pensioned member has dependants equal to the average household size. In practice, this method of calculation sometimes results in double counting. For example, take a household consisting of a grandfather who is a retired member of the GERF and his wife, their son who runs a small shop and is a member of Bag-Kur and his wife, and their three children: one a student, one a civil servant and one an active member of the SSK. Four members of this household are covered by social security and they have a total of three dependants. However, according to the system for calculating the number of dependants, 4 insured people would be multiplied by 3.5 (1 insured person plus 2.5 dependants) to produce 14 people with coverage.

The figures presented in Table 16 do not take into account Green Card holders either. Even the 11.5 million people who are poor enough to be entitled to Green Card membership exceed the number of uninsured people presented in the table.

Complementary sources of financing

Complementary sources of financing in the Turkish health care system include out-of-pocket payments and funding from external sources such as the World Bank.

Out-of-pocket payments

Out-of-pocket payments may be in the form of direct payments to private doctors and institutions, premiums paid for voluntary health insurance and co-payments for drugs and services.

It is difficult to make reliable estimates of the extent of out-of-pocket payments in Turkey, as private spending on health care is not well documented. The World Health Organization's *European health for all database* records private expenditure at 28.1% of total expenditure on health care in 1998

Table 16. Population groups covered by the social security institutions (thousands), 1980–2000

Institution	1980	1985	1990	1995	2000
GERF (total)	5 426	5 879	6 583	8 124	9 766
Active insured	1 325	1 400	1 560	1 880	2 164
Pensioners[a]	496	680	843	952	1 297
Dependants	3 606	3 798	4 180	5 291	6 3057
SSK (total)	10 674	13 576	19 488	28 524	34 140
Compulsory insured	2 205	2 608	3 287	4 207	5 284
Voluntary insured	–	–	3007	981	844
Voluntary insured agricultural workers	–	18	74	253	185
Pensioners[a]	636	1 071	1 597	2 338	3 340
Dependants	7 834	9 879	14 230	20 743	24 488
Bag-Kur (total)	4 540	8 001	11 333	11 833	15 036
Active insured	1 101	1 682	1 967	1 791	2 173
Voluntary active insured	–	–	106	79	264
Active insured in agriculture	–	245	752	799	876
Pensioners[a]	138	294	596	881	1 277
Dependants	3 302	5 780	7 911	8 283	10 446
Private funds	196	289	312	291	271
Active insured	78	77	84	71	78
Pensioners[a]	12	21	32	52	71
Dependants	106	191	196	168	121
Social security coverage (health care) (total)	16 297	19 744	34 475	43 138	56 487
General total insured	20 837	27 745	37 716	48 772	59 213
Total active insured,	4 708	6 030	8 131	10 064	11 867
of which:					
- active insured	4 708	5 766	6 898	7 951	9 697
- voluntary active insured	–	–	406	1 060	1 108
- active insured in agriculture	–	263	826	1 053	1 061
Total non-active insured,	16 129	21 715	29 585	38 708	47 346
of which:					
- pensioners[a]	1 282	2 067	3 068	4 223	5 986
- dependants	14 847	19 649	26 517	34 485	41 360
Total population, both insured and uninsured	44 737	50 664	56 636	61 075	68 036
% population covered for health care	36.4	39.0	60.9	70.6	83.0
% population insured	46.6	54.8	66.6	79.9	87.0

Source: State Planning Organization 2001.

Bag-Kur: Social Insurance Agency of Merchants, Artisans and the Self-employed; GERF: Government Employees' Retirement Fund; SSK: Social Insurance Organization. [a] Pensioners also include retired workers, invalids, widows, widowers, orphans, etc.

Table 17a. Main sources of health care financing (millions of current US dollars), 1992–1998

Source	1992	1993	1994	1995	1996	1997	1998
Taxes	2 776	3 135	2 170	2 457	2 921	3 387	3 853
Social security contributions	1 361	1 472	1 136	1 547	1 708	2 168	3 001
Out-of-pocket (including VHI)	1 887	2 109	1 415	1 700	2 143	2 255	2 675
Total	6 024	6 716	4 721	5 704	6 772	7 810	9 529

Sources: Tokat 1996, 1997 and 1998.
US $: United States dollars, VHI: voluntary health insurance.

Table 17b. Main sources of health care financing (as a % of the total), 1992–1998

Source	1992	1993	1994	1995	1996	1997	1998
Taxes	46.1	46.7	46.0	43.1	43.1	43.4	40.4
Social security contributions	22.6	21.9	24.1	27.1	25.2	27.8	31.5
Out-of-pocket (including VHI)	31.3	31.4	30.0	29.8	31.6	28.9	28.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Tokat 1996, 1997 and 1998.
US $: United States dollars, VHI: voluntary health insurance.

(see Table 17). The Organisation for Economic Co-operation and Development (OECD) puts this percentage at 27.2% in 1997, down from 29.2% in 1995, 39% in 1990, 49.8% in 1985 and 72.7% in 1980. The Turkish health expenditure and finance reports produced by the Ministry of Health also find out-of-pocket payments to account for 28.1% of total expenditure on health care in 1998 (see Table 17b). However, as these reports are all based on data collected from private providers, the authors consider their data to be subject to a margin of uncertainty numbers are not very reliable, and there are several good reasons for believing that. In their opinion, out-of-pocket payments are much higher than the Ministry of Health figures suggest, accounting for almost half of total expenditure on health care in Turkey. Their reasons for thinking this are set out below.

First, private health care initiatives are visibly increasing in Turkey. In 1990, there were about 100 private hospitals (totalling 3000 beds), but by 1998 there were about 200 hospitals (totalling 13 000 beds). The rising number of polyclinics and high-tech diagnostic centres, particularly those offering magnetic resonance imaging (MRI) and computed tomographic (CT) scanning, and the establishment of laboratory networks clearly indicate a boom in the private health care sector. Not only are the numbers of these private enterprises increasing, the service volume of each enterprise has also increased drastically.

Second, it is widely acknowledged that for tax reasons, many private enterprises declare lower revenue than their actual income. It is therefore likely that some private hospitals declared lower than actual revenue for the preparation of the Ministry of Health reports. In fact, some private hospitals declined to reveal any information at all. The revenue from polyclinics and diagnostic centres is calculated as part of private doctors' income, and according to reports averages about US $30 000 annually per facility. But given that an MRI scanner costs about US $2 million and a CT scanner about US $750 000, it is unrealistic to assume that these private facilities would only generate US $30 000 per year.

Third, the Health Services Utilization Survey published in 1992 showed that patients prefer private to public health care, regardless of their income, due to a lack of confidence in public health services and a belief that private health care is better quality. While the distribution of out-of-pocket payment remains obscure, the uneven income distribution that has been accentuated in the last decade has created a high-income group of between six and eight million people. This group would be expected to make substantial use of private health care.

Finally, the development of private health insurance in recent years is also likely to have contributed to increased out-of-pocket expenditure (see below). Considering all these points, it is possible to conclude that private health care expenditure in Turkey is higher than the official statistics suggest.

Informal payments are also an issue in the Turkish health care system. Recent surveys of 3021 urban adults and 1219 small- and medium-sized enterprises (conducted in 2000 and 2001) attempted to establish the perceived degree of corruption in a set of public institutions, including public hospitals (*3*). Respondents were asked to grade the degree of corruption present on a scale of 0 to 10, with 0 meaning no corruption and 10 meaning total corruption. On average, households graded public hospitals 5.6, which compared to a low of 2.7 for the armed forces, 6.1 for non-traffic police and a high of 7.6 for customs. On average, businesses graded public hospitals 4.9, compared to 2.5 for universities, 5.7 for non-traffic police and 7.7 for customs. Although the position of public hospitals is not among the worst, 46% of individual respondents and 38% of business respondents gave public hospitals a grade between 6 and 10, indicating that corruption in the health care system is perceived to be problematic by many people.

Equity implications

Health care financed by out-of-pocket payments clearly breaches the principle of vertical equity, which in economic terms means that payment is related to

ability to pay. In both the SSK and Bag-Kur schemes, contributions are set as fixed percentages of a member's income, which implies a level of cross-subsidy between members with low and high incomes. Uninsured people do not benefit from this type of cross-subsidy.

Voluntary health insurance

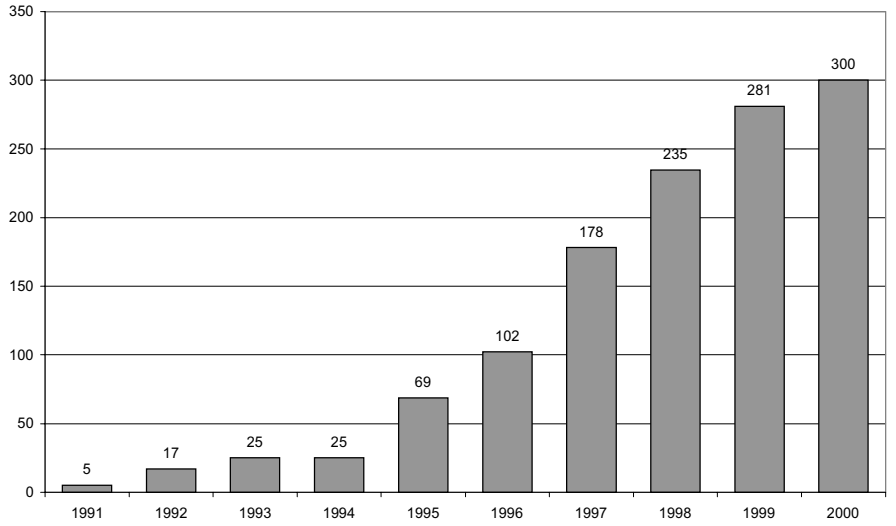
As all voluntary health insurance in Turkey is provided by private insurance companies, it is referred to in this section as private health insurance. Private health insurance was not well developed until the 1990s. In 1990, approximately 15 000 people were privately insured. Today, it is estimated that as many as 650 000 people have private health insurance, which is now offered by over 30 insurers. However, since 2000, estimates of private health insurance companies' income from premiums suggest that there has been a decrease in the number of people purchasing private health insurance.

Most private health insurance subscribers are already insured by a social security institution but pay private health insurance premiums to cover the cost of health care in private institutions (supplementary voluntary health insurance). Some private employers offer private health insurance to their employees as a fringe benefit, paying for the premiums partly or fully. This type of employment-related private health insurance accounts for well over half of the people who are covered by private health insurance. Those most likely to be covered by private health insurance include the employees of banks, insurance companies, chambers of commerce and computer companies (*3*).

The development of new private institutions in the 1990s fuelled the growth of the private health care sector, making private health insurance more popular. After rapid growth during the 1990s, the number of people with private health insurance stabilized in 1998. The main reason for this levelling off in the demand for private health insurance since the end of the 1990s is that premiums have risen substantially. In the last eight years, the average annual premium per person has increased from approximately US $200 to US $800, partly because private health insurers have very little control over the costs of health care (perhaps due to provider moral hazard) and partly due to fraud. As private health insurers do not have the legal infrastructure to tackle fraud, they have had to raise premiums and reduce coverage year after year. Consequently, many subscribers no longer trust their insurers, and young and healthy individuals have started to opt out, leaving insurers to cover older and less healthy people (adverse selection). This situation is likely to continue for the next few years, and will put further pressure on insurers to increase premiums. Another factor causing premiums to rise was the introduction of products offering unlimited coverage products with a lifetime renewal guarantee after a waiting period,

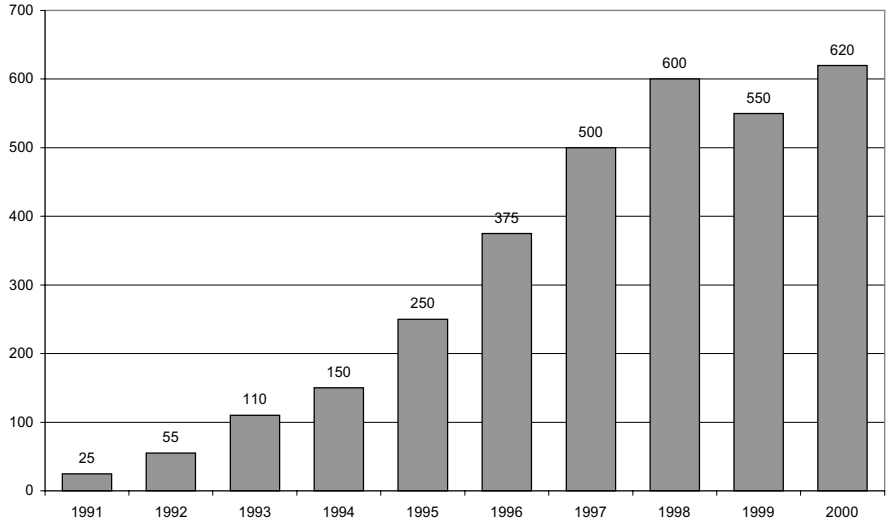
whereas first-generation private health insurance policies offered limited coverage and mainly operated on a reimbursement basis.

Fig. 14. Private health insurance premiums paid (millions of US dollars), 1991–2000



Source: Ministry of Finance 2001.

Fig. 15. Number of people with private health insurance (thousands), 1991–2000



Source: Ministry of Finance 2001.

In Turkey, per person spending on general insurance (property, car, liability etc) increased from US $4.50 in 1981 to US $24.50 in 1997. Private health insurance increased its share of the total insurance market from 2.05% in 1993 to 8.5% in 1997. Of the 60 private insurance companies in Turkey, 33 offer private health insurance.

Self-funded schemes

Self-funded schemes organized by large private companies for their retired personnel have been set up to purchase private health care. Probably not more than a few hundred thousand retired workers are involved in these schemes. In most cases, this type of insurance coverage is paid for by employers.

External sources of financing

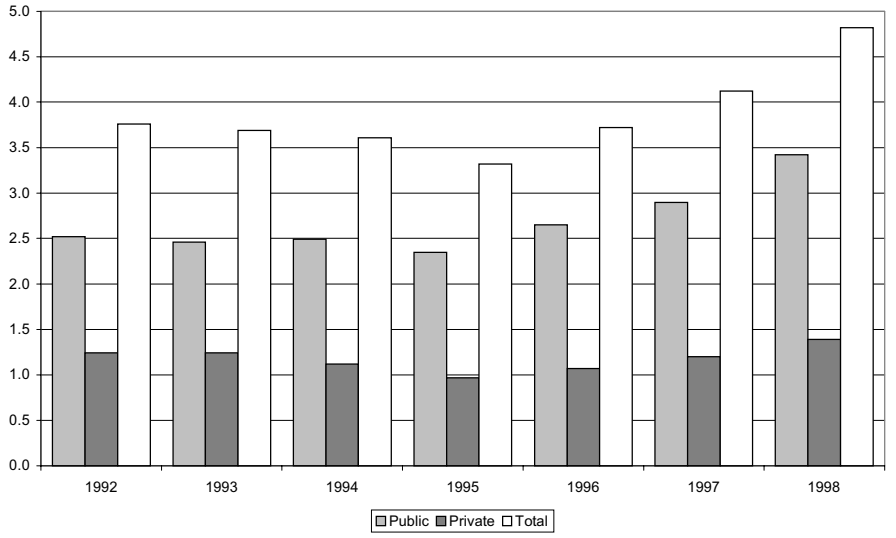
The World Bank is the most prominent international agency contributing to health care funding in Turkey. The First Health Project (US $75 million World Bank loan, US $75 million provided by the government) and the Second Health Project (US $150 million World Bank loan and US $50 million provided by the government) were realized during the 1990s. Approximately 80% of the money for the first project was spent on renewing and improving infrastructure (purchasing equipment, building hospitals, renewing facilities), with the rest spent on training and management development. The second project focused more on strengthening primary health care and health care reforms.

Since Turkey has become a candidate for membership of the European Union, some EU funds may become available for the health care sector.

Health care expenditure

According to official statistics, health care expenditure has generally exceeded 3% of the gross domestic product (GDP). The proportion of GDP spent on health care declined consistently from 1992 (3.76%) to 1995 (3.32%). Once economic growth resumed in 1996, the proportion rose to 3.72% and then to 4.12% (1997) and 4.82% (1998). As discussed in the section on complementary sources of financing, however, these figures tend to underestimate the high level of out-of-pocket payments for health care in Turkey (see above).

Fig. 16. Public and private health care expenditure as a % of GDP, 1992–1998



Sources: Tokat 1996, 1997 and 1998.

Table 18. Total health care expenditure (millions of current US dollars), 1992–1998

	1992	1993	1994	1995	1996	1997	1998
Total health care expenditure	6 024	6 716	4 721	5 704	6 772	7 810	9 529

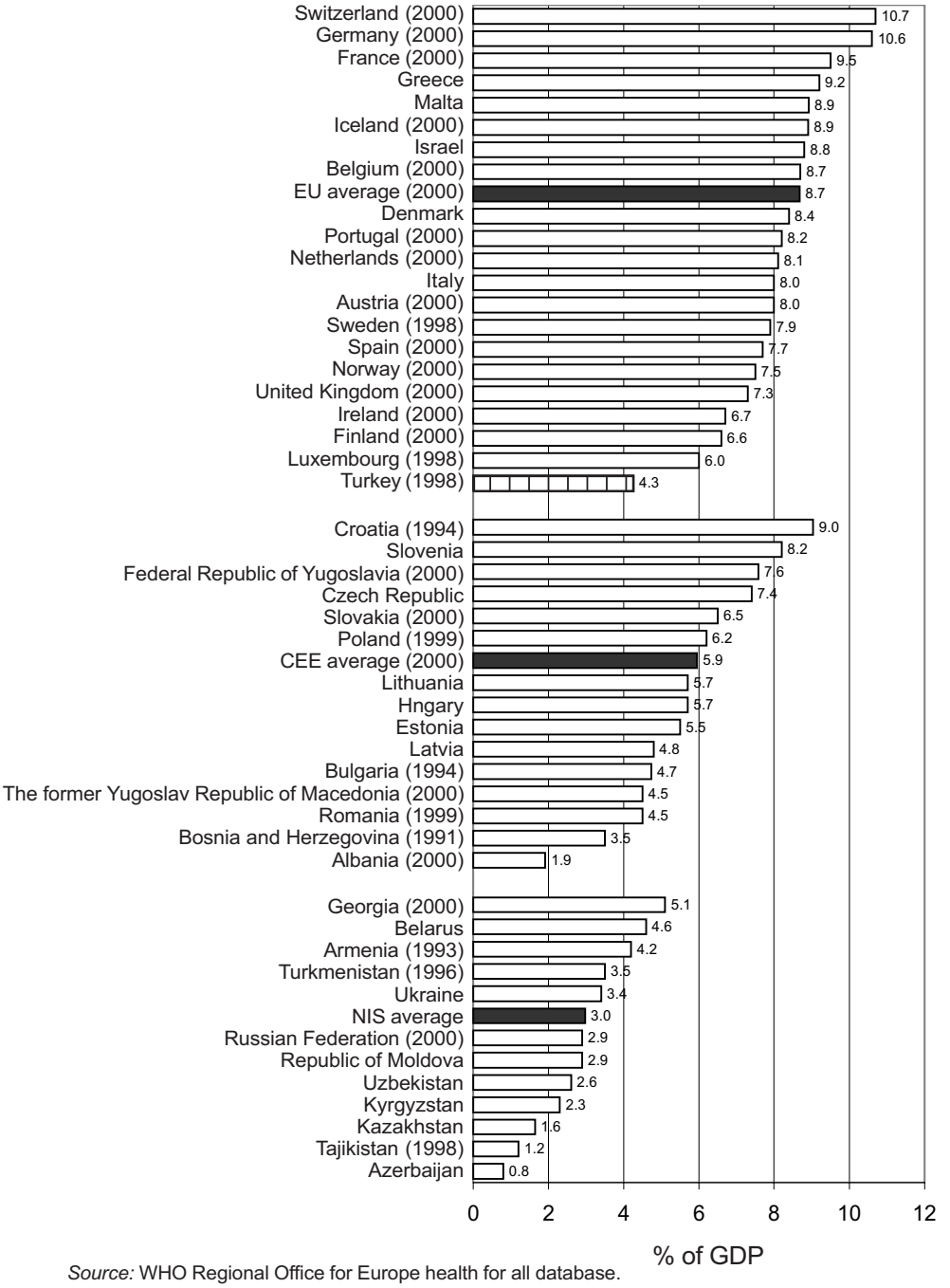
Sources: Tokat 1996, 1997 and 1998.

Table 19. Total and per person health care expenditure (current US dollars), 1980–2000

	1980	1985	1990	1995	1999	2000
Total health care expenditure (as % of GDP)	3.5	2.9	3.5	3.8	4.1	4.3
Health care expenditure per person						
in current US $	55.5	39.2	95.0	105.6	116.4	135.3
in US $PPP	86.5	102.0	173.8	234.2	220.0	250.0

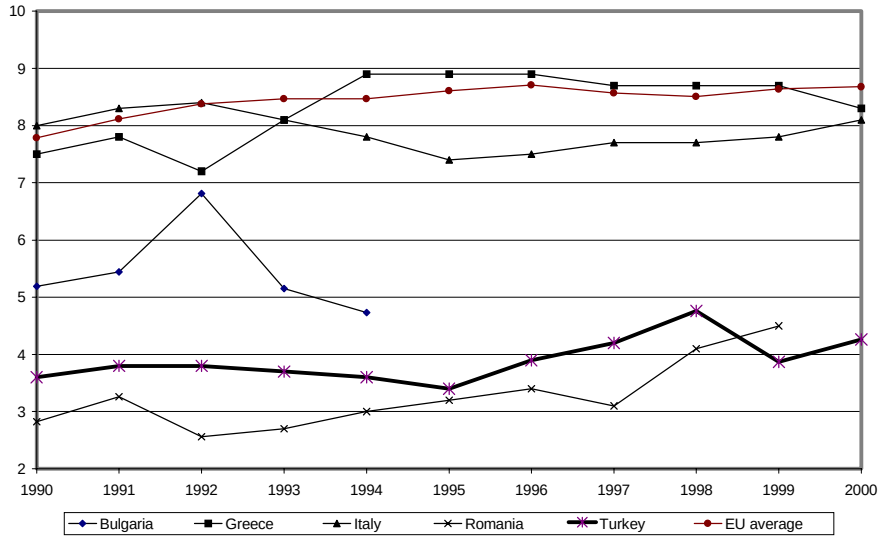
Source: State Planning Organization 2001.

Fig. 17. Total expenditure on health as a % of GDP in the WHO European Region, 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.
CEE: central and eastern Europe; EU: European Union; NIS: Newly independent states.

Fig. 18. Health care expenditure as a percentage of GDP in Turkey and other selected European countries, 1990–2000



Source: WHO Regional Office for Europe health for all database.

Table 20. Trends in health care expenditure, 1980–1998

	1980	1985	1990	1995	1998
Expenditure per person (US $PPP)	75	74	171	190	316
Total health expenditure as % of GDP	3.3	2.2	3.6	3.4	4.8
Public expenditure as % of total health expenditure	27.3	50.2	61.0	70.3	71.9

Source: WHO Regional Office for Europe health for all database.

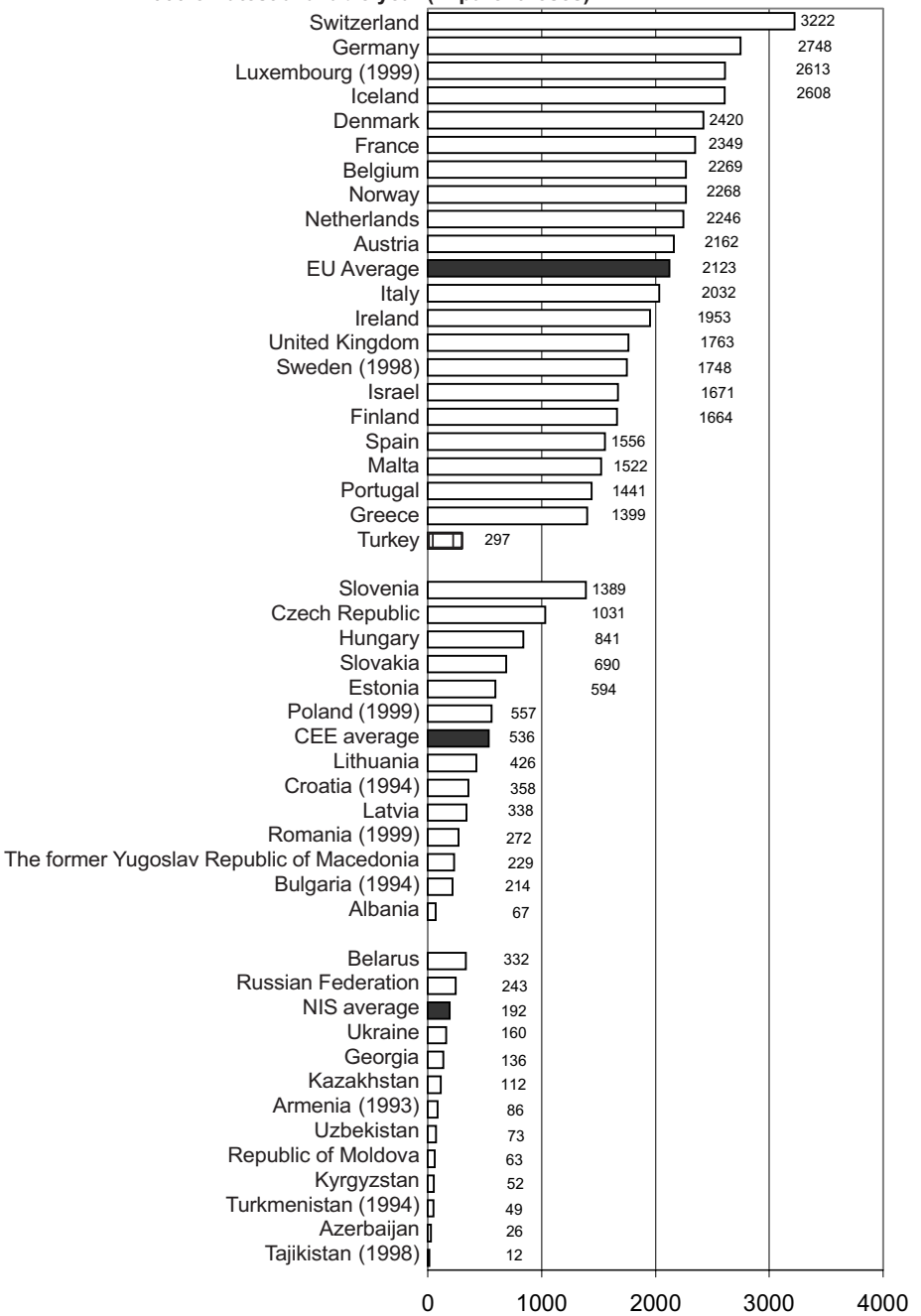
Note: The figures for total health expenditure as % of GDP given here differ from the figures given in Table 19. The reason for this is not known.

Table 21. Health care expenditure by category as a % of total expenditure on health, 1980–1998

	1980	1981	1985	1987	1990	1995	1996	1997	1998
Inpatient care	–	–	–	35.8	33.4	28.7	28.2	28.8	29.3
Pharmaceuticals	–	10.2	13.2	12.6	20.5	30.1	26.3	27.8	34.7
Capital investment	12.3	16.5	13.0	17.6	15.7	7.0	6.0	–	–

Source: WHO Regional Office for Europe health for all database.

Fig. 19. Health care expenditure in US $PPP per person in the WHO European Region, 2000 or latest available year (in parentheses)

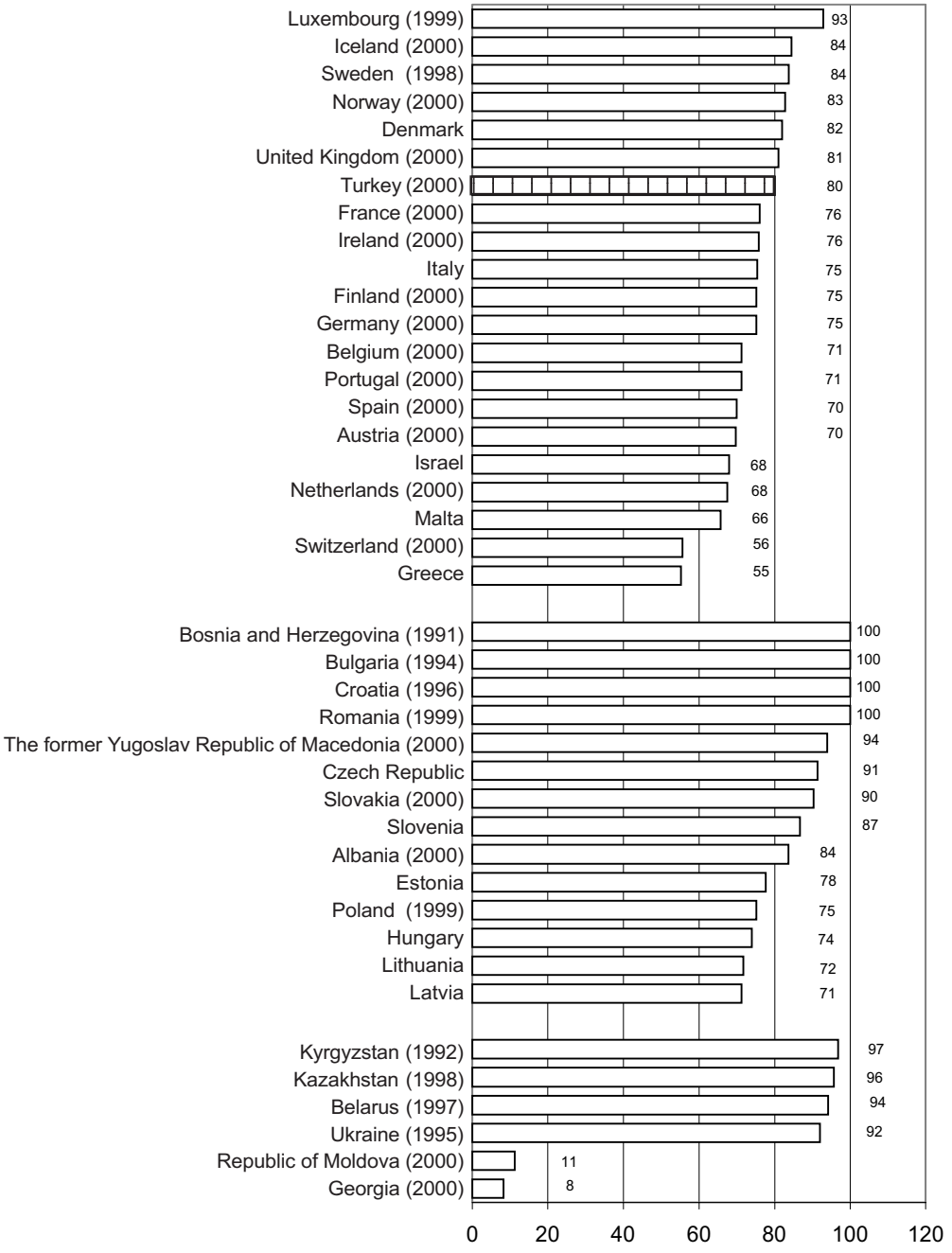


Source: WHO Regional Office for Europe health for all database.

CEE: central and eastern Europe; EU: European Union; NIS: Newly independent states.

Turkey

Fig. 20. Health care expenditure from public sources as a % of total health care expenditure in countries in the WHO European Region, 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Table 22. Ministry of Health expenditure by category (millions of US dollars), 1992–1998

	1992	1993	1994	1995	1996	1997	1998
Preventive care	130	108	52	54	59	71	75
Outpatient treatment	446	529	313	334	408	477	502
Inpatient treatment	931	1 066	786	984	1 170	1 338	1 583
General budget	700	840	551	608	691	808	882
Revolving funds	231	226	235	376	479	530	701
Administration, training and other	314	257	141	253	251	295	320
Total	1 821	1 960	1 292	1 626	1 888	2 181	2 480

Sources: Tokat 1996, 1997 and 1998.

Most Ministry of Health expenditure goes to inpatient services (64% in 1998) (see Table 23). The second largest item of expenditure is outpatient services (20%), of which a large proportion is provided in hospital settings, and the third is training and management (13%). In 1998, expenditure on pharmaceuticals was 4%. Although the Ministry of Health is the only agency that provides preventive health services, the proportion of its budget allocated to preventive health services declined substantially from 7% to 3% between 1992 and 1998.

Table 23. Ministry of Health expenditure by category (%), 1992–1998

	1992	1993	1994	1995	1996	1997	1998
Preventive care	7	6	4	3	3	3	3
Outpatient treatment	24	27	24	21	22	22	20
Inpatient treatment	51	55	61	60	62	61	64
General budget	38	43	43	37	37	37	36
Revolving funds	13	12	18	23	25	24	28
Administration, training and other	17	13	11	16	13	14	13
Total	100	100	100	100	100	100	100

Sources: Tokat 1996, 1997 and 1998.

Table 24. Health care expenditure of public institutions, 1998

Institution	Expenditure per insured person, including pensioners and dependants (US $)	Percentage change from 1997 to 1998
Ministry of Defence	322.3	26.5%
Other ministries	78.9	–2.7%
SSK	50.0	9.7%
Bag-Kur	125.2	74.0%
GERF	312.5	31.7%

Sources: Tokat 1997 and 1998.

Bag-Kur: Social Insurance Agency of Merchants, Artisans and the Self-employed;
GERF: Government Employees' Retirement Fund; SSK: Social Insurance Organization;
US $: United States dollars.

Table 25. SSK health care expenditure by category (millions of US dollars)

Category	1992	1993	1994	1995	1996	1997	1998
SSK institutions	813	836	611	761	796	939	1 113
Non-SSK institutions	199	208	132	165	195	261	313
Contracted doctors	50	55	45	54	69	79	107
Total	1 062	1 099	788	980	1 060	1 279	1 533

Sources: Tokat 1996, 1997 and 1998.
SSK: Social Insurance Organization.

Table 26. SSK health care expenditure per active member and per insured person (US dollars), 1992–1998

	1992	1993	1994	1995	1996	1997	1998
Health care expenditure per active member	280	276	188	222	229	254	277
Health care expenditure per insured person (including pensioners and dependants)	52	51	34	40	41	46	50

Sources: Tokat 1996, 1997 and 1998.
SSK: Social Insurance Organization.

Table 27. GERF health care expenditure by category (millions of US dollars), 1992–1998

Category	1992	1993	1994	1995	1996	1997	1998
Hospitals	71	87	68	125	143	189	257
Pharmaceuticals	121	155	150	230	250	308	400
Medical equipment	26	30	25	30	27	32	40
Dental care	4	5	3	5	5	6	7
Other	1	1	1	1	1	2	2
Total	223	278	247	391	426	537	706

Sources: Tokat 1996, 1997 and 1998.
GERF: Government Employees' Retirement Fund.

Table 28. GERF health care expenditure, 1997 and 1998

Category	1997		1998	
	Millions of US $	%	Millions of US $	%
Hospitals	189	35.2	257	36.4
Pharmaceuticals	308	57.4	400	56.6
Medical equipment	32	6.0	40	5.7
Dental	6	1.1	7	1.0
Other	2	0.3	2	0.3
Total	537	100.0	706	100.0

Sources: Tokat 1996, 1997 and 1998.
GERF: Government Employees' Retirement Fund, US $: United States dollars.

Table 29. GERF health care expenditure per active member (US dollars), 1992–1998

Year	1992	1993	1994	1995	1996	1997	1998
Expenditure per active member	105	125	109	173	188	238	312

Sources: Tokat 1996, 1997 and 1998.
GERF: Government Employees' Retirement Fund.

Health care delivery system

The main bodies responsible for delivering health care in Turkey are described in the section on organizational structure and management. This section outlines public health services, primary health care, secondary and tertiary care, human resources and training, pharmaceuticals and health technology assessment.

Public health services

Public health laboratories, available in some provinces, provide public health and laboratory-based services.

Environmental health services

The environmental health responsibilities of the various organizations that have them are not clear. The main bodies involved in environmental health include the Ministry of Health, the Ministry of Environment, the Ministry of Agriculture and Rural Affairs, the Ministry of Forestry, the Ministry of Industry and Trade, the Ministry of Interior Affairs and the municipalities. However, with the exception of the Ministry of Health and the municipalities, these bodies are more interested in ecological issues and large-scale policies for environmentally conscious development than the sanitary aspects of environmental health.

Within the Ministry of Health, the General Directorate of Primary Health Care has some responsibilities for environmental health. At the provincial level, each health directorate has a branch manager for environmental health services. Environmental health officers located in health centres in urban (and some

rural) areas are responsible for basic sanitation issues such as water safety, solid-waste disposal, sewerage systems and food hygiene.

Municipalities provide almost identical sanitary services. Since the municipalities have more resources than health centres, their services are more effective and their role in providing these services is more widely recognized. However, most of the rural settlements in Turkey are not yet municipalities, and in these areas, therefore, the health centres have most responsibility for sanitary services.

Occupational health services

Occupational health problems, particularly workplace accidents, are more prevalent in Turkey than in western European countries. About 80 000 workplace accidents were reported in 1999.

Workplaces with 300 or more employees are required by law to recruit a full-time doctor; those with more then 50 employees must have a part-time doctor. These doctors have dual functions in providing primary care and ensuring health and safety in the workplace.

The Turkish Medical Association and local medical associations organize joint training courses for occupational doctors, awarding a certificate on completion. Holding such a certificate gives a doctor priority for appointment, and doctors have shown considerable interest in these courses, paying to participate.

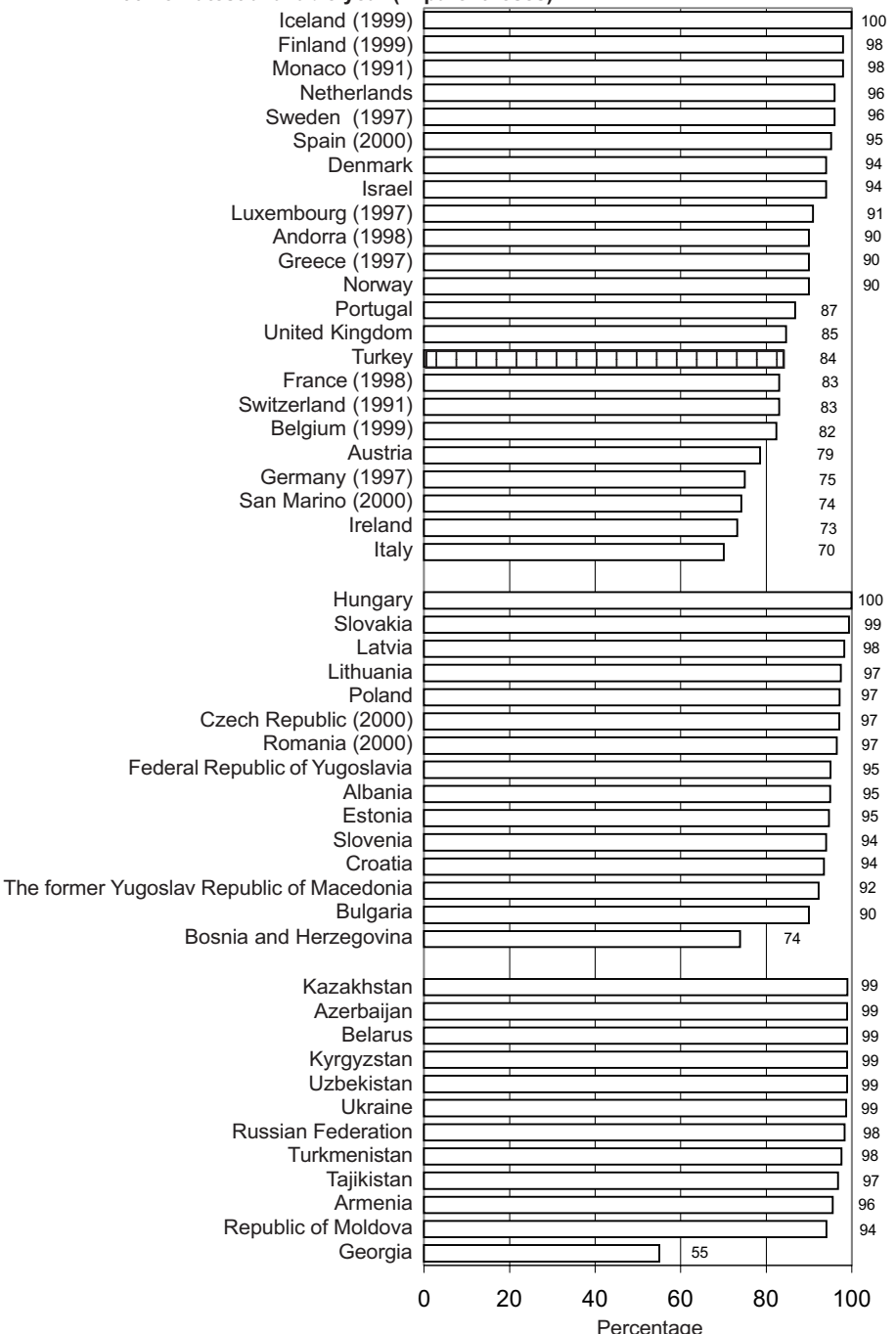
Although workplace inspection is considered highly effective in ensuring occupational health, the current levels of activity of the Ministry of Labour and Social Security in this area are inadequate.

School health services

With respect to children, the Ministry of Health primarily focuses on the needs of pre-school children. School health services are therefore organized jointly with the Ministry of National Education. In addition to the Ministry of Health's vaccination programme, which is quite well managed, this collaboration includes screening programmes (such as eye, oral and general physical examinations that check heart, lungs, blood pressure, height and weight) and primary care services. With the exception of vaccination programmes, these school health services are not well structured.

One type of health service that might be confused with school health services is the health facilities provided for Ministry of National Education staff. Since 1985, the Ministry of National Education has established health centres for teachers and other staff. Almost 300 doctors, 100 dentists and 300 nurses across

Fig. 21. Levels of immunization for measles in the WHO European Region, 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

the country work in these centres. Although the Ministry of Health has a health centre in the main city of each province and three in Istanbul and Ankara, it also uses these other health facilities where necessary, particularly in rural areas.

From time to time, the Ministry of Health and the Ministry of National Education develop training programmes for teachers and school inspectors and implement health promotion programmes in schools, although these programmes are neither well structured nor sustainable. A recent attempt has been made to implement a health-promoting schools project in Turkey, in collaboration with WHO and the United Nations Children's Fund (UNICEF).

Primary health care

At the provincial level, the following units provide Ministry of Health primary care services:

- health centres
- health posts
- mother and child health and family planning centres
- tuberculosis dispensaries.

Health centres serve a population of between 10 000 to 40 000. They are each staffed by a team consisting of a doctor, a nurse, a midwife, a health technician and an administrator. Their main responsibilities are:

- preventing and treating communicable diseases;
- providing basic treatment, immunization, mother and child services, family planning, public health education and environmental health services; and
- collecting health-related statistical data.

Health posts report to health centres and are each staffed by a midwife. They serve an average population of 2000 to 2500, mainly in rural areas.

Health centres and health posts are the only settings providing preventive care, health promotion and community-based health services. All other settings use specialists to provide just primary diagnostic and curative care. The services provided by health centres and health posts, including essential drugs, used to be free of charge, but current practice does not include free essential drugs, and in the beginning of 2002, official fees were introduced for outpatient services. Any donations for service used to be channelled into the health centre

[8] Many health centres have their own societies, which accept patient fees on a charitable basis in order to fund recurrent expenses and the purchase of basic materials.

societies,[8] but since the introduction of new legislation in 2000, fees have been assigned to the revolving funds.

About 280 **mother and child health centres** and **family planning centres** provide immunization, control diarrhoeal and respiratory diseases, promote breastfeeding, ensure sufficient and balanced nutrition, monitor the growth of children and provide family planning services.

Each province has tuberculosis control groups operating about 260 **tuberculosis dispensaries**.

Table 30. Number of health centres and health posts, 1963–2001

Years	Health centres	Health posts
1963	19	37
1965	416	970
1970	851	2231
1975	995	3243
1980	1467	5776
1985	2887	8464
1990	3454	11 075
1995	4927	11 888
2000	5700	11 747

Source: Ministry of Health 2002.

Primary health care has a strong legislative basis in Turkey. The Law on the Nationalization of Health Care Delivery, passed by the Grand National Assembly in 1961, introduced the concept of integrated primary health care provided by health centres and health posts. According to this law, each health centre was to serve a population of 5000 to 10 000 and would be staffed by general practitioners, nurses, midwives and health officers.

The nationalization of health services required massive infrastructure to cover the whole country. In the last 40 years, infrastructure has been successfully developed in rural areas, but rapid urbanization during the same period was not anticipated, and as a result, health care infrastructure is relatively weak in urban areas.

Funding policies envisaged for nationalization (a tax-based system supported by income-related contributions from the population) were not implemented for economic and political reasons, nor were the necessary human resources provided. Doctors were trained to become specialists rather than general practitioners, and there have been serious shortcomings in the number and quality of nurses and midwives. For all these reasons, the creation of a national primary health care network of health centres and health posts has not been fully achieved.

The inadequacy of health centres and health posts has led to the development of other entities. For example, in urban areas the outpatient departments of Ministry of Health hospitals are used extensively for first-level contact with the health care system. Members of the Social Insurance Organization (SSK) use its hospital polyclinics and dispensaries for the same purpose. In the last two decades, the increase in the number of university hospitals has provided patients with a further source of primary contact.

Private specialist practices also seem to be an important point of initial contact with the health care system, both for urban and rural populations, although people living in rural areas make less use of private doctors and are more likely to use health centres. The choice of initial contact also varies according to income, education and geography, with wealthier and university-educated people and those living in western Turkey making more use of private doctors. The lack of health centres in Istanbul, for example, forces people to go to private polyclinics for basic treatment. It is estimated that the number of private polyclinics in Istanbul is more than twice the number of health centres (*3*).

Table 31. Average population per health centre, 1997–2000

Region	1997	1998	1999	2000
Marmara	18 933	18 742	19 810	19 434
Aegean	9 213	8 805	9 273	8 973
Mediterranean	11 161	10 741	11 805	10 678
Middle Anatolia	10 427	10 117	10 418	10 165
Black Sea	8 324	8 088	7 971	7 650
East Anatolia	10 394	10 187	9 658	10 226
Southeast Anatolia	15 857	15 420	16 253	15 893
Total	11 734	11 306	11 805	11 461

Source: Ministry of Health 2001b.

The number of health centres has increased since 1993 (see Table 30). Table 31 shows that the number of people served by each health centre has declined from 11 734 in 1997 to 11 461 in 2000. However, in some areas it has increased over time, particularly in those areas where it is already high, such as the Marmara region and Southeast Anatolia. In Istanbul (in the Marmara region), the number of people per health centre was as high as 48 076 in 2000. Health posts have declined in number since 1994 (see Table 30).

A recent government document notes that in 2000, a total of 665 health centres did not have a doctor and 7713 health posts did not have a midwife (*6*).

In the last 40 years, the Ministry of Health has not entirely embraced the concept of integrated primary health care. Vertically organized programmes

such as those for mother and child health care and for tuberculosis surveillance and treatment continue to be supported. Originally conceived as centres for training health centre and health post staff, the mother and child health centres are generally perceived as service providers, leading to considerable overlap with the services provided by health centres and health posts. Similarly, the tuberculosis dispensaries established during the 1930s have survived the nationalization programme.

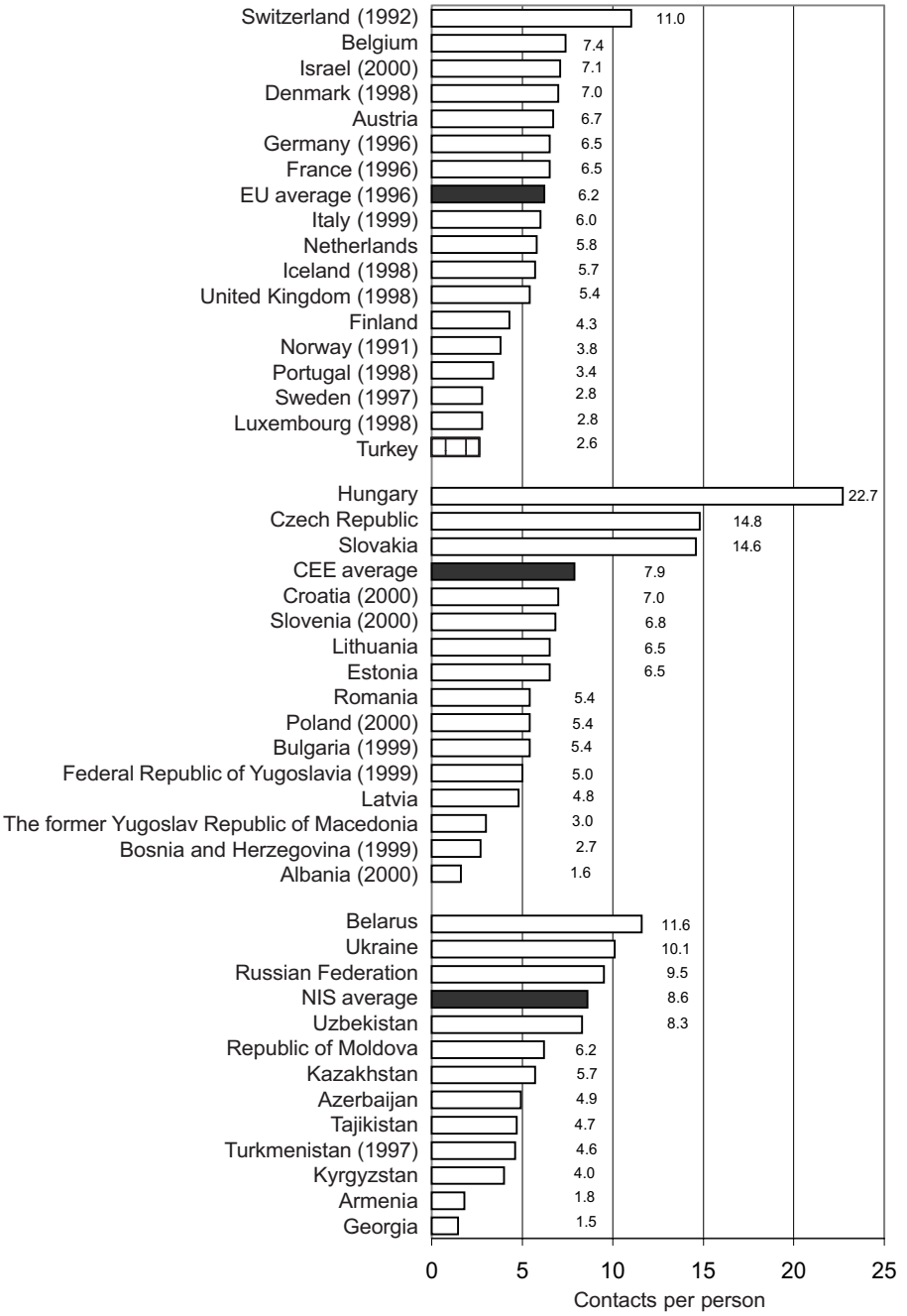
Health indicators relating to primary health care, for example infant mortality, under-five mortality and levels of immunization, demonstrate how ineffective primary health care has been in Turkey (see Table 4). Attempts during the 1990s to provide coordinated and integrated primary health care in eight pilot provinces (particularly through the First Health Project) were unsuccessful, and coordination and collaboration among primary care providers is still almost nonexistent. Reasons for this failure include the weak leadership of the Ministry of Health, the lack of properly trained staff (particularly general practitioners and family doctors), insufficient managerial capacity and ineffective legislation.

Secondary and tertiary care

In the 1930s and 1940s, provincial administrations were responsible for building and operating hospitals. In the late 1940s, the Ministry of Health took over all government hospitals in the provinces and assumed responsibility for building and operating hospitals. During this period, many hospitals with 10 to 20 beds were built across the country. After the Law on the Nationalization of Health Care Delivery was adopted in 1961, the intention was to make the Ministry of Health responsible for managing all hospitals. However, at the same time, the SSK began to develop as a provider organization and started to build and manage its own hospitals.

Turkey has about 25 hospital beds per 10 000 population (see Table 32). However, the distribution of hospital beds across the country is not homogeneous, and the range of beds varies from 3 to 60 beds per 10 000 population.

Fig. 22. Outpatient contacts per person in the WHO European Region, 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

CEE: central and eastern Europe; EU: European Union; NIS: Newly independent states.

Table 32. Trends in the total number of hospitals and hospital beds, 1970–1997

Year	Hospitals	Hospital beds	Population per bed	Beds per 10 000 population
1970	746	71 876	490	20.3
1975	798	80 264	493	20.3
1980	827	99 117	451	22.2
1985	722	103 638	495	20.0
1990	899	139 606	414	24.1
1991	941	142 511	405	24.2
1992	970	147 774	398	24.3
1993	1 004	150 565	388	24.0
1994	1 024	151 565	375	24.6
1995	1 051	151 972	384	24.6
1996	1 076	155 819	386	24.9
1997	1 125	161 269	384	25.5

Source: Ministry of Health 2001a.

The Ministry of Health owns about half of all hospital beds (Table 33). The SSK is the second largest provider with 16%, university hospitals provide 14% and the Ministry of Defence 9%. Although the private sector is developing rapidly, private hospital beds only account for 8% of the total number of hospital beds in Turkey.

Table 33. Number of hospitals and hospital beds by type of institution, 2000

Institution	Hospitals	% of total	Beds	% of total
Ministry of Health	751	60.6	87 709	50.1
SSK	118	9.5	28 517	16.3
Ministry of Defence	42	3.4	15 900	9.1
University hospitals	43	3.5	24 754	14.1
Other public institutions	19	1.5	3 628	2.1
Private institutions	267	21.5	14 682	8.4
Total	1 240	100.0	175 190	100.0

Source: Ministry of Health 2001a.
SSK: Social Insurance Organization.

The acute hospital bed occupancy is just under 60 per cent (see Table 34), but varies considerably between hospitals. The occupancy rate for hospital beds is not correlated with the level of provision of beds, as provinces with few beds also have low occupancy rates. This might be due to a lack of human resources or medical equipment in remote areas. Ministry of Health hospitals generally have low occupancy rates, and their average occupancy rate is greatly reduced when the health centre hospitals with 20 beds or fewer are taken into

account (these small hospitals usually have occupancy rates of under 10%). SSK hospitals generally have higher occupancy rates, of 60% to 70% or more.

Table 34. Inpatient utilization and performance in acute hospitals, 1975–2000

	1975	1980	1985	1990	1995	1997	2000
Inpatient admissions per 100 population	–	3.7	4.7	5.5	6.2	6.9	7.6
Average length of stay in days	7.0	6.3	6.2	6.0	5.7	5.5	5.4
Occupancy rate (%)	49.0	39.5	52.1	57.2	55.4	57.7	58.7

Source: WHO Regional Office for Europe health for all database.

The Ministry of Health also runs some specialist hospitals (see Table 35). Chest disease hospitals now treat many clinical conditions in addition to tuberculosis. The Ministry of Health operates most of the specialist maternity hospitals, although the number has declined steadily in recent years. Psychiatric hospitals serve not only as hospitals, but also as long-term care institutions. This contributes to inefficiency in psychiatric hospitals, because various types of institutions, including primary care institutions, are able to meet long-term care needs at lower cost. Hospitals for cardiovascular and chest surgery have radically improved their quality in the last 10 years, and now have fatality rates that are comparable to the most developed centres in other countries of the Organisation for Economic Co-operation and Development (OECD). The improvements are largely due to the fact that the SSK, Bag-Kur (Social Insurance Agency of Merchants, Artisans and the Self-employed) and the GERF (Government Employees' Retirement Fund) now purchase cardiac surgery from these hospitals.

University hospitals serve as referral centres for the region in which they are located, as they are the most developed clinical centres in their region. However, the quality and the range of services they provide varies widely across the country, and many patients travel from remote parts of the country to use university hospitals in metropolitan areas.

In case of emergency, patients can make use of any hospital, but once their condition has stabilized, they may be referred to other institutions that can provide the necessary diagnostic or curative services.

Ministry of Health hospitals do not require referrals. Patients referred from health centres to hospital outpatient departments comprise less than 2% of the total number of outpatients seen in Ministry of Health hospitals. Almost all patients consult outpatient facilities without the advice of a primary care doctor as to whom it would be most appropriate for them to see.

Bag-Kur members are restricted to using hospitals with which the organization has an agreement and that are in the province in which they live.

University hospitals are open to members of the general public, provided that they or their referring institutions are able to pay the fees. Government employees and people insured by the GERF are eligible to use university hospitals and GERF will pay the hospital directly, while SSK members and Green Card holders need to be referred by an authorized institution, such as an SSK hospital.

Patients who cannot be treated in SSK or Ministry of Health hospitals, or who need to be admitted to a specialized care unit, can be referred to university hospitals by a specialist after consultation with the referring hospital's chief doctor. Patients paying out-of-pocket can use university hospitals on a fee-for-service basis.

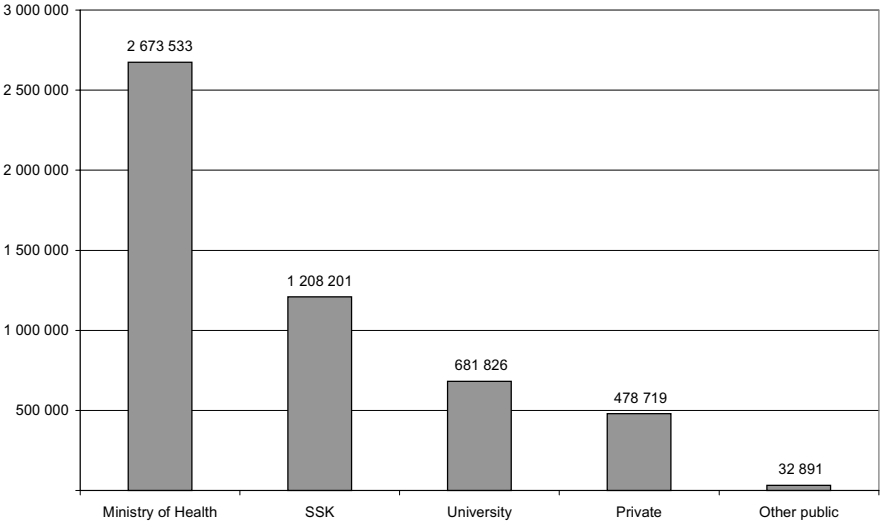
Before the 1990s, private hospitals served as operating theatres for privately practising specialists, but recent changes have brought about a new form of service. The institutionalization of private hospitals now promotes the hospitals themselves, rather than individual doctors, and well-established outpatient departments make private hospitals a convenient one-stop centre for patients. Private hospitals vary with the income levels of their target patients, ranging from basic structures to luxurious centres with high-tech equipment.

Table 35. Distribution of hospitals and inpatient beds by specialization, 2000

Type of hospital	Hospitals	Beds	% of total beds
District general hospitals	964	140 923	80.4
Maternity hospitals	54	8 867	5.1
Chest disease hospitals	28	8 062	4.6
Psychiatric hospitals	9	6 186	3.5
Children's hospitals	9	1 905	1.1
Cardiovascular and chest surgery hospitals	5	1 700	1.0
Physiotherapy and rehabilitation hospitals	13	1 530	0.9
Bone disease hospitals	3	1 450	0.8
Small rural hospitals (health centres)	128	1 175	0.7
Oncology hospitals	4	866	0.5
Others	8	652	0.4
Emergency assistance and trauma hospitals	6	560	0.3
Ophthalmology hospitals	5	433	0.2
Diabetes hospitals	3	71	0.0
Total	1 239	174 380	100.0

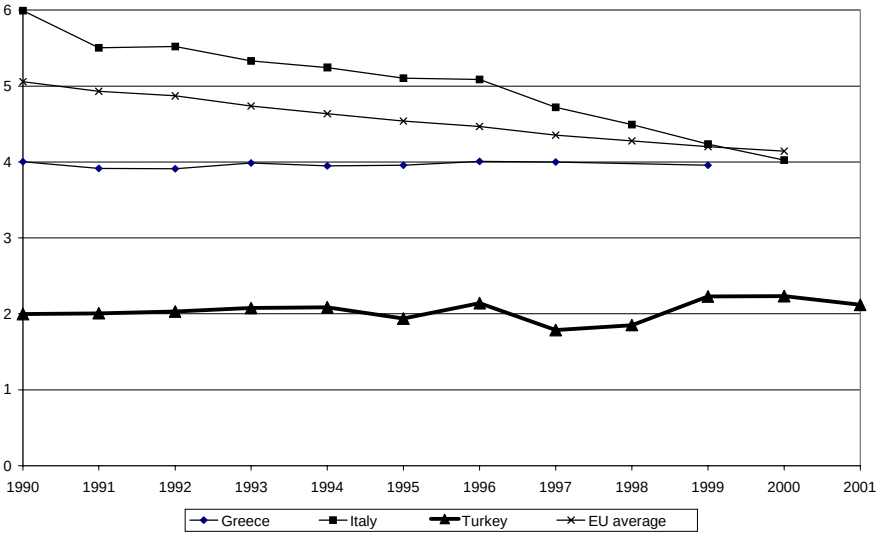
Source: Ministry of Health 2001a.

Fig. 23. Distribution of inpatients by institutional ownership, 2000



Source: Ministry of Health 2001a.
SSK: Social Insurance Organization.

Fig. 24. Number of hospital beds in acute hospitals per 1000 population in Turkey and selected countries, 1990–2001



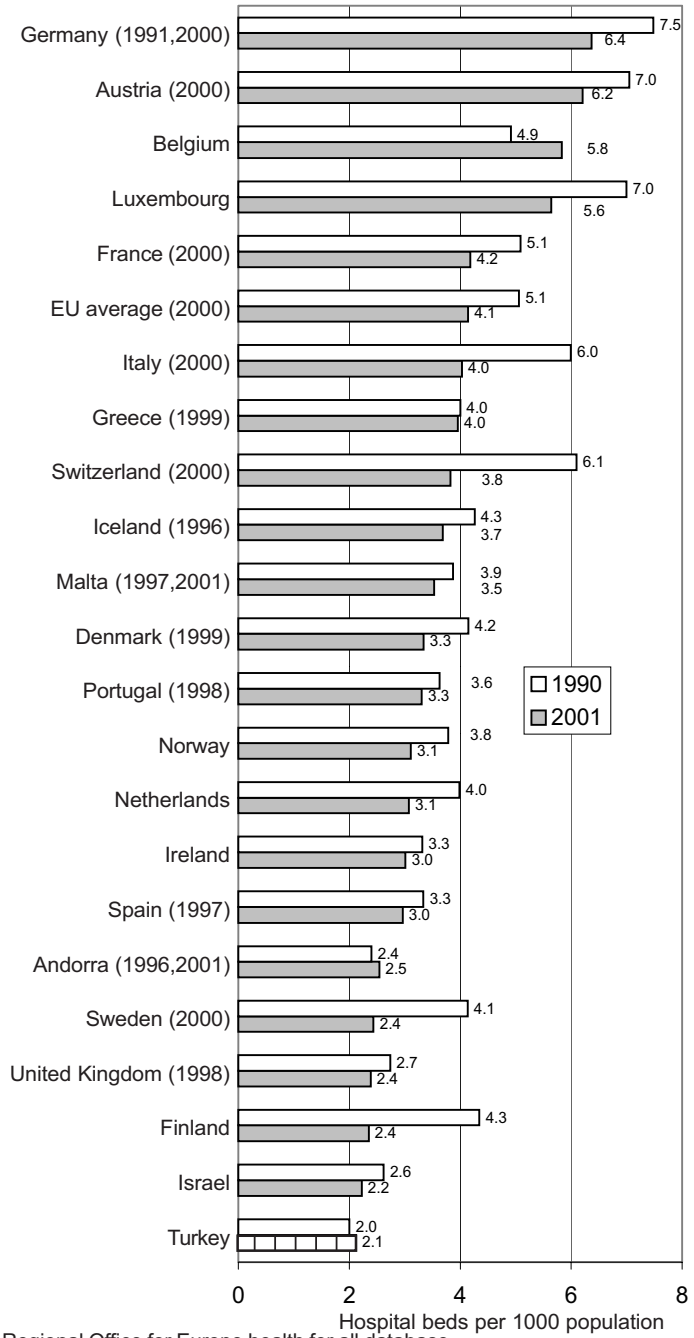
Source: WHO Regional Office for Europe health for all database.

Table 36. Inpatient utilization and performance in acute hospitals in the WHO European Region, 2001 or latest available year

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Andorra	2.5	9.4	6.7[b]	70.0[b]
Austria	6.2[a]	27.2[a]	6.3[a]	75.5[a]
Belgium	5.8	16.9[b]	8.0[b]	80.0[c]
Denmark	3.3[b]	17.9	5.2[a]	83.5[a]
EU average	4.1[a]	18.9[b]	7.7[b]	77.4[c]
Finland	2.4	19.7	4.4	74.0[f]
France	4.2[a]	20.4[b]	5.5[b]	77.4[b]
Germany	6.4[a]	20.5[a]	9.6[b]	81.1[a]
Greece	4.0[b]	15.2[c]	–	–
Iceland	3.7[e]	18.1[f]	6.8[f]	–
Ireland	3.0	14.5	6.4	83.8
Israel	2.2	17.8	4.1	93.0
Italy	4.0[a]	16.0[a]	7.0[a]	75.5[a]
Luxembourg	5.6	18.4[g]	7.7[c]	74.3[g]
Malta	3.5	11.2[a]	4.3	75.5[a]
Netherlands	3.1	8.8	7.4	58.4
Norway	3.1	16.1	5.8	87.2
Portugal	3.3[c]	11.9[c]	7.3[c]	75.5[c]
Spain	3.0[d]	11.3[d]	7.6[d]	76.2[d]
Sweden	2.4[a]	14.9	4.9	77.5[e]
Switzerland	3.8[a]	16.3[c]	10.0[a]	85.0[a]
Turkey	2.1	7.6[a]	5.4	58.8
United Kingdom	2.4[c]	21.4[e]	5.0[e]	80.8[c]
CEE				
Albania	2.8[a]	–	–	–
Bosnia and Herzegovina	3.3[c]	7.2[c]	9.8[c]	62.6[b]
Bulgaria	–	14.8[e]	10.7[e]	64.1[e]
CEE average	5.4	17.8	8.3	72.3
Croatia	4.0	13.9	8.9	85.5
Czech Republic	6.3	18.9	8.6	70.5
Estonia	5.1	17.9	6.9	62.3
Hungary	6.4[a]	24.2	7.0	76.9
Latvia	5.8	18.6	–	–
Lithuania	6.3	21.7	8.0	76.3
Slovakia	6.7	18.8	9.2	70.9
Slovenia	4.2	15.9	6.8	70.5
The former Yugoslav Republic of Macedonia	3.4	8.2	8.0	53.7
NIS				
Armenia	3.7	4.7	9.6	31.6
Azerbaijan	7.9	4.7	15.5	25.7
Georgia	3.9	4.3	7.4	82.0
Kazakhstan	5.4	14.7	11.3	96.5
Kyrgyzstan	4.8	13.9	10.8	87.6
NIS average	7.9	19.1	12.5	85.0
Republic of Moldova	4.7	11.9	10.3	70.7
Russian Federation	9.1	21.6	13.2	85.8
Tajikistan	5.8[d]	8.9	13.0	54.5
Turkmenistan	6.0	12.4[d]	11.1[d]	72.1[d]
Ukraine	7.1	18.7	12.5	89.5
Uzbekistan	–	–	–	84.5

Source: WHO Regional Office for Europe health for all database.
Notes: [a] 2000, [b] 1999, [c] 1998, [d] 1997, [e] 1996, [f] 1995, [g] 1994, [h] 1993, [i] 1992, [j] 1991.

Fig. 25. Hospital beds in acute hospitals per 1000 population in western Europe, 1990 and 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.
EU: European Union.

Turkey

Issues in the delivery of secondary and tertiary care

Turkey does not have a functional referral system. An effective referral system requires two elements: a single primary care doctor accepting responsibility for caring for a particular patient and hospitals refusing to accept self-referred patients except in genuine emergencies. The main reasons for the failure of referral systems in Turkey are the historical absence of these two elements and the importance accorded to freedom of choice.

Hospital outpatient departments seldom have appointment systems, and patients simply turn up in large numbers, often waiting for hours to be examined.[9] This arrangement causes considerable stress to doctors and patients and is not conducive to good medical practice.

Lack of professional management is an important concern for hospitals in Turkey. Traditionally, public hospitals are run by chief doctors who have no training in hospital management. Chief doctors are appointed according to criteria such as clinical experience, length of service and political loyalties, and no attempt is made to measure their managerial effectiveness. Almost all chief doctors also practise privately. This situation is changing in private hospitals, which may have a general manager who is not a doctor. In such cases, the responsibility of the chief doctor is limited to acting as medical director.

Human resources and training

Human resources for health care are a vital component of health services, but Turkey has relatively few health personnel compared with other countries: approximately one doctor and one nurse per 1000 population (see Table 38), the lowest figure among the 51 countries in WHO's European Region (see Fig. 27). The number of nurses in Turkey is particularly low. The number of health personnel started to increase sharply during the 1980s and 1990s (Fig. 16).

[9] Although hospital outpatient departments in the larger cities do have appointment systems, such systems are not yet well established.

Table 37. Numbers of health professionals, 1994–2000

Title	1994	1995	1996	1997	1998	1999	2000
Doctors	65 832	69 349	70 947	73 659	77 344	81 988	85 117
Specialists	27 564	29 846	31 126	32 511	34 189	36 854	38 064
General practitioners	38 268	39 503	39 821	41 148	43 155	45 134	47 053
Dentists	11 457	11 717	12 406	12 737	13 421	14 226	16 002
Pharmacists	18 366	19 090	19 681	20 557	21 441	22 065	23 266
Health officers	30 811	39 342	39 165	39 658	41 461	43 032	46 528
Nurses	56 280	64 243	64 526	67 265	69 146	70 270	71 600
Midwives	35 604	39 551	38 945	40 230	41 059	41 271	41 590

Source: Ministry of Health 2002.

Table 38. Numbers of health professionals by place of employment, 2000

			Ministry of Health		SSK	University	Other public	Private
	Total	Population per professional	No. of total	%	No.	No.	No.	No.
Doctors	85 117	797	4 282	50	8112	17 346	5 304	11 535
Specialists	38 064	1781	13 837	36	4 801	8 586	2 175	8 665
General practitioners	47 053	1 441	28 983	62	3 311	876	3129	287
Dentists	16 002	4 237	2423	15	583	863	741	11 392
Pharmacists	23 266	2 914	793	3	864	621	240	20 748
Health officers	46 528	1 457	33 708	72	3 059	3 347	288	3 534
Nurses	71 612	947	43 694	61	8 489	10 399	4 543	4 487
Midwives	4159	163	38 674	93	1 524	110	156	1 126

Source: Ministry of Health 2002.
SSK: Social Insurance Organization.

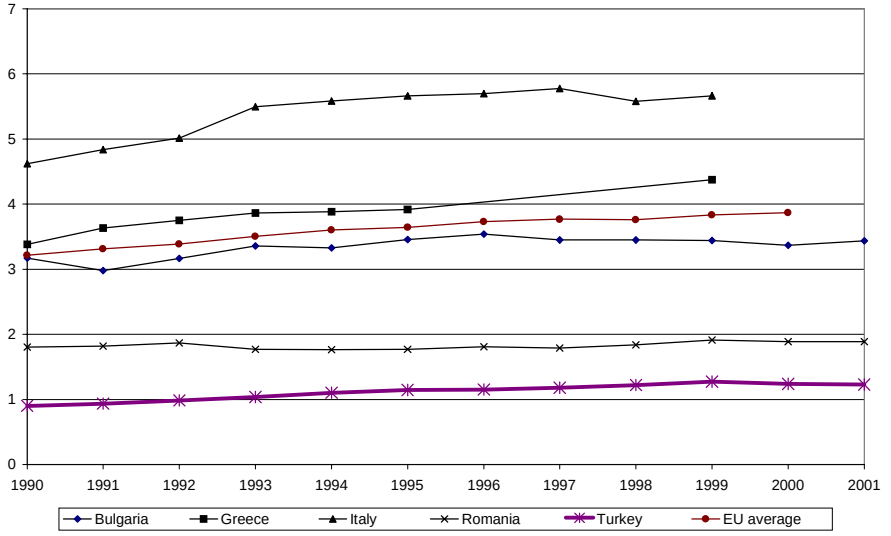
Table 39. Health care personnel per 100 000 population, 1970–2000

	1970	1975	1980	1985	1990	1995	1997	1999	2000
Active doctors	44.9	54.3	61.2	72.9	90.2	114.4	117.9	127.4	123.9
Active dentists	9.2	12.6	15.9	16.6	18.7	19.3	20.3	22.1	24.3
Certified nurses	53.1	61.0	71.7	118.8	172.6	227.9	235.6	240.2	244.4
Active pharmacists	8.5	17.5	27.1	23.2	28.1	31.5	32.9	34.3	35.6

Source: WHO Regional Office for Europe health for all database.

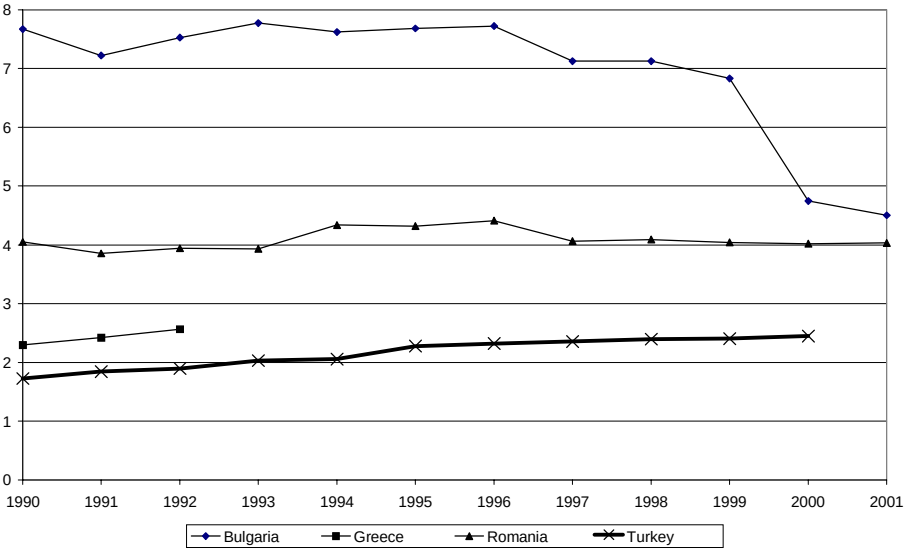
The geographical distribution of health personnel in Turkey is very unequal, with fewer staff per person in less-developed regions (see Table 41). The unequal distribution of health personnel is greater for certain categories, specialists being the most unevenly distributed. Istanbul has almost 14 times as many specialists per person as the eastern provinces of Mus and Van. The most evenly distributed category of staff is midwives, but the regional distribution of midwives is also uneven, with twice as many midwives employed per person in the eastern province of Bingol as in Istanbul.

Fig. 26. Number of doctors per 1000 population in Turkey and selected countries, 1990–2001



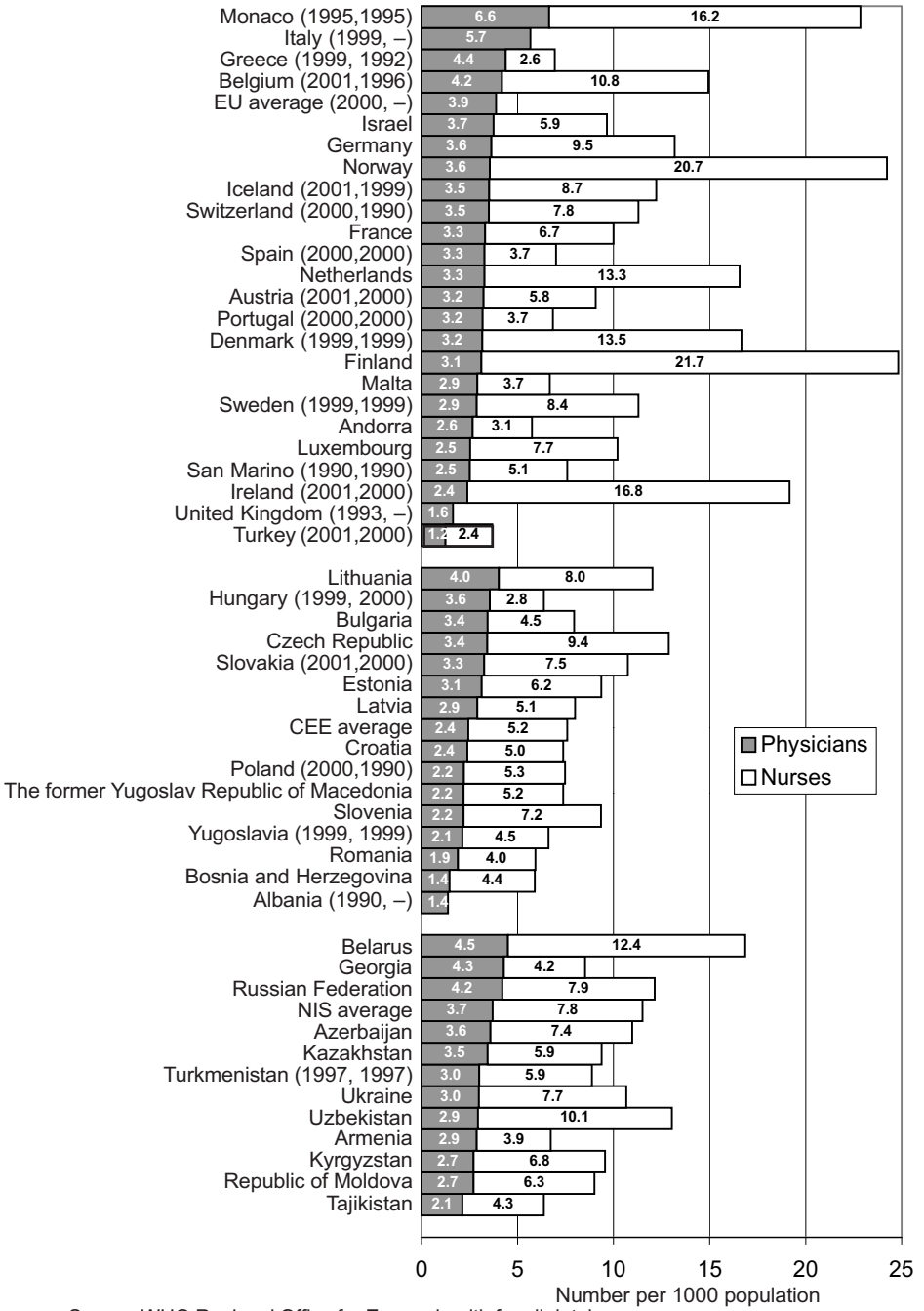
Source: WHO Regional Office for Europe health for all database.

Fig. 27. Number of nurses per 1000 population in Turkey and selected countries, 1990–2001



Source: WHO Regional Office for Europe health for all database.

Fig. 28. Number of physicians and nurses per 1000 population in the WHO European Region, 2000 or latest available year (in parentheses)

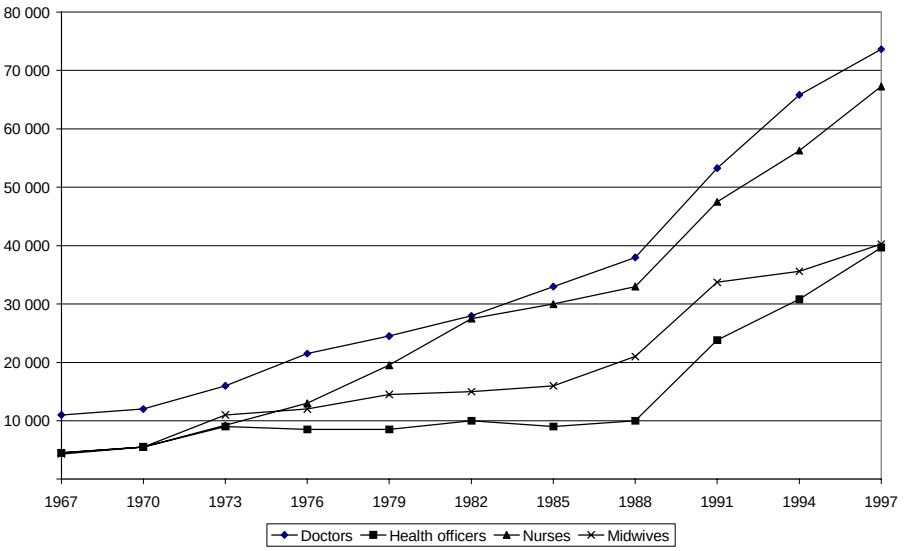


Source: WHO Regional Office for Europe health for all database.

CEE: central and eastern Europe; EU: European Union; NIS: Newly independent states.

Turkey

Fig. 29. Numbers of health professionals, 1967–1997



Source: Ministry of Health 1999.

Table 40. Population per health worker by province's degree of development, 2000

Province	Doctors	Dentists	Pharmacists	Nurses	Health officers	Midwives
Metropolitan	879	4 966	2 843	968	1 858	1 634
Developed	1 294	9 473	4 188	1 204	2 010	1 438
Underdeveloped	2 299	18 798	14 002	2 120	2 988	2 739

Source: Ministry of Health 2001a.

There are several reasons for this uneven distribution, the most important being economic and social differences among the regions. Geographical conditions such as climate also play an important role, as does the absence of strong financial or other incentives to encourage health personnel to practise in less favourable areas of the country.

The skill mix of health personnel in Turkey is inappropriate for the delivery of effective health care. There are too few nurses and midwives in relation to doctors (an aggregate ratio of 1:1), and in this respect, Turkey's functional mix of health personnel is comparable to that of Italy, Spain, Portugal and Greece.

Until recently, a further skill mix problem was that there were more specialists than general practitioners. Before 1985, Turkey had twice as many specialists as general practitioners. Doctors have always preferred to specialize,

partly for economic and social status reasons, because people often go straight to a specialist, without consulting a general practitioner first, which means that specialists have higher incomes than general practitioners, and partly in order to maximize job satisfaction. Levels of job satisfaction have been low among general practitioners, which has implications for the quality of the services they provide.

However, since 1985, the difference in the numbers of specialists and general practitioners has shrunk considerably, and during the 1990s the number of general practitioners surpassed the number of specialists (see Table 37). This is partly because the number of students accepted to medical school increased rapidly during the 1990s, while the number of doctors accepted for specialization did not increase at the same rate. Currently, there is a shortage of general practitioner posts in favoured areas, such as large cities, with the number of graduates outnumbering the available positions, but this is not the case in more unpopular areas.

A major reason for ineffective human resources planning in Turkey is that it is mainly carried out by the State Planning Organization, while the Ministry of Health, the agency responsible for delivering health care, is restricted to allocating posts to health facilities and deploying staff to those posts.

The policies implemented during the late 1980s and early 1990s have increased the number of medical schools and health vocational schools, as well as the number of students accepted to these schools. As a result, the numbers of doctors, nurses and other health personnel in Turkey are increasing.

However, basic training in these schools is considered inadequate because:

- curriculum content is not sufficient in relation to the skills required for effective care;
- practical training opportunities are scarce;
- the objective is to increase the number of graduates rather than improve their quality
- the quality of training institutions varies substantially; and
- health personnel trainers are in extremely short supply.

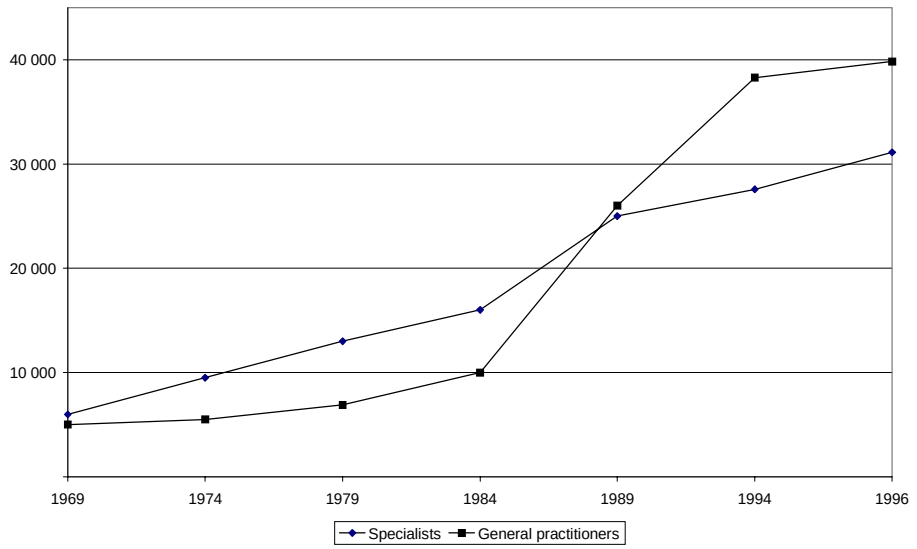
The lack of effective in-service training is a further concern, particularly given the cost–effectiveness of improving and adapting the skills of existing staff as opposed to training new staff.

No board examination or other certification is necessary to practise after graduation from medical or health vocational school, or after completing specialist training. Furthermore, every medical school graduate is qualified to practise as a general practitioner. Those who want to specialize need to take a

centrally administered examination (*Tipta Uzmanlik Sinavi*, or TUS) organized by the Council of Higher Education. The examination is held twice a year and graduates can sit the examination as many times as they like. On passing the examination, graduates are assigned to institutions.

The quality of specialist training is also questionable. Medical schools, Ministry of Health teaching hospitals, SSK teaching hospitals and military teaching hospitals all provide specialist training without having a common curriculum or training standards. The knowledge, skills and attitudes of specialists are therefore highly dependent on where and by whom they have been trained.

Fig. 30. Numbers of general practitioners and specialists, 1969–1996



Source: Ministry of Health 2001a.

Table 41. Number of students in Ministry of Health vocational schools, 1997

Type of training	Students
Nurse	12 206
Medical secretary	11 879
First aid and emergency nurse	9 097
Hygiene assistant	5 944
Midwife	4 492
Laboratory technician	2 514
Environmental health officer	2 171
Radiology technician	2 007
Anaesthesia technician	1 500
Dental prosthesis technician	412
Orthopaedic technician	185
Total	52 407

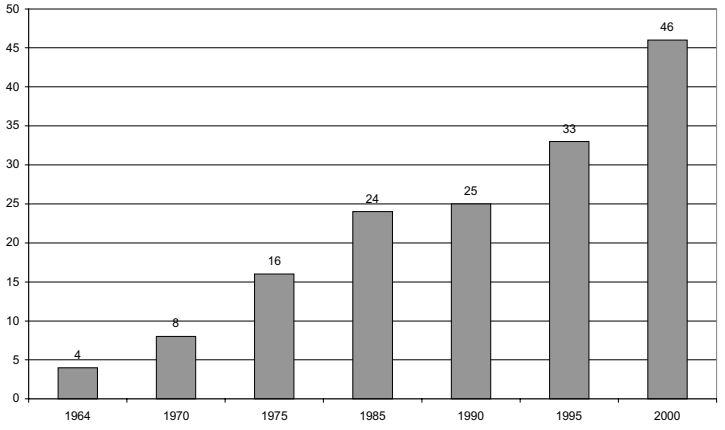
Source: Ministry of Health 2001a.

Table 42. Numbers of health vocational schools and students by responsible institution, 1997

Institution	No. of schools	Students	
		No.	%
Ministry of Health	321	52 407	98.0
Ministry of National Education	2	312	0.6
SSK	3	266	0.5
Foundations	2	135	0.3
University	3	121	0.2
American nursing school	1	110	0.2
Red Crescent	1	106	0.2
Total	333	53 457	100.0

Source: Ministry of Health 2001a.

Fig. 31. Number of medical schools, 1964–2000



Sources: Various.

Pharmaceuticals

Turkey obtains pharmaceuticals through domestic production and import. In 1997, the total consumption of pharmaceuticals was US $2070 million at ex-factory prices, or US $32 per person. These figures are low when compared to the pharmaceutical consumption of western European countries (see Table 43).

Table 43. Consumption of pharmaceuticals in Turkey and selected western European countries, 1999

Country	Consumption of pharmaceuticals (millions of US $)	Consumption per person (US $)
France	17 029	287
Germany	18 597	227
United Kingdom	12 680	213
Portugal	2 128	212
Italy	11 266	196
Spain	7 069	177
Greece	1 524	144
Turkey	2 519	38

Source: Industry Employers' Union 2002.

In 1998, the pharmaceutical industry imported pharmaceuticals worth US $1180 million, including raw materials (US $769 million) and finished pharmaceutical products (US $411 million). In the same year, the industry exported US $129 million, including raw materials (US $61 million) and finished pharmaceutical products (US $68 million).

Pharmaceutical consumption grew dramatically between 1997 and 1998, rising from US $2070 million in 1997 to US $3310 million in 1998, but there is no clear explanation for this rapid growth (see Table 45). According to more recent Ministry of Health data, pharmaceutical consumption was equal to between US $4000 million and US $4500 million in 2001, or about US $60 per person (*7*).

Table 44. Consumption of pharmaceuticals (millions of US dollars), 1992–1998

1992	1993	1994	1995	1996	1997	1998
1 710	1 950	1 490	1 720	1 780	2 070	3 310

Sources: Tokat 1996, 1997 and 1998.

The pharmaceutical industry is regulated by the government. The Ministry of Health determines prices by adding fixed percentages for labour, management

expenses, profit, indirect profit, wholesale agent profit and pharmacy profit to the costs of raw materials and packaging. This method encourages the use of expensive raw materials and packaging, particularly for drugs with a monopoly on raw material production. New licensing regulations that closely resemble European Union regulations came into force recently, and a national patent law has been in effect since 1 January 1999. The latter is likely to increase pharmaceutical prices.

Domestic production must follow rules for good manufacturing practice, which cover all steps from raw material procurement to production processes and beyond. Production is controlled by trained inspectors and experts from the Ministry of Health, from the control section of the Refik Saydam Central Institute of Hygiene.

Although Turkey has an unofficial list of essential drugs, the list has no practical implications for the pharmaceutical sector. All social insurance organizations have negative lists for prescriptions. There have been a number of unsuccessful attempts to promote the use of generic drugs, but doctors generally prescribe by brand name. Representatives of pharmaceutical companies visit doctors regularly to promote their products, and doctors are heavily influenced by the pharmaceutical industry, although there is no firm data about the extent of this influence.

Pharmaceutical companies use various methods to sell drugs to pharmacies, including direct sales from the factory and the use of wholesalers. Pharmacies are staffed by a pharmacist, one or more supervisors and an assistant supervisor. Most pharmacy customers have more contact with supervisors than with pharmacists, which suggests that customers may be inadequately informed and advised. This is a serious problem, since many drugs are sold over the counter without a prescription, and patients ask pharmacies for advice on their ailments. A system of green and red prescriptions is used to control the sale of certain drugs.

Health care technology assessment

A major weakness in the Turkish health care system is the lack of regulation and control of medical technology, in combination with economic incentives to import high-tech medical equipment. Consequently, the use (and inappropriate use) of such equipment has increased dramatically. Much privately owned diagnostic equipment is used inefficiently, from a public health perspective, and largely to generate profit.

The Turkish Medical Association (and its branches in the provinces) is the sole body charged with determining minimum prices for diagnostic and treatment-related procedures. This practice was initially intended to prevent unfair competition among health care professionals using labour-intensive procedures, but over time, the Turkish Medical Association began to determine prices for capital-intensive transactions as well. The Turkish Medical Association does not (and practically cannot) take into account variations in initial investment or operational costs, arriving instead at one price for all. Since the price needs to cover the cost of highly sophisticated centres and allow them a comfortable profit margin, some diagnostic centres (particularly those with low capital investment) have extremely high profit margins.

Fierce competition created by multiple centres offering magnetic resonance imaging and computed tomographic scanning is likely to lead investors to offer a substantial proportion of their profit to prescribing doctors. Although there is little evidence to prove this actually happens, it is a common practice familiar to every doctor. The Turkish Medical Association has recently acknowledged the existence of these under-the-table transactions and announced that they would take measures against it.

Financial resource allocation

Turkey's government budget allocation for health care resembles that of low-income countries, despite its middle-income status. Relative underspending in the health care sector is most marked in public expenditure on health care, which is responsible for at least part of the poor performance of Turkey's health care system.

The scarcity of information about health care costs indicates that the main providers of health care in Turkey do not consider cost-control to be an important managerial function. This suggests that concern for using resources efficiently is not a key factor in determining the allocation of resources among health care facilities.

Payment of hospitals

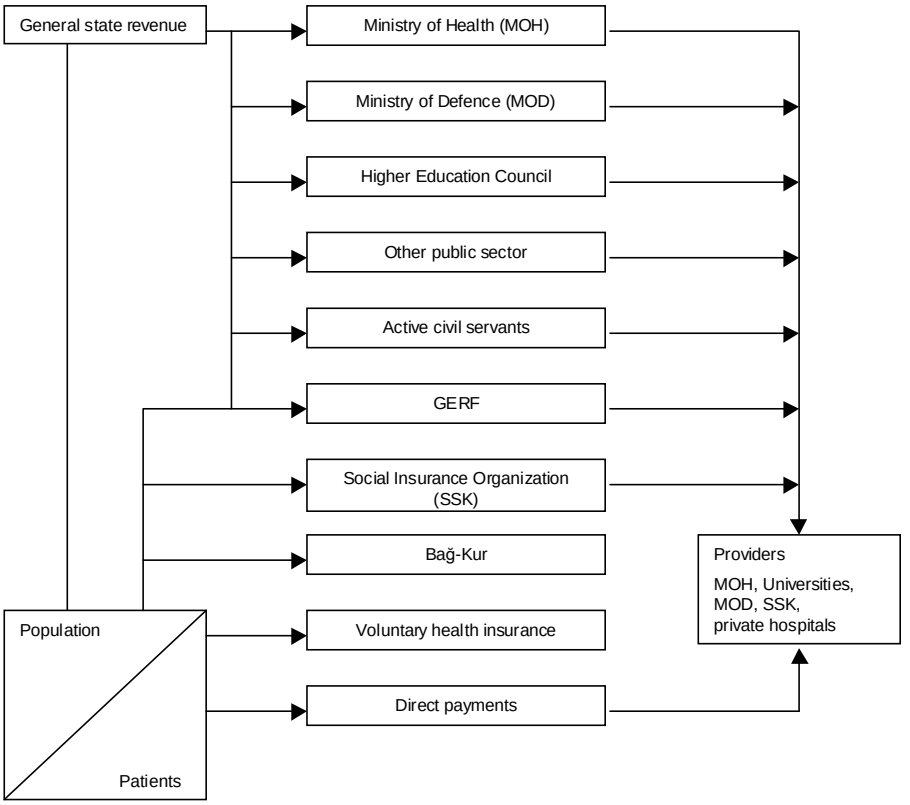
Ministry of Health hospitals

Ministry of Health hospitals receive 80% of their funding from general government revenue and 15% from insurers or individuals (paid into revolving funds). Since 1988, the remaining 5% has been obtained from earmarked excise taxes on fuel, new car sales, cigarettes and alcohol.

The Ministry of Health allocates resources from the general budget based on:

- an initial allocation negotiated with the Ministry of Finance and ratified by the Grand National Assembly before the start of each fiscal year;
- a revised allocation, including adjustments for inflation, authorized within the year; and

Fig. 32. Organization of financial flows in the health care system



Source: Ministry of Health 1997.

- the actual amount spent, which is only known at the end of the fiscal year.

General budget allocations are prepared on the basis of simple adjustments that take into account the previous year's inflation rate. These general budget funds may be spent on all types of health services provided by the Ministry of Health. In recent years, the rapid rate of inflation has been a major challenge in reporting, monitoring and controlling public expenditure. With public sector salaries being adjusted twice a year and the costs of material inputs rising constantly, the initial allocation is routinely increased by supplementary allocations during the fiscal year.

Revolving fund revenue, obtained from fees paid by insurers or individuals, is retained by the hospital generating the revenue. These revolving funds have become progressively more important as a source of funding.

A commission with representatives from the Ministry of Health and the Ministry of Finance determines the fees for different health services, without considering the actual cost of these services.

University hospitals

Funding for university hospitals comes from two sources: general budget allocations made by the Council of Higher Education and revolving funds. The general budget covers both recurrent and capital expenditures. It also finances basic personnel costs and routine operating expenditures such as the costs of services, teaching and research. All figures reported for university hospitals include the costs of medical and dental faculties.

Revolving fund revenue for university hospitals has been boosted (in comparison to Ministry of Health hospitals) by rational pricing policies. Revolving funds are financed by fees that are higher, sometimes as much as three times higher, than those charged by Ministry of Health hospitals. The expenditure of the university hospitals' revolving funds are monitored by the Audit Office (*Sayistay*), which is an autonomous state organ, while capital expenditure is controlled by the State Planning Organization. The revolving funds finance staff bonuses, supplement routine operating costs and fund specialized medical equipment. The precise quantity of this expenditure is not known.

Social Insurance Organization (SSK) hospitals

SSK health services are primarily funded by premiums paid by employees and their employers. A single system is used to collect pension contributions and health insurance contributions, although health insurance contributions and health care expenditure are identified separately in SSK accounts. Two other sources of funding include fees paid by nonmembers using SSK facilities and income obtained through co-payments for outpatient drugs. The SSK allocates funds to hospitals centrally, similar to the way in which the Ministry of Health allocates funds to its hospitals.

Payment of doctors

Payment of doctors varies by institution. Doctors working in Ministry of Health, university or SSK hospitals receive government salaries. They also receive bonuses from the revolving funds. This secondary payment provides doctors with a better standard of living. On the whole, public sector doctors' salaries

are fairly uniform. The exception to this is doctors working in less-developed parts of the country, particularly the eastern part. These doctors earn more than other doctors, as a result of government incentives to encourage doctors to practise in these areas.

Some public sector doctors, particularly specialists, establish private practices independent of the institutions in which they work. This type of practice allows them to charge fees-for-service.

Doctors working in private hospitals earn more than public sector doctors. Unlike their public sector counterparts, they are usually paid for overtime and receive large extra payments for working night shifts. In general, doctors' incomes have declined substantially over the last 15 years. In 2002, the annual salary of a full-time practitioner is around US $3600 after tax (US $4800 for a specialist). This amount can be doubled if a part-time job is taken, and tripled if a full-time private job is performed.

Health care reforms

After the Republic was established in 1923, Turkey developed a mixed economic model with heavy state involvement in the economy. The main production came from agriculture, and the industrial model was based on import substitution. Radical decisions taken in January 1980 to liberalize the economy, to develop an industrial model based on international competition, to establish the convertibility of the lira, to reduce customs barriers and to privatize state banks and enterprises, have visibly affected the development of the country. These changes affected all sectors, including the health sector.

The first attempt to adapt the health sector to the new market economy was the Basic Law on Health Services adopted by the Grand National Assembly in 1987. The law defined the first steps in establishing a universal health insurance scheme and envisaged decentralizing state hospitals and allowing them to employ their own personnel. However, the Constitutional Court struck down some crucial provisions of this law, and although the law is still in force, none of it is being implemented.

In 1989, a draft national health policy was developed but did not have any effect on government policy. The following year, an international firm carried out a health sector master plan study and produced a detailed situation report, with some general policy recommendations, but the study was discontinued for political reasons.

A more comprehensive and detailed process of reform was carried out from 1990 to 1993. A special project unit was formed within the Ministry of Health, and some funds from the First Health Project (part of a World Bank loan) were made available to prepare for health care reforms. A process was initiated to create awareness about the problems in the health care system and to build

consensus on policy direction. The following key policy objectives were identified:

- to increase the effectiveness of the health care system and improve the health of the country;
- to reduce inequalities among geographical regions and between rural and urban areas;
- to increase efficiency and to use resources to ensure effective health services; and
- to improve quality to increase patients' satisfaction and improve health outcomes.

Several studies were carried out to investigate the utilization of health services, the cost of health care, the funding of and expenditure on health care, the knowledge, skills and attitudes of professionals, the effectiveness of current legislation and the managerial problems of the health care system.

In 1992, the First National Health Congress was held with the participation of about 500 delegates in 34 working groups from related sectors, including representatives from professional associations, various ministries, political parties, the private sector, universities, nongovernmental organizations, local authorities and international agencies. The issues highlighted during the Congress were debated nationally and internationally for a year, and the final policy document, including a reform proposal, was presented at the Second National Health Congress in 1993.

The proposed changes included reforms to health care organization (delegating Ministry of Health powers to regional health administrations), funding (establishing a universal health insurance organization to cover the uninsured population based on income-related actuarial premiums, with exemptions for low earners), delivery (introducing a gatekeeping general practitioner model for primary health care in urban areas), human resources (training doctors as gatekeeping general practitioners and health care managers) and management information systems. The proposed changes required a radical overhaul of the existing legislation, much of which dated from the 1920s and 1930s.

Five new laws were prepared concerning all aspects of the health care system, including public health, and presented to participants of the Second National Health Congress and to the general public via the mass media. Public opinion supported the reforms, although there was opposition from the Turkish Medical Association and other organizations (health organizations, trades unions and academics).

The reform proposals were to have been presented to the Council of Ministers in May 1993, but the death of President Özal led to substantial changes in the political arena, including a new Prime Minister and Minister of Health, and changes in civil servants. The main aspect of the 1993 reform proposals to be implemented was the Green Card scheme for low earners. Today, 11.3 million people have a Green Card.

More recently, the government has published plans for a "health transformation programme" to be implemented over the next few years. The programme's main objective is to ensure that health services are organized, funded and delivered in an effective, efficient and equitable way. The main components of the proposed programme are as follows:

- restructuring of the Ministry of Health to enhance its core functions of setting priorities, ensuring quality and managing public health processes, including preventive services;
- introducing compulsory statutory health insurance for the whole population, with the possibility of supplementary voluntary health insurance operated by private insurers;
- increasing access to health care by making use of private facilities where necessary, strengthening primary care, improving the referral system and giving institutions more administrative and financial autonomy;
- improved and more appropriate training for doctors, nurses and administrators and better incentives to encourage a more even distribution of personnel across the country;
- establishing a school of public health and a national quality and accreditation agency;
- supporting more rational use of drugs and medical devices through the establishment of a national drug agency and a medical device agency;
- improving health information systems.

Conclusions

Turkey is the third most populous country in WHO's European Region, and its economy is among the ten largest economies in Europe. It has a high growth rate and a young population. Turkey is also a candidate for membership of the European Union. However, the population's health status and the quality of the health care system are far below the country's general level of development.

Major health care challenges include the following:

- improving health status and reducing regional and urban/rural inequalities in health status;
- increasing population coverage;
- increasing access to quality health services;
- reducing high levels of out-of-pocket expenditure;
- achieving a more equitable distribution of health services and health care personnel;
- tackling inefficiencies in delivery, including the lack of a proper referral system and relatively low occupancy rates in hospitals;
- introducing health technology assessment;
- improving doctors' training and management skills;
- improving preventive health services; and
- improving accountability and transparency.

The last few years have seen a rapid expansion of the private health care sector in Turkey. The expectations of those with high incomes provide incentives for further expansion and encourage the private sector to play a larger role in the health care system. However, while this process may contribute to the

development of health care infrastructure by increasing the number of health care facilities, and may satisfy patients who are able to pay for private health care, it exacerbates existing inequalities in access to health care among those with different levels of income. Furthermore, the development of an unregulated private health care sector raises substantial concerns about quality and service outcomes.

It is to be hoped that the Turkish health care system can move forward by addressing the deficiencies of the public sector identified elsewhere in this report, rather than by encouraging further privatization. There is considerable scope for improvement of the public health care sector. As a result of internal and external pressures (notably accession to the European Union), public structures are likely to be fundamentally overhauled in coming years, leading to increased transparency and the establishment of more participatory democracy. Such changes are also likely to encourage improvements in the public health care sector, thereby increasing the overall equity, efficiency, effectiveness and quality of the Turkish health care system.

References

1. Ministry of Health. *Temel saglik hizmetleri genel müdürlügu yilligi 2000*. Ankara, 2001.
2. World Health Organization (WHO) Regional Office for Europe. *European health for all database* (http://hfadb.who.dk/hfa). Copenhagen, 2002 (accessed June 2002).
3. Adaman, F. *Study on the social protection systems in the 13 applicant countries: Turkey country report*. 2nd draft, Brussels, European Commission, 2002.
4. United Nations Population Reference Bureau. *World population prospects 1998*. Geneva, 1999.
5. Organisation for Economic Co-operation and Development (OECD). *OECD health data 2001*. Paris, 2001.
6. Government of Turkey. 2002 government programme. *Official Gazette* 24567 (2001).
7. Mollahaliloglu, S. Unpublished personal communication from the Deputy Coordinator of the Health Project General Coordination Unit, Ministry of Health. Ankara, 2002.

Bibliography

Adaman, F. *Study on the social protection systems in the 13 applicant countries: Turkey country report.* 2nd draft, Brussels, European Commission, 2002.

Almanac 2000: Turkey. Istanbul, Intermedia Publications, 2000.

Association of the Insurance and Reinsurance Companies of Turkey. *Annual report 1999*. Istanbul, 1999.

Government of Turkey. 2002 government programme. *Official Gazette* 24567 (2001).

Hacettepe University. *Population and health study of Turkey*. Ankara, 1998.

State Institute of Statistics. *Hane halki harcamalari arastirmasi* [1987 household expenditure survey]. Ankara, 1987.

Industry Employers' Union. (http://www.ieis.org/eng/yayin/index2.htm). Istanbul, 2002 (accessed December 2002).

Istanbul Chamber of Commerce. *1999 economic report*. Istanbul, 1999.

Karakuzu, I. *Turkish law and legislation on health*. Yasa Publications, 1996.

Ministry of Finance. (http://www.maliye.gov.tr/). Ankara, 2001 (accessed December 2001).

Ministry of Health. *Saglik hizmetlerinde mevcut durum, TC Saglik Bakanligi: Ulusal Saglik Kongresi, 23–27 Mart 1992* [Current situation in health services, Ministry of Health: First National Health Congress, 23–27 March 1992]. Ankara, 1992.

Ministry of Health. (http://www.saglik.gov.tr). Ankara, 2001a (accessed December 2001).

Ministry of Health. (http://www.saglik.gov.tr). Ankara, 2002 (accessed December 2002).

Ministry of Health. *Temel saglik hizmetleri genel müdürlügü yilligi 2000* [General Directorate for Primary Health Care Services]. Ankara, 2001b.

Ministry of Health, Health Project General Coordination Unit. *Current health status report.* Ankara, 1992.

Ministry of Health, Health Project General Coordination Unit. *Current situation in health care personnel*. Ankara, 1999.

Ministry of Health, Health Project General Coordination Unit. *First Health Project and Second Health Project Primary Health Care Services Project*. Ankara, 1998.

Ministry of Health, Health Project General Coordination Unit. *Good pharmacy practice*. Ankara, 1994.

Ministry of Health, Health Project General Coordination Unit. *Health sector reforms in Turkey*. Ankara, 1997.

Ministry of Health, Health Project General Coordination Unit. *Health services utilization survey in Turkey.* Ankara, 1992.

Ministry of Health, Health Project General Coordination Unit. *Health services utilization survey in Turkey*. Ankara, 1996.

Ministry of Health, Health Project General Coordination Unit. *National health policy*. Ankara, 1993.

Ministry of Health, Health Project General Coordination Unit. *Relationship between income levels, household composition and asset ownership*. Ankara, 1993.

Ministry of Health, Health Project General Coordination Unit. *Turkish health reform: Mega Project*. Ankara, 1992.

Ministry of Health, Health Project General Coordination Unit. *Working group, discussion questionnaire, First National Health Congress.* Ankara, 1992.

Ministry of Health, Research Planning and Coordination Council. *Health statistics year book*. Ankara, 1997.

Mollahaliloglu, S. Unpublished personal communication from the Deputy Coordinator of the Health Project General Coordination Unit, Ministry of Health. Ankara, 2002.

Organisation for Economic Co-operation and Development (OECD). *OECD health data 2001*. Paris, 2001.

Social Insurance Organization (SSK). *1999 statistical yearbook*. Ankara, 1999.

State Institute of Statistics (SIS). *Statistics of Turkey 2000*. Ankara, 2000.

State Planning Organization. *Health sector master plan study: report on the current situation*. Ankara, 1990.

State Planning Organization. (http://www.dpt.gov.tr/dptweb/ingin.html). Ankara, 2001 (accessed December 2001).

State Planning Organization. (http://ekutup.dpt.gov.tr/ekonomi/gosterge/tr/1950-98). Ankara, 2001 (accessed December 2002).

Tokat, M. *Türkiye saglik harcamlari ve finansmani 1992–1996* [Turkish health expenditures and finances 1992–1996]. Ankara, Ministry of Health, Health Project General Coordination Unit, 1996.

Tokat, M. *Türkiye saglik harcamlari ve finansmani 1997* [Turkish health expenditures and finances 1997]. Ankara, Ministry of Health, Health Project General Coordination Unit, 1997.

Tokat, M. *Türkiye saglik harcamlari ve finansmani 1998* [Turkish health expenditures and finances 1998]. Ankara, Ministry of Health, Health Project General Coordination Unit, 1998.

Tusiad. (http://www.tusiad.org). (accessed December 2002). Istanbul, Turkish Industrialists' and Businessmen's Association, 2002.

United Nations Population Reference Bureau. *World population prospects 1998*. Geneva, 1999.

United Nations Population Reference Bureau. *World population prospects: the 2002 revision*. Geneva, 2002.

World Health Organization (WHO). *World health report 2000: health systems: improving performance* (http://www.who.int/whr2001/2001/archives/2000/en/index.htm). Geneva, 2000 (accessed June 2002).

World Health Organization (WHO) Regional Office for Europe. *European health for all database* (http://hfadb.who.dk/hfa). Copenhagen, 2002 (accessed June 2002).

Yearbook 1999. *The Economist*, special issue (2000).

Appendix: List of organizations, Turkish terms, abbreviations and useful websites

English	Turkish	Abbreviation in HiT	Website
Audit Office	*Sayistay*		
Chief doctor	*bashekim*		
City	*sehir*		
Constitutional Court	*Anayasa Mahkemesi*		www.anayasa.gov.tr
Council of Higher Education	*Yuksek Ogrenim Kurumu*	YOK	http:// www.yok.gov.tr/ english/index_en.htm
Council of Ministers	*Bakanlar kurulu*		
District	*ilce*		
District administrator	*kaymakam*		
European Union	*Avrupa Birligi*	EU	
Entrance examination for medical specialization study	*Tipta Uzmanlik Sinavi*	TUS	
General Provincial Assembly	*il genel meclisi*		
Government Employees' Retirement Fund	*Emekli Sandigi*	GERF	http://www.emekli.gov.tr

Grand National Assembly	*Turkiye Buyuk Millet Meclis*	TBMM	www.tbmm.gov.tr
Gross domestic product	*Gayri Sahfi Milli Hasila*	GDP	
Hacettepe University	*Hacettepe Universitesi*		http://www.hacettepe.edu.tr/english
Health Project General Coordination Unit	*Saglik Projesi Genel Koordinasyon Unitesi*		http://www.spgk.saglik.gov.tr/en/baslat.htm
Higher Health Council	*Yuksek Saglik Surasi*		
Istanbul Medical Chamber	*Istanbul Tabip odasi*		http://www.istabip.org.tr
Ministry of Defence	*Milli Savunma Bakanligi*		www.msb.gov.tr
Ministry of Environment	*Cevre Bakanligi*		http://www.cevre.gov.tr
Ministry of Finance	*Maliye Bakanligi*		www.maliye.gov.tr
Ministry of Foreign Affairs	*Disisleri Bakanligi*		http://www.mfa.gov.tr
Ministry of Health	*Saglik Bakanligi*		http://www.saglik.gov.tr
Ministry of Labour and Social Security	*TC Calisma ve Sosyal Guvenlik Bakanligi*		www.calisma.gov.tr
Ministry of National Education	*Milli Egitim Bakanligi*		http://www.meb.gov.tr/indexeng.htm
Municipal Assembly	*Belediye Meclisi*		
Municipal governor	*belediye baskani*		

Pharmaceutical Manufacturers' Association	*Ilac Endustrisi Isverenler Sendikasi*		www.ieis.org
Province	*il*		
Provincial governor	*vali*		
Red Crescent	*Kizilay*		http://www.kizilay.org.tr
Revolving funds	*döner sermaye*		
Social Insurance Agency of Merchants, Artisans and the Self-employed	*Esnaf ve Sanatkarlar ve Diger Bagimsiz Sigortalar Kurumu Calisanlar Sosyal*	Bag-Kur	www.bagkur.gov.tr
Social Insurance Organization	*Sosyal Sigortalar Kurumu*	SSK	http://www.ssk.gov.tr
State Planning Organisation	*Devlet Planlama Teskilati*	SPO - DPT	http://www.dpt.gov.tr/dptweb/ingin.html
State Institute of Statistics	*Devlet Istatistik Enstitusu*	SIS - DIE	http://www.die.gov.tr/english/index.html
Town	*ilçe*		
Turkish Industrialists' and Businessmen's Association	*Turk Sanayicileri ve Isadamlari Dernegi*	TUSIAD	http://www.tusiad.org/english.nsf
Turkish Medical Association	*Turk Tabibler Birligi*	TMA - TTB	http://www.ttb.org.tr
United States dollars	*Amerikan Dolari*	US $	

Village	*koy*
Village Council of Elders	*ihtiyar heyeti*
Village Head	*muhtar*

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