



THE MINISTRY of HEALTH of TURKEY

HEALTH STATISTICS YEARBOOK 2011



GENERAL DIRECTORATE of HEALTH RESEARCH



THE MINISTRY of HEALTH of TURKEY
HEALTH STATISTICS YEARBOOK
2011

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NOMENCLATURE of TERRITORIAL UNITS FOR STATISTICS and PROVINCES

Mediterranean	Antalya	Aegean	İzmir
	Burdur		Aydın
	Isparta		Denizli
	Adana		Muğla
	İçel		Afyonkarahisar
	Hatay		Kütahya
	Kahramanmaraş		Manisa
	Osmaniye		Uşak
Western Anatolia	Ankara	Southeastern Anatolia	Adıyaman
	Karaman		Gaziantep
	Konya		Kilis
Western Blacksea	Bartın	Istanbul	Diyarbakır
	Karabük		Şanlıurfa
	Zonguldak		Batman
	Çankırı		Mardin
	Kastamonu		Siirt
	Sinop		Şırnak
	Amasya		İstanbul
	Çorum	Northeastern Anatolia	Bayburt
Western Marmara	Samsun		Erzincan
	Tokat		Erzurum
	Edirne	Mideastern Anatolia	Ağrı
	Kırklareli		Ardahan
	Tekirdağ		Iğdır
	Balıkesir		Kars
	Çanakkale		Bingöl
Eastern Blacksea	Artvin		Elazığ
	Giresun		Malatya
	Gümüşhane		Tunceli
	Ordu		Bitlis
	Rize		Hakkâri
	Trabzon		Muş
Eastern Marmara	Bilecik	Central Anatolia	Van
	Bursa		Aksaray
	Eskişehir		Kırıkkale
	Bolu		Kırşehir
	Düzce		Nevşehir
	Kocaeli		Niğde
	Sakarya		Kayseri
	Yalova		Sivas
			Yozgat

ACRONYMS

ABPRS	: Address Based Population Registration System
BCG	: Bacillus Calmette-Guerin Vaccination
BMI	: Body Mass Index
Cm	: Centimeter
CPI	: Consumer Price Index
CPV	: Conjugated Pneumococcal Vaccination
CT	: Computerized Tomography
DaPT	: Diphtheria aceluler Pertussis Tetanus Vaccination
ECO	: Echocardiography
ESPC	: Evulation Selection and Placement Center
EU	: European Union
EUROSTAT	: Office of European Statistics
GD-MCHFP	: General Directorate of Mother-Child Health and Family Planning
GDP	: Gross Domestic Product
HBV	: Hepatitis B Vaccination
HFA	: Health for All
Hib	: Haemophilus Influenza Type B Vaccination
ICD-10	: International Classification of Diseases
IPV	: Inactive Polio Vaccination
KETEM	: Cancer Early Diagnosis, Screening and Traning Centers
Kg	: Kilogram
MMR	: Measles Mumps Rubella Vaccination
MoD	: Ministry of Defense
MoH	: Ministry of Health
MRI	: Magnetic Resonance Imaging
NUTS	: Nomenclature of Territorial Units for Statistics
OECD	: The Organisation for Economic Cooperation and Development
PPP	: Purchasing Power Parity
SSI	: Social SecurityInstitution
TDHS	: Turkey Demographic and Health Survey
TL	: Turkish Lira
TURKSTAT	: Turkish Statistical Institute
WHO	: World Health Organization

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General Explanations

While the values of the indicators in the Health Statistics Yearbook 2011 were calculated, international definitions and standards has been used and they were revised in accordance with these definitions and standards.

You can find information in detail in the fact sheet at the end of the chapters.

The international data on all partitions (except Turkey) are taken from the following four sources;

1. Online data base of the World Health Organization Headquarters in Geneva, “Global Health Observatory” (<http://www.who.int/gho/en/>), which contains data on 194 countries. Unlike the WHO European Region Office of the database (Health for All-HFA, <http://data.euro.who.int/hfad/>) not the data declared by countries but projections by the WHO are included. In order to make comparisons between countries, projected data for countries are included.
2. The World Health Organization, “World Health Statistics” report (http://www.who.int/gho/publications/world_health_statistics/en/index.html), is distributed to the World Health Assembly in May of each year. The data included in the report are the data in the Global Health Observatory database. The most recent data in the report are the data belonging to the 2 years prior to the publication. The data for countries specified in the “World Health Statistics 2012” report belong to 2010 or the latest available data for the countries included.
3. The OECD online database, the data included in the “OECD Health Data” are based on the information provided by countries. Thus, there can be incompatibilities between the data in the WHO database. Health expenditures data are obtained particularly from the OECD Health Data. The most recent data in the database belongs to two years ago. The data for countries specified in the “World Health Statistics 2012” report belong to 2010 or the latest available data for the countries included.
4. “OECD Health at a Glance”, is a report based on the analysis of the data in the OECD Health Data.

International comparison of the regions and countries that are included are as follows;

- 1. WHO/Europe:** Germany, Andorra, Albania, Austria, Azerbaijan, Belarus, Belgium, the United Kingdom, Bosnia and Herzegovina, Bulgaria, Czech Republic, Denmark, Armenia, Estonia, Finland, France, Cyprus, Georgia, Croatia, Netherlands, Ireland, Spain, Israel, Sweden, Switzerland, Italy, Iceland, Montenegro, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Hungary, Macedonia, Malta, Moldova, Monaco, Norway, Uzbekistan, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine, Greece
- 2. Upper-Middle-Income Countries (Countries with GDP per capita between \$ 4 036 and \$ 12 475):** Antigua and Barbuda, Argentina, Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Algeria, Cook Islands, China, Dominican Republic, Dominica, Ecuador, Gabon, Grenada, South Africa, Iran, Jamaica, Montenegro, Kazakhstan, Colombia, Costa Rica, Cuba, Latvia, Libya, Lithuania, Lebanon, Macedonia, Maldives, Malaysia, Mauritius, Mexico, Namibia, Nauru, Palau, Panama, Peru, Romania, Russia, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Serbia, Suriname, Seychelles, Chile, Thailand, Tunisia, Turkey, Uruguay, Jordan
- 3. High-Income Countries (Countries with GDP per capita above \$ 12 476):** Andorra, Australia, Austria, Bahamas, Bahrain, Barbados, Belgium, Brunei, Canada, Croatia, Cyprus, Czech Republic, Denmark, Equatorial Guinea, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Japan, Kuwait, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Oman, Poland, Portugal, Qatar, South Korea, San Marino, Saudi Arabia, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Trinidad & Tobago, United Arab Emirates, the United Kingdom, United States
- 4. European Union:** Germany, Austria, Belgium, United Kingdom, Bulgaria, the Czech Republic, Denmark, Estonia, Finland, France, Cyprus, the Netherlands, Ireland, Spain, Sweden, Italy, Latvia, Lithuania, Luxembourg, Hungary, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Greece.

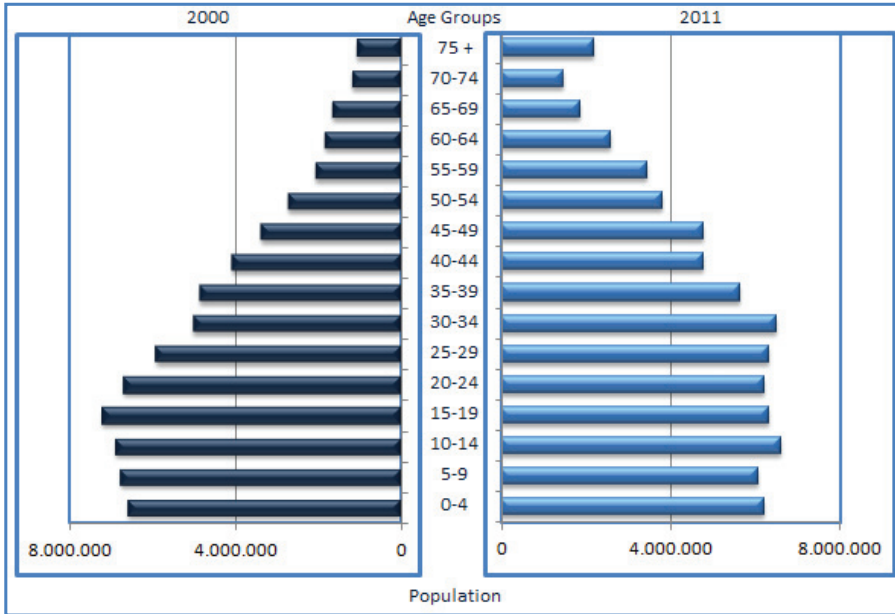


Chapter 1

General Demographic Indicators

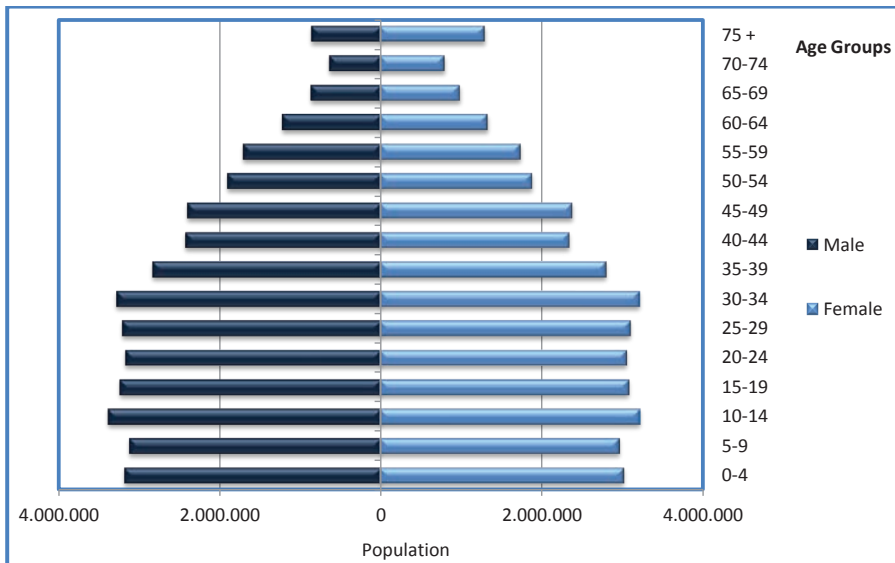


Figure 1.1. Population Pyramid, Total, Turkey, 2000, 2011



Source: TURKSTAT

Figure 1.2. Population Pyramid, 2011, Turkey



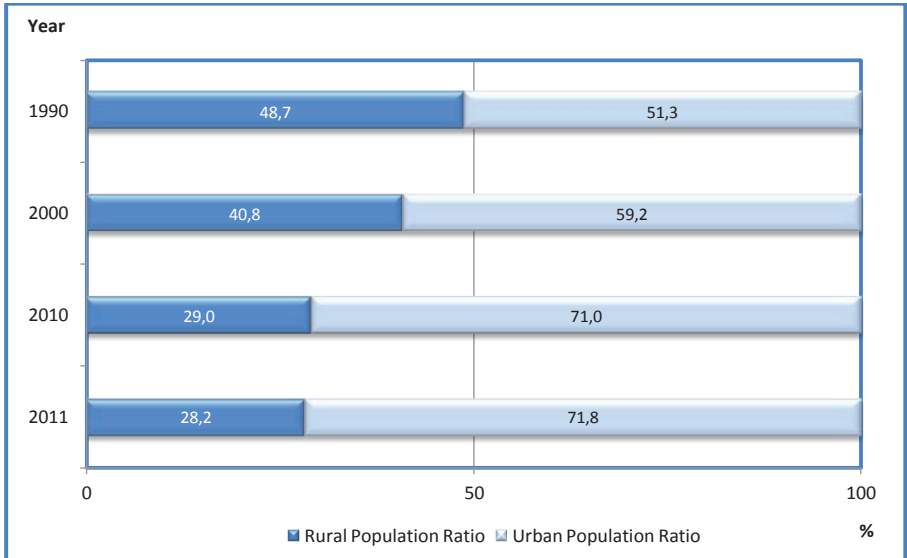
Source: TURKSTAT

Table 1.1. General Demographic Indicators, Turkey

	1990	2000	2010	2011
Total Population	56.473.035	67.803.927	73.722.988	74.724.269
Rural Population Ratio (%)	48,7	40,8	29,0	28,2
Urban Population Ratio (%)	51,3	59,2	71,0	71,8
0-14 Aged Population Ratio (%)	35,0	29,8	25,6	25,3
65 and 65+ Aged Population Ratio (%)	4,3	5,7	7,2	7,3
Youth Dependency Ratio (Age 0-14)	57,6	46,3	38,1	37,5
Elderly Dependency Ratio (Aged 65 and Over)	7,0	8,8	10,8	10,9
Total Age Dependency Ratio	64,7	55,1	48,9	48,4
Annual Population Growth Rate (‰)	17,0	13,8	13,0	12,8
Crude Birth Rate (‰)	24,1	20,3	17,5	17,3
Crude Death Rate (‰)	7,1	6,6	6,3	6,3
Total Fertility Rate (per Woman)	2,9	2,4	2,1	2,1

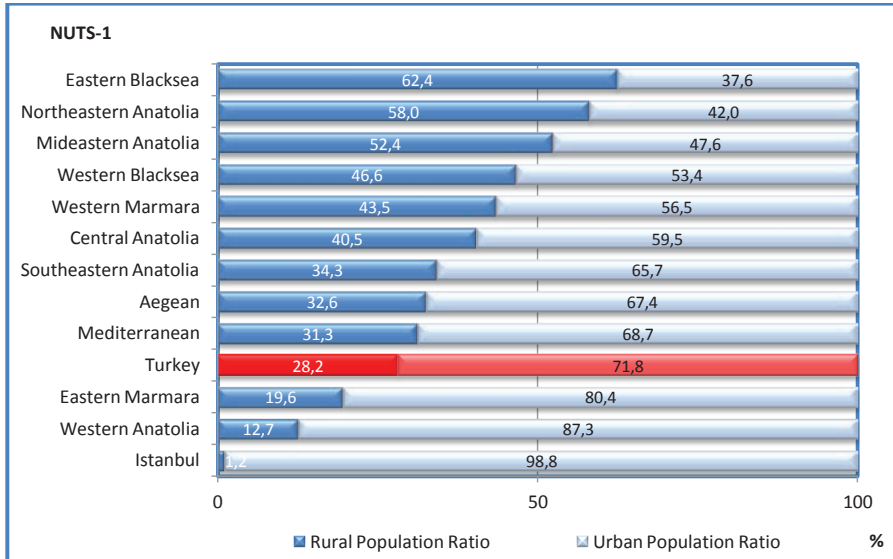
Source: TURKSTAT

Figure 1.3. Rural and Urban Population Ratios by Years, (%), Turkey



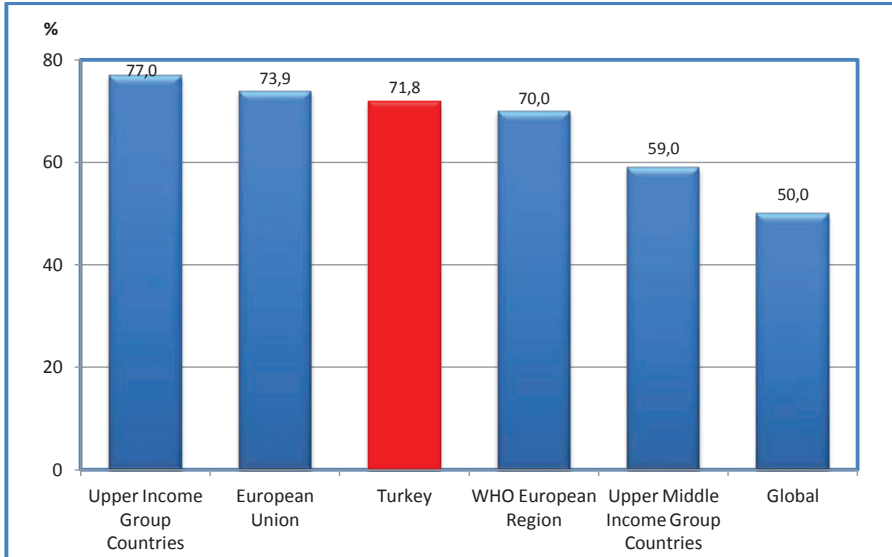
Source: TURKSTAT

Figure 1.4. Rural and Urban Population Ratios by NUTS-1, (%), 2011



Source: TURKSTAT

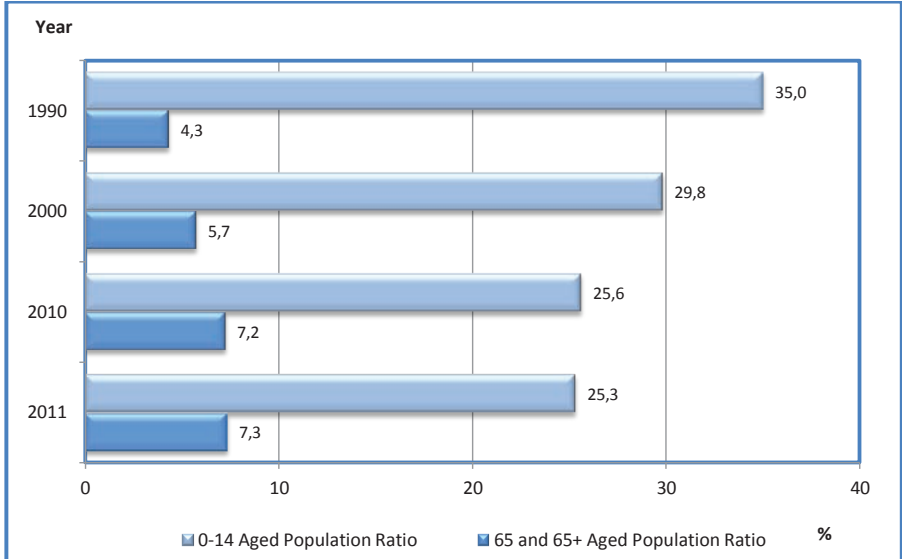
Figure 1.5. International Comparison of Urban Population Ratios, (%), 2010



Source: TURKSTAT, WHO World Health Statistics 2012

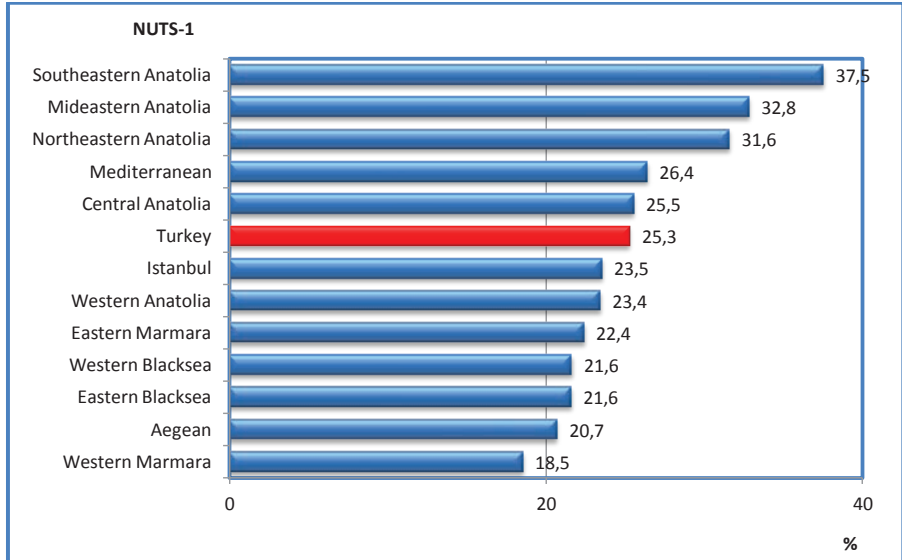
Note: Turkey's data belongs to 2011.

Figure 1.6. 0-14 Aged, 65 and 65+ Aged Population Ratios by Years, (%), Turkey



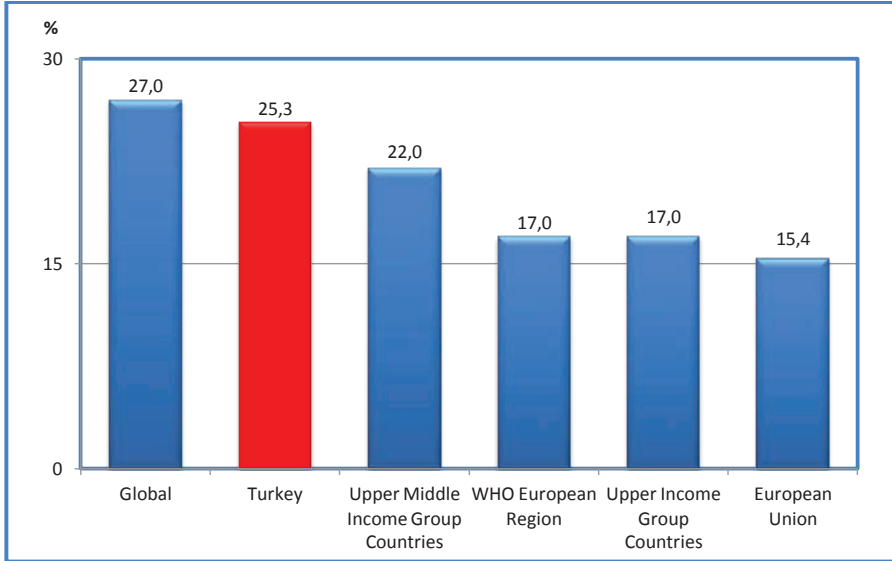
Source: TURKSTAT

Figure 1.7. 0-14 Aged Population Ratios by NUTS-1, (%), 2011



Source: TURKSTAT

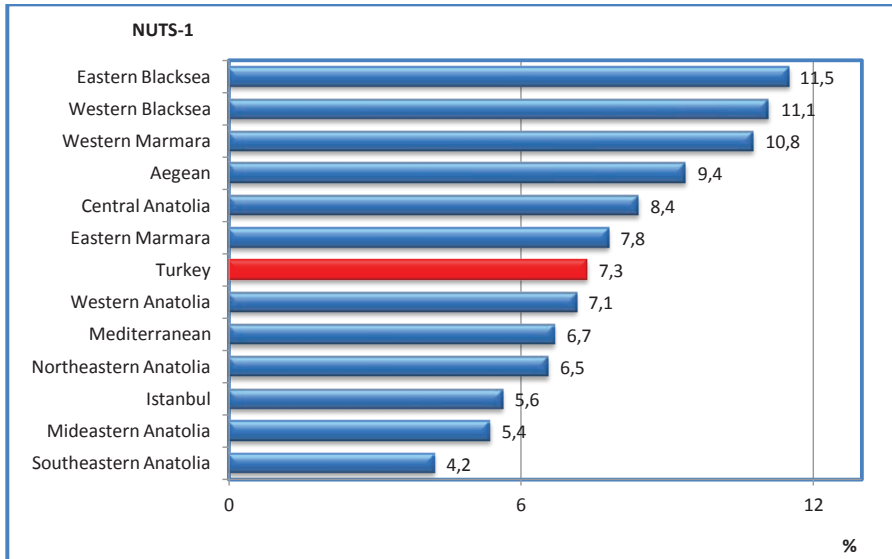
Figure 1.8. International Comparison of 0-14 Aged Population Ratios, (%), 2010



Source: TURKSTAT, WHO World Health Statistics 2012

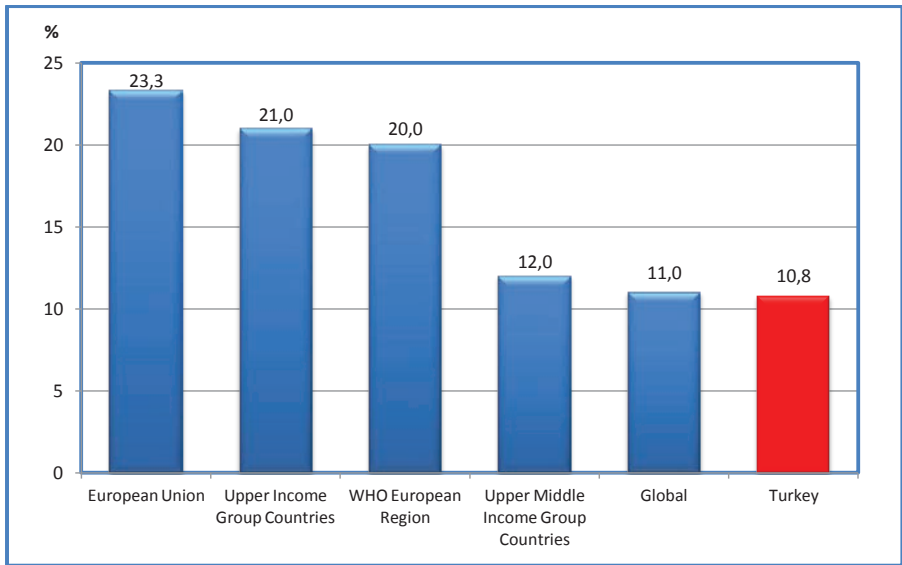
Note: Turkey's data belongs to 2011.

Figure 1.9. 65 and 65+ Aged Population Ratios by NUTS-1, (%), 2011



Source: TURKSTAT

Figure 1.10. International Comparison of 60 and 60+ Aged Population Ratios (%), 2010



Source: TURKSTAT, WHO World Health Statistics 2012

Note: Turkey's data belongs to 2011.

Explanations for Chapter 1

Population data for 1990 and 2000 were taken from the “General Census” results, and the 2011 population data from the Address Based Population Registration System (ABPRS).

The definitions of the indicators in Table 1.1. are as follows:

- Rural Population Ratio : The ratio of the population living in settlements with a population of 20,000 and below to the total population. The data of the previous years have been revised according to the definition.
- Urban Population Ratio : The ratio of the population living in settlements with a population of 20,000 and above to the total population. The data of the previous years have been revised according to the definition.
- Youth Dependency Ratio : It is the ratio of younger dependents (aged 14 and under) to the working-age population (from 15 to 64).
- Elderly Dependency Ratio : It is the ratio of elder dependents (aged 65 and over) to the working-age population (from 15 to 64).
- Total Age Dependency Ratio: It is the ratio of dependents younger than 15 or older than 64 to the working-age population (from 15 to 64).
- Crude Birth Rate : It indicates the number of live births occurring during the year, per 1,000 population.
- Crude Death Rate : It indicates the number of deaths occurring during the year, per 1,000 population.
- Total Fertility Rate : It represents the average number of children that would be born to a woman if she were to live to the end of her child-bearing years (from 15 to 49) and bear children in accordance with current age-specific fertility rates.

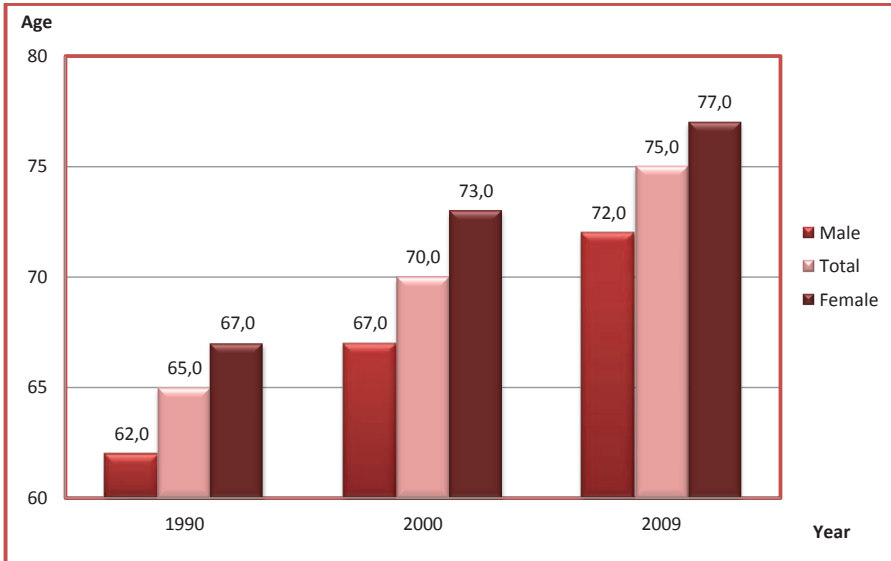


Chapter 2

Mortality

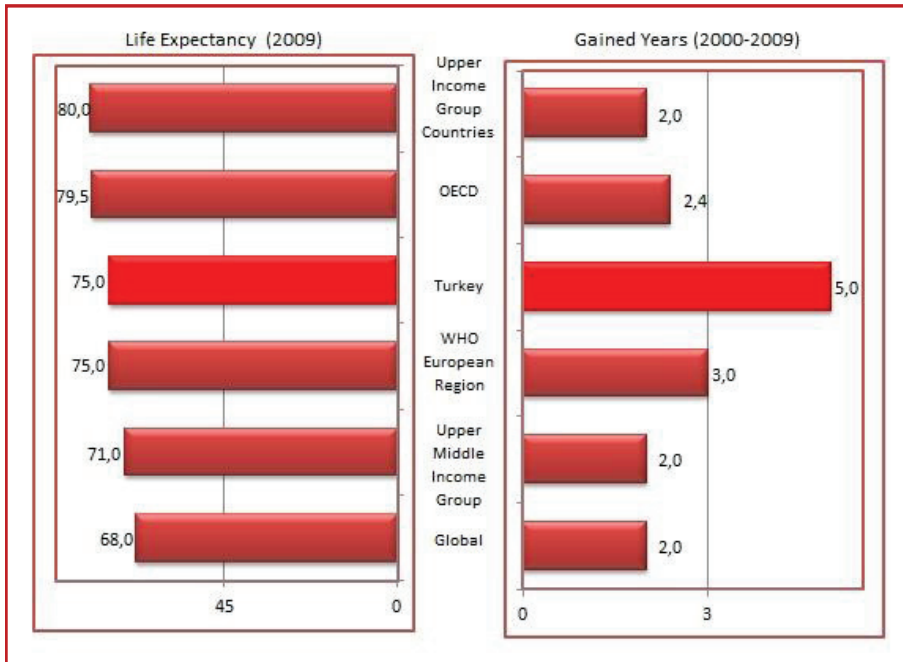


Figure 2.1. Life Expectancy at Birth, (Year), 1990, 2000, 2009, Turkey



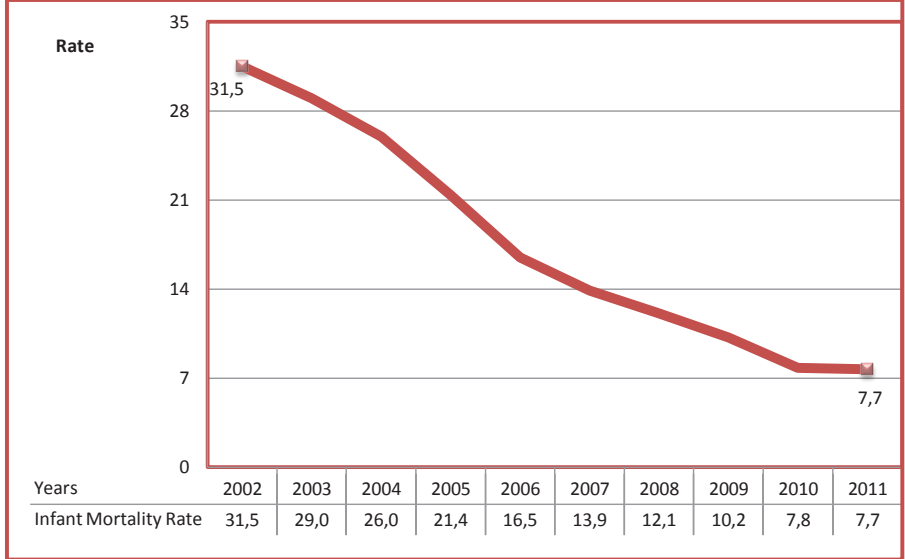
Source: WHO World Health Statistics 2011

Figure 2.2. International Comparison of Life Expectancy at Birth



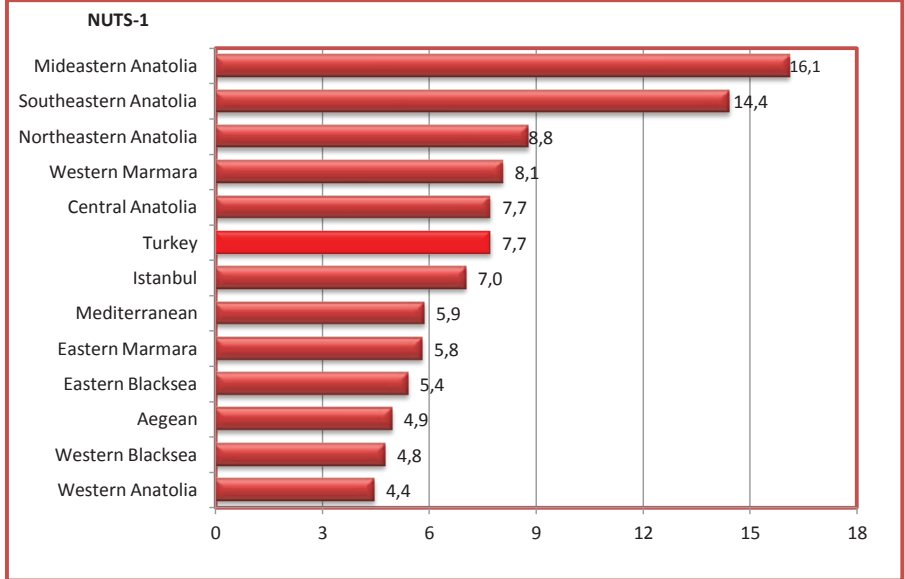
Source: OECD Health Data, WHO World Health Statistics 2011

Figure 2.3. Infant Mortality Rate by Years, (per 1.000 Live Births), Turkey



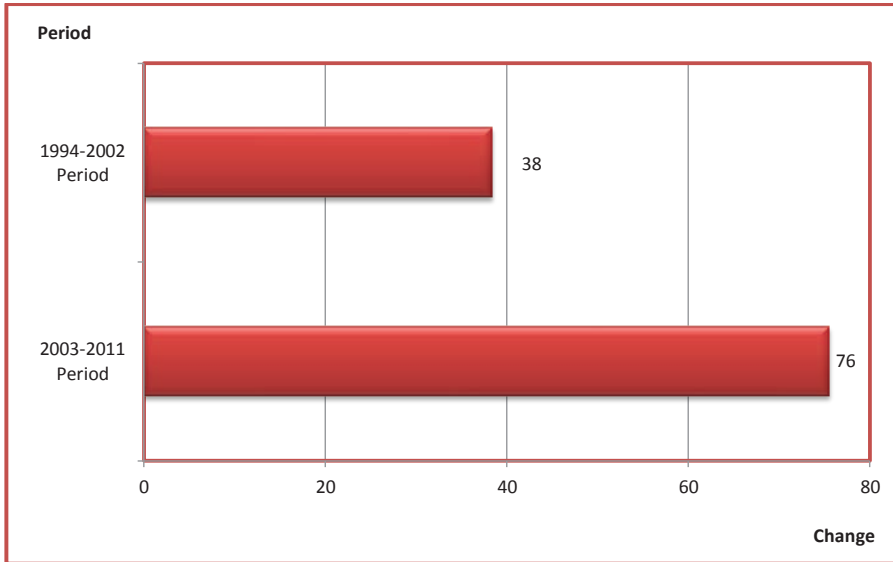
Source: 2011 Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, Other Years-Public Health Institution of Turkey

Figure 2.4. Infant Mortality Rate by NUTS-1, (per 1.000 Live Births), 2011



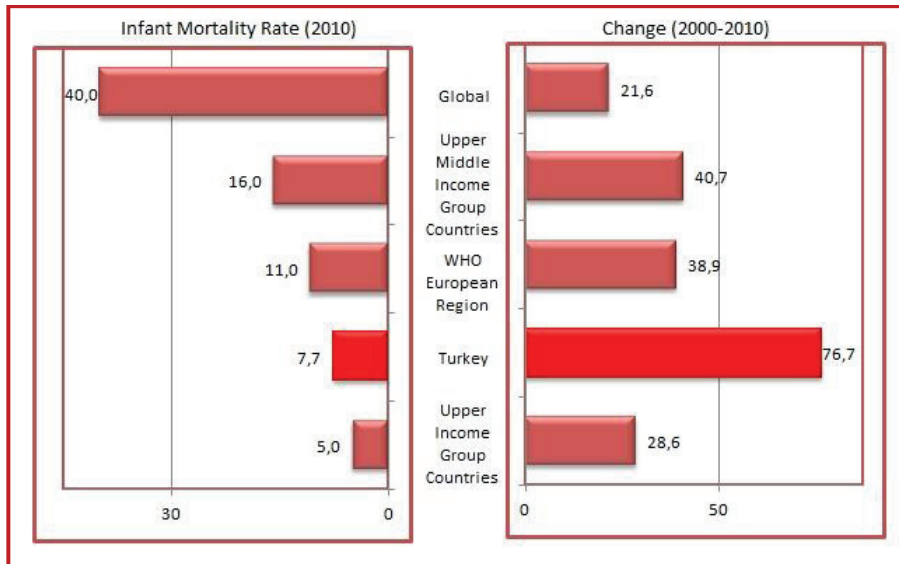
Source: Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”

Figure 2.5. Change in Infant Mortality Rate by 9-Year Periods, (per 1.000 Live Births), Turkey



Source: 2011 Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, Other Years-Public Health Institution of Turkey

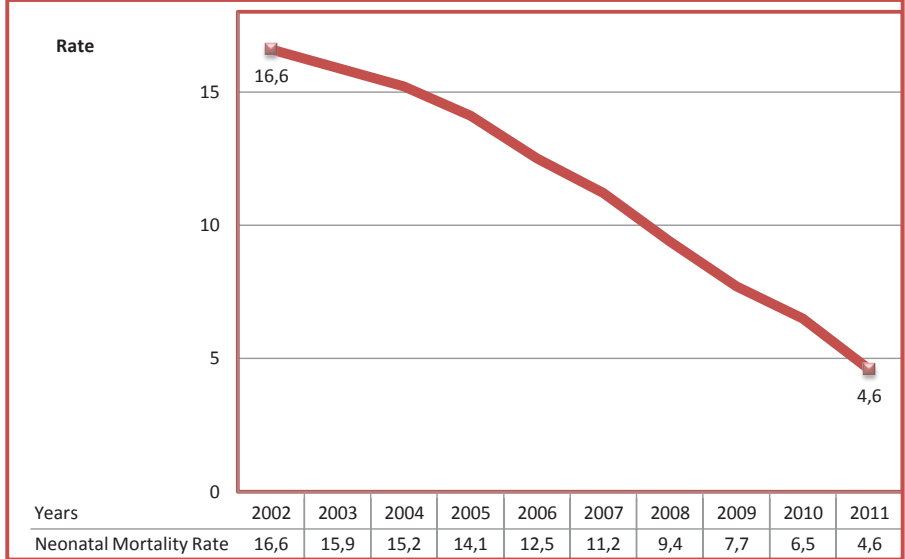
Figure 2.6. International Comparison of Infant Mortality Rate



Source: Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, WHO World Health Statistics 2012, Other Years Public Health Institution of Turkey

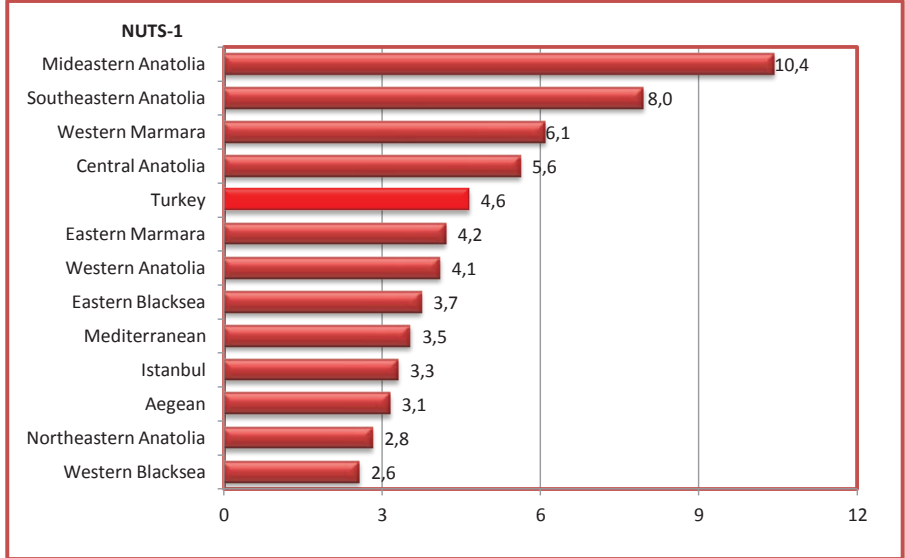
Note: Turkey data belongs to the year 2011.

Figure 2.7. Neonatal Mortality Rate by Years, (per 1.000 Live Births), Turkey



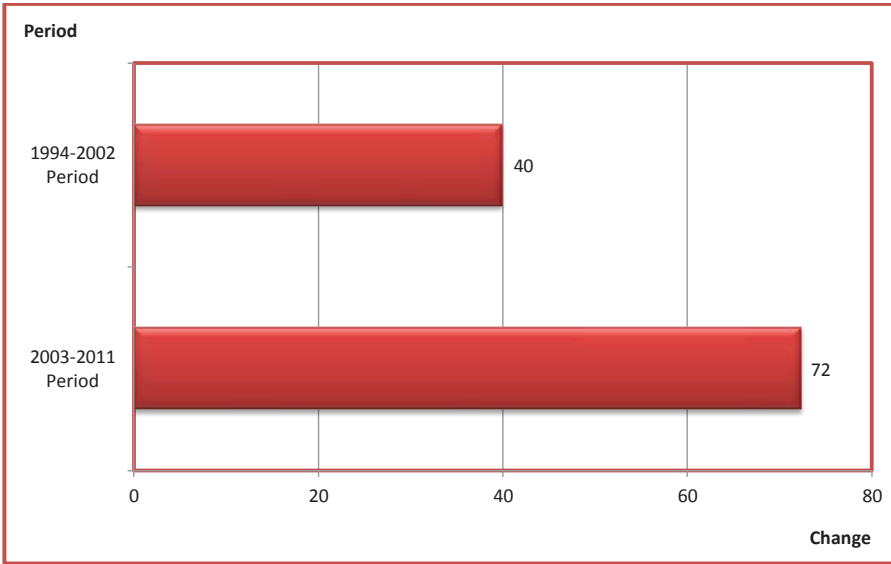
Source: 2010 Public Health Institution of Turkey, 2011 Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, Other Years-Public Health Institution of Turkey

Figure 2.8. Neonatal Mortality Rate by NUTS-1, (per 1.000 Live Births), 2011



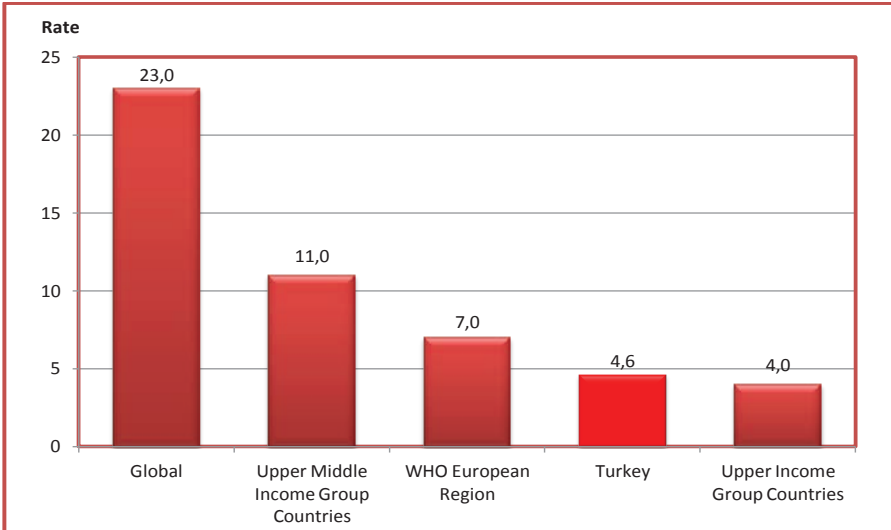
Source: Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”

Figure 2.9. Change in Neonatal Mortality Rate by 9-Year Periods, (per 1.000 Live Births), Turkey



Source: 2011 Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, Other Years-Public Health Institution of Turkey

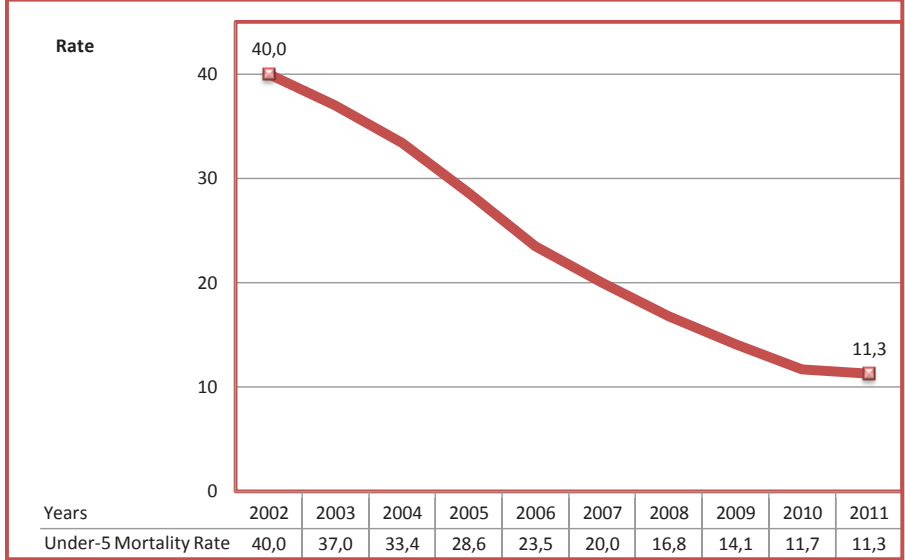
Figure 2.10. International Comparison of Neonatal Mortality Rate (per 1.000 Live Births), 2010



Source: Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, WHO World Health Statistics 2012

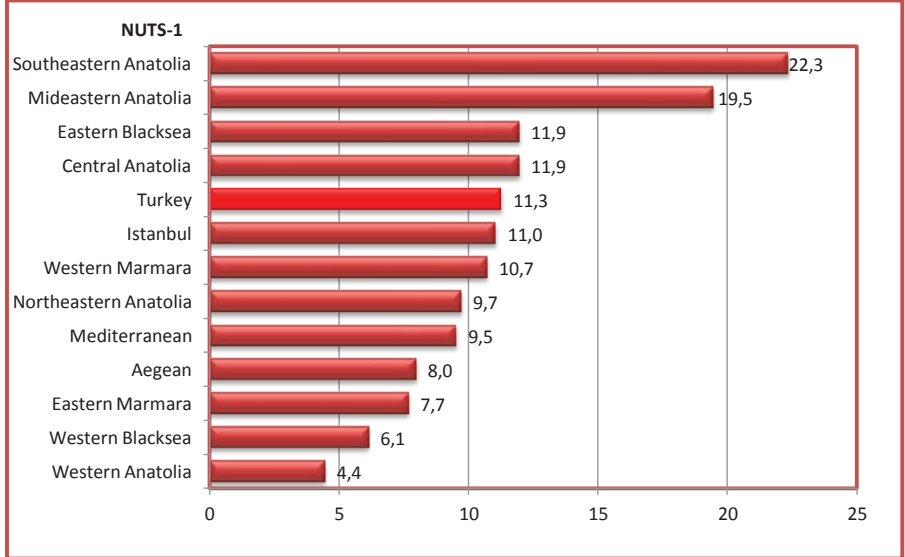
Note: Turkey data belongs to the year 2011.

Figure 2.11. Under-5 Mortality Rate by Years, (per 1.000 Live Births), Turkey



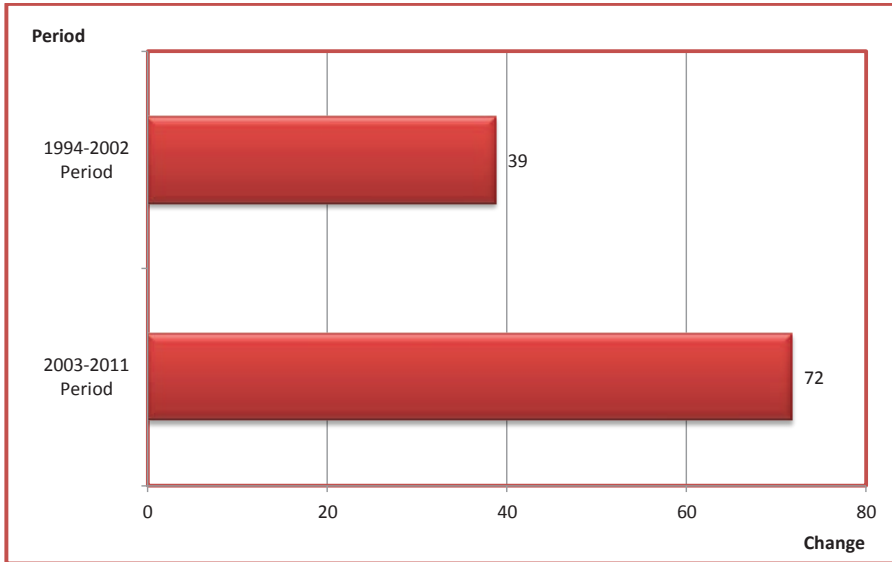
Source: 2011 Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, Other Years-Public Health Institution of Turkey

Figure 2.12. Under-5 Mortality Rate by NUTS-1, (per 1.000 Live Births), 2011



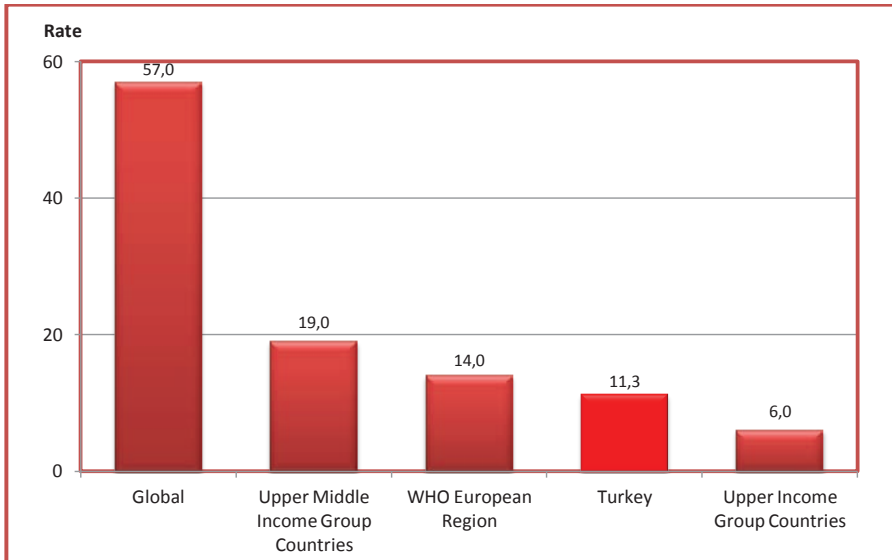
Source: Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”

Figure 2.13. Change in Under-5 Mortality Rate by 9-Year Periods (per 1.000 Live Births), Turkey



Source: 2011 Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, Other Years-Public Health Institution of Turkey

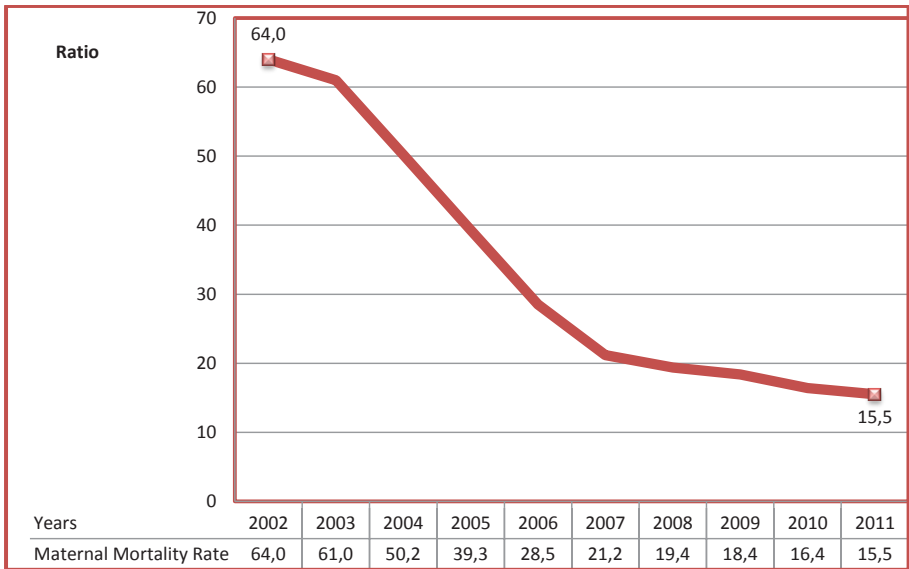
Figure 2.14. International Comparison of Under-5 Mortality Rate (per 1.000 Live Births), 2010



Source: Istanbul University, Marmara University, Yıldırım Beyazıt University “Infant and Under-5 Mortality Study 2012”, WHO World Health Statistics 2012

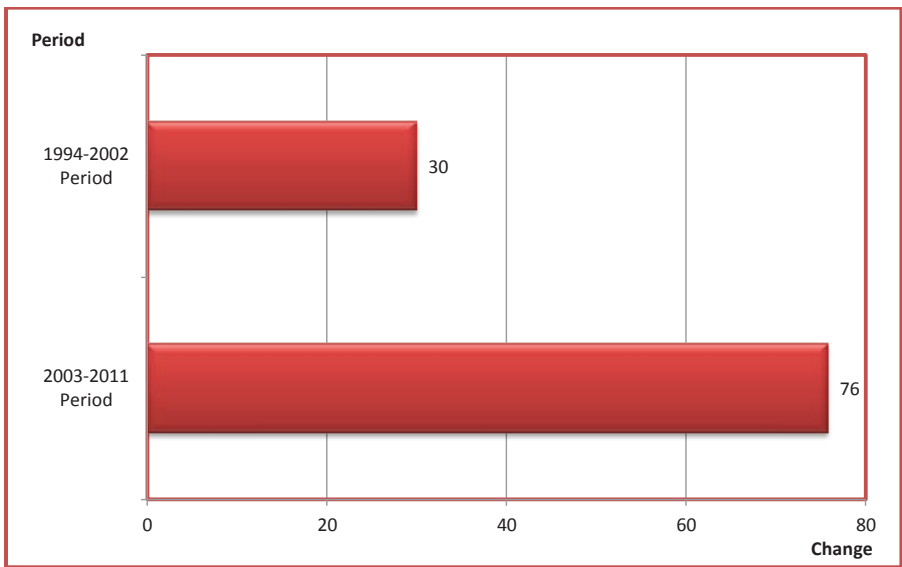
Note: Turkey data belongs to the year 2011.

Figure 2.15. Maternal Mortality Ratio by Years, (per 100.000 Live Births), Turkey



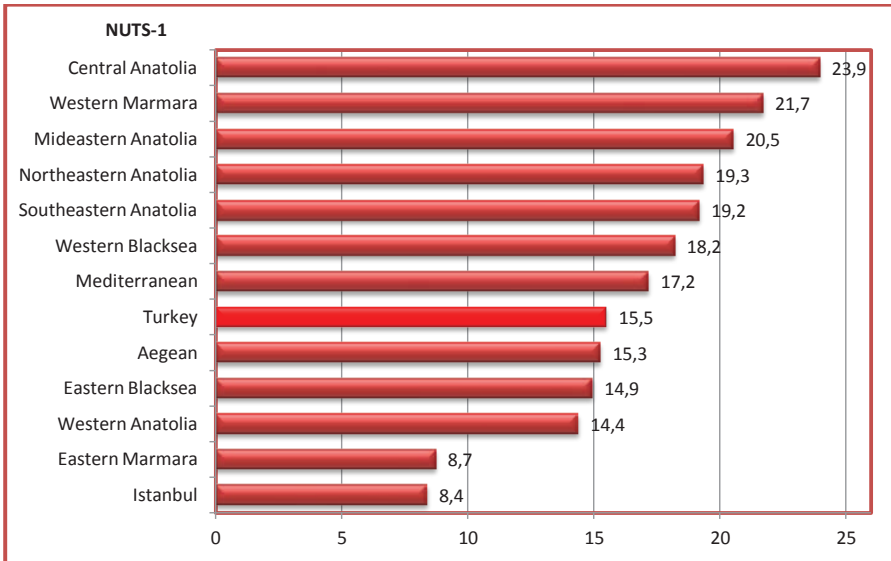
Source: Public Health Institution of Turkey

Figure 2.16. Change in Maternal Mortality Ratio by 9-Year Periods, (per 100.000 Live Births), Turkey



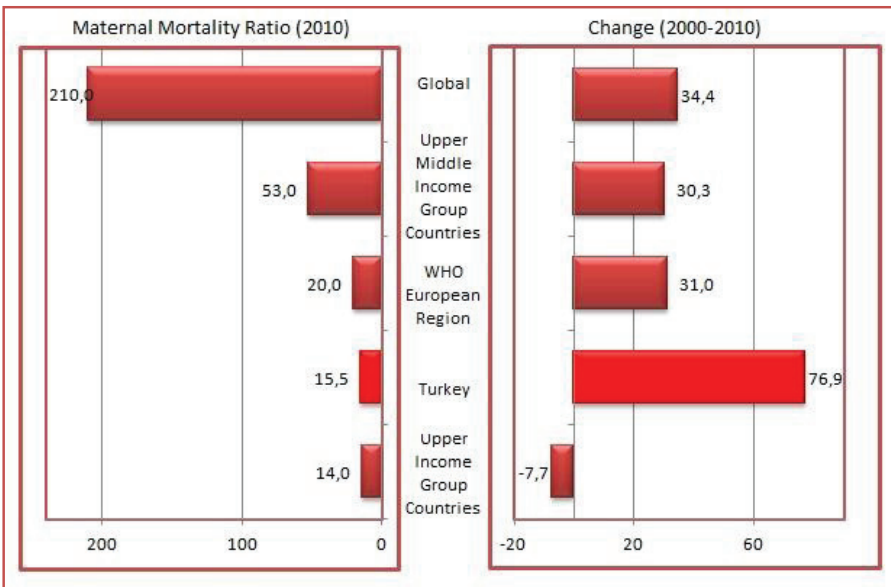
Source: Public Health Institution of Turkey

Figure 2.17. Maternal Mortality Ratio by NUTS-1, (per 100.000 Live Births), 2011



Source: Public Health Institution of Turkey

Figure 2.18. International Comparison of Maternal Mortality Ratio, (per 100.000 Live Births), 2010



Source: Public Health Institution of Turkey, WHO World Health Statistics 2012

Note: Turkey data belongs to the year 2011.

Table 2.1. Distribution of Causes of Death by the ICD-10 Main Diagnosis Groups and Sex, (%), Turkey, 2009

ICD-10 Diagnosis Groups	Male	Female	Total
Diseases of the Circulatory System	36,21	44,39	39,86
Neoplasms	24,88	16,45	21,12
Diseases of the Respiratory System	10,06	7,45	8,89
Endocrine, Nutritional and Metabolic Diseases	4,81	8,33	6,38
Symptoms, Signs and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified	4,88	4,83	4,86
External Injury Causes and Poisoning	4,92	2,83	3,98
Diseases of the nervous system and sense organs	2,65	3,31	2,95
Diseases of the Genitourinary System	2,64	2,87	2,74
Diseases of the Digestive System	2,55	2,51	2,53
Certain Conditions Originating in the Perinatal Period	2,52	2,52	2,52
Certain Infectious and Parasitic Diseases	1,65	1,58	1,62
Congenital Malformations, Deformations and Chromosomal Abnormalities	1,28	1,48	1,37
Diseases of the Musculoskeletal System and Connective Tissue	0,33	0,67	0,48
Diseases of the Blood and Blood forming Organs and Certain Disorders Involving the Immune Mechanism	0,38	0,51	0,44
Mental and Behavioral Disorders	0,19	0,16	0,18
Diseases of the Skin and Subcutaneous Tissue	0,04	0,09	0,06
Pregnancy, Childbirth and the Puerperium	-	0,03	0,01
Total	100	100	100

Source: TURKSTAT Causes of Death Statistics, 2009

Explanations for Chapter 2

- While infant, neonatal and under-5 mortality rates were being calculated before 2011, 22-week-old and older infants were taken into account. However, while being revised, 28 weeks-old or older infants were taken into account. Administrative records of the Public Health Institution of Turkey, international reports and TDHS data were used in the revised version.
- The changes in mortality rates are calculated as the difference between start and end year divided by the start year value. This rate shows how much change occurred during the interval years. Values for the end of 2002 were used for the period between 2003 and 2011.
- In Figure 2.6, as the infant mortality rates in Turkey is the same for 2000 and 2001 (33 per thousand), it was possible to compare the rate of change in 10 years. Similarly, for such estimations, the OECD and the WHO use the latest available data from the countries.
- In Figure 2.18, as the maternal mortality ratio in Turkey is the same for 2000 and 2001 (67 per 100.000), it was possible to compare the rate of change in 10 years. Similarly, for such estimations, the OECD and the WHO use the latest available data from the countries.

ICD-10 Major Diagnosis Codes and Groups of Diseases:

A00-B99 : Certain infectious and parasitic diseases

C00-D48 : Neoplasms

D50-D89 : Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism

E00-E90 : Endocrine, nutritional and metabolic diseases

F00-F99 : Mental and behavioral disorders

G00-H95 : Diseases of the nervous system and sense organs

I00-I99 : Diseases of the circulatory system

J00-J99 : Diseases of the respiratory system

K00-K93 : Diseases of the digestive system

L00-L99 : Diseases of the skin and subcutaneous tissue

M00-M99 : Diseases of the musculoskeletal system and connective tissue

N00-N99 : Diseases of the genitourinary system

O00-O99 : Pregnancy, childbirth and the puerperium

P00-P96 : Certain conditions originating in the perinatal period

Q00-Q99 : Congenital malformations, deformations and chromosomal abnormalities

R00-R99 : Symptoms, signs and abnormal clinical and laboratory findings, not else where classified

V01-Y89 : External injury causes and poisoning



Chapter 3

Morbidity



Table 3.1. Number of Cases of the Infectious Diseases by Years, Turkey

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
AIDS	Local Case	42	48	42	34	33	21	48	68	64	66
	Imported Case	6	4	5	3	2	3	1	7	6	14
	Total Case	48	52	47	37	35	24	49	75	70	80
Measles	Local Case	7.810	5.600	8.744	1.119	34	3	0	0	0	0
	Imported Case	-	-	-	-	-	-	4	4	7	111
	Total Case	7.810	5.600	8.744	1.119	34	3	4	4	7	111
Tuberculosis	Local Case	18.043	17.923	17.543	19.681	19.511	18.739	17.425	16.594	15.700	14.852
	Imported Case	-	-	-	63	118	139	175	163	179	202
	Total Case	18.043	17.923	17.543	19.744	19.629	18.878	17.600	16.757	15.879	15.054
Malaria	Local Case	10.184	9.182	5.252	2.036	751	313	166	38	9*	4*
	Imported Case	40	40	50	48	45	45	49	46	78	128
	Total Case	10.224	9.222	5.302	2.084	796	358	215	84	87	132

Source: Public Health Institution of Turkey

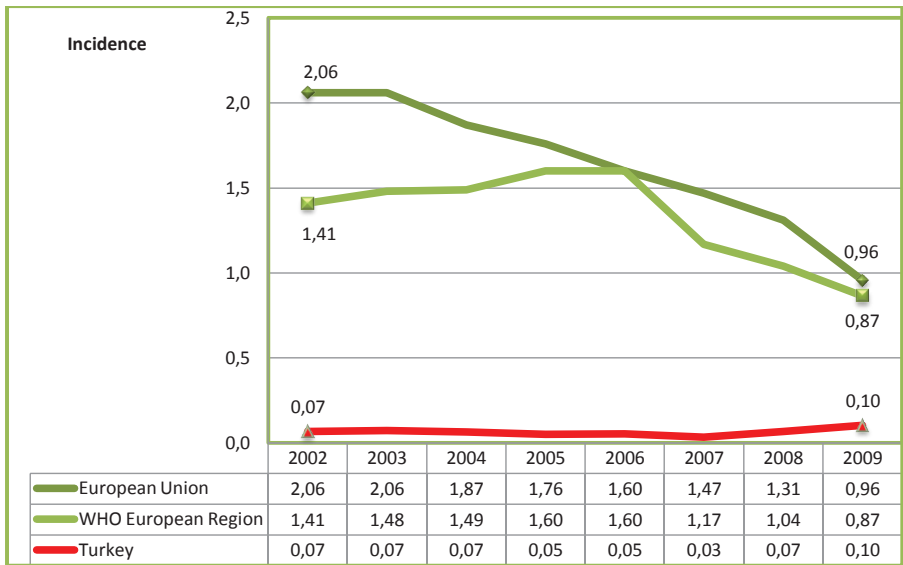
*2010 and 2011 all local malaria cases are "Relapsing malaria cases". **Local new case number is "0" (zero)**

Table 3.2. Incidence of Infectious Diseases by Years, (per 100.000 Population), Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
AIDS	0,07	0,07	0,07	0,05	0,05	0,03	0,07	0,10	0,09	0,11
Measles	11,1	7,8	12,3	1,6	0,1	0,0	0,0	0,0	0,0	0,1
Tuberculosis	40	37	35	33	32	31	30	29	28	-
Malaria	14,7	13,1	7,5	2,8	1,2	0,5	0,3	0,1	0,1	0,2

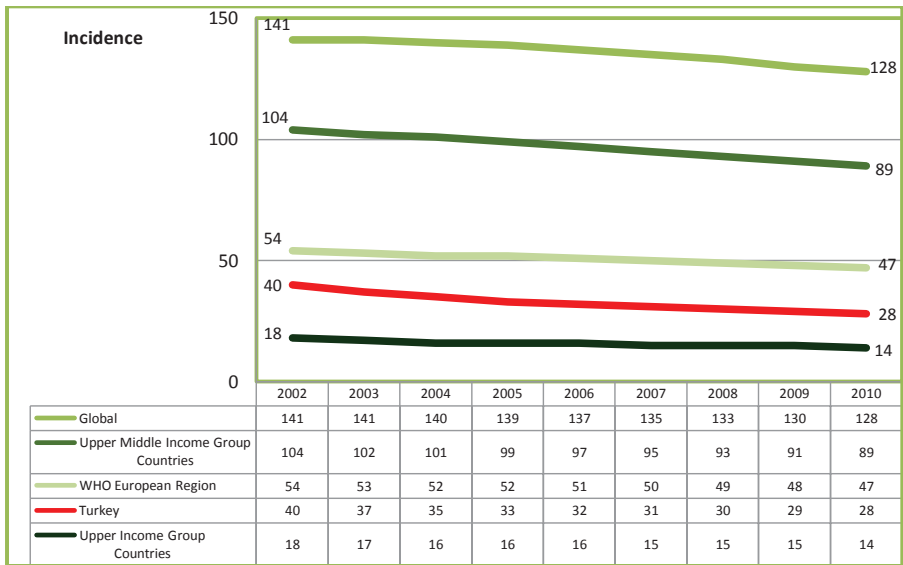
Source: Public Health Institution of Turkey

Figure 3.1. International Comparison of AIDS Incidence by Years, (per 100.000 Population)



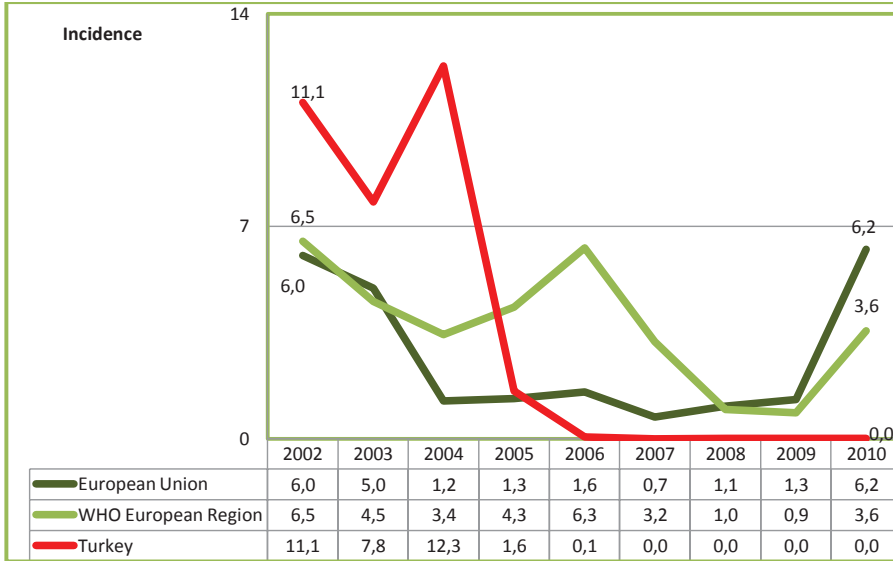
Source: WHO HFA Database, Public Health Institution of Turkey

Figure 3.2. International Comparison of Tuberculosis Incidence by Years, (per 100.000 Population)



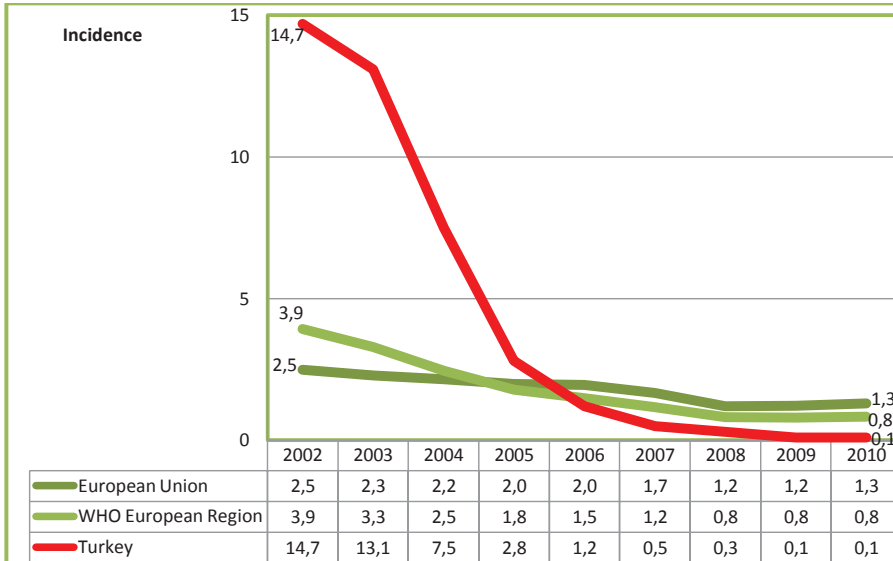
Source: WHO Global Health Observatory Database

Figure 3.3. International Comparison of Measles Incidence by Years, (per 100.000 Population)



Source: WHO HFA Database, Public Health Institution of Turkey

Figure 3.4. International Comparison of Malaria Incidence by Years, (per 100.000 Population)



Source: WHO HFA Database, Public Health Institution of Turkey

Table 3.3. Distribution of Hospital Discharges by the ICD-10 Main Diagnosis Groups and Sex, (%), Turkey, 2011

ICD-10 Diagnosis Groups	Male	Female	Total
Diseases of the Respiratory System	18,38	9,80	13,45
Pregnancy, Childbirth and the Puerperium	0,00	19,73	11,34
Diseases of the Genitourinary System	11,56	9,69	10,49
Diseases of the Digestive System	11,36	7,58	9,19
Factors influencing health status and contact with health services	2,65	10,51	7,17
Diseases of the Circulatory System	8,22	5,86	6,86
Symptoms, Signs and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified	6,71	5,38	5,95
Diseases of the Musculoskeletal System and Connective Tissue	5,04	5,69	5,42
Neoplasms	5,84	3,82	4,68
Diseases of the Eye and Adnexa	4,72	3,90	4,25
Injury, Poisoning and Certain other Consequences of External Causes	6,03	2,86	4,21
Diseases of the Skin and Subcutaneous Tissue	4,20	2,01	2,94
Certain Infectious and Parasitic Diseases	2,18	3,33	2,84
Endocrine, Nutritional and Metabolic Diseases	3,44	2,29	2,78
Diseases of the nervous system	2,16	1,97	2,05
Diseases of the Blood and Blood forming Organs and Certain Disorders Involving the Immune Mechanism	1,40	1,99	1,74
Mental and Behavioral Disorders	1,90	1,22	1,51
External Causes of Morbidity and Mortality	1,67	0,89	1,22
Diseases of the Ear and Mastoid Process	0,85	0,65	0,73
Certain Conditions Originating in the Perinatal Period	0,99	0,37	0,63
Congenital Malformations, Deformations and Chromosomal Abnormalities	0,70	0,46	0,56
Total	100	100	100

Source: General Directorate of Health Information Systems

Table 3.4. Distribution of 15 and 15+ Aged Individuals' General Health Status by Sex, Age Groups and Residence, (%), 2010

Age Groups		Rural			Urban			Turkey		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
15-24	Very Good/ Good	87,9	83,3	85,3	86,8	82,7	84,8	87,1	82,9	84,9
	Bad/Very Bad	1,8	2,4	2,1	2,8	2,5	2,6	2,5	2,5	2,5
25-34	Very Good/ Good	82,5	69,7	76,2	87,0	77,2	82,1	85,8	75,3	80,5
	Bad/Very Bad	3,0	7,5	5,2	2,2	4,0	3,1	2,4	4,9	3,6
35-44	Very Good/ Good	67,8	43,8	55,6	78,5	59,2	69,0	75,5	54,8	65,2
	Bad/Very Bad	6,5	12,2	9,4	4,6	9,8	7,2	5,1	10,5	7,8
45-54	Very Good/ Good	60,3	32,5	47,0	70,9	43,2	56,8	67,5	40,0	53,8
	Bad/Very Bad	5,8	17,4	11,4	6,9	11,8	9,4	6,6	13,4	10,0
55-64	Very Good/ Good	46,6	26,5	35,7	55,6	29,4	42,5	52,6	28,3	40,1
	Bad/Very Bad	15,3	27,9	22,1	11,4	25,9	18,6	12,7	26,6	19,9
65-74	Very Good/ Good	39,0	16,8	26,7	46,7	18,5	30,0	43,1	17,8	28,6
	Bad/Very Bad	22,9	42,6	33,8	20,4	37,5	30,5	21,5	39,6	31,9
75+	Very Good/ Good	24,2	10,0	16,7	20,1	16,8	18,3	22,3	13,5	17,5
	Bad/Very Bad	37,3	55,0	46,7	32,7	49,1	42,0	35,1	51,9	44,3
Total	Very Good/ Good	66,1	49,1	57,2	76,7	60,1	68,3	73,5	56,7	65,0
	Bad/Very Bad	8,9	17,2	13,2	5,8	11,2	8,5	6,7	13,1	10,0

Source: TURKSTAT Health Interview Survey 2010

Table 3.5. Distribution of 15 and 15+ Aged Individuals' General Health Status by Sex, (%), 2008, 2010

		2008	2010
Male	Very Good/ Good	71,9	73,5
	Bad/Very Bad	7,0	6,7
Female	Very Good/ Good	55,5	56,7
	Bad/Very Bad	13,2	13,1
Total	Very Good/ Good	63,6	65,0
	Bad/Very Bad	10,1	10,0

Source: TURKSTAT Health Interview Survey 2008, 2010

Table 3.6 Distribution of 15 and 15+ Aged Individuals' Declared Diseases/Health Problems by Sex and Residence, (%), 2010

Diseases/Health problems	Rural			Urban			Turkey		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Back Musculoskeletal System Disorders (Lumbago, Back Hernia etc.)	14,1	23,1	18,8	11,7	18,9	15,3	12,4	20,2	16,4
High Blood Pressure (Hypertension)	10,6	20,5	15,8	8,2	15,9	12,0	8,9	17,3	13,2
Rheumatismal Joint Disease (Rheumatoid Arthritis)	9,7	18,6	14,3	5,7	13,0	9,4	6,9	14,7	10,9
Stomach Ulcer (Gastric Ulcer)	9,5	13,3	11,5	6,7	10,9	8,8	7,5	11,7	9,6
Osteoarthritis (Arthrosis, Joint Degeneration)	6,6	14,4	10,7	4,3	10,5	7,4	5,0	11,7	8,4
Neck Musculoskeletal System Disorders (Neck Pain, Neck Hernia, etc.)	5,2	11,1	8,3	4,1	10,9	7,5	4,4	11,0	7,8
Sinusitis (Inflammation of Sinus)	6,8	8,3	7,6	7,0	8,8	7,9	6,9	8,6	7,8
Anemia (Iron Deficiency Anemia)	2,4	11,8	7,3	1,9	13,6	7,8	2,1	13,0	7,6
Migraine and Severe Headache	4,3	11,0	7,8	3,3	10,7	7,1	3,6	10,8	7,3
Allergy, Such as Rhinitis, Eye Inflammation, Dermatitis, Food Allergy or Other (Allergic Asthma Excluded)	4,9	6,9	5,9	5,0	8,2	6,6	5,0	7,8	6,4
Diabetes	4,6	7,7	6,2	4,6	7,7	6,2	4,6	7,7	6,2
Asthma (Allergic Asthma Included)	4,4	6,4	5,5	3,6	6,5	5,1	3,8	6,5	5,2
Coronary Heart Disease (Angina Pectoris, Chest Pain, Spasm)	6,3	5,7	6,0	4,1	4,1	4,1	4,7	4,6	4,7
Chronic Obstructive Pulmonary Disease (Emphysema, Chronic Bronchitis)	5,3	5,3	5,3	4,1	4,0	4,0	4,5	4,4	4,4
Thyroid Disease	1,3	5,5	3,5	0,9	5,8	3,4	1,1	5,7	3,4
Urinary Incontinence, Problems in Controlling the Bladder	3,0	5,6	4,4	1,3	4,1	2,7	1,8	4,6	3,2
Chronic Depression	1,4	3,2	2,4	1,3	4,5	2,9	1,4	4,1	2,8
Other Psychological Health Problems	1,8	2,5	2,2	1,5	2,5	2,0	1,6	2,5	2,1
Chronic Heart Failure	2,4	2,4	2,4	1,2	1,9	1,5	1,5	2,0	1,8
Permanent Injury or Defect Caused By An Accident	2,9	0,6	1,7	2,0	0,8	1,4	2,3	0,7	1,5
Hepatitis	2,2	1,3	1,8	1,6	1,2	1,4	1,8	1,2	1,5
Myocardial Infarction (Heart Attack)	2,5	1,1	1,8	1,3	0,7	1,0	1,7	0,8	1,2
Duodenal Ulcer	1,1	1,4	1,3	1,0	1,1	1,1	1,1	1,2	1,1
Stroke (Cerebral Hemorrhage, Cerebral Thrombosis)	1,6	1,7	1,6	1,0	0,8	0,9	1,2	1,0	1,1
Chronic Anxiety	0,5	1,1	0,8	0,5	1,3	0,9	0,5	1,2	0,8
Cirrhosis of the Liver, Liver Dysfunction	0,6	0,9	0,7	0,5	0,4	0,4	0,5	0,5	0,5
Cancer (Malign, Malignant, Leukemia, Lymphoma Included)	0,2	0,3	0,3	0,5	0,5	0,5	0,4	0,5	0,5

Source: TURKSTAT Health Interview Survey 2010

Table 3.7. Distribution of 15 and 15+ Aged Individuals' Declared Diseases/Health Problems by Sex, (%), 2008, 2010

Diseases/Health Problems	Turkey-2008			Turkey-2010		
	Male	Female	Total	Male	Female	Total
Back Musculoskeletal System Disorders (Lumbago, Back Hernia etc.)	17,0	27,9	22,5	12,4	20,2	16,4
High Blood Pressure (Hypertension)	9,9	19,5	14,8	8,9	17,3	13,2
Rheumatismal Joint Disease (Rheumatoid Arthritis)	11,7	23,4	17,7	6,9	14,7	10,9
Osteoarthritis (Osteoarthritis, Arthrosis, Joint Degeneration)	8,0	16,8	12,5	5,0	11,7	8,4
Neck Musculoskeletal System Disorders (Neck Pain, Neck Hernia, etc.)	6,7	16,0	11,5	4,4	11,0	7,8
Sinusitis (Inflammation of Sinus)	8,5	11,2	9,9	6,9	8,6	7,8
Anemia (Iron Deficiency Anemia)	2,8	17,2	10,1	2,1	13,0	7,6
Migraine and Severe Headache	9,1	21,3	15,3	3,6	10,8	7,3
Allergy, Such as Rhinitis, Eye Inflammation, Dermatitis, Food Allergy or Other (Allergic Asthma Excluded)	6,2	9,3	7,8	5,0	7,8	6,4
Diabetes	4,4	7,2	5,9	4,6	7,7	6,2
Asthma (Allergic Asthma Included)	3,3	6,2	4,8	3,8	6,5	5,2
Coronary Heart Disease (Angina Pectoris, Chest Pain, Spasm)	5,5	7,0	6,3	4,7	4,6	4,7
Chronic Obstructive Pulmonary Disease (Emphysema, Chronic Bronchitis)	2,1	2,2	2,1	4,5	4,4	4,4
Urinary Incontinence, Problems in Controlling the Bladder	2,9	6,3	4,6	1,8	4,6	3,2
Chronic Depression	2,3	5,8	4,1	1,4	4,1	2,8
Other Psychological Health Problems	2,3	4,7	3,6	1,6	2,5	2,1
Chronic Heart Failure	2,1	2,6	2,3	1,5	2,0	1,8
Permanent Injury or Defect Caused By An Accident	3,5	1,4	2,4	2,3	0,7	1,5
Myocardial Infarction (Heart Attack)	2,2	1,6	1,9	1,7	0,8	1,2
Stroke (Cerebral Hemorrhage, Cerebral Thrombosis)	1,1	1,1	1,1	1,2	1,0	1,1
Chronic Anxiety	1,5	3,5	2,5	0,5	1,2	0,8
Cirrhosis of the Liver, Liver Dysfunction	1,1	1,1	1,1	0,5	0,5	0,5
Cancer (Malign, Malignant, Leukemia, Lymphoma Included)	0,8	0,9	0,8	0,4	0,5	0,5

Source: TURKSTAT Health Interview Survey 2008, 2010

Table 3.8 Distribution of 15 and 15+ Aged Individuals' Morbidity/ Health Problems Diagnosed by Physician, by Sex and Residence, (%), 2010

Diseases/Health problems	Rural			Urban			Turkey		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Back Musculoskeletal System Disorders (Lumbago, Back Hernia etc.)	10,1	18,2	14,4	8,9	15,6	12,3	9,3	16,5	12,9
High Blood Pressure (Hypertension)	10,3	19,9	15,3	7,7	15,3	11,5	8,4	16,8	12,7
Rheumatismal Joint Disease (Rheumatoid Arthritis)	7,7	16,5	12,3	4,5	11,6	8,0	5,4	13,1	9,3
Stomach Ulcer (Gastric Ulcer)	8,4	12,1	10,4	6,0	10,2	8,1	6,7	10,8	8,8
Osteoarthritis (Osteoarthritis, Arthrosis, Joint Degeneration)	5,6	13,1	9,5	3,5	9,8	6,7	4,1	10,8	7,5
Anemia (Iron Deficiency Anemia)	1,8	11,1	6,6	1,6	12,7	7,2	1,7	12,2	7,0
Sinusitis (Inflammation of Sinus)	5,0	7,8	6,5	5,5	8,2	6,9	5,4	8,1	6,7
Neck Musculoskeletal System Disorders (Neck Pain, Neck Hernia, etc.)	3,7	8,5	6,2	2,9	9,0	6,0	3,1	8,9	6,1
Diabetes	4,4	7,5	6,0	4,6	7,6	6,1	4,5	7,5	6,0
Migraine and Severe Headache	2,5	8,9	5,8	2,4	8,6	5,5	2,4	8,7	5,6
Allergy, Such as Rhinitis, Eye Inflammation, Dermatitis, Food Allergy or Other (Allergic Asthma Excluded)	3,5	5,3	4,5	4,0	6,8	5,4	3,9	6,3	5,1
Asthma (Allergic Asthma Included)	4,2	5,7	5,0	3,3	6,2	4,8	3,6	6,0	4,8
Coronary Heart Disease (Angina Pectoris, Chest Pain, Spasm)	5,2	5,3	5,3	3,8	3,7	3,7	4,2	4,2	4,2
Chronic Obstructive Pulmonary Disease (Emphysema, Chronic Bronchitis)	4,9	5,0	4,9	3,8	3,8	3,8	4,2	4,2	4,2
Thyroid Disease	1,2	5,3	3,3	0,9	5,6	3,3	1,0	5,5	3,3
Chronic Depression	1,3	2,8	2,1	1,2	4,1	2,7	1,2	3,7	2,5
Urinary Incontinence, Problems in Controlling the Bladder	2,1	3,7	2,9	1,1	2,6	1,8	1,3	2,9	2,2
Chronic Heart Failure	2,3	2,3	2,3	1,1	1,8	1,5	1,5	2,0	1,7
Other Psychological Health Problems	1,4	2,2	1,8	1,2	2,0	1,6	1,3	2,1	1,7
Hepatitis	2,2	1,3	1,7	1,6	1,1	1,4	1,8	1,2	1,5
Permanent Injury or Defect Caused By An Accident	2,7	0,6	1,6	1,8	0,7	1,3	2,1	0,7	1,4
Myocardial Infarction (Heart Attack)	2,4	1,1	1,7	1,3	0,6	1,0	1,7	0,8	1,2
Stroke (Cerebral Hemorrhage, Cerebral Thrombosis)	1,6	1,6	1,6	1,0	0,8	0,9	1,2	1,0	1,1
Duodenal Ulcer	1,1	1,3	1,2	0,9	1,1	1,0	1,0	1,2	1,1
Chronic Anxiety	0,3	0,7	0,5	0,2	0,9	0,5	0,3	0,8	0,5
Cirrhosis of the Liver, Liver Dysfunction	0,6	0,8	0,7	0,4	0,4	0,4	0,5	0,5	0,5
Cancer (Malign, Malignant, Leukemia, Lymphoma Included)	0,2	0,3	0,3	0,5	0,5	0,5	0,4	0,5	0,5

Source: TURKSTAT Health Interview Survey 2010

Table 3.9 Distribution of 15 and 15+ Aged Individuals' Morbidity/ Health Problems Diagnosed by Physician, by Sex (%), 2008, 2010

Diseases / Health Problems	Turkey-2008			Turkey-2010		
	Male	Female	Total	Male	Female	Total
Back Musculoskeletal System Disorders (Lumbago, Back Hernia etc.)	11,5	20,2	15,9	9,3	16,5	12,9
High Blood Pressure (Hypertension)	8,9	17,9	13,5	8,4	16,8	12,7
Rheumatismal Joint Disease (Rheumatoid Arthritis)	8,5	18,8	13,8	5,4	13,1	9,3
Osteoarthritis (Osteoarthritis, Arthrosis, Joint Degeneration)	5,8	14,6	10,3	4,1	10,8	7,5
Anemia (Iron Deficiency Anemia)	2,0	15,5	8,9	1,7	12,2	7,0
Sinusitis (Inflammation of Sinus)	6,7	9,6	8,2	5,4	8,1	6,7
Neck Musculoskeletal System Disorders (Neck Pain, Neck Hernia, etc.)	3,9	11,2	7,6	3,1	8,9	6,1
Diabetes	4,4	7,2	5,9	4,5	7,5	6,0
Migraine and Severe Headache	5,3	15,1	10,3	2,4	8,7	5,6
Allergy, Such as Rhinitis, Eye Inflammation, Dermatitis, Food Allergy or Other (Allergic Asthma Excluded)	4,4	7,4	5,9	3,9	6,3	5,1
Asthma (Allergic Asthma Included)	3,3	6,2	4,8	3,6	6,0	4,8
Coronary Heart Disease (Angina Pectoris, Chest Pain, Spasm)	4,6	5,5	5,1	4,2	4,2	4,2
Chronic Obstructive Pulmonary Disease (Emphysema, Chronic Bronchitis)	2,1	2,1	2,1	4,2	4,2	4,2
Chronic Depression	1,6	4,5	3,1	1,2	3,7	2,5
Urinary Incontinence, Problems in Controlling the Bladder	1,8	3,6	2,7	1,3	2,9	2,2
Chronic Heart Failure	2,1	2,6	2,3	1,5	2,0	1,7
Other Psychological Health Problems	1,6	3,3	2,5	1,3	2,1	1,7
Permanent Injury or Defect Caused By An Accident	2,9	1,1	2,0	2,1	0,7	1,4
Myocardial Infarction (Heart Attack)	2,2	1,6	1,9	1,7	0,8	1,2
Stroke (Cerebral Hemorrhage, Cerebral Thrombosis)	1,1	1,1	1,1	1,2	1,0	1,1
Chronic Anxiety	0,7	1,7	1,2	0,3	0,8	0,5
Cirrhosis of the Liver, Liver Dysfunction	1,0	1,0	1,0	0,5	0,5	0,5
Cancer (Malign, Malignant, Leukemia, Lymphoma Included)	0,8	0,9	0,8	0,4	0,5	0,5

Source: TURKSTAT Health Interview Survey 2008, 2010

Explanations for Chapter 3

- There is no record for the distinction between the local and imported cases for the measles cases in 2007 and before, and tuberculosis cases in 2004 and before.
- The incidence of tuberculosis for all countries is calculated and published by the World Health Organization. The latest available data is from 2010.
- The grading scales in the tables entitled “General health status” is the same as TURKSTAT used in “Health Survey” (very good, good, fair, poor, very poor). The values about the “fair” grade were not provided in the table.

ICD-10 Major Diagnosis Codes and Groups of Diseases

A00-B99 : Certain infectious and parasitic diseases

C00-D48 : Neoplasms

D50-D89 : Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism

E00-E90 : Endocrine, nutritional and metabolic diseases

F00-F99 : Mental and behavioral disorders

G00-H95 : Diseases of the nervous system and sense organs

I00-I99 : Diseases of the circulatory system

J00-J99 : Diseases of the respiratory system

K00-K93 : Diseases of the digestive system

L00-L99 : Diseases of the skin and subcutaneous tissue

M00-M99 : Diseases of the musculoskeletal system and connective tissue

N00-N99 : Diseases of the genitourinary system

O00-O99 : Pregnancy, childbirth and the puerperium

P00-P96 : Certain conditions originating in the perinatal period

Q00-Q99 : Congenital malformations, deformations and chromosomal abnormalities

R00-R99 : Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified

V01-Y89 : External injury causes and poisoning



Chapter 4

Risk Factors



Table 4.1 Distribution of 15 and 15+ Aged Individuals Using Tobacco Product by Sex and Residence, 2010

Tobacco Consumption	Rural			Urban			Turkey		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Current Tobacco Smoker	42,5	8,5	24,8	43,9	19,4	31,6	43,5	16,0	29,5
Daily Smoker	37,4	6,1	21,1	39,7	15,1	27,3	39,0	12,3	25,4
Occasional Smoker	5,1	2,4	3,7	4,3	4,3	4,3	4,5	3,7	4,1
Non-smoker	27,5	10,1	18,4	21,1	12,1	16,5	23,0	11,5	17,1
Never Smoker	29,9	81,4	56,8	35,0	68,5	51,9	33,5	72,6	53,4

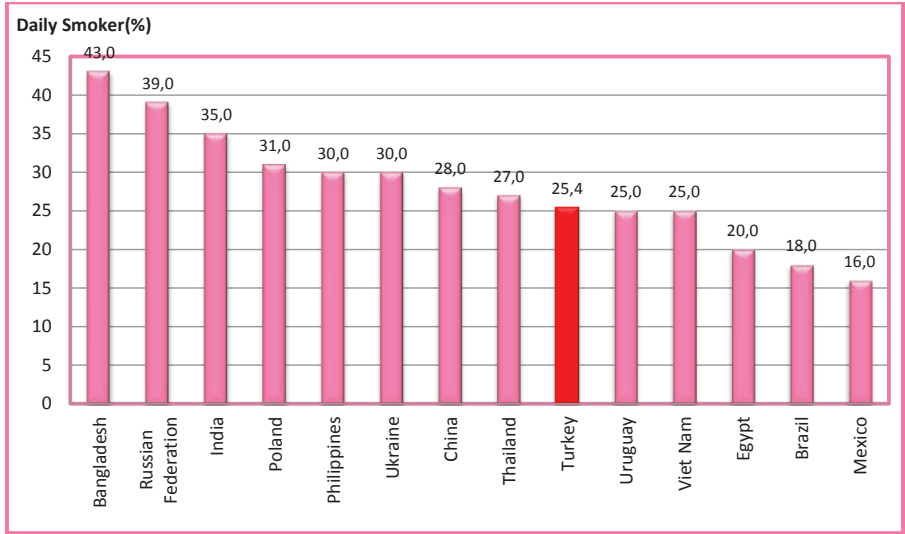
Source: TURKSTAT, Health Interview Survey 2010

Figure 4.1 Distribution of Individuals Using Tobacco Product Daily by Sex, (%), 2003, 2008, 2010



Source: Ministry of Health National Burden of Disease and Cost Effectiveness Study, Household Survey 2003, TURKSTAT Global Adult Tobacco Survey 2008, TURKSTAT Health Interview Survey 2010

Figure 4.2 Daily Tobacco Product Consumption by Countries (%), 2010



Source: WHO Report on the Global Tobacco Epidemic, 2011

Table 4.2 15 and 15+ Aged, Current Tobacco Product Consumers’ First Tobacco Product Consumption Age by Sex, (%), 2010

Age at the First use of Tobacco Products	Male	Female	Total
<10	5,1	0,7	3,8
10-14	22,1	13,2	19,4
15-19	48,7	47,7	48,4
20-24	18,0	20,6	18,8
25-29	3,6	7,4	4,7
30-34	1,3	4,8	2,4
35+	1,3	5,6	2,6
Total	100	100	100

Source: TURKSTAT, Health Interview Survey 2010

Table 4.3. Distribution of 15 and 15+ Aged Individuals' Alcohol Consumption by Sex and Residence, (%), 2008, 2010

Alcohol Consumption	Rural						Urban						Turkey					
	2008			2010			2008			2010			2008			2010		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Consumes	17,0	1,2	8,5	16,7	1,5	8,8	19,5	4,4	12,0	23,0	5,7	14,3	18,8	3,3	10,9	21,1	4,4	12,6
Doesn't Consume	19,4	1,3	9,7	23,6	2,4	12,5	16,5	4,8	10,7	18,5	6,6	12,5	17,3	3,7	10,4	20,0	5,2	12,5
Never Consumed	63,6	97,5	81,8	59,7	96,1	78,7	64,0	90,8	77,3	58,4	87,7	73,2	63,9	93,0	78,7	58,8	90,3	74,9
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: TURKSTAT, Health Interview Survey 2008, 2010

Table 4.4 15 and 15+ Aged, Current Alcoholic Drink Consumers' First Alcoholic Drink Consumption Age by Sex, (%), 2008, 2010

Age at the First Use of Alcohol	2008			2010		
	Male	Female	Total	Male	Female	Total
<10	1,1	1,4	1,1	1,4	0,5	1,2
10-14	7,5	2,0	6,7	7,2	5,7	6,9
15-19	53,1	39,3	50,9	52,5	36,1	49,3
20-24	29,5	33,4	30,1	26,9	31,8	27,9
25-29	5,9	12,8	7,0	7,2	13,0	8,3
30-34	1,6	7,2	2,4	2,5	6,5	3,3
35+	1,4	3,9	1,8	2,2	6,4	3,0
Total	100	100	100	100	100	100

Source: TURKSTAT, Health Interview Survey 2008, 2010

Table 4.5 Distribution of 19 and 19+ Aged Individuals' Body Mass Index by Sex and Age Groups, (%), 2010

Age Group	Male				Female				Total			
	Under weight	Normal	Over weight	Obese	Under weight	Normal	Over weight	Obese	Under weight	Normal	Over weight	Obese
19-30	2,8	59,0	30,5	7,7	8,1	56,0	22,2	13,8	5,1	57,7	26,9	10,2
31-50	1,1	31,7	42,9	24,4	1,3	22,2	34,5	42,1	1,2	27,1	38,9	32,8
51-64	1,7	26,1	41,4	30,7	0,2	7,0	28,3	64,4	0,9	16,4	34,8	47,8
65+	1,8	27,5	45,9	24,8	1,1	15,0	30,4	53,5	1,4	20,7	37,4	40,4
Turkey	1,8	38,7	39,1	20,5	2,7	26,6	29,7	41,0	2,2	32,9	34,6	30,3

Source: Turkey Nutrition and Health Survey 2010

Figure 4.3 International Comparison of Obese (BMI \geq 30) Individuals by Sex, 2010

Source: Turkey Nutrition and Health Survey 2010, WHO World Health Statistics 2012

Table 4.6 Distribution of 19 and 19+ Aged Individuals' Height and Weight Average by Age Groups, Sex and Residence, 2010

Age Group	Average Weights (kg)				Average Heights (cm)			
	Rural		Urban		Rural		Urban	
	Male	Female	Male	Female	Male	Female	Male	Female
19-30	71,9	59,9	73,7	62,4	172,0	158,3	173,7	159,8
31-50	78,0	74,7	80,7	72,7	170,1	156,3	172,2	158,0
51-64	77,1	75,5	79,4	78,6	167,2	153,6	168,6	155,4
65+	72,5	66,7	75,9	72,1	164,4	151,7	165,0	152,3
Turkey	75,5	70,3	77,9	71,1	169,1	155,2	171,5	157,4

Source: Turkey Nutrition and Health Survey 2010

Table 4.7 Distribution of 20 and 20+ Aged Individuals Frequency of Fruit and Vegetable Consumption by Sex and Residence, %, 2010

	Do not Consume			Every Day			5-6 Times Weekly			3-4 Times Weekly			1-2 Times Weekly			Once in 15 Days			Once in a Month		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Green Leafy Fresh Vegetables																					
Urban	4,8	2,7	3,8	43,1	51,1	46,9	8,4	7,4	7,9	18,1	18,0	18,0	20,5	17,1	18,8	3,6	3,0	3,3	1,5	0,8	1,1
Rural	6,0	4,5	5,3	48,2	51,6	49,7	7,5	8,2	7,8	18,2	15,9	17,2	14,8	15,5	15,1	3,9	3,2	3,6	1,4	1,1	1,2
Total	5,2	3,1	4,2	44,4	51,2	47,6	8,2	7,6	7,9	18,1	17,5	17,8	19,0	16,7	17,9	3,7	3,0	3,4	1,5	0,8	1,2
Potato																					
Urban	3,8	2,4	3,1	8,8	9,0	8,9	5,5	7,7	6,6	31,4	25,6	28,6	40,7	43,2	41,9	7,8	9,4	8,6	2,1	2,6	2,3
Rural	2,9	2,7	2,9	13,7	12,4	13,1	6,6	7,9	7,2	27,6	28,7	28,1	40,2	38,0	39,2	6,3	7,9	7,0	2,7	2,4	2,5
Total	3,5	2,5	3,0	10,1	9,9	10,0	5,8	7,8	6,7	30,4	26,4	28,5	40,5	41,9	41,2	7,4	9,0	8,2	2,3	2,5	2,4
Other Fresh Vegetables																					
Urban	5,3	1,4	3,4	31,1	38,1	34,5	9,0	10,9	9,9	23,4	22,1	22,8	25,8	24,0	24,9	4,0	3,0	3,5	1,4	0,6	1,0
Rural	4,2	2,2	3,3	36,2	35,7	36,0	9,9	9,4	9,7	22,0	21,1	21,6	21,1	26,6	23,6	4,7	3,5	4,2	1,9	1,3	1,6
Total	5,0	1,6	3,4	32,4	37,5	34,9	9,2	10,6	9,9	23,0	21,9	22,5	24,6	24,6	24,6	4,2	3,1	3,7	1,5	0,7	1,2
Citrus Fruits																					
Urban	37,9	35,9	37,0	15,6	18,7	17,1	3,9	4,7	4,3	9,8	10,0	9,9	15,9	15,5	15,7	8,1	7,8	8,0	8,7	7,5	8,1
Rural	41,8	43,7	42,7	12,8	14,1	13,4	3,4	2,4	2,9	9,8	9,5	9,7	16,8	14,6	15,8	7,6	7,4	7,5	7,7	8,3	8,0
Total	39,0	37,8	38,4	14,9	17,6	16,2	3,8	4,1	3,9	9,8	9,8	9,8	16,1	15,3	15,7	8,0	7,7	7,8	8,4	7,7	8,1
Other Fresh Fruits																					
Urban	3,9	3,3	3,6	49,7	57,6	53,5	8,4	8,1	8,3	17,1	13,0	15,1	15,6	13,9	14,7	4,4	3,2	3,8	1,0	0,9	0,9
Rural	5,9	5,4	5,6	44,7	46,4	45,5	8,2	7,7	8,0	19,1	15,8	17,6	15,5	17,2	16,3	3,8	5,1	4,4	2,7	2,4	2,6
Total	4,4	3,8	4,1	48,4	54,9	51,5	8,4	8,0	8,2	17,6	13,7	15,7	15,5	14,7	15,1	4,3	3,7	4,0	1,4	1,3	1,4
Dried Vegetables Fruits																					
Urban	62,8	59,4	61,1	2,4	4,8	3,6	1,1	1,4	1,2	4,3	3,6	4,0	10,0	9,9	9,9	11,3	11,5	11,4	8,3	9,3	8,8
Rural	58,6	58,3	58,4	2,1	3,3	2,6	1,1	0,9	1,0	3,6	4,6	4,1	9,9	12,7	11,2	12,7	10,4	11,7	12,0	9,8	11,0
Total	61,7	59,1	60,5	2,3	4,5	3,3	1,1	1,3	1,2	4,1	3,9	4,0	9,9	10,6	10,3	11,6	11,2	11,4	9,2	9,4	9,3

Source: Turkey Nutrition and Health Survey 2010

Table 4.8 Distribution of 12 and 12+ Aged Individuals’ Physical Activity by Sex and Age Groups, (%), 2010

Age Group	Male					Female					Total				
	Do not Exercise	1-2 times in a week	3-4 times in a week	5-6 times in a week	Every day	Do not Exercise	1-2 times in a week	3-4 times in a week	5-6 times in a week	Every day	Do not Exercise	1-2 times in a week	3-4 times in a week	5-6 times in a week	Every day
12-14	41,4	19,2	5,4	7,2	26,2	69,8	13,9	5,1	3,9	7,0	56,2	16,4	5,2	5,5	16,2
15-18	44,6	21,7	13,7	5,0	14,6	72,5	10,9	3,3	3,4	9,9	57,8	16,6	8,8	4,3	12,4
19-30	69,5	15,1	5,4	1,9	7,7	76,6	10,0	5,6	1,2	6,5	72,5	13,0	5,5	1,6	7,2
31-50	73,2	9,4	5,3	1,3	10,6	74,8	8,0	4,7	2,3	10,2	74,0	8,7	5,0	1,8	10,4
51-64	70,8	4,8	4,3	2,2	17,8	78,0	2,9	5,7	1,7	11,7	74,4	3,9	5,0	1,9	14,7
65-74	77,1	3,0	3,8	2,0	13,7	86,9	2,0	3,1	0,8	6,9	82,4	2,4	3,4	1,3	10,0
74+	83,7	1,5	2,1	1,0	11,4	88,0	4,5	1,9	0,0	5,6	86,3	3,3	2,0	0,4	7,9
Turkey	67,6	11,5	5,8	2,4	12,4	76,5	7,7	4,7	2,0	9,0	71,9	9,7	5,3	2,2	10,8

Source: Turkey Nutrition and Health Survey 2010

Explanations for Chapter 4

- Body mass index is calculated by dividing the individual's body mass (kg) by the square of his or her height in meters.

Underweight : $BMI < 18,5$

Normal weight : $18,5 \leq BMI < 25$

Overweight : $25 \leq BMI < 29,9$

Obesity : $BMI \geq 30$

- Physical Activity: Physical activity in Turkey Nutrition and Health Survey in 2010 was categorized according to exercising 30 minutes or more in the last 7 days.

Chapter 5

Prevention of Diseases and Protection of Health

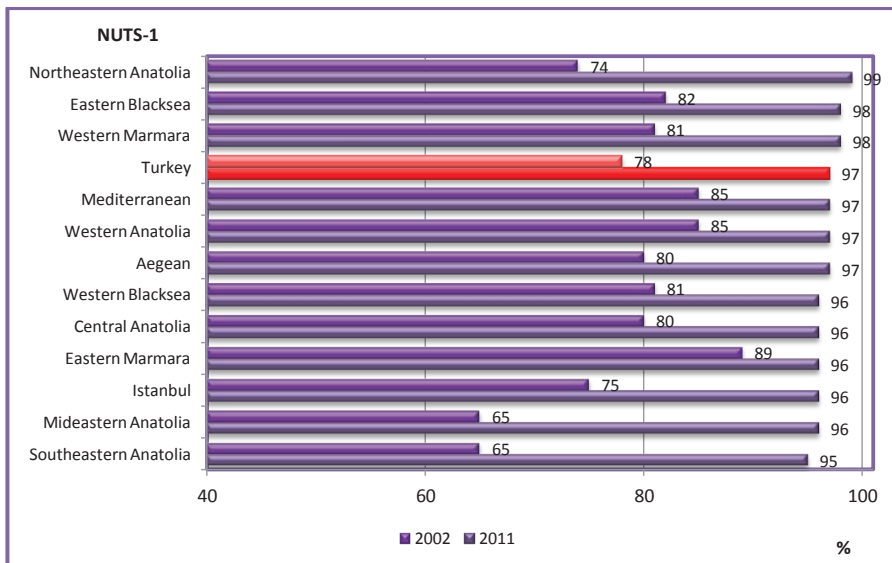


Table 5.1. Immunization Coverage by Years, (%), Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
DaPT 1	82	76	86	87	92	98	97	97	98	98
DaPT 2	80	71	85	84	89	96	96	96	98	98
DaPT 3	78	68	85	84	90	96	96	96	97	97
BCG	77	76	79	88	88	94	96	96	97	95
HBV 3	72	68	77	80	82	96	92	94	96	96
MMR	82	75	81	84	98	96	97	97	97	98
CPV 3	-	-	-	-	-	-	-	97	95	96

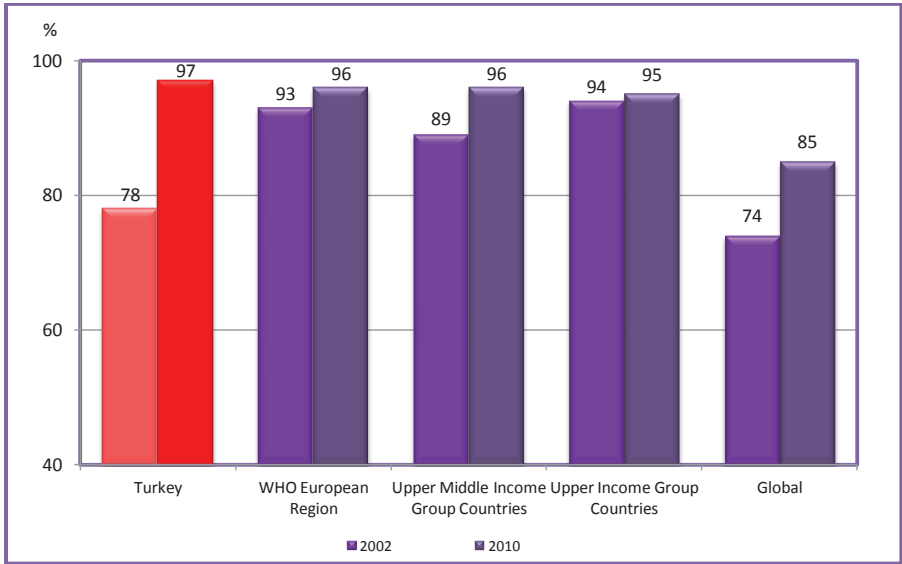
Source: Public Health Institution of Turkey

Figure 5.1. Third Dose Immunization Coverage of 5-Component Combined Vaccine (DaPT+IPV+Hib) by NUTS-1, (%), 2002, 2011



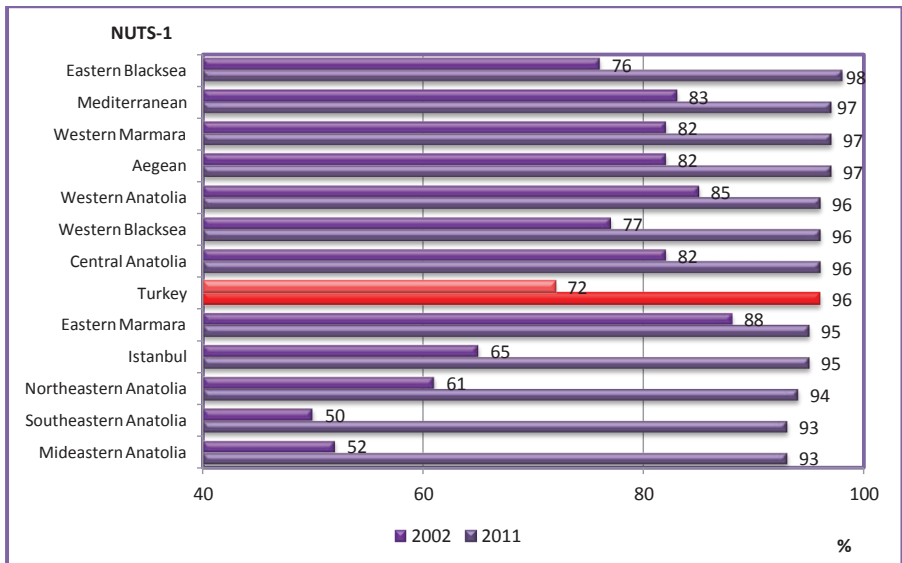
Source: Public Health Institution of Turkey

Figure 5.2. International Comparison of 5-component Combined Vaccine (DaPT+IPV+Hib) Immunization Coverage (%), 2002, 2010



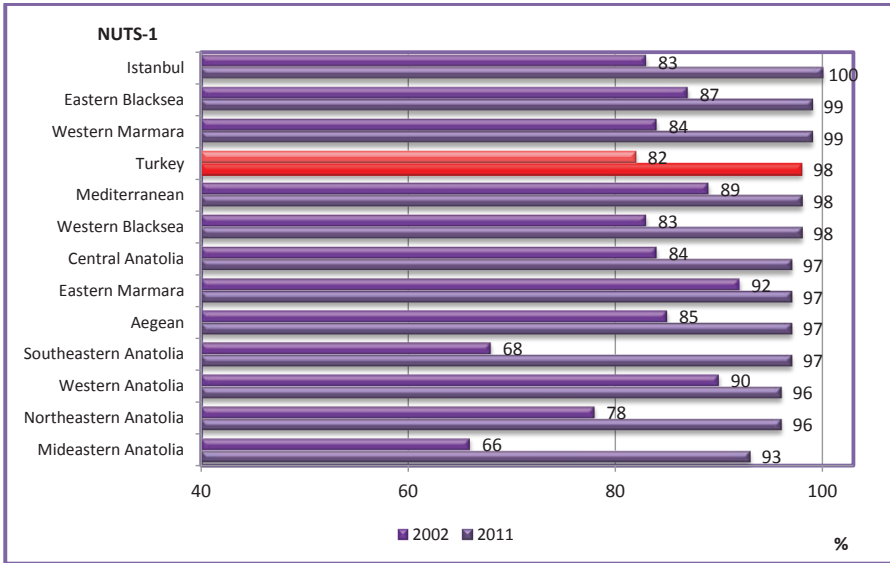
Source: WHO Global Health Observatory Database, WHO World Health Statistics 2011, 2012

Figure 5.3. HBV-3 Immunization Coverage by NUTS-1, (%), 2002, 2011



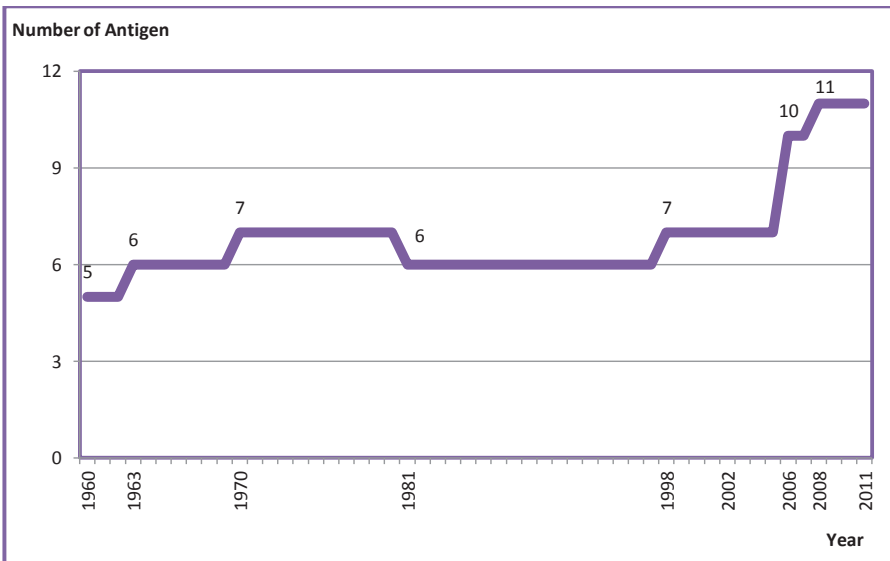
Source: Public Health Institution of Turkey

Figure 5.4. MMR Immunization Coverage by NUTS-1, (%), 2002, 2011



Source: Public Health Institution of Turkey

Figure 5.5. Number of Applied Vaccine Antigens by Years and Vaccine Schedule, Ministry of Health



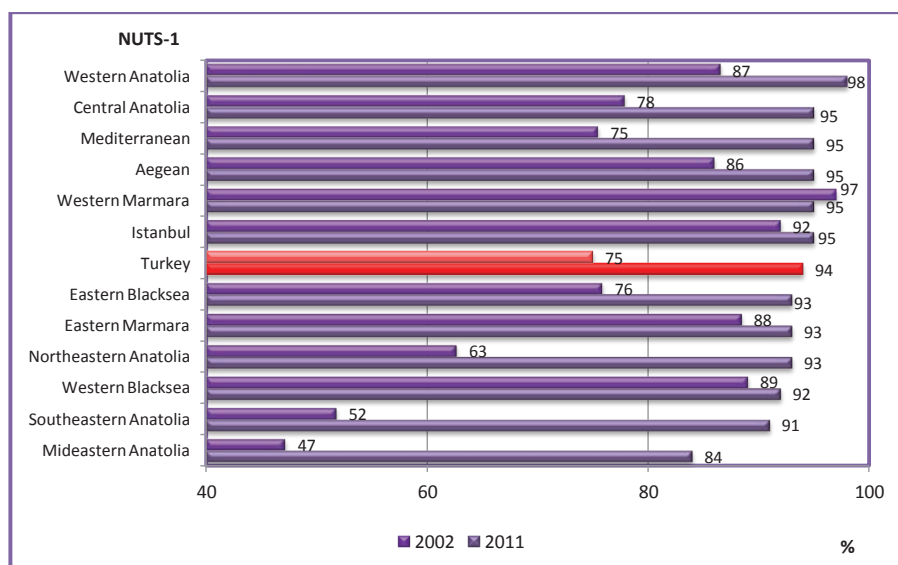
Source: Public Health Institution of Turkey

Table 5.2. Indicators of Mother and Child Healthcare and Family Planning by Years, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Births in Health Care Institution (%)	75	78	79	80	82	85	90	91	92	94
Antenatal Care Coverage (Minimum One Visits) (%)	70	81	83	86	88	91	92	93	94	95
Cesarean Sections Among All Births (%)	21	21	25	29	32	36	37	43	46	47
Contraceptive Method Use (Any Methods) in 15-49 Aged Married Women (%)	70	71	71	72	72	72	73	73	73	73

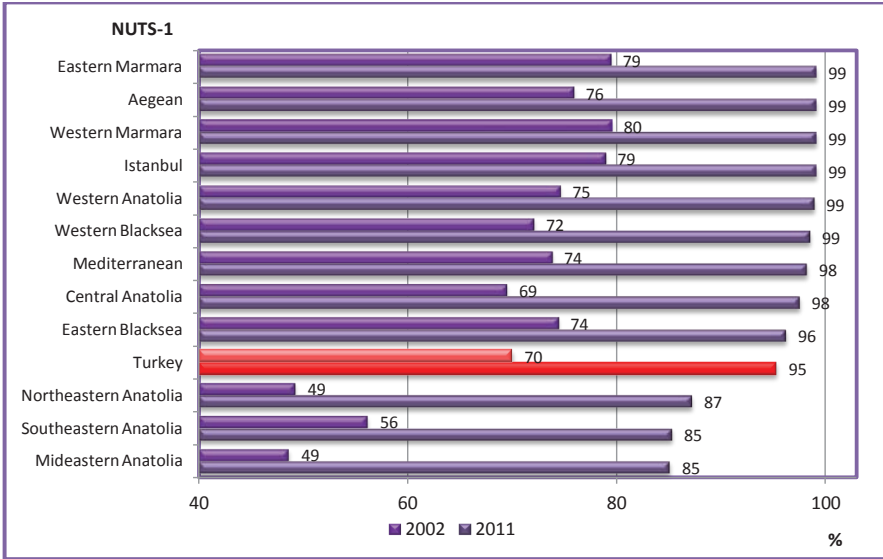
Source : 2003, 2008 TDHS, Other Years-Public Health Institution of Turkey

Figure 5.6. Proportion of Births in Health Care Institution by NUTS-1, (%), 2002, 2011



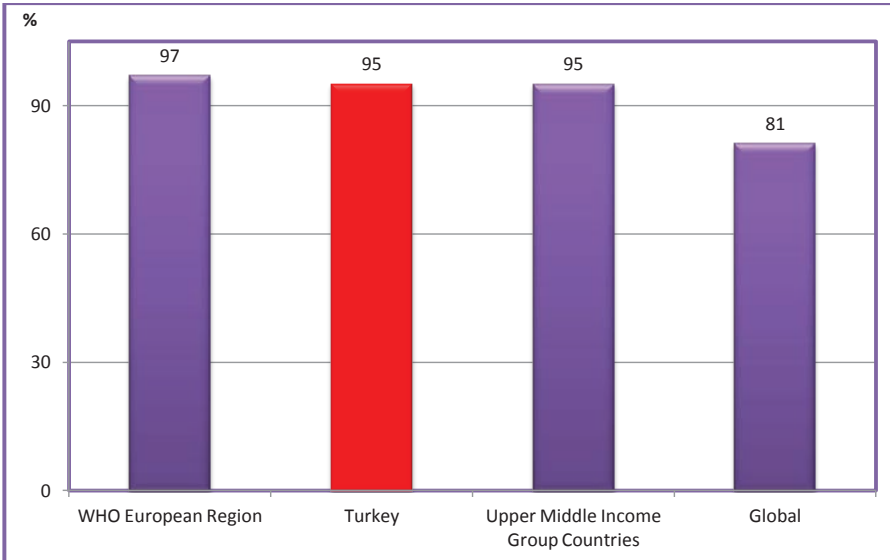
Source: Public Health Institution of Turkey

Figure 5.7. Proportion of Antenatal Care Coverage (Minimum 1 Visit), by NUTS-1, (%), 2002, 2011



Source: Public Health Institution of Turkey

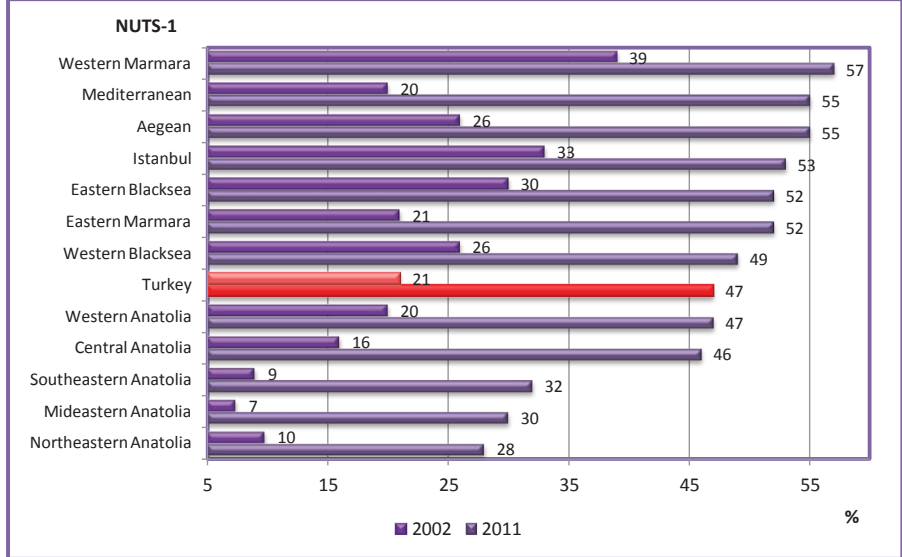
Figure 5.8. International Comparison of Antenatal Care Coverage (Minimum 1 Visit), (%), 2010



Source: WHO World Health Statistics 2012

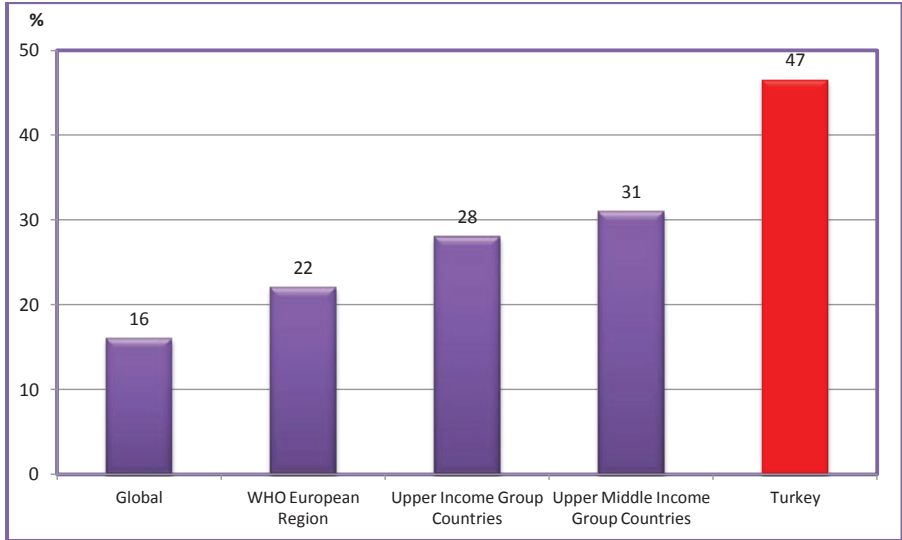
Note: Turkey data belongs to the year 2011.

Figure 5.9. Cesarean Sections Among All Births by NUTS-1, (%), 2002, 2011



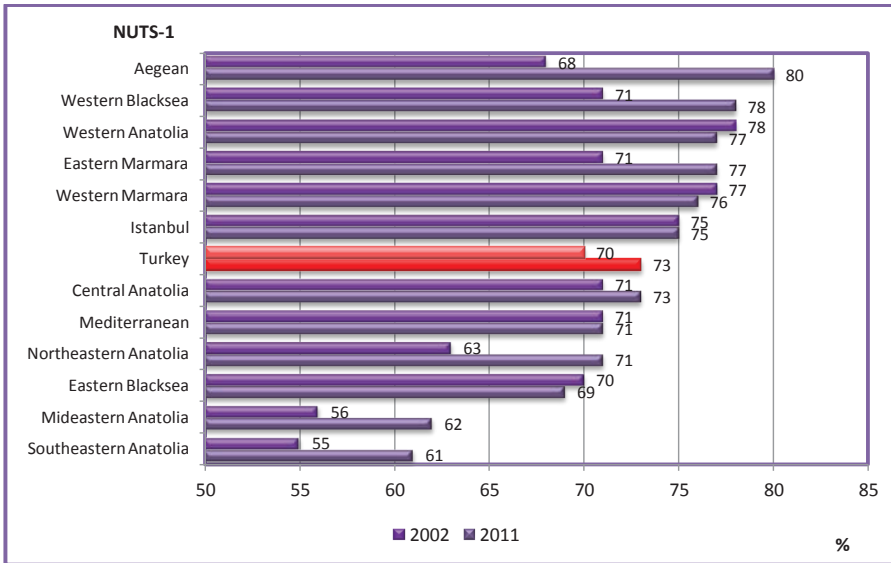
Source: Public Health Institution of Turkey

Figure 5.10. International Comparison of Cesarean Sections Among All Births, (%), 2010



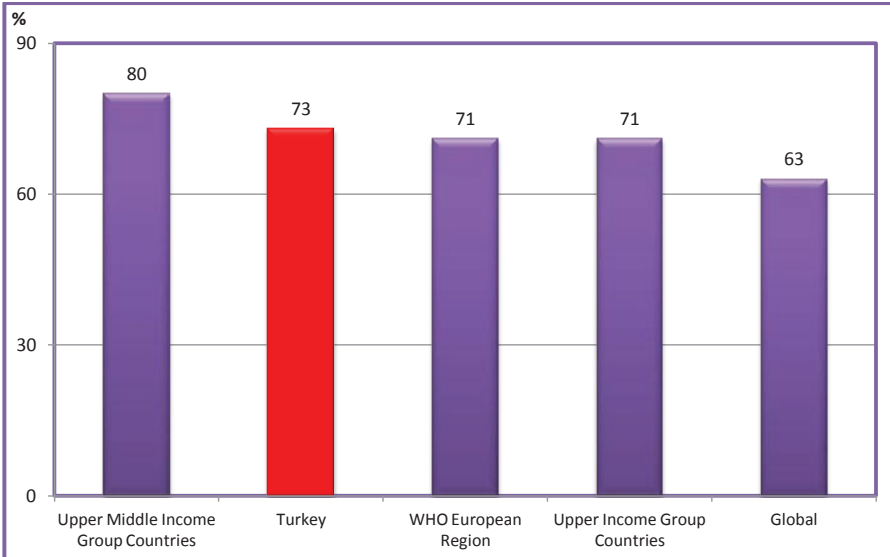
Source: Public Health Institution of Turkey 2011, WHO World Health Statistics 2012
Note: Turkey data belongs to the year 2011.

Figure 5.11. Proportion of Contraceptive Method Use (Any Method) Among 15-49 Aged Married Women by NUTS-1, (%), 2002, 2011



Source: Public Health Institution of Turkey

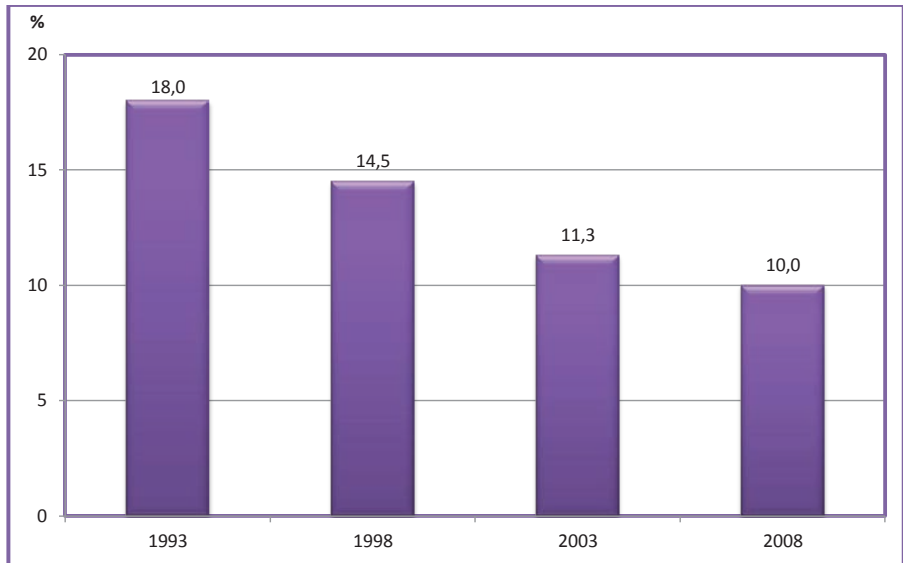
Figure 5.12. International Comparison of Contraceptive Method Use (Any Method) Among 15-49 Aged Married Women, (%), 2010



Source: Public Health Institution of Turkey 2011, WHO World Health Statistics 2012

Note: Turkey data belongs to the year 2011.

Figure 5.13. Proportion of Induced Abortion (in 100 Gestation), 1993, 1998, 2003, 2008, Turkey



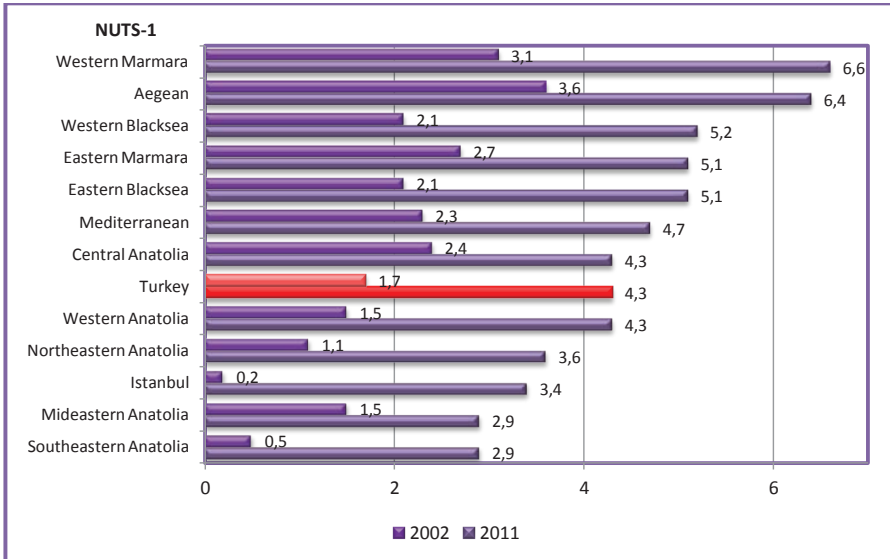
Source: TDHS, 1993, 1998, 2003, 2008

Table 5.3. Pregnant, Infant, Child and Puerperant Follow-Ups Activities by Years, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average Number of Follow-Ups per Pregnant	1,7	1,8	2,2	2,4	2,7	3,1	3,3	3,6	4,2	4,3
Average Number of Follow-Ups per Infant	3,4	3,3	4,3	4,8	5,2	6,0	6,4	6,8	7,1	8,1
Average Number of Follow-Ups per Child	1,0	1,0	1,3	1,5	1,5	1,6	1,6	1,6	1,6	2,0
Average Number of Follow-Ups per Puerperant	0,7	0,7	0,8	0,9	1,0	1,1	1,2	1,4	1,5	2,0

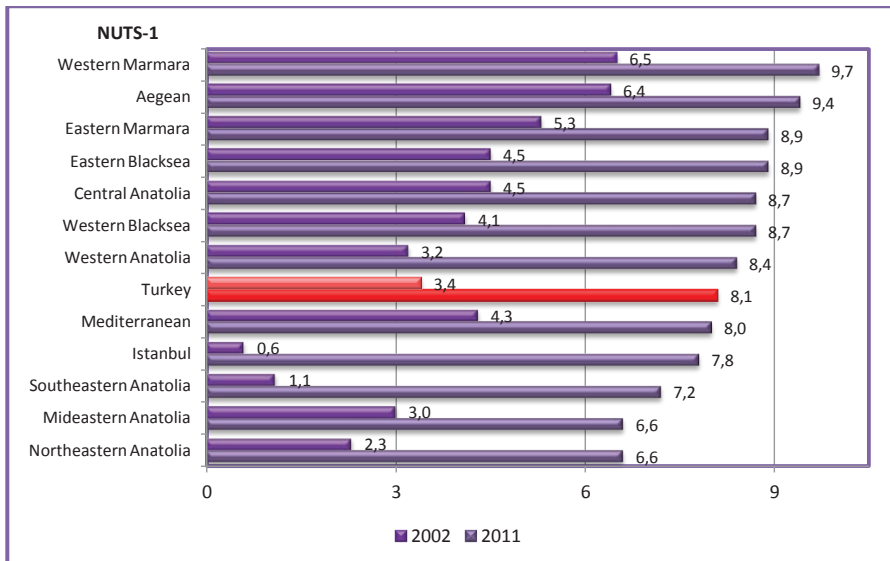
Source: Public Health Institution of Turkey

Figure 5.14. Average Number of Follow-Ups per Pregnant by NUTS-1, 2002, 2011



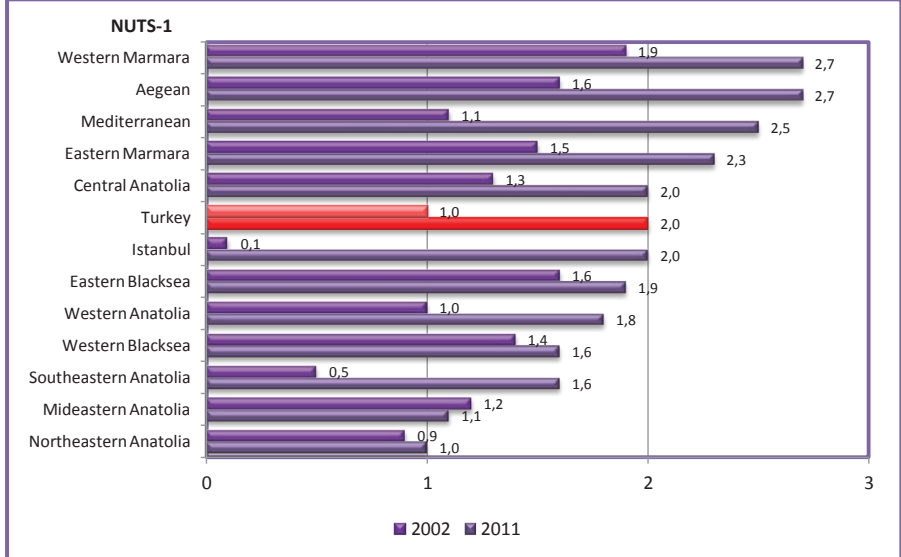
Source: Public Health Institution of Turkey

Figure 5.15. Average Number of Follow-Ups per Infant by NUTS-1, 2002, 2011



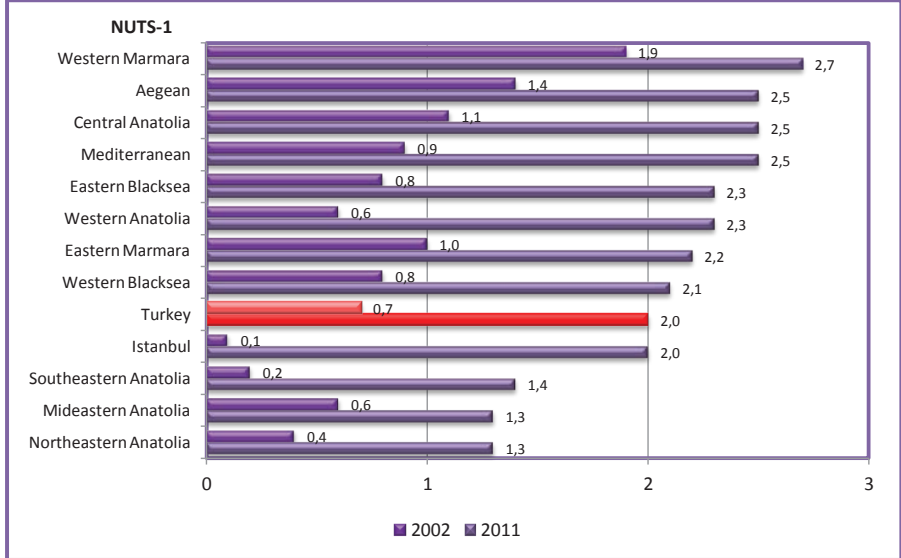
Source: Public Health Institution of Turkey

Figure 5.16. Average Number of Follow-Ups per Child by NUTS-1, 2002, 2011



Source: Public Health Institution of Turkey

Figure 5.17. Average Number of Follow-Ups per Puerperant Women by NUTS-1, 2002, 2011



Source: Public Health Institution of Turkey

Explanations for Chapter 5

- MMR vaccine was administered as measles vaccine alone before the year 2006.
- Hib-3 vaccination was started in 2007.
- The DPT vaccine which had been administered until 2008 was introduced in the form of DaBT + IPA + Hib (5 in one vaccine).
- CPV 3 vaccination started in November 2008.
- The population that was used to calculate the vaccination rates is the target population that was calculated by the Ministry of Health.
- The TDHS surveys, reflect the average value of the 5 years before it was conducted. The TDHS results in the tables and graphs are based on the year when they were conducted.

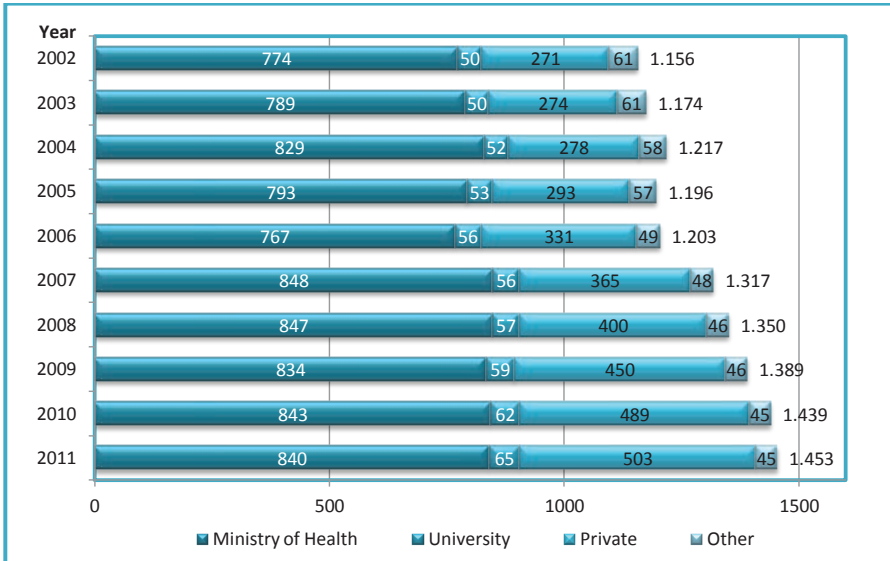


Chapter 6

Health Care Facilities and Infrastructures



Figure 6.1. Number of Hospitals by Years and Sectors, Turkey



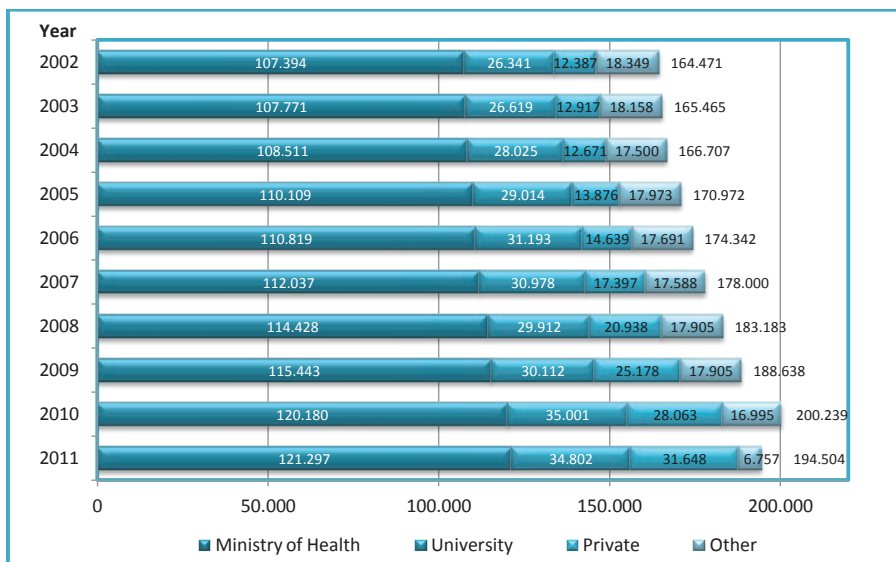
Source: General Directorate for Health Services

Table 6.1. Number of Hospitals by Years and Branches, Turkey

Branches	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
General Hospital	987	1.001	1.050	1.025	1.032	1.140	1.171	1.219	1.266	1.304
Obstetric and Child Hospital	64	65	62	70	71	73	74	63	63	50
Ophthalmology Hospital	8	8	8	9	10	15	18	24	26	25
Chest Diseases Hospital	28	27	27	24	23	22	22	19	18	17
Physical Treatment and Rehabilitation Centers	15	16	15	14	14	13	12	12	14	14
Psychiatry Hospital	9	9	9	9	10	10	11	12	12	11
Dental Hospital	1	3	3	3	3	4	3	5	5	8
Child Diseases Hospital	9	9	10	10	10	10	8	6	7	6
Cardiovascular Diseases Centers	6	6	6	6	6	6	7	11	11	6
Oncology Hospital	5	6	6	6	4	4	4	5	5	4
Bone Diseases Hospital	3	3	3	3	3	3	3	3	3	3
Occupational Diseases Hospital	3	3	2	2	2	2	2	2	2	2
Orthopedics and Traumatology Hospital	7	6	5	5	5	5	5	3	2	1
Lepra Hospital	2	2	2	2	2	2	2	1	1	1
Veneral Diseases Hospital	2	2	2	2	1	1	1	1	1	1
Diyabetes Hospital	2	2	2	2	2	2	2	2	2	0
Cardiology Hospital	5	6	5	4	5	5	5	1	1	0
Total	1.156	1.174	1.217	1.196	1.203	1.317	1.350	1.389	1.439	1.453

Source: General Directorate for Health Services

Figure 6.2. Number of Hospital Beds by Years and Sectors, Turkey



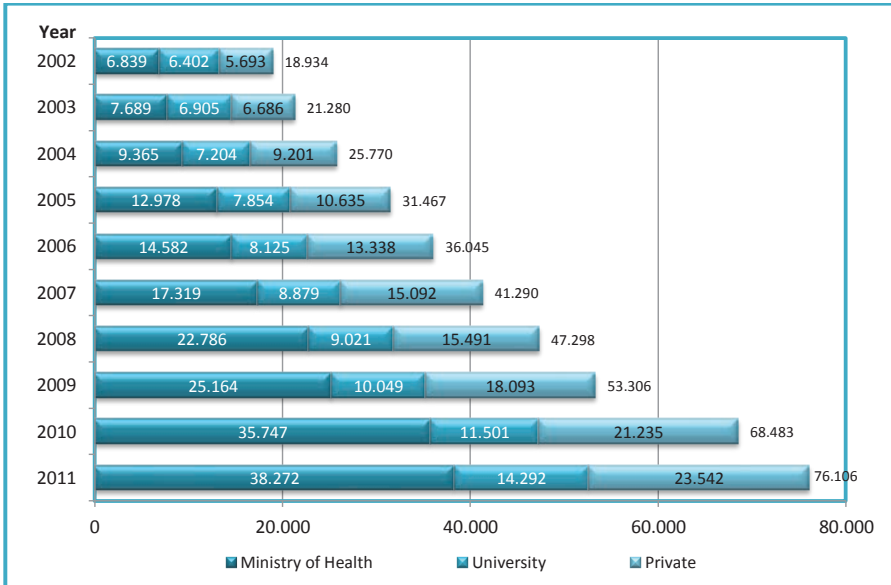
Source: General Directorate for Health Services

Table 6.2. Number of Hospital Beds by Years and Branches, Turkey

Branches	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
General Hospital	136.960	138.442	140.294	143.829	144.783	148.971	152.896	159.091	170.999	170.063
Obstetric and Child Hospital	8.666	8.663	8.534	9.365	10.353	11.473	11.527	10.662	10.554	8.401
Psychiatry Hospital	4.356	4.149	3.913	4.042	4.443	3.507	4.359	4.742	4.692	4.542
Chest Diseases Hospital	6.008	5.901	5.486	4.884	4.940	4.506	4.468	4.090	3.916	4.211
Child Diseases Hospital	1.630	1.667	1.815	1.993	2.407	2.563	2.333	2.056	2.260	2.083
Physical Treatment and Rehabilitation Centers	1.834	1.675	1.616	1.635	1.642	1.704	1.660	1.660	1.736	1.773
Oncology Hospital	899	914	977	1.025	1.475	1.004	973	1.295	1.294	974
Cardiovascular Diseases Centers	1.513	1.555	1.719	1.848	2.056	2.058	2.403	2.983	2.950	906
Bone Diseases Hospital	1.011	822	851	803	762	714	635	686	636	636
Ophthalmology Hospital	345	328	369	375	357	366	475	559	598	553
Occupational Diseases Hospital	161	208	160	178	160	152	156	156	156	156
Dental Hospital	12	12	22	44	38	38	55	77	75	96
Lepra Hospital	160	160	160	160	150	150	175	50	50	50
Veneral Diseases Hospital	99	99	99	99	79	79	79	79	31	31
Orthopedics and Traumatology Hospital	501	491	333	333	317	320	320	186	115	29
Diyabetes Hospital	54	64	64	64	64	64	64	66	61	0
Cardiology Hospital	262	315	295	295	316	331	605	200	116	0
Total	164.471	165.465	166.707	170.972	174.342	178.000	183.183	188.638	200.239	194.504

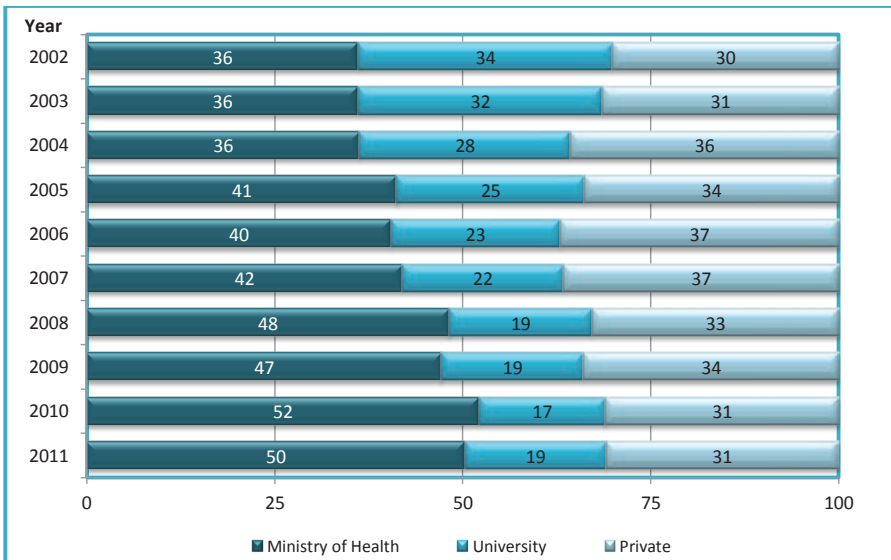
Source: General Directorate for Health Services

Figure 6.3. Number of Qualified Beds by Years and Sectors, Turkey



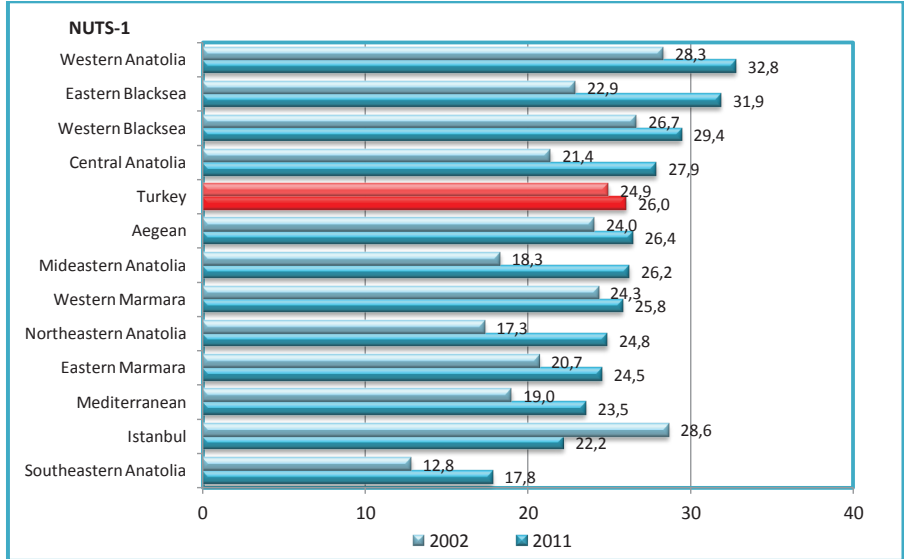
Source: General Directorate for Health Services

Figure 6.4. Distribution of Qualified Beds by Years and Sectors, (%), Turkey



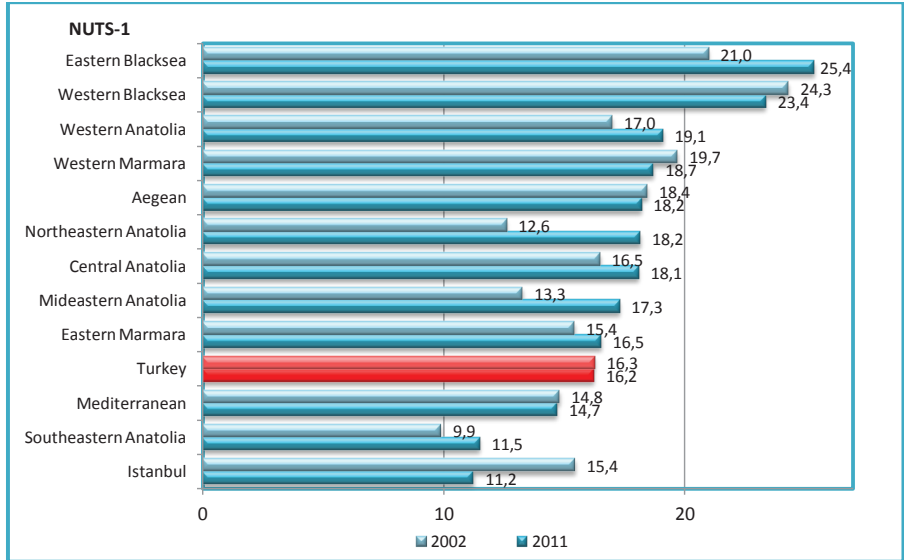
Source: General Directorate for Health Services

Figure 6.5. Number of Hospital Beds per 10.000 Population by NUTS-1, All Sectors, 2002, 2011



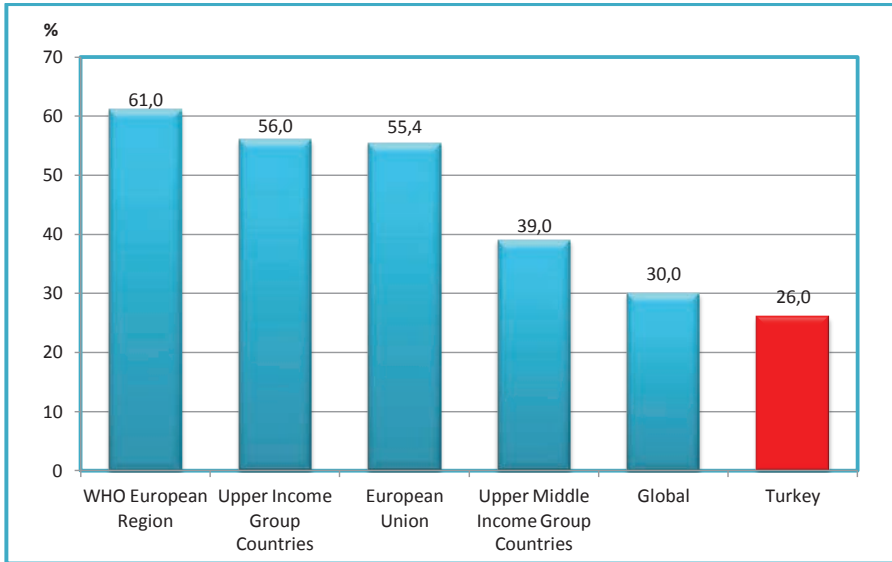
Source: General Directorate for Health Services

Figure 6.6. Number of Hospital Beds per 10.000 Population by NUTS-1, Ministry of Health, 2002, 2011



Source: General Directorate for Health Services

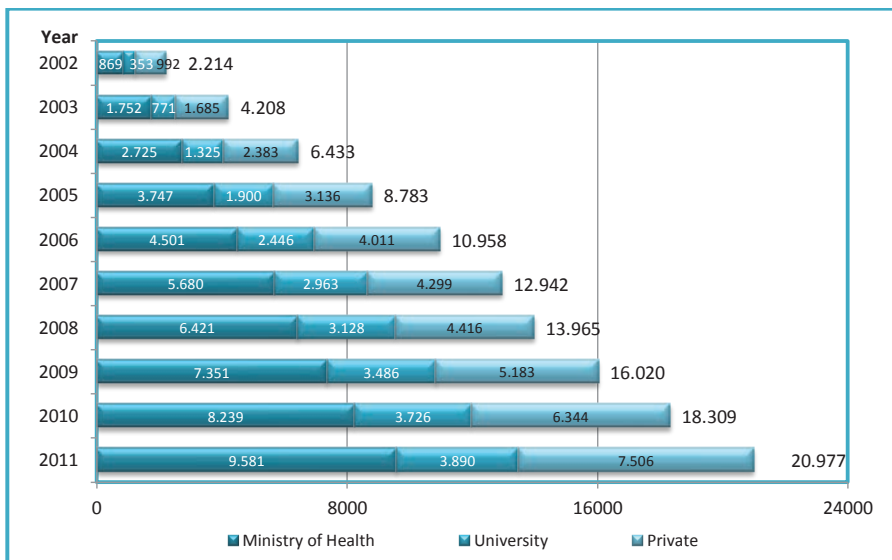
Figure 6.7. International Comparison of Number of Hospital Beds per 10.000 Population, 2010



Source: General Directorate for Health Services, WHO World Health Statistics 2012

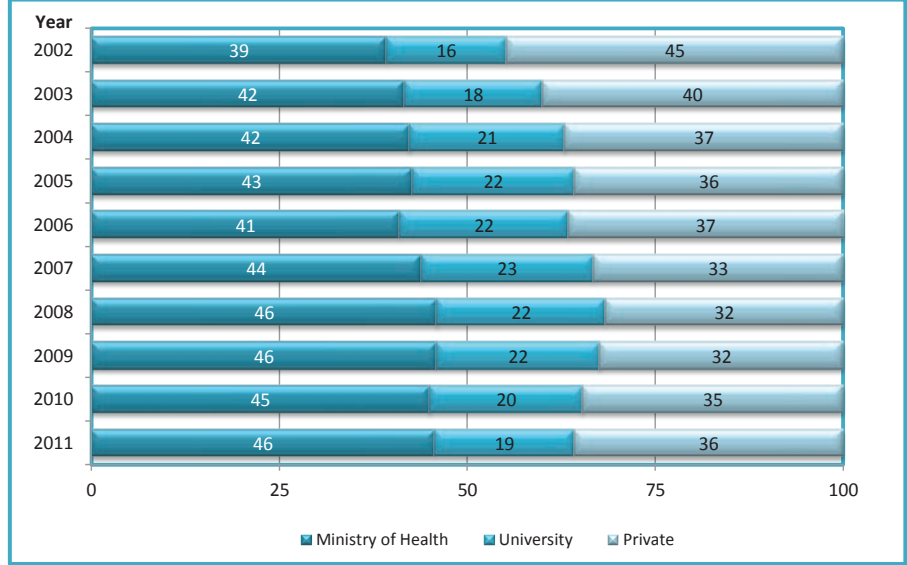
Note: Turkey data belongs to the year 2011.

Figure 6.8. Total Number of Intensive Care Unit Beds by Years and Sectors, Turkey



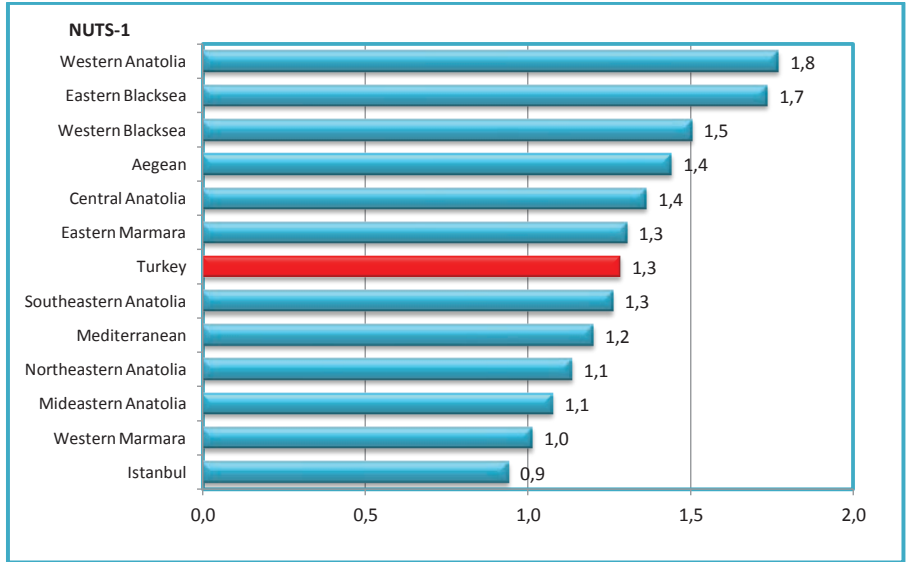
Source: General Directorate for Health Services

Figure 6.9. Distribution of Intensive Care Unit Beds by Years and Sectors, (%); Turkey



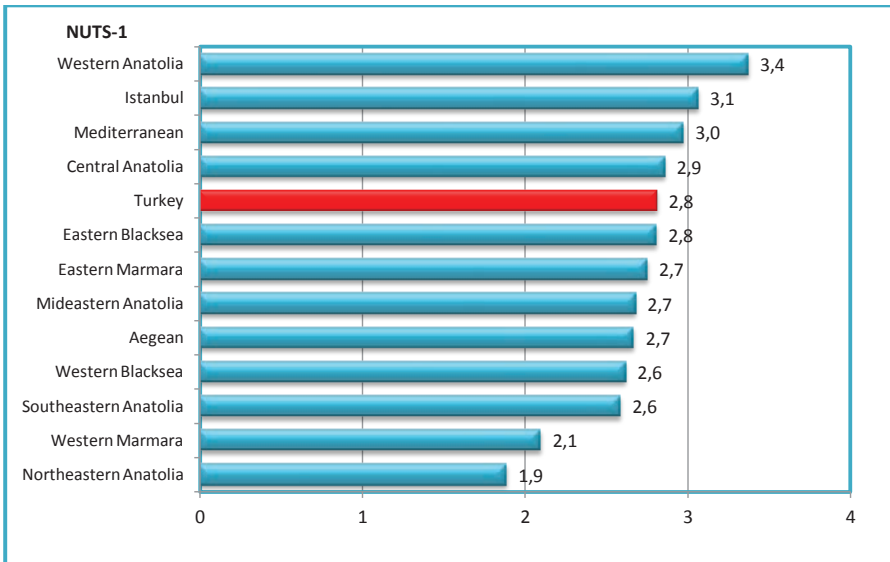
Source: General Directorate for Health Services

Figure 6.10. Number of Intensive Care Unit Beds per 10.000 Population by NUTS-1, Ministry of Health, 2011



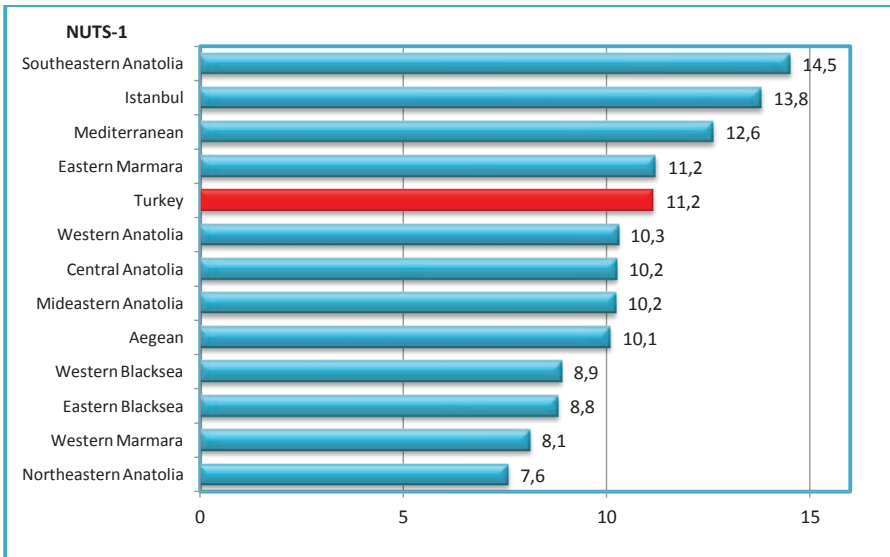
Source: General Directorate for Health Services

Figure 6.11. Number of Intensive Care Unit Beds per 10.000 Population by NUTS-1, All Sectors, 2011



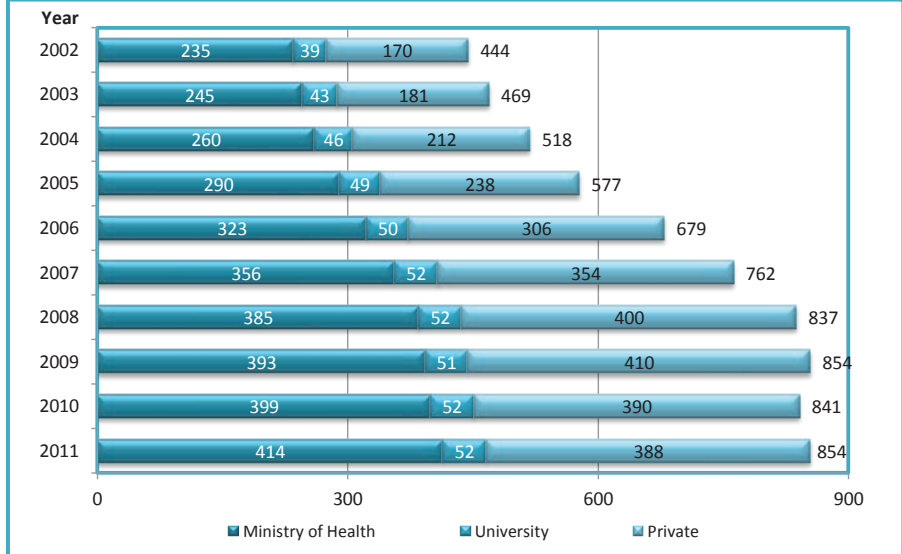
Source: General Directorate for Health Services

Figure 6.12. Proportion of Intensive Care Unit Beds to All Beds by NUTS-1, (%), All Sectors, 2011



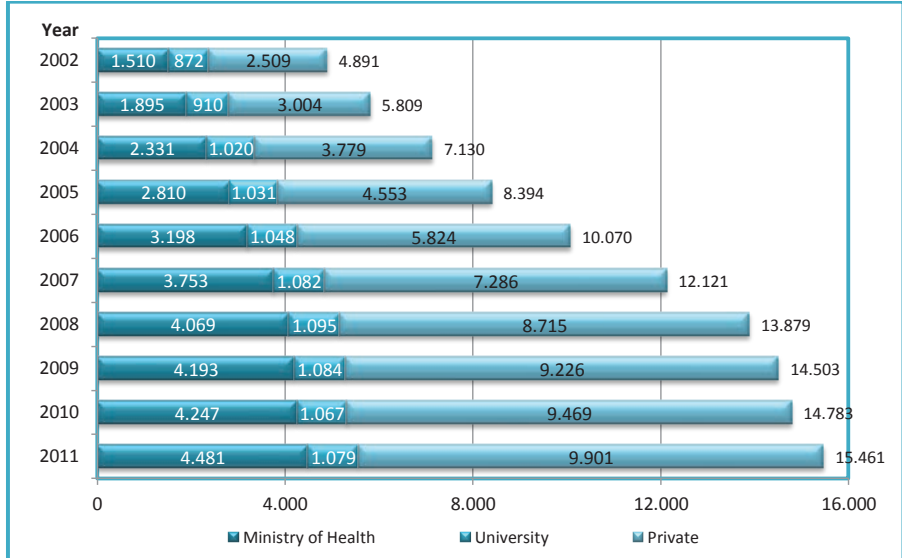
Source: General Directorate for Health Services

Figure 6.13. Number of Hemodialysis Centers by Years and Sectors, Turkey



Source: General Directorate for Health Services

Figure 6.14. Number of Actively Used Hemodialysis Devices by Years and Sectors Turkey



Source: General Directorate for Health Services

Table 6.3. Actively Used Hemodialysis Devices per 1.000.000 Population by NUTS-1 and Sectors, 2011

	Ministry of Health	University	Private	Total
Western Black sea	115,7	13,8	136,7	266,2
Western Anatolia	45,4	34,9	181,5	261,7
Aegean	63,9	13,9	176,4	254,2
Eastern Black sea	149,2	4,8	90,7	244,7
Central Anatolia	78,6	10,7	148,3	237,5
Eastern Marmara	66,4	12,8	147,3	226,5
Western Marmara	77,9	5,6	129,6	213,1
Turkey	60,0	14,4	132,5	206,9
Mediterranean	56,2	21,7	123,6	201,6
Istanbul	18,7	7,0	165,0	190,7
Northeastern Anatolia	99,1	9,9	30,9	139,9
Mideastern Anatolia	72,8	19,4	43,7	135,9
Southeastern Anatolia	44,8	9,9	49,8	104,4

Source: General Directorate for Health Services

Table 6.4. Number of Devices in Inpatient Health Care Facilities by Years, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
MRI	58	99	149	199	310	410	517	647	697	781
CT	323	376	446	509	593	675	759	838	904	1.088
ECHO	259	338	391	453	518	598	689	791	881	1.181
Ultrasound	1.005	1.164	1.309	1.493	1.699	1.900	2.117	2.283	2.436	3.775
Doppler Ultrasonography	681	743	805	845	920	1.006	1.095	1.251	1.397	2.091

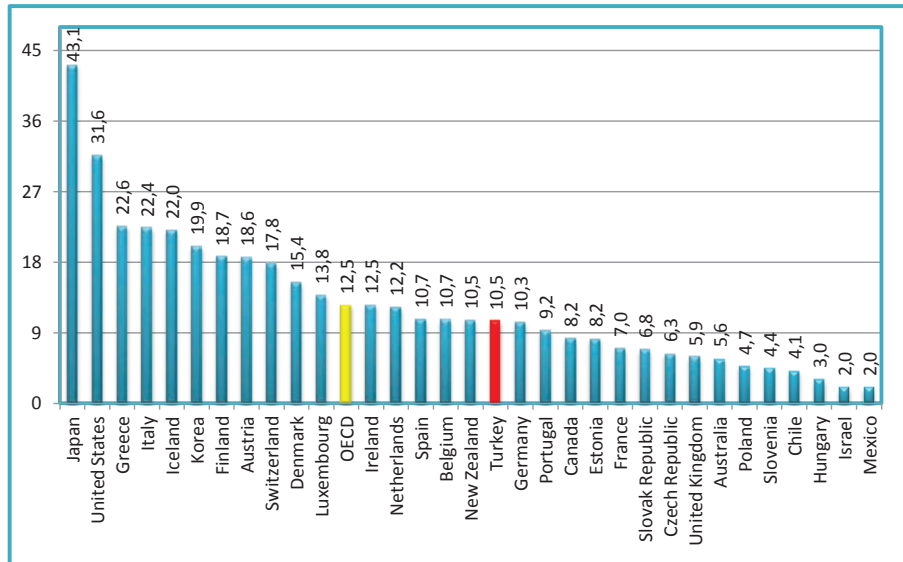
Source: General Directorate for Health Services

Table 6.5. Number of MRI Devices in Inpatient Health Care Facilities per 1.000.000 Population by NUTS-1 and Sectors, 2011

	Ministry of Health	University	Private	Total
Istanbul	2,3	0,6	9,9	12,8
Aegean	5,8	1,2	5,3	12,3
Eastern Black sea	5,6	0,4	5,6	11,5
Mideastern Anatolia	3,2	1,9	6,2	11,3
Western Marmara	5,3	1,2	4,0	10,6
Turkey	3,7	1,1	5,7	10,5
Western Anatolia	4,3	1,8	4,2	10,3
Western Black sea	4,9	1,6	3,6	10,1
Mediterranean	3,4	1,2	5,5	10,0
Central Anatolia	2,9	1,3	5,7	9,9
Eastern Marmara	2,9	1,0	5,0	8,9
Northeastern Anatolia	4,0	1,3	1,8	7,2
Southeastern Anatolia	2,3	0,5	4,0	6,8

Source: General Directorate for Health Services

Figure 6.15. International Comparison of Number of MRI Devices in Inpatient Health Care Facilities per 1.000.000 Population, 2010



Source: General Directorate for Health Services, OECD Health Data 2012

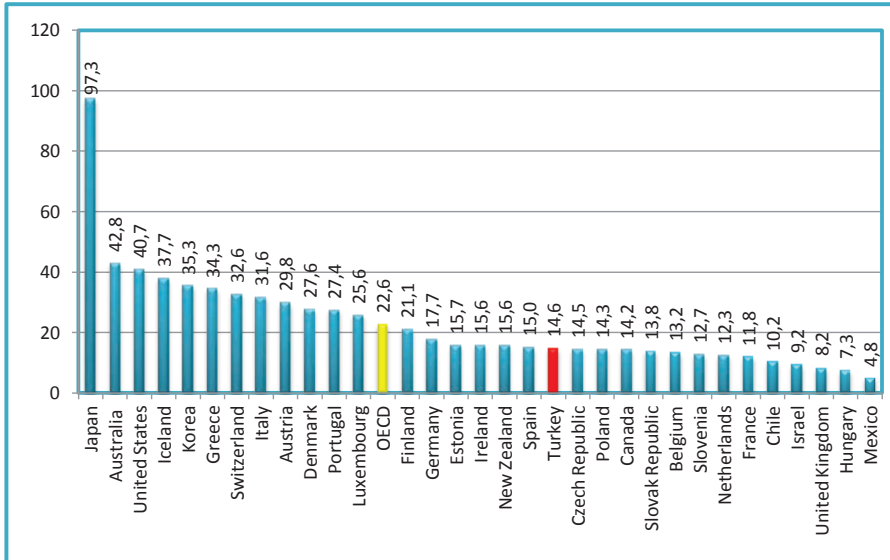
Note: Turkey data belongs to the year 2011.

Table 6.6. Number of CT Devices in Inpatient Health Care Facilities per 1.000.000 Population by NUTS-1 and Sectors, 2011

	Ministry of Health	University	Private	Total
Western Anatolia	7,7	3,5	6,1	17,3
Istanbul	3,7	1,0	12,0	16,7
Western Black sea	9,4	1,6	4,7	15,6
Aegean	7,3	1,7	6,4	15,4
Western Marmara	7,5	1,2	6,5	15,3
Mideastern Anatolia	5,9	1,6	7,3	14,8
Turkey	6,0	1,5	7,1	14,6
Mediterranean	5,2	1,8	7,5	14,4
Eastern Blacksea	8,4	0,8	4,8	13,9
Central Anatolia	5,7	1,6	6,5	13,8
Eastern Marmara	4,7	1,2	6,2	12,1
Northeastern Anatolia	6,7	1,8	2,2	10,8
Southeastern Anatolia	5,2	0,9	4,1	10,2

Source: General Directorate for Health Services

Figure 6.16. International Comparison of Number of CT Devices in Inpatient Health Care Facilities per 1.000.000 Population, 2010



Source: General Directorate for Health Services, OECD Health Data 2012

Note: Turkey data belongs to the year 2011.

Table 6.7. Number of Ultrasound Devices in Inpatient Health Care Facilities per 1.000.000 Population by NUTS-1 and Sectors, 2011

	Ministry of Health	University	Private	Total
Central Anatolia	37,7	5,2	18,2	61,1
Eastern Black sea	42,2	3,2	12,3	57,7
Western Anatolia	32,5	10,3	14,7	57,5
Northeastern Anatolia	40,8	9,0	4,5	54,3
Istanbul	19,2	2,3	30,4	51,9
Western Black sea	36,9	2,5	12,3	51,6
Mediterranean	28,1	4,1	18,5	50,8
Turkey	28,4	4,6	17,5	50,5
Aegean	32,5	2,5	15,2	50,2
Mideastern Anatolia	29,7	6,7	13,2	49,6
Western Marmara	30,8	7,8	10,0	48,6
Southeastern Anatolia	25,1	6,4	12,2	43,6
Eastern Marmara	19,7	2,2	17,7	39,6

Source: General Directorate for Health Services

Table 6.8. Number of Doppler Ultrasound Devices in Inpatient Health Care Facilities per 1.000.000 Population by NUTS-1 and Sectors, 2011

	Ministry of Health	University	Private	Total
Western Anatolia	23,3	7,3	9,4	39,9
Mideastern Anatolia	17,0	3,0	12,1	32,1
Istanbul	9,8	3,4	18,1	31,3
Central Anatolia	12,5	4,4	13,0	29,9
Eastern Marmara	15,8	2,6	11,2	29,6
Eastern Black sea	23,1	0,8	5,6	29,4
Turkey	13,8	3,7	10,4	28,0
Western Marmara	13,4	4,0	7,8	25,2
Aegean	12,2	4,3	8,4	24,9
Mediterranean	11,5	2,8	9,7	24,0
Northeastern Anatolia	14,8	4,0	3,1	22,0
Southeastern Anatolia	10,9	4,1	6,8	21,7
Western Black sea	14,5	2,2	4,5	21,2

Source: General Directorate for Health Services

Table 6.9. Number of ECO Devices in Inpatient Health Care Facilities per 1.000.000 Population by NUTS-1 and Sectors, 2011

	Ministry of Health	University	Private	Total
Western Anatolia	8,1	5,7	7,3	21,1
Istanbul	5,9	1,4	10,5	17,8
Eastern Blacksea	11,9	1,2	4,4	17,5
Western Blacksea	9,6	2,5	5,1	17,2
Central Anatolia	4,7	3,1	8,8	16,7
Turkey	6,9	2,2	6,8	15,8
Mideastern Anatolia	7,5	1,6	5,7	14,8
Eastern Marmara	5,6	2,0	6,9	14,5
Mediterranean	5,5	2,4	6,5	14,4
Southeastern Anatolia	7,7	1,3	5,0	13,9
Aegean	6,6	1,3	5,6	13,5
Western Marmara	6,2	1,6	5,6	13,4
Northeastern Anatolia	9,0	2,2	0,9	12,1

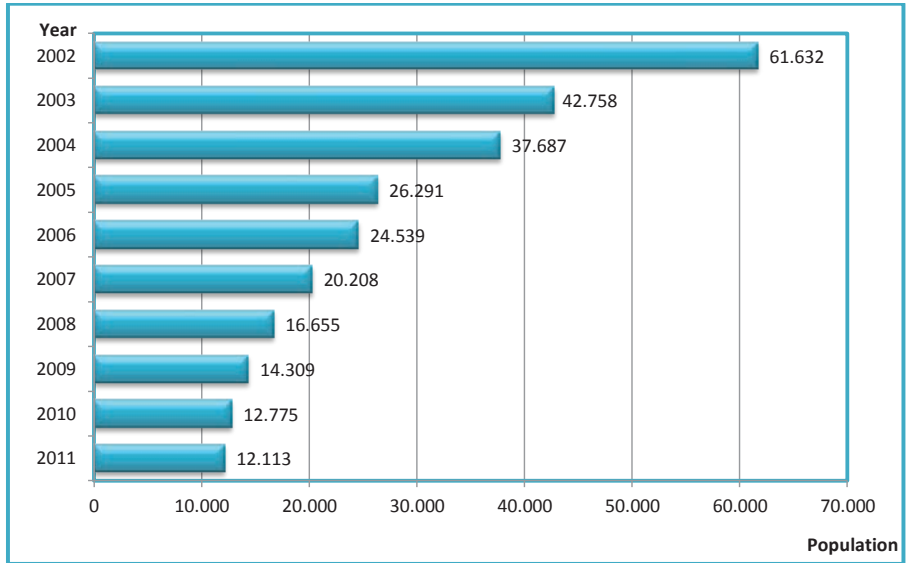
Source: General Directorate for Health Services

Table 6.10. Number of MoH Institutions Providing Oral and Dental Health Care Services, by Years, Turkey

	Dental Hospital	Oral and Dental Health Center	State Hospital Dental Treatment and Prosthesis Center	Dental Outpatient Clinics	Dental Unit
2002	1	14	103	465	1.071
2003	2	14	101	477	1.564
2004	2	20	99	489	1.797
2005	2	35	107	581	2.608
2006	3	44	106	580	2.828
2007	3	94	96	615	3.493
2008	2	123	77	622	4.294
2009	2	123	85	626	5.071
2010	2	121	96	661	5.771
2011	5	117	84	542	6.169

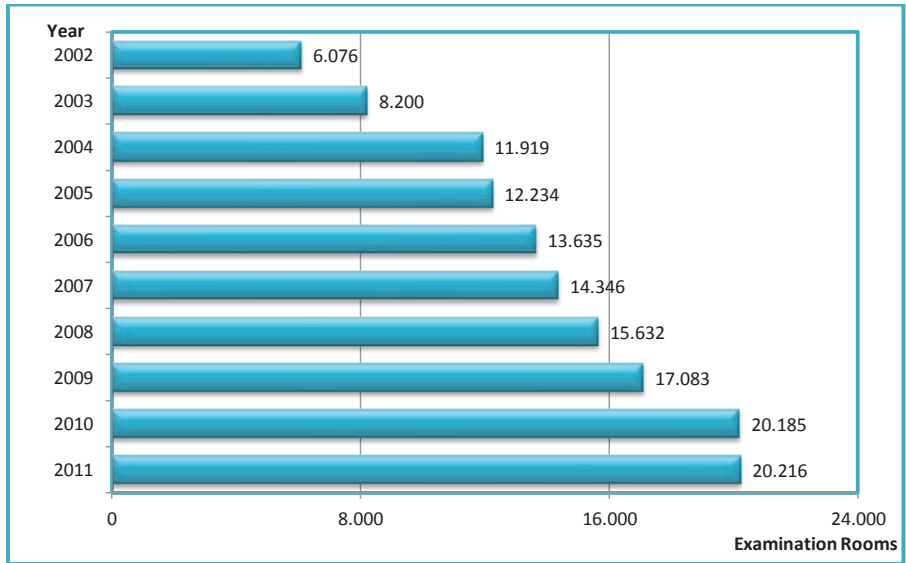
Source: General Directorate for Health Services

Figure 6.17. Population per Dental Unit by Years, Ministry of Health, Turkey



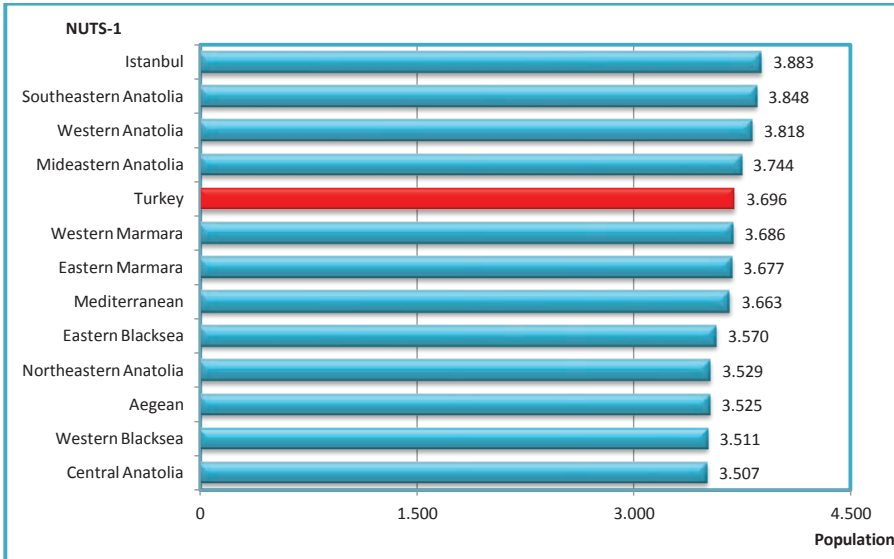
Source: General Directorate for Health Services

Figure 6.18. Number of Family Health Center Medical Examination Rooms by Years, Turkey



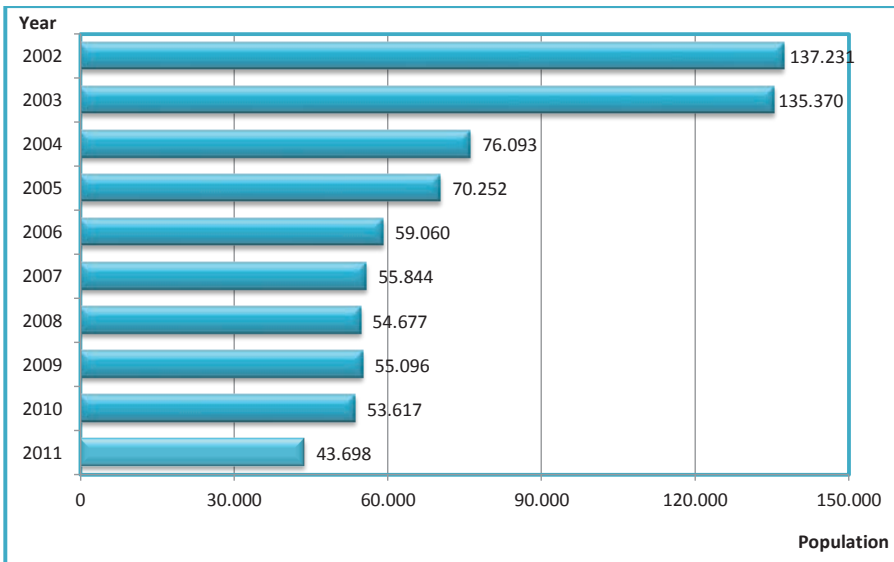
Source: Public Health Institution of Turkey

Figure 6.19. Population per Actively Working Family Physician by NUTS-1, 2011



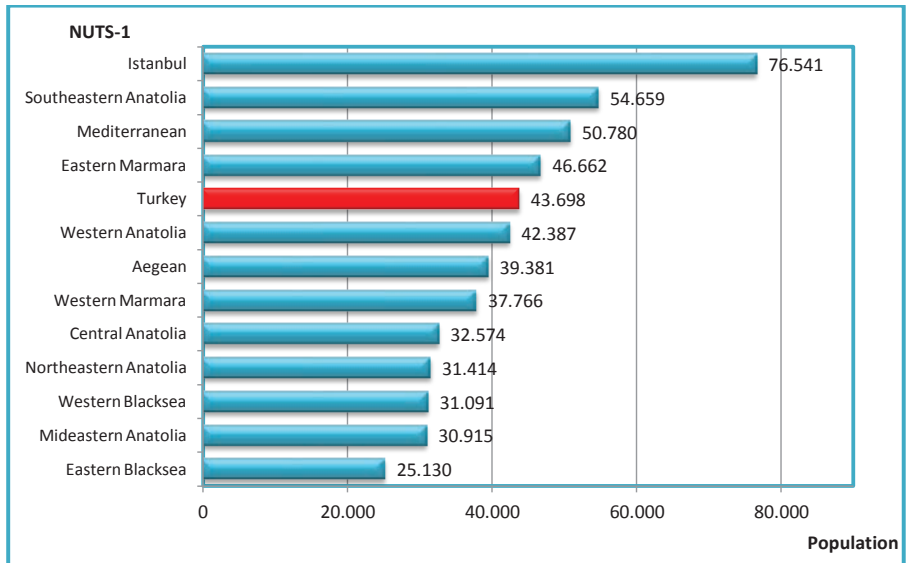
Source: Public Health Institution of Turkey

Figure 6.20. Population per 112 Emergency Care Station by Years, Ministry of Health, Turkey



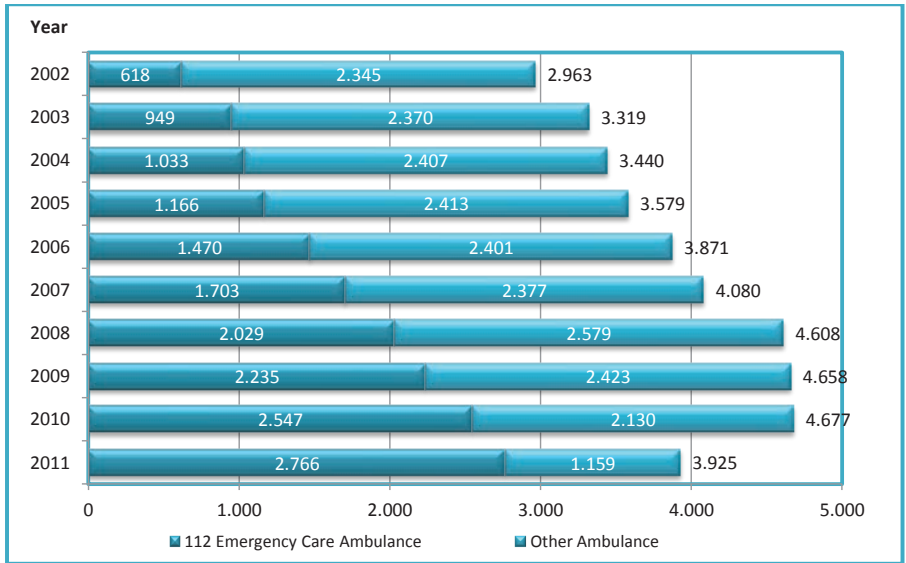
Source: General Directorate for Emergency Health Services

Figure 6.21. Population per 112 Emergency Care Station by NUTS-1, Ministry of Health, 2011



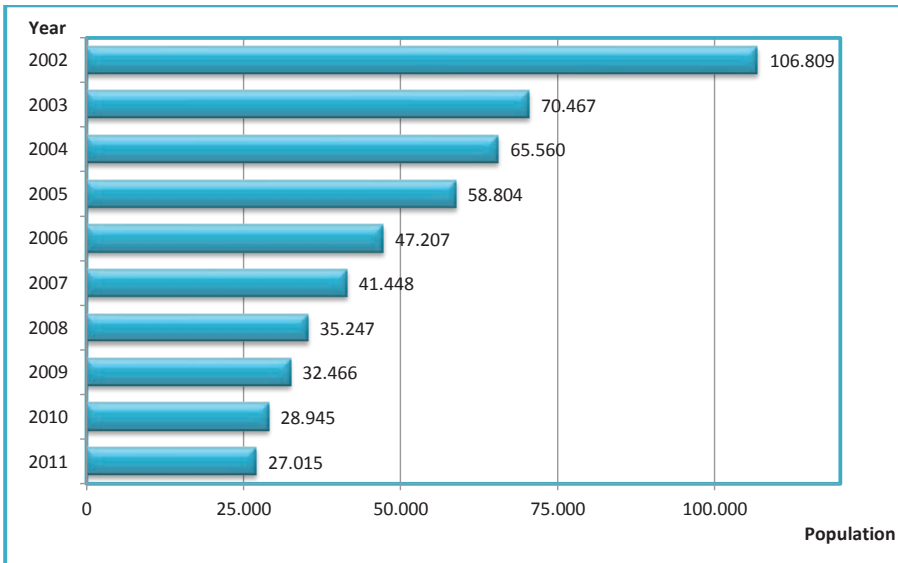
Source: General Directorate for Emergency Health Services

Figure 6.22. Number of Ambulances by Years, Ministry of Health, Turkey



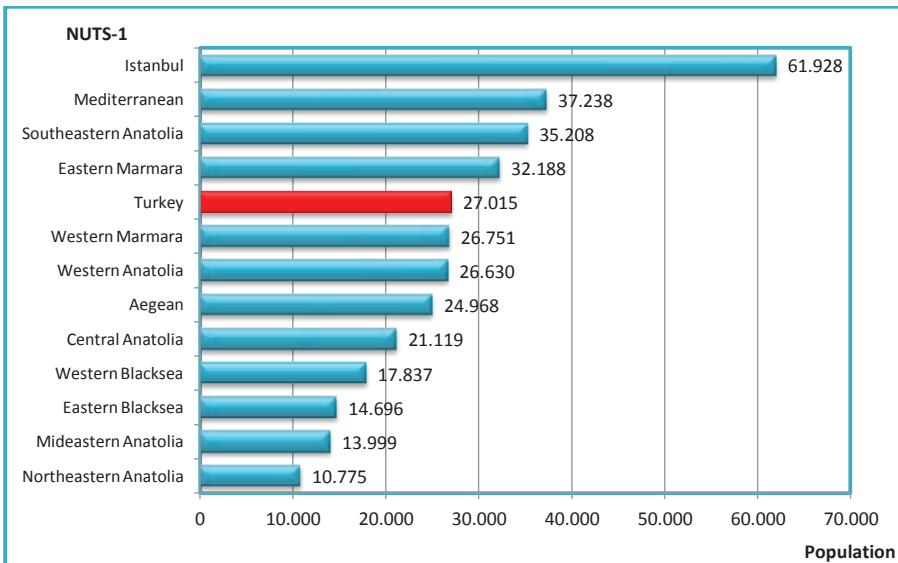
Source: General Directorate for Emergency Health Services

Figure 6.23. Population per 112 Emergency Care Ambulance by Years, Ministry of Health, Turkey



Source: General Directorate for Emergency Health Services

Figure 6.24. Population per 112 Emergency Care Ambulance by NUTS-1, Ministry of Health, 2011



Source: General Directorate for Emergency Health Services

Table 6.11. Number of Vehicles and Transferred Patients by Years and Ambulance Types, Ministry of Health, Turkey

	2007		2008		2009		2010		2011	
	Number of Vehicle	Number of Transferred Patients	Number of Vehicles	Number of Transferred Patients	Number of Vehicles	Number of Transferred Patients	Number of Vehicles	Number of Transferred Patients	Number of Vehicles	Number of Transferred Patients
Ambulance Helicopter	-	-	-	-	17	2.475	17	4.770	19	3.264
Air Ambulance	-	-	-	-	-	-	2	612	4	1.400
Snow Track Ambulance	64	66	64	102	114	130	114	193	224	537
Sea Ambulance	4	132	4	162	4	159	4	165	4	356

Source: General Directorate for Emergency Health Services

Explanations for Chapter 6

- Tables and charts in which the number of hospitals is indicated: “Other” is defined as the hospitals other than MoH, University and Private sector which are hospitals owned by Ministry of Defence (MoD), municipalities and other public institutions.
- Tables and charts in which the number of hospital beds are indicated, “Other” is defined as the hospital beds other than MoH, University and Private sector which are beds in hospitals owned by MoD, municipalities and other public institutions.
- In order to make the number of hospitals and hospital beds comparable across sectors, the number of institutions and beds belonging to the Social Security Institution were included in the Ministry of Health between years 2002 and 2005.
- In tables regarding number of hospitals and beds by branches, the number of hospitals and beds owned by other public institutions and local administrations are included in the number of hospitals and beds of general hospitals.
- Hospital beds: beds that are used for care and treatment of patients for more than 24 hours, and located in the patient rooms or units that provide continuous medical care for patients. Beds in intensive care units, in premature and newborn units (incubator, open infant bed), in burn centers and burn unit rooms and skilled beds were included in Hospital Beds. Actual beds were used in all calculations related to the beds in institutions.
- Skilled Beds: with a bathroom, a toilet, and a maximum of 2 patient beds, television, telephone, refrigerator, dining table, shelf and a folding companion seat. These figures are included in the total number of beds. The number of skilled beds in other institutions (excluding the Ministry of Defense) were included in the private sector.
- MoD data were only used for the number of hospitals and beds, and were included in the “Other” sector in the tables and graphs. The number of beds in the Ministry of Defense hospitals for the years 2002-2010 is 15 900, and 6 457 for 2011.
- The population in 2002 is given by TURKSTAT only as the total population. Distribution of the population by NUTS-1 in 2002 was projected by taking the distribution of the results of the 2000 Population Census by NUTS-1 into consideration.
- While the number of devices were being calculated, MRI, CT, hemodialysis, ultrasound, Doppler ultrasound, echocardiography devices belonging to the “Other” institutions (except the MoD) were included in the private sector.
- The tables and graphs which show the number of Family Health Centers and Family Health Center examination rooms: the data for the years 2002-2006 include health centers, the data for the years 2007-2009 include health centers and family health centers, and the data for 2010 and 2011 family health centers and it’s examination rooms .
- 112 Emergency care ambulance; a land vehicle with an ambulance crew, technical and medical equipment that are able to provide emergency medical intervention in any emergency situation for the sick and injured at the emergency scene and in the ambulance. “Other Ambulances”: ambulances of the health centers, hospitals and provincial health directorates. The private sector ambulances are not included in the total.



Chapter 7

Utilization of Health Care Services

Utilization of Health
Care Services

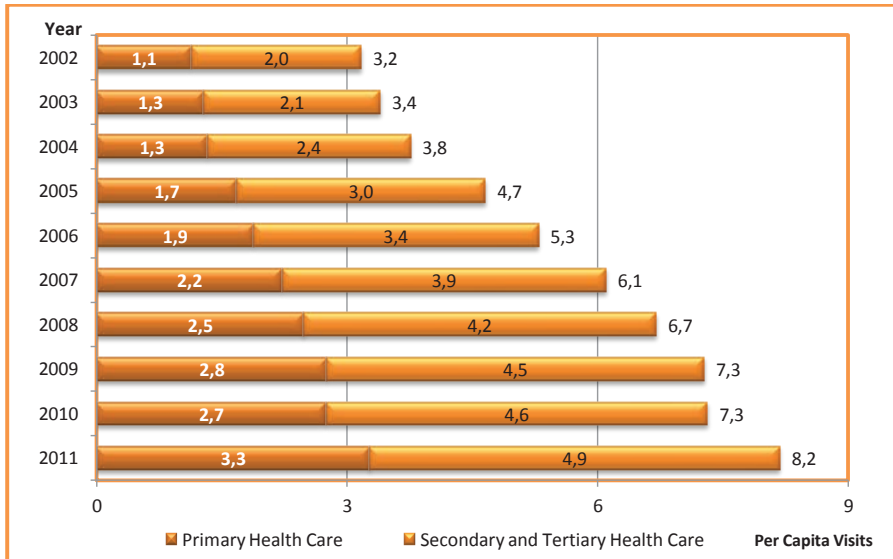


Table 7.1. Total Number of Visits to a Physician in Health Care Facilities by Years, All Sectors, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Health Center	69.103.517	79.163.271	82.153.024	105.482.440	121.101.156	146.161.943	121.441.948	123.851.458	84.629.163	-
Family Medicine	-	-	-	-	-	-	45.111.103	65.716.898	108.976.049	240.298.753
Tuberculosis Control Dispensary	2.012.458	2.332.915	2.380.166	3.108.694	3.034.844	2.818.945	2.781.992	2.557.787	2.378.998	2.219.534
Mother and Child Health and Family Planning Center	2.980.481	3.468.145	4.162.022	5.289.858	4.593.339	5.992.171	5.841.810	5.707.593	3.831.859	944.842
Private Outpatient Clinics	731.132	856.800	896.151	1.251.536	1.439.183	1.807.718	2.078.721	2.387.515	2.497.352	882.973
Primary Care Facilities Total	74.827.588	85.821.131	89.591.363	115.132.528	130.168.522	156.780.777	177.255.574	200.221.251	202.313.421	244.346.102
Private Clinics and Specialty Branch Centers	9.824.802	11.513.512	12.042.303	16.817.890	19.339.461	24.291.760	27.933.434	32.082.953	33.788.328	29.040.707
Hospitals	124.313.659	129.644.628	152.848.409	187.230.118	217.540.425	249.141.099	273.702.825	295.262.190	302.984.218	337.849.536
Secondary and Tertiary Health Care Total	134.138.461	141.158.140	164.890.712	204.048.008	236.879.886	273.432.859	301.636.259	327.345.143	336.772.546	366.890.243
Total	208.966.049	226.979.271	254.482.075	319.180.536	367.048.408	430.213.636	478.891.833	527.566.394	539.085.967	611.236.345

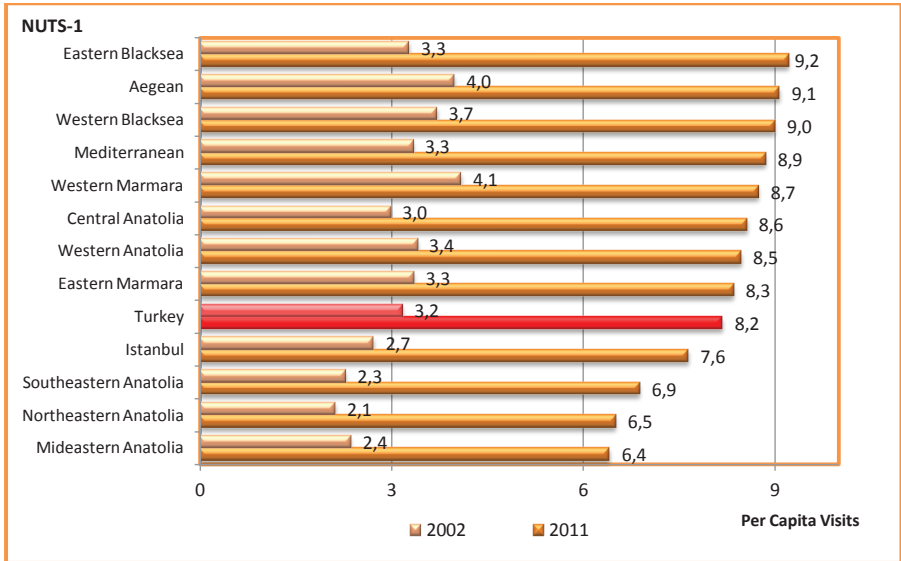
Source: Public Health Institution of Turkey, General Directorate for Health Services

Figure 7.1. Per Capita Visits to a Physician in Health Care Facilities by Years, All Sectors, Turkey



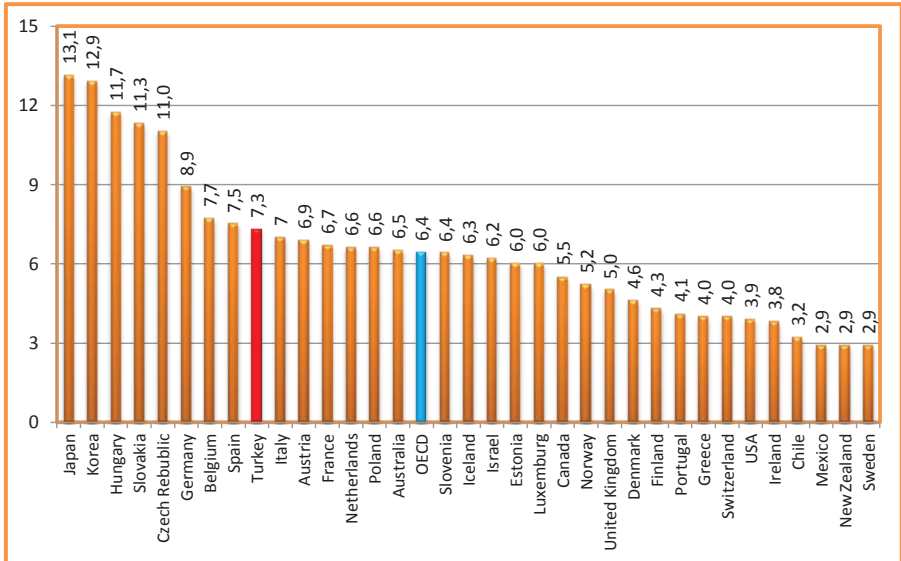
Source: Public Health Institution of Turkey, General Directorate for Health Services

Figure 7.2. Per Capita Visits to a Physician in Health Care Facilities by NUTS-1, All Sectors, 2002, 2011



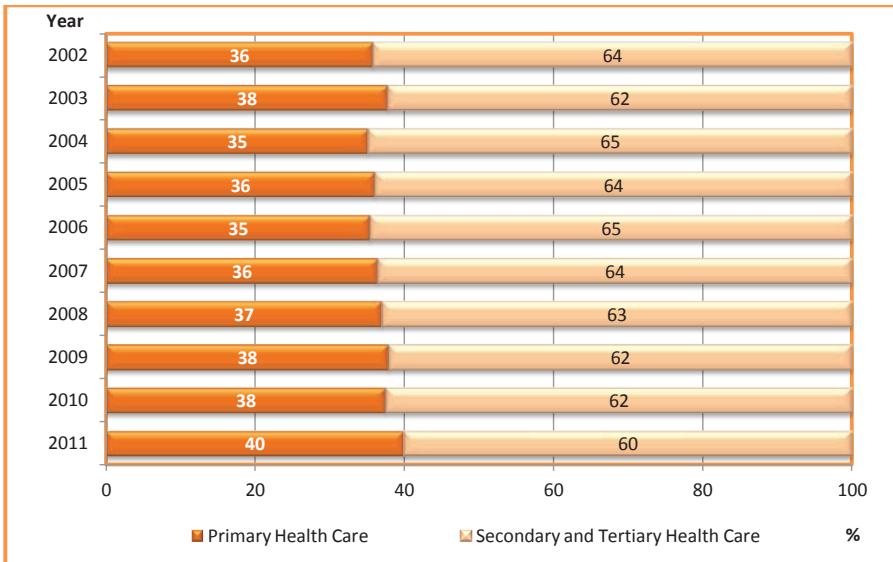
Source: Public Health Institution of Turkey, General Directorate for Health Services

Figure 7.3. International Comparison of Per Capita Visits to a Physician, 2010



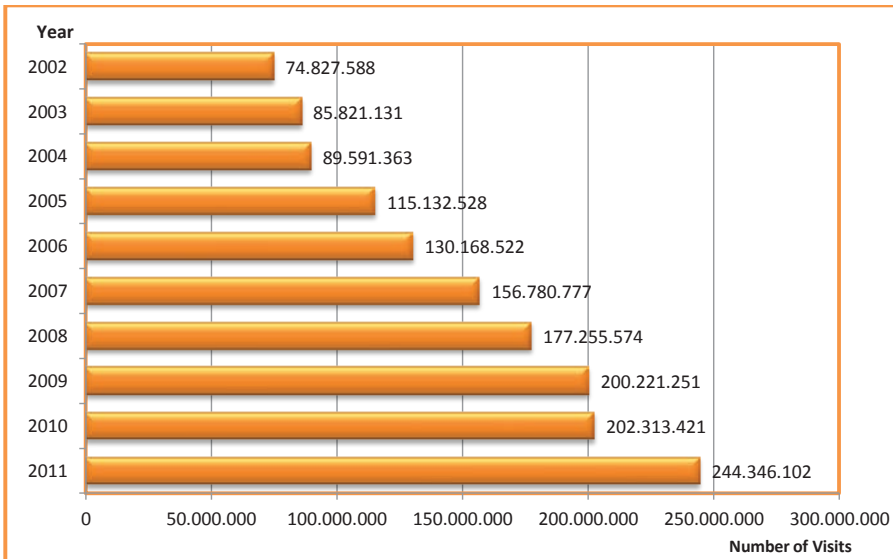
Source: OECD Health Data 2012

Figure 7.4. Proportion of of Total Number of Visits to a Physician in Health Care Facilities by Years and Levels, (%), All Sectors, Turkey



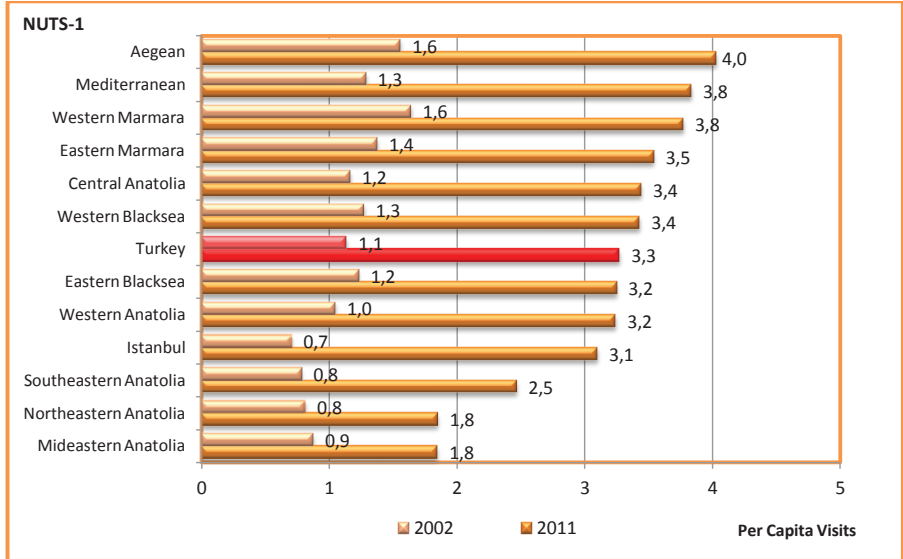
Source: Public Health Institution of Turkey, General Directorate for Health Services

Figure 7.5. Number of Visits to a Physician at Primary Health Care Facilities by Years, All Sectors, Turkey



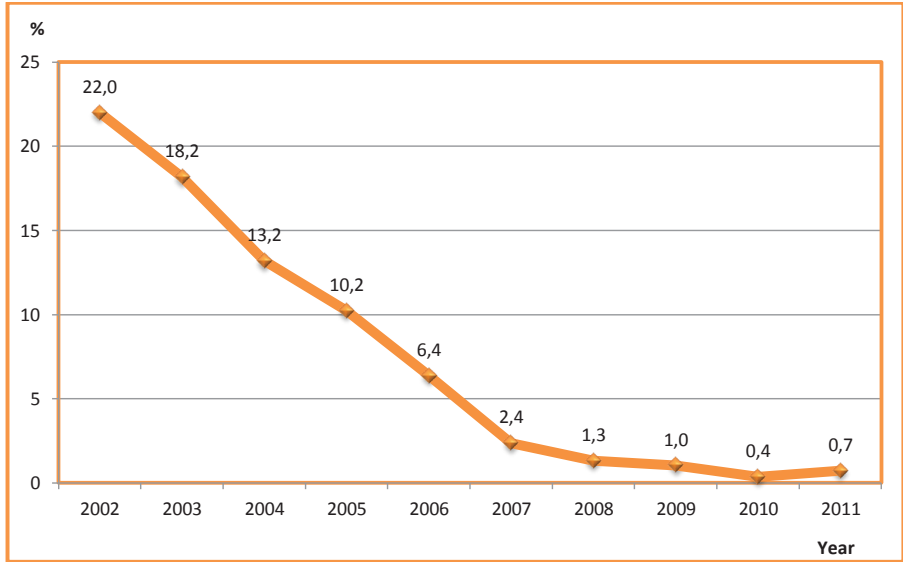
Source: Public Health Institution of Turkey, General Directorate for Health Services

Figure 7.6. Per Capita Visits to a Physician at Primary Health Care Facilities by NUTS-1, All Sectors, 2002, 2011



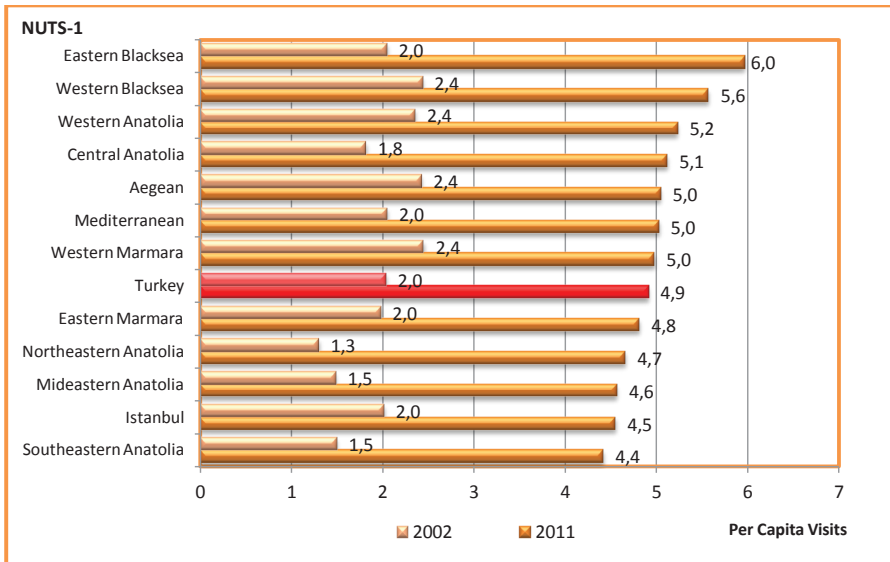
Source: Public Health Institution of Turkey, General Directorate for Health Services

Figure 7.7. Referrals from the Primary Health Care Facilities by Years, (%) Ministry of Health, Turkey



Source: Public Health Institution of Turkey

Figure 7.8. Per Capita Visits to a Physician at Secondary and Tertiary Health Care Facilities by NUTS-1, All Sectors, 2002, 2011



Source: Public Health Institution of Turkey, General Directorate for Health Services

Table 7.2. Number of Visits to Hospitals by Years and Sectors, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ministry of Health	109.793.128	113.849.426	135.169.229	164.758.149	189.422.137	209.630.370	216.723.712	228.279.139	235.172.924	254.342.943
University	8.823.361	9.637.593	10.685.275	11.493.879	12.588.872	15.025.079	18.290.800	19.364.865	20.098.754	24.437.107
Private	5.697.170	6.157.609	6.993.905	10.978.090	15.529.416	24.485.650	38.688.313	47.618.186	47.712.540	59.069.486
Total	124.313.659	129.644.628	152.848.409	187.230.118	217.540.425	249.141.099	273.702.825	295.262.190	302.984.218	337.849.536

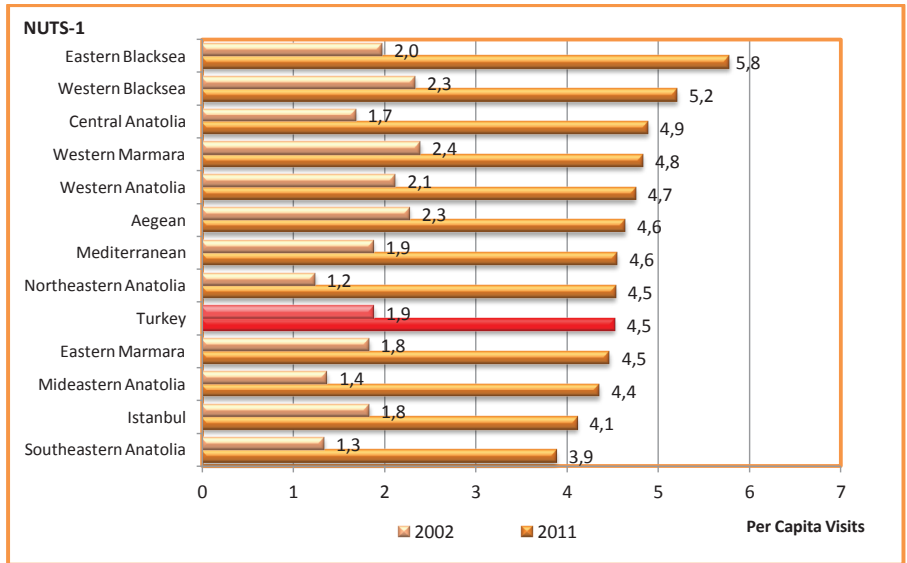
Source: General Directorate for Health Services

Table 7.3. Per Capita Visits to Hospitals by Years and Sectors, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ministry of Health	1,7	1,7	2,0	2,4	2,7	3,0	3,0	3,1	3,2	3,4
University	0,1	0,1	0,2	0,2	0,2	0,2	0,3	0,3	0,3	0,3
Private	0,1	0,1	0,1	0,2	0,2	0,3	0,5	0,7	0,6	0,8
Total	1,9	1,9	2,3	2,7	3,1	3,5	3,8	4,1	4,1	4,5

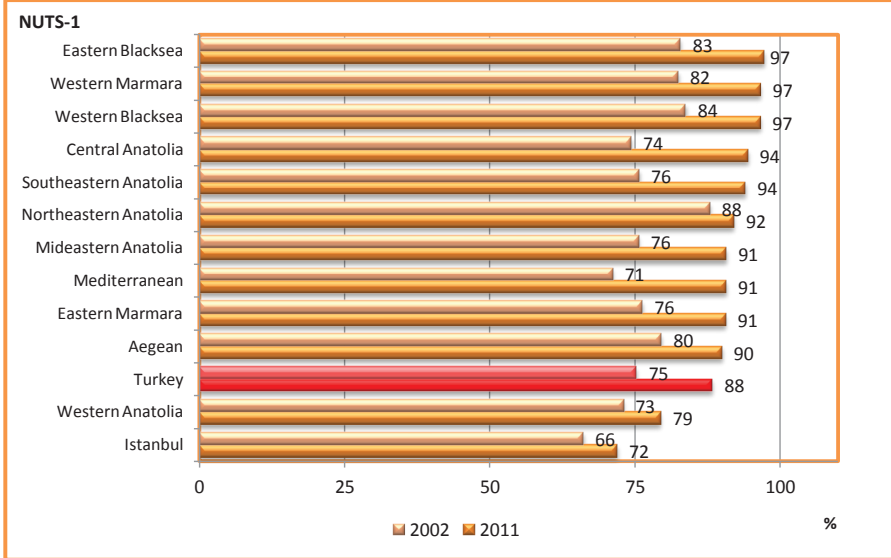
Source: General Directorate for Health Services

Figure 7.9. Per Capita Visits to Hospitals by NUTS-1, All Sectors, 2002, 2011



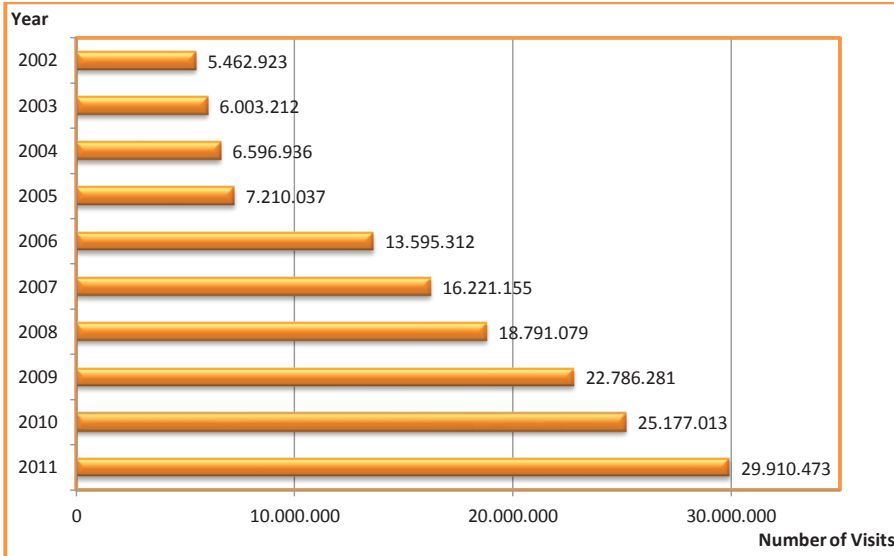
Source: General Directorate for Health Services

Figure 7.10. Proportion of Visits to MoH Hospitals to All Sectors by NUTS-1, (%), 2002, 2011



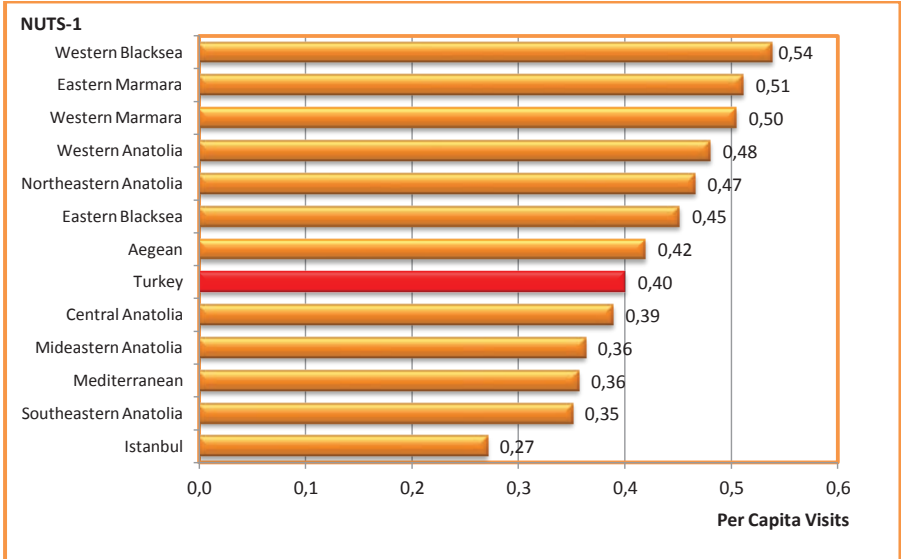
Source: General Directorate for Health Services

Figure 7.11. Number of Visits to Oral and Dental Care Services by Years, Ministry of Health, Turkey



Source: General Directorate for Health Services

Figure 7.12. Per Capita Visits to a Dentist by NUTS-1, Ministry of Health, 2011



Source: General Directorate for Health Services

Table 7.4. Number of Inpatients by Years and Sectors, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ministry of Health	4.169.779	4.277.747	4.860.433	5.042.382	5.303.347	5.674.935	5.959.585	5.934.978	6.361.116	6.775.154
University	781.990	838.486	921.735	1.025.614	1.165.277	1.262.973	1.386.449	1.462.690	1.509.484	1.607.462
Private	556.494	618.855	658.632	908.942	1.220.176	1.782.381	2.338.211	2.503.992	2.657.573	3.054.165
Total	5.508.263	5.735.088	6.440.800	6.976.938	7.688.800	8.720.289	9.684.245	9.901.660	10.528.173	11.436.781

Source: General Directorate for Health Services

Table 7.5. Number of Inpatients in the MoH Hospitals and Its Proportion to All Sectors by NUTS-1, (%), 2011

NUTS-1	Ministry of Health	Total	Proportion of MOH (%)
Northeastern Anatolia	232.787	301.299	77,3
Western Marmara	300.376	430.358	69,8
Eastern Blacksea	328.975	472.940	69,6
Western Blacksea	507.211	738.044	68,7
Southeastern Anatolia	751.087	1.110.854	67,6
Aegean	972.651	1.485.904	65,5
Eastern Marmara	647.123	1.006.487	64,3
Turkey	6.775.154	11.436.781	59,2
Mideastern Anatolia	355.675	608.298	58,5
Mediterranean	869.855	1.549.699	56,1
Western Anatolia	653.655	1.193.011	54,8
Central Anatolia	383.865	748.910	51,3
Istanbul	771.894	1.790.977	43,1

Source: General Directorate for Health Services

Table 7.6. Number of Surgical Operations by Years and Sectors, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ministry of Health	1.072.417	1.130.023	1.442.076	1.689.797	1.985.405	2.217.413	2.464.291	1.829.919	2.039.021	2.209.326
University	307.108	326.441	375.473	452.326	508.129	560.275	638.028	546.903	576.547	617.477
Private	218.837	236.906	260.114	392.671	579.771	787.297	1.086.975	1.131.431	1.215.159	1.373.774
Total	1.598.362	1.693.370	2.077.663	2.534.794	3.073.305	3.564.985	4.189.294	3.508.253	3.830.727	4.200.577

Source: General Directorate for Health Services

Table 7.7. Number of Surgical Operations by Surgical Operation Groups by Sectors, 2011

	A	B	C	Total
Ministry of Health	167.022	766.793	1.275.511	2.209.326
University	95.063	245.441	276.973	617.477
Private	148.852	477.798	747.124	1.373.774
Total	410.937	1.490.032	2.299.608	4.200.577

Source: General Directorate for Health Services

Table 7.8. Distribution of Surgical Operations by Surgical Operation Groups by Sectors, (%), 2011

	A	B	C	Total
Ministry of Health	41	52	56	53
University	23	16	12	15
Private	36	32	32	33
Total	100	100	100	100

Source: General Directorate for Health Services

Table 7.9. Number of Surgical Operations per 1.000 Population by NUTS-1 and Sectors, 2011

NUTS-1	Ministry of Health	University	Private	Total
Western Anatolia	40,9	16,0	19,9	76,8
Central Anatolia	26,6	13,5	23,9	64,0
Mediterranean	32,0	8,9	20,5	61,4
Eastern Marmara	31,9	7,9	17,7	57,5
Turkey	29,6	8,3	18,4	56,2
Eastern Blacksea	35,7	8,2	11,8	55,7
Istanbul	23,4	4,8	27,2	55,4
Aegean	29,0	9,0	14,6	52,6
Western Blacksea	33,5	6,7	12,2	52,4
Southeastern Anatolia	26,2	4,8	17,7	48,7
Mideastern Anatolia	24,3	9,3	13,5	47,0
Northeastern Anatolia	35,4	7,4	2,4	45,2
Western Marmara	23,6	5,8	9,9	39,3

Source: General Directorate for Health Services

Table 7.10. Number of Surgical Operations per 1.000 Population by NUTS-1 and Groups, 2011

NUTS-1	A	B	C	Total
Western Anatolia	9,8	28,4	38,6	76,8
Central Anatolia	5,1	23,8	35,1	64,0
Mediterranean	5,0	20,7	35,7	61,4
Eastern Marmara	6,2	20,6	30,7	57,5
Turkey	5,5	19,9	30,8	56,2
Eastern Blacksea	5,3	18,9	31,6	55,7
Istanbul	6,6	19,8	29,1	55,4
Aegean	5,8	20,0	26,8	52,6
Western Blacksea	4,8	18,8	28,8	52,4
Southeastern Anatolia	2,9	15,9	29,9	48,7
Mideastern Anatolia	2,9	15,4	28,7	47,0
Northeastern Anatolia	2,6	13,6	29,0	45,2
Western Marmara	3,5	15,1	20,7	39,3

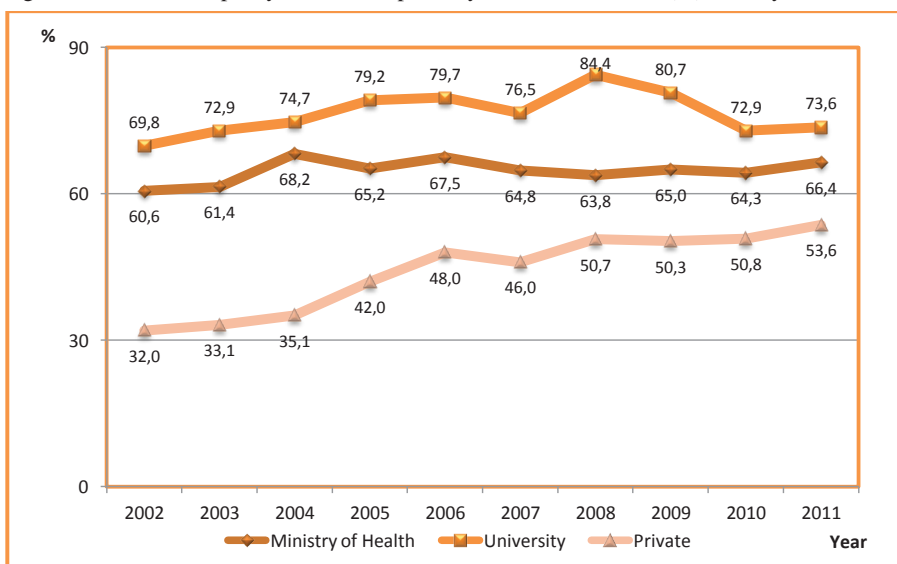
Source: General Directorate for Health Services

Table 7.11. Proportion of Surgical Operations to the Number of Hospital Visits by NUTS-1 and Sectors, (%), 2011

NUTS-1	Ministry of Health	University	Private	Total
Western Anatolia	1,2	2,4	3,3	1,6
Mediterranean	1,0	2,2	2,2	1,3
Istanbul	0,9	1,8	2,4	1,3
Central Anatolia	0,7	4,5	2,5	1,3
Eastern Marmara	0,9	2,3	2,4	1,3
Southeastern Anatolia	0,9	3,1	2,2	1,3
Turkey	0,9	2,5	2,3	1,2
Aegean	0,8	2,5	2,5	1,1
Mideastern Anatolia	0,7	3,2	1,8	1,1
Western Blacksea	0,8	2,7	2,0	1,0
Northeastern Anatolia	0,9	3,0	0,8	1,0
Eastern Blacksea	0,7	4,7	1,4	1,0
Western Marmara	0,6	2,7	1,6	0,8

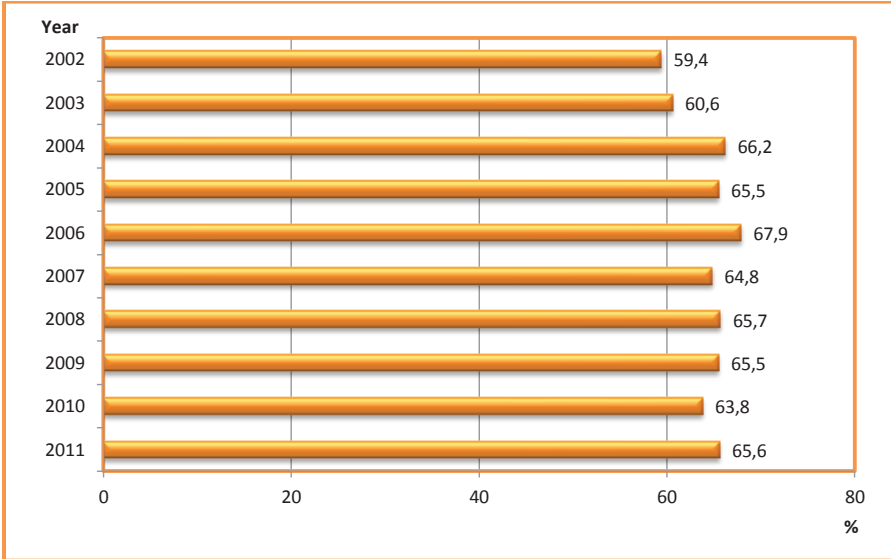
Source: General Directorate for Health Services

Figure 7.13. Bed Occupancy Rate in Hospitals by Years and Sectors, (%), Turkey



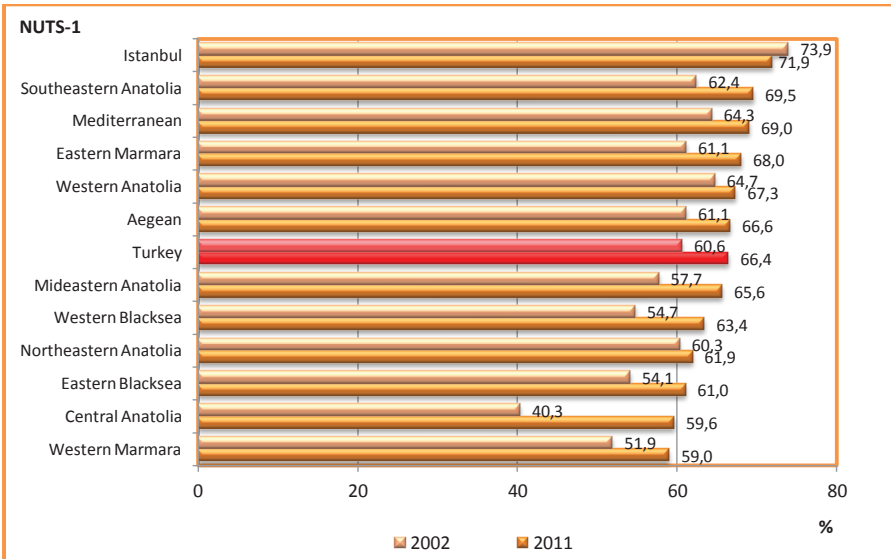
Source: General Directorate for Health Services

Figure 7.14. Bed Occupancy Rate in Hospitals by Years, All Sectors, (%), Turkey



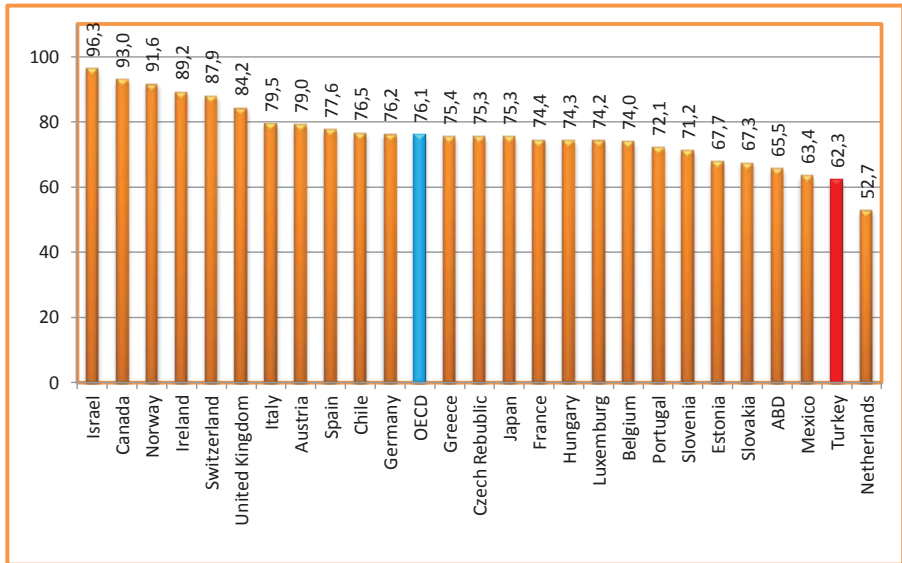
Source: General Directorate for Health Services

Figure 7.15. Bed Occupancy Rate in Hospitals by NUTS-1, Ministry of Health, (%), 2002, 2011



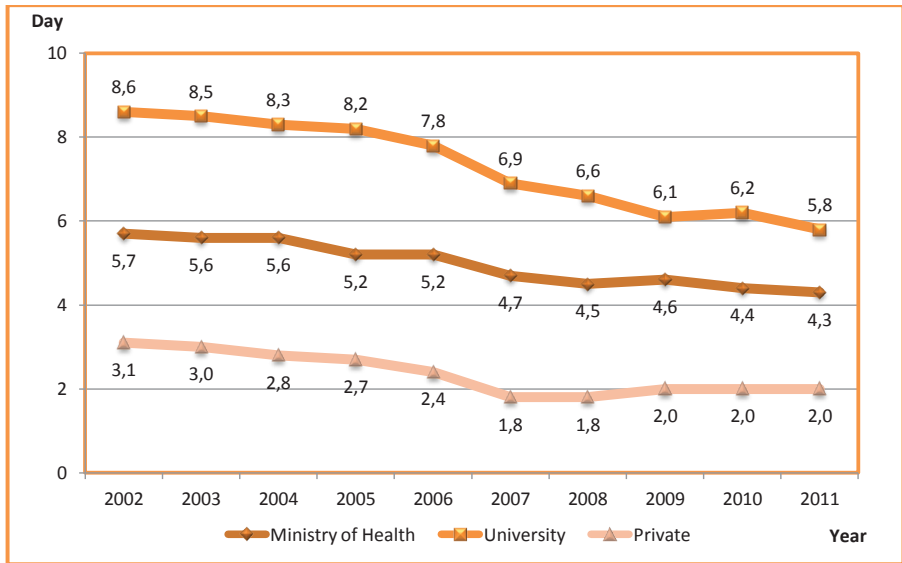
Source: General Directorate for Health Services

Figure 7.16. International Comparison of Acute Care Bed Occupancy Rate in Hospitals, 2009



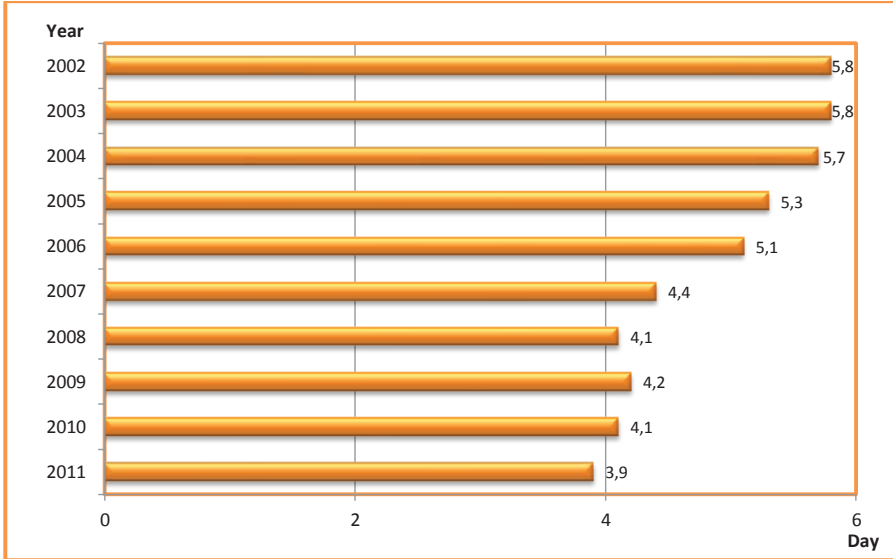
Source: OECD Health at a Glance, 2011

Figure 7.17. Average Length of Stay in Hospitals by Years and Sectors, (Days), Turkey



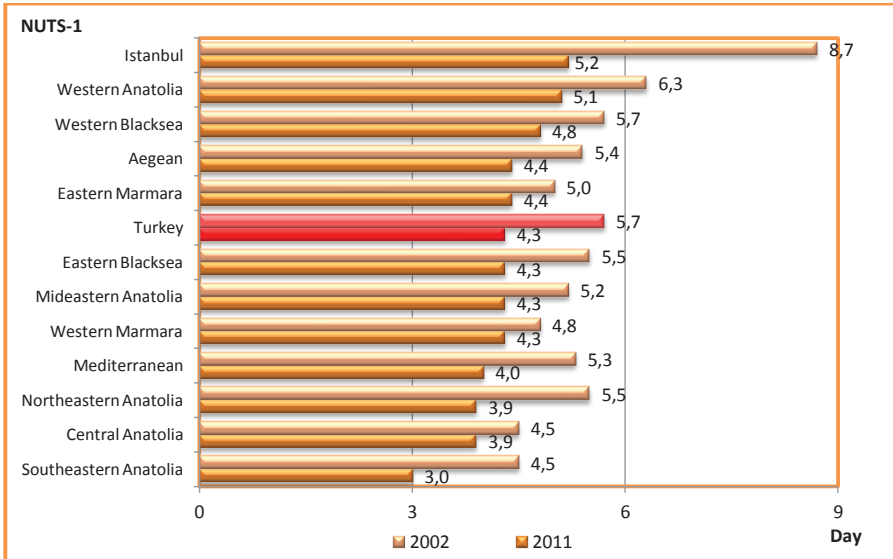
Source: General Directorate for Health Services

Figure 7.18. Average Length of Stay in Hospitals by Years, (Days), All Sectors, Turkey



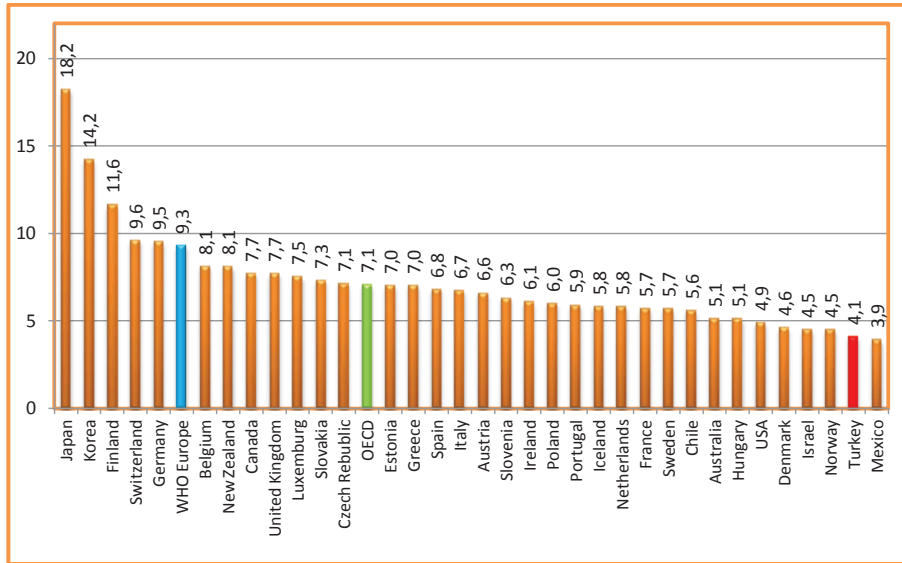
Source: General Directorate for Health Services

Figure 7.19. Average Length of Stay in Hospitals by NUTS-1, (Days), 2002, 2011



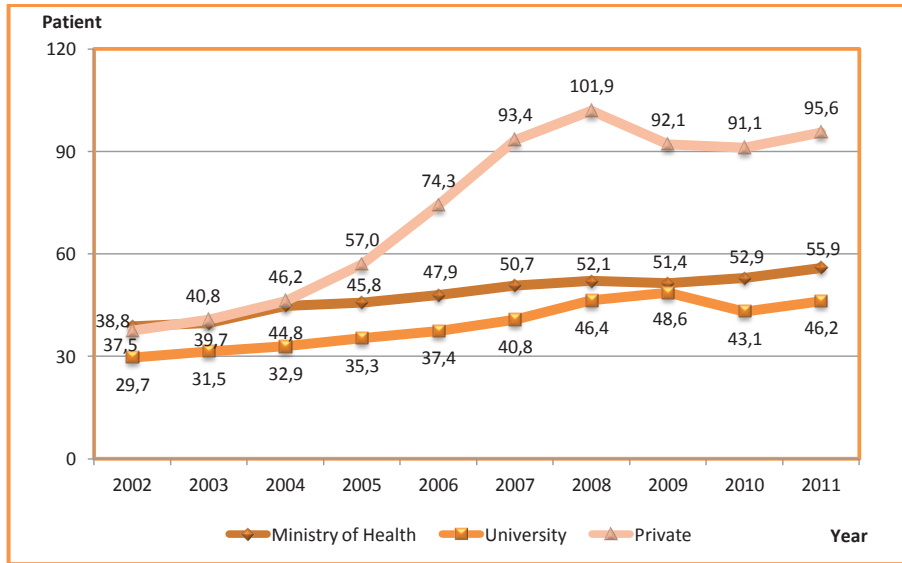
Source: General Directorate for Health Services

Figure 7.20. International Comparison of Average Length of Stay in Hospitals, (Days), 2010



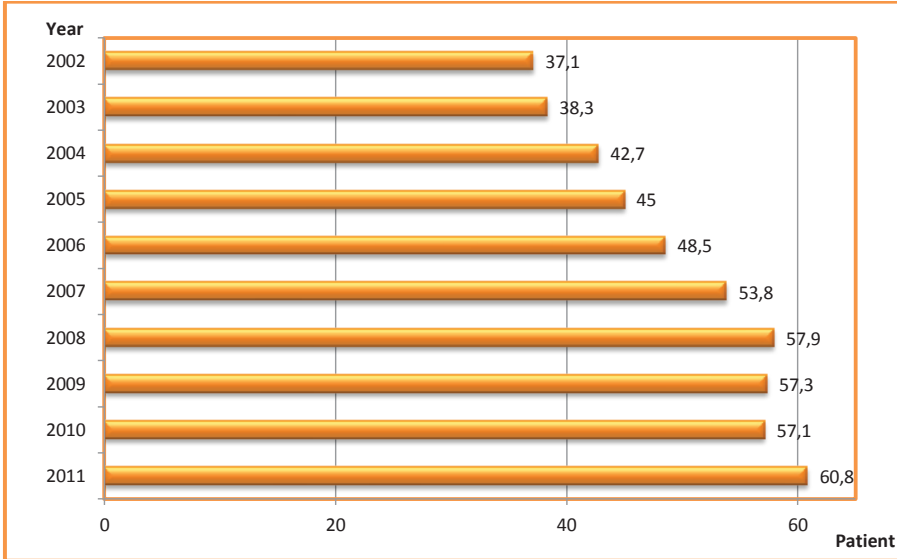
Source: OECD Health Data 2012

Figure 7.21. Bed Turnover Rate in Hospitals by Years and Sectors, (Patient), Turkey



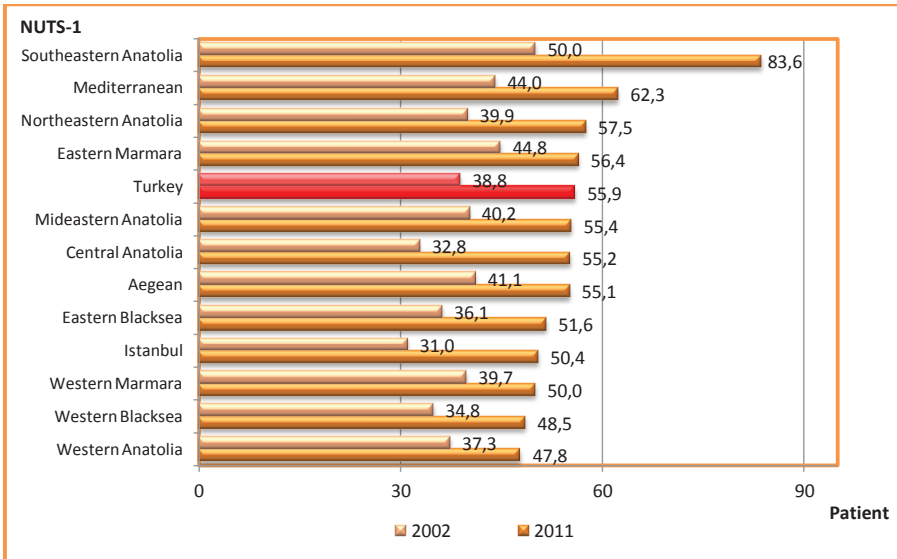
Source: General Directorate for Health Services

Figure 7.22. Bed Turnover Rate in Hospitals by Years (Patient), All Sectors, Turkey



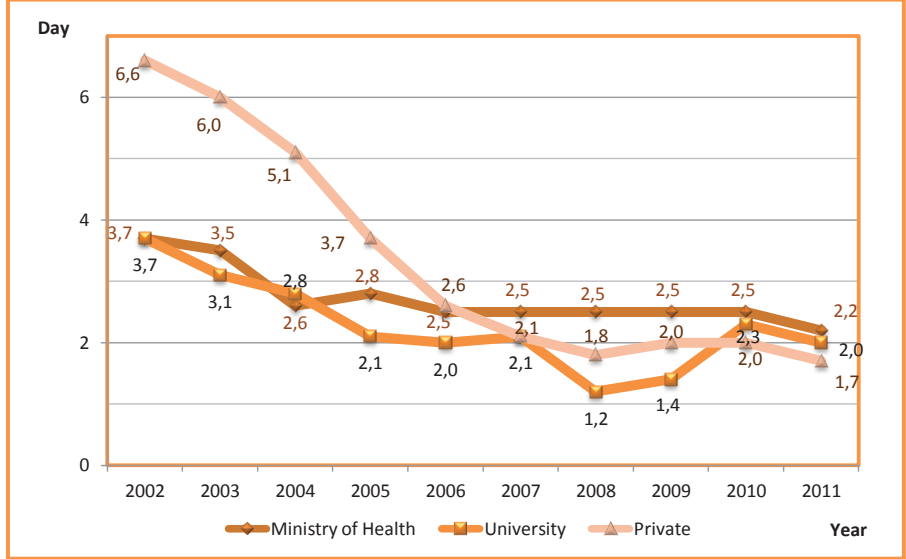
Source: General Directorate for Health Services

Figure 7.23. Bed Turnover Rate in Hospitals by NUTS-1, (Patient), MoH, 2002, 2011



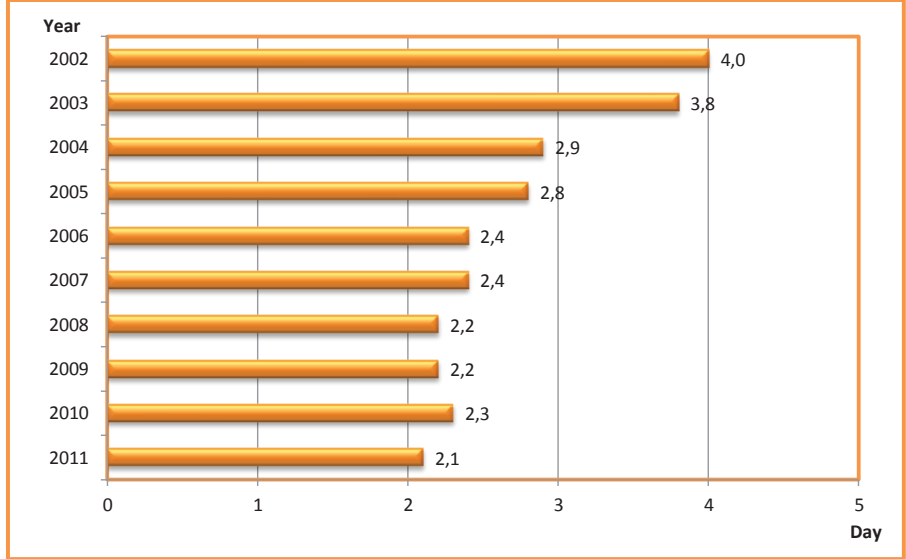
Source: General Directorate for Health Services

Figure 7.24. Bed Turnover Interval in Hospitals by Years and Sectors, (Day), Turkey



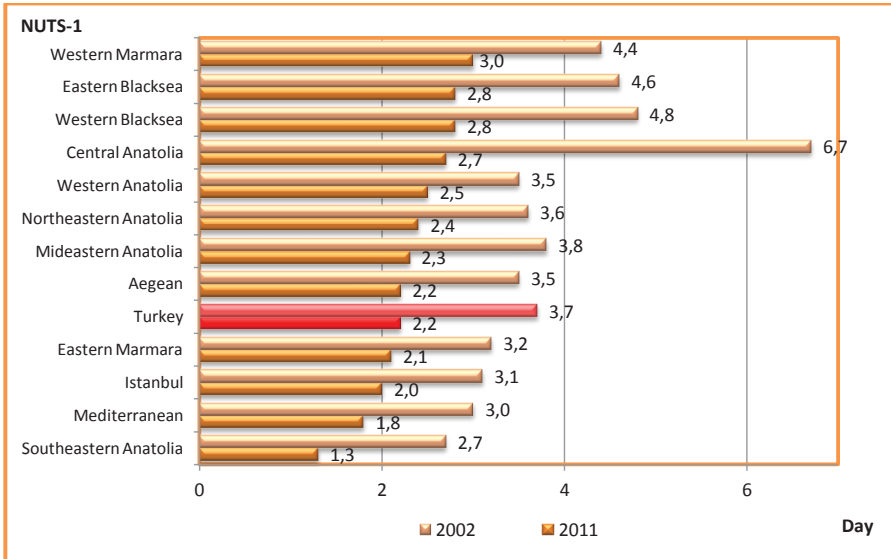
Source: General Directorate for Health Services

Figure 7.25. Bed Turnover Interval in Hospitals by Years, (Day), All Sectors, Turkey



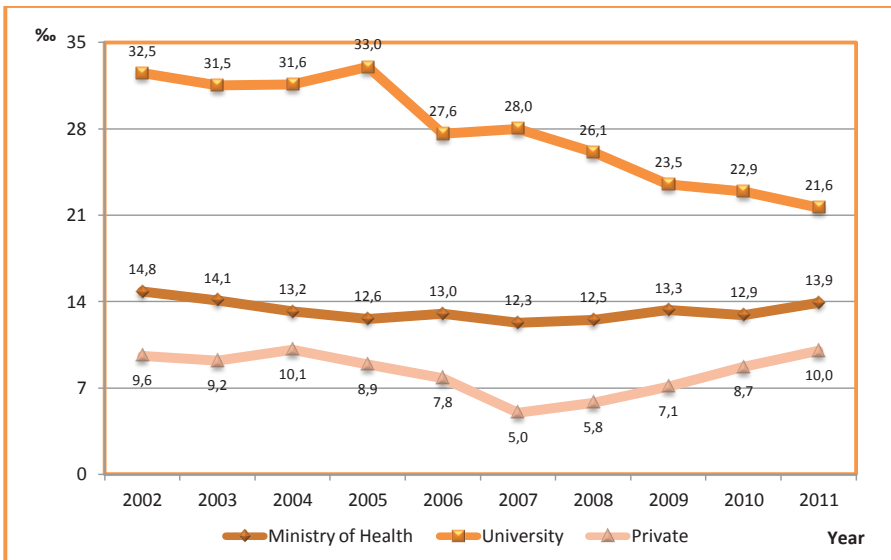
Source: General Directorate for Health Services

Figure 7.26. Bed Turnover Interval in Hospitals by NUTS-1, (Days), MoH, 2002, 2011



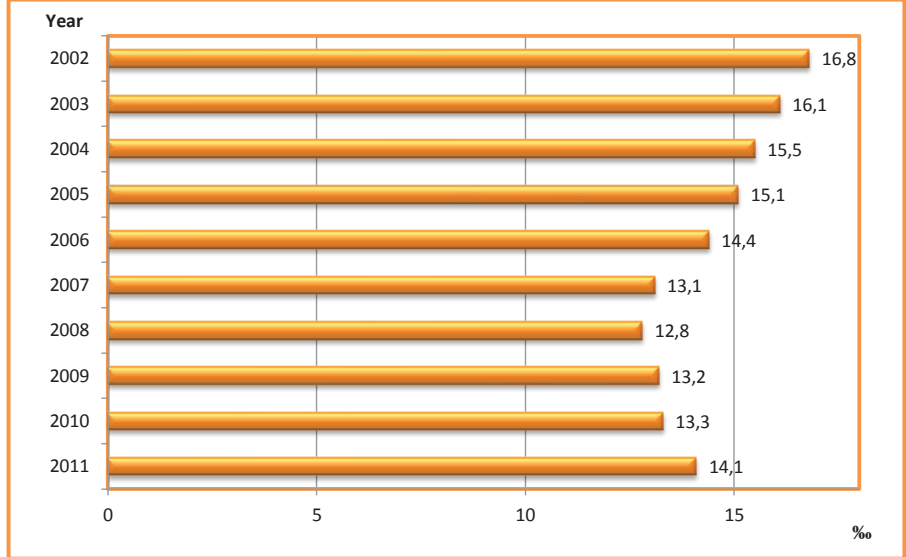
Source: General Directorate for Health Services

Figure 7.27. Crude Death Rate in Hospitals by Years and Sectors, (%), Turkey



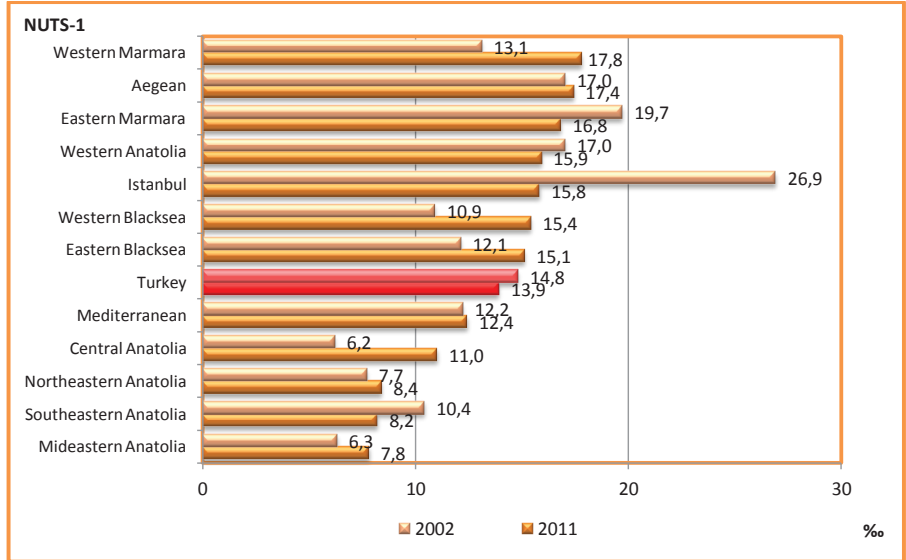
Source: General Directorate for Health Services

Figure 7.28. Crude Death Rate in Hospitals by Years, All Sectors, (%), Turkey



Source: General Directorate for Health Services

Figure 7.29. Crude Death Rate in Hospitals by NUTS-1, Ministry of Health, (%), 2002, 2011



Source: General Directorate for Health Services

Table 7.12. Number of Days Stayed in Hospitals by Years and Sectors, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ministry of Health	23.770.910	24.159.738	26.996.924	26.207.912	27.320.145	26.511.490	26.650.409	27.408.539	28.193.909	29.405.370
University	6.713.945	7.086.001	7.638.029	8.390.287	9.073.326	8.651.632	9.213.985	8.873.997	9.317.978	9.350.038
Private	1.730.661	1.835.088	1.828.932	2.447.727	2.877.624	3.203.632	4.241.645	4.986.717	5.410.529	6.246.243
Total	32.215.516	33.080.827	36.463.885	37.045.926	39.271.095	38.366.754	40.106.039	41.269.253	42.922.416	45.001.651

Source: General Directorate for Health Services

Table 7.13. Number of Days Stayed in the Hospitals by NUTS-1, Ministry of Health, 2011

NUTS-1	2011
Northeastern Anatolia	914.233
Western Marmara	1.292.005
Eastern Blacksea	1.418.276
Central Anatolia	1.513.037
Mideastern Anatolia	1.535.073
Southeastern Anatolia	2.279.272
Western Blacksea	2.420.699
Eastern Marmara	2.849.390
Western Anatolia	3.358.768
Mediterranean	3.514.223
Istanbul	4.019.709
Aegean	4.290.685
Turkey	29.405.370

Source: General Directorate for Health Services

Table 7.14. Number of Organ Transplantations by Years, All Sectors, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Kidney	550	605	775	926	949	1.302	1.665	2.362	2.502	2.923
Liver	159	174	245	324	319	473	602	592	695	904
Heart	20	23	33	36	45	61	50	54	86	93
Heart Valve	15	24	7	19	25	159	29	38	18	1
Lung	0	0	2	1	0	1	0	7	3	5
Heart-Lung	0	0	0	0	0	1	3	0	0	0
Pancreas	0	9	37	13	7	9	10	18	29	26
Small Intestine	1	1	1	0	0	3	3	1	3	1
Total	745	836	1.100	1.319	1.345	2.009	2.362	3.072	3.336	3.953

Source: General Directorate for Health Services

Table 7.15. Number of MRI Exams in Inpatient Health Care Facilities by Years and Sector, Turkey

	2008	2009	2010	2011
Ministry of Health	2.280.537	2.910.384	3.567.676	4.352.817
University	415.776	588.953	653.392	803.446
Private	770.628	1.370.399	1.596.022	2.065.924
Total	3.466.941	4.869.736	5.817.090	7.222.187

Source: General Directorate for Health Services

Table 7.16. Number of MRI Exams per 1.000 Population in Inpatient Health Care Facilities by NUTS-1 and Sectors, 2011

NUTS-1	Sağlık Bakanlığı	Üniversite	Özel	Toplam
Western Marmara	11,1	37,3	41,8	16,3
Central Anatolia	13,7	38,5	28,7	18,2
Western Blacksea	13,7	36,3	46,0	18,5
Eastern Marmara	16,4	21,7	34,0	19,6
Mediterranean	15,2	35,7	31,4	20,2
Aegean	17,1	36,5	35,7	21,0
Turkey	17,1	32,9	35,0	21,4
Northeastern Anatolia	14,6	64,5	76,9	21,4
Southeastern Anatolia	15,6	31,9	41,9	21,6
Eastern Blacksea	18,4	49,9	34,6	21,6
Western Anatolia	17,9	32,9	38,0	22,6
Istanbul	24,7	20,9	25,5	24,7
Mideastern Anatolia	17,8	41,8	60,8	27,0

Source: General Directorate for Health Services

Table 7.17. Number of CT Exams in Inpatient Health Care Facilities by Years and Sectors, Turkey

	2008	2009	2010	2011
Ministry of Health	3.834.506	4.324.510	4.918.990	5.440.694
University	741.752	1.190.739	1.152.175	1.165.010
Private	946.065	1.425.160	1.495.899	1.733.007
Total	5.522.323	6.940.409	7.567.064	8.338.711

Source: General Directorate for Health Services

Table 7.18. Number of CT Exams per 1.000 Population in Inpatient Health Care Facilities by NUTS-1 and Sectors, 2011

NUTS-1	Ministry of Health	University	Private	Total
Western Marmara	12,5	31,3	28,6	15,4
Eastern Marmara	19,4	43,2	24,6	22,0
Eastern Blacksea	17,6	83,6	36,7	22,3
Central Anatolia	17,0	99,1	20,9	22,8
Mediterranean	19,3	40,2	28,5	23,0
Turkey	21,4	47,7	29,3	24,7
Western Anatolia	21,7	41,0	25,1	24,9
Aegean	21,5	57,5	27,5	25,1
Western Blacksea	20,3	60,9	52,6	26,0
Istanbul	27,9	29,9	21,0	26,1
Mideastern Anatolia	21,7	64,7	41,3	28,0
Northeastern Anatolia	21,0	50,1	107,4	28,4
Southeastern Anatolia	25,9	50,3	38,6	29,5

Source: General Directorate for Health Services

Table 7.19. Number of Other Examination Devices in Inpatient Health Care Facilities by Sectors, 2011

	Ultrasound	Doppler Ultrasonography	ECO
Ministry of Health	13.527.610	3.157.262	2.551.543
University	1.297.086	482.245	486.980
Private	4.491.576	1.119.006	1.520.421
Total	19.316.272	4.758.513	4.558.944

Source: General Directorate for Health Services

Table 7.20. Number of Ultrasound Exams in Inpatient Health Care Facilities per 1.000 Population by NUTS-1 and Sectors, 2011

NUTS-1	Ministry of Health	University	Private	Total
Western Marmara	32,3	25,0	49,2	34,2
Eastern Blacksea	39,7	76,5	78,9	46,4
Western Blacksea	42,6	48,2	85,7	47,9
Northeastern Anatolia	49,6	66,3	74,6	52,2
Istanbul	52,8	38,9	54,6	52,4
Eastern Marmara	50,0	45,2	76,2	53,9
Aegean	50,4	44,0	86,8	54,4
Turkey	53,2	53,1	76,0	57,2
Mediterranean	55,6	65,3	65,6	58,5
Mideastern Anatolia	52,4	72,3	94,7	61,2
Southeastern Anatolia	57,2	82,9	96,3	66,2
Central Anatolia	56,9	42,1	127,5	69,7
Western Anatolia	79,2	57,1	79,4	76,1

Source: General Directorate for Health Services

Table 7.21. Number of Doppler Ultrasound Exams in Inpatient Health Care Facilities per 1.000 Population by NUTS-1 and Sectors, 2011

NUTS-1	Ministry of Health	University	Private	Total
Eastern Blacksea	6,8	7,9	13,1	7,7
Western Marmara	6,4	22,0	18,5	8,7
Mediterranean	9,7	14,5	14,8	11,1
Northeastern Anatolia	7,3	18,7	69,0	12,0
Central Anatolia	8,4	65,0	14,2	13,0
Aegean	9,9	26,2	27,7	13,5
Istanbul	14,7	6,7	12,6	13,6
Western Blacksea	11,2	34,1	22,9	13,7
Turkey	12,4	19,7	18,9	14,1
Eastern Marmara	13,8	21,5	20,4	15,5
Western Anatolia	15,6	16,9	14,1	15,6
Southeastern Anatolia	16,7	17,9	23,6	18,2
Mideastern Anatolia	24,1	13,0	38,5	25,9

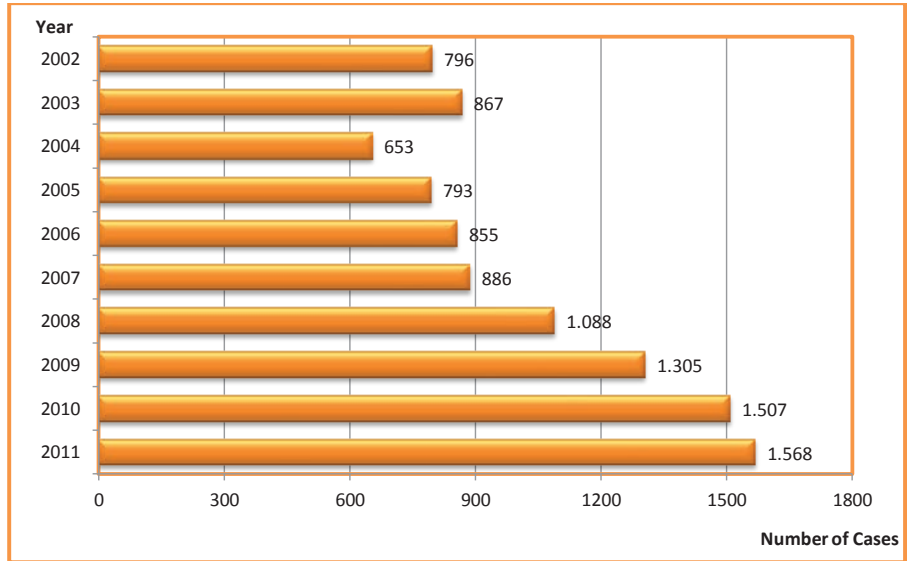
Source: General Directorate for Health Services

Table 7.22. Number of ECO Exams in Inpatient Health Care Facilities per 1.000 Population by NUTS-1 and Sectors, 2011

NUTS-1	Ministry of Health	University	Private	Total
Western Marmara	7,3	8,7	13,6	8,2
Eastern Blacksea	9,8	32,0	17,5	11,5
Aegean	8,9	12,3	30,5	11,9
Istanbul	9,7	8,8	18,0	11,9
Northeastern Anatolia	12,2	17,3	11,3	12,4
Turkey	10,0	19,9	25,7	13,5
Eastern Marmara	8,8	15,4	35,1	13,6
Mediterranean	9,2	27,5	23,5	13,7
Central Anatolia	8,3	39,2	27,7	14,0
Western Blacksea	10,8	27,4	33,6	14,2
Southeastern Anatolia	11,2	33,0	30,1	15,9
Western Anatolia	12,5	21,6	31,8	16,3
Mideastern Anatolia	13,9	19,1	37,6	18,4

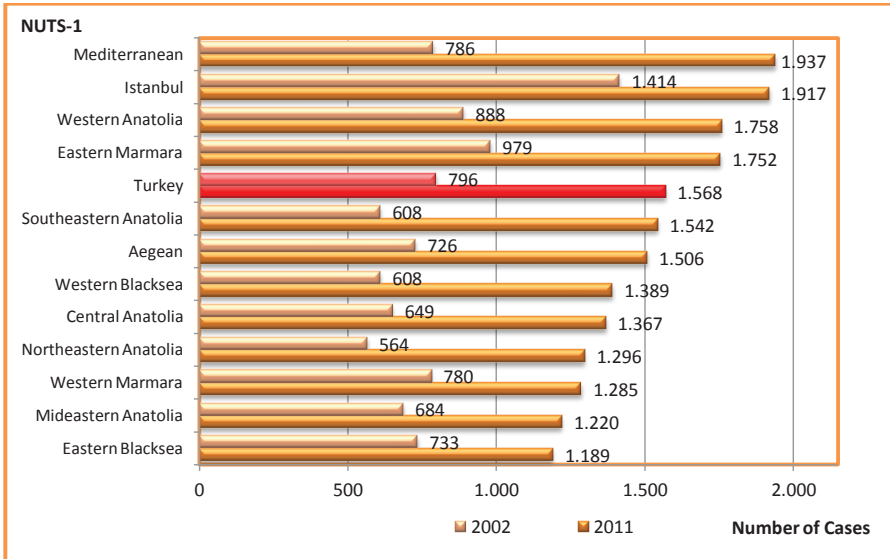
Source: General Directorate for Health Services

Figure 7.30. Number of Cases per 112 Emergency Care Station by Years , Turkey



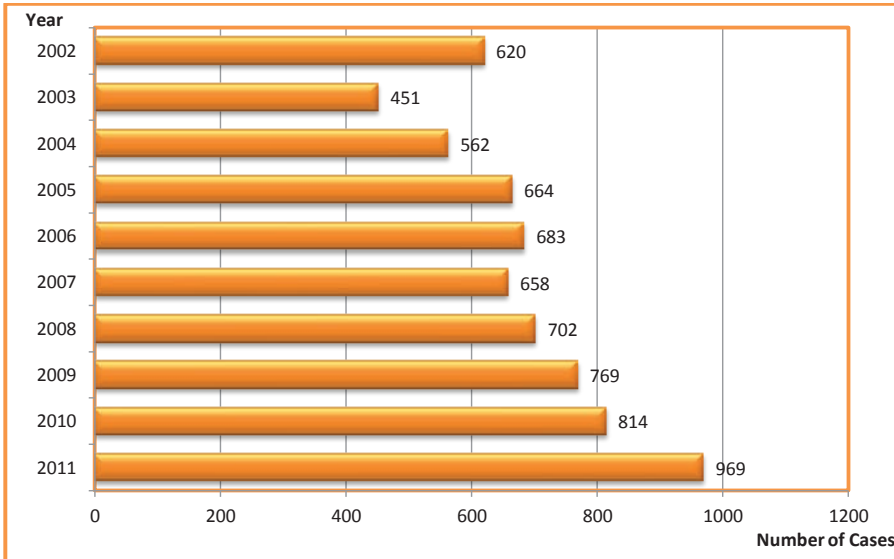
Source: General Directorate for Emergency Health Services

Figure 7.31. Number of Cases per 112 Emergency Care Station by NUTS-1, 2002, 2011



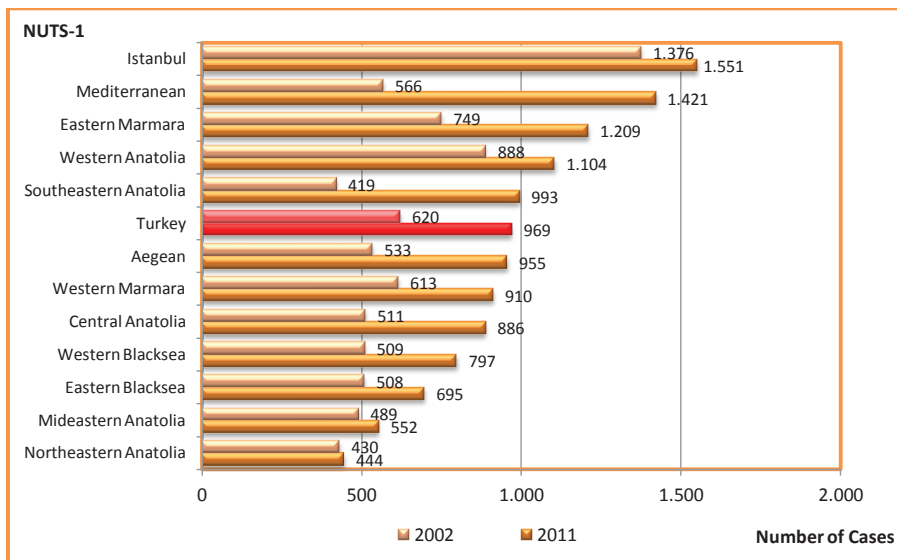
Source: General Directorate for Emergency Health Services

Figure 7.32. Number of Cases per 112 Emergency Care Ambulance by Years, Turkey



Source: General Directorate for Emergency Health Services

Figure 7.33. Number of Cases per 112 Emergency Care Ambulance by NUTS-1, 2002, 2011



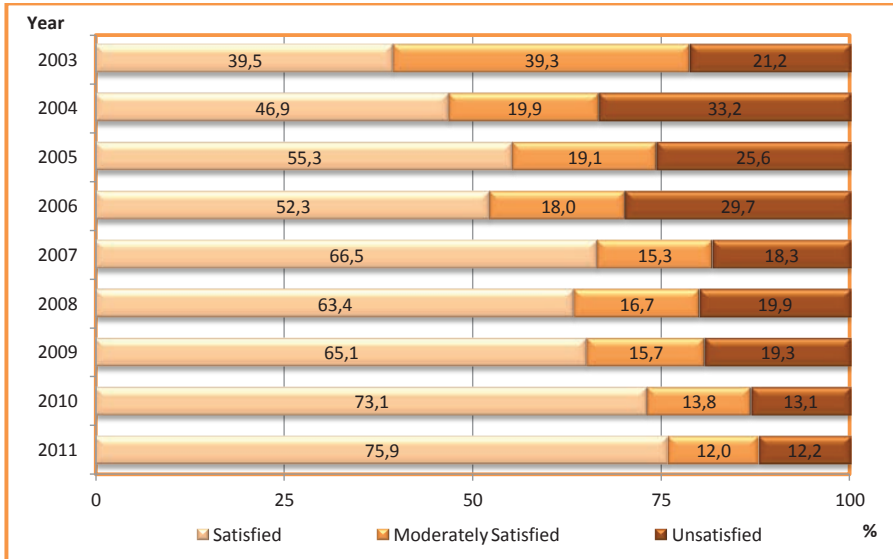
Source: General Directorate for Emergency Health Services

Table 7.23. Consumption Amounts of Some Drugs by Years, (Million Boxes), Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Respiratory System	74,6	105,1	115,9	162,3	179,2	194,4	204,7	232,9	225,6	262,2
Alimentary T.& Metabolism	76,1	117,1	129,9	182,2	196,0	208,9	218,9	215,8	226,5	247,5
Musculo-Skeletal System	82,1	81,0	93,3	150,6	165,0	197,7	209,6	208,4	215,1	232,2
Systemic Anti-Infectives	135,1	138,0	152,0	221,2	221,0	223,2	220,4	232,8	223,8	228,7
Nervous System	27,6	126,0	138,3	168,6	171,0	183,6	193,0	190,2	190,3	208,0
Cardiovascular System	47,0	61,4	68,4	107,0	115,2	123,0	135,2	142,4	153,5	164,4
Dermatologicals	39,5	38,9	43,3	59,9	66,0	73,8	81,2	79,3	85,4	95,6
Blood & B.Forming Organs	47,7	19,7	25,0	35,9	43,4	48,0	54,8	59,6	62,1	67,3
G.U.System & Sex Hormones	17,8	25,8	28,7	39,8	42,5	45,4	48,5	50,1	54,3	60,3
Sensory Organs	32,1	18,7	20,9	29,1	32,3	36,4	41,2	41,9	45,5	47,8
Systemic Hormones	9,6	12,2	13,0	18,2	19,6	20,1	21,1	22,3	23,3	25,2
Diagnostic Agents	1,1	1,1	1,1	1,9	2,2	2,9	4,8	5,9	8,2	10,1
Hospital Solutions	4,5	7,9	8,1	10,3	10,2	10,3	7,5	7,6	7,8	7,8
Antineoplastic & Immunomodul	1,2	1,6	1,6	3,1	3,6	4,0	4,2	4,7	5,2	5,5
Parasitology	5,2	4,8	5,0	6,0	6,1	5,7	5,6	5,4	5,0	5,0
Various (Other)	97,9	9,6	11,1	15,7	18,6	21,5	25,9	32,2	38,4	53,9
Total Pharmaceutical Consumption	699,1	768,9	855,6	1211,8	1291,9	1398,9	1476,6	1531,5	1570,0	1721,5

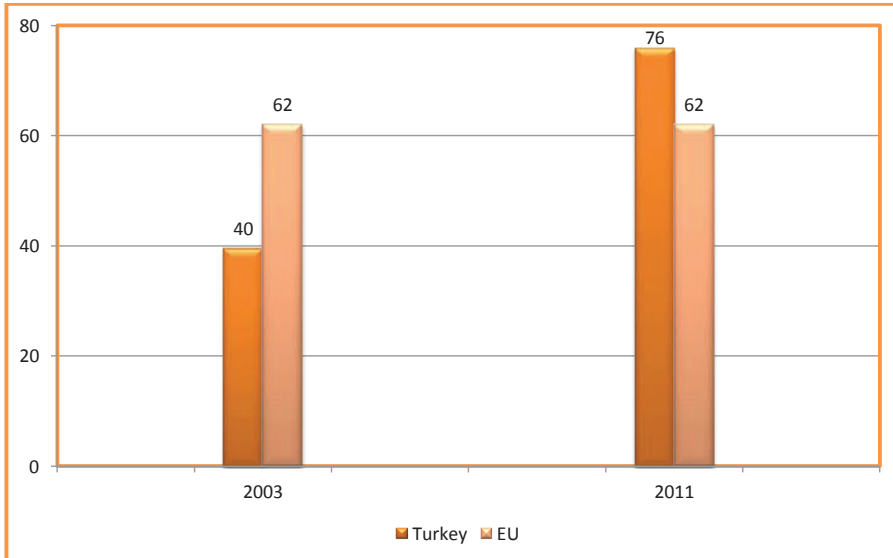
Source: Pharmaceuticals and Medical Devices Institution of Turkey

Figure 7.34. Proportion of Overall Satisfaction with Health Care Services by Years, (%)



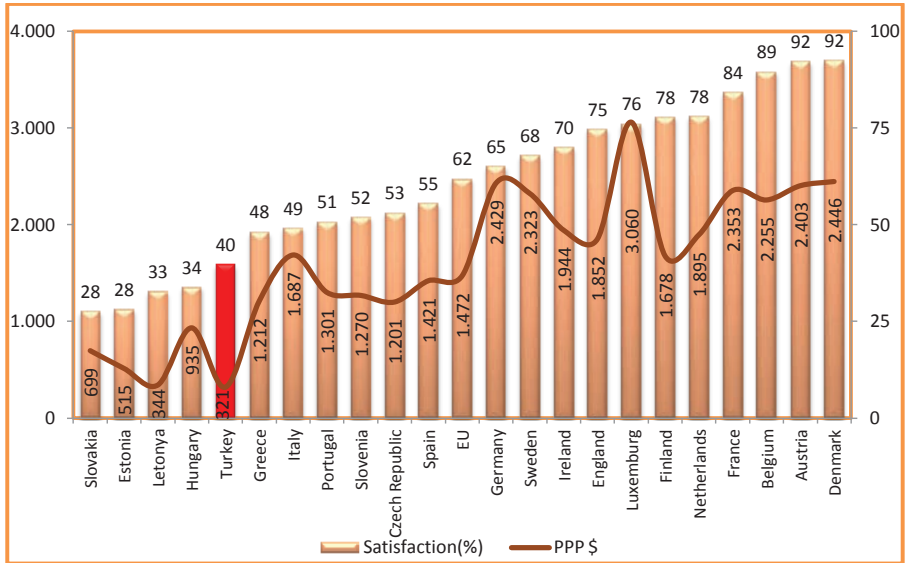
Source: TURKSTAT Life Satisfaction Survey 2011

Figure 7.35. Satisfaction with Health Care Services in EU and Turkey, (%), 2003, 2011



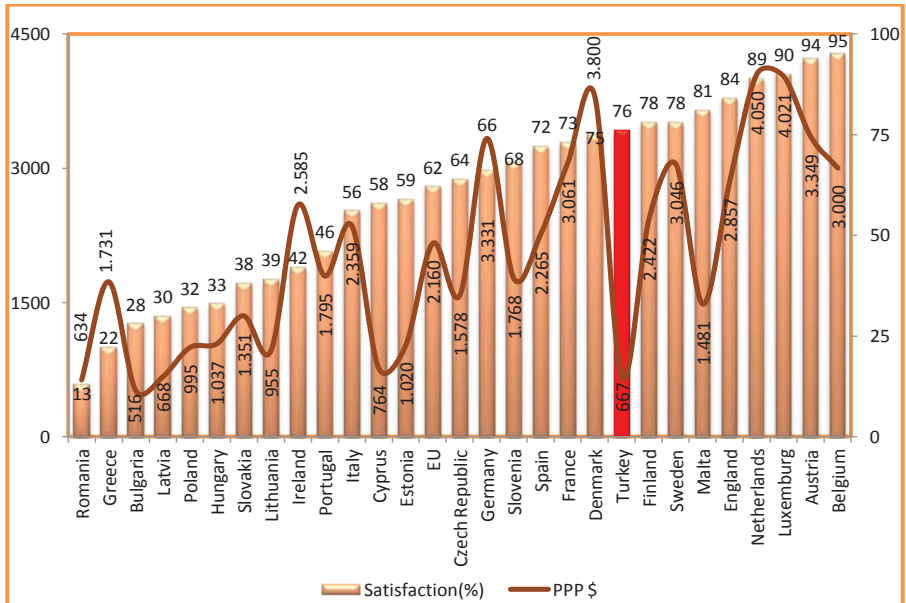
Source: Bulletin of the World Health Organization 2009; 87:271-278, European Commission Social Climate Report 2011, TURKSTAT Life Satisfaction Survey 2011

Figure 7.36. Satisfaction with Health Care Services (%) and Per Capita Public Health Expenditure, (PPP US\$), 2003



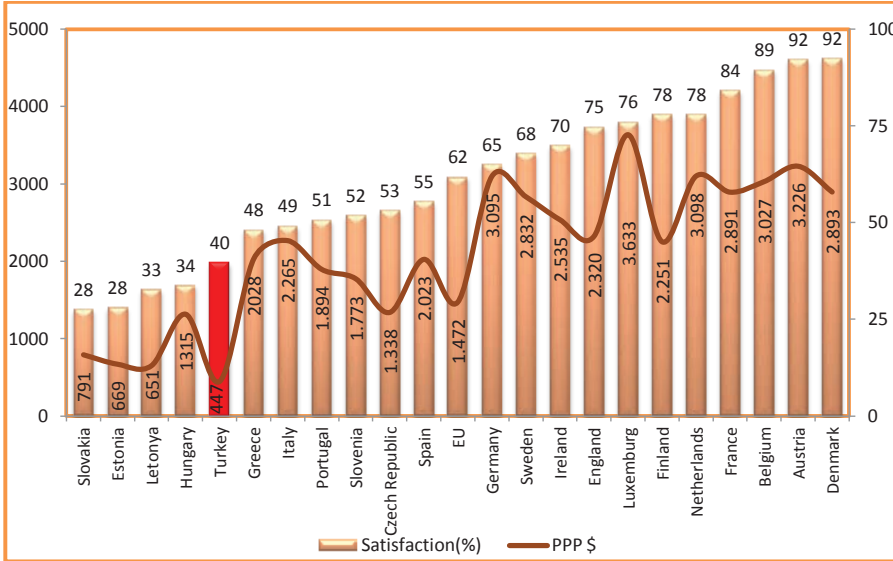
Source: OECD Health Data, Bulletin of the World Health Organization 2009; 87:271-278, TURKSTAT Life Satisfaction Survey 2011

Figure 7.37. Satisfaction with Health Care Services (%) 2011 and Per Capita Public Health Expenditure, (PPP US\$), 2010



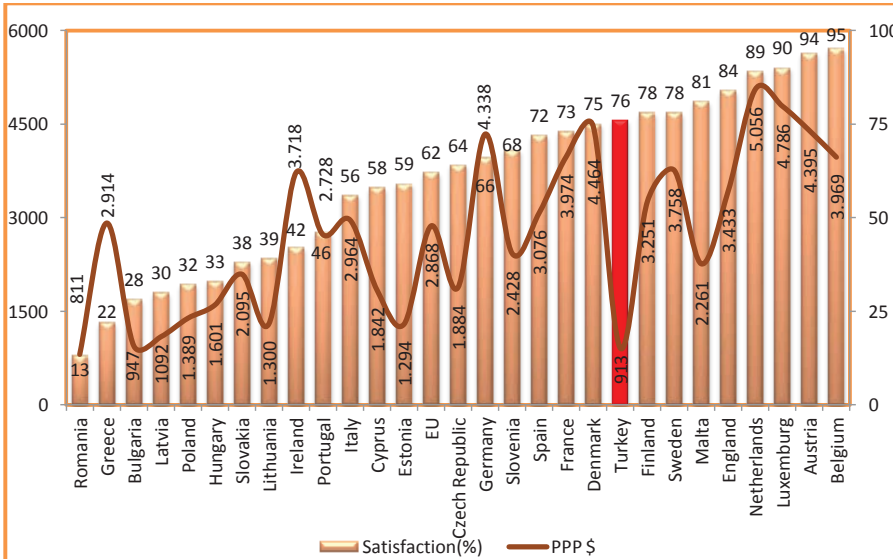
Source: OECD Health Data, European Commission Social Climate Report 2011, TURKSTAT Life Satisfaction Survey 2011

Figure 7.38. Satisfaction with Health Care Services (%) and Per Capita Total Health Expenditure, (PPP US\$), 2003



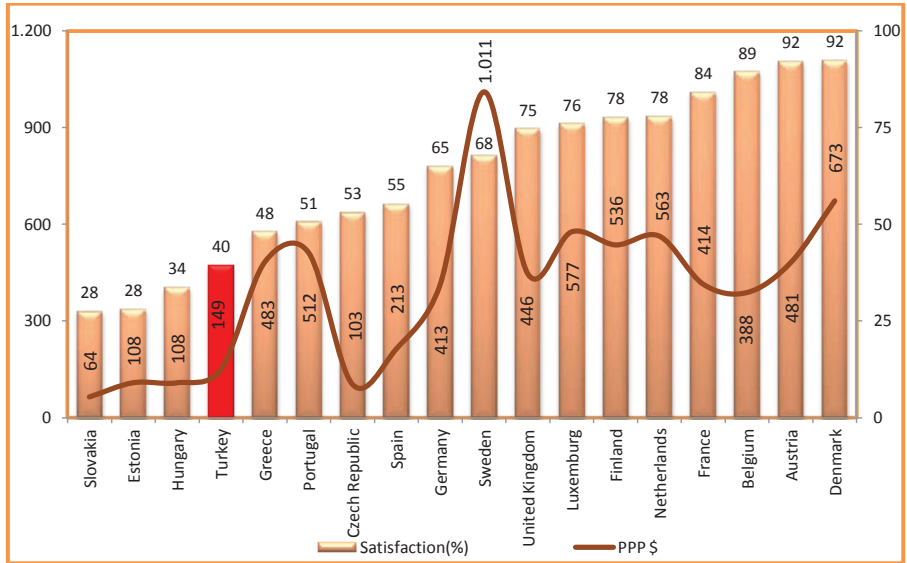
Source: OECD Health Data, Bulletin of the World Health Organization 2009;87:271-278, TURKSTAT Life Satisfaction Survey 2011

Figure 7.39. Satisfaction with Health Care Services (%) 2011 and Per Capita Total Health Expenditure, (PPP US\$), 2010



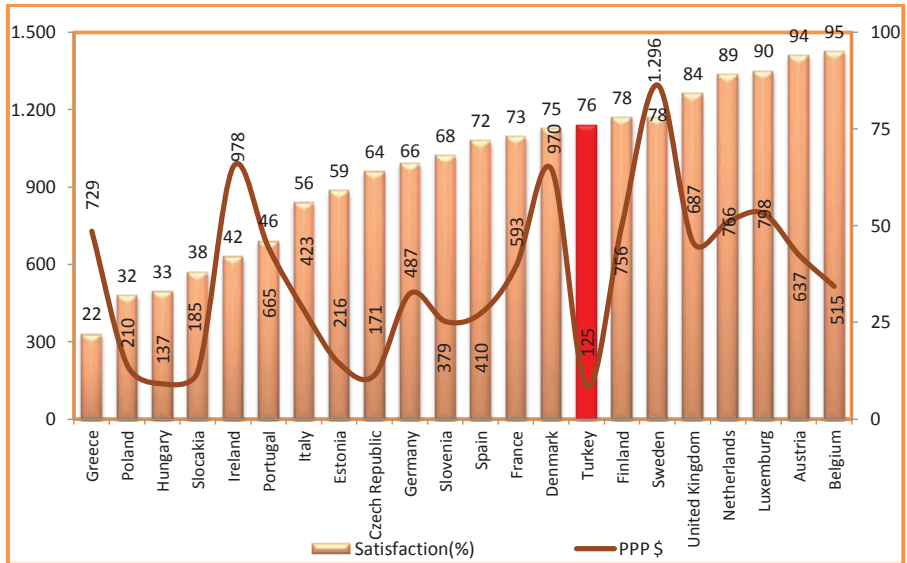
Source: OECD Health Data, European Commission Social Climate Report 2011, TURKSTAT Life Satisfaction Survey 2011

Figure 7.40. Satisfaction with Health Care Services (%) and Total Health Expenditure per Visit, (PPP US\$), 2003



Source: OECD Health Data, Bulletin of the World Health Organization 2009;87:271-278, TURKSTAT Life Satisfaction Survey 2011

Figure 7.41. Satisfaction with Health Care Services (%), 2011 and Total Health Expenditure per Visit, (PPP US\$), 2010



Source: OECD Health Data, European Commission Social Climate Report 2011, TURKSTAT Life Satisfaction Survey 2011

Explanations for Chapter 7

- Number of visits; It was defined by the OECD as “visits to physicians for any reason except via the phone”.
- The number of visits to a dentist is not included in the number of visits to a physician.
- The data of the Ministry of Defense hospitals are not included in the number of visits to physicians, inpatients, and surgical operations.
- Hospitals affiliated with other public institutions and local governments, number of inpatients in those hospitals, and surgical operations were included in the “private” sector.
- In order to make them comparable, visits to Social Security hospitals, inpatient numbers and surgical operations were included in the Ministry of Health.
- **Information regarding the surgical operations;** The surgical classification is based on the World Health Organization’s International Classification of Health Intervention (ICHI). Number of surgical operations (group A, B and C) were calculated in accordance with the definitions in this classification According to the World Health Organization’s ICHI, diagnostic and minor surgical procedures are not included in the surgical operations.
- **Bed Occupancy Rate:** This indicates the rate of bed usage by the patient within one year. It is calculated as follows: $(\text{Number of Days Stayed} \times 100) / (\text{Number of beds} \times 365)$.
- **Acute Care Bed Occupancy Rate:** This indicator is used by the OECD and indicates the occupancy rate of beds used for acute services.
- **Average Length of Stay:** The average number of days a patient stays in a hospital. It is calculated as follows: $(\text{Number of Days Stayed}) / (\text{discharged} + \text{deceased})$ number of patients.
- **Bed Turnover Rate:** This indicates how many times a bed has been used by patients per year. It is calculated as: $(\text{Number of Inpatients}) / (\text{Number of Beds})$.
- **Bed turnover interval:** Average period in days that an available bed remains empty between the discharge of one inpatient and the admission of the next. It is calculated as: $(\text{Number of Beds} \times 365 - (\text{Number of Days Stayed})) / \text{number of patients (discharged} + \text{deceased)}$.
- **Crude Death Rate (in hospitals):** It indicates the proportion of patients who died in a hospital within a year to those who died and discharged from the hospital in the same period. $(\text{Number of people who died}) / (\text{discharged} + \text{deceased}) \times 1.000$.

- While the number of devices were being calculated, MRI, CT, hemodialysis, ultrasound, Doppler ultrasound, echocardiography devices belonging to the “Other” institutions (except the MoD) were included in the private sector.
- In the tables and graphs related to the imaging devices and their numbers, in the “Ministry of Health” chapter: the devices, the number of fixtures and imaging devices, which are used by the Ministry of Health through service procurement from external sources, are included.
- 112 Emergency care ambulance; a land vehicle with an ambulance crew, technical and medical equipment that are able to provide emergency medical interventions in any emergency situation for the sick and injured at the emergency scene and in the ambulance. “Other Ambulances”: ambulances of the health centers, hospitals and provincial health directorates. The private sector ambulances are not included in the total.
- The expenditure figures in Figure 7.36, Figure 7.38, Figure 7.40 are the values for countries calculated by the OECD.



Chapter 8

Human Resources for Health



Table 8.1. Number of Health Care Professionals by Years, All Sectors, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Specialist Physicians	45.457	47.108	48.687	49.477	52.868	54.439	56.973	60.655	63.563	66.064
General Practitioners	30.900	32.019	32.579	34.886	33.383	34.559	35.763	35.911	38.818	39.712
Medical Residents	15.592	15.339	15.844	16.490	18.224	19.404	20.415	22.075	21.066	20.253
Physicians Total	91.949	94.466	97.110	100.853	104.475	108.402	113.151	118.641	123.447	126.029
Dentists	16.371	17.744	17.893	18.149	18.332	19.278	19.959	20.589	21.432	21.099
Pharmacists	22.289	22.371	22.608	22.756	23.140	23.977	24.778	25.201	26.506	26.089
Nurses	72.393	74.483	75.753	78.182	82.626	94.661	99.910	105.176	114.772	124.982
Midwives	41.479	41.662	43.229	43.541	44.483	47.175	47.673	49.357	50.343	51.905
Other Health Personnel	50.106	57.416	60.959	62.035	67.514	79.441	89.540	93.550	99.302	110.862
Other Personnel and Procurement of Services	83.964	101.229	111.646	131.223	150.053	167.585	169.763	197.386	198.694	209.126
TOTAL	378.551	409.371	429.198	456.739	490.623	540.519	564.774	609.900	634.496	670.092

Source: General Directorate for Health Services

Table 8.2. Distribution of Health Care Professionals by Sectors and Titles, 2011

	Ministry of Health	University	Private Sector	Total
Specialist Physicians	32.623	13.094	20.347	66.064
General Practitioners	33.523	277	5.912	39.712
Medical Residents	7.236	13.017	0	20.253
Physicians Total	73.382	26.388	26.259	126.029
Dentists	7.225	1.134	12.740	21.099
Pharmacists	1.891	245	23.953	26.089
Nurses	89.314	17.530	18.138	124.982
Midwives	46.944	663	4.298	51.905
Other Health Personnel	82.201	7.011	21.650	110.862
Other Personnel and Procurement of Services	181.295	8.991	18.840	209.126
TOTAL	482.252	61.962	125.878	670.092

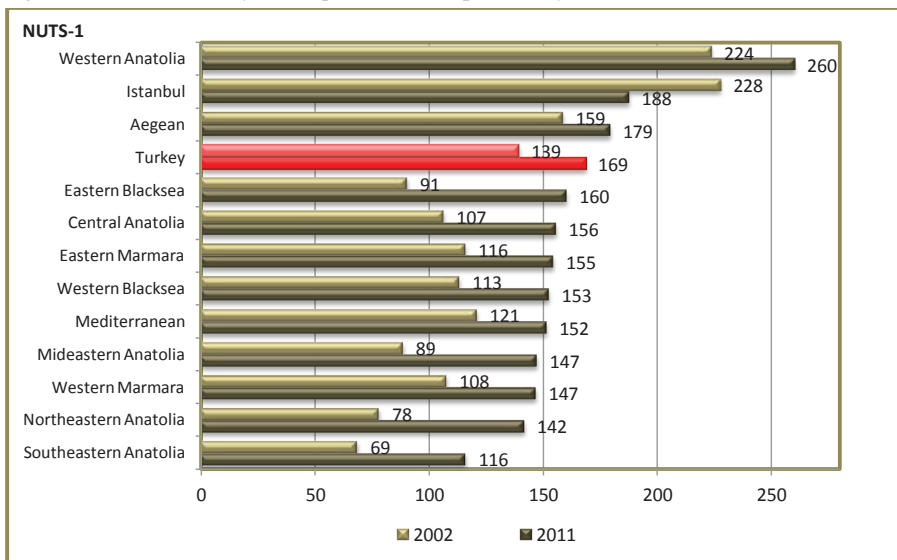
Source: General Directorate for Health Services

Table 8.3. Number of Health Care Professionals by Years, Ministry of Health, Turkey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Specialist Physicians	22.187	23.178	24.446	24.745	25.586	25.426	25.886	27.537	31.527	32.623
General Practitioners	29.030	28.910	28.472	28.740	28.077	28.884	29.899	30.417	33.229	33.523
Medical Residents	6.189	5.851	6.331	6.793	7.629	7.921	7.751	9.031	7.679	7.236
Physicians Total	57.406	57.939	59.249	60.278	61.292	62.231	63.536	66.985	72.435	73.382
Dentists	3.211	4.061	4.060	4.138	4.183	5.082	5.425	5.795	7.069	7.225
Pharmacists	1.596	1.449	1.393	1.237	1.190	1.210	1.192	1.535	1.854	1.891
Nurses	54.360	55.955	57.055	58.956	62.901	69.710	70.022	72.142	77.472	89.314
Midwives	39.473	39.422	40.661	40.583	41.387	43.781	43.600	44.468	45.515	46.944
Other Health Personnel	33.276	39.839	42.854	43.443	47.432	57.683	63.846	66.192	70.701	82.201
Other Personnel and Procurement of Services	67.496	83.691	94.502	113.421	131.760	147.947	148.866	169.437	172.296	181.295
TOTAL	256.818	282.356	299.774	322.056	350.145	387.644	396.487	426.554	447.342	482.252

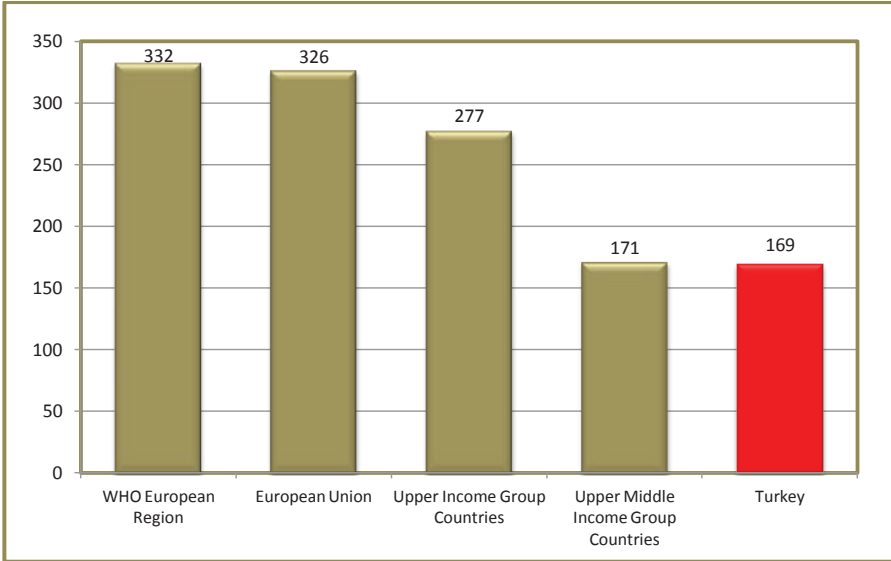
Source: General Directorate for Health Services

Figure 8.1. Number of Physicians per 100.000 Population by NUTS-1, All Sectors, 2002, 2011



Source: General Directorate for Health Services

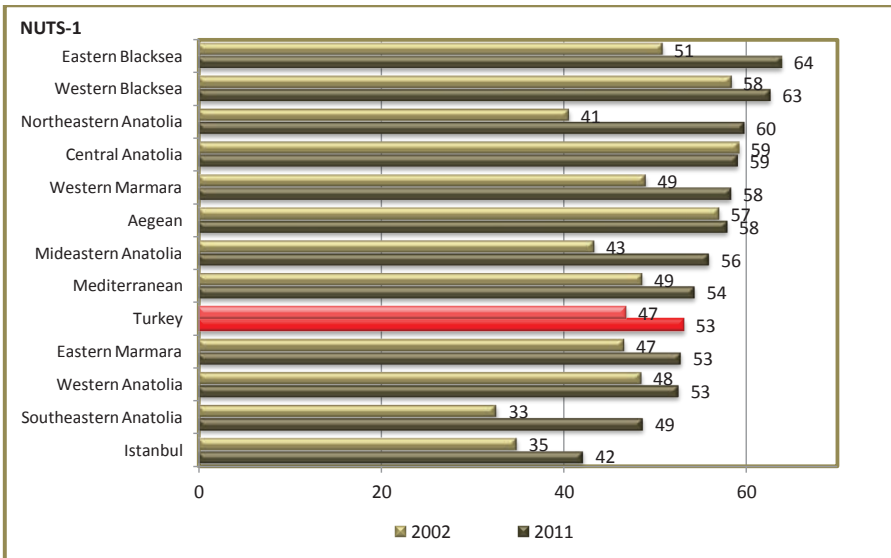
Figure 8.2. International Comparison of Number of Physicians per 100.000 Population, 2010



Source: General Directorate for Health Services, WHO World Health Statistics 2012

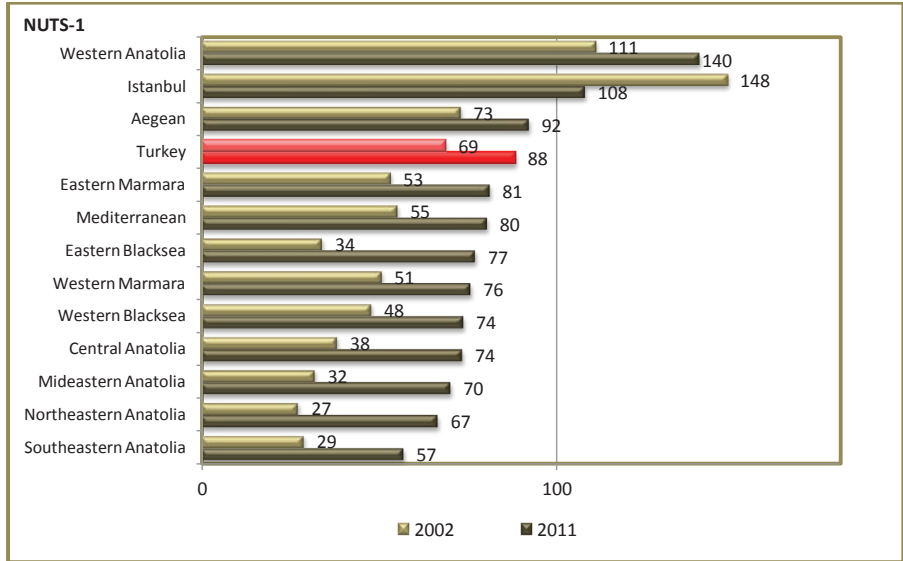
Note: Data of Turkey belongs to 2011 year.

Figure 8.3. Number of General Practitioners per 100.000 Population by NUTS-1, All Sectors, 2002, 2011



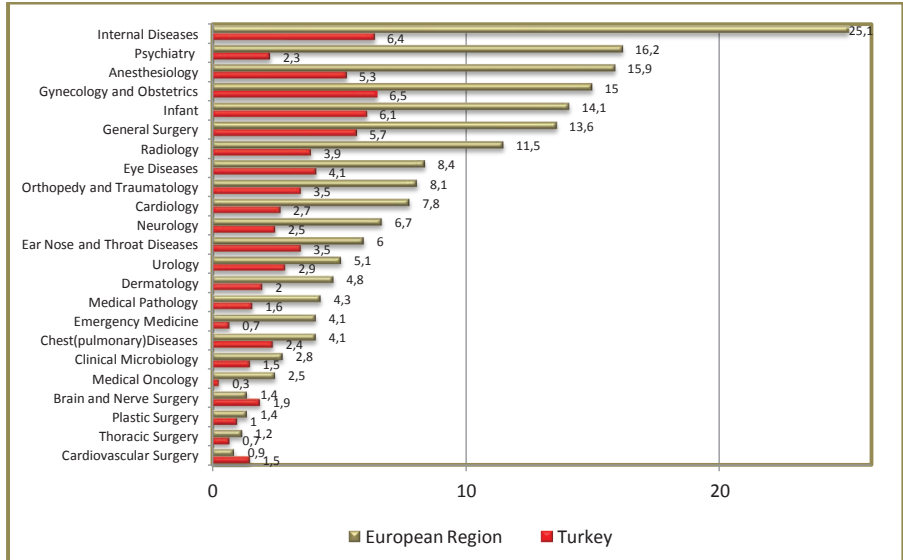
Source: General Directorate for Health Services

Figure 8.4. Number of Specialist Physicians per 100.000 Population by NUTS-1, All Sectors, 2002, 2011



Source: General Directorate for Health Services

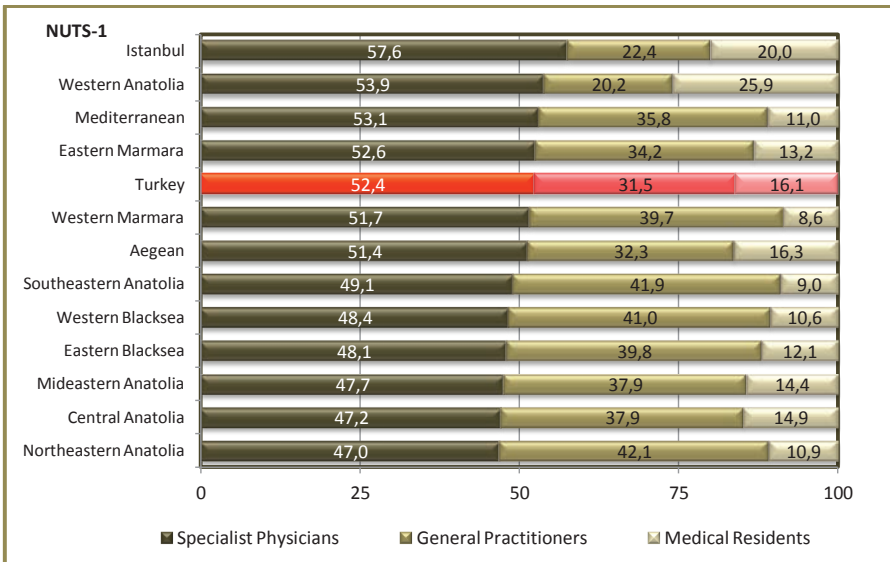
Figure 8.5. International Comparison of Number of Specialist Physicians per 100.000 Population by Branches, 2009



Source: EUROSTAT Database, General Directorate for Health Services

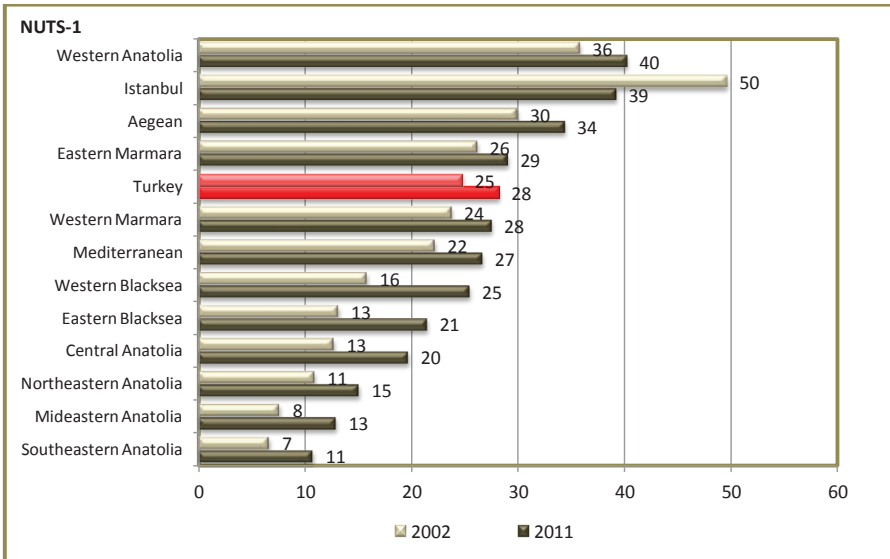
Note: Data of Turkey belongs to 2011 year.

Figure 8.6. Proportion of Specialist Physicians, Medical Residents and General Practitioners by NUTS-1, All Sectors, (%), 2011



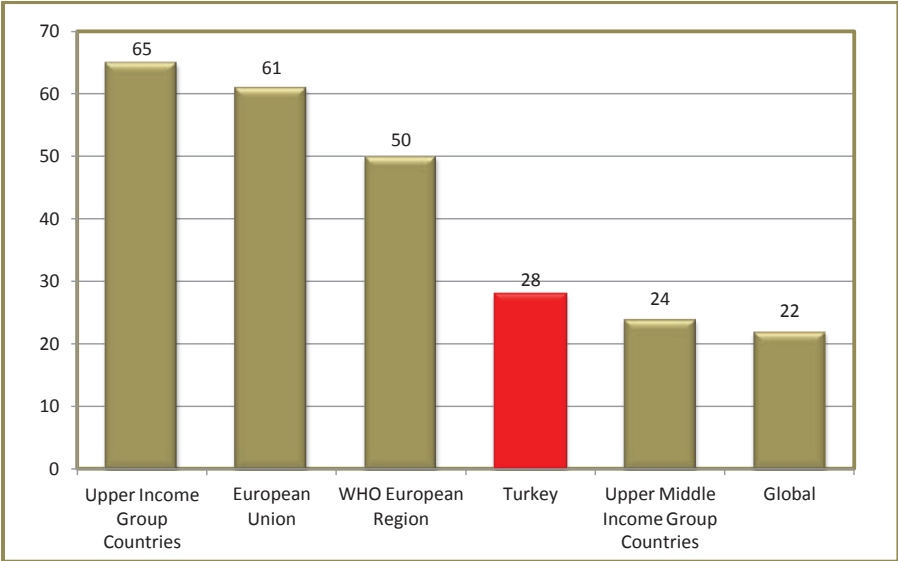
Source: General Directorate for Health Services

Figure 8.7. Number of Dentists per 100.000 Population by NUTS-1, All Sectors, 2002, 2011



Source: General Directorate for Health Services

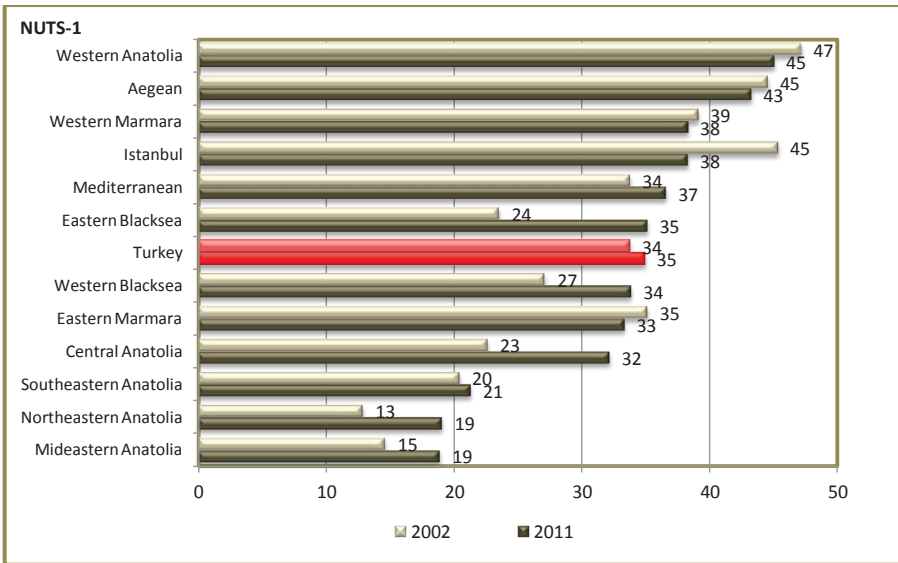
Figure 8.8. International Comparison of Number of Dentists per 100.000 Population , 2010



Source: General Directorate for Health Services, WHO World Health Statistics 2012

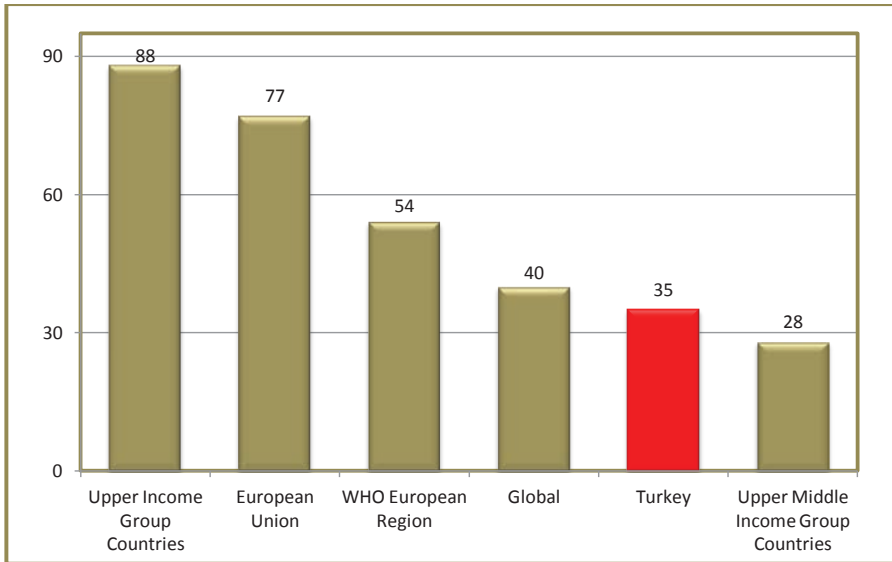
Note: Data of Turkey belongs to 2011 year.

Figure 8.9. Number of Pharmacists per 100.000 Population by NUTS-1, All Sectors, 2002, 2011



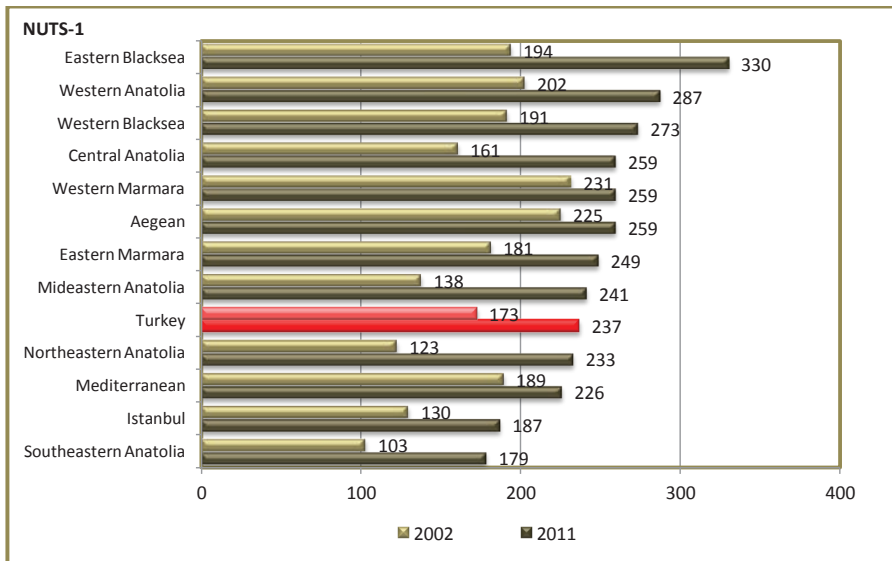
Source: General Directorate for Health Services

Figure 8.10. International Comparison of Number of Pharmacists per 100.000 Population, 2010



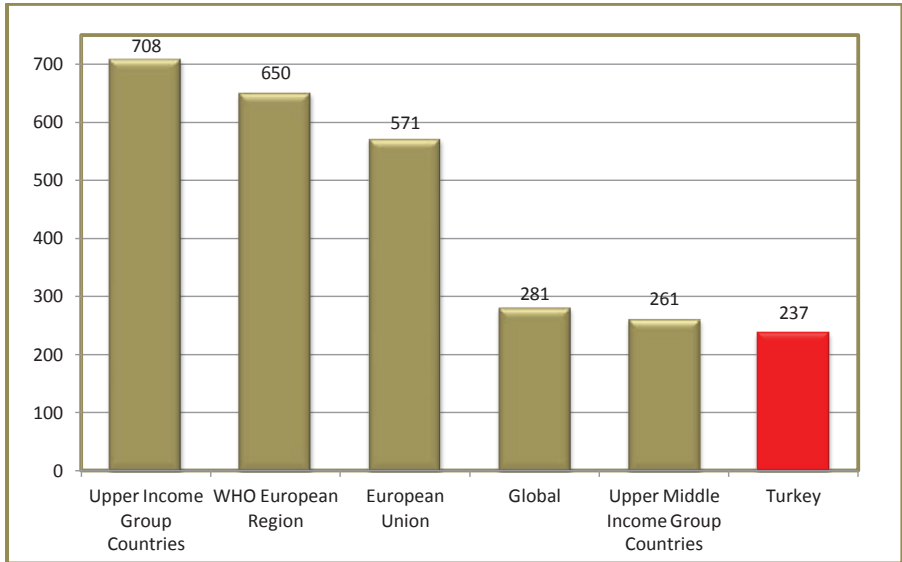
Source: General Directorate for Health Services, WHO World Health Statistics 2012

Figure 8.11. Number of Nurses and Midwives per 100.000 Population by NUTS-1, All Sectors, 2002, 2011



Source: General Directorate for Health Services

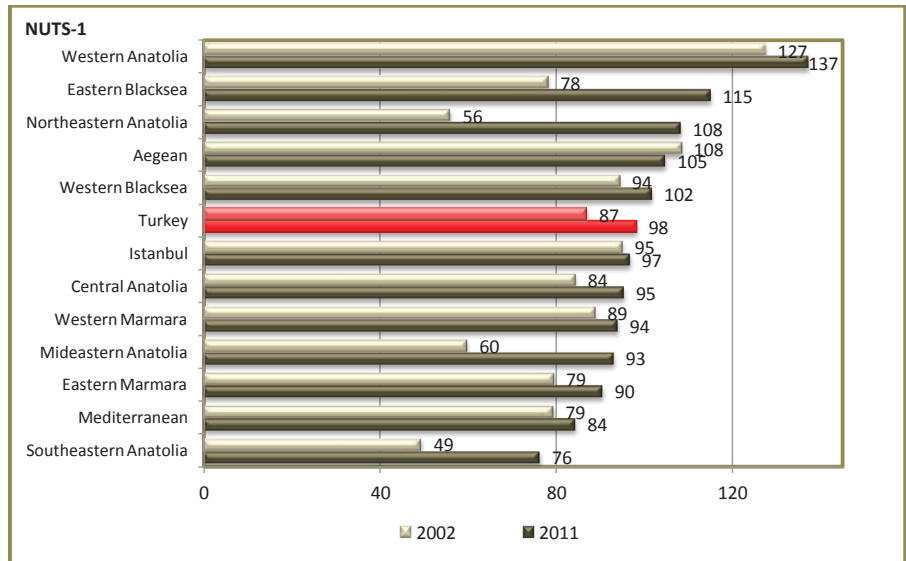
Figure 8.12. International Comparison of Number of Nurses and Midwives per 100.000 Population, 2010



Source: General Directorate for Health Services, WHO World Health Statistics 2012

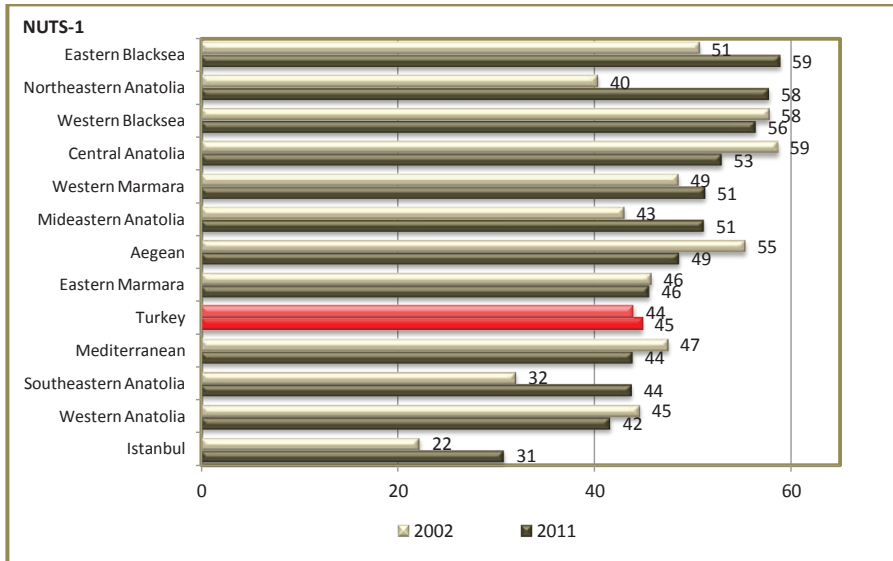
Note: Data of Turkey belongs to 2011 year.

Figure 8.13. Number of Physicians per 100.000 Population by NUTS-1, MoH , 2002, 2011



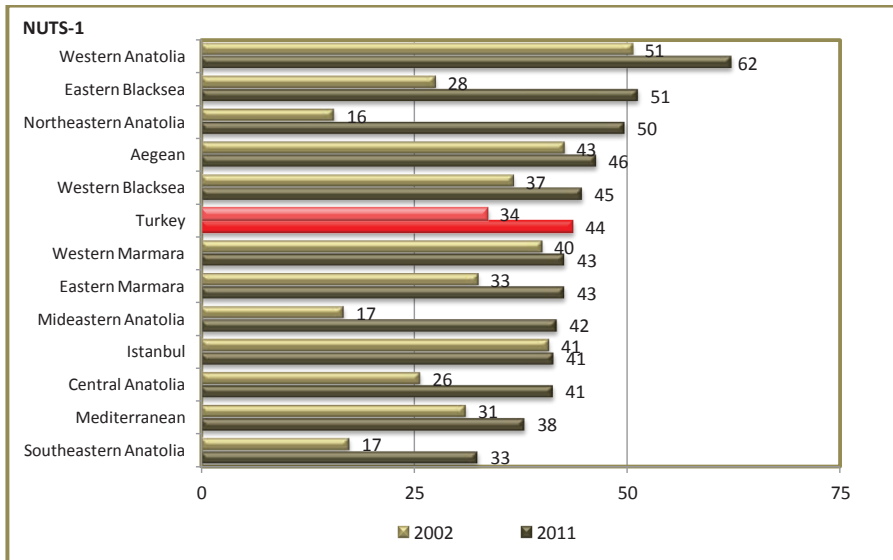
Source: General Directorate for Health Services

Figure 8.14. Number of General Practitioners per 100.000 Population by NUTS-1, MoH, 2002, 2011



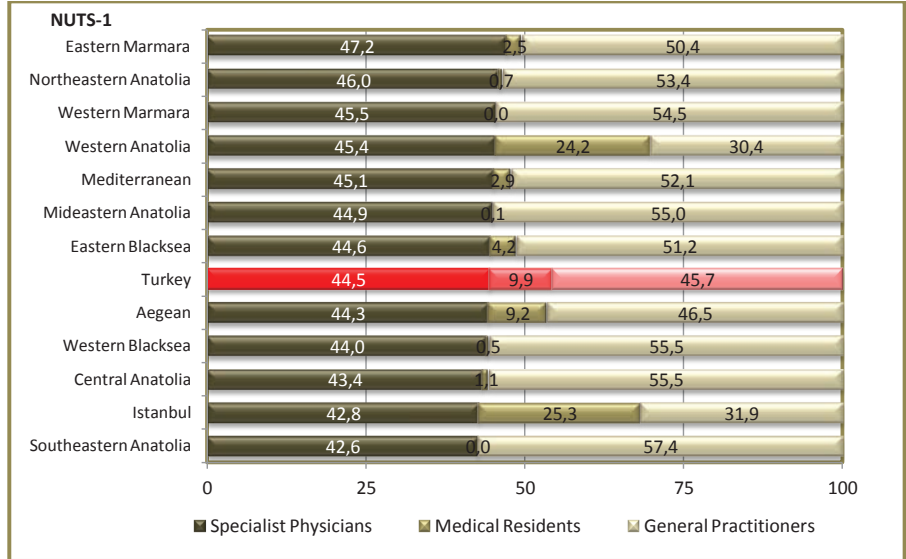
Source: General Directorate for Health Services

Figure 8.15. Number of Specialist Physicians per 100.000 Population by NUTS-1, MoH, 2002, 2011



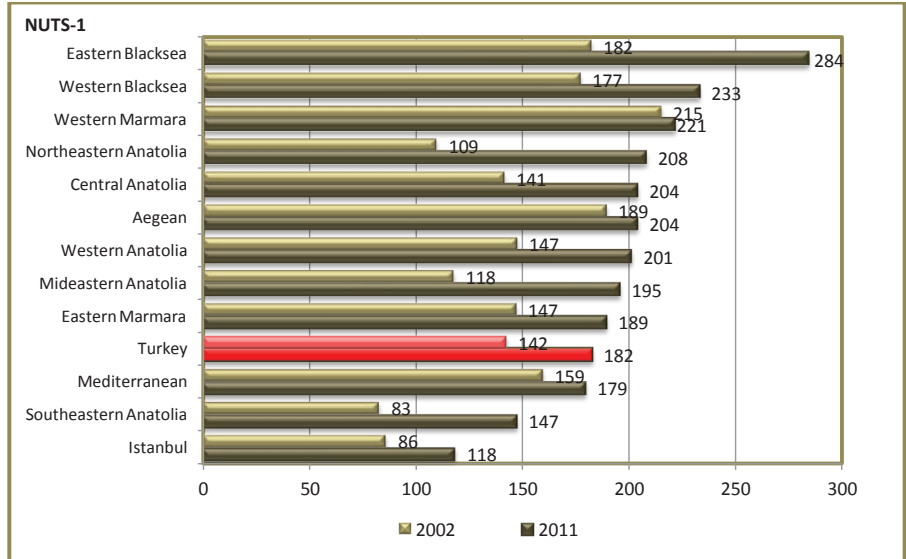
Source: General Directorate for Health Services

Figure 8.16. Proportion of Specialist Physicians, Medical Residents and General Practitioners by NUTS-1, MoH, (%), 2011



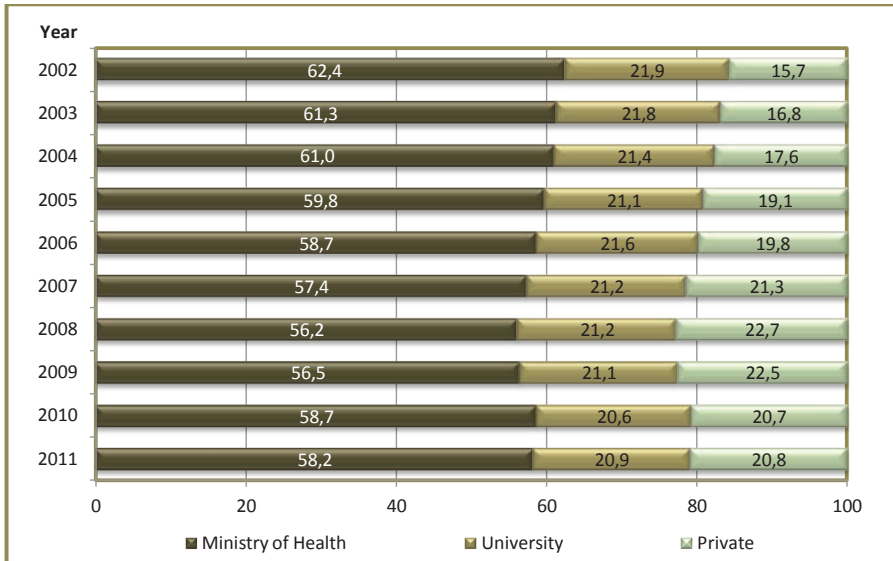
Source: General Directorate for Health Services

Figure 8.17. Number of Nurses and Midwives per 100.000 Population by NUTS-1, MoH, 2002, 2011



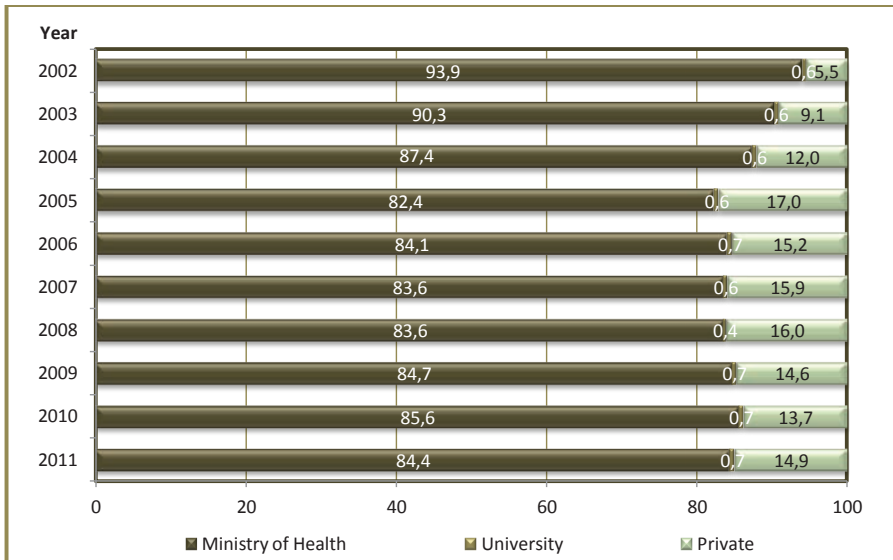
Source: General Directorate for Health Services

Figure 8.18. Proportion of Total Physicians by Years and Sectors, (%), Turkey



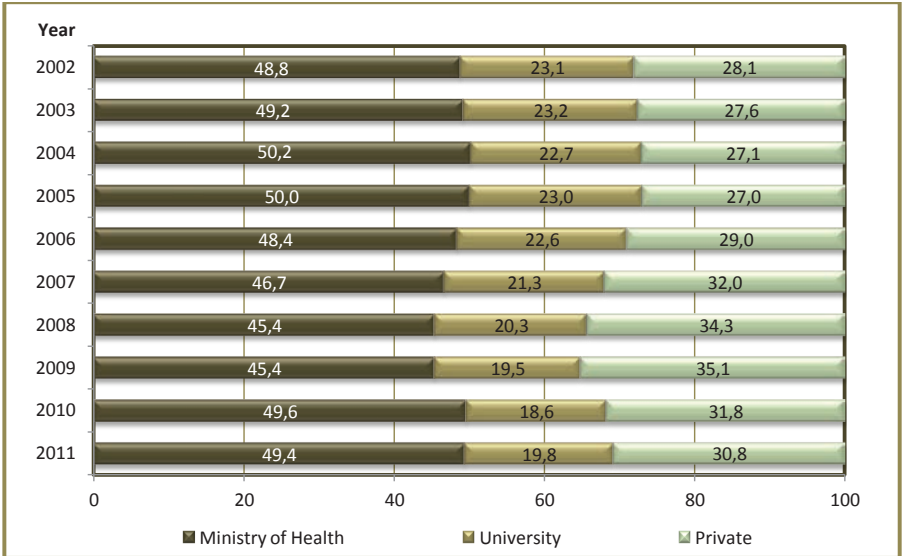
Source: General Directorate for Health Services

Figure 8.19. Proportion of General Practitioners by Years and Sectors, (%), Turkey



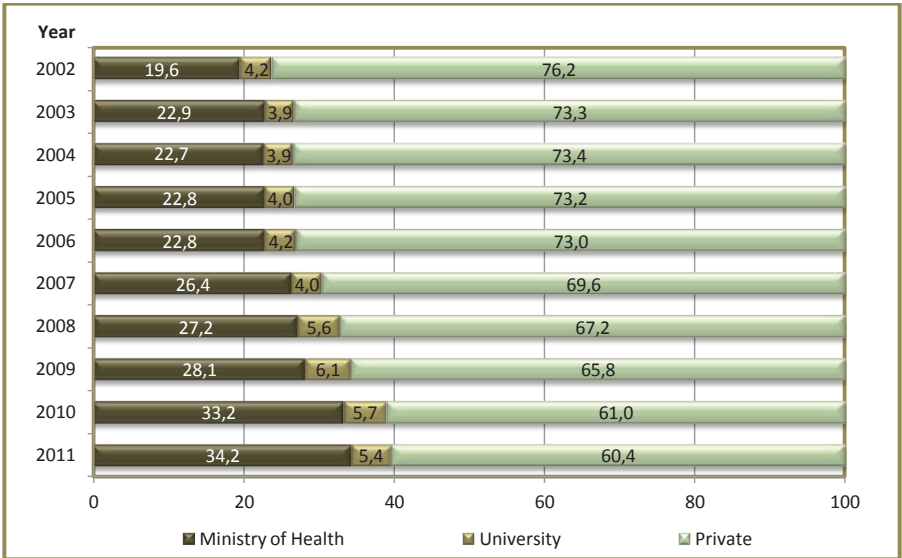
Source: General Directorate for Health Services

Figure 8.20. Proportion of Specialist Physicians by Years and Sectors, (%), Turkey



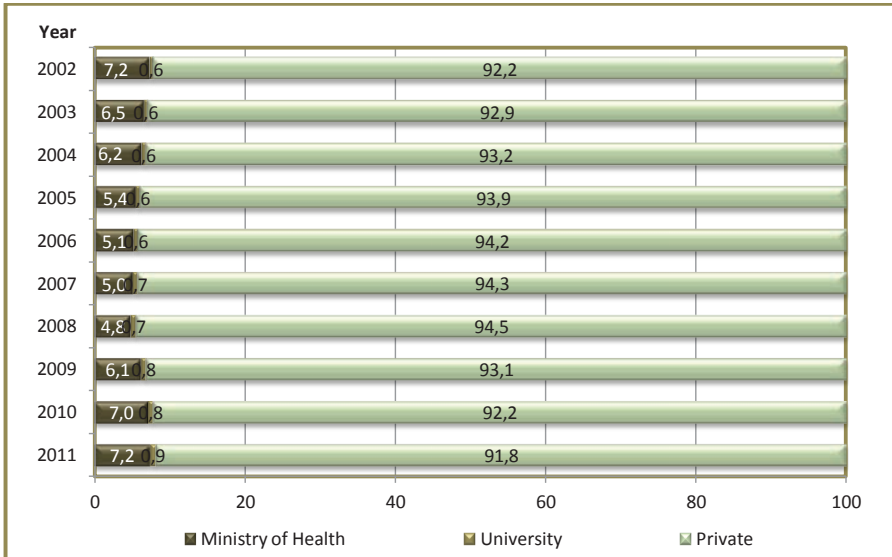
Source: General Directorate for Health Services

Figure 8.21. Proportion of Dentists by Years and Sectors, (%), Turkey



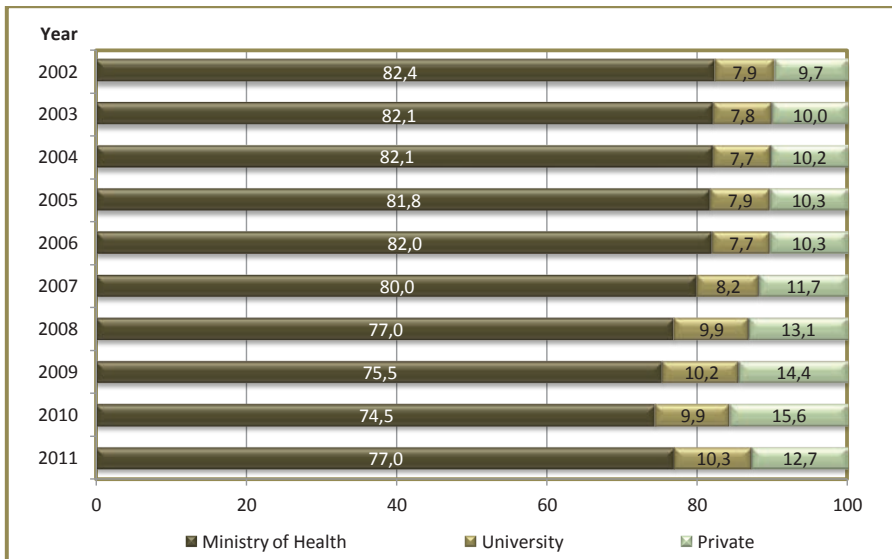
Source: General Directorate for Health Services

Figure 8.22. Proportion of Pharmacists by Years and Sectors, (%), Turkey



Source: General Directorate for Health Services

Figure 8.23. Proportion of Nurses and Midwives by Years and Sectors, (%), Turkey



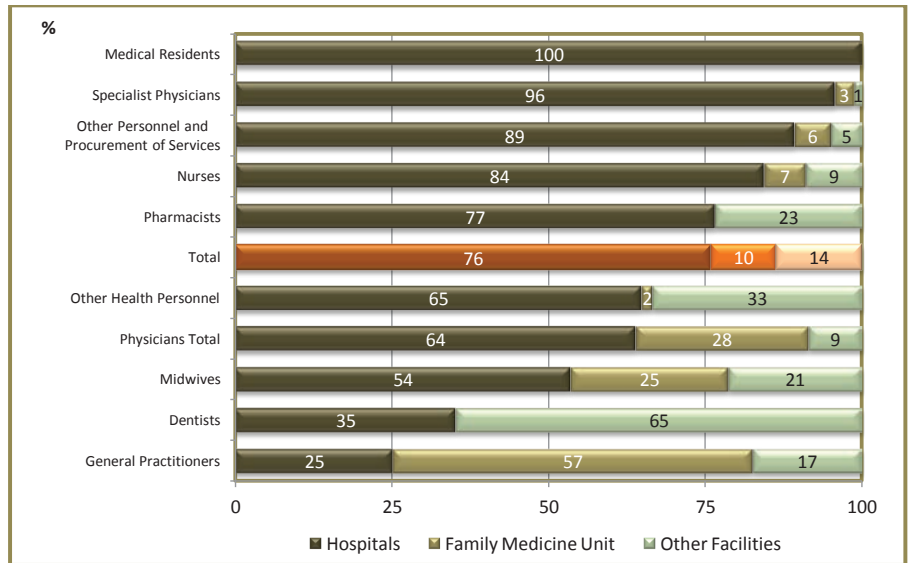
Source: General Directorate for Health Services

Table 8.4. Distribution of MoH Personnel by Service Units, MoH, 2011

	Hospitals	Family Medicine Unit	Other Facilities	Total
Specialist Physicians	31.181	1.009	433	32.623
General Practitioners	8.456	19.207	5.860	33.523
Medical Residents	7.236	0	0	7.236
Physicians Total	46.873	20.216	6.293	73.382
Dentists	2.546	0	4.679	7.225
Pharmacists	1.448	0	443	1.891
Nurses	75.288	6.009	8.017	89.314
Midwives	25.123	11.804	10.017	46.944
Other Health Personnel	53.274	1.445	27.482	82.201
Other Personnel and Procurement of Services	161.625	10.593	9.077	181.295
TOTAL	366.177	50.067	66.008	482.252

Source: General Directorate for Health Services

Figure 8.24. Distribution of MoH Personnel by Service Units , (%), MoH, 2011



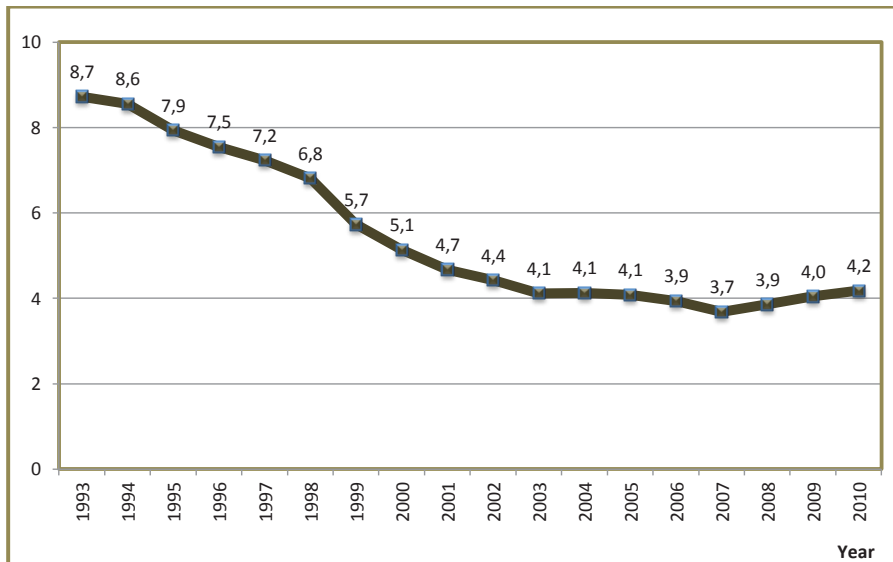
Source: General Directorate for Health Services

Table 8.5. Number of Students and Academic Staff Member in Faculties of Medicine by Education Terms, Turkey

Education Term	Number of Faculties	Number of Students			Number of Academic Staff Member
		Recently Enrolled	Still in Education	Graduates	
1993-1994	26	5.115	33.143	4.888	3.798
1994-1995	26	5.232	33.191	4.792	3.881
1995-1996	30	5.155	34.065	4.191	4.293
1996-1997	32	4.796	34.162	4.264	4.528
1997-1998	33	4.479	34.185	4.408	4.724
1998-1999	38	4.698	34.317	4.467	5.036
1999-2000	39	4.648	32.957	5.105	5.748
2000-2001	40	4.749	32.250	5.174	6.284
2001-2002	40	4.801	31.786	4.925	6.798
2002-2003	44	4.945	31.719	4.380	7.172
2003-2004	46	5.130	32.118	4.487	7.794
2004-2005	46	5.090	32.552	4.494	7.881
2005-2006	46	4.957	32.985	4.532	8.077
2006-2007	47	5.117	33.537	4.899	8.512
2007-2008	49	5.253	33.782	4.872	9.182
2008-2009	56	6.655	35.454	4.753	9.192
2009-2010	61	7.877	38.369	5.087	9.479
2010-2011	69	8.438	41.664	5.138	9.970

Source: ESPC Higher Education Statistics

Figure 8.25. Number of Students per Academic Staff Member in Faculties of Medicine by Years, Turkey



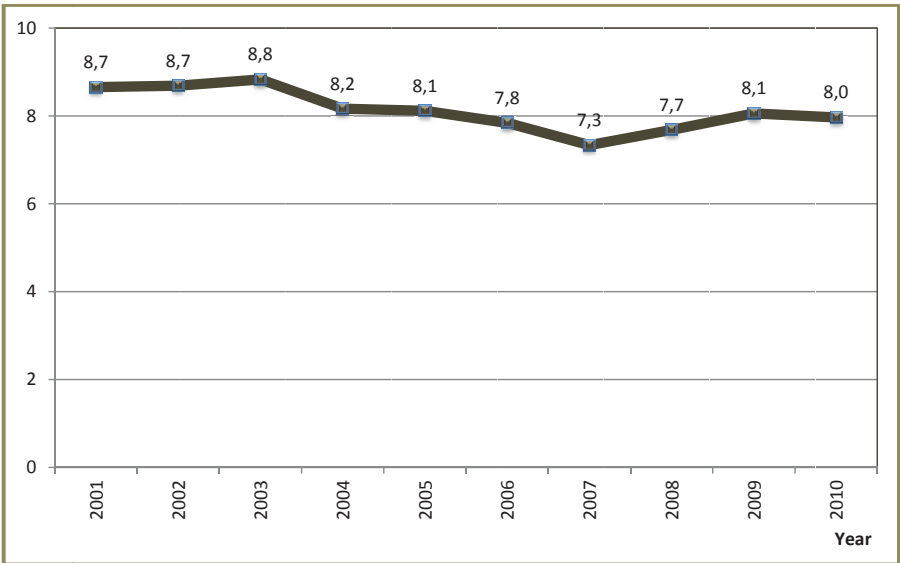
Source: ESPC Higher Education Statistics

Table 8.6. Number of Students and Academic Staff Member in Faculties of Dentistry by Education Terms, Turkey

Education Term	Number of Faculties	Number of Students			Number of Academic Staff Member
		Recently Enrolled	Still in Education	Graduates	
2001-2002	14	971	5.167	1.001	597
2002-2003	14	975	5.256	813	605
2003-2004	14	996	5.343	856	605
2004-2005	14	994	5.422	849	664
2005-2006	15	1.030	5.609	855	691
2006-2007	17	1.078	5.873	763	749
2007-2008	18	1.132	5.926	981	808
2008-2009	19	1.458	6.322	994	823
2009-2010	22	1.700	7.082	927	879
2010-2011	27	1.998	7.528	950	945

Source: ESPC Higher Education Statistics

Figure 8.26. Number of Students per Academic Staff Member in Faculties of Dentistry by Years, Turkey



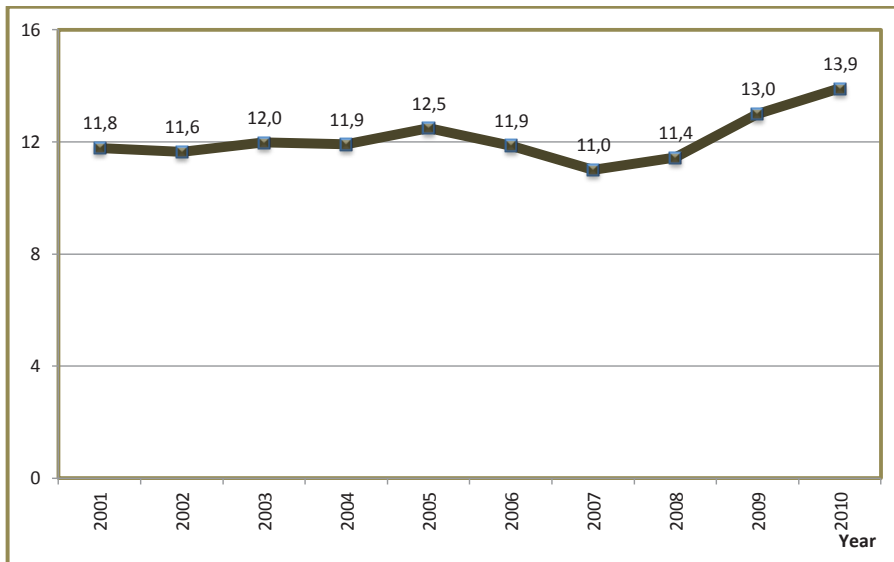
Source: ESPC Higher Education Statistics

Table 8.7. Number of Students and Academic Staff Member in Faculties of Pharmacy by Education Terms, Turkey

Education Term	Number of Faculties	Number Of Students			Number of Academic Staff Member
		Recently Enrolled	Still in Education	Graduates	
2001-2002	9	855	4.149	695	352
2002-2003	11	939	4.120	919	354
2003-2004	11	967	4.266	792	356
2004-2005	11	973	4.324	885	363
2005-2006	12	1.005	4.572	785	366
2006-2007	12	997	4.666	896	393
2007-2008	12	1.020	4.666	981	424
2008-2009	12	1.195	4.896	966	428
2009-2010	12	1.265	5.821	374	448
2010-2011	15	1.421	6.368	815	458

Source: ESPC Higher Education Statistics

Figure 8.27. Number of Students per Academic Staff Member in Faculties of Pharmacy by Education Terms, Turkey



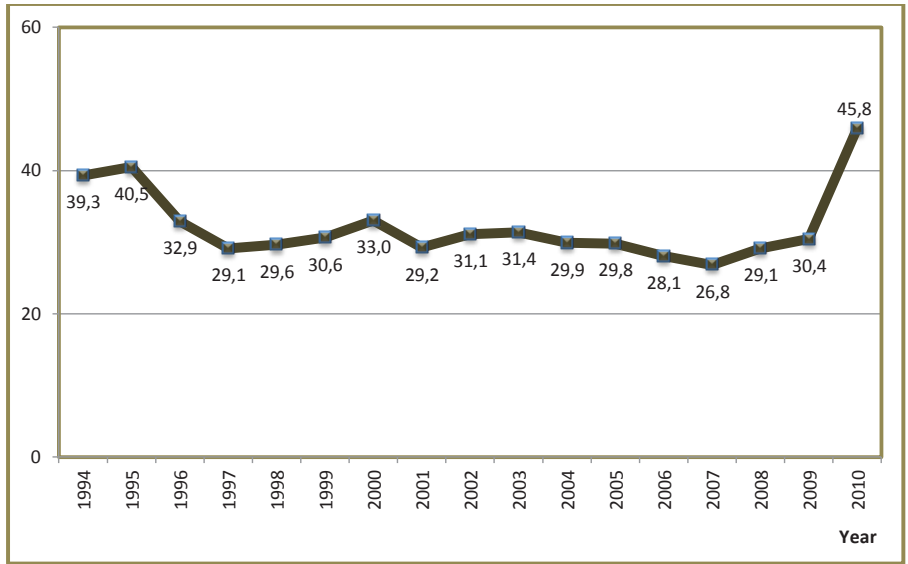
Source: ESPC Higher Education Statistics

Table 8.8. Number of Students and Lecturers in Bachelor Degree (4-Years) Faculties of Nursing by Education Terms, Turkey

Education Term	Number of Lecturer in Nursing Schools	Number of Students		Graduates
		Recently Enrolled	Still in Education	
1994-1995	236	3.953	9.277	1.808
1995-1996	246	3.922	9.958	2.885
1996-1997	295	3.528	9.705	2.707
1997-1998	326	3.871	9.486	2.708
1998-1999	345	2.990	10.224	2.523
1999-2000	391	3.728	11.974	2.105
2000-2001	421	3.753	13.897	1.693
2001-2002	523	3.883	15.287	2.289
2002-2003	528	3.940	16.423	2.586
2003-2004	552	4.053	17.320	3.002
2004-2005	598	4.091	17.887	3.285
2005-2006	607	4.035	18.093	3.648
2006-2007	664	4.361	18.630	3.782
2007-2008	762	5.824	20.442	4.113
2008-2009	783	6.570	22.796	3.894
2009-2010	827	6.764	25.176	4.288
2010-2011	628	7.734	28.791	4.358

Source: ESPC Higher Education Statistics

Figure 8.28. Number of Students per Lecturers in Bachelor Degree (4-Years) Faculties of Nursing by Years, Turkey



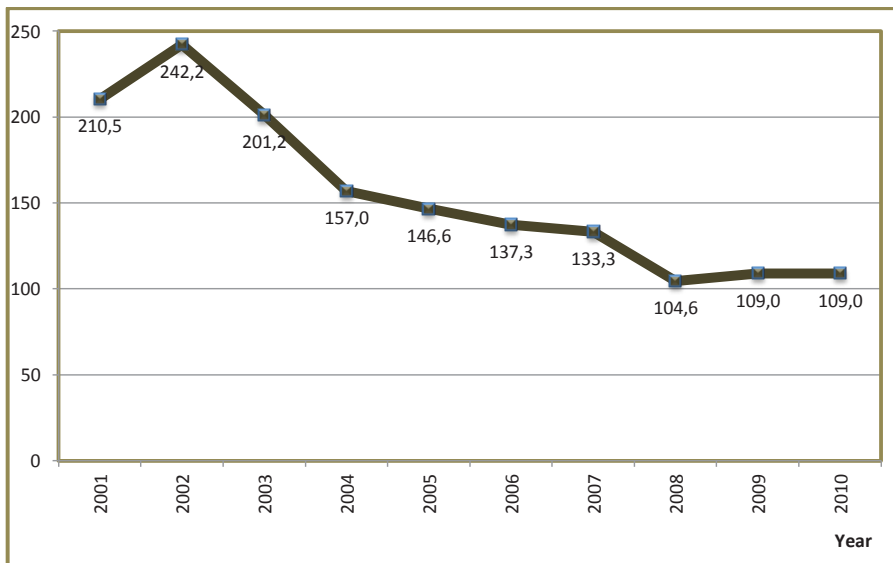
Source: ESPC Higher Education Statistics

Table 8.9. Number of Students and Lecturers in Bachelor Degree (4-Years) Faculties of Midwifery by Education Terms, Turkey

Education Term	Number of Faculties	Number of Students			Number of Lecturers
		Recently Enrolled	Still in Education	Graduates	
2001-2002	22	1.244	4.421	590	21
2002-2003	27	1.270	5.087	540	21
2003-2004	30	1.286	5.432	842	27
2004-2005	29	1.293	5.653	979	36
2005-2006	29	1.214	5.719	1.101	39
2006-2007	29	1.338	5.906	1.169	43
2007-2008	32	1.488	5.997	1.160	45
2008-2009	33	1.873	6.382	1.331	61
2009-2010	33	1.898	6.977	1.254	64
2010-2011	33	1.889	7.627	1.307	70

Source: ESPC Higher Education Statistics

Figure 8.29. Number of Students per Lecturers in Bachelor Degree (4-Years) Faculties of Midwifery by Years, Turkey



Source: ESPC Higher Education Statistics

Table 8.10. Number of Graduates of Vocational High Schools for Health by Education Terms and Departments, Turkey

Education Term	Nurses	Midwives	Health Officers	Environmental Health	Dental Care	Medical Secretary	Emergency Care
2001-2002	1	10	254	823	183	5.346	4.758
2002-2003	0	1	0	753	105	3.341	4.201
2003-2004	0	0	1	327	74	1.737	3.967
2004-2005	896	1.539	124	195	31	1.203	2.529
2005-2006	1.738	1.921	233	221	44	1136	2.578
2006-2007	1.927	1.129	199	153	52	809	1.737
2007-2008	2.888	1.330	229	130	81	699	2.094
2008-2009	41	-	-	316	136	1.185	3.125
2009-2010	-	-	-	419	201	1.430	4.285
2010-2011	7.515	-	-	234	353	1.224	3.702
2011-2012	8.874	-	-	165	426	942	3.934

Source: General Directorate for Health Services

Table 8.11. Data on Medical Residency Training by Education Term, Turkey

Education Term	Number of Entrance for Medical Residency	Number of Graduated Specialist Physicians
2001-2002	3.693	2.558
2002-2003	4.040	2.408
2003-2004	4.121	2.939
2004-2005	4.810	3.588
2005-2006	4.376	2.448
2006-2007	5.262	2.283
2007-2008	4.644	3.223
2008-2009	3.828	3.721
2009-2010	5.792	5.101
2010-2011	4.295	4.980

Source: ESPC Higher Education Statistics

Explanations for Chapter 8

- The number of healthcare professionals working in institutions and organizations under the Ministry of Defense is not included.
- Healthcare Professionals working in the following branches were included in the category of “Other” Healthcare Professionals: Surgery Technician, Anesthesia Technician, Biologist, Environmental Health Technician, Child Development Specialist, Dental Technician, Dental Prosthetic Technician, Dietitian, Physical Therapy Technician, Physiotherapist, Physiotherapist, First Aid and Emergency Care Technician, Heart-Lung Pump Operation Technician, Laboratory Technician, Audiologist, Audiometric Technician, Audiometric Technician, Orthopedic Technician, Pathological Anatomy Technician, Perfusion Pump Technician, Prosthetic Technician, Psychologist, X-ray Technician, Health Physicists, Health Officer of the war, Health Technician, Cytopathologist, Social Worker, Medical Secretary, Medical Technologist, Public Health Technician.
- The numbers of the SSI staff between the years 2002 and 2005 were included in the number of the Ministry of Health staff.
- The total population in 2002 is given by the TURKSTAT only as a total. The Distribution of the 2002 population by NUTS-1, was projected by taking the distribution of the results of the 2000 Population Census by NUTS-1 into consideration.
- “Other Institutions” which is indicated in the distribution of the Ministry of Health personnel: include 112 Emergency Center, Tuberculosis Dispensary, Cancer Early Diagnosis and Screening Center, Health Post, Public Health Laboratory, GD-MCHFP Center, Oral and Dental Health Center personnel.
- In the table where the Medical Faculty Statistics are given: Ataturk University, Gazi, Hacettepe and Istanbul Universities offer medical education in both English and Turkish in different departments and they are not listed separately. The number of faculty members from other departments are not included.
- The Number of Academic staff in the faculties includes faculty professors, associate professors, and assistant professors.
- Professors, associate professors, assistant professors, lecturers, experts, research assistants, translators, and educational planners were included in the number of the teaching staff in Education Institutions for Nurses and midwifery training schools providing education at the undergraduate level.



Chapter 9

Health Economics and Financing

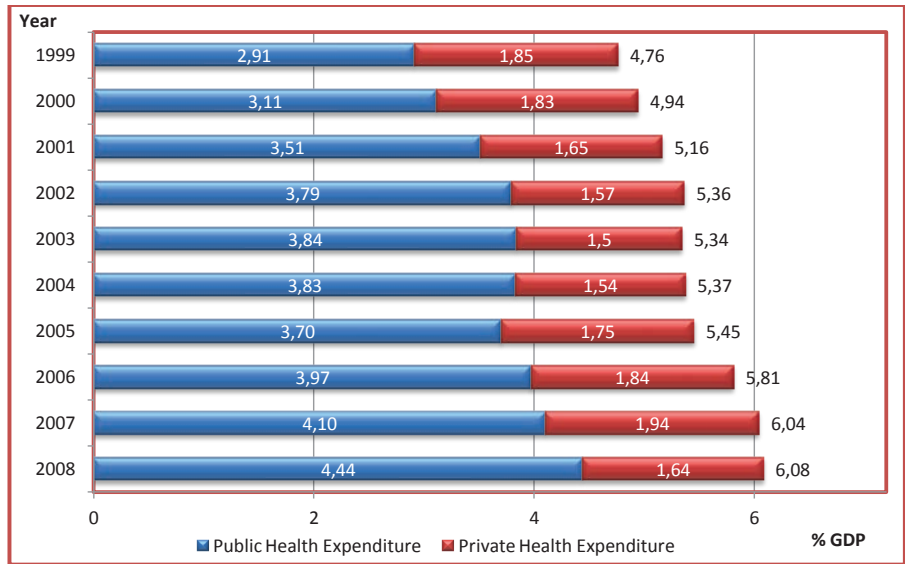


Table 9.1. Current, Investment and Total Health Expenditure, by Years, Turkey

Yıllar	Unit	GDP	Current Health Expenditure	Proportion of Current Health Expenditure to the GDP (%)	Investment Expenditure	Proportion of Investment Expenditure to the GDP (%)	Total Health Expenditure (Current + Investment)	Proportion of Total Health Expenditure to the GDP (%)
1999	Million TL	104.596	4.786	4,6	199	0,2	4.985	4,8
	Million US \$	261.489	11.965		497,5		12.463	
	Million PPP US \$	522.980	23.930		995		24.925	
2000	Million TL	166.658	7.888	4,7	360	0,2	8.248	4,9
	Million US \$	277.763	13.147		600		13.747	
	Million PPP US \$	555.527	26.293		1.200		27.493	
2001	Million TL	240.224	12.086	5	310	0,1	12.396	5,2
	Million US \$	200.187	10.072		258		10.330	
	Million PPP US \$	600.560	30.215		775		30.990	
2002	Million TL	350.476	18.331	5,2	443	0,1	18.774	5,4
	Million US \$	233.651	12.221		295		12.516	
	Million PPP US \$	584.127	30.552		738		31.290	
2003	Million TL	454.781	23.676	5,2	603	0,1	24.279	5,3
	Million US \$	303.187	15.784		402		16.186	
	Million PPP US \$	568.476	29.595		754		30.349	
2004	Million TL	559.033	28.616	5,1	1.405	0,3	30.021	5,4
	Million US \$	399.309	20.440		1.004		21.444	
	Million PPP US \$	698.791	35.770		1.756		37.526	
2005	Million TL	648.932	33.292	5,1	2.067	0,3	35.359	5,4
	Million US \$	499.178	25.609		1.590		27.199	
	Million PPP US \$	811.165	41.615		2.584		44.199	
2006	Million TL	758.391	40.949	5,4	3.120	0,4	44.069	5,8
	Million US \$	541.708	29.249		2.229		31.478	
	Million PPP US \$	947.988	51.186		3.900		55.086	
2007	Million TL	843.178	46.495	5,5	4.409	0,5	50.904	6
	Million US \$	648.599	35.765		3.392		39.157	
	Million PPP US \$	936.865	51.661		4.899		56.560	
2008	Million TL	950.534	52.320	5,5	5.420	0,6	57.740	6,1
	Million US \$	731.180	40.246		4.169		44.415	
	Million PPP US \$	1.056.149	58.133		6.022		64.156	

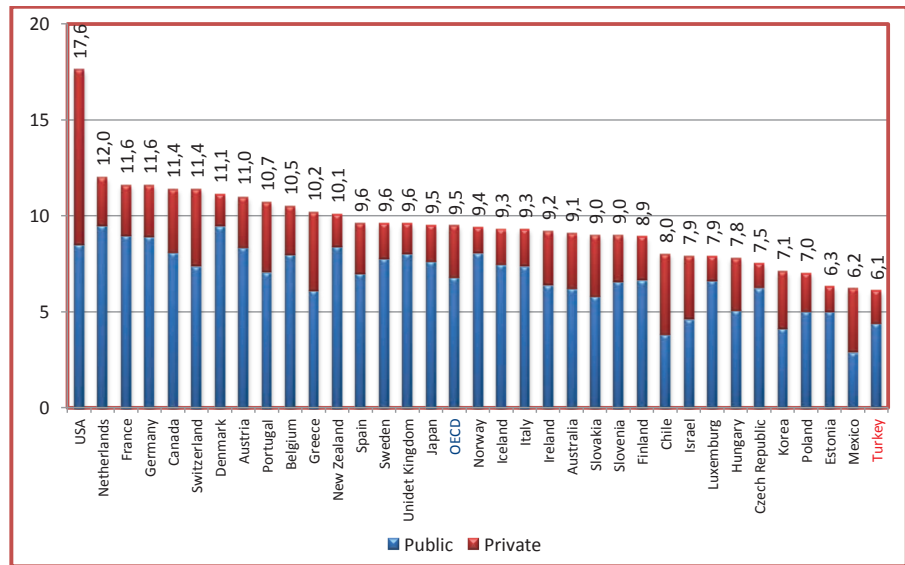
Source: TURKSTAT

Figure 9.1. Public and Private Health Expenditure as a Share of GDP by Years, (%), Turkey



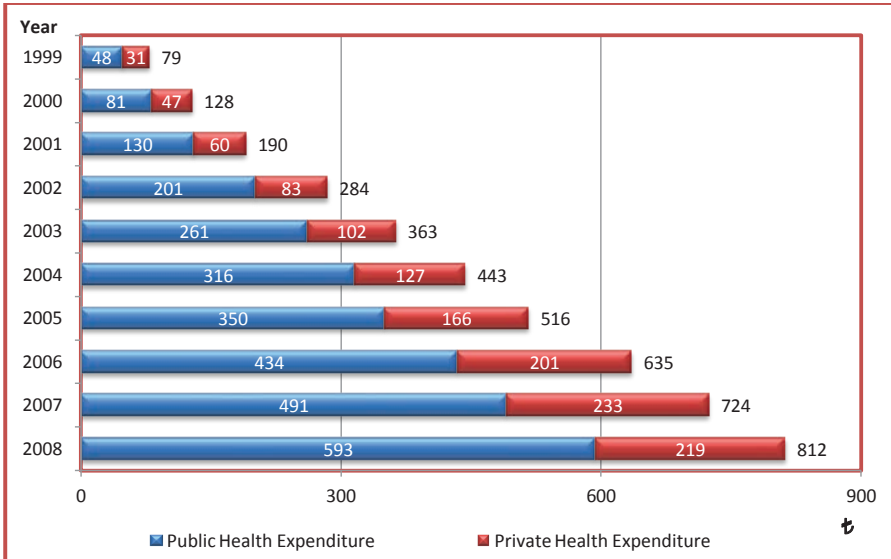
Source: TURKSTAT

Figure 9.2. Health Expenditure as a Share of GDP in the OECD Countries, (%), 2010



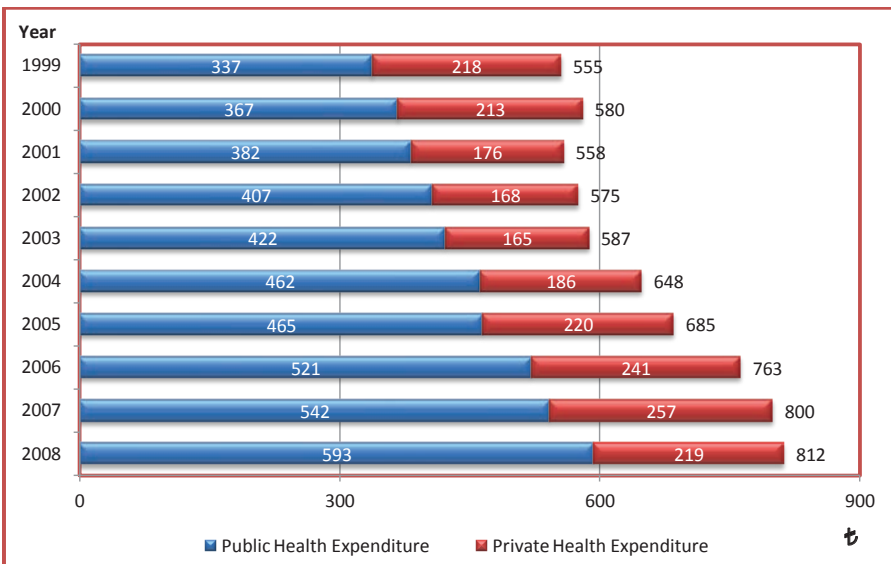
Source: OECD Health Data 2012

Figure 9.3. Public and Private Health Expenditure Per Capita by Years, Nominal, TL, Turkey



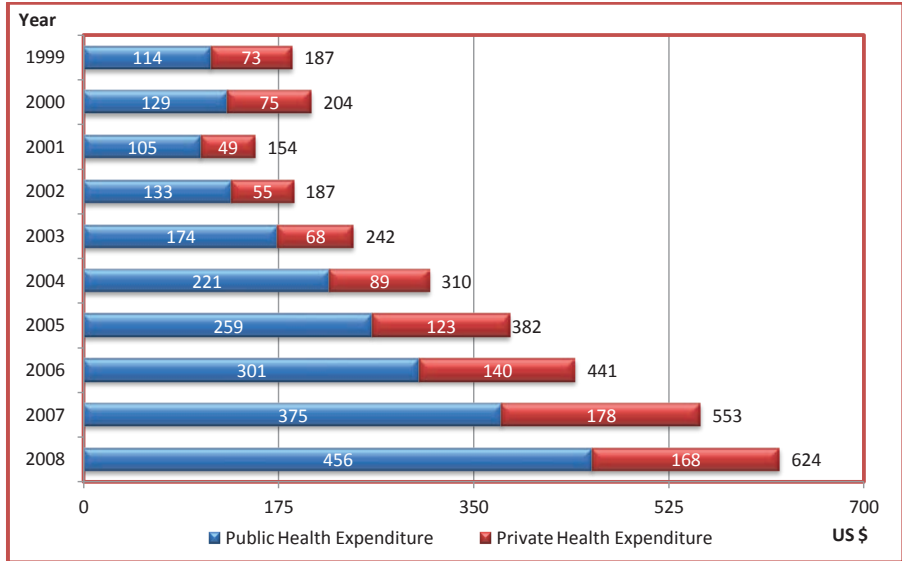
Source: TURKSTAT

Figure 9.4. Public and Private Health Expenditure per Capita, at 2008 Price Level, TL, Turkey



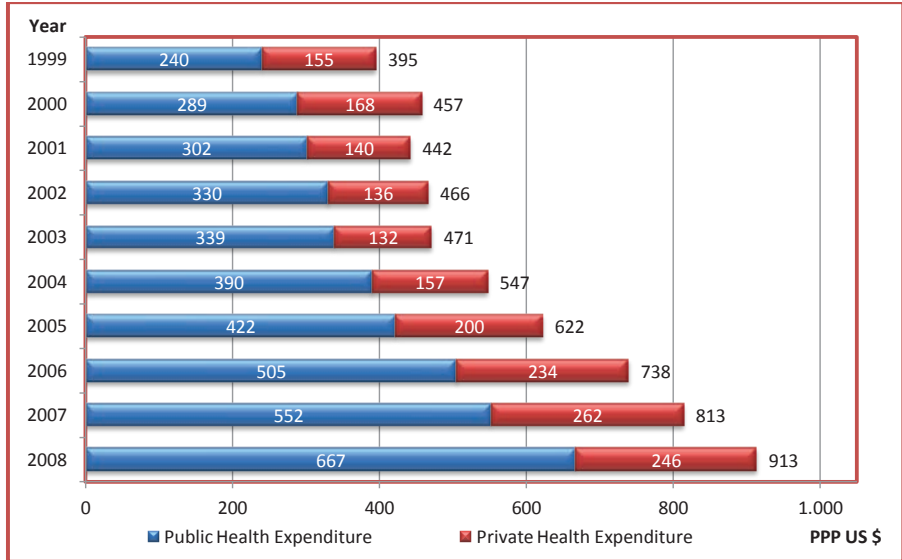
Source: TURKSTAT

Figure 9.5. Public and Private Health Expenditure per Capita by Years, US\$, Turkey



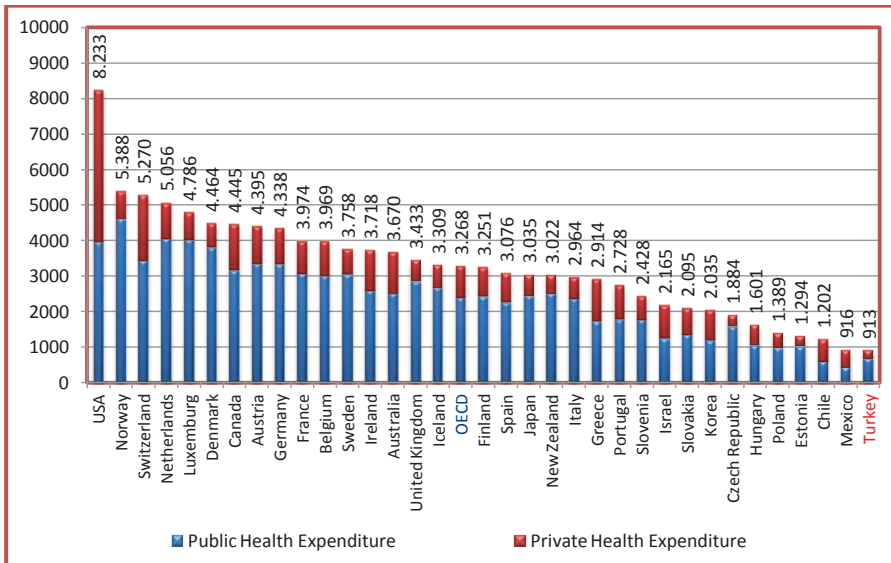
Source: TURKSTAT

Figure 9.6. Public and Private Health Expenditure per Capita by Years, PPP US\$, Turkey



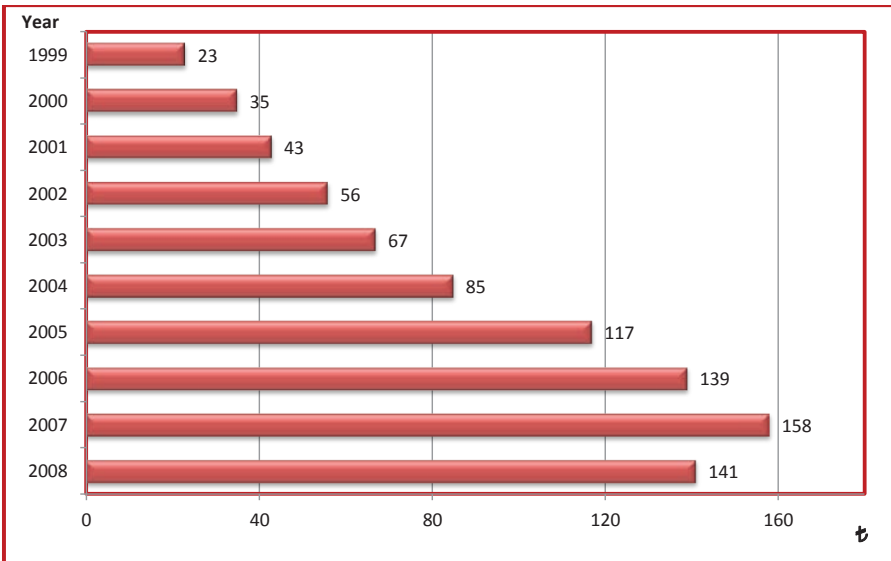
Source: TURKSTAT

Figure 9.7. Public and Private Health Expenditure per Capita in OECD Countries, PPP US\$, 2010



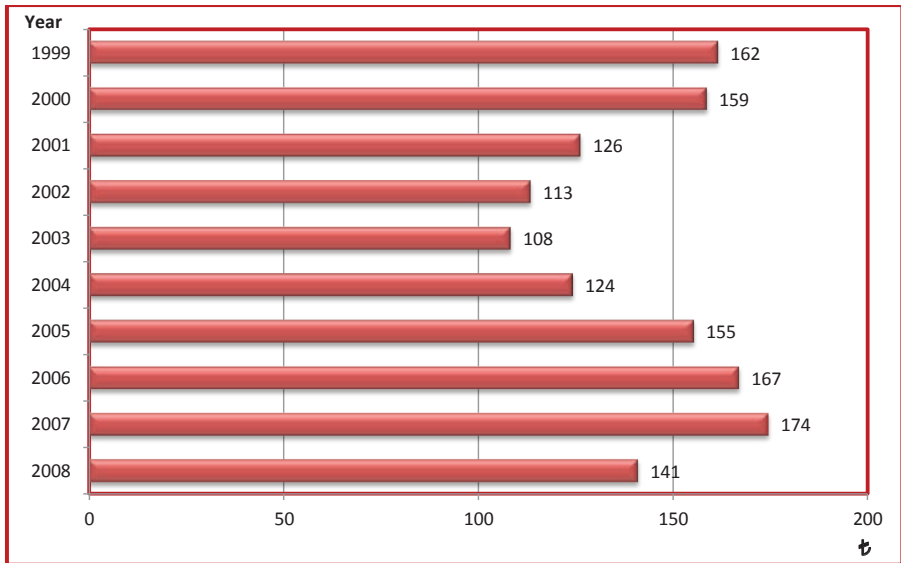
Source: OECD Health Data 2012

Figure 9.8. Out-of-Pocket Health Expenditure per Capita by Years, Nominal, TL, Turkey



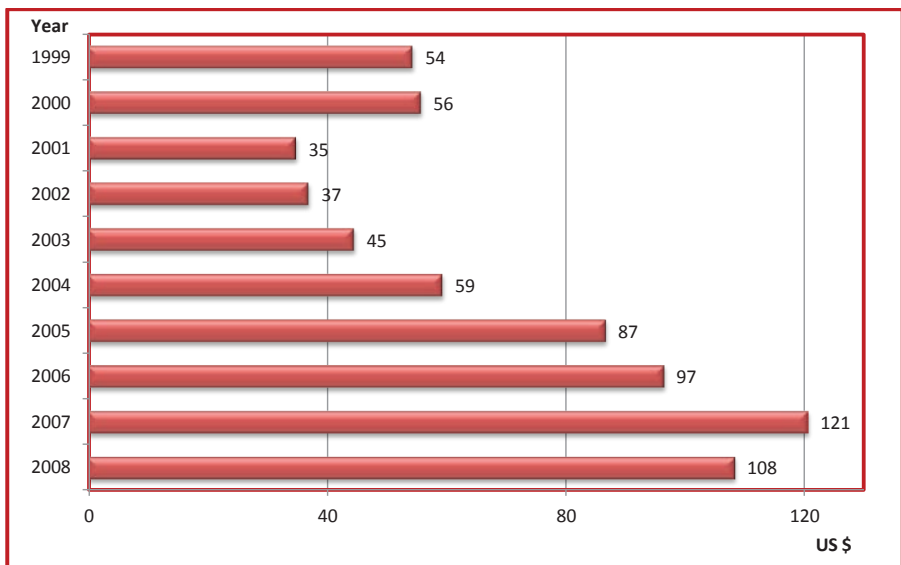
Source: TURKSTAT

Figure 9.9. Out-of-Pocket Health Expenditure per Capita at 2008 Price Level, TL, Turkey



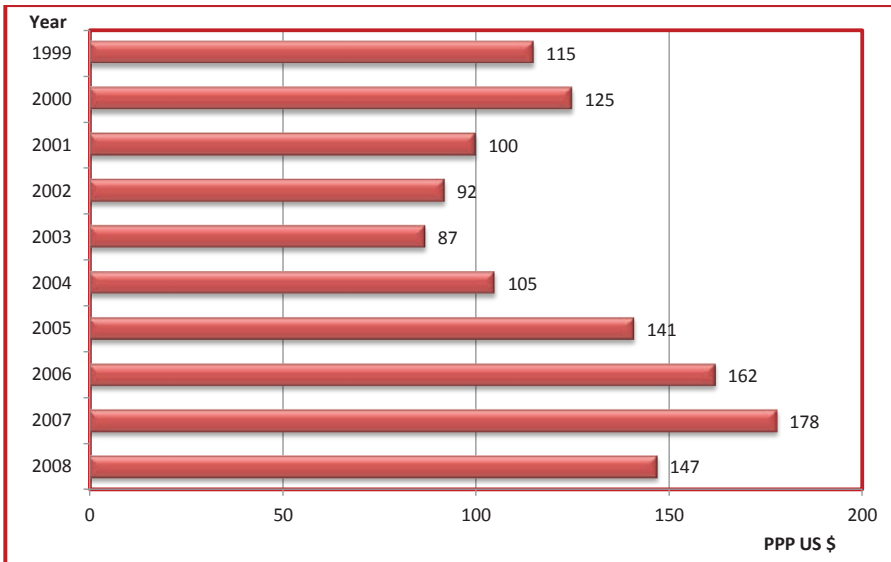
Source: TURKSTAT

Figure 9.10. Out-of-Pocket Expenditure per Capita by Years, US\$, Turkey



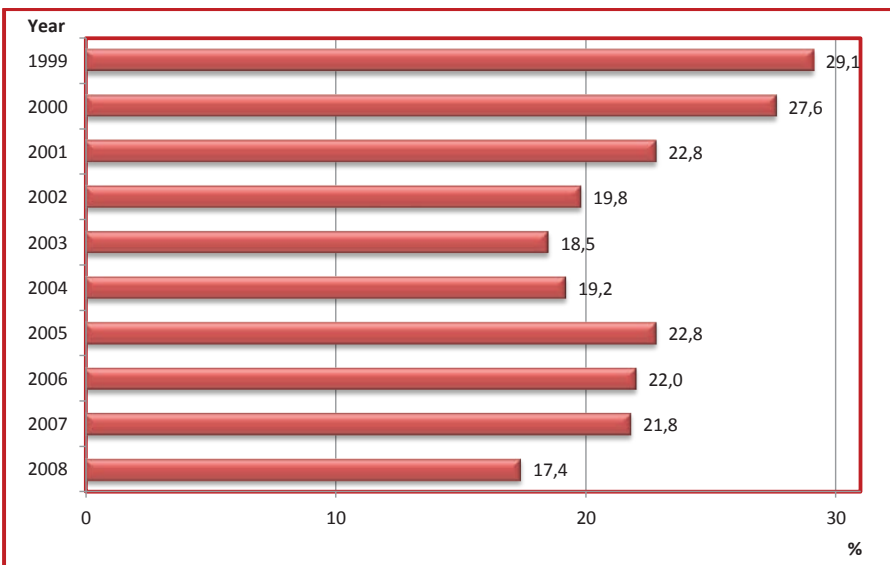
Source: TURKSTAT

Figure 9.11. Out-of-Pocket Expenditure per Capita by Years, PPP US\$, Turkey



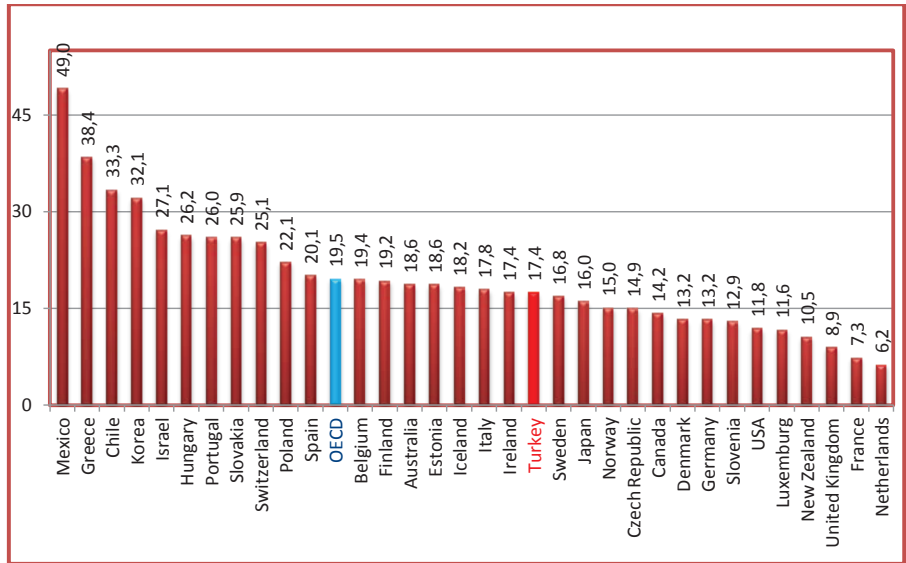
Source: TURKSTAT

Figure 9.12. Out-of-Pocket Expenditure as a Share of Total Health Expenditure by Years, (%), Turkey



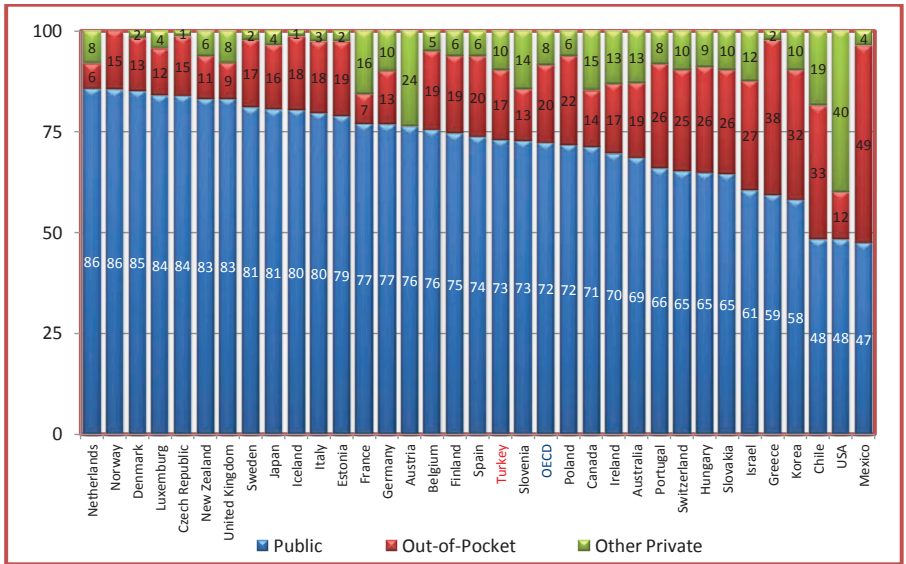
Source: TURKSTAT

Figure 9.13. Out-of-Pocket Expenditure as a Share of Total Health Expenditure in OECD Countries, (%), 2010



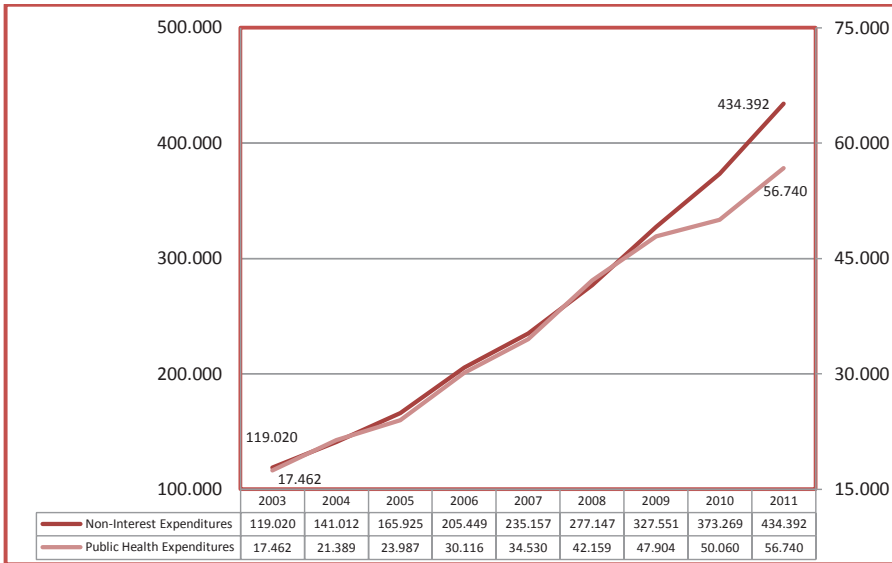
Source: OECD Health Data 2012

Figure 9.14. Health Expenditure by Type of Financing in OECD Countries, 2010



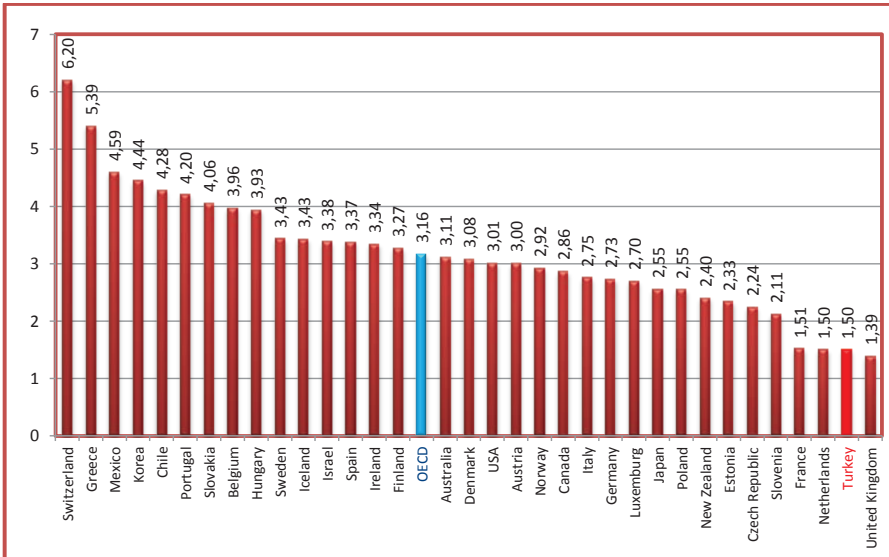
Source: OECD Health Data 2012

Figure 9.15. Non-Interest Expenditures and Public Health Expenditures by Years, Million TL, Turkey



Source: Public Health Expenditure; 2003-2008 TURKSTAT 2009-2011 Ministry of Development "Public Sector Social Expenditure Statistics", Primary Expenditures; Ministry of Finance, Ministry of Development

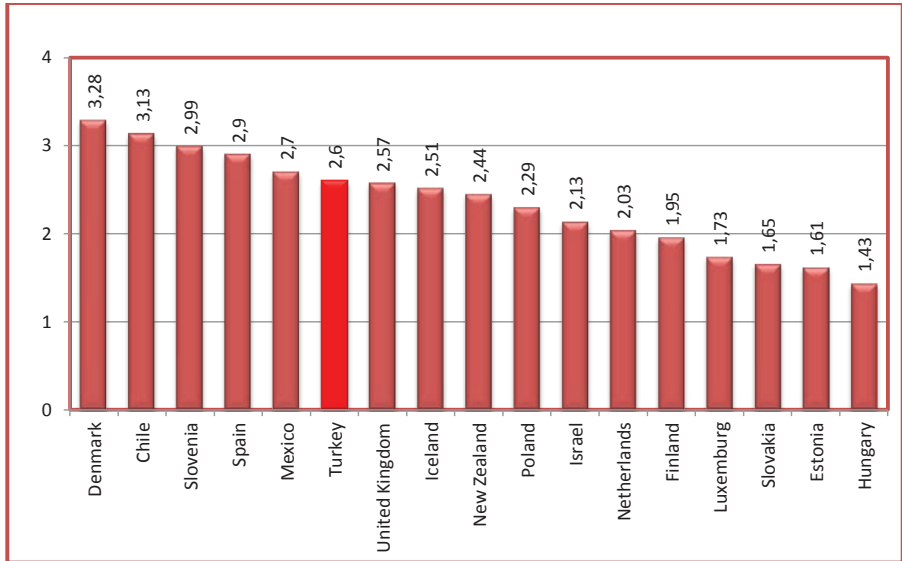
Figure 9.16. International Comparison of Out-of-Pocket Health Expenditure as a Share of Final Household Consumption Expenditure, (%), 2010



Source: OECD Health Data 2012

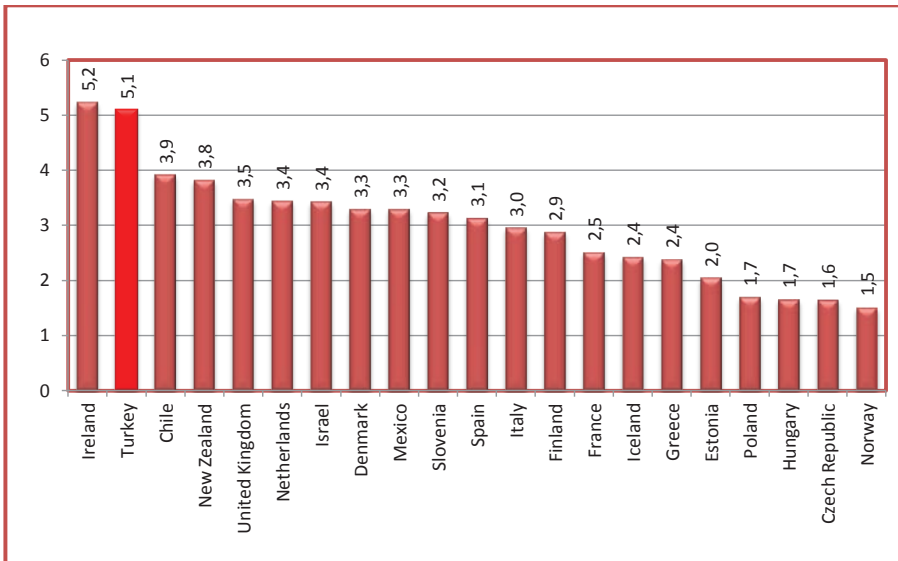
Note: Data of Turkey belongs to year 2008.

Figure 9.17. Ratio of General Practitioners' Remuneration to GDP Per Capita in OECD Countries, 2010



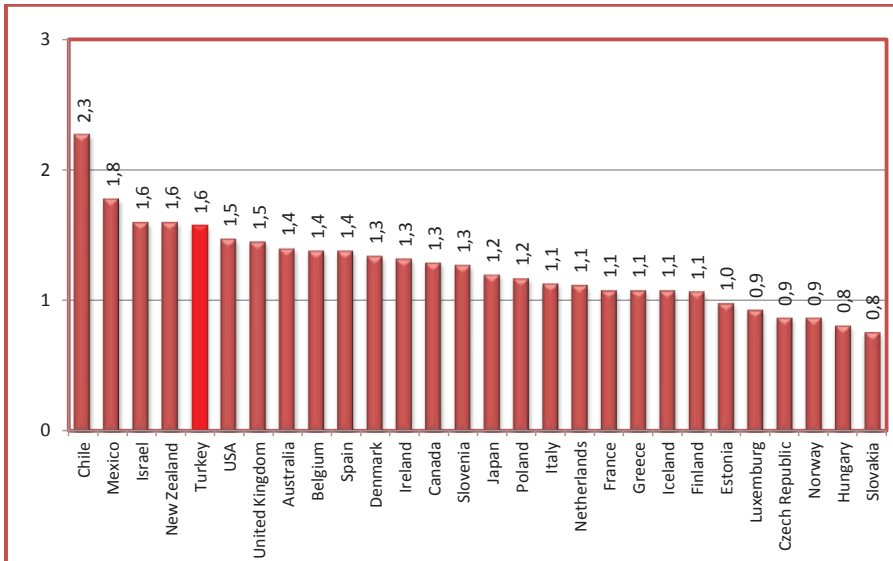
Source: OECD Health Data 2012

Figure 9.18. Ratio of Specialist Physicians' Remuneration to GDP Per Capita in OECD Countries, 2010



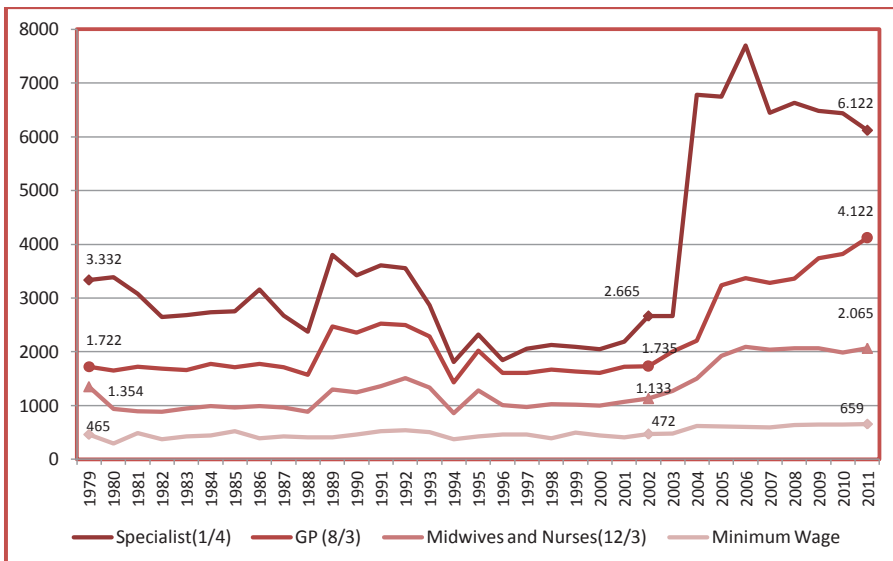
Source: OECD Health Data 2012

Figure 9.19. Ratio of Nurses' Remuneration to GDP Per Capita in OECD Countries, 2010



Source: OECD Health Data 2012

Figure 9.20. MoH Personnel Remuneration (According to Cost of Living Index) Adjusted at 2011 Price Level, (Salary+Bonus), TL



Source: Turkey Public Hospitals Institution, Ministry of Development

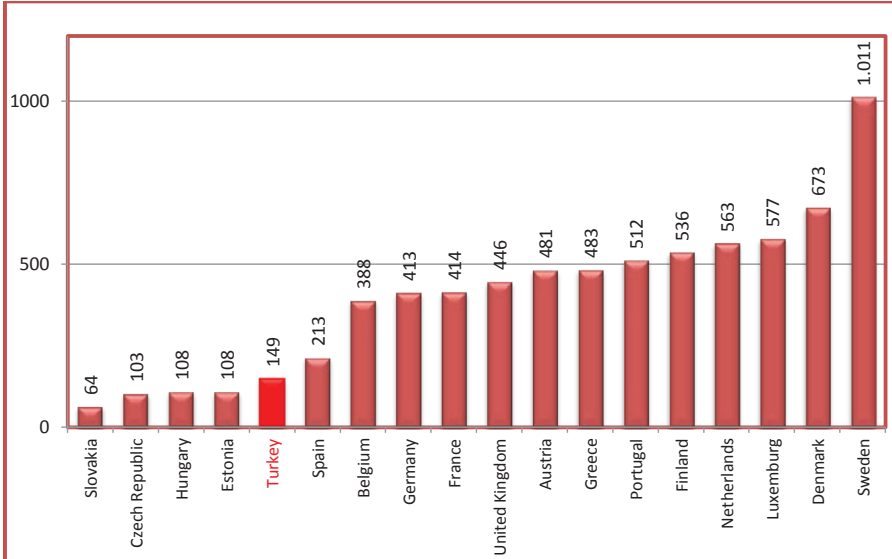
Table 9.2. MoH Personnel Remuneration, Real at 2011 Price Level, Nominal, (Salary+Bonus) by years, TL, Turkey

Years	Specialist (1/4)		General Practitioner (8/3)		Midwives and Nurses (12/3)		Minimum Wage	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
1979	0,023	3.332	0,012	1.722	0,009	1.353,90	0,003	465
1980	0,038	3.389	0,019	1.648	0,011	936,593	0,003	290
1981	0,046	3.076	0,026	1.720	0,013	893,71	0,007	491
1982	0,052	2.647	0,033	1.690	0,017	887,879	0,007	375
1983	0,069	2.682	0,043	1.665	0,024	949	0,011	425
1984	0,1	2.732	0,065	1.772	0,036	992	0,016	448
1985	0,148	2.750	0,092	1.717	0,052	966	0,028	522
1986	0,228	3.161	0,128	1.779	0,071	988	0,028	388
1987	0,306	2.675	0,195	1.710	0,11	965	0,049	429
1988	0,478	2.376	0,315	1.568	0,177	882	0,082	407
1989	1,327	3.806	0,862	2.474	0,454	1.303	0,142	407
1990	1,949	3.426	1,342	2.359	0,709	1.246	0,262	460
1991	3,445	3.607	2,414	2.527	1,303	1.364	0,503	527
1992	5,955	3.559	4,183	2.500	2,522	1.507	0,908	543
1993	8,908	2.865	7,121	2.290	4,162	1.339	1,563	503
1994	13	1.813	10,503	1.433	6,317	862	2,759	376
1995	30	2.321	26	2.025	16	1.279	5,514	431
1996	44	1.844	39	1.606	24	1.010	11,085	460
1997	103	2.059	80	1.606	49	976	22,943	458
1998	183	2.128	143	1.665	88	1.025	33,809	394
1999	286	2.088	224	1.635	139	1.014	68,631	501
2000	398	2.051	312	1.607	194	999	86,923	447
2001	662	2.193	518	1.719	322	1.069	122,187	405
2002	1.040	2.665	677	1.735	442	1.133	184,252	472
2003	1.269	2.669	951	2.002	606	1.276	225,999	476
2004	3.464	6.785	1.128	2.209	768	1.504	318,233	623
2005	3.843	6.745	1.843	3.235	1.098	1.927	350,150	615
2006	4.841	7.698	2.118	3.368	1.313	2.088	380,460	605
2007	4.541	6.447	2.310	3.280	1.435	2.037	419,150	595
2008	5.265	6.630	2.667	3.359	1.642	2.068	503,260	634
2009	5.503	6.482	3.172	3.736	1.757	2.069	546,480	644
2010	5.953	6.440	3.531	3.820	1.837	1.987	599,120	648
2011	6.122	6.122	4122*	4122*	2.065	2.065	658,950	659

Source: Turkey Public Hospitals Institution, Ministry of Development

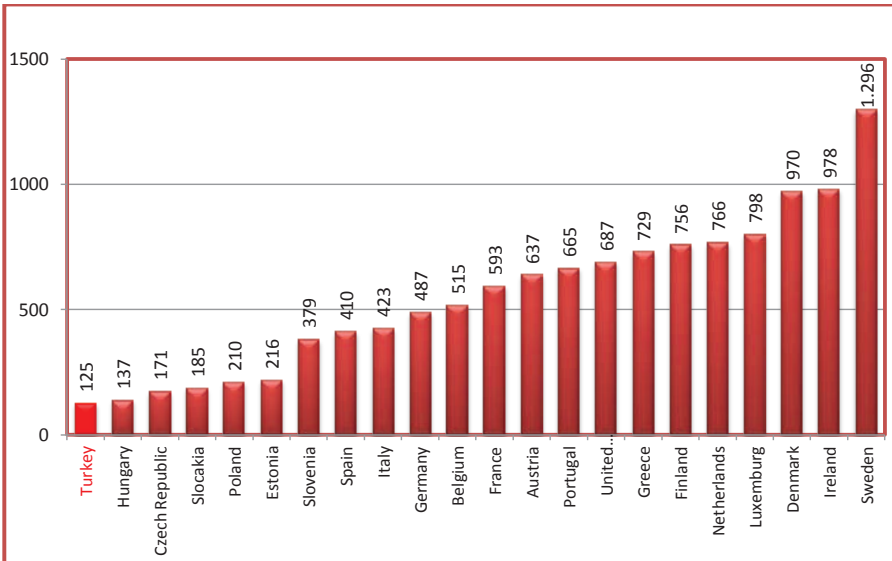
*Income of the practitioners working as family medicine has also been included.

Figure 9.21. International Comparison of Total Health Expenditure per Visit, (PPP US\$), 2003



Source: OECD Health Data

Figure 9.22. International Comparison of Total Health Expenditure per Visit, (PPP US\$), 2010



Source: OECD Health Data

Explanations for Chapter 9

- Tables and graphs on health expenditures were made according to the OECD Health Accounts system. They were calculated by the Ministry of Health, Directorate General of Health Research in 1999-2000 and by the TURKSTAT in 2001-2008.
- While the expenditure figures were being converted into real figures, Consumer Price Index (CPI) 12-month average change rate released by the TURKSTAT was used.
- Calculating the Ministry of Health personnel remuneration (salary+bonus): salary data for the years 1979 to 2004 were obtained from the statistical yearbooks published by the Ministry of Health, Department of Strategy Development, and the salary data and additional information for the year 2005 and after were obtained from Public Hospitals Authority. The family practitioner salaries were added to the General Practitioners' income in 2011. While the real values were calculated, the cost of living index of the Ministry of Development was used.
- Minimum wage figures were obtained from the Ministry of Development. While determining the minimum wage rate of a year, the rate at the year-end was taken into consideration.
- In figures 9.21 and 9.22, for the calculation of the Total Health Expenditure per visit for countries, OECD Health Data figures have been used.

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