

Report prepared by:

Alanur avlin
Tuęba Adalı
Arda Kumaş

With the contributions of:

Hilal Arslan
Akın Atauz
Meryem Demirci
Ece Koyuncu
Selen Örs-Reyhanoęlu
Helga Rittersberger-Tılı
A. Sinan Türkyılmaz
Turgay Ünalın
Gökhan Yıldırımkaıa
M. Murat Yüceşahin
İlknur Yüksel-Kaptanoęlu

Translation

Akya Akarsu

Proofreading

Cheryl Jacklin-Piraino

© Population Association

Population Association - Nüfusbilim Derneęi
Aziziye Mahallesi, Hava Sokak 25/1 ankaya – Ankara
www.nd.org.tr

All rights reserved. Citation is allowed only with reference details. Requests for permission to reproduce all or part of this publication should be addressed to the Population Association.

The financial support for printing of this book has been provided by the United Nations Population Fund (UNFPA).

ISBN: 978-605-85586-3-2

First Print: March, 2016

Graphic Design by:

Asya Fatma Baęcı

Printed by:

Elma Teknik Basım Matbaacılık Ltd. Őti.
İvedik OSB Matbaacılar Sitesi Yenimahalle/ANKARA
Tel: 0312 229 92 65 • www.elmateknikbasim.com

CONTENTS

CONTENTS

02

ABBREVIATIONS

03

EXECUTIVE
SUMMARY

04

INTRODUCTION

Components of the
Population: Births, Deaths
and Migration

06

Age and Sex Structure
of the Population

07

Population Pyramids
Spatial Distribution of
the Population

08

Population Projections

09

Population Information
Systems

11

FERTILITY

12

Age Structure of
Fertility

13

Adolescent Fertility
Reproductive Health
Contraceptive Methods and
Induced Abortion

14

Health Services
Regarding Births

15

Marriage and Divorce

16

Policies Regarding
Fertility in Turkey

19

MORTALITY
Infant, Child and Under-5
Mortality Rates and
Maternal Mortality

20

Causes of Death

21

Specific Causes of
Death
Risk Factors Regarding
Causes of Death and Disease

22

MIGRATION

23

Internal Migration

25

External Migration

27

DEFINITIONS

28

REFERENCES



ABPRS

Address Based Population Registration System

AFAD

Disaster and Emergency Management Authority

EUROSTAT

Statistical Office of the European Communities

HUIPS

Hacettepe University Institute of Population Studies

ICPD

International Conference on Population and Development

MERNİS

Central Civil Registration System

SSI

Social Security Institute

TFR

Total Fertility Rate

TURKSTAT

Turkish Statistical Institute

TDHS

Turkey Demographic and Health Survey

THSK

Public Health Institution of Turkey

UNFPA

United Nations Population Fund

Turkey's current population is 78.7 million. The level of fertility has stabilized to slightly above replacement level, under-5 mortality has decreased to 15 per 1000, life expectancy at birth is close to 75 years of age, and there are intense internal and external migratory movements. The median age of the population is 31, while one-fourth of the population is under the age of 15, and 8 percent of the population is above the age of 65. The population is concentrated around urban areas, especially in metropolises. The population projections into the year 2050 estimate that the population will peak with 93.5 million people. Furthermore, the projections demonstrate that, during this period, the proportion of elderly persons will increase to 21 percent, and the share of under-15 population will decrease to 16 percent.

The total fertility rate is 2.26 per woman. The age group with the highest fertility has shifted from 20-24 to 25-29. Marriage is widespread and the proportion of divorce is slowly increasing. Prenatal and postnatal care and deliveries in health facilities have become services that can be accessed by almost everyone. Furthermore, the proportion of C-sections has increased and now covers half of all deliveries. The proportion of induced abortions per 100 pregnancies has been halved in the last 5 years, down to 5 percent.

The objectives of the Millennium Development Goals set for 2015 which were related to under-5 and maternal mortality rates have been achieved. Increases in life expectancies, but also chronic diseases and congenital anomalies have come into prominence among the causes of death and morbidity.

According to TURKSTAT data, in 2011, more than 2.2 million people had changed their residences and had gone live in other provinces. In Turkey, the most widespread migratory movement is between cities. Even though seasonal labor migration is an important social and demographic issue, there is no data regarding this issue. Regarding external migration, Turkey's position shifted from being an emigrant country to being a transit country that receives predominantly undocumented immigrants. The Syrian asylum-seekers that looked for refuge in Turkey in 2014 are generally still living in the country, with temporary protection status.

Since 2008, political discourse aimed at increasing fertility rates has become a tangible goal for both the Tenth Development Plan and the Family and Dynamic Population Structure Conservation Program.

Turkey has experienced a series of improvements and developments of the registry system since 2000. The system has been bolstered and has been centralized and digitalized. Within this scope, population censuses were terminated and the population information has become register and research based.

As of January 2016, the population of Turkey, defined by the number of people residing in Turkey, is approximately 78.7 million¹. Including temporary residents, the population of Turkey is estimated to exceed 81 million. With this report, we aim to concisely present certain topics related to the current status of Turkey's population and certain prominent issues related to its population, and to provide those working in this field with a current overview of the country's population. We will start by portraying the basic characteristics of the population through different statistical snapshots. In order to better understand and interpret the current status, we will support our findings using information from previous periods regarding Turkey's population, when necessary.

The population of Turkey is nearly 79 million. Including immigrants who temporarily reside in the country, it is estimated that the total population exceeds 81 million.

In essence, 'population' corresponds to the number of people living in a specific geographic area. Throughout the report, we will highlight the differences between urban and rural areas, distinct regions, and certain situations specific to the metropolises in considering this human-space relationship. At certain points, we will also dwell upon the unregistered population, which is mainly composed of immigrants and which is one of the core realities of today's Turkey. Comprehending, improving and sharing the acquired data sources are very important for multiplying and enriching the discussions on population. With this in mind, this report will also include sections that will highlight, under different section titles, current data sources that emphasize the deficiencies and further needs regarding these sources.

COMPONENTS of POPULATION CHANGE: BIRTHS, DEATHS and MIGRATION

The primary characteristics of population such as age, sex and spatial distribution, change with three dynamic phenomena; births, deaths and migration. While the population increases with births and decreases with deaths, it both increases and decreases with migration. Globally, population has generally shifted from a period with high fertility and mortality rates – and consequent low population growth rates - to a period where the mortality rates first decreased and thus the population growth rate increased. Following the mortality rate decrease, fertility rates also started to decline. The demographic transition theory, which reveals changes in the fertility, mortality and population growth rates according to different historical periods, explains the stages of demographic transition as follows: (1) *the first stage* of the demographic transition is

Fertility rates stabilized slightly above the replacement level, infant and child mortality rates decreased and the population growth started to decrease.

¹ Based on the Address Based Population Registration System, the Turkish Statistical Institute announced Turkey's population to be 78,741,053 as of December 31, 2015 (TURKSTAT, 2016).

the period with high fertility and mortality rates and low population growth rate; (2) the *second stage* of the transition is the period with decreasing mortality rates, but persistent high fertility rates and, consequently, increasing population growth; (3) the *third stage* is the period with falling fertility and population growth; (4) the *fourth stage* is the period where the fertility rate falls below replacement level and where the population decreases.

Based on the aforementioned stages of the demographic transition theory, Turkey is in the third stage of the transition. In the recent years the level of fertility has become stable slightly above replacement level, and especially with the improvements in infant and child health, mortality rates have declined and the population growth rate is trending downwards. However, even though the population is currently increasing with a low growth rate, it should be noted that, every year, nearly one million people are being added to the total population.

While current fertility and mortality rates are stationary, Turkey is going through a very mobile period in terms of both internal and external migration. From the 1950s to the 1980s, internal migration was dominated by population movements from rural areas to urban areas and, generally, from eastern regions to western regions, and from northern regions to southern regions. However, after this period, urban-to-urban migration became most prominent. Briefly highlighting the diversity of reasons for migration in the same period, it is seen that migratory movements catalyzed by economic reasons were prevalent until the 1980s, and continued to be so afterwards. In addition, forced migration, which peaked between the years 1985 and 2000 due to the armed conflicts that occurred in the East and Southeast Anatolia regions, affected the provinces in these regions. Also affected were the metropolises with high immigrant populations, notably İstanbul, Diyarbakır, Adana, Antalya and Mersin. Furthermore, seasonal labor migration, which is shaped by the agricultural, construction and tourism sectors, maintains its importance as a widespread spatial movement catalyst, as it has in previous years. In Turkey, where the share of rural population has declined below one-fourth², urbanization continues. Within all internal migration movements, the share of migration from the East to the West is decreasing, and migration to the southern regions, especially to coastal cities, follows an increasing trend.

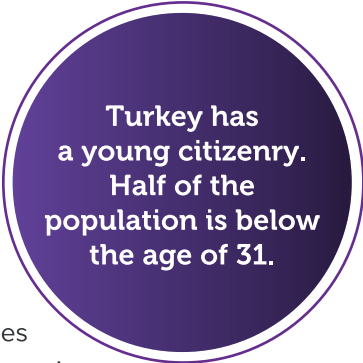
When assessing the impact of external migration on the population of Turkey, it is noteworthy that there is a substantial migrant population in European countries, especially Germany, as well as in the United States of America, Australia and Libya. A considerable part of the Turkish emigrant population in foreign countries stems from the continuing effects of the labor migration wave, which was the first big wave of emigration after the Population Exchange (Mübadele)³. Regarding the direction of external migration, it should be emphasized that Turkey's status as a sending country in the 1960s changed, to a large extent, because of intensive labor immigration from Central Asia and Eastern nations, and the inflow of asylum seekers from southern and eastern neighboring countries using Turkey as a transit country, or as a final settlement destination. In particular, the immigration of Syrian asylum-seekers (who were given temporary protection status) to Turkey, which started in March 2011 and continues today, is currently one of the leading social and political topics in terms of human mobility, emergency needs and other major impacts are stemming from this movement.

² Since the urban and rural definitions were changed, 2012 ABPRS results were used for the comparison with the previous periods. According to the current definitions, as of 2012, some 92 percent of Turkey's population is living in urban areas.

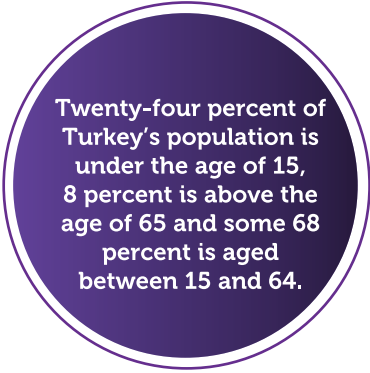
³ The population Exchange between Turkey and Greece occurred in 1923-1924 after the First World War when Muslims in Greece and Orthodox in Turkey moved en masse.

AGE AND SEX STRUCTURE OF THE POPULATION

The first indicators that should be examined to understand the structure of the population are those related to age and sex. Among the age-related indicators, median age, a division of the population into two even groups, is most commonly used. According to median age calculations, Turkey has a young citizenry⁴. Half of Turkey is under the age of 31. One-third of the population is below the age of 18, nearly 24 million people. The population of children (under the age of 5) is over 6 million. The plans and policies for a young population are of great importance, both for the present day and for the future of Turkey's population. In accordance with changing needs, the following items are among the necessary policies aimed at youth; investments in education, especially in vocational courses; plans for ensuring that girls benefit equally from education; efforts regarding youths' rights to reproductive health care; prevention of early marriages; participation of youth in decision-making processes; the employment of young workers and ensuring the social security of the entire workforce.




Turkey has a young citizenry. Half of the population is below the age of 31.



Twenty-four percent of Turkey's population is under the age of 15, 8 percent is above the age of 65 and some 68 percent is aged between 15 and 64.

By retrospectively analyzing the age structure of the Turkey's population, it is seen that the share of elderly persons is increasing due to decreasing fertility rates and increasing probabilities of living to an older age. With an approach that divides the population into three main age groups in terms of economic participation, it is seen that 24 percent of Turkey's population is under the age of 15; 8 percent is aged 65 and above, and 68 percent is between the ages of 15 and 64⁵. In this approach, the population who are under the age of 15 and above the age of 65 are referred to as economically dependent population groups, and the population between 15 and 64 is designated the economically active age group. With the envisaged changes in the overall age structure of the population into the mid-21st century, the proportion of the population under the age of 15 will decline, whereas the share of the population aged 65 and over will increase.

However, there will not be a significant change in the proportion of the working population (ABPRS, 2014; Koç et al., 2010). As a result of this structure, the proportion of the dependent population will not change significantly; there will be approximately one dependent person per two persons from the working population. However, the share of the young population within the dependent population will decrease, whereas that of the elder population will increase.



Investments in education, especially in vocational training, plans for gender equality in education, efforts regarding the right to reproductive health, the employment of a young population and ensuring the social security of all workers are among the priority needs of young people.

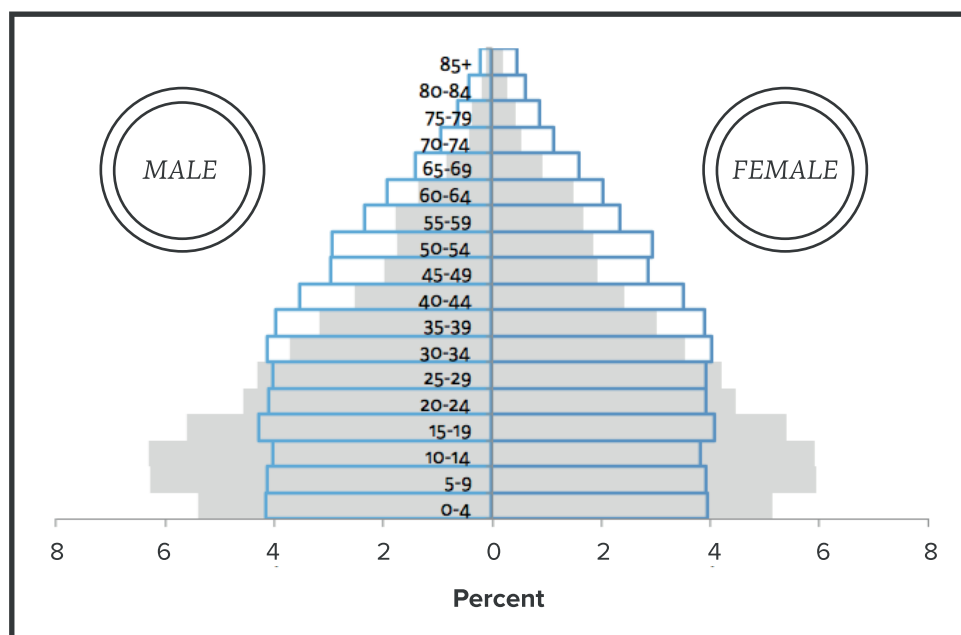
⁴ For 2012, the median years of age was 29 worldwide, while it was 30.7 in Turkey, 45.9 for Japan which has the highest share of elderly population, and 41 for Europe which is the oldest continent (WPP 2012 and ABPRS 2014).

⁵ For 2013, the proportion of the population under 15 was 26 percent worldwide; it was 16 percent in Europe and 13 percent in Japan. The proportion of elderly population was 8 percent worldwide; it was 17 percent in Europe and 26 percent in Japan (Population Reference Bureau 2014 World Population Data Sheet).

Population Pyramids

Population pyramids are graphs that demonstrate the age and sex distribution of the population. The pyramids impart information on the following topics; age-related differences in the sex ratio; changes stemmed from increasing or decreasing fertility rates among generations; and the birth cohorts that correspond to specific age groups. The population pyramid based on the results of the Address Based Population Registration System (ABPRS) for 2014 shows that the age cohort of 30-34, those born between the years of 1979-1983, has the largest share. The population under 5 no longer has the largest share and, in fact, its share is smaller than the age cohort born in the previous five year period. There is sex conformity in all age groups with the exception of age 85 and over, which is the oldest age group, wherein the number of females is higher than males. When the 1990 and 2014 population pyramids are compared, the areas of the graph that are most striking are the shrinking areas showing younger age groups and the expanding areas covering middle and older aged groups. It is clear that, in these two periods, there is a very different picture of age distribution within the population of the country (Figure 1).

Figure 1. Population pyramid of Turkey 1990 (shaded) and 2015 (lined)



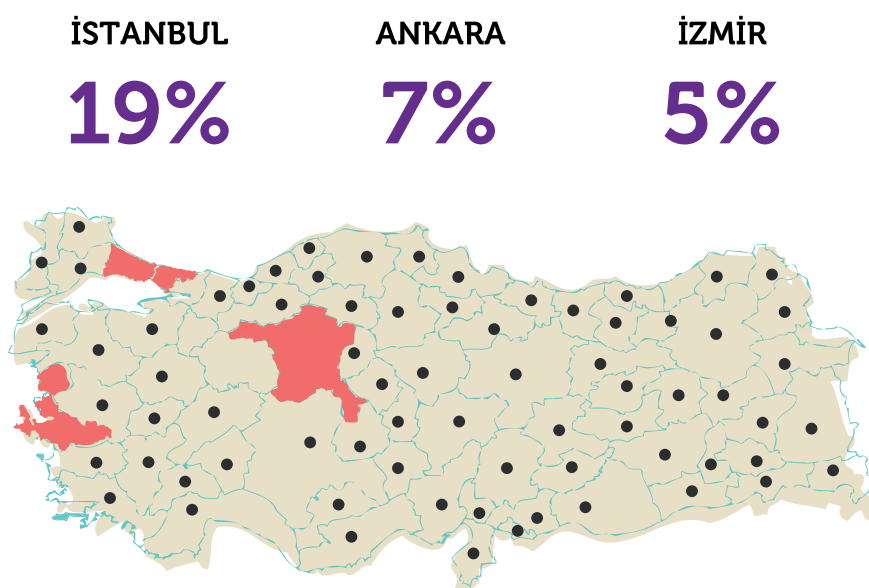
Source: General Population Census, 1990 and ABPRS, 2015

SPATIAL DISTRIBUTION OF THE POPULATION

The generation who are currently aged around 65 has witnessed a significant portion of the urbanization of Turkey. Even though this generation was born in a country where only one-fourth of the population was living in urban areas, throughout their lives they have seen a dramatic transition during which, first, the urban-rural population equalized (1985 General Census) and then the urban population soared to include more than three-quarters of the overall population (ABPRS, 2012). In 2010, the urban-rural population became equalized worldwide. That same year, the proportion of urban population started to increase. In Turkey, the current proportion of urban population is at par with the average of developed countries (Population Reference Bureau, 2014). During the same period, along with

rapid urbanization, Turkey also went through the process of metropolization. Almost one-third of Turkey's population is living in the most crowded three metropolises; İstanbul, Ankara and İzmir. The people living in these metropolises constitute 18.6 percent, 6.7 percent and 5.3 percent of the population of the country, respectively (ABPRS, 2014).

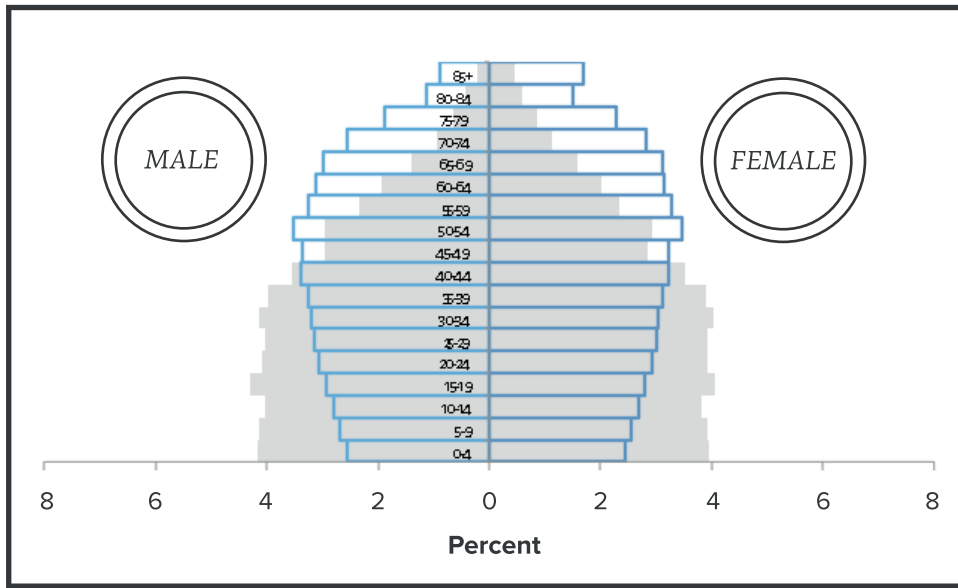
The three metropolises, İstanbul, Ankara and İzmir, make up nearly one third of Turkey's population; about 19 percent, seven percent and 5 percent of the total population, respectively.



POPULATION PROJECTIONS

The future size and structure of the population is projected based on the assumptions made surrounding the changes in fertility, mortality and migration indicators. The success of the projections is attached to the accuracy of these assumptions over time. According to the population projections of the Turkish Statistical Institute (TURKSTAT), the population of Turkey, which will reach 80 million in few years, will reach its most populous state with 93.5 million by 2050 and then it will start to decrease (TURKSTAT, 2013b). During this process, the share of young and elderly population in particular will change significantly. While 1 out of every 4 people today is under the age of 15, by 2050, 1 out of every 6 people will be in this age group. During this period, it is expected that the proportion of the 15-64 age group - the working population - will decrease from 68 percent to 63 percent. A decrease in the proportion of this age group implies that the overall dependency ratio will increase. In other words, the working population will be responsible from the economic maintenance of more non-employed people. The population projections suggest that by 2050 the working population will be close to 60 million people. Within this period in which the population is expected to age and the proportion of elderly population will increase from 8 percent to 21 percent.

Figure 2. Population pyramid of Turkey, 2015 ABPRS (shaded) and 2050 TURKSTAT projection (lined)



Source: TURKSTAT population projections and ABPRS, (TURKSTAT 2016 and TURKSTAT 2013b)

Higher fertility rates mean a relatively lower elderly population ratio in the following years. Nevertheless, there is an unchanging fact about the elderly population which is independent from fertility: the size of the elderly population will increase significantly by the year 2050. As can be seen in the population projection scenarios of TURKSTAT, by 2050, nearly 20 million people will be aged 65 and over. Currently, this figure is around 6 million and the population aged 65 years and over in Turkey is higher than the overall population of many countries in the world. The reason why this figure will not be affected by the change in the fertility is that the generation which will reach 65 years of age in 2050 has already been born. When we assess the change in the age structure using the population pyramid, it is clearly seen that while the proportions of child, young and adult populations aged under 40 decreases, the proportion of population aged over 50 increases (Figure 2). This situation will cause a transformation in terms of labor market and other health and social policy needs. Furthermore, the expected increase in the older age groups will inflate the various social needs of an elderly population, such as institutional care and home care. Thirty-four percent of the current working population has no social security (TURKSTAT, 2015b). This figure indicates that there will be a considerable amount of poor and unsecured population in the future.

The size of the elderly population will increase significantly until 2050, regardless of fertility.

POPULATION INFORMATION SYSTEMS

Since the year 2000, the basic focus in the collecting, gathering and sharing population data has been the centralization and digitization of population information systems, and facilitating the use of different databases through a network by connecting them. A unique identifier, to be used in various data collection and sharing systems, was instituted on October 28, 2000, when every citizen of the Republic of Turkey was given an Identification Number⁶. Following this development, the incidents of birth, death and marriage have become readily updatable, due to the digitalization of the information systems used in family registrations. The next step was the establishment of ABPRS; a system in which the individuals with identification numbers were matched with their places of residence. In today's Turkey, up-to-date basic information regarding population (population

⁶ An 11-digit "foreign identification number" was also given to individuals with "Residence Permit for Foreigners", who plan to stay in Turkey for more than six months.

The termination of classic population censuses precluded the comparative examination of the data of the registry system. It was also the end of a broad reaching series that had been used by researchers and policy makers since 1927.

size, age-sex structure, spatial distribution of the population, etc.) is being provided by ABPRS. In turn, ABPRS is being updated annually, based on MERNİS. Another current initiative is the biometric identity card. The pilot study of the biometric identity card was carried out in 2009⁷,⁸. The goal is to make the electronic citizenship card, which includes a fingerprint and a password, universal across in all provinces and for all services (DPT, 2006: 27). The improvements achieved in the registry system over the last 10 years are important gains in terms of demographic data. Furthermore, the fact that this registry system is updated annually and shared with the public enables the collection of current basic information related to population, as well as the use of this information in academic and political fields. However, the traditional censuses that had been conducted on a regular basis since 1927 came to an end in 2000. This is a significant loss for researchers and policy makers, since it is no longer possible to compare the registry system with an external source. Some comparisons between cohorts and time periods can also no longer be made and interpreting the changes and developments as they occurred over time has especially become more difficult.

⁷ The official regulation was made through the Information Society Strategy Action Plan, which was published in the Official Gazette No. 26242 dated 28/7/2006 and the Circular No. 2007-16 on the Citizenship Card Project of the T.R. Prime Ministry General Directorate of Personnel and Principles dated July 4, 2007, which was published in the Official Gazette No. 26572 dated July 4, 2007.

⁸ For detailed information on the pilot implementation in Bolu, see the booklet prepared by the General Directorate of Civil Registration and Nationality (http://www.nvi.gov.tr/Files/File/Kimlik_Karti/Brosurler.pdf) (02/07/2009).

In Turkey, fertility estimates are obtained from the data of sample surveys which have been conducted regularly since 1963. Even though the questions aimed at the indirect estimations of fertility were included in the censuses, as of the 1970 General Census, the indicators of fertility obtained from the censuses are not used for national and international estimations⁹. The improvements in the registration system in recent years have had a positive effect on birth records and fertility indicators. Nevertheless, there is still a need for survey data in order to investigate the relationships between different socio-demographic characteristics and fertility behaviors. The findings of the 2013 Turkey Demographic and Health Survey (HUIPS, 2014) were used for the most recent fertility indicators mentioned in this document.

In the early 1950s, women gave birth seven times, on average. Currently, this number is slightly above two live births per woman.

Fertility rates in Turkey have been declining steadily since the mid-20th century. In the early 1950s, women gave birth 7 times, on average. Currently this number is slightly above two live births per woman; 2.26 according to HUIPS, 2014). Among the primary demographic, economic and social changes behind declining fertility rates in Turkey: the decline of infant and child mortality; the decline of the need for labor as a result of agricultural mechanization; urbanization; changes in income distribution; increasing investments in children, notably their education; an increase in the educational attainments of women; and changing norms related to the ideal number of children.

Typically, fertility rates are observed to be lower in urban areas than rural areas. The reason given for this is usually the fact that having more children is advantageous for families in rural areas who earn their livelihood from agriculture. Yet, today, this assumption is a rather simplistic approach. By considering the broader socio-economic and cultural factors that affect fertility, the reasons behind the low number of children in families living in urban areas can be understood more easily. There is still a total fertility rate difference of 0.6 children between urban and rural areas. According to the 2013 Turkey Demographic and Health Survey, the TFR in urban areas is 2.16 and it is 2.73 in rural areas.

The decrease in infant and child mortality rates, decreased labor needs due to mechanized agriculture, urbanization, changes in income distribution, increased investments in children, women being more educated and the decreasing ideal number of children are among the primary reasons behind the decrease of fertility.

The nationwide change in fertility progressed through different dynamics in different geographies of Turkey. For example, in İstanbul the decline of fertility to 2-3 children can be traced back to the 1800s (Duben and Behar, 1998). In Western Turkey, including İstanbul, fertility started to decrease earlier than the rest of the country and thus it remained at relatively lower levels for many years. On the other hand, in Southeast Anatolia, fertility has been higher than other regions since the first demographic surveys in the 1960s. Even though in Central, Northern and Southern Anatolia, fertility levels were between these two extreme regions until the last 15 years, according to new studies, these regions started to resemble the Western region of Turkey. Therefore, the Southern Anatolia region is currently the most different region in terms of fertility¹⁰.

⁹ Indirect estimates can provide indicators that belong to previous years. Furthermore, they have higher margins of error compared to direct estimates and therefore, they are not preferred in cases where direct estimation is possible.

¹⁰Total fertility rate is 3.41 in East Anatolia.

Although it is possible to associate these regional differences with socioeconomic causes, cultural factors should not be overlooked. According to population studies, fertility is closely related to indicators such as education, occupational status, level of wealth, and mother tongue.

According to the studies conducted between 1993 and 2000, women's average ideal number of children remained stable, despite the decline of fertility in Turkey (TDHS-1993, TDHS-1998, TDHS-2003 and TDHS-2008). In this period, the average ideal number of children was above 2.5 children. In other words, women wanted 2 or 3 children on average. According to the latest research results, the ideal number of children is 2.8 children, which is above the level observed in the last 20 years (HUIPS, 2014: 123). Starting in the 2000s, the government began making statements directed at increasing fertility. Even though these statements did not have an observable effect on actual fertility behavior, this rapid change in ideal number of children can be interpreted as the reflection of these statements. The ideal number of children is a hypothetical indicator. Nevertheless, its change over time demonstrates that in Turkey, the widely accepted ideal number of children is around 2 to 3 children.

Fertility is being postponed to older ages. While the highest fertility had been observed in the 20-24 age group, it has recently shifted to the 25-29 age group.

Turkey shifted from being a country with a high fertility level, to being a country where fertility is stable near replacement level. During the process, the discourse about fertility changed, as it did around the world. In the high fertility period, these subjects included the level of contraceptive use during the fertile period, the impact of contraceptives on the decrease of fertility, out-of-hospital deliveries, and pre- and post-natal care. But in the period with decreasing fertility rates the following subjects also made their way into the agenda; reproductive rights, child brides, adolescent fertility, assisted reproductive technology, the proportion of births delivered by C-section, divorce, decline of fertility, and the promotion of fertility. Furthermore, issues like contraceptive use and induced abortion, which entered Turkey's agenda through the family planning approach, started to be addressed within the reproductive rights approach, in line with international changes. Certain notable topics related to fertility in today's Turkey are summarized below.



AGE STRUCTURE OF FERTILITY

In Turkey there is a pattern of declining fertility at early ages. First births are being shifted to older ages and fertility postponement is becoming widespread. Demographic surveys from the 1970s demonstrated that the highest fertility was at the 20-24 age group, and this did not change for 40 years (Koç et al., 2010). The most substantial change observed in the age structure of fertility is that this age group with highest fertility shifted to the subsequent age group of 25-29.

Adolescent Fertility

The decline in fertility is observed in every reproductive age group. Therefore, the fertility in the 15-19 age group, namely adolescent fertility, also declined substantially. Pregnancies and births are risky both for the mother and the baby in these ages. This risk is directly associated with early marriages, which is an important problem in terms of girls' and women's human and reproductive rights. The number of births was 93 per 1000 adolescent women in 1978 and it declined to 56 births after 15 years. As of 2008, adolescent fertility declined to 35 births per 1000 women. Despite the overall decline in all regions, the urban versus rural and other observable regional differences for many demographic indicators are also apparent for adolescent fertility. According to the results of TDHS-2013, age specific fertility for 15-19 year olds is 45 per 1000 women in rural areas, 28 in urban areas; standing at 41 in East Anatolia and 26 in Western provinces.

At the present time, nearly 160 000 adolescent women have already started childbearing. Adolescent fertility is more widespread in East Anatolia.

With the decline of adolescent fertility, the percentage of women who have started having children between the ages of 15-19 also declined. In the early 1990s, 9 percent of this group had already given birth, whereas currently this proportion is 5 percent (TDHS-1993 and TDHS-2013). The fact that there are currently 160 000 adolescent women who started bearing children before the age of 20, despite this decline, is an important problem. The results do indicate, however, that there is a decrease in the percentage of mothers among adolescent women after the age of 18, and an increase after the age of 19. In other words, first age of motherhood is shifting from the age of 18 to the age of 19 (TDHS-2008 and TDHS -2013).

REPRODUCTIVE HEALTH

Contraceptive Methods and Induced Abortion

After 2000, the use of contraceptive methods among married women increased to around 10 percent compared to the preceding years, and become steady at a level in which 7 out of every 10 married women use contraceptive methods. In terms of contraceptive methods, the first striking finding is that the 'withdrawal' method is the most prevalently used contraceptive method in every period, despite its inefficacy. Even with the 16 percent increase in the use of modern contraceptive methods in the last 25 year period (31 percent in 1988; 47 percent in 2013), 1 out of every 4 women have been using the withdrawal method consistently to avoid pregnancies. Since the withdrawal method has a high failure rate, its prevalent use is important in terms of unintended pregnancies. Among modern methods, the use of condoms and sterilization is increasing. With the increase in the use of contraceptive methods, the unmet need for contraception decreased and the proportion of women who do not use contraceptive methods, even though they want to limit or postpone having children, declined to 6 percent. However, when women who use the withdrawal method and their wish to shift to more effective modern methods are also included in this category, the unmet need increases substantially. In Turkey, the services regarding the need for contraceptive methods focus on married women. They should, however, be planned taking into account both married and unmarried women, as well as men. In settings where pre-marital sexual relationship is not approved of by society, the lack of reliable and accessible services hinders especially young people from obtaining information and accessing services. Therefore, young people living in Turkey are faced with the risk of unwanted pregnancies and sexually transmitted diseases, since they cannot obtain information on sexual and reproductive health and rights. The planning of contraceptive method services should be carried out in consideration of the differing needs of varied groups. Women in post-natal and post-abortion (miscarriages and induced abortion) periods, married teenage women, young women and men, seasonal agricultural workers and women who use traditional methods are among these groups with special needs.

Modern reproductive health programs are geared to prevent unintended pregnancies by using targeted methods in accordance with need, and thus they aim to decrease the proportion of induced abortions. However, under the scope of reproductive rights and women's rights to control their fertility, these programs also guarantee induced abortions are accessible, and further ensure that abortions are carried out in safe conditions as a legal right and service. The International Conference on Population and Development Programme of Action addresses this need (United Nations, 1995). In Turkey, it was still possible to terminate unintended pregnancies during the period when induced abortions were illegal, albeit through suspect means. Induced abortions were legalized in 1983 with the 2nd Law on Population and this contributed substantially to the prevention of unregistered interventions of induced abortion which did not meet medical standards, and to a consequent decrease in maternal mortality rates.

Due to the effective use of contraceptives, induced abortion rates had decreased substantially as of the early 1990s. At that time, 18 out of every 100 pregnancies were terminated by induced abortions, and this number fell to 10 percent in the second half of the 2000s. According to the results of the last survey, there has been a rapid decrease and only 5 out of every 100 pregnancies in the last five years were terminated by induced abortions (TDHS-1993, TDHS-2008 and TDHS-2013). Given this change, one is drawn to consider the direct, or indirect, impact of anti-abortion statements of the government on women's behaviors. These statements might have, on one hand, caused a change in the perception towards abortion while conversely, and more importantly, they may have been an obstacle for women trying to gain access to this service.

Health Services Regarding Births

Among the main health care service topics surrounding birth are; pre-natal and post-natal care, having deliveries in health care facilities with the assistance of trained health personnel, and using assisted reproductive technologies to overcome problems related to fertility. Throughout Turkey, there is an apparent increase in the use of all health services surrounding births. The proportion of women who have never used any health services during their pregnancies decreased from 38 percent to just 3 percent over the course of 20 years. In the same period, there was also a substantial increase in the proportion of births occurring in health facilities, from 60 percent to 97 percent (between TDHS-1993 and TDHS-2013).

Improvements in birth technologies, the postponement of fertility throughout the country, and the increase in the number of women over the age of 35 wanting to get pregnant for the first time are all factors that increase the supply and demand of assisted reproductive technologies. The mandatory health insurance system covers the use of these technologies (in vitro fertilization, intrauterine insemination, sperm microinjection, etc.) depending on certain conditions such as age and duration of marriage of the individuals who have fertility problems. The data on this subject, however, is limited. For example, this subject is not mentioned in the statistical yearbook of the Ministry of Health and the statistics of the Social Service Institute (SSI). According to TDHS-2008, 2.6 percent of married women used these techniques and 56 percent of these women got pregnant using the aforementioned techniques.

In recent years, and in parallel with the rapid change experienced in the health sector all around the world, the share of private health institutions has also increased. Furthermore, the number of deliveries occurring in health facilities is on the rise. Privatization in the health care sector affects service delivery and the types of service demands. The nationwide proportion of C-section births currently stands at 48 percent. While the World Health Organization stated that the proportion of C-section births should be between 15 and 18 percent, the C-section numbers in Turkey are much higher than those suggested levels.

Another important change observed in the same period is the fact that health services related to births are administered almost solely by doctors. Even though this seems to be an improvement in health service indicators, such as the number of doctors per person, there is also a downside which can be summarized as a decline in the effective roles of nurses and midwives. The increase in the use of health services are observed in every segment of

the society and in all regions. Nevertheless, the differences, which continue on a downward trend, among social groups and various regions point to the existence of disadvantaged groups when it comes to the use of health services related to births.

MARRIAGE AND DIVORCE

Both civil and religious ceremonies are available in Turkey, and generally both types of marriage ceremonies are practiced simultaneously. However, some of the marriages, especially early ones, are performed through religious ceremonies only. Since statistics based on MERNİS only cover civil marriages, they are inadequate for demonstrating the whole picture related to the pattern of marriage. Therefore, census and survey data provide more factual information (since the marriage information is based on self-reports which cover both types of marriage ceremonies).

In Turkey, where marriage is common, 97 percent of women who are at the end of their reproductive ages (aged 45-49) are ever-married (HUIPS, 2014: 106). In the studies conducted within the last 20 years, despite the unchanging prevalence of marriage, the increase in the age at first marriage both for women and men is striking. According to the TDHS-1993, while the median age at first marriage¹¹ for women was 19, this number increased by two years, to the age of 21 according to the TDHS-2013 (HUIPS, 2014: 107). The change in age at first marriage over time can also be seen when the median age at first marriage of women is examined. According to civil registration data, the age at first marriage is 24 for women and 27 for men as of 2013. These estimates are higher compared to survey results as they only include information on civil marriages.

Even though nearly all of the female population is married by the end of their reproductive ages, it is observed that the proportion of unmarried women, especially among younger age groups, changes in accordance with the increase in the age at first marriage. Surveys have indicated an increase in the proportion of unmarried individuals in almost all age groups, from the second half of the 1970s to today. The most significant increase for women is observed in the 20-24 age group. According to the Turkish Fertility Survey conducted in 1978, while nearly one-fourth of women from the 20-24 age group were not married, 35 years later (in TDHS-2013), more than half of the women in this age group were not married. For men, the highest increase is observed in the 25-29 age group. According to TDHS-1993, 17 percent of this group was not married, whereas according to the TDHS-2008, 42 percent were unmarried.

According to current data, 3 out of every 10 females of reproductive age were married as children in Turkey. The median age at child marriages is 15.

In Turkey, while there is an increase in the age at first marriage and in the proportion of women who were not married at younger ages, it is apparent that child marriages¹² continue on a downward trend. Recent studies showed that 3 out of every 10 females of reproductive age were married in childhood, and the median age of girls in child marriages is 15¹³ (Yüksel-Kaptanoğlu and Ergöçmen, 2012: 139 and 150).

As in the case of formation of marriages, the information obtained from the civil registration system on divorces only gives information on the termination of civil marriages. Divorce is not widespread in Turkey. Nevertheless, the annual number of divorces and rate of divorces increase slowly. According to data from MERNİS, 130,913 couples got divorced in 2014 (TURKSTAT, 2015c).

¹¹ Calculations are based on the ages 25-49.

¹² Marriages carried out under the age of 18 are defined as child marriages.

¹³ Since girls under the age of 18 are faced with the risk of child marriages, the same percentage was also calculated for women aged 20-49 based on their histories. As a result of this calculation, it is seen that 27 percent of women aged 20-49 were married as children.

POLICIES REGARDING FERTILITY IN TURKEY

Fertility has been a part of the country's political agenda during many periods in Turkey, as it has been all over the world. During the first years of the Republic of Turkey, the increase of fertility rates was regarded as a very important component for the development of the country, which had recently experienced war and had suffered significant losses in the working-age male population. This attitude of encouraging fertility manifested itself in tax reductions or awards for multiple-child families, and also in the prohibition of contraception and abortion. The latter policy, adopted by the government of the time, started to be reversed as of the 1960s with the gaining popularity of the idea that "high fertility is an obstacle to development", and it was bolstered by health personnel's initiatives aimed at combating the health threats that high fertility rates bring to mothers and children. Within this period, the government started to argue that having too many children both impeded economic development and caused high mother/infant mortality. The Population Planning Law No. 557 of 1965, which is one of the two population laws of Turkey, is a product of this approach. According to this Law, it was essential that individuals decide on the number and the timing of their children. The production, acquisition and sale of contraceptive methods were legalized. In fact, campaigns were organized to encourage the use of intrauterine devices among women living in rural areas. Abortion and tubal ligation procedures, however, were not yet legalized at this stage.

The current regulations regarding the use of contraceptives and induced abortion, as well as tubal ligation procedures for men and women, are based on the Population Planning Law No. 2827 of 1983. With this law, the sale and use of all contraceptive methods were legalized. In addition, induced abortion (with the consent of the spouse for married couples) within the first 10 weeks of pregnancy, and sterilization procedures for men and women (with the consent of the spouses) entered among the reproductive rights recognized by the government.

From when these regulations were made in 1983 to today, it is evident that there have been substantial changes, especially in terms of fertility. Turkey stopped being a country with high fertility families and became a country where, in particular, women with high educational and wealth levels working in sectors other than agriculture have fewer children.

In Turkey, as with other nations, the decline of fertility to fewer than two children per family signifies that, in the long run, the population will decrease in the absence of immigration; thus, the decline of fertility is perceived as a threat to the sustainability of the country's economic, political and military powers. Another concern is that decreasing fertility will turn the overall aging population into a significant social problem. If individuals from certain cohorts start having fewer children, then the adulthood of these children will coincide with the older ages of a crowded group of parents. If certain measures are not taken, this situation will place an economic burden on top of social problems and will lead to difficulties for social security infrastructures.

It is apparent that the aforementioned concerns also had some effect on the Turkish government in the last ten years. The issue of "having at least three children", which was introduced in 2008 by the Prime Minister at the time, is by far the most obvious example of this. According to this view, reaching the three-child family model "before it is too late" will increase the population and will make the nation "powerful" (NTVMSNBC, 2009). The government position is that Western countries experience "difficulties" due to decreasing fertility and Turkey can prevent these difficulties by guaranteeing a young and dynamic population through the practice of having three or more children (Milliyet, 2013). However, as previously mentioned, the elderly population will inevitably increase in Turkey due to the significant increase in life expectancy, regardless of fertility levels. Furthermore, the experiences of other countries demonstrated that such a large increase in fertility levels has not been realized. Therefore,

social and economic policies should be prepared with consideration to the anticipated changes in the age structure of the population, and the expected changes both in size and in scope of the needs of the growing elderly population.

These developments resonate as a policy that promotes the increase of fertility (pronatalist), just like in the first years of the Republic of Turkey. Clear signs of these changes are found in news items which mention that regulations related to financial support for newborns, longer maternity leaves for mothers and flexible working arrangements were being assessed by the Ministries (Akşam, 2013). The anti-abortion views mentioned in 2011 by the then Prime Minister, and the support that the Prime Minister received from the relevant ministries, can also be evaluated in this context. Following these statements, there were some reports in the media which mentioned that new regulations concerning the reduction of the 10-week legal period of induced abortions and the prohibition of this practice were being planned (Hürriyet, 2012).

Statements in favor of increasing fertility were also mentioned in the Tenth Development Plan prepared by the Ministry of Development. This plan mentions the need for “increasing the fertility rate through population policies” and recommends that a policy be prepared within this mandate. Following the aforementioned arguments and activities, the government unveiled the “Family and Dynamic Population Structure Conservation Program” on January 8, 2015 (Ministry of Development, 2015). In this program, in which the inclination to support increased fertility is clearly indicated, Prime Minister Erdoğan’s speech from 2008 on “having at least 3 children” was presented as a milestone. It is anticipated that with the law, which will be prepared according to the program, will include a one-time financial aid¹⁴ to be provided for each child: the amount of which will increase as the number of children increases. The 16-week maternity leave will not be prolonged, however, and part-time working hours, which will increase depending on the number of children, will be provided in the subsequent months of the leave¹⁵. With the same program, the three day paternity leave will be increased to five days. Furthermore, in pursuit of a policy of “work-family” balance, the following new rights were defined within the program; part-time working hours to ensuring women’s continued professional progression during unpaid maternity leave and the transfer of maternity leave to the father if the mother dies soon after birth. Along with the program’s direct incentives to fertility, it also aims to encourage couples to marry young, and thus bringing the age at marriage to earlier than the age of 27, through a “dowry account” incentive.

Following the “at least 3 children” statement of the government, the policies aimed at increasing fertility became concrete in the Tenth Development Plan and the Family and Dynamic Population Structure Conservation Program.

Another important point is that, internationally, pronatalist policies became “old-fashioned”. At the International Conference on Population and Development supported by the United Nations Population Fund and held in 1994, in Cairo, a new approach was adopted which emphasized the concept of reproductive health. (Notably, the concept of family planning was renounced.) With this approach, in terms of human rights, government encouragement of lower or higher fertility rates is considered a violation. It is more important that people have access to the required reproductive health services and make informed decisions on any subject related to reproduction.

¹⁴ 200 TL for the first child, 400 TL for the second child and 600 TL for third or higher parities.

¹⁵ 2 months for the first child, 4 months for the second child and 6 months for third or higher parities.

Another important point is that the views or expectations arising from these incentives, particularly those related to recommendations for longer maternity leave and child benefits, may increase fertility in Turkey, just as they did in Northern European countries and France. However, there are substantial economic, social and cultural differences between Turkey and these countries, as well as differences in terms of the motives behind the strategies.

The main motive of the said European countries is to “ensure gender equality” and aid individuals in achieving a “work-family” balance. In other words, motherhood should not cause a disadvantage in the work force for women. For this purpose, implementations such as a paternal leave policy that supports the active participation of fathers in child care, and paid parental leaves were introduced. Traditional gender roles appear more pronounced in Turkey than these countries. Evidence for this can be seen in the data that shows Turkish women’s lower educational levels compared to men, their even lower participation in the labor force, the low political representation of women, and in the rates of violence against women. Reproductive rights are essential for work-family balance. From this perspective, governments should offer opportunities for women who wish to have children, but do not want to leave the work force, so that families/couples do not encounter the problem of not being able to reach their desired number of children due to economic reasons. Other strategies adopted without first considering the gender dimension and rights will be deficient and groundless.

In the Family and Dynamic Population Structure Conservation Program, there is no approach aimed at ensuring gender equality in domestic and work life.

The Family and Dynamic Population Structure Conservation Program have concrete goals for increasing fertility and supporting marriages at younger age. The aim of “increasing the total fertility rate above replacement level”, which is one of the four objectives of the program, is open for discussion since the fertility rate of Turkey is already at replacement level. Furthermore, the content and language of the report are not focused on preventing the inequalities that women face in private and public life. In the program, the policy entitled “strengthening the harmony of family and work life” does not contain an approach for redressing gender inequalities in domestic and work life. On the contrary, child care was defined as the duty of women and relevant recommendations aimed only at mothers were made. The unequal status of women in workplace policies can clearly be seen in women’s participation in the labor force, and in women working without salary and without social security. Only 31 percent of women are working in Turkey. One-fifth of these women are unpaid family workers and only half of the working women are covered by social security (HUIPS, 2014). Therefore, even though the program encourages part-time hours for working women after birth, the program is deemed inadequate in preventing the inequalities faced by women in the workplace. The one-time financial aid only serves as a symbolic incentive, rather than being a regular state aid for people in need. Maternity leave privileges can be transferred to the father only after the death of the mother after birth. In contrast to Northern European countries, paternity leave has only been symbolically increased. It is not functional, and is limited to five days.

There is an inherent imposition of marriage throughout the program. The dominant view is on supporting marriage, and not on supporting young individuals as they build their lives. This approach does not present any life projects to young people other than marriage and the “dowry money”, which was intended to encourage marriage at young ages, is a concrete indicator of this philosophy. In the future, there should be a re-evaluation of these policies and new regulations should be implemented based on a critical analysis of this program.

Turkey is seeing improvements in mortality indicators. These improvements can be observed in increasing life expectancies at birth, the decreasing rates of maternal and infant mortality which are associated with the level of development, and the decreasing proportion of preventable causes of death (in general, communicable diseases). Mortality rates for both infants and older age groups have dropped. In 2013, the life expectancy at birth was 72 for men, 78 for women and 75 for the overall population. Turkey is 7 to 8 years behind Japan, which has one of the highest life expectancies at birth in the world (Population Reference Bureau, 2013).

In Turkey, life expectancy at birth is 72 for men and 78 for women. These values are 7-8 years below than those of Japan.

INFANT, CHILD AND UNDER-5 MORTALITY RATES AND MATERNAL MORTALITY

In Turkey, reliable information on childhood mortality is obtained from the demographic and health surveys. International organizations, notably the World Health Organization, also obtain the relevant indicators from the results of these surveys. The improvements achieved in the registration systems in the recent years also manifest themselves in improvements in data collection related to the numbers and causes of death.

In 1978, 134 out of every 1000 babies died before reaching the age of one, whereas today, 13 out of every 1000 babies do not reach their first birthday.

Since 2009, a central system has been used to compile nationwide mortalities and causes of death based on the registers. However, since the early-age deaths have the highest risk of being unregistered, there is still a need for survey results. Fifty years ago, Turkey stood out with its high infant mortality rates, which lagged behind the general upward turn in socio-economic conditions. However, the infant mortality rate, which was 134 per 1000 in 1978, made rapid progress and in the 25 years between 1988 and 2013, it decreased from 78 per 1000 to 13 per 1000. . While the under-5 mortality rate decreased from 97 per 1000 to 13 per 1000 in the same period, child mortality rates reached a very low level of 2 per 1000. Reducing the under-5 mortality by two-thirds between 1990 and 2015 was one of the objectives of the Millennium Development Goals¹⁶.

The infant mortality rate is higher in the Eastern part of Turkey. Some 24 out of every 1000 infants are lost before reaching their first birthday.

¹⁶ <http://www.tr.undp.org/content/turkey/tr/home/mdgoverview/>

From 1990 to 2005, the maternal mortality ratio decreased from 70 per 100 000 to 29 per 100 000. The 2013 estimate is 16 per 100 000.

Turkey achieved this objective as of 2011¹⁷. Despite these improvements, it should be noted that the differences between regions and different social groups continue. While the infant mortality rate is 13 per 1000 in the Western and Northern regions, it remains at 24 per 1000 in the Eastern region (HUIPS, 2014). Infant mortality is increasingly being concentrated in the earlier period of the first year. Early neonatal mortality, which refers to the death of a newborn baby within the first week of life, is mostly caused by birth defects. More expensive medical practices are required for the redressal of mortality in this period. Furthermore, 1 out of every 4 marriages are consanguineous marriages in Turkey - unions between close blood relatives - so it is not possible to further decrease the infant mortality rate with medical solutions before addressing the social issues surrounding high risk consanguineous marriages.

More prevalent deliveries in health facilities, increasing pre- and post-natal care and the legalization of induced abortions are closely related to the achievement of Turkey regarding the objective on maternal mortality of the Millennium Development Goals.

Maternal deaths during pregnancies, births or the postpartum period that are caused by reasons related to pregnancy are statistically defined. They are generally encompassed within the maternal mortality ratio, which refers to the number of maternal deaths per 100 000 live births.

This ratio decreased from 70 per 100 000 to 29 per 100 000 during the 15 years, between 1990 and 2005. The 2013 estimate is 15.9 per 100 000 (HUIPS, 2006a and SAGEM, 2013). Reducing maternal mortality by three-fourths between 1990 and

2015 is another objective of the Millennium Development Goals¹⁸. A significant portion of maternal deaths occur during and after deliveries. Furthermore, worldwide, the illegal termination of pregnancies in places other than health facilities,

and with the assistance of people who are not health professionals, is an important cause of maternal mortality. The following developments play a significant role in Turkey's achievement of the MDG objective; the increase in the proportion of deliveries carried out in health facilities, more prevalent prenatal and postnatal care, and the legalization of induced abortion.

Nevertheless, regional differences and higher mortality rates among women in disadvantaged groups (for example, women with low wealth and female seasonal agricultural workers) should be considered during the planning of health services. The current political statements on induced abortion and arbitrary implementations based on these statements might be an impediment to Turkey's aim related to the currently improving maternal mortality.

In Turkey, life expectancy at birth is increasing, while maternal and infant mortality and preventable deaths are decreasing.

CAUSES OF DEATH

While Turkey is making progress in terms of mortality rates, it is also going through a transition period in terms of causes of death and diseases. Cardiovascular diseases, cancers, chronic pulmonary diseases and congenital anomalies are ranked among the most common causes of death (Naghavi et al., 2014). In Turkey, while the share of communicable diseases in causes of death and morbidity decreased, the share of non-communicable diseases increased rapidly, as observed in developed countries. Along with the improvements achieved in communicable

¹⁷ While the under-5 mortality rate was 61 per 100 000 in 1990 (TDHS-1993), it was 15 per 100 000 in 2011 (TDHS-2013).

¹⁸ <http://www.tr.undp.org/content/turkey/tr/home/mdgoverview/>

diseases, the consequent issues of prolonged lifespan, and increased longevity for those with chronic diseases, as well as the increased share of deaths caused by chronic diseases, should not be overlooked. It is very important to consider the overall picture while planning health services.

In Turkey, cardiovascular diseases, cancers, chronic pulmonary disease and congenital anomalies are the most prevalent causes of death. The share of communicable diseases in the causes of death is decreasing.

Specific Causes Of Death

Improvements in general mortality rates created the opportunity of observing specific preventable causes of death such as violence, suicide, workplace accidents and traffic accidents, along with death rates in different strata of society and in different regions. These types of causes of death come to the forefront as preventable causes linked with social inequalities or environmental factors.

According to the compilation of the independent media, 281 women were murdered in 2014. Violence against women is an important social problem in Turkey due to physical and mental problems that it causes.

Violence originating from gender inequalities is one of the biggest risks to women's lives. The perpetrators of violence against women are predominantly the men who are close to them, such as their fathers, husbands, boyfriends and brothers (HUIPS, 2009). According to the monitoring reports of the Independent Communication Network (Bianet), 281 women were murdered in 2014¹⁹ in Turkey. Furthermore, women are injured and experience psychological problems due to the violence (HUIPS, 2014b). Violence against women, which is considered both a cause of death and disease, is an important social problem, especially with its high prevalence and severity.

Workplace accidents are other preventable specific causes of death. In 2014, 1886 people died as a result of causes related to their work (İşçi Sağlığı ve İş Güvenliği Meclisi, 2015). The fact that a significant portion of the people who die due to workplace accidents are uninsured workers, and the lack of mortality records for people working in agricultural and construction sectors as seasonal workers, leads to the numbers provided by SSI to be lower than the actual number of workplace accidents and deaths. Notably, fatal work accidents occur mostly in the mining and construction sectors²⁰.

Traffic accidents, which are also among preventable causes of fatalities, caused the deaths of 3750 people in 2012. The number of deaths due to traffic accidents has been increasing steadily since 2007 (TURKSTAT; 2013).

According to the report by Council of Workers Health and Work Security, in 2014, 1886 people died as a result of causes related to their work.

Risk Factors Regarding Causes of Death and Disease

With the objective of decreasing death rates and prolonging healthy lifespans, it is very important to determine the risk factors related to the causes of death and morbidity, and to develop policies for the elimination of these risk factors. In Turkey, the leading risk factors are as follows; smoking, excessive salt consumption, poor nutritional habits (diet) and immobility.

¹⁹ <http://bianet.org/bianet/erkek-siddeti/161582-erkek-siddetinin-2014-grafigi>

²⁰ The coal mine accident on May 13, 2014 which occurred in Manisa/Soma and killed 301 miners, and the coal mine accident on October 29, 2014 which occurred in Konya/Ermenek and killed 18 miners, brought the subject once again to the public agenda.

Along with births and deaths, migration is another primary component of population change. In contrast to the two former components, migration is a social phenomenon that does not have a biological root. Migration occurs as people move from their permanent residences to other places, either en masse or individually, due to natural, economic, social or political reasons. Therefore, the size, direction, and the reasons and impacts of migration should be examined multi-dimensionally. Migration has always existed in human history. However, in today's world, as its variety and prevalence increases, migration has become an area of interest and a subject for discussion both at the national and international level; international migration, in particular, has become one of the important focuses of international relations and law.

In demography, migration usually indicates movement from one place of residence to another with the intention of settling. In order to collect data in a standard manner, the definition of migration is restricted according to various durations, settings and objectives. For example, while the United Nations defines a migrant as any person who moves to a country and lives there for one year or more, without further consideration of the type of migration and the reasons for it; questions asked in the population censuses of Turkey between 1970-2000 of people whose permanent residences were different from their permanent residence from 5 years ago were accepted as migrants. At the present time, according to the Address Based Population Registration System, migration covers all of the permanent residential changes, regardless of the duration of stay.

Another important feature of migration is dynamism. Today, the movement of people between different settings, either for temporary or permanent settling purposes, is higher than ever. In the analyses of modern population movements, this situation is compounded and makes it difficult to analyze migration issues. However, it also makes it necessary to work diligently on this field. In terms of spatial analysis, migration studies are divided between internal migration and international migration. As previously mentioned, internal migration was from rural to urban areas between the 1950s and 1980s in Turkey. After the 1980s, urban-to-urban migration became more prevalent with increasing urbanization trends. Regarding international migration, the major movements were the population exchange between Turkey and Greece during the foundation period of the Republic of Turkey, the labor migration to Europe after the Second World War, the wave of migration from Bulgaria in 1989 and during the recent period, and the registered and unregistered asylum seekers from southern and eastern neighboring countries of Turkey who moved as a result of war and armed conflicts.

One of the pivotal elements of migration is whether the migratory movement is voluntary or not. While rural-to-urban migration due to socio-economic reasons is defined as voluntary migration, the increasing evacuation of villages and abandoning villages due to armed conflicts in the eastern and southeastern regions after 1990 can be given as an example for forced migration (internally displaced persons). The same categorization also applies for international migration. Labor migration, or 'brain drain' when referring to the emigration of intellectual population, are both defined as voluntary migrations, and the migratory movements with the aim of permanently or temporarily seeking refuge (refugees or asylum seekers) in another country are defined as forced international migration. Another important migration movement that affects Turkey is the international irregular labor migration. These migrants, who are primarily from Eastern European countries, former Soviet Union countries and Middle Eastern countries, come to Turkey repeatedly for short periods and generally work without recorded immigrant status to work in the tourism, home and care services, textile and construction sectors (Toksöz, Erdoğan and Kaska, 2013).

Another type of migration which conflicts with the dominant “for settling purposes” definition in demography, but which is also socially and economically very important, is seasonal migration. Throughout Turkey, it is estimated that nearly 3.5 million individuals seasonally migrate for working in the agriculture sector²¹.

Agriculture, construction and tourism are the leading sectors in seasonal migration. The workers from Southeast Anatolia who go to the Black Sea region for harvesting hazelnuts, or workers who go to Çukurova for harvesting cotton, are examples of seasonal migrants. Seasonal migration is also frequently covered by the media. Different from other labor migrations, which are predominantly comprised of adult males and females, seasonal migration often refers to a temporary working and living situation in which all family members migrate and work together. In this respect, seasonal migration contributes to the child labor problem in Turkey.

INTERNAL MIGRATION

According to the 1927 population census, which was the first population census of Turkey, 76 percent of the population was living in rural areas. This proportion remained stable until the 1950s and according to the 2012 data of ABRPS, it now stands at about 23 percent²². In other words, over a single lifetime, the nationwide proportion of rural and urban populations has reversed. Similar to Turkey’s experience, the proportion of rural population of the 27 European Union member countries is 23 percent, as of 2011 (EUROSTAT, 2012).

In the 1950s, the excess supply of labor in rural areas due to agricultural mechanization generated the basic “push factor” of rural areas, and the growing employment opportunities in cities generated the “pull factor” of urban areas. During this rural-to-urban migration phase, which dominated the first wave of internal migration in Turkey, the rural “push factor” was more effective than the urban “pull factor”. The rapid urbanization experienced in parallel with the internal migration phenomenon is the outcome of the increasing population in big cities. The pattern of migration in that period, in broad terms, was chain migration. This wave of migration resulted in the creation of metropolitan areas and squatter housing districts in Turkey. As of the 1980s, urban-to-urban migration had become the main internal migration wave in Turkey (Özbay-Yücel, 2001; Koçak and Terzi, 2012).

Various internal displacements/forced migrations have also occurred throughout the history of Turkey. The settlement policies which were implemented after the riots against the new regime, those between 1925 and 1937, are important examples for internal displacements/forced migrations. As a result of these policies, approximately 25 000 people were moved from Eastern to Western provinces (Kaygalak, 2009; Koçak and Terzi, 2012). In recent periods, it’s been seen that after the 1980s, many people were displaced due to security problems in Southeast Anatolia. According to the Turkey Migration and Internally Displaced Population Survey, conducted in 2005 in the 14 provinces²³ which were affected the most by security problems, nearly a million people were forced to migrate between 1986-2005 (HUIPS, 2006b: 17, 72, 106; Ayata and Yüksekler, 2005: 16).



In Turkey, the current data on internal migration is obtained from ABPRS. This migration data, which is advantageous because it is based on permanent residences and is published annually, has certain limitations since the current address of the migrant is only registered if it was changed officially. Before ABPRS, migration data, both at the national and residential level, was obtained from the censuses. In the information obtained from the census, official registry of migration was not required. Furthermore, the data was provided with the aim of presenting the patterns of migration, such as rural-to-urban, rural-to-rural and urban-to-rural migration. Therefore the termination of censuses can be evaluated as a loss for migration data.

²¹ <http://www.mevsimliktarimiscileri.com/default.aspx>


²² The urban and rural area definitions of Turkish Statistical Institute were changed in 2013. According to new definitions, only 9 percent of the population was living in rural areas in 2013.

²³ Adıyaman, Ağrı, Batman, Bingöl, Bitlis, Diyarbakır, Elazığ, Hakkâri, Mardin, Muş, Siirt, Şırnak, Tunceli, Van.

The aforementioned deficiencies in the compilation and presentation of migration data based on ABPRS should be corrected. Along with the magnitude of internal migration, external migration and net migration²⁴, keeping and disseminating the very data which will make it possible to examine migratory movements by types of residences, and to understand the patterns of migration, are crucial tasks.

Another important deficiency is the lack of regular data collection on seasonal labor migration. Since this migratory movement is not aimed at settlement, it is not covered by the ABPRS, as was the case with the censuses. However, seasonal migration is an important issue in terms of direct demographic behaviors, as well as economic and social needs and problems. Therefore it should be analyzed in detail.

According to the ABPRS data, within the 2013-2014 period, the highest migrant-receiving provinces were listed as follows; İstanbul, Ankara, İzmir, Bursa, Antalya, Adana, Konya, Kocaeli and Mersin. These provinces have extensive employment opportunities in industry and service sectors. İstanbul maintains its popularity of many years, with over 400 000 received migrants in this period. In fact, the magnitude of migration that Ankara - the second in the list - received is less (187 000) than the half of the migration received by İstanbul. The above listed provinces are also among the top 10 migrant-giving provinces, with a quite similar ranking. İstanbul, Ankara and İzmir are again in the top 3 provinces and the size of the migration from İstanbul alone (372 000) exceeds the total population of many provinces. All these figures point out that the highest migratory movements occur in big cities. The fact that the net migration rate²⁵ is, in general, positive in the Western provinces and negative in the Eastern provinces implies that the migration from east to west is still continuing. Even though urban-to-urban migration has intensified at the present time, it should be remembered that rural-to-rural, town-to-town and urban-to-town or urban-to-villages can still be observed.

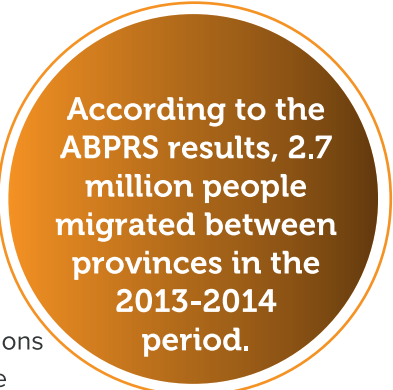


Urban-to-urban migration is currently the most prevalent type of migration in Turkey.

Lifetime migration/migrant information, which is collected relatively easily and is a basic migration indicator, refers to someone who lives away from his/her place of birth. Migration occurs more prevalently in Western provinces. According to the TDHS-2008, 44 percent of the population living in Western provinces has migrated²⁶. This proportion was 10 percent in East Anatolia. Worldwide, migration is more common among men. However, there is no significant difference between the number of male and female migrants in Turkey in terms of internal migration. This situation stems from the fact that internal migratory movement consists predominantly of family migration. Educational level gives another clue about the characteristics of migrants in Turkey; it is observed that a more educated population is more mobile. The highest proportion of migrants is observed to be among people with high

school and above education (41 percent), whereas only 23 percent of uneducated people migrated. In terms of the age structures of migrants, it can be seen that the lowest proportion of migrants is observed to be in the under-15 age group. The highest proportion of migrants is observed in the 30-59 age group.

According to the findings of ABPRS, nearly 2.7 million people resided in a different province than their birthplace in the 2013-2014 period (TURKSAT; 2014a). According to the information on the reasons for migration collected in the 2011 Population and Housing Survey, the top three reasons for migration among women were as follows; due to another migrating family member, due to educational purposes, and finally due to marriage-related reasons (TURKSTAT; 2013a). Among the reasons for movement of male migrants, dependent migration is followed by reassignments/ job changes and seeking/finding a job, as well as the pursuit of education. The decisions of families are predominantly decisive in the migratory movement. In cases where the



According to the ABPRS results, 2.7 million people migrated between provinces in the 2013-2014 period.

²⁴ Net migration is the difference between immigration into and emigration from the given area.

²⁵ Net migration rate is obtained by the amount of net migration over the total population in the area.

²⁶ This indicator was obtained from the household dataset of the survey. If a difference was observed between the individual's current place of residence and birth place, the said individual was defined as a migrant.

migratory movement was initiated by individuals, their families, relatives and their friends living in the same city partake in the process. Therefore, family ties have more impact on individuals' lives after migration than individuality. The basic necessities of daily life such as housing, finding a job, and accessing services like education and health are largely based on informal solidarity and family ties (Rittersberger-Tılıç and Kalaycıoğlu, 1998:72).

EXTERNAL MIGRATION

External migratory movement maintained its importance in the formation of Turkey's population structure and in the social and economic changes and developments related to this structure. The population exchange between Greece and Turkey was one of the policies that formed a basis for the project of the establishment of the Republic and it resulted in the exchange of nearly 2 million people. The importance of this population exchange is obvious, given that the country's population was 13 million at that time. External migration was based on religious and ethical homogenization during the first years of the Republic. After the mechanization in the agricultural sector, the excess labor group which could not find employment opportunities in the cities emigrated to Western European countries, notably Germany, and thus, the external migration transformed into labor migration by the 1960s. At first, these emigrants were predominantly young men who held temporary worker status. However, with family reunifications, as well as with their numbers and permanent lifestyles, these emigrants changed the characteristic of the migratory movement. This emigration deal, and its resultant labor migration, ended in 1973. Nevertheless, the social and economic impacts of Turkish emigrants living in European countries on Turkey and on the countries in which they have settled continue. After the mid-1980s, there was an intense wave of return migration from European countries. According to the 2011 Population and Housing Survey, 1 656 000 people residing in Turkey had previously lived abroad. Out of these people, 488 000 of them had lived in Germany.

According to the Population and Housing Survey-2011, there are more than 1.5 million people who had previously lived abroad. Out of these people, nearly 500 000 of them have lived in Germany.

Another important migratory movement is the immigration of Turkish people living in Bulgaria with the aim of fleeing from assimilation policies between 1989 and mid-1990s. During this time, certain regulations were made concerning the legal and economic rights of migrants. After Bulgaria's accession into the European Union, return migration of the same group was observed. In the late 1980s and early 1990s, irregular labor immigration from former Soviet Union countries began and this migratory movement came to be known as the "suitcase trade". Again in the 1990s, there was an influx of male labor emigration to the Arabian Peninsula and to the North African countries with the intention of finding work in the construction sector. Male labor migration is ongoing and is being shaped by the political and economic atmosphere and the security situation of this geography. For many years, Turkey has been an emigrant country in terms of labor migration. However, Turkey has also become a destination, especially for irregular temporary migrants, due to its proximity with European Union countries, post-Soviet countries and Arab countries. Immigrants who are not entitled to legal rights to reside or work in the country consider Turkey as a "transit country" and generally work uninsured and in unlawful working conditions. They tolerate poor living conditions in the hopes of eventually migrating to and settling in a safe third country.

Forced migration is another type of external migration that affected Turkey. An example of this migratory movement was directed at Northern and Western European countries, and it was led by a leftist opposition after the 1970 and 1980 coup d'états and by those supportive of the Kurdish movement during the 1990s. Being located in a region with intensive political conflicts, Turkey is also the first recourse and transit country of many asylum seekers. Asylum seekers are individuals who have applied for protection to a country other than their own.

According to AFAD, there are currently 269 thousand Syrian asylum-seekers in 25 temporary camps. It is estimated that the number of Syrian migrants is above 2.5 million with the people living outside the camps.

These people may want to settle in the country where they sought asylum, or they may want to go back to their countries when the security problem is resolved. Refugees, on the other hand, are individuals who have been granted asylum by the host country. Turkey ratified the 1951 Geneva Convention, which is a fundamental international document on refugees and asylum-seekers, but only upon the condition of a geographic restriction; refugee status is only granted to asylum-seekers coming from the countries to the west of Turkey²⁷. In Turkey, the applications of the asylum-seekers are reported to the official authorities, asylum-seekers are provided with temporary residences during the examination process of their applications, and if their demands are deemed appropriate, asylum-seekers are transferred to a safe third country. However, in 2004, the European Union countries tightened the laws related to the examination of the applications of asylum-seekers in the first country of arrival, and to their transfer to a safe third country. As a result of Turkey's limited application of the Geneva Convention, the country is being used as a transit country by the registered asylum-seekers who want to settle in a safe third country. Furthermore, it also caused people who do not have the opportunity to go to a third country to endure undocumented, unsecured living conditions which are open to any exploitation in Turkey. During the Iraq-Iran War and Gulf War, people from Iraq and Iran constituted the biggest asylum-seeker population. It is estimated that between 1980 and 1991, 1.5 million Iranian asylum-seekers and around 600 000 Iraqi people between 1988 and 1991 took refuge in Turkey²⁸. Currently, there is an extensive flow of Syrian asylum-seekers to Turkey. The borders were opened to Syrian asylum-seekers, whose lives were threatened due to the conflicts that started in April 2011, and they were given a temporary protection status. According to the recent figures of the Disaster and Emergency Management Authority (AFAD), while there are 269 thousand Syrian migrants in 25 temporary camps, it is stated that with those living outside the camps, this number is above 2.5 million (AFAD, 2016; GiGM, 2016). Not having reliable data on the number of immigrants, or their places of residence and life conditions, are among the main problems related to this subject. The thorny life conditions of Syrian refugees are not problems that are limited to the provinces next to the borders. In fact, these issues are apparent throughout the country, since Syrian refugees have only temporary protection status and temporary work permits during their temporary protection.

Regarding Turkey's need for regulations on international migration, the Ministry of Interior Directorate General of Migration Management was established with Law No. 6458, in 2013²⁹. The Directorate General works with a special emphasis on external migration; and during this period where the status of Turkey as a transit country is changing to a destination country, it aims to develop policies on migration in Turkey. The Directorate General is also working on subjects related to the migrants who applied for protection under Law No. 6458.

Regarding external migration, Turkey needs to develop data-based policies compatible with current political and humanitarian priorities. Therefore, the efforts of the Directorate General of Migration Management are important. The Migration Report of the Tenth Development Plan also focused on the priorities of Turkey regarding international migration. Internal migration was not addressed extensively in this report. However, it should be noted that Turkey is an internal migration country in perpetual motion, and internal migration is an important field of study that requires examination and planning with the same priorities. Regarding the current status of urbanization, the assumption that the rural-to-urban episode, and thus internal migration, has lost its importance will lead to deficiencies in terms of social and economic planning in a country where intense migratory movements are expected to continue.

²⁷ <http://www.unhcr.org>

²⁸ <http://www.unhcr.org/3ebf5c054.html>

²⁹ <http://www.goc.gov.tr/main/>

Demography-population studies

The discipline that analyzes certain components of the population such as size, age and sex as well as the phenomena of fertility, mortality and migration which affect the said components.

Replacement level

The state where the total fertility rate is 2.1 is called the replacement level since a couple leaves two children behind to replace them. With fertility at this level, the population can replace itself.

Total Fertility Rate

The number of live births women are expected to give on average throughout their lifetimes is defined as the total fertility rate.

Infant mortality rate

The probability of children dying before reaching one year of age.

Child mortality rate

The probability of death between the age of 1 and 5.

The unmet need for family planning

The unmet need for family planning refers to the lack of use of contraceptives despite the wish for limiting or spacing fertility.

Maternal mortality ratio

The number of maternal deaths in a certain period per 100 000 live births in the same period.

Life expectancy at birth

Life expectancy at birth indicates the overall number of years a newborn would be expected to live if the prevailing patterns of mortality were to stay the same.

Antinatalist policy

Population policy that is against high fertility.

Pronatalist policy

Population policy that is for high fertility.

Population projection

The method of estimating the future size and structure of the population through assumptions on the fertility, mortality and migration components of the population.

REFERENCES

- AFAD (2016) Afet Raporu-Suriye, <https://www.afad.gov.tr/TR/IcerikDetay1.aspx?ID=16&IcerikID=848> (last accessed: 01.02.2016).
- Aktar, A. (2000), Varlık Vergisi ve Türkleştirme Politikaları, Ankara: İletişim.
- Akşam, (2013). “3 çocuk teşviki 300 lira ticket!”. <http://www.aksam.com.tr/guncel/3-cocuk-tesviki-300-lira-ticket/haber-163314> (last accessed: 01.08.2014).
- Ayata, Bilgin – Yüksekler, Deniz (2005), “A belated awakening: National and international responses to the internal displacement of Kurds in Turkey”, *New Perspectives on Turkey*, Vol. 32, s. 5-42
- United Nations (1995), Uluslararası Nüfus ve Kalkınma Konferansında kabul edilen eylem planı, Kahire, 5-13 Eylül 1994. Ankara: TİSAMAT.
- BİANET (2015), 2014 Erkek Şiddeti Çetelesi. <http://bianet.org/bianet/erkek-siddeti/161582-erkek-siddetinin-2014-grafigi> (last accessed: 01.03.2015).
- Duben, Alan ve Cem Behar, (1998), İstanbul Haneleri. İstanbul: İletişim Yayınları.
- EUROSTAT, (2012) “Eurostat News Release, 21/2012”. http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/1-30032012-BP/EN/1-30032012-BP-EN.PDF (last accessed: 04.08.2014).
- GİGM (T.C. İçişleri Bakanlığı Göç İdaresi Genel Müdürlüğü), (2016), Geçici Koruma. http://www.goc.gov.tr/icerik6/gecici-koruma_363_378_4713_icerik (erişim tarihi: 01.02.2016)
- Gülay Toksöz, Seyhan Erdoğan, Selmin Kaska, (2013): Türkiye’de Düzensiz İş Göçü ve Göçmenlerinin İsgücü piyasasındaki durumları, IOM Yayınları http://www.turkey.iom.int/documents/Labour/IOM_irregular_labour_migration_tr_06062013.pdf (last accessed: 10.11.2014).
- HUIPS, (2014a) 2013 Türkiye Nüfus ve Sağlık Araştırması. Ankara: Elma Teknik Basım
- HUIPS, (2014b), Türkiye’de Kadına Yönelik Aile İçi Şiddet Araştırması Özet Bulgular. Ankara: Elma Teknik Basım.
- HUIPS, (2006a), Ulusal Anne Ölümleri Çalışması 2005,
- HUIPS, (2006b), Türkiye Göç ve Yerinden Olmuş Nüfus Araştırması, İsmat Matbaacılık Yayıncılık, Ankara.
- Hürriyet, (2012) “Kürtaj Yasası Çıkartacağız”. <http://www.hurriyet.com.tr/gundem/20654033.asp> (last accessed: 01.08.2014).
- İşçi Sağlığı ve İş Güvenliği Meclisi (Council of Workers Health and Work Security) (2015), 2014 Yılı İş Cinayetleri Raporu (Report on Work-Related Deaths, 2014) <http://www.guvenlicalisma.org/icerik/haber/dosyalar/2014.pdf> (last accessed: 12.05.2015)
- Ministry of Development (2015), Ailenin ve Dinamik Nüfusun Korunması Programı Eylem Planı, <http://www.kalkinma.gov.tr/Documents/Ailenin%20ve%20Dinamik%20N%C3%BCfus%20Yap%C4%B1s%C4%B1n%C4%B1n%20Korunmas%C4%B1%20Program%C4%B1%20Eylem%20Plan%C4%B1.pdf>. (last accessed: 13.01.2015).
- Ministry of Development (2014) Onuncu Kalkınma Planı 2014-2018 Göç Özel İhtisas Komisyonu Raporu.
- Kaygalak, Sevilay, (2009) “Kentin Mültecileri Neoliberalizm Koşullarında Zorunlu Göç ve Kentleşme”, Ankara, Dipnot Yayınları.
- Koç, İ., Eryurt, M.A., Adalı, T. ve Seçkiner, P. (2010) Türkiye’nin Demografik Dönüşümü: Doğurganlık, Aile Planlaması, Anne-Çocuk Sağlığı ve Beş Yaş Altı Ölümlerdeki Değişimler 1968-2008, HÜNEE, Sağlık Bakanlığı, DPT ve TÜBİTAK, ISBN 978-975-491-285-2, Ankara.
- Mevsimlik Tarım İşçileri, <http://www.mevsimliktarimiscileri.com/default.aspx>. (last accessed: 01.03. 2015).

- Milliyet, (2013) "Erdoğan neden 3 çocuk istediğini açıkladı?".
<http://siyaset.milliyet.com.tr/erdogan-neden-3-cocuk-istedigini-acikladi-/siyaset/siyasetdetay/02.01.2013/1650260/default.htm> (last accessed: 01.08.2014).
- Naghavi, M. ve diğerleri (2014), "Global, regional, and national age–sex specific all-cause and cause-specific mortality for 240 causes of death, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013", *Lancet Volume 385*, No. 9963, p117–171, 10 January 2015
- NTVMSNBC, (2009) "Erdoğan: İş işten geçmeden 3 çocuk". <http://www.ntvmsnbc.com/id/25008774/> (last accessed: 01.08.2014).
- Population Reference Bureau, 2014 World Population Data Sheet: <http://www.prb.org/> (last accessed: 10.01.2014).
- Rittersberger Tılıç, Helga- Kalaycıoğlu, Sibel, (1998), "The Nation State and The Individual: Alternative Strategies of Consent From Below", *Asian and African Studies*, Vol. 7, No:1, s. 69-79.
- SAGEM (2013), Sağlık İstatistiği Yıllığı 2012.
- TURKSTAT, (2016) Adrese Dayalı Nüfus Kayıt Sistemi Sonuçları, 2015 <http://www.tuik.gov.tr> (last accessed: 30.01.2016)
- TURKSTAT, (2015a) Adrese Dayalı Nüfus Kayıt Sistemi Sonuçları, 2014 <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18616> (last accessed: 07.02.2015).
- TURKSTAT, (2015b), İş Gücü İstatistikleri, Kasım 2014, <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18634> (last accessed: 24.02.2015)
- TURKSTAT, (2015c), Evlenme ve Boşanma İstatistikleri, 2014. <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18628> (last accessed: 30.01.2016).
- TURKSTAT, (2014) Adrese Dayalı Nüfus Kayıt Sistemi Sonuçları, 2013: <http://www.tuik.gov.tr/> (last accessed: 07.07.2014).
- TURKSTAT, (2013a) Nüfus ve Konut Araştırması, 2011. Ankara: Türkiye İstatistik Kurumu Matbaası.
- TURKSTAT, (2013b), "Nüfus Projeksiyonları", (last accessed: 07.11.2014) http://tuik.gov.tr/PreTablo.do?alt_id=1027.
- World Population Prospects, (2012), <http://esa.un.org/wpp/> (last accessed: 07.10.2014)
- Yüksel-Kaptanoğlu ve Ergöçmen, (2012), "Çocuk Gelin Olmaya Giden Yol", *Sosyoloji Araştırmaları Dergisi*, 15(2): 129-161.