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Human Resources for Health in Turkey: Current Situation, Challenges and Solutions

Hasan Hüseyin YILDIRIM[1,2*]

Türkan YILDIRIM[1]

Merve Kardelen BİLİR[2]

Hakan Oğuz ARI[2]

Elif İŞLEK[2]

Yonca ÖZATKAN[2]

Okan ÖZKAN[1]

Hasan Giray ANKARA[1]

ABSTRACT

The implementation of effective health policies in a population depends on a large extent on the provision of efficient, accessible, viable and high-quality service network by health care personnel. One main objective of any given health care system is to improve the health of the population. Providing for an appropriate health sector workforce capacity is one means to achieve this goal. The human resources for health (HRH) sector have specific features that cannot be ignored to attain health objectives. The lack of explicit policies for challenges in

[1] Health Sciences University, Turkey
[2] TÜSEB Turkish Institute for Health Policies, Turkey
[*]Corresponding author: Hasan Hüseyin YILDIRIM, hhyildirim2005@gmail.com

human resources for health such as shortage of health professionals, geographical misdistribution and ineffective planning has produced, in most countries including Turkey, imbalances that threaten the health care systems of the countries. In this context, this paper presents current situations and targets to explore the problems for HRH in Turkey's case. It aims to argue potential causes and solutions by considering policy recommendations.

Keywords: Human Resources for Health, Health Workforce, Health Workforce in Turkey

INTRODUCTION

One main objective of any given health care system is to improve the health of the population. Providing for an appropriate health sector workforce capacity is one means to achieve this goal. As to be indicated in the literature, the health care industry relies on well-trained health professionals to deliver and to sustain effective health care services across the country (Wendt and Kohl, 2010). However, many countries face workforce-related challenges, including the shortage and imbalanced distribution of health care workers. Turkey is one example, and like other countries, Turkish health system also encounters with challenges like shortages and imbalances in geographical distribution and skill mix.

Turkey, strategically positioned at the crossroads of Europe, Asia and the Middle East, a candidate country of the European Union (EU) since 1999 and in the negotiation process with the EU since 2005, has a complex health system with many different public and private providers and a single financing agent, which is dominated by the public sector (World Bank [WB], 2005). Although Turkey has shown very important progress regarding human resources for health (HRH) in terms of quantity and quality when it is compared with the first years of its establishment, i.e. the 1920s, Turkey has not been able to resolve its HRH problems fully.

By winning the Turkish Independence War under the leadership of Mustafa Kemal Pasha, in Turkey which was founded in 1923 on the remnants of Ottoman Empire defeated in the First World War and collapsed after the War, the most important and priority issue in the health field was to increase the number of health workforce which was very limited. The priority was particularly given to increasing the number of HRH. Therefore, the education of more physicians, sanitarians, and midwives was among the main health care problems which needed to be solved urgently. Together with the development of the country and the growth of the population over time, the need for HRH has been growing, and the need for HRH planning to respond to this demand has come to the forefront. It should be indicated that the health workforce issue was dealt with, for the first time, in the Working Programme prepared by the Republic of Turkey, Ministry of Health (MoH) in 1925. Systematic studies on HRH planning in Turkey started during the term of Refik Saydam, who was the Minister for Health for 15 years between 1921 and 1937, had an important influence on the formation of the Turkish health policy and system during the first years of the Republic. It can be noted that the foundations of the modern Turkish health care system, including its physical, legislative, and workforce infrastructure were built in his period. In other words, Dr. Refik Saydam was one of the main figures in the evolution of Turkish health policy. Regarding human resources planning, he used the compulsory service strategy as a method to meet the country's physician needs in the 1930s. Dr. Saydam also centralized the functions of HRH management (such as planning, recruitment, development, retention, and supervision) in the hands of the MoH and prohibited private practice (Aybaş et al., 1987). Rational studies of the planning and implementation of health services, including the health workforce, were undertaken as part of the First Ten Annual National Health Plan in 1937. Under this framework, one of the striking goals of the plan was the education of the current health workforce in line with updated needs. Then, in 1955, in the National Health Programme, which was prepared for ten years to outline HRH planning, it was decided to try to

get the needed health care workforce in place (Ministry of Health [MoH], 1973). The Socialisation of Health Services Programme (Official Gazette, 1961) was prepared in the context of universal healthcare provision after the 1961 constitution. The establishment of a vertically organized public healthcare delivery system constituted the main aim of this program. These public healthcare service institutions were health posts, health stations and health centers across the country (Fişek, 1964; Günal, 2008; Yılmaz, 2017). Socialization of health services foresaw the development of health services and the rise of the quality of health services through providing balanced distribution of health personnel across the country, improving in medical education and increasing the number of health personnel (Fişek, 1963; 1964). Therefore, some decisions were made on establishing new schools and the improvement of current schools for each region.

Health workforce planning was conducted under Five Year Development Plans (FYDPs) by the management of the State Planning Organization (SPO) (Türkay et al., 1996) until the transfer of its authority to the Republic of Turkey, Ministry of Development in 2011 and later, to the Presidency of Turkey, Presidency of Strategy and Budget in 2018 (Official Gazette, 2018). In this context, the main target in the FYDP (1963-1967) and the Second FYDP (1968-1972) was about the establishment of educational institutions to raise health workforce as well as to provide a balanced distribution of health human resources across the country (State Planning Organization [SPO], 1963; 1968). The balanced distribution of health personnel at each level across the country was also determined as the main factor to produce services in both the Third (1973-1977) and Fifth (1985-1989) FYDPs. In the Sixth FYDP (1990-1994), the increase of human resources for health and the importance of education and continuous development were emphasized; it was indicated that the distribution of human resources between rural and urban areas was unequal, and the roles and responsibilities of employees should be defined to decrease

workload in the Seventh FYDP (1996-2000). The need for improvement in health human resources for a quality and cost-effective health service delivery was continued to be highlighted in the Tenth FYDP (2014-2018) (Official Gazette, 2013). However, these targets for the health workforce have not completely attained in any terms between 1960 and 2018 for two main reasons. The first was that these targets were not determined rationally. This could be a result of the inability to rationally determine the health workforce need. The second was that all actors who were responsible for health workforce planning did not perform their responsibilities satisfactorily. Hence, the production of the health workforce was not appropriate for the FYDPs' targets. According to the latest development plan published in 2019, the main objective is to improve both the quality of physical infrastructure and human resources by considering a quality, reliable, effective and financially sustainable health service provision supported by evidence-based health policies (Official Gazette, 2019).

Subsequent health reforms have also required effective strategies concerning the health workforce. However, the FYDPs' strategies in combination with other measures were not able to produce the desired results, and these challenges carried on within the current health care reform scheme, i.e., the Health Transformation Programme (HTP) in 2003 (MoH, 2003), which was put in place by the current government in 2003. A comprehensive set of policies focused on the problems of insufficiency, imbalances, and inequities in human resources for health within the HTP framework. The objectives of the HTP were determined to organize, finance and deliver health services in an effective, productive and equal way. Along with its three major initiatives including family practitioners, general health insurance, and autonomous hospitals, the reform program also aimed to achieve some improvements in the area of HRH. This is because completing this transformation process depends on the availability of qualified, enough, and balanced human resources across the country. It was stated in the reform program that the task

and responsibilities of health professionals was determined in the line of the harmonization process with the EU; a new education program was prepared for the specialization of family physicians; the term family health worker was developed to make the "family health" concept that forms the core of HTP operational, and attention and priority was being given to planning, research, and training facilities to strengthen the development of health system management as an independent discipline from physician management.

The program wanted to enable the balanced distribution of health professionals across the country utilizing encouraging voluntary policies (MoH, 2003). In this respect, compulsory service was abolished in 2003 mainly because its implementation was undemocratic, and it was not able to solve the problem. Therefore, instead of compulsory service, "contractual health workforce practice" was put into place voluntarily. However, this regime did not produce the expected outcomes. Consequently, approximately two years later in 2005, the government changed its policy; and introduced compulsory public service again to bridge the physician gap in deprived areas of Turkey, especially the east and southeast regions. Nevertheless, this initiative has partially solved this problem; it has negatively affected the satisfaction of health personnel.

The role of the World Bank should be also mentioned in this issue. The Government of the Republic of Turkey provided a new loan of TI No. 7717 from the World Bank to implement the Health Transformation and Social Security Reform Project (SDSGRP) which is the continuation of the Health Transformation Programme (HTTP). In addition to other issues within SDSGRP, there are other targets such as "to develop the understanding of human resources management in health, to implement the practices based on this approach, to make and improve a five-year health workforce plan for the years 2010-2014 and to ensure the sufficient number of health personnel in years" and planning, implementation, monitoring, coordination and

accreditation of trainings that aimed at increasing the competence of employees (IEG Review Team, 2016).

Human resources for health have been also underlined in strategic plans of the MoH; the main point in them is strengthening the capacity of the health system and improving its quality and safety by improving human resources for health. The MoH laid stress on the significant progress that was made after the HTP's reforms in terms of developing the health workforce in both capacity and quality. There are four points as follows; to provide the sustainability of human resources for health, to ensure the improvement of health workforce planning, to increase the competence level of human resources in health and to make health management more effective (MoH, 2012; 2019b).

The division of labour among various public institutions caused a fragmented structure and a lack of coordination in the management and education of HRH in Turkey (Türkay et al., 1996; MoH, 2003; Ağartan, 2015). The SPO undertook human resource planning, the Council of Higher Education (CoHE) carried out training of health human resources by medical schools; allocation and deployment decisions were taken in the Ministry of Health and Social Security Organization. Also, to some extent, the Ministry of Finance (MoF), Social Security Institution (SSI), Provincial Governors (and Provincial Health Directorates), and NGOs (such as the Turkish Medical Association [TMA]) played some roles in this equation. As can be seen, the planning, education, and utilization of HRH were conducted by different institutions. Problems arose partly due to the lack of effective coordination among these institutions (MoH, 2003).

Planning activities of human resources for health have been carried out since 2007 under the coordination of the MoH in the name of Human Resources in Health 2023 Vision (MoH, 2007a; 2007b; 2011). As a result of these emphases on the importance of human resources for

health, Health Manpower Planning Department was established in 2011 within the General Directorate of Health Services (Official Gazette, 2011). These ongoing studies have been managed by the participation of all stakeholders of the sector; they gathered once in the report of Health Labour Targets and Health Education in 2023. This report has been updated periodically because of changing targets, trends, needs and projections towards 2023 in health (MoH, 2014a) The Council of Higher Education (CoHE) also prepared three reports namely Health Education and Health Manpower in Turkey, on the situation of health education and service units, the solution of emerging needs and problems, the introduction of contemporary and up-to-date training plans and employment policies in 2008, 2010 and 2014 (The Council of Higher Education [CoHE], 2014).

Along with the HTP and many concurrent health reforms in terms of accessibility, finance, quality, and provision; the satisfaction rate of health services increased greatly from 40% in 2003 to 72.3% in 2015. Nevertheless, the satisfaction of health personnel was not in the same trend with the increasing citizen satisfaction in health considering the local and national studies conducted in our country (İşlek, 2019). The satisfaction of health personnel in Turkey was indicated by 64.6% in 2017 (MoH, 2017). It is a fact that this ratio is above the average; however, the efforts to increase the satisfaction of the health personnel will bring about the solutions to solve challenges in human resources for health and will pave the way for highly motivated health personnel and better health outcomes (İşlek, 2019).

Against this background, this paper aims to systematically put into place current situations and to reveal the problems for HRH in Turkey and the underlying causes, to explore potential solutions and to develop recommendations for policy and practice. To this end, the rest of the paper is organized as follows. The second section provides an overview of the current situation in Turkey. The third section explores the health workforce problems and the fourth

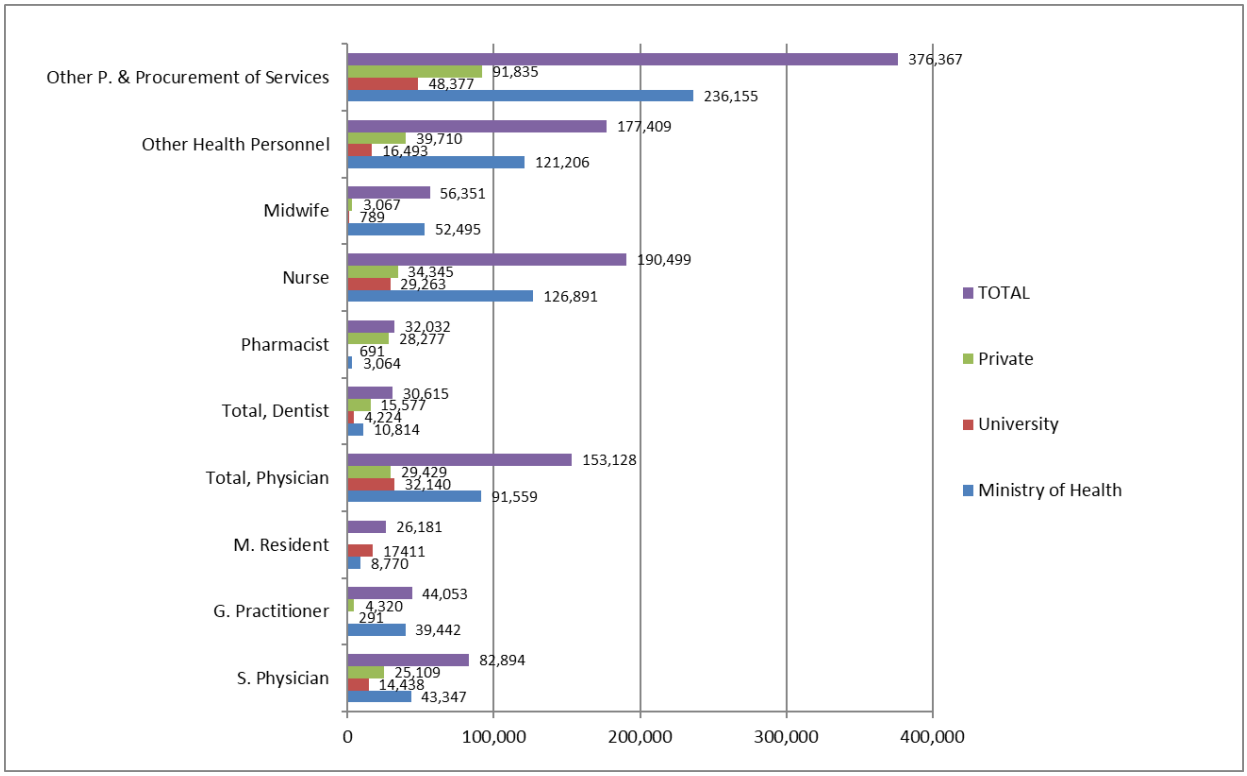
section analyses the causes of these problems. The fifth section focus on searching for solutions to manage problems and the last concludes with some policy recommendations.

CURRENT SITUATION IN TURKEY

There is a well-known and ongoing shortage of health workforce in Turkey. However, it is apparent that the HTP which was based on developing health care services considering the needs, demands and expectations of people who are in the center of improved health care services has put into its efforts also in provision, planning, and management of health human resources since 2003 (MoH, 2003).

In this respect, Turkey has been narrowing the gap with other the Organisation for Economic Co-operation and Development (OECD) countries; the growth in the number of physicians has been increased particularly since 2000. For example, while the total number of physicians was 95,190 and the rate per 1,000 population was 1.37 in 2002, the total number of physicians rose to 108,894 and the rate per 1,000 population increased to 1.47 in 2007 (MoH, 2007a, 2007b). According to the latest OECD report, Turkey is one of the countries in which the number of physicians ranged from 2.5 or less per 1,000 population. The other countries are ranked as Korea, Poland, Mexico, Japan and Chile (OECD, 2019). Turkey's rate for practicing physicians per 1,000 population is calculated as 1.9, while the OECD average is 3.5 per 1,000 population in 2017 (OECD, 2019). As can be seen in Table 1, there are 153,128 physicians in Turkey; 82,894 of them are specialists; 44,053 of them are general practitioners and 26,181 are medical residents (MoH, 2019a). The total number of dentists in the public and private sector and universities is 30,615; 4,890 of them are dental specialists across the country (MoH, 2019a). The number of nurses in all sectors is 190,499 across the country, and the number of midwives is 56,351 (MoH, 2019a).

Table 1: Number of Health Care Professionals, All Sectors (Ministry of Health, 2019)

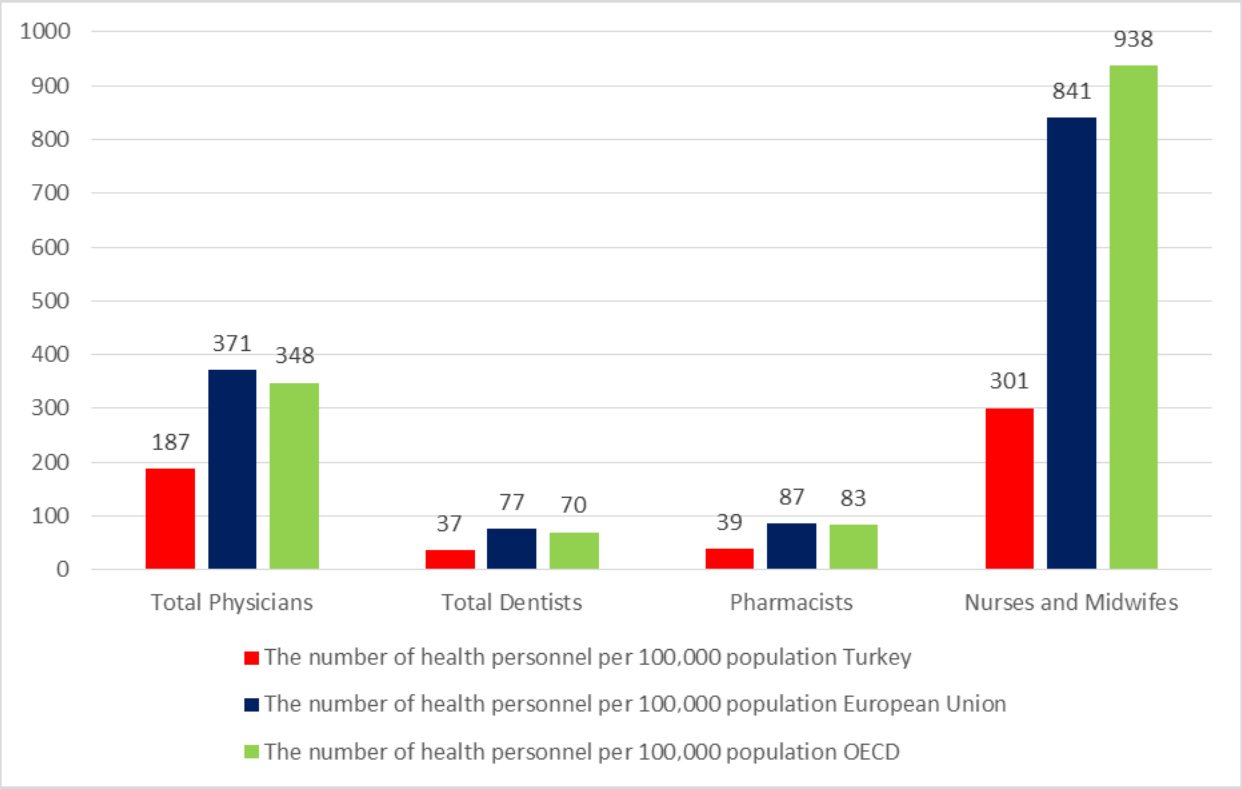


The number of nurses per capita grew in also almost all OECD countries between 2000 and 2017, and the average rate rose from 7.4 per 1,000 population in 2000 to 8.8 per 1,000 population in 2017. There were just fewer than 9 nurses per 1,000 population in OECD countries in 2017; while Turkey has about 2 per 1,000 in Turkey, both Norway and Switzerland have more than 17 per 1,000 in the same year (OECD, 2019).

According to the latest data from the MoH, the number of nurses and midwifes per 100,000 population remains 301 for Turkey; the same indicator in the European Union is 841 in the same period (MoH, 2019a). The number of nurses is generally greater than the number of physicians in most OECD countries, and on average there are three nurses to every physician. Chile, Turkey and Greece have one nurse per physician; Finland, Japan, Ireland, and the United States have more than four nurses per physician (OECD, 2019). In the Health Statistics Yearbook of 2018, the number of physicians per 100,000 population in Turkey increased to 187;

the number in the European Union is 371 and the OECD countries had 348 physicians per 100,000 population in 2019 (MoH, 2019a). Turkey's rate for general practitioners per 100,000 population was presented as 54; the number of specialist physicians per 100,000 population was 101 (MoH, 2019a).

Table 2: Number of Health Care Professionals per 100, 000 Population (Ministry of Health, 2019)



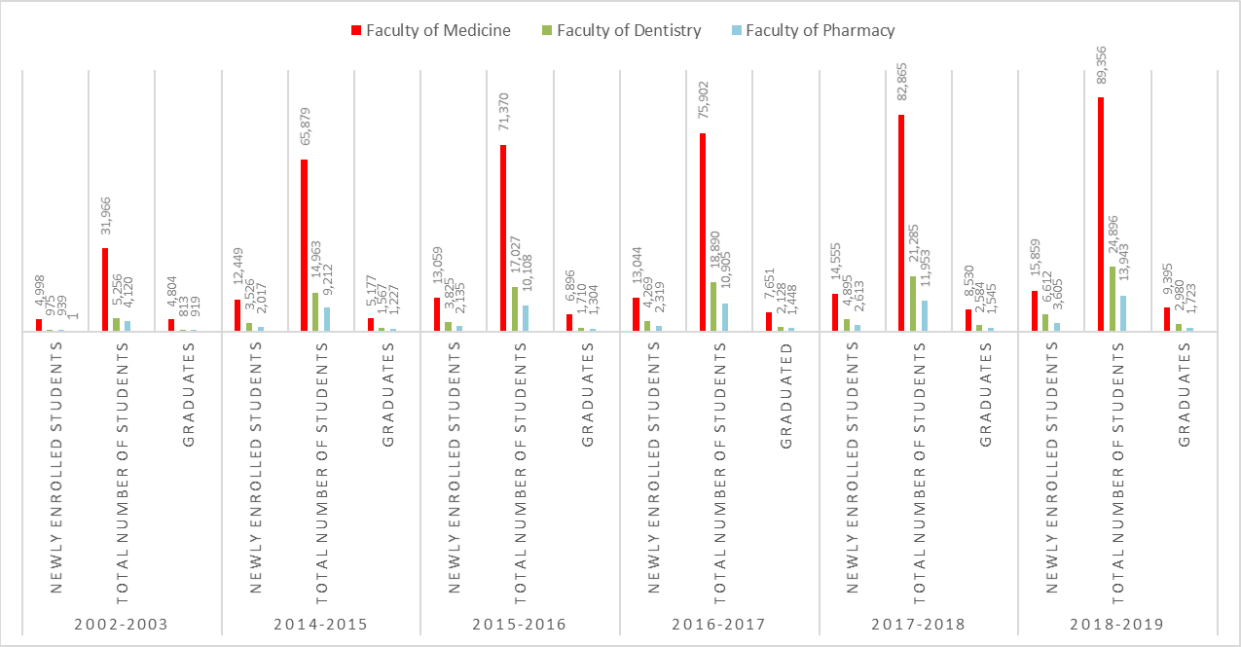
The Council of Higher Education (CoHE) prepared three reports namely Health Education and Health Manpower Situation in Turkey, on the situation of health education and service units, the solution of emerging needs and problems, the introduction of contemporary and up-to-date training plans and employment policies in 2008, 2010 and 2014 (CoHE, 2014). According to this report, 129,383 physicians, 21,160 dentists, 26,617 pharmacists, 149,012 nurses, 5,821 physiotherapists, 52,351 midwives, and 130,611 other health personnel constituted

the active health workforce in 2014. While the need for physicians and nurses will be completed in 2024; the need for midwives and medical secretaries will be completed in 2025 (CoHE, 2014).

Medical programs have continued in the medical faculties in both state and foundation universities. Despite public universities reveal their weight and importance in medical education with 69 faculties, the number of foundation universities that have a medical faculty reaches 23 (CoHE, 2018). 58 public universities and 10 foundation universities offered 9,392 students to medical residency and internship in 2018 (CoHE, 2018; MoH, 2019a).

The number of domestic medical graduates per capita has also risen in all OECD countries except Greece since 2000. On the other hand, the way of these increases has not been steady among different countries. For example, as can be seen in Figure 3, Belgium, Slovak Republic, and Switzerland are close to the OECD average (13.1); but, Turkey, France, and Israel are evaluated as below the OECD average (OECD, 2019). Since 2000, the number of nursing graduates has also increased in most OECD countries including Poland, Turkey, and Mexico, but the numbers in these countries have remained below the OECD average. The OECD average is around 44 new nurse graduates per 100,000 population, and the number of nurse graduates across OECD countries rose from about 450,000 in 2006 to more than 550,000 in 2017 (OECD, 2019).

Table 3: Number of Students and Graduates (Ministry of Health, 2019)



HEALTH WORKFORCE CHALLENGES IN TURKEY

Currently, the Turkish health care system has been suffering from several problems, including an inappropriate distribution of health workers both in terms of spatial distribution and skill mix distribution. Additionally, there is no completely rational HRH planning based on epidemiological or demographic conditions and the utilization of health services. Besides, centralized health worker recruitment is negatively affected by inadequate staffing norms based on population and bed numbers rather than on workload. There is outdated legislation on the responsibilities and authority of the health workforce, a lack of enough job descriptions, and inadequate coordination and monitoring of in-service training programs (Türkay et al., 1996; MoH, 1996; WB, 2003). These problems can be summarised under three main clusters: the shortage of health workers, health workforce imbalances, and different employment patterns.

The Shortage of Health Professionals

In Turkey, there are two main opposing sides concerning the shortage or surplus of health workers. The MoH generally argues that there is a shortage of health workers, especially physicians and nurses. The point of increasing the number of health human resources i.e. the number of physicians and nurses without compromising the quality of education was emphasized specifically. From the early step of the Health Transformation process, the MoH pointed to the shortage in the number of human resources for health (Akdağ, 2012). On the other hand, some NGOs such as the TMA took the opposite position from the MoH approach, generally claiming that there was no shortage problem in Turkey. TMA indicated its opposite position against the HTP from the very beginning in terms of financing mechanisms, family medicine and human resources in health. The clear divergence between the MoH and TMA was also emphasized by the World Bank's stakeholder report that the main cleavage among key actors was derived from ideological differences in the form of state-centered vs. market-centered (Ağartan, 2015; Rosetti, 2014). TMA claimed that a management problem led to the problems in the health arena in Turkey and believed that if the unequal distribution of the health workforce could be resolved, then the problem would largely be removed (TMA, 2008). According to a report from 2008 titled "Health Workforce: Facts and Figures" (TMA, 2008), TMA estimated the number of physicians needed in Turkey by performing a regression analysis using 198 countries and 256 independent variables and determined that Turkey must have 109,446 physicians. TMA compared this figure with the number of 103,177 which was released in a report titled "Turkey Health Manpower Situation Report" jointly published by MoH and CoHE (MoH and CoHE, 2008) in the same year, noted that the lack of physicians is just 7,000 physicians and concluded that, as shown by this figure, there was no a huge deficit in Turkey in terms of physician as supposed.

Various indicators have been used to determine the incidence and extent of shortages/surpluses of the health workforce, such as the workforce-population ratio, professional standards, demand/supply differentials, relative income, rates of return, health levels and community satisfaction (Sorkin, 1977). Among them, population-based indicators such as the physician/population ratio with a "gold standard" allow for the clear identification of an imbalance and its quantification (Zurn et al., 2002).

Although it is widely accepted that there is no "gold standard" for countries regarding the need for health professionals, since every country is different in terms of economy, history, culture, politics, and so forth, there have been some attempts to standardize these ratios. For example, according to Working Together for Health (WHO, 2006a), the critical threshold for effective health care delivery (to achieve an 80% coverage rates for deliveries by skilled birth attendants or measles immunization) was 228 health care workers (including physicians, nurses, and midwives) per 100,000 people, and the oversupply and inadequacy of health workers can be clearly expressed numerically. On the other hand, other countries at similar levels of socio-economic development or averages of a group of countries such as the EU or the OECD can be used as yardsticks. Both measures are used in Turkish HRH management sphere. Health workforce planning in Turkey has been conducted, as in most of the other countries, based on health worker-to-population ratios or health worker-to-beds ratios, with European country ratios used as yardsticks.

When the EU average is taken as a gauge, the health workforce in Turkey is relatively small compared with EU averages, despite some increase over the last two decades. The rate of health workers per 100,000 population is an important indicator to make comparisons on different countries in terms of shortage. In this respect, according to the database of WHO, the rate of physicians in all sectors per 100,000 population was 175 in 2014, while the average of

WHO-European countries was 322 (WHO, 2019). The rate of nurses per 100,000 population was reported as 252 in 2014, but the rate of WHO-European countries (741 per 100,000 population) was bigger than Turkey's rate in the same year (WHO, 2019).

This gap also exists for other health professionals such as dentists, pharmacists, and other health staff. WHO-European countries' average rate for dentists per 100,000 population was 53; Turkey's rate remained 30 in 2014 (WHO, 2019). The average rate of other health staffs employed by hospitals per 100,000 population was 391.4 among WHO-European countries, but Turkey's rate was 261.85 in 2014 (WHO, 2019). WHO-European countries' average for pharmacists per 100,000 population was 57 and the OECD average was 89, while Turkey's rate remained 35 in 2016 (MoH, 2017; WHO, 2019).

Another normative indicator in determining the shortage of health professionals can be stated as the number or percentage of health facilities without health workers. At the beginning of the HTP, Turkey was also in a difficult situation according to this indicator. According to the MoH Basic Health Care Statistics for 2003, the percentage of health centers without a physician increased from 11.3% in 1999 to 16.8% in 2003; the gap gradually rose (MoH, 2003), and this gap was wider in the east and southeast regions of the country. This kind of gap also manifested itself in all other staff branches such as nurses, midwives and so forth. For this reason, the HTP's reforms have aimed to diminish these challenges. Since the implementation of the HTP, the data on family medicine has also improved. In 2019, there are 7,991 Family Health Centers and 26,423 Family Medicine Units. The number of family physicians is 24,465, and the number of family medicine units without a contracted family physician are 1,958; the percentage of health facilities without health workers is 8% (MoH, 2019a).

On the other hand, the health-care delivery system in Turkey has undergone a great change with the health reform in 2003. The utilization of healthcare services has continued to increase from 2002 to onwards in primary, secondary and tertiary levels for all sectors. For instance, the total number of visits to a physician in primary health care facilities rose from 74,827,588 in 2002 to 265,496,223 in 2018. The total number of visits to a physician in secondary and tertiary health care facilities scaled up 782,515,204 in 2018; it was just 208,966.049 in 2002 (MoH, 2019a). Despite the OECD average for per capita visits to a physician in all health care facilities was 6.8 in 2016; Turkey's rate (9.5) exceeded this average (MoH, 2019a). These numbers reflected in the number of hospitalizations and operations; the number of inpatients rose from 5,508,263 in 2002 to 13,651,377 2018, and the number of surgical operations escalated from 1,598,362 in 2012 to 5,201,738in 2018 (MoH, 2019a). The number of days stayed in hospitals also lengthened to 56,642,035 in 2018, while it was 32,215,516 in 2012 (MoH, 2019a). This trend of increasing utilization in health care services has caused to also pressure on more health care professionals. In this respect, the MoH's strategy from the very beginning to combat shortage in the health workforce has been based on increasing the number of human resources in health in every branch.

When the information above is taken as empirical it can be suggested that one of the main problems in the Turkish health care system regarding human resources is the lack of health professionals. The second problem is the health workforce distribution which is elaborated below.

Unbalanced Distributions of Health Workforce

The unbalanced distribution of health workforce between and within countries is a worldwide, long standing and serious problem (Dussault and Franceschini, 2006). Health

workforce imbalances are generally classified under five categories: profession/specialty imbalances, geographical imbalances, institutional and services imbalances, public/private imbalances, and gender imbalances (Zurn et al., 2002). Among these, professional/specialty and geographical are two prominent imbalances in the Turkish case.

Skill-mix Imbalances

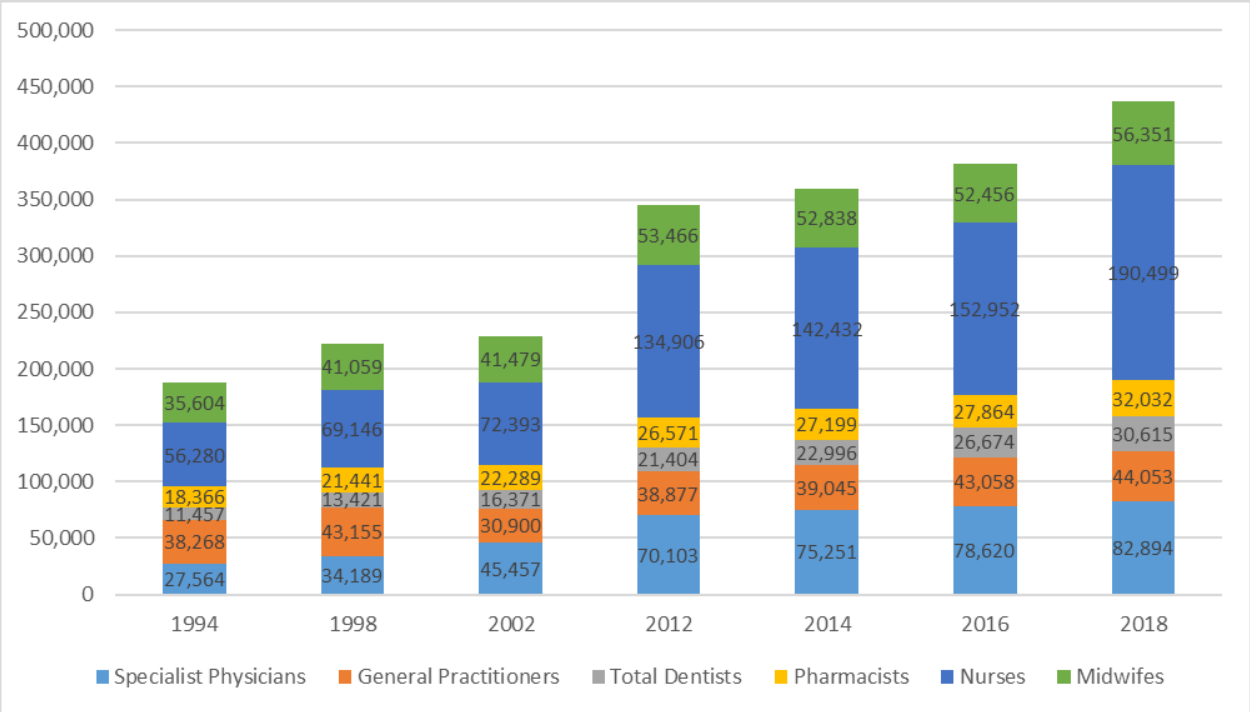
In addition to the shortage of health professionals, a considerable inappropriate skill-mix problem exists in the Turkish health care system, further restricting the delivery of effective health services (Türkay et al., 1996; Savaş et al., 2002; Thomson and Saka, 2003) with too few nurses and midwives concerning physicians, and until recently, too many specialists concerning general practitioners (Thomson and Saka, 2003). In Turkey, according to MoH statistics, the number of physicians is greater than that of nurses as a result of a failure in planning. There was a numerical increase for all occupational groups between 1967 and 1994; however, the rate of increase among the different professions varied greatly. Since 1980, the number of physicians, nurses and midwives had rapidly increased, but the ratio of nurses and midwives to physicians remained still less than one in those years (Türkay et al., 1996). Another imbalance in the human resources for health could be observed among the number of specialists and the number of general practitioners. General Practitioners (GPs): In Turkey, physicians who complete a basic medical education of 6 years but do not specialize further are called "practitioner". Specialists in family medicine complete a 3-year residency program in family medicine after graduating from medical school (Güneş and Yaman, 2008). In this study, when we use the term "general practitioner", we mean practitioner (Yıldırım and Kaya, 2010).

Until 1985, Turkey had twice as many specialists as general practitioners (Türkay et al., 1996). However, the proportion of physicians who practice as general practitioners has increased

rapidly in the last decade or so. In other words, since 1985, the difference in the number of specialists and general practitioners has shrunk considerably, and during the 1990s, the number of general practitioners surpassed the number of specialists. This is partly because the number of students accepted to medical school increased rapidly during the 1990s, while the number of physicians accepted for specialization did not increase at the same rate (Türkay et al., 1996). Currently, there is a shortage of general practitioner posts in favored areas, such as large cities, with the number of graduates outnumbering the available positions, but this is not the case in more unpopular areas (Savaş et al., 2002). Besides, the policy change towards providing health services at the primary care level in the coverage of HTP in recent years has also been an influential dynamic in increasing the number of general practitioners.

Table 4 shows the change in the number of health workers in Turkey between 1994 and 2018. As can be seen from this table, the number of health workers has continuously increased over the years; for example, from 1994 until 2018 both the number of physicians and nurses have nearly doubled. However, the number of nurses has also grown as years; it has remained far behind of physicians. While the nurse/physician ratio is 1.22 in Turkey, the same ratio has an average of 2.8 across OECD countries. The share of health in total employment in Turkey constituted 4.95; however, the same rate among OECD countries increased to 10.4 (Kosdak, 2019). Although this imbalance has been addressed continuously by the authorities, the problem has not been solved so far (MoH, 2002; 2016; 2019a).

Table 4: Number of Health Care Professionals by Years, All Sectors (Ministry of Health, 2002; 2016; 2019a)



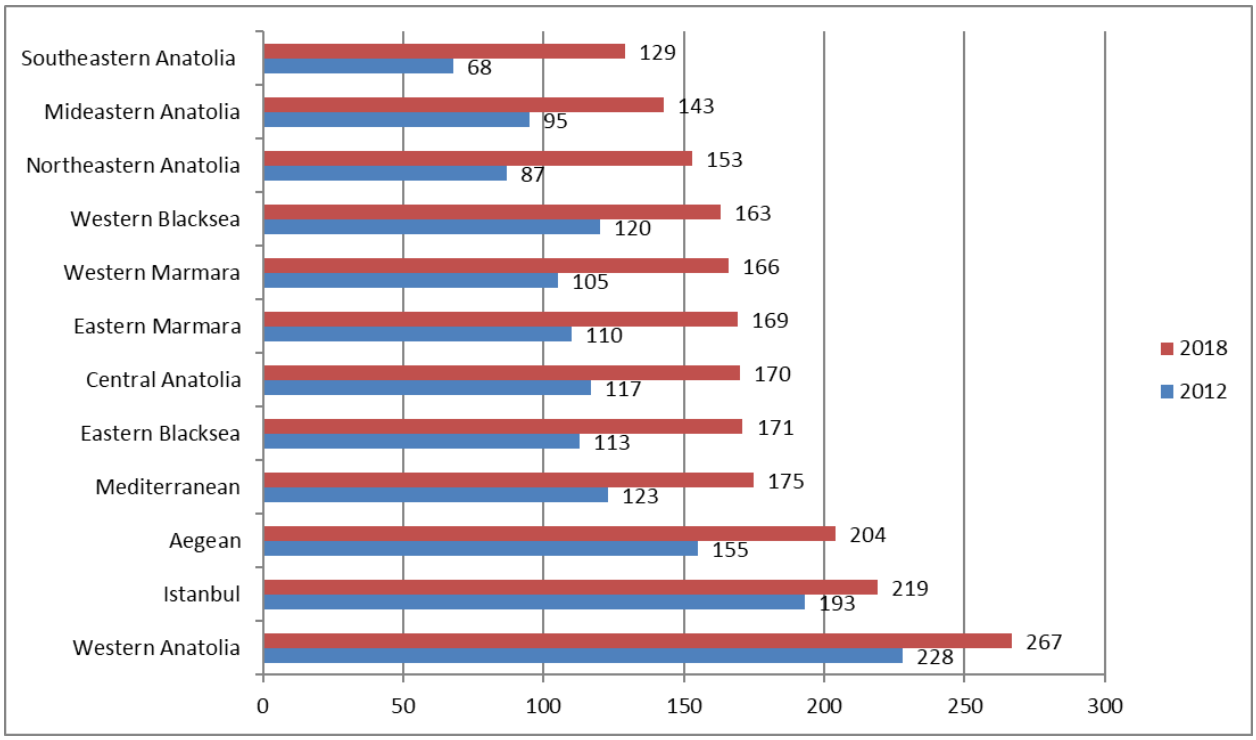
Geographic Imbalances

Broadly speaking, geographic imbalances stem from the internal migration or movement of HRH that takes place between the public and private health sectors, between rural and urban areas, from poor to rich districts and between levels of care (Zurn et al., 2002). As Zurn et al. (2002) noted, almost all countries suffer from a geographic maldistribution of their health workforce, and the main area of concern is usually the physician workforce. For example, the distribution of the health workforce in Turkey varies markedly between geographic regions with the majority working in urban areas while few works in rural settings. Physicians are disproportionately distributed between the western and eastern regions of the country.

As it can be seen in Table 5, the distribution of total physicians in all sectors per 100,000 population is concentrated on Western Anatolia, Istanbul and Aegean, while Western Anatolia has 267 physicians; South-eastern Anatolia has 129 physicians in all sector per 100,000 population (MoH, 2019a). In the distribution of specialist physicians, there are also imbalances

among different regions of the country. The number of specialist physicians per 100,000 population in all sectors is centered upon Western Anatolia, Istanbul and Aegean; Western Anatolia has 144 specialist physicians, Istanbul has 134 specialist physicians and Aegean has 112 specialist physicians per 100,000 population (MoH, 2019a). On the other hand, South-eastern Anatolia has 62 specialists, while Turkey's average number is 101 for specialist physicians per 100,000 population (MoH, 2019a). Similarly, the number of total dentists per 100.000 population in all sectors is concentrated on Western Anatolia, Istanbul and Aegean; for instance, Western Anatolia has 51 dentists; South-eastern Anatolia has remained 21 dentists per 100,000 population (MoH, 2019a).

Table 5: Number of Total Physicians per 100, 000 Population, All Sectors (Ministry of Health, 2019a)



The number of nurses and midwives per 100,000 population is concentrated on three regions -Eastern Blacksea, Western Blacksea and Western Anatolia. While Eastern Blacksea has 368, Western Blacksea has 345, and Western Anatolia has 335 nurses and midwives per 100,000

population. On the other hand, South-eastern Anatolia has remained 248, and Istanbul has 270 nurses and midwives per 100,000 population (MoH, 2019a).

Geographic imbalance asserts itself not only in six regions but also among cities that are in the same region. According to the Ministry of Health's data in 2019, the average number of total physicians in all sectors per 100,000 population in Turkey is 187. However, the three richest provinces – İstanbul, Ankara, and İzmir have 33,052 total physicians, 16,708 total physicians and 11,047 respectively. In comparison, these numbers for the four poorest provinces are Van (1,409), Muş (387), Bitlis (401), Hakkari (273) (MoH, 2019a).

According to the 11th Development Plan, which was adopted by the Presidency of Turkey, Presidency of Strategy and Budget in 2019, the imbalance in the provision of health services at the regional and rural-urban levels should be enhanced to reach development goals. The plan underlines the fact that internal migration, especially towards metropolises and provinces with a developed economy, and external migration due to instability in neighbouring countries have concentrated in certain cities. This situation causes geographical imbalances in the distribution of health services, the quality of physical infrastructure and human resources across different regions. In this respect, the purpose is that improving the quality of life of individuals, ensuring their active and healthy participation in economic and social life, increasing the quality of physical infrastructure and human resources, improving regional distribution of quality, reliable, effective and financially sustainable health service delivery supported by evidence-based policies (Official Gazette, 2019).

Different Employment Patterns

The public personnel regime in Turkey is regulated by Civil Servants Law in terms of service, qualifications, appointment and training, progress and promotion, duties, rights, obligations and responsibilities, pensions and allowances and other personal affairs. These rights and obligations vary depending on the forms of employment. There are eight forms of positions in health sector: civil servants (4/A), contract-based staffs (4/B and others), workers (4/D), personnel who are working based on Law No. 4924, permanent workers who are recruited in the scope of Decree-Law No. 696, contracted family medicine and family health workers; proxy midwife/nurses; and health personnel who are working according to the model of city hospitals (SASAM, 2018). In addition to them, the subcontractor employment was another form of employment that was increasingly common in Turkey; but the subcontracted workers were carried over to the position of permanent workers with Decree-Law No. 696 in 2017 (Official Gazette, 2017).

There are separate employment models for working in the same units in public health services. For instance, according to a report, while a nurse who is working under the title of 4/A earns approximately 4,500 Turkish Lira (TL); a nurse who is working with contract-based status (4/B) is approximately 4,300 TL because of fees of shifts, insurance, and retirement. Proxy midwife/nurse's salary is about 3,200 TL; family health workers who are not officers get approximately 4,800 TL. A nurse's salary which is based on Law No. 4924 may increase in 7,000 TL; and nurses who work in exchange for the course receive only 2,000 TL in 2018 (SASAM, 2018).

THE CAUSES OF HEALTH WORKFORCE PROBLEMS IN TURKEY

Since a good understanding of the problems' dynamics is a vital step to find remedies and overcome them, this section concentrates on the reasons for health workforce problems in Turkey: Why are the shortages of health workers occurring? Are they due to poor workforce planning? Why has Turkey been experiencing these problems? What are the reasons for this situation? In the case of the Turkish health care workforce, the underlying causes of problems can be broken into three main clusters: 1) ineffective planning, 2) socio-economic differences among the geographic regions and 3) the preferences of health professionals.

Ineffective Planning

Abel-Smith (1994) notes that "The aim of planning human resources for health is to secure that the right mix of skills with the desired orientation is available in the right place, and that this is achieved with minimum waste. The mix of skills that is appropriate for a country will depend on long-term plans for the development of health services." Ineffective planning in HRH is one of the main causes of problems in the health workforce arena. As Dussault and Dubois (2003) suggest, "Even where the HRH issues receive attention, the way they are addressed is usually characterized by a limited vision of HRM; dispersal of accountability and lack of coordinated actions, reactive attitudes in the management of the health workforce, subordination of HRH decisions to economic criteria and a short-term view of HRM. The policies which have been shaped by these dynamics inevitably fail to produce the expected results." All these observations are also the case in the Turkish HRH context. In this regard, the regulation of the quotas of the medical faculties, the planning for employment of nurses and the projection of needs in specialists based on the branch constitutes are three important points in Turkey's case (Kosdak, 2019).

Human resources planning that is approached by the MoH is lacking in terms of projections of epidemiological transformation and disease burden estimates in addition to demographic transformation. Quantitative targets are set for the health workforce; a workforce to population ratios in industrialized countries are adopted without due attention to the specific and special needs of the Turkish health sector and the appropriate functional mix of staff. Additionally, staff assignments are entirely centralized (Özcan et al., 1995). New technologies that are emerging in the health sector, new health care professions and role sharing between different health professions are also not enough (Hayran, 2019). As mentioned earlier, there are many stakeholders and actors in the planning and management process of the health workforce in Turkey. If this fragmented structure is not coordinated and managed well, it brings about ineffective planning in the health workforce. Since effective planning requires political commitment as well as accurate information and qualified people, a strong political will at the level of politics and bureaucracy must be involved in this process.

Although the issue of health workforce planning has always been on the agenda within the coverage of the FYDPs and health reform programs in Turkey, the governments and their planning bodies have not yet shown adequate willingness or capacity to undergo rational HRH planning. The main reasons for this can be stated as: 1) political and economic instability existed for the last decade or so. For instance, between 1991 and 2002, ten governments came into power in Turkey, which means that each of the governments ruled for only about 1 year. Thus, there has been a lack of political commitment, 2) there was not enough adequate information or qualified people for undertaking effective planning. So far, the health workforce business has been conducted mainly based on conventional planning and daily remedies, as Özcan et al. (1995) noted, HRH planning in Turkey has not been generally based on routine "knee-jerk

reaction", not on systematic and strategic planning actions although some attempts have been made in the name of HRH planning.

There were some attempts at planning in the HRH arena. Despite a rational workforce policy that will have been put in place by the year 2000 in the National Health Policy document of 1993 (MoH, 1993), the plan for the health workforce and dynamic HRH plans with 20-year projections were not prepared until the introduction of HTP in 2003. Studies on strategic planning for the year 2023 in the field of Human Resources in Health (HRH) have been carried out since 2007 under the coordination of the MoH. For instance, a workshop was arranged on Human Resources in Health and Policy Forming, and afterward, an analysis, Current Situation Analysis on Human Resources in Health, was published in 2007 (MoH, 2007a).

The MoH published another report, Human Resources in Health 2023 Vision, on the 15-year strategic vision of human resources in Turkey (MoH, 2011). The report of Health Labour Targets and Health Education in 2023 was prepared to identify the need for labor in health services and to specify possible policy actions for the best possible balance of supply and needs in the future (MoH, 2014a). In the strategic plan between 2013 and 2017 that was revised the current 2010-2014 strategic plan with the restructuring of the Ministry and in cooperation by the WHO, one of the objectives for human resources for health was determined as improving the distribution, competences, and motivation of human resources for health, and ensuring the sustainability of human resources for health (MoH, 2012). Additionally, increasing the competence level of human resources in health and making health management more effective were put into the strategic plan of 2019-2023 in terms of human resources for health (MoH, 2019b). Whether or not these ongoing studies will be successful will be determined by the assessments in 2023 (MoH, 2011).

As mentioned above, there are several directorates and units which are responsible for the planning of the health workforce in the Ministry of Health of Turkey. General Directorate of Health Services is mainly responsible for HRH planning in Turkey. It plans HRH at the macro level, long term and by professional groups. Secondly, the General Directorate of Public Hospitals uses Personnel Distribution Scale (PDS) to deploy its personnel. PDS is prepared considering the population and demographic factors, regional factors, hospital roles, personnel performance, physical and technological structure of the institution and statistical health data. Lastly, the General Directorate of Public Health is responsible for the planning of family physicians and family health workers. However, it should be considered that education and training of health professionals take a long term. Thus, closing the HRH gaps cannot be achieved in the short term.

In addition to ineffective health workforce planning, there is also ineffective planning in the whole health care system and its infrastructure. When the Turkish health infrastructure is considered, it can easily be seen that the western part of the country has a huge infrastructure, while the eastern part of the country suffers from a lack of health infrastructure. The health care infrastructure is one of the important considerations in the distribution of health workforces.

Socio-Economic Differences among the Regions

Turkey has seven geographic regions, each of which has different terrain, climate, culture, social, economic, and population structure, and health infrastructure. These differences are the main dynamics that lead to uneven distribution, but the most important reason and the only variable that can be intervened by the government is the economic and social differences among the regions. Urban areas are more attractive to health care professionals for their comparative social, cultural and professional advantages. Large metropolitan centers offer more

opportunities for career and educational advancement, better employment prospects for health professionals and their families, easier access to private practice (an important factor in countries where public salaries are low), lifestyle-related services and amenities and better access to educational opportunities for their children. Besides, the low status often conferred to those working in rural and remote areas further contributes to health professionals' preference for settling in urban areas, where positions are perceived as more prestigious (Dussault and Franceschini, 2006).

The Preferences of Health Professionals

All the above factors are closely related to "health workers' preferences". Health care workers, especially physicians, are keen on working in developed regions. This situation causes an uneven distribution of the health workforce. Regional differences and the lack of effective health workforce planning have caused the health workforce to prefer to work in more developed regions at the cost of regional inequalities in terms of the health workforce.

According to the findings of the Health Personnel's Attitudes and Perceptions Research (Ergin, 1995), in which health workforce were asked about their preferences regarding working in under-developed regions in the event of incentives, which might include higher wages, accommodations, further educational opportunities, or improved working conditions, 40% of nurses and midwives and 58% of health technicians and sanitarians declared that they would be willing to work in less-developed provinces. The results of the same study also show that when health workforce choose the region in which to practice their jobs, educational opportunities, the social environment, a high opportunity to earn more money and cultural activities have been influential factors.

According to the results of research conducted by Kılıç and Tunç (2004) aimed at identifying the perceptions of physicians about the problems of the East and Southeast Anatolian Regions of Turkey and the factors that satisfy and dissatisfy them: 1) physicians rank compensation issues and difficult working conditions as the first and second most important regional problems, respectively; 2) 49% of physicians are not happy with working in these regions; 3) the first and second issue that physicians are not happy with is the limited social and cultural facilities and a lack of means for professional development and education. The most important source of satisfaction for physicians is that the profession itself provides them a higher social status and a more prestigious position.

The role and the behavior of the private sector within the health care system are also two important elements in determining the preferences of physicians. The private sector, especially the private hospital sector has exponentially grown in recent years, and it can be stated that the competition between the public and private sectors has also increased. Both increasing demand and more financial incentives from the private sector have resulted in the outflow of human resources, particularly physicians, from public facilities under the MoH to private hospitals. According to TURKSTAT (formerly known as State Institute of Statistics) statistics (2005; 2018), the number of private hospitals has increased from 90 in 1980 to 274 in 2004 and from 274 to 571 in 2017, and more importantly, most of these hospitals are situated in the three major cities; İstanbul, Ankara, and İzmir. The income gap between private and public health workforce is highest among physicians. As a matter of fact, recently it has been highlighted in the media that physicians migrate from the public sector to the private sector since the private sector pays more money. The earning in private hospitals is about four times more than in the public hospital sector. However, the MoH has recently followed the planned growth of the private sector has somewhat limited the migration. Furthermore, as will be mentioned later, banning dual practice

by law is another initiative employing by the government to limit the migration from public to private sector.

Finally, the satisfaction of health professionals with the health care system is another concern in determining health professionals' preferences. It is claimed that health care professionals are dissatisfied with the health care system (Tatar and Kanavos, 2006). The results of a study conducted by Bodur (2002) showed that health care workers in public health centers (including GPs, nurses, midwives, and health technicians) had low levels of satisfaction. Similarly, in another study of a group of 855 dentists from İstanbul, the researchers (Sur et al., 2004) found that only 40.8% of respondents reported satisfaction with their jobs. Eker et al. (2004) found that 45.5% of physiotherapists reported satisfaction with their jobs in Ankara.

It is well known that specialization is seen as a means of acquiring an economic and social status and occupational development. The skill-mix problem concerning specialists and general practitioners is the result of several factors. The specialization is more attractive in terms of prestige and income. Consequently, physicians are keen to become specialists. Physicians have always preferred to specialize, partly for economic and social status reasons and partly to maximize job satisfaction. Levels of job satisfaction have been low among general practitioners, which has implications for the quality of the services they provide (Türkay et al., 1996; Savaş et al., 2002). The major driving forces behind the increasing number of specialists are the development of medical technology, better financial prospects and prestige among their colleagues and from the public at large (WB, 2003). Another reason arises from the education model of physicians in Turkey. The education model of physicians has been structured predominantly based on high medical technology, and after graduation, people unsurprisingly prefer to specialize and practice in urban areas where high medical technology is available. In other words, one of the elements that seriously affects the location preference of physicians is the

model of medical education. In this respect, the Turkish medical education model can predominantly be characterized as urban-based, curative, specialized care, and hospital-centered.

SEARCHING FOR SOLUTIONS TO MANAGE THE CHALLENGES

Turkey has implemented several measures to solve the problems of the shortage of health professionals and internal brain drain and the inequitable distribution of human resources with some degree of success. To put it into a systematic perspective however, Turkey has followed the combination of five main policies to remedy HRH problems in Turkey: (1) increasing the production of HRH, (2) compulsory public service, (3) contractual-basis employment, (4) dual practice and (5) international recruitment of health professionals, especially physicians (Yıldırım 2009; Yıldırım and Kaya, 2011).

Increasing the Production of HRH

The first policy option is to increase the production of physicians. The supply has been increased through increasing production. In this context, new medical schools have been opened since the late 1980s, especially in underserved areas, and the student intake has increased in the present medical schools. According to the TMA's Medical Education Report 2006, the number of medical schools in Turkey has almost doubled every ten years since the 1980s, and many medical schools opened between 1990 and 2000. The same report suggested that the number of students enrolled had increased continually until 1985; after reaching a peak in 1985 (5,440), it decreased to 4,902 students in 2006 (TMA, 2006). On the other hand, the CoHE and the MoH agreed to increase intake students to medical schools. Furthermore, Minister for Health Recep Akdağ has announced that the MoH is ready to transfer their hospitals to universities willing to run medical schools which do not have hospitals.

As a result of this, the student intake increased by about 27% from 2007 to 2008. Therefore, the number of medical faculty students reached to 6,492 students in 2008. The upward trend could be increasingly observed in 2009 and 2010 (TMA, 2006; 2010). By 2014, there were 129,383 physicians, 21,160 dentists, 26,617 pharmacists, 149,012 nurses, 5,821 physiotherapists, 52,351 midwives and 130,611 other health personnel (CoHE, 2014). According to the last data from the CoHE, there are 69 medical faculties in public universities and 23 medical faculties in private universities with a totally of 9,392 students for medical residency and internship in 2018 (CoHE, 2018). One of the basic assumptions that the Turkish health workforce policy underlined in the 1970s and 1980s was that a great increase in the supply of health workforce would both solve the problems of health workforce shortage and optimize or balance the geographic distribution of health workforce (Türkay et al., 1996). Nevertheless, others argued that purely increasing the number of physicians would not improve the distribution (Sorkin, 1977; TMA, 2006). Flooding the market with physicians does not necessarily solve the problem of geographical inequality (Sorkin, 1977). The increase in the size of the health workforce has been conducted without considering the quality, workload, and function of the health workforce (Türkay et al., 1996; CoHE, 2018). Consequently, rural and inner-city areas continue to face shortages of health workforce (WB, 2003). Nevertheless, due to the lag time in the production of new medical graduates, this measure has not been and will not be able to solve the immediate shortages. Rather, it is a long-term solution.

Compulsory Public Service

The second policy is to use promoted compulsory public service. To address shortages in less developed areas, the strategy of compulsory service for physicians has been used occasionally since the 1920s but more intensively since 2005. According to the last paragraph of Article 4 of Law No. 3359, personnel who are under the obligation of state service cannot

perform their professions without completing these obligatory duties (Official Gazette, 1987). In other words, the person who completed the medical school or completed the specialist education successfully must complete his / her compulsory service to perform their professions in Turkey. This strategy has been successful in part, but it has not been able to completely overcome the problem. Furthermore, as Türkay et al. (1996) discussed, this practice has also brought about some problems concerning the quality of health services and the job satisfaction of workers. Newly graduated health workforce was generally employed in primary care level services; however, they usually worked in a region unfamiliar to them and with insufficient supervision and support. Compulsory service coupled with rapid increases in student intake has resulted in a supply-driven employment strategy. Therefore, employment, especially of physicians, in the MoH has expanded rapidly, putting pressure on finances. Most of the physicians who have completed their compulsory service term have moved to the private sector attracting by huge salaries and better working conditions.

Contractual-Basis Employment

The third policy is to practice contractual-basis employment of physicians (Official Gazette, 2003), which includes strong financial incentives with special allowances in places where the employment of physicians is difficult. The salary difference of a physician working in the status of the civil servant (the Law no. 657) and a physician working in contract status (Law No. 4924 on the Employment of Contracted Health Personnel in Places with Difficulty in Recruiting Personnel) is 2.5 times in favor of the contract status. Not only physicians' salaries but also the wage of all health personnel who work in contract status following the law No. 4924 shall not exceed 2.5 times the salary of the employees who work in the status of a civil servant (Official Gazette, 2003). However, to date, non-financial incentives have not been properly and effectively incorporated into the system.

Dual Practice

Fourth, especially concerning containing the public-to-private brain drain, Turkey had firstly employed three main strategies within the coverage of dual practice: 1) after-hours (after 4 pm) or afternoon private practice within the public hospitals, 2) full-time private practice for faculty members (teaching staff) within educational hospitals, especially university hospital physicians (professor and associate professor) and 3) many physicians working in the public sector also have the right to practice in private.

Before 2010, physicians commonly engaged in "dual practice": they worked both in public hospitals and their private clinics at the same time. They were supposed to make money from their patients due to their insufficient salaries. However, this system of dual practice caused terrible results in terms of catastrophic out of pocket expenditure and impoverishment to receive treatment for especially serious diseases because people sometimes had no option except seeking treatment in private hospitals and private clinics. In this regard, the MoH took two steps to extend its transformational power on this issue (Akdağ, 2012; 2015). The first step was used to institute performance-based financial incentive through the revolving funds of public hospitals and to raise the general salaries, and the other one was the implementation of the Full Day Law in 2010 (Law no. 5947) to get rid of dual practice and to incentive academicians to abandon their private clinics (Official Gazette, 2010). The performance management system significantly increased the workload and income of physicians. On the other hand, while the workload of non-physician health personnel increased, their salaries did not increase significantly and even decreased in real terms from year to year (Görmüş, 2013). In 2014, there was an exception in terms of dual practice; professors and associate professors would be able to work at private hospitals and private university hospitals outside the office on condition that they did not exceed 50 percent of the total number, and their income was registered to the university (MoH, 2014b).

The most important positive effect of the performance management system on Turkey's health care system was to increase the proportion of full-time physicians (Görmüş, 2013).

As a result of these effective steps, the MoH indicated that a significant number of physicians voluntarily switched to solely public practice in a full time (MoH, 2017). The number of full-time physicians working in the MoH increased from 11% in 2003 to 73% in 2008. The ratio of full-time physicians in the public sector increased to 62%, while part-time workers decreased to 38% from 2003 to 2007 (MoH, 2012). The full-time working rate of physicians working in the public sector reached 83% in 2010 (Akdağ, 2010). Since 2018, the MoH has been working on a draft law that would allow physicians to work in both public and university hospitals with a protocol that would allow a physician working in a private hospital to perform surgery in a public hospital if necessary. The physician who is working in the private hospital may be invited by the MoH to perform surgery in the public hospital and to make additional capital up to four times for each work performed within the scope of health tourism. Private or self-employed physicians can examine patients or perform procedures in public hospitals with pay-per-service as guest physicians like the practice in Australia (Özatkan, 2018). In terms of university hospitals, professors and associate professors who are employed in public universities could work in private hospitals or private university hospitals under definite conditions outside working hours, and they could conduct their practice outsides working hours (Özatkan, 2018).

The MoH stated that it is the main employment provider for all health occupational groups and that most health occupational groups work in the public sector (MoH, 2017). On the other hand, these financial incentives and measures have raised many concerns about the ethical aspects of providing services and the quality of care. It is essential to encourage public work and to take necessary measures for unethical practices. It will be beneficial to take the opinions of all stakeholders and to eliminate the concerns with a good control mechanism (Özatkan, 2018).

International Recruitment of Health Professionals

Despite the above measures, Turkey has not yet been able to solve the shortfall, uneven distribution and skill-mix problems of its health care workforce sphere by using its internal dynamics. Therefore, the government has been planning to overcome the problems to some extent by opening the domestic market to overseas physicians since the international recruitment of health professionals is seen both as a solution in part and accordance with the EU perspective.

Discussions concerning the employment of international health workers have taken place in Turkey mainly came up with the government's "imported physician" initiative in 2006. Since that year, issues on migration, scarcity or surplus of health workers in Turkey's healthcare environment (previously partially addressed in these discussions) have continued increasingly taking on the back of the winds of the EU dynamics (Yıldırım, 2010). Concerns about the size of the Turkish population, the youth ratio and the high unemployment rate contributed to debates on this issue. This is also supported by the few studies; Yıldırım and Yıldırım (2005) found that 53% of their 93 key informants expected that EU accession might prompt health professionals to emigrate, and brain drain would emerge as a major problem following accession (Yıldırım, 2004; Yıldırım and Kaya, 2011). The most important benefit of employing international physicians is the increase in the number of physicians in order to employ them in rural areas in a more flexible working condition. Additionally, local resources have not been spent on medical training for these physicians. On the other hand, the main hesitation on this employment policy derives from the problem of professional quality of these international physicians and their integration, grammatical competence as well as variances in immigration trend in future (Sezer and Yıldız, 2009).

Although there is not complete, comprehensive and accurate data in the literature on the employment of international human resources in health inside or outside Turkey, it can be claimed that, as Yıldırım and Kaya (2011) noted, "Currently, international health professional mobility in Turkey is a one-way street due to restrictive domestic labor laws. Work permits for foreigners in Turkey is approved by the Ministry of Labour and Social Security (MLSS) by 2504 Work Permits for Foreigners Act (dated 6 March 2003 and numbered 2504) (Official Gazette, 2003). In the second paragraph of Article 13 of the Law; "The provisions of the other laws regarding the jobs and professions that foreigners cannot work are reserved" (Official Gazette, 2003). In this context, the following provisions of the Law no. 1219, physicians, dentists, midwives and nurses must have a diploma from an institution related to Turkey and must be Turks (Official Gazette, 1928) was located. Under the Nursing Law No. 6283 dated 25 February 1954, the nursing profession was allocated to Turkish citizens (Official Gazette, 1954). As mentioned earlier, the current body of legislation governing health professional practice in Turkey goes back to the 1920s with Law number 1219 on the Principles for the Performance of the Art of Medicine and Dentistry. According to this legislation, to be able to pursue the profession in Turkey, one is required to be a Turkish citizen with a diploma from one of the appropriate schools in Turkey. The diploma must be registered by the MoH. However, according to Article 7 of the Health Services Basic Law, health professionals who are Turkish or foreign can be employed on a contractual basis without looking for staff compensation if they have a needed special professional knowledge and specialty or will improve the level of professional services in the country (Official Gazette, 1987).

Health professionals may leave the country to seek employment elsewhere, but foreigners will face serious difficulties establishing and working in Turkey. With a view to potential accession to the EU, the government tries to ease labor laws to allow for foreign physicians to

establish themselves in Turkey. The policy option is, however, very controversial in Turkey" (Yıldırım and Kaya, 2011). Work has been started on the necessary legal regulation of international recruitment. However, the legislative process has been progressing rather problematically. During its first term (2002-2007), the Erdoğan government brought the imported physicians issue on the agenda in 2006, and following lengthy and heated debates, the law numbered 5581 which removed obstacles in the way of foreign medical doctors could work in Turkey (the phrase of "and being Turkish" was removed in Article 1 of the Law on the Way of Practicing the Art of Medicine and Its Branches, dated 11 April 1928 and numbered 1219) was passed by the Turkish Grand National Assembly (TGNA) on 15 February 2007 (Official Gazette, 2007). The government prepared a bill which would open the way for foreign doctors to practice with a contract base in Turkey. The rationale for the law was stated as: 1) to ensure contribution in increasing the number of physicians in the country, 2) to remove the barriers which prevent foreign physicians to successfully work in the country, and 3) to annul the blocks which stop the free movement of people and services within the context of the full membership process of EU. The EU membership process and the requirements for membership (the mutual recognition of the qualities of health workforce) require the provision of the free movement of health professionals under the scope of the four freedoms (Yıldırım 2009; Yıldırım and Kaya, 2011).

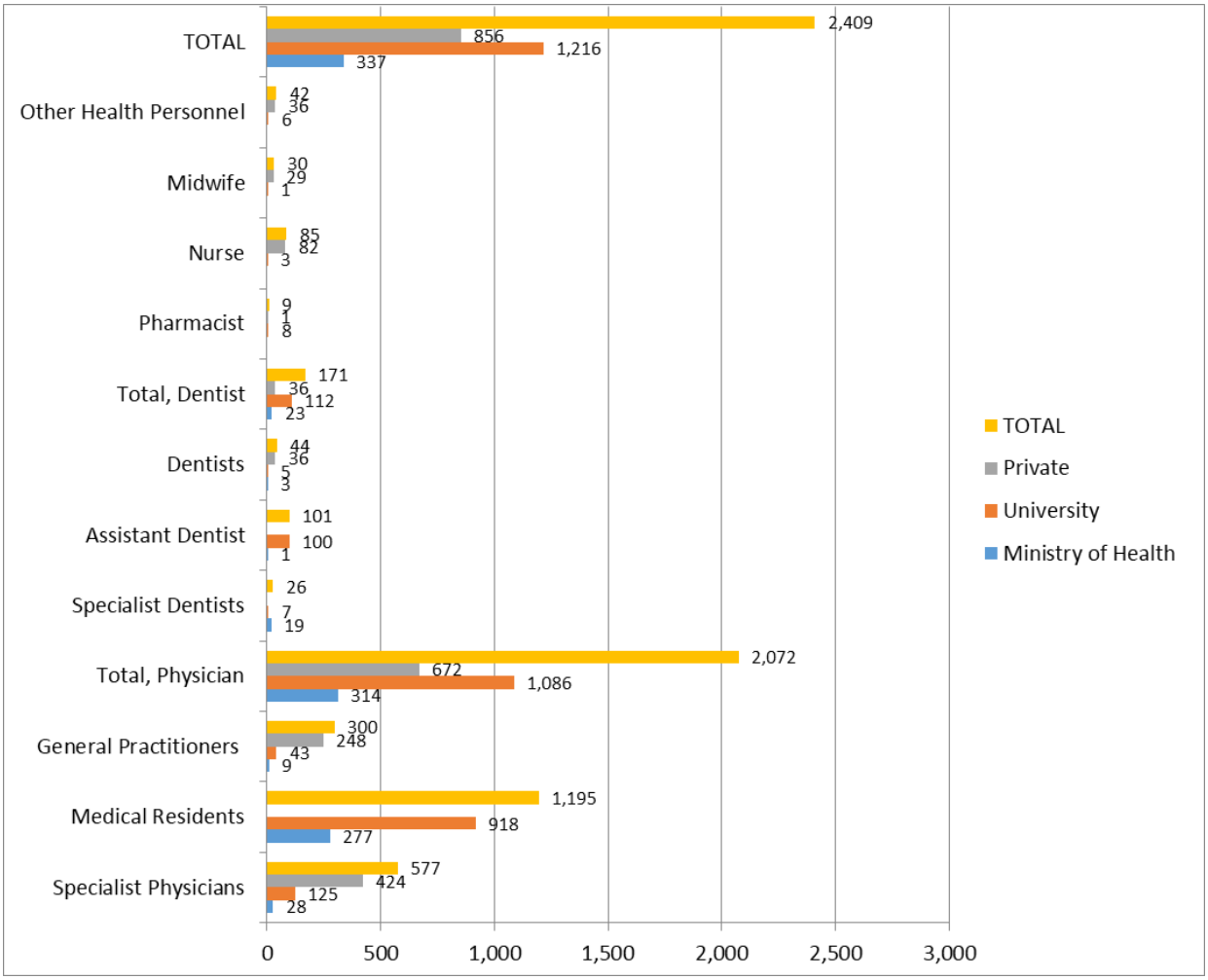
However, the law was vetoed by the era's President on the ground that some articles of the law are considered inappropriate in terms of the public health requirement. Following this development, the Erdoğan government announced that they would rest the law for a while. However, the imported medical doctors' issue was on their agenda in the second Erdoğan government (2007-2011) (Yıldırım 2009; Yıldırım and Kaya 2011). In addition to the presidential veto, it may be indicated that three main factors have been effective in suspending

the law: (1) reactions from several circles and civil society organizations, particularly the TMA (TMA, 2008), (2) during these discourses, the government has understood that too many physicians would not migrate to Turkey, and (3) the government has postponed to satisfy the requirement of the EU perspective in relating to free movement of people and mutual recognition of professionals qualifications after 2013, in other words, the EU perspective has been indexed to the occurrence of full membership (Yıldırım, 2010). In the third Erdoğan era, the government began in 2011 and this period, the Working Permit for Foreign Physicians could be issued in 2012 and published in the Official Gazette. It is still in force and it remains valid for foreign physicians who must receive a work permit diploma equivalency certificate, Turkish language proficiency certificate and compulsory registration in the MoH to work in the private health sector. However, this law did not include dentists, pharmacists, midwife and caregivers (Official Gazette, 2012). The MoH decides who will work in the health sector with the preliminary permit, but foreign nationals must have permission from the Ministry of Family, Labour and Social Services.

In this respect, international recruitment of health professionals in the Turkish context could be divided into two sections; one of them includes foreign nationals who have an identification number and work permit of Turkey; the second involves foreign nationals who do not have an identification number but have work permission from related institutions. While health personnel from the first section can work in the public sector, health personnel from the second section cannot perform their professions within the public institutions. However, they can work in the private sector with the required permissions. According to the last publication of OECD in 2019, the number and share of foreign-trained physicians – and in some countries foreign-trained nurses – working in OECD countries has continued to rise over the past decade (OECD, 2019). However, the share of foreign-trained physicians ranged from less than 3% in

Turkey, Lithuania, Italy, the Netherlands, and Poland to around 40% in Norway, Ireland and New Zealand, and nearly 60% in Israel in 2017 (OECD, 2019). It can be seen in Table 6, the MoH's data from 2019 for the first section demonstrates that there are 575 specialists, 1,157 residents, and 287 general practitioners; the total number of dentists is 173 in all sectors. Additionally, the number of nurses is given as 84, and the number of midwives is 28 (MoH, 2020).

Table 6: Number of Foreign National Health Care Professionals, All Sectors (Source: Ministry of Health, 2020)



DISCUSSIONS AND POLICY RECOMMENDATIONS

This paper has conducted a situational analysis of HRH in Turkey and explored the challenges for HRH in Turkey and the underlying issues. It has also explored potential solutions employed by the government including international recruitment. Two main conclusions can be drawn from this analysis: 1) Turkey has experienced health workforce problems for a long time and has not been able to solve these problems with its internal dynamics so far. 2) Thus, Turkey would like to overcome these challenges to some extent by recruiting international health professionals (opening its internal market to foreign health workers), especially EU citizens, following its prospects for EU membership.

As mentioned earlier, opening the national health workforce market to the EU member countries is one of the requirements of EU dynamism in terms of the free movement of health professionals. However, Turkey's expectation regarding health care workers' mobility is beyond the fulfilment of an EU requirement of the acquis. Turkey wants to recruit foreign physicians to overcome its shortage and unbalanced distribution problems. However, it is unlikely that this strategy can solve Turkey's HRH problems. Since generally, international mobility occurs toward the countries that provide better income and working conditions that determine the direction of the free movement of health professionals are taken into account, there will be more movement from Turkey to EU countries rather than from EU countries to Turkey since migration will bring better working conditions, higher salaries and more promising futures to the Turkish side. Therefore, the government should not see the option of physician importation (international recruitment) as a solution. Thus, as outflow will be higher than inflow rate, possibly creating a net loss in the health labor market in Turkey. This may further deepen the existing problems. On the other hand, the opposition which is against the international recruitment of health professionals mainly because their position will not be secured, should not be afraid of the

inflow of importing physicians because the movement will not take place as much as they expected. Instead, it is time for health professionals and the government to come together to solve the problems of the health workforce. Regarding international recruitment, the government should not see the option of importing physicians as the only solution since, given the current working conditions in Turkey, physicians are more likely to leave Turkey for countries in the European Union and other developed countries, rather than attracting physicians to work in Turkey.

Although Turkey sees it as a way out of international employment, albeit limited available data and literature on examining internal and external migration mobility of health workers in Turkey reveal that both effective and potential outmigration are more prevalent than internal migration (Weinbrenner and Busse 2006; Yıldırım and Yıldırım 2005; Yıldırım 2009; Yıldırım and Kaya 2011). As the data on the mobility of health professionals on the international scale is very limited, in fact almost non-existent in Turkey, it may be stated that despite not depending on any sound research evidence, the health professional brain drain from Turkey outweighs immigration. This might mean the loss of domestic human capital produced through national resources. Although it is not possible to make a sound judgment because of the unavailability of healthy data, when the data available are evaluated and the legal restrictions on internal migration are considered, it may be concluded that Turkey is a source country. It means that Turkey has lost its educated human capital to other countries, which is not for the good of Turkey which lags in terms of per capita health professional (Yıldırım and Kaya 2011).

As has been discussed in the WHO report (2006b), an unplanned or unmanaged outflow of health workers could damage the health system, undermine planning projections and erode the skill base; Turkey, however, has already begun to plan for the broader health workforce implications of accession. Since the free movement of health professionals is a phenomenon and

necessity of the EU context/dynamics, while planning, and in making and implementing policies and strategies in the health field must be considered. Turkey should mostly rely on its domestic sources while not ignoring the EU dynamism. Turkey utilizes its resources effectively; on the other hand, she must take "improvement measures" to attract, recruit and retain health professionals, especially physicians, and thus to be able to prevent a huge international brain drain.

Currently, the most prominent problem in Turkey is the maldistribution of the health care workforce in favor of developed regions. For the time being, as noted previously, the government is using both compulsory service and monetary tools as means of encouraging physicians to practice in deprived areas of the country, especially in the Eastern and Southeast regions. However, despite the compulsory service and incentives, the problem is far from being solved. The problem seems to be much deeper and rooted in the socio-economic context rather than simply for financial reasons. If the government wants to solve the problem, two main tasks should be fulfilled. First, effective planning should be undertaken based on sound scientific information, which includes involving health care workers and other stakeholders. Compulsory service and the use of incentives should be continued for the short- to medium term, and incentives should include both financial and non-financial elements. However, these measures are not enough if the country wishes to establish a sustainable health care workforce. It is thus important that, second, investments should be undertaken in the less developed regions. The South-eastern Anatolia Project is one of the examples of economic development activities in these regions. This project, however, has not yet been able to reach its potential to advance the general and health services infrastructure. Otherwise, exercising power and financial instruments alone will not suffice to motivate people to go to these regions where transportation, housing, communication, social life, educational facilities and the appropriate health infrastructure are not

available. As Özkan and Uydacı (2015) indicated that the implementation of long-term strategic planning studies, practices for eliminating personnel distribution imbalance, performance-based additional payment system and family medicine system constituted as important reforms in human resources for health. On the other hand, the development of inter-sectoral cooperation and coordination requires to ensure the sustainability of health human resources planning.

Although it is not based on a research data that could represent a comprehensive and all countries, as Yıldırım and Kaya (2011) noted together with the results of the limited research on migration to the outer and inner mentioned above that Turkey is giving a net migration in the international health workforce. Turkey has public funding to meet medical education's costs and she has the insufficiency of the health workforce (MoH, 2007a) and the unstable distribution (TMA, 2008) problems. Therefore, it is also an essential need to manage migration at the international level. There are not available specifically identified and implemented mechanisms to manage the current situation in international migration in Turkey (in the sense of internal and external migration) (Yıldırım, 2010).

In conclusion, for Turkey to achieve and maintain a high-quality health care workforce, she should focus on measures to enable the attraction and retention of health care workers, especially physicians, while also considering global dynamics, especially given potential membership of EU, to prevent a potentially damaging brain-drain of highly-qualified professionals. Turkey needs the introduction of solution-based policies for the causes of the problems discussed in the third part of the article, and it should implement a series of effective human management strategies and planning to solve health workforces' problems.

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