



Health Services and Transformation of Health Services in the Post-pandemic Period

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Abstract

Maximizing the life quality of individuals and providing a high level of health services to people is the main goal of the health system. The externality feature of healthcare services requires the state to assume basic responsibilities in the provision of health care services. During the COVID-19 pandemic, handling health as a public service and the importance of service delivery with a philosophical perspective based on the principles of inclusiveness, equity, and solidarity has become evident. The health system, which has a dynamic structure, has experienced a much faster change and development process in the pandemic process. During the pandemic period, it is important to evaluate the positive and negative aspects of experiences in service delivery, to adapt the services to changing conditions, and to take an organizational and holistic approach in solving the problems.

From a social perspective, treating the masses in infectious diseases is much more difficult and costly than preventing the occurrence of the disease. The importance of preventive health services and primary care service structuring within the health system is better understood in this process. In the post-pandemic period, It will be important to experience changes and transformations health system such as the solution of labour and infrastructure problems in the health service system, establishment of a system based on quality and efficiency, strengthening the production capacity of our country(Turkey) in all areas, bringing our country that meets both needs and exports, revising the medical education in line with the needs, increasing cross-sectoral cooperation and health literacy of the society. Most importantly, attempts should be started to establish the referral chain by seeing the opportunity of social perception about primary services during the COVID-19 pandemic period.

Keywords

Health services, health system, post-pandemic period, COVID-19

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Introduction

The Concept of Health

Health, which is a versatile concept, in the World Health Organization (WHO) Constitution; is defined as “not only the absence of disease and disability but also physical, mental and social well-being”. This definition is the most general, widely used, and presenting health in all its dimensions. In addition to the well-being of individuals regarding their health outcomes, their mental and social well-being is also included in the definition. This definition states that health services are a much broader concept than medical services provided to patients and that health services should not be approached with a narrow and traditional bio-medical understanding (Öztek, 2019).

The Concept of Health Services

Health services are a group of activities that include the elimination and protection of various factors that threaten human health, treatment of diseases, and rehabilitation of individuals with various mental and physical disabilities. Health services are a type of service that cannot be substituted, postponed, and it concerns the whole society, unlike other services (Schulz and Johnson, 1990). In addition, health services are a service that is not only the responsibility of healthcare institutions but also concerns the whole society needed cooperation with many institutions and organizations.

Health services have three dimensions: prevention, treatment, and rehabilitation. The main purpose of health services is to provide that people do not get sick, which is to protect individuals and society from diseases. Despite all efforts, it is its secondary purpose to treat sick individuals. The tertiary aim of health services is to provide that people who cannot be fully treated live on their own, ie to rehabilitate them (Öztek, 2019).

Health services differ from other goods and services in terms of, externalities, supply and demand structure, financing, and presentation methods. It is necessary to consider health protection, disease prevention, treatment, and rehabilitation as a public service and to establish the structure within the health service system and provide effective service in all three stages.

Preventive health services are services that aim to minimize the various health/disease risks that the individual and the society may be exposed to in the short and long term, thereby protecting their healthy life potential and improving the life quality. Preventive health services to be carried out for individuals protects society from diseases. Apart from this, the removal of environmental factors that threaten public health includes environmental protective health services that can minimize the potential social risks and costs that may arise in the medium and long term.

Therapeutic health services, which are services provided to sick individuals, don't present external benefits such as preventive health services. However, it provides indirect positive externality to society in terms of preventing negative externality caused by the disease (Çalışkan, 2008).

Rehabilitative health services, on the other hand, include the services provided to eliminate the restriction that prevents the effective use of the organs of the body such as illness, accident, mental disorders, and to prevent these injuries from affecting daily life.

Health Systems

Definition of Health Systems and Characteristics

Health systems are a broad concept that includes all topics such as health care provision, health policies, health manpower planning, education, health system financing, and health legislation. The health system is analysed within the social systems, and the social systems show complex structure features because they are affected by many factors around them. For this reason, health systems are the most complex systems in social systems (Kavuncubaşı and Yıldırım, 2012).

The health system is described as all the services provided by using material and immaterial resources to improve people's health status. In the World Health Report titled "Health Systems: Increasing Performance" published in 2000, WHO stated the health system as "the system that includes all kinds of works whose primary aim is to improve, protect and develop health" (WHO, 2000).

Today, many countries need strong health systems to achieve better health outputs. Each country can choose a different health system. However, the characteristics of each preferred health system can positively or negatively

affect the outcomes of the countries such as average life expectancy and infant death, which are various health-related outputs.

The health system is a social mechanism that directs country resources to specific health outputs/results within the framework of health services. The health system is a system that uses the resources of society to solve certain health problems of society and improve health status. The health system of a country is generally shaped by the health policies created and executed by the authorities and actors of that country. In other words, the shaped health system of a country is an indicator of the health policies implemented by that country. Health systems have a complex structure. In this structure, patients, various healthcare providers, reimbursement agencies, healthcare providers, regulators, government, etc. many different organizations are involved (Street and Hakkinen, 2010). Basic functions of health systems; management and regulation, financing, service provision, resource generation, and organization (WHO, 2000). Each country has a national health system that reflects its culture, history, economic situation and political ideology in its country, and is influenced by factors such as medical information and technology, population characteristics, forms of the disease, social perception and expectations. International relations and financial circles also affect the health systems of countries directly or indirectly. Each country has its own health system and the structure and scope of each health system vary according to the preferences, conditions, and expectations of the society it serves (Yıldırım and Yıldırım, 2011).

It is expected that health systems will have some basic characteristics to have strong and good functioning. These characteristics can be listed as follows (Roemer, 1982).

- *Health Service: It should cover the whole society without any discrimination.*
- *Protective and preventive services should be at the center of health care delivery.*
- *All the protective, therapeutic, and rehabilitative services should be tried to be provided in a modern way with the help of technological elements,*
- *Necessary resource transfer to health systems should be provided,*
- *Sufficient health personnel should be employed in all areas.*
- *Good relations and teamwork among healthcare professionals should be supported for quality service delivery.*
- *To all health personnel; special skills, local conditions, seniority, responsibility, etc.*
- *Considering the quality and quantity of their work, a fee should be paid.*
- *Appropriate financing methods should be developed for the health systems to function effectively and efficiently.*

When health systems have the specified characteristics, basic health systems aim such as increasing the life quality of the society and providing service quality will be achieved.

Health Systems Goals

In general terms of a health system, it has basic goals such as developing, protecting, and supporting the health of a population or society (Feo, 2008). According to WHO, the main purpose of a health system is; to improve the health of the population and to increase health status, to provide healthcare services that meet the expectations of individuals, and to protect people from financial risks against disease costs (DSÖ, 2000).

Health Systems Functions

Countries are expected to effectively implement their health system goals while implementing their health systems. The functions of the health system play an active role in meeting this expectation. These functions, which interact with the objectives, are of great importance for the system.

Health systems: It should have a solid and strong financing structure, enough qualified human resources, decisions, and policies that produce safe information and methods, advanced facilities, and logistics services (McPake and Normand, 2008).

The health system has four main functions accepted by WHO. In the WHO 2000 report, these functions are grouped under four headings: management and regulation, resource generation, service delivery, and financing (WHO, 2000).

While carrying out these functions in the country's health systems, each country develops policies based on the national health system that reflects its history, culture, economic development, and the dominant political ideology in its country.

Management and regulation

There are various processes related to management in health systems. These processes are Management functions such as health planning, control, counselling, and coordination, and regulation and legislation. There are differences in this element with the political structure of the countries in each management process. Health programs: The government can be organized through other public institutions with health functions, like voluntary health institutions and private markets. The organization of these services may differ in each country.

Resource Providing

Restriction of health-related resources requires the use of resources to achieve maximum results. Resources mean one of the most important elements for the health system to continue perfectly. There are four main resources in general: manpower, health structures, health equipment, and materials, and information. The most important manpower in the health system is physicians, nurses, and other health personnel. While hospitals and private medical centers are called health structures; medical supplies, medicines,

and biological materials compose essential health equipment and materials. Information, which is essential for every system, also takes place as one of the most important resources of the health system (Sargutan, 2006).

Service Delivery

The provision or delivery of the service leads to other elements. Because all the elements of the system are created to provide the service more effectively and efficiently. Activities in service delivery; health promotion, disease prevention, diagnosis, treatment, and rehabilitation.

Service delivery in general; basic-primary health services (preventive and therapeutic) can be classified as secondary and tertiary health services. There are also special forms of health services for different situations in most health systems. Based on Roemer's (1989) health systems elements, Kavuncubaşı and Yıldırım (2012) have developed a model for Turkey's national health systems and functions. There are four factors that affect the organization of service delivery. These are policies and strategies, suppliers, services, and financing.

Health Financing

Health services are a type of service that must be met due to their individual and social importance. However, while the need for health services is increasing both individually and socially, the limited budget allocated to these services has led countries to act more prudently in the financing of health services (Ateş, 2012).

The financing of health services is mainly concerned with the money that should be allocated to health services, who will pay this money, who will benefit from these services, how much of this money will be allocated to which services and who will control this system (Hayran and Sur, 1998). The financing of health services affects service delivery, quantity, quality, efficiency, and therefore the health of individuals and communities. The continuous growth of the health sector (due to technological developments, an increase in population, increase in the elderly population and chronic diseases, awareness of individuals) causes an increase in the resources allocated to health. The type of financing of the health services of the countries differs according to the history, political structure, socio-economic characteristics, and economic structure of that country. Therefore, the health financing method of each country differs according to each other, that is, there is no single system that is applicable and efficient for each country (Ateş, 2012). It is important to provide health services with high quality, equitable, efficient, and sustainable to realize the right to healthy life defined in international platforms. For this, health services should be financed effectively, efficiently, and sustainably (Atabey 2016).

The share for health is increasing in countries especially in developed and developing countries. Increases in health expenditures have been the main source of health and healthcare discussions in recent years. At the same time, whether resources are used efficiently or not is one of the issues frequently discussed in the health sector. Countries' income levels and health problems

are among the important factors affecting their health expenditures. For this reason, to analyse the efficiency of a country's health care expenditures in the functioning of health systems, it is of great importance to compare with countries in the same income group or geographically close to each other.

Turkey's Health System and Health Services Delivery

Health services in Turkey until the 1980s, took place among the services that the state was obliged to provide. Health services in Turkey underwent a dramatic change in the 1980s with the effects of actors such as the beginning of dominated politics in the world, the World Bank, the International Monetary Fund, and the World Trade Organization. Later, with the "Health Transformation Program" implemented in 2003, significant changes occurred in the delivery and financing of health services.

In Turkey, the Ministry of Health is the most authoritative institution for the implementation of these policies and the formulation of health policy. Many organizations, including public, semi-public, and private, operate in the organization of health services in the country. Health institutions affiliated to universities, especially the Ministry of Health in the public sector, provide health services. Primary health services presented by Ministry of Health are provided by units such as family health centers, community health centers. Hospitals constitute the second step of the system. In the country, secondary and tertiary health services are provided by Ministry of Health hospitals, other public hospitals, university hospitals, foundation hospitals, private hospitals, foreign and minority hospitals. Ministry of Health hospitals have an important position in the system both in terms of the number of hospitals and health services provided to society.

The primary care system in the country was restructured with the family medicine practice, which came to the agenda with the Health Transformation Program and was expanded across the country in 2011. According to the Family Medicine Implementing Regulation, family physicians are defined as physicians who "provide preventive health services and primary care, primary diagnosis, treatment, and rehabilitative health services in a specific and comprehensive place, provide mobile health services to the extent necessary" (Family Medicine Implementing Regulation, 2010).

Primary health care services represent the entrance door of the individual to the health system (McWhinney and Freeman 2009). The use of primary health care services as the first place of the application provides contributions such as reducing costs, accessing appropriate treatment in a shorter time, referring to the right place, and using the emergency services and secondary and tertiary health services more efficiently. In countries with strong primary care, approximately 85% of patients can be treated and followed up in primary care, and their service needs can be met (Başer et al., 2015). However, acceptance of primary health care services as an entrance door to the health system depends

on its availability. Although there is no problem in terms of accessibility to primary health care services in Turkey, the Ministry of Health has not yet implemented the referral chain located within the Health Transformation Program. Therefore, the idea that family medicine practice 2 and 3 may be the solution to congestion in places, prevent the loss of time and resources, could not be realized yet. It has been shown by studies that there is not a big difference before and after family medicine in terms of individuals' preference for the first step when there is any health problem (Naçar et al., 2004; Şenol et al., 2010).

Although studies have shown that the satisfaction rate from family medicine practice has increased over time, it has been shown that the application status is still not at the desired level (Çetinkaya, 2013; Aktürk, 2015; Özata, 2016; Durmuş, 2018). In many studies, people stated that they did not prefer family medicine as the first place of application, 10-15% of them never went to the family physician, they applied to the family physician for recipe repetition and that they did not choose their family physicians themselves (Çetinkaya et al., 2013; Aydın et al., 2016; Durmuş et al., 2018).

In the studies carried out to determine the thoughts and problems of family physicians regarding the system, the rate of those who think that the workload and work stresses have increased has been found high (Çetinkaya et al., 2014; İlgün and Şahin, 2016). In the study of Aktaş, it is seen that family physicians have difficulties related to working conditions and personal rights (Aktaş and Çakır, 2012). According to a study on burnout of family physicians; Half of the family physicians think that practicing negatively affects their psychological status, and half of them think that their anxiety increases for the future (Baykan et al., 2014).

According to the data of the Ministry of Health 2018; There is an average of 3405 people per family medicine unit in Turkey. This figure is higher in Istanbul with 3721 (Ministry of Health, 2018). The target of the Ministry of Health to reduce the number of people per family physician in 2010 to below 3000 has not been reached yet (Ministry of Health, 2018).

In addition, it is claimed that preventive health services for the individual are put into the second plan and become dysfunctional in this system (Öztek, 2009). This plays a negative role in achieving the desired improvement in primary health indicators.

Primary health indicators are widely used to assess the effectiveness of health systems and healthcare spending (Arslanhan, 2010). Prolongation of life expectancy at birth, the mother and the reduction of infant mortality, in 1000 the increase of hospital beds per person, like many improvements occur but still, Turkey lags behind the European Union countries in terms of these indicators (Ay, 2019; UNICEF, 2019).

Service delivery and financing in Turkey is mainly financed by public incomes. The production factors of the services are completely under the control of the public. The health spending trend in the country is increasing every day. In Turkey, health spending has increased due to factors such as the use of new technologies in health services, the increase of the actors, depending on the sector's growth, an increase in the number of individuals aged 65 and over, and individuals who had chronic diseases (Ay, 2019).

According to OECD data, per capita, health expenditure is \$ 1194. Per capita in OECD countries, Turkey ranks second among countries with the least health expenditure. It is the country with the lowest expenditure compared to European Union countries. In the United States, where per capita health expenditure is the highest, this figure is 10,209 (TurkStat, 2018; OECD, 2019).

The share of total health expenditures of Turkey's current health expenditure lags developed countries by 4.2% (TurkStat, 2019). In Turkey, the shares allocated for health expenses from the Gross domestic product (GDP) are low than the average of OECD countries (8.8%). This rate is almost twice the OECD average in the USA with 17.2%. Other countries that allocate the highest share of health among OECD countries, Switzerland, France, and Germany.

Another aspect of the problem is that a large part of the money allocated for health is reserved for therapeutic services. The EU's 2018 Progress Report (2018) on Turkey, Turkey has invested more in public health, especially the necessity of increasing the resources allocated to preventive health care is emphasized. There are also problems in using resources allocated to health effectively and efficiently (Bayraktutan and Pehlivanoglu, 2012; Öksüz kaya 2017; Özçelik, 2019). Nevertheless, Turkey showed a better performance than the countries stated before in the COVID-19 pandemic process with the public approach for the health services offered to the community.

The expected and necessary transformations in health services in Turkey in the post-pandemic period

The fact of how important it is for countries to reveal that health should be handled as a public service, and service delivery and financing should be structured accordingly has emerged clearly in the period of COVID-19. The advocacy of the idea that health is not an individual issue and care should be taken while delivering health in terms of supply and demand conditions has gained importance all over the world. In the pandemic period, Turkey in terms of providing adequate and effective health care to everyone struggling with COVID-19 in accordance with the principle of inclusiveness has come to the fore. This positive situation should be maintained in the post-pandemic period and the understanding and practice in the country should be further strengthened in terms of providing health in a public-based service approach.

- *The advocacy of the approach that healthcare services with social duty and responsibility approach including everybody, based on the principles of equity and solidarity and philosophical perspective, has increased.*

- Turkey's issues to deal mainly in the post-pandemic period, efforts are made to raise the level of health indicators that are not good compared to EU countries and to surpass them.
- In Turkey, the infant mortality rate per thousand is 9.2, this rate in the WHO European Region is 7, It is in high-income group countries is 4.2, while in European Union countries it is 3.3, the infant mortality rate is still not in the desired level (Ministry of Health, 2018). The infant mortality rate in Turkey has been reduced to below 10 per thousand by studies in recent years. This is a positive and important development. However, it is not the goal. These studies and strategies should be re-evaluated, strengthened and studies should be carried out to reduce the rate of less than 5 per thousand in the post-pandemic period.
- In Turkey, considerable success has been achieved in the fight against measles, tuberculosis, and malaria, and has been a serious decline in the rate of infection of this disease in the last two decades. The incidence of these three major diseases in the country is lower than the upper-income group and the European Union countries (Ministry of Health, 2018). This situation should be sustained.
- During the COVID-19 pandemic, Turkey exhibits an active struggle. Postponed elective health services and physical, mental, and social problems that are predicted to increase should be carefully monitored, and in the post-pandemic period, necessary planning should be made for them from now.
- Turkey has made significant legal regulatory and successful efforts in the fight against tobacco and tobacco products. Despite the decrease in consumption of tobacco and tobacco products in the country with this struggle, the rate of smoking and the average number of cigarettes per person is higher than the average of OECD countries in people 15 years and above (Ministry of Health, 2018). Combating tobacco and tobacco products in the post-pandemic period should be on the agenda as an important field of study and struggle.
- Important steps in the fight against obesity in Turkey, programs have been developed. However, like all developed countries obesity as one of the most important problems facing Turkey will also remain on the agenda. The frequency of obesity may have increased due to the increased duration of stay at home during the pandemic period. New strategies and studies are needed in the post-pandemic period regarding obesity.
- Programs related to increasing physical activity have been developed and implemented by the Ministry of Health. Physical inactivity is an important cause of many health problems. Due to the increase in the time spent at home during the pandemic and the curfew imposed on the group above 65 and below 20, a decrease in physical activity can be expected in society. Programs related to increasing physical activity in the post-pandemic period should be updated/developed, new and strong strategies should be developed, and their implementation should be followed.
- In Turkey, the number of vaccine antigens administered according to the vaccine calendar has been a significant increase in recent years. In addition, vaccination rates have increased. The country's rate of vaccination is higher

than the WHO European region and high-income countries (Ministry of Health, 2018). This is an important success and should be sustained in the post-pandemic period.

- One of the important problems in the world and in Turkey recently is anti-vaccination. In the COVID-19 pandemic period, there was a decrease in anti-vaccination, and there was a serious expectation in the community to develop a vaccine against SARS-CoV-2. By evaluating this situation, regulations regarding the compulsory vaccines in the Ministry of Health vaccination schedule should be made without delay.
- In Turkey, the rate of birth that took place in the hospital has risen in recent years. The birth rate with qualified healthcare staff is higher than the upper-income group and European Union countries. This is a positive and important development. However, there has been a serious increase in the rate of caesarean births in recent years. While the rate of caesarean births in live births in the country is 54.9%, this rate is 28.1% in OECD countries and European Union countries, and it is quite high in Turkey (Ministry of Health, 2018). Studies to reduce caesarean births should be adopted as an important field of struggle in the post-pandemic period.
- With the studies of the Ministry of Health in recent years, there have been significant reductions in adolescent fertility rate, and it remains on the country agenda as one of the problematic areas. While the adolescent fertility rate in the country is 19 per thousand, this rate is 10 in the European Union countries and 13 in the upper-income group (Ministry of Health, 2018). Studies on the reduction of adolescent fertility in the post-pandemic period are required.
- Despite the increased number of hospital beds in recent years, the number of hospital beds per 10,000 people in Turkey is 28.3, while it is 46.5 in OECD countries and 49.1 in European Union countries. The acute bed occupancy rate in hospitals is 66.7% in Turkey, 75.3% in OECD countries, and 74.4% in European Union countries (Ministry of Health, 2018).
- For one hundred thousand population, the number of intensive care beds in Turkey 49, Germany 29, Italy 13. Turkey stands out in terms of the number of intensive care beds. (TUBA COVID-19 Pandemic Evaluation Report, 2020). The importance of this infrastructure became more prominent in the period of the COVID-19 pandemic and became a reassuring factor for the society.
- The number of MR devices is 11.2 per 1 million people in Turkey. This rate is 16.7 in OECD countries and 14.6 in European Union countries. However, the MR number of views per thousand people is higher in Turkey. Again, the number of Tomography devices is 14.8 for one million people in Turkey. It is 26.8 in OECD countries and 22.6 in European Union countries. However, the number of tomography views per thousand people is higher in Turkey (Ministry of Health, 2018). It is possible to analyse this data in two ways. One of them may be unnecessary MR and tomography shots, the other is the highly cost-effective use of these devices. In the post-pandemic period, it is necessary to make an evaluation from these aspects.
- One of the important services provided by the Ministry of Health is 112 emergency services in Turkey. As a result of increasing services in recent years,

the population per 112 emergency stations has dropped from 138,050 to 29,983 (Ministry of Health, 2018). This decline should be continued.

- *The number of applications per physician per person has increased from 3.1 to 9.5 in Turkey. The number of applications in primary care increased from 1.1 to 3.2, and in the 2nd and 3rd levels increased from 2 to 6.3. The number of applications per physician per person is 6.8 in OECD countries and 6.9 in EU countries. The number of applications to physicians per person in Turkey is concerned with facilitating access to health services and is a positive development. The highest application numbers are in South Korea (16.6) and Japan (12.6) (Ministry of Health, 2018).*
- *Over the years the level of satisfaction with health care services in Turkey has increased to 70.4% from 39.5%. Turkey is a country with a very high satisfaction rate in terms of total public current expenditure on health and health care (Ministry of Health, 2018). This situation should be sustained in the post-pandemic period.*
- *Approaches and policies that include components related to the training, use, and management of health manpower that can provide health services in a cost-effective manner should be reconsidered.*
- *In Turkey in recent years, with studies, the number of nurses and midwives per hundred thousand people increased to 301 from 171. However, this number is 938 in OECD countries and 841 in EU countries (Ministry of Health, 2018). Nurses in the country work with great devotion and try in order not to cause and create disruption in the services. But the country's need for nurses is urgent and important. Therefore, studies should be carried out to increase the number of nurses and staff in the post-pandemic period.*
- *In order for the health systems to reach the intended targets, the system should be revised continuously by determining correct and effective policies based on the performance measurements of the health systems.*
- *Turkey's health system, as in many countries are also faced with significant resource limitations. Healthcare managers, policymakers, and planners should accelerate search and solutions to use available resources as efficiently and effectively as possible.*
- *During COVID-19 pandemic period, the titles of vaccines, diagnostic kits, personal protective equipment, and ventilation equipment production have come to the fore. Therefore, Turkey should strengthen its production capacity in all areas of health care. First, it should be a country that meets its needs and can export by determining certain thematic areas. In other areas, it should immediately become a country that meets its needs.*
- *To talk about a sustainable effective health system, drug expenditures should be brought under control, drug consumption habits in the society should be changed, and rational drug use policies should be implemented effectively and efficiently. Daily consumption of antibiotics per thousand people in Turkey is 31.0 while this ratio in OECD countries is 18.9. Antibiotic usage in Turkey is quite high (Ministry of Health, 2018). In the post-pandemic period, stronger strategies and programs should be developed to reduce unnecessary antibiotic*

consumption in general and to reduce unnecessary drug consumption in general.

- *Problems such as combating chronic diseases and providing integrated health services, meeting complex health needs, increasing costs, and the aging society are the biggest problems that health systems face today. To cope with these problems, it is necessary to have a strong primary step.*
- *From a social perspective, treating the masses in terms of infectious diseases is much more difficult and costly than protecting them before the disease occurs. The necessity of giving importance to preventive healthcare services and primary care in the healthcare system during the COVID-19 pandemic period has been clearly revealed. In this sense, the physician should be able to offer a comprehensive and continuous health service considering personal needs. The physician should establish a personal relationship with their patient based on trust, healing qualities in the process, and should be qualified as a family physician.*
- *Family medicine practices in Turkey still need to be improved because of the dysfunctionality of referral systems, the family physicians less in quantity and quality, the limitations of the medical school education system, the integration of the shortcomings of the other branches of the family medicine.*
- *Effective provision of primary health care services and decreasing the density in secondary and tertiary health care services will open the door to provide better quality health care services.*
- *Inciting individuals to family medicine, encouraging them to apply, and expanding preventive health services will reduce the cost of treatment services.*
- *It is particularly important for Turkey to increase the resources allocated to preventive health care and to invest more in the field of public health. Infrastructure problems of primary health care services should be resolved quickly.*
- *It is recommended to improve the protective service aspect of primary care, such as periodic health examinations, pregnancy-maternity-baby follow-up, vaccination, and family planning services.*
- *The number of public health professionals in Community Health Centers should be increased and the employment of public health professionals at administrative levels of responsibility should be increased.*
- *Policies should be developed about the subjects that we encounter as a problem of Turkey's health system such as deficiency in the number of family physicians, the number of persons per family physician, and the regional imbalances.*
- *It is expected that the family physician will establish the first medical contact point related to the health system and be a leader or coordinator among the healthcare units, where he is constantly responsible for all aspects of his/her patient's health. The patient should take responsibility for any health-related issue, including the community, family, or social environment.*
- *The fact that the primary step is not preferred at first in health problems, taking the problems to the second or third step increases the workload of these steps*

and causes low-cost efficiency. The family medicine system, which is one of the most important components of the Health Transformation Program, has ceased to be the first place of application for individuals because the effective and gradual referral chain cannot be functionalized. After the current problems of the family medicine system are resolved, the stepwise referral chain should be made functional. The social perception that got used to the primary step and moved away from the hospital is a chance for the referral chain in the COVID-19 pandemic period. The referral chain application should be started by evaluating the appropriate environment.

- The aim of medical education should be to train physicians equipped with the information and skills that can serve in primary care.
- During the COVID-19 pandemic period, there was seen the resignation of healthcare workers in some countries, including developed countries, but this situation was not seen in Turkey. However, this is an important experience, taking this experience into consideration, courses related to the philosophy of health services should be added to all the faculties that train staff working in healthcare provision.
- Medical education should include an approach that gives importance to preventive medicine, to protect and increase the health status of individuals and to train physicians and non-physician health personnel. Providing coordination between medical education and health services, balancing the number of general practitioners and specialist physicians, the curriculum being in line with national requirements, etc. many issues should be reconsidered.
- One of the prominent issues in the COVID-19 pandemic period is the team spirit in providing health services. In this period, it was clearly seen that the health services were not physician-centred but a team service. Turkey has become one of the countries in the world that can achieve this and even form a spiritual union with social dynamics. In the post-pandemic period, this team spirit and team service approach should be supported and developed.
- Primary health care services should be supported in terms of personnel quality and quantity. Attempts should be made to increase the number of family physicians in family health centers. In addition, a college/faculty should be opened for personnel described as family health personnel, and personnel should be trained in this field. A standard in-service training should be provided to staff working as current family health personnel.
- The views of family physicians about the implementation of the system should be discussed on common ground with stakeholders who are planners and implementers, and solutions should be provided in coordination with the problems.
- Studies should be carried out to increase the health literacy of individuals. One of the most common difficulties encountered during the epidemic of COVID-19 was experienced during health communication and understanding/implementation of the messages. Studies and training in this area should be increased and supported.

- *Community-based research focusing on community perceptions, preferences, and use of the service; It is important to provide information on the current situation, compare it with the past, and measure changes over the years.*
- *Payment imbalances among healthcare personnel providing health services should be eliminated and the health performance system should be revised.*
- *A quality and efficiency-oriented system should be established in health services instead of a performance-oriented system.*
- *One of the prominent issues in the COVID-19 pandemic period is the importance of the multisectoral approach in healthcare. Turkey has constituted a great experience in inter-sectoral cooperation in this period and has struggled successfully with the pandemic. This experience should be used during the post-pandemic period and intersectoral cooperation in health care should be sustained and developed.*
- *The difference in emotion between the personnel working in the health service provider that has existed in Turkey for a while and those receiving the service decreased rapidly during the COVID-19 epidemic period, and a common feeling developed over time. In fact, this is a very desirable situation. Because people who receive and provide health services serve the same purpose. Policies to support this new emotional unity should be created and developed.*
- *During the pandemic, the deficiency and inadequacy of the media about health news came back to the agenda. In the post-pandemic period, rules, and decisions regarding health news in the media should be created and shared with RTUK.*
- *Municipalities have assumed an important role in the pandemic period. However, some municipalities' wrong practices such as disinfection tunnels have been negative in terms of the pandemic period. Because municipalities are extremely important in terms of health services. For this reason, health advisory boards should be established in the municipalities during the post-pandemic period. It should be ensured that many services that are closely related to public health from cleaning to disinfection are carried out on a more scientific basis. An important issue in pandemic and all extraordinary periods is also routine health services and services offered to risk groups. To standardize the services to be provided in these periods, studies should be carried out in the post-pandemic period.*

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