

### COVID-19 IN TURKEY

The last known coronavirus disease is COVID-19 which has appeared in China, in December 2019, and rapidly spread worldwide <sup>[1]</sup>. It has caused a pandemic in the world. The first confirmed case of COVID-19 in Turkey was a 44-year-old male who was referred to the hospital on March 9, 2020 <sup>[2]</sup>. It was announced by the Health Minister of Turkey, Dr. Fahrettin Koca at a press conference on March 11, 2020<sup>[1]</sup>. Koca announced that a male citizen had tested positive and that he had been infected with the virus after returning from Europe. Koca also declared that the patient was completely isolated, his general condition was good, and all of his family members and those who had had contact with him were under surveillance <sup>[1]</sup>. Koca added that “The coronavirus is not stronger than the measures we will take. A quarantined patient cannot threaten society <sup>[3]</sup>”; and underlined that the problem was global, but the fight had to be national, and Turkey was prepared to fight against Coronavirus <sup>[1]</sup>. Turkey confirmed the first COVID-19 related death on March 17, 2020 <sup>[2]</sup>.

#### **The Current Status of COVID-19 in Turkey**

As of May 10, there exist 138,657 confirmed cases of COVID-19 in Turkey. The reports of COVID-19 related numbers such as total cases, total deaths, total recovered, total tests, total ICU patients and total intubated patients are announced by Ministry of Health via its web page and twitter account, and these numbers are updated daily. According to this data on May 10 2020, 1,370,598 total tests have been done, 3,786 patients have died and 92,691 previously positive patients have recovered from the disease <sup>[4]</sup>.

Health Minister Fahrettin Koca announced “Turkey is currently passing over the peak of the novel coronavirus pandemic but the drops in numbers must be consistent,” on April 29, 2020. He also stated that “The number of recovered patients in Turkey in the past 24 hours reaches twice that of newly diagnosed patients,” and shared new data of COVID-19. As reported by him, the death rate for intubated patients dropped from 74% to 14%, and for intensive care patients it dropped from 58% to 10% <sup>[5]</sup>.

Healthcare workers and their efforts have been immensely important in Turkey and the Health Minister has thanked them for their hard work. As of April 29, he declared that at least 7,428 healthcare workers had been infected with COVID-19, which constituted nearly 6.5% of all cases <sup>[5]</sup>.

On May 4, 2020, Minister Koca made a presentation about Turkey's fight against COVID-19 at the video conference of the World Health Organization (WHO). Koca highlighted that they were effectively cooperating with all global partners, and that world needed a stronger WHO. According to Koca, “Solidarity is our strongest weapon against this unprecedented threat. At this point, we must put aside disagreements and focus on the solution. After overcoming these challenging times, we must come together and see what went wrong <sup>[6]</sup>.” Koca, about the current situation of COVID-19 in Turkey, said that with great testing capacity and early treatment protocols, Turkey had been able to reduce the rate of disease progression to pneumonia from 60% to 12%. In the later stages of the treatment, Turkey did not rush to intubate patients. Instead, it was seen that giving high-flow oxygen to the patients in the prone position, yielded positive results. Turkey has

achieved a significant increase in the rate of recovery for non-intubated patients. The mortality rate of ICU patients have also progressively reduced from 58% to 10%. Turkey has been able to reach 99% of all contacts with filiation studies, and this means approximately 455 thousand people in 44 hours through this process. Koca also underlined the importance of health information technologies. He said that Turkey had achieved a peak level 30 days after the first death was reported as a result of the measures taken. The fact that Turkey was one of the countries the virus reached relatively late, combined with the fact that the peak level was reached earlier in Turkey than in other countries, have resulted in Turkey having one of the lowest case fatality ratio among European countries <sup>[6]</sup>.

On May 6, 2020, Minister Koca stated that Turkey had completed the first phase of the fight against Coronavirus and entered the second phase, but that success was still dependent on outside conditions and measures taken. He underlined that the healthcare army had gone a long distance, and thanked the Turkish people for their support. Koca said that the number of recovered cases were quickly approaching the number of total cases; and that the number of recovered cases had surpassed the number of active cases that week for the first time.

These results are proof that Turkey has been successful in diagnosis, treatment and containment efforts. Koca warned the Turkish people that the pandemic was ongoing and that the facts about the virus remained unchanged. Home was still the safest place to be protected from the virus <sup>[7]</sup>. He added: "This should not mean that we are giving up on measures. We will be free in a controlled way <sup>[7]</sup>." Normalization means a controlled social life. Thus, Turkey is creating the new normal in the second phase and this new normal will be different than what Turkish people were used to. Therefore, life in Turkey will be reorganized as a controlled social life and this new situation will have its own rules. The people of Turkey will be free, in the constraint of two main rules: firstly, if they have to go out, they will wear masks and secondly, they will practice social distancing <sup>[7]</sup>.

Finally, Koca stated that Turkey's goal is to zero the number of new cases and new deaths and also to ensure continuous success and achieve good results <sup>[7]</sup>. The Ministry of Interior of Turkey has also issued a circular on May 6, 2020 regarding the normalization period in Turkey <sup>[12]</sup>. Barbershops, beauty salons and hairdressers are allowed to begin work as of May 11, 2020. After then, many business sectors are allowed to reopen workplaces because of economic, social and psychological impacts of COVID-19 <sup>[13]</sup>.

### **What Turkey Has Done in Comparison to Other Countries During the COVID-19 Pandemic?**

The pandemic has reached Turkey later than many other countries. At first, most of the confirmed cases were linked to people coming from China, Iran and European countries; therefore the top priority for the Government of Turkey was to detect these cases by finding their contacts and isolating them as well. Like other countries <sup>[8]</sup>, it was important for Turkey, too, to improve its capacity to detect cases not only at points of entry but also in health facilities and communities.

As mentioned before, the first COVID-19 case in Turkey was detected on March 10 and announced on March 11, much later than in many European countries. Four new cases were reported on March 12. Then new cases were added day by day. The death rate was 2.4% as of March 25 <sup>[15]</sup>. Istanbul has the highest number of cases compared to other cities in Turkey. The start of the epidemic in Turkey shows high similarity with the early stages of it in Italy and Spain. Although the Minister of Health and the Government of Turkey were quick to take the necessary

measures, a nationwide curfew was not declared. However, curfews for certain age groups ( $\geq 65$  and  $< 20$ ) and weekend curfews for high-risk cities were implemented. Petersen & Gökengin argue that the consequences of an epidemic similar in proportion to Italy would have been devastating in Turkey<sup>[15]</sup>.

Turkey has already implemented some measures against the spread of the disease compared to other countries. The most important ones are the closure of educational institutions right after the first case, the prohibition of public gatherings and the cancellation of all public events such as football matches, theaters, cinemas, and religious activities in the following weeks<sup>[15]</sup>. The early preparation of the healthcare system with the Scientific Board was very important in the scientific management of the epidemic. Moreover, developments related to the pandemic in the world were followed closely, procedures updated, and healthcare workers trained by following the suggestions of the Scientific Board and the decisions of the Ministry of Health. The protection of healthcare workers was revised according to new regulations. Likewise, personal protective equipment (PPE) for healthcare workers was provided but providing enough PPE for all healthcare workers took time. The capacity of the available ICUs was also revised, elective surgeries that needed intensive care were canceled. COVID-19 cases which did not need hospitalization were isolated and all those with whom they had had contact were quarantined<sup>[15]</sup>.

Turkey also evacuated its citizens in the COVID-19 pandemic from other countries such as Germany, Italy, Spain, and the USA. Turkey performed the first evacuation operation by bringing back 32 Turkish citizens and 6 Azerbaijani, 3 Georgian, and 1 Albanian citizens from China to the country on February 1 with a well-educated and equipped medical team. Those who were on board, the medical team, and pilots were quarantined at the quarantine hospital in Ankara when they were back in Turkey. Before and after the flight, everyone underwent a detailed medical examination and there was nobody showing any symptoms. Protective measures were also taken against the transmissions by droplets and aerosolization. When back to Turkey, nasopharyngeal swab samples were taken from people for PCR testing in the 3rd, 10th, and 14th days in Ankara and all test results came negative. Then 14 days of quarantine was completed and the medical team and pilots also spent the last 4 days at their homes<sup>[16]</sup>.

21,000 pilgrims returned to Turkey from Umrah in March and 6,448 of them who returned after March 15, 2020, were put in quarantine in empty student dormitories, in 7 different cities such as Ankara, Konya, and Eskişehir. Unfortunately, 224 COVID-19 positive cases were reported among them and taken under the treatment. Additionally, 4,821 people were brought back to Turkey from various countries such as Italy, Spain, Germany, Tunisia, Lebanon, Azerbaijan, Ukraine, and Kazakhstan. They were also quarantined in empty student dormitories, in different cities such as İstanbul and Bolu. Moreover, Turkey performed other evacuations from Iraq and Iran. 3,358 students who lived in Europe were brought back from different European countries on March 25. The students were also quarantined in government facilities, in different cities. This evacuation process is still being evaluated, in terms of its effects on the spread of the coronavirus, and its psychosocial outcomes in Turkey<sup>[16]</sup>.

When compared to Asian countries, Turkey was behind South Korea regarding test capacity at first, but currently, more than 30,000 tests can be done in a day in Turkey. Turkey should learn the management and control of the epidemic from countries like South Korea, Singapore, and China. Turkey should continue to test, provide adequate PPE for each hospital timely, and also provide a healthy working environment and suitable working hours for healthcare workers<sup>[15]</sup>.

## **The Lessons Learned from the Previous Pandemics in Turkey and Their Usage for the COVID-19 Pandemic**

The National Pandemic Plan of Turkey was published in 2006. The Pandemic Influenza National Preparedness Plan of Turkey was updated according to experiences from 2009 Influenza-A pandemic. This Plan was prepared under the coordination of the Ministry of Health, General Directorate of Public Health (GDPH), and it was published in the Official Gazette as the Presidency Circular 2019/5. Then Provinces were requested to generate “Provincial Pandemic Influenza Preparedness and Action Plans” and 81 Provincial Health Directorates prepared drafts of own Action Plans. After the evaluation of these plans, Provinces were asked to complete their preparations in the frame of the feedbacks given. Then, Pandemic Coordination Boards and Operation Centers were established on the national and provincial levels. Since COVID-19 is caused by a virus that transmits via respiratory droplets like Influenza, The Pandemic Influenza National Preparedness Plan is also adaptable to the COVID-19 pandemic <sup>[2]</sup>.

This National Pandemic Plan provides an outline of the minimum elements needed for optimal readiness. The aim of the Plan is to secure the continuity of public services. The Plan also aims to reduce transmission, the pandemic strain, the number of patients, hospitalization, and deaths due to the disease, and the socioeconomic burden due to the pandemic <sup>[2]</sup>.

One of the key lessons learned from previous health crises in Turkey was that a rapid response from the Ministry of Health and other arms of Government, as well as the quick reaction of civil society and local communities was critical. Previous pandemics provided case studies of political, societal and socioeconomic consequences of such crises. Thus, this information highlighted that Turkey needed the cooperation of all sectors as part of the response to COVID-19.

Previous epidemics and pandemics in Turkey had also shown the importance of well-prepared national plans and their applications, trained health workers and specialists, and in particular public health specialists and services.

### **Which Measures Have Been Taken to Control the Spread of COVID-19 by the Government of Turkey?**

Preparation for the COVID-19 pandemic had begun before the first case was detected in Turkey. The Ministry of Health of Turkey built teams to work 24/7, and set up a Scientific Board for COVID -19 at the Public Health Emergency Operation Center. This Scientific Board conducted the “COVID -19 Risk Assessment” and then, “COVID-19 Guideline and Case Report Form” was prepared on January 22, 2020. This guideline’s first version was published on January 24, 2020. This way a standardized approach to suspect COVID-19 cases all over the country was provided. It is updated constantly in accordance with the updates of WHO, the current scientific developments, international developments, and course of the disease in our country and published on the website of the Ministry of Health of Turkey. Therefore, updated risk assessments, guidelines, case report forms, regulations of personal protective equipment, treatment algorithms, brochures and other related documents have been released regularly <sup>[2]</sup>.

The Ministry of Health of Turkey have made many regulations for COVID-19 pandemic. According to regulations, the Public Health Management System (HSYS) is being used for the case-based

follow-up. All of the COVID-19 possible cases, people who came from abroad and had to be isolated at home and those with whom they had had contact are monitored with HSYS. The data of HSYS is started to be entered retrospectively on March 17, 2020. This data is shared daily. The samples for COVID-19 are being tested by PCR and rapid diagnostic kits, and analyzed at the Central Microbiology Reference Laboratory and other authorized laboratories in several provinces. In each province of Turkey, Pandemic Hospitals have been determined and all possible and confirmed cases have been admitted and treated in those hospitals. Additionally, nonemergency surgeries and nonurgent dental practices have been postponed. Scientific studies have also been conducted on virus isolation, vaccine, drug and plasma treatment and the studies are still going on <sup>[2]</sup>.

Healthcare personnel and the public have been trained about COVID-19. Different communication channels and social media have been used for giving information related to the disease such as prevention and general hygiene rules <sup>[2]</sup>. Various preventive measures have also been taken by the Government of Turkey such as social distance orders, weekend curfews, limiting foreign admission to the country and air traffic, limiting ground transportation and trains, the closure of business and educational institutions.

In February, all flights to and from China, Iran, Italy, South Korea and Iraq were stopped. In March, President Erdoğan announced that Turkey suspended all international flights as part of measures to curb the spread of coronavirus <sup>[9]</sup>. Domestic flights were also restricted. Flight restrictions were, at first, to certain countries, then gradually expanded and all flights were suspended. Foreign nationals were prohibited from entering Turkey. 14-day self-isolation and symptom monitoring were requested from those who arrived from high-risk countries to Turkey. Those preventive measures are also applied to Turkish citizens who came from Umrah and who have been discharged from the quarantined areas. Moreover, health control measures have been taken at land, air, sea entry points and ships <sup>[2]</sup>.

Measures have also been implemented in areas such as penitentiary institutions, dormitories, nursing homes, military barracks, hotels, restaurants, shopping malls, cinemas, theaters, airports, bus stations, train stations, public transport, and intercity busses. At first, some restrictions were implemented for gathering places or high-risk places for disease transmission, next all places such as entertainment venues, bars, night clubs, theaters, cinemas, concert halls, wedding halls, mosques, tea gardens, restaurants, cafes, internet cafes, all game halls, all indoor playgrounds, amusement parks, swimming pools, saunas, sports centers, hairdressers, barbers and beauty centers have been temporarily suspended. Moreover, prayers with the congregation, Friday prayers, funerals and following gettogethers, all meetings, social organizations and other organizations which bring people together, sports activities and all kinds of scientific, cultural, artistic and similar meetings or activities at national and international level were suspended. Hygiene and cleaning measures have also been taken for transportation vehicles such as public transportation and shuttle buses and the number of passengers allowed on such transportation has been limited to 50% of the capacity. Road and air travel are only allowed after obtaining a permit. Entrance and exit to and from 30 metropolitan cities and Zonguldak was restricted <sup>[2]</sup>.

Educational institutions have been temporarily closed as of March 16, 2020, and distance education is still ongoing. Regulations such as flexible working hours and working from home for workplaces and offices have been applied. People with chronic diseases or those over 60 years old, disadvantaged or disabled groups, pregnant women, and nursing mothers entitled to nursing

leave have been granted administrative leave. A restriction has been implemented as a curfew for people who are 65 or older and who are with chronic disease on March 21, 2020, then it has been extended to young people who are under 20 on April 3, 2020. Lastly, weekend curfews and quarantine measures have been implemented for the same provinces starting from April 11, 2020 <sup>[2]</sup>.

Morgue and burial procedures and autopsy procedures have been regulated and carried out for those who died of COVID-19. Personal protective equipment has been used in the undertaking of such tasks <sup>[2]</sup>.

According to the current situation of the COVID-19 pandemic in Turkey, the Government of Turkey seems to have acted quickly to take the necessary measures for the interruption of transmission. The strategies of the government have aimed to identify cases early, isolate possible cases and trace contacts to prevent or limit person-to-person transmission. It has been especially important to put stringent early detection and surveillance measures in Turkey. For this reason, Turkey has deployed filiation teams for monitoring citizens to curb the spread of virus.

Health Minister Fahrettin Koca has announced Turkey's COVID-19 data, and informed the public about the process and the recommendations of the Coronavirus Scientific Advisory Board in press conferences almost every day. Koca said that there are 5,849 filiation teams in Turkey, and they have so far detected 468,390 people who had been in contact with the virus in one of press conferences following the meeting of the Coronavirus Scientific Advisory Board on April 29, 2020 <sup>[5]</sup>.

Like other countries <sup>[8]</sup>, since existing healthcare systems in Turkey are already dealing with many diseases and challenges, the main fear was that an unmanageably large caseload would be developed. As of 29 April, Koca said that Turkey had the lowest death rate from coronavirus among the European countries, and the country ranked 80th in the world in COVID-19 related deaths <sup>[5]</sup>.

### **What is the Risk Profile of Turkey in terms of Susceptibility to COVID-19?**

COVID-19 can lead to a serious lung inflammation, acute respiratory distress syndrome (ARDS), cardiac and renal injury. This disease can be serious in patients especially with older age and comorbidities (diabetes mellitus, hypertension, and heart failure). Patients can be divided mainly into two groups. The first group includes asymptomatic or mild cases that usually recover. The second group includes severe cases (approximately 15%) that develop multi organ failure, primarily respiratory failure and require intensive care unit (ICU) admission <sup>[2]</sup>.

In the light of current information about COVID-19 in Turkey, it seems that older people and people with a range of underlying conditions have been more affected like in Asian and European countries. Turkey is still piecing together evidence based information and current experiences on how COVID-19 will affect different age groups and people. The Coronavirus Scientific Advisory Board is analyzing Turkey's COVID-19 data and updating the information for Turkey's act plan for this pandemic.

### **How Has Life Changed During the COVID-19 Pandemic in Turkey?**

First of all, Turkish citizens have had to adapt to the preventive measures which were recom-

mended by the Government of Turkey to mitigate the spread and impact of COVID-19. Personal hygiene, in particular regular hand washing has become more important than before.

Although there were much misinformation and false preventive suggestions about COVID-19, the members of the Coronavirus Scientific Advisory Board and public health specialists have taken action to debunk misinformation through TV programs and their twitter accounts. The Health Minister gave information and reports about the current status of the pandemic in Turkey almost every day through press conferences and his official twitter account since the end of February. The public have closely followed him and paid much attention to his conferences, statements and tweets.

The evacuation operations were important periods for Turkey during the pandemic. Those operations brought some medical risks and new social problems to Turkish society. One of those problems was the transferring of coronavirus from one place to another despite the measures taken. Others were social and psychological traumas and concerns in society because of some COVID-19 positive evacuees. Like in other countries, some locals did not want people in their cities where the evacuees were quarantined. Thus, this situation also caused another public problem. Moreover, regardless of the social, mental, and economical status of the evacuees, they were put in quarantine strictly for 14 days<sup>[16]</sup>. For example, some evacuees did not want to stay in the dormitories prepared for the quarantine in different cities of Turkey, and some evacuees even tried to escape from those places. Likewise, some of the Turkish citizens blamed the evacuees and the government because of the spread of the disease. Thus, the Turkish people had to cope with those concerns, too. The tension between the evacuees and the locals decreased after the end of the quarantine process.

Turkish people have started to avoid unnecessary travel and take precautions to stay away from crowded areas in accordance with recommendations and measures taken by the government. Those over 60 or with underlying conditions, such as cardiovascular disease, diabetes, chronic respiratory disease or cancer are strongly recommended not to leave their homes and to avoid visitors. Those who are younger or in lower-risk categories are asked to be aware of their ability to spread novel coronavirus to those more vulnerable than them. Accordingly, the Government of Turkey declared a curfew for old people who are 65 or older and who have a chronic disease, and then extended this curfew to include young people under 20. Those who have been at home for over a month have had a hard time and psychological, physical and economic difficulties. Then Ministry of Interior issued a circular for those restricted with the curfew on May 6, 2020; according to this which those citizens who are 65 or older and citizens with a chronic disease were allowed to go out on May 10, between 11:00 am and 15:00 pm, complying with the social distance rule and wearing a mask. Likewise children who are under 14 years old will be allowed to go out on May 13, and young people who are in between 15-20 years old will be allowed to go out on May 15, between 11:00 am and 15:00 pm complying with walking distance, social distance rules and wearing a mask<sup>[10]</sup>.

After the curfew for the elderly and at-risk populations, military police, watchmen employed by the government, police, and municipalities started to help those people (e.g. for shopping, health issues, etc.) in Turkey. Vefa Social Support Group by the Government of Turkey also started to help those people for their personal needs. After then, President Erdoğan announced the initiation of a donation campaign called "We're Enough for Each Other Turkey" (In Turkish: Biz Bize Yeteriz Türkiyem)<sup>[14]</sup>. Turkish people have tried to help each other economically and psychologically. They supported their elderly neighbors and those with economic difficulties.

Especially some municipalities such as Ankara and İstanbul have supported the society with social regulations for making their life easier.

The situation of migrants is one of the important issues in Turkey. With the regulations related to COVID-19, migrants are examined in health institutions according to case algorithms, too. If necessary, samples are taken from them and isolation rules are applied for 14 days under observation. The migrants are also trained on COVID-19 in Migrant Health Centers. They are informed about the prevention measures of the disease. Likewise, informative materials on COVID-19 are prepared and translated into other languages for them. The Ministry of Health has also made regulations for everyone to utilize personal protective equipment, diagnostic tests, and medications used for related COVID-19 treatment regardless of whether if they have social security or not <sup>[2]</sup>.

Currently, it is mandatory to wear a mask in public places such as markets, buses, and subway trains where physical distance rules might not be applied. Measures for physical distance rules must also be taken in such environments. Sales of products such as clothes and toys have been stopped, only food and cleaning products are allowed to be sold <sup>[2]</sup>. However, there are still some difficulties in practicing physical distance rules, especially in markets. Moreover, markets and public places are getting more crowded because of the good weather and Ramadan.

### **The Lessons Learned from the COVID-19 Pandemic in Turkey**

The world is still learning a lot about COVID-19 and how it will affect different populations <sup>[8]</sup>. Every country wants to take all possible measures to guard itself against COVID-19, so does Turkey. As in all countries, it is possible that some cases of COVID-19 in Turkey are still being missed, but it is thought that most are being picked up.

At first, there was too much misinformation about COVID-19 and it was really dangerous for the public health in Turkey. It has been seen that people should be informed about such diseases from reliable sources. It has also been seen that the spread of rumors and misinformation can cause the potential panic and discrimination.

Prevention and mitigation interventions by the government must be employed, and the government has to work on this seriously with the help of specialists. Additionally, evacuation and quarantine processes should be prepared in a very detailed manner. The economic, psychological, and social aspects of them should be evaluated carefully. Some practices in those processes can lead to health concerns, economic and social anxieties in the public <sup>[16]</sup>. Therefore, new problems might appear in time, which can also make the existing situation even harder. The Government of Turkey should be well-prepared for those processes and should manage them keeping in consideration all possible social problems.

One important point is about the socio-economic status of people in Turkey. Turkish citizens who are living in poor and overcrowded areas and who had to close their business places temporarily or who had to leave from the work during the pandemic have been confronted with significant socioeconomic obstacles. In these circumstances, the government should support those people socially and economically with well-prepared regulations. According to the article of Açıkgöz & Günay, the Government of Turkey announced a \$15.4 billion economic stimulus package on March 18, 2020, and introduced “a mix of tax cuts, payment deferrals and increased pension pay-

puts to help citizens and businesses”; but the government should take measures for long term to save jobs and reduce the burden on people who have left work. Turkey has been the host country for the largest refugee population, in particular for Syrians, in the world for quite a while, and this situation will also bring a financial burden to Turkey<sup>[17]</sup>. Hence, the Turkish economy is under the danger of a financial crisis, and Turkey should take life-saving measures to cope with this crisis.

COVID-19 pandemic in Turkey has revealed the value of the health-care workers. Like previous pandemics, it has also shown the importance of a well-prepared national pandemic plan, trained health workers and specialists, in particular ICU specialists, infectious disease specialists, public health specialists and epidemiologists. Turkey has also seen that the importance of education, training, adequate personal protective equipment, especially masks, tests, ventilators and updated protocols. Additionally, the importance of public advices, sanctions and applications regarding hygiene and social distancing has been understood. In sum, like other countries in the world, Turkey has seen that national preparedness and community engagement is very important for fighting pandemics, too.

The Ministry of Health of Republic of Turkey has not collaborated with the Turkish Medical Association during the COVID-19 pandemic. The Ministry of Health should work together with the Turkish Medical Association, and they should inform the public with common infographics, texts, brochures, videos, etc. which is important for creating an environment of trust in Turkey<sup>[11]</sup>. Moreover, the decisions of the Scientific Board have not been shared during the pandemic. Those decisions should be shared with Turkish society transparently again for creating trust in the management of the pandemic<sup>[18]</sup>.

Consequently, Turkey should work on worst-case scenarios and prepare for mitigation measures in a pandemic like the rest of the world<sup>[8]</sup>. Turkey also has to rethink the health services and health policies to ensure the continuity of critical health services. The Government of Turkey and its partners have to prepare health services well and work on other critical measures and possible challenges for such health crises like pandemics. Additionally, as Açıkgöz & Günay argue: “This pandemic has severe adverse effects on the employees, customers, supply chains and financial markets” and it will probably cause a global economic recession<sup>[17]</sup>. Açıkgöz & Günay also argue<sup>[17]</sup>: “It seems that this pandemic will lead to a permanent shift in the world and its politics, especially in health, security, trade, employment, agriculture, manufacturing goods production and science policies”. Therefore, Turkey also should develop new strategies to prepare for the post-pandemic world like other countries in the world.

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