

COVID-19 Diaries of Higher Education during the Shocking Pandemic

COVID-19 Pandemisinde Yükseköğretim Günceleri

Zeliha Kocak Tufan¹⁻³

¹Ankara Yıldırım Beyazıt University, Faculty of Medicine, Infectious Diseases & Clinical Microbiology Department

²Executive Board Member of Council of Higher Education of Turkey [YÖK]

³Member of COVID-19 Scientific Board of Ministry of Health of Turkey

ABSTRACT

The ongoing pandemic due to SARS CoV2 is really a big one, which would never welcomed from any countries anytime, but knocked the door all of a sudden! The SARS CoV-2 first appeared in China in late December 2019. The virus isolated on January 7, 2020; the disease named as COVID-19 afterwards. Since this was a SARS virus not an influenza, nobody seem to expect it as a pandemic agent, spread so fast and so globally. But actually it did spread to many countries and declared as a pandemic by the World Health Organization on March 11, 2020. The pandemic hit the universities hard. The most important topic for universities during the pandemic was of course distance and remote learning, which become widespread already. The pandemic will cause profound impacts and changes on the higher education system around the world in terms of education-teaching methods, research, internationalization and mobility. The response of Council of Higher Education of Turkey to pandemic could be evaluated in four phases: 1) Close monitoring, 2) Preparing, 3) Action, 4) New normalization. In this paper we will review the response of Turkish higher education institutions and Council of Higher Education to the COVID-19 pandemic.

Key Words: Universities, education, virus, pandemic.

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ÖZET

Halihazırda devam eden SARS CoV-2 salgını, çok büyük ölçekte ve beklenmedik bir şekilde tüm ülkelerin kapısını çaldı! SARS CoV-2, ilk olarak Aralık 2019'un sonlarında Çin'de ortaya çıktı. Virüs 7 Ocak 2020'de izole edildi; daha sonra hastalık COVID-19 olarak isimlendirildi. En başta etken bir SARS virüsü olduğundan, salgını yakın takip etmekle birlikte, kimse influenzalara benzer küresel çapta bir salgın beklemiyordu. Ancak virus bir çok ülkeye yayıldı ve 11 Mart 2020'de Dünya Sağlık Örgütü tarafından pandemi ilan edildi. Salgının en çok etkilediği yerlerden biri üniversitelerdi. Pandemi sırasında üniversiteler için en önemli konu elbette, an itibarıyla çoktan yaygınlaşan, uzaktan öğretim idi. Öyle görünüyorki pandemi, eğitim-öğretim yöntemleri, araştırma-geliştirme, uluslararasılaşma ve hareketlilik açısından dünyadaki yükseköğretim sistemi üzerinde derin etkilere ve değişikliklere neden olacak. Türkiye'de Yükseköğretim Kurulu'nun pandemiye yanıtı 4 aşamada değerlendirilebilir: 1) Yakın takip dönemi, 2) Hazırlık dönemi, 3) Eylem dönemi, 4) Yeni normalleşme dönemi. Bu yazıda, Türk yükseköğretim kurumlarının ve Yükseköğretim Kurulu'nun COVID-19 salgınına tepkisi ve aldıkları tedbirleri özetleyeceğiz.

Anahtar Sözcükler: Üniversiteler, eğitim, virüs, pandemi.

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ORCID ID: Z.K.T. 0000 0002 3294 014X

Address for Correspondence / Yazışma Adresi: Zeliha Koçak Tufan, MD, Prof. Ankara Yıldırım Beyazıt University Faculty of Medicine Infectious Diseases and Clinical Microbiology Department Ankara, Turkey. E-mail: zktufan@ybu.edu.tr

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INTRODUCTION

For a hundred year, since the Spanish flu (*Influenza A H1N1*) pandemic of 1918, which is the biggest one among others, the academic life was never effected from a pandemic in this range. After Asian flu (*Influenza A H2N2*, 1957) and Hong Kong flu (*Influenza A H3N2*, 1968), the last pandemic within the last century was swine flu of 2019 (*Influenza A (H1N1)pdm09*), etiology of which was also an influenza virus like others (1). Although millions of cases detected worldwide and has been lasting more than ten years, the swine flu didn't affect our globe like COVID-19 does, which not just affected the health care but caused dramatic effects on education, global travel and trade. The ongoing pandemic due to SARS CoV2 is really a big one, which would never welcomed from any countries but knocked the door all of a sudden! The SARS CoV-2 first appeared in China in late December 2019, virus isolated on January 7, 2020, the disease named as COVID-19 (refers to new coronavirus disease of 2019) afterwards. Since this was a SARS virus not an influenza, nobody seem to expect it as a pandemic agent, spread so fast and so globally (Figure 1). But actually it did spread to many countries and declared as a pandemic by the World Health Organization (WHO) on March 11, 2020 (2-3).



Figure 1. The COVID-19 pandemic affected our globe all of a sudden (Figure: Courtesy of Dr.Merve Evren).

The COVID-19 pandemic affected all aspects of life. To prevent further increase of the number of the cases, many countries applied different measures, closing schools and markets, suspending flights etc. (4). Even there are programmes and indexes for comparison of different measures of different countries. There are teams who are monitoring 170 interventions in 52 countries, ranging from small measures to restrictive policies such as school closures while another team from Oxford is monitoring 13 interventions in more than 100 countries, which afterwards compiles 7 of the 13 into a single 'stringency' index that captures the overall severity of each country's response. These indexes and response checkers will allow us the comparison of countries that take different approaches (5).

The pandemic hit the universities hard (6). Thousands, millions of people are not in their workplace or classrooms neither in laboratories or research centers anymore. Many universities also suspended their face to face education, meetings and research plans. Still, several try to survive and continue on digital platforms. Those who already get used to open and distance learning had advantage over others. The infrastructure for distance learning became extremely important. While some part of the formal education can survive on digital platforms many researchers didn't have the same chance to continue their research within the campus. The universities are also the places for innovation and research which can serve to stop the spread of the pandemic. The Turkish higher education system also switch to online teaching like many other countries. In this paper we will review the response of Turkish higher education institutions (HEIs) and the Council of Higher Education (CoHE) to the COVID-19 pandemic.

Universities

Drug studies, clinical research, vaccine development, designing of personnel protective equipment... All of these subjects are among the interest of academy. In the modern world, the new model of universities interested in more cooperation with the industry, which is vital in a pandemic as well. The universities and other HEIs play extremely important role because they can help to stop the spread of the outbreak; they can improve guidelines; provide health care; make research on the virus and potential vaccines, work with local health authorities etc. The social programmes and academics of HEIs are also important in terms of serving the society (Figure 2). The pandemic and quarantine duration is a hard time to cope with, so the academy can serve the society by running webinars, giving online consultations or making broadcasts etc. (4).

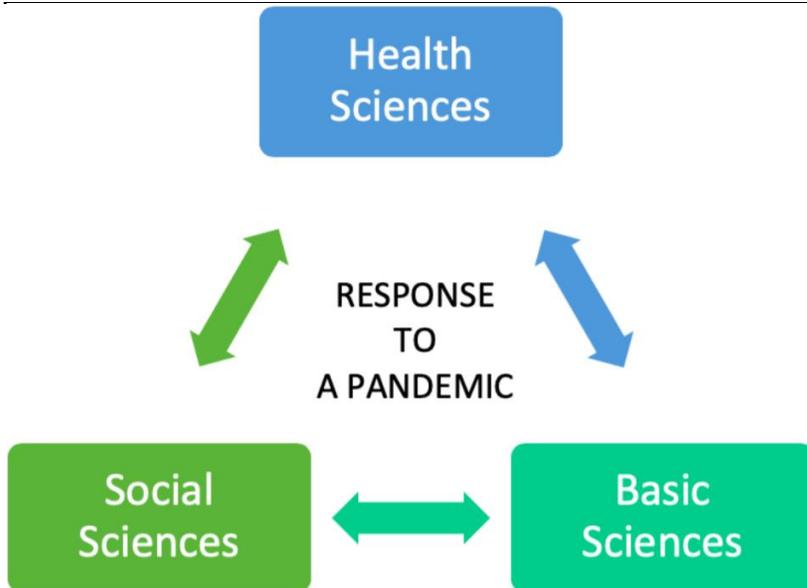


Figure 2. Studies and contribution of all sciences and different professionals are vital during a pandemic.

The most important topic for universities during the pandemic was of course distance and remote learning, which become widespread already. The pandemic will cause profound impacts and changes on the higher education system around the world in terms of education-teaching methods, research, internationalization, and mobility (7). There are many advantages and disadvantages of distance learning, since it is experienced worldwide and massively, the role and new aspects of online learning seem to be discussed widely this fall and after the pandemic ends (8). The main concern in different geographic regions were those students living in rural areas who have no or poor opportunities to access internet connections and facilities. International students issue was another problem. Those students who went their homeland never know if they can turn back to their school. Many may experience health insurance problem if they dare to stay in another country. Pandemic started on spring holiday of some universities and there are also students who left the campus, leaving their staff there without being aware of the upcoming pandemic. There are also others whose life was depending on the part time job in the campus, and left with nothing to do after the campus closed (9).

The response of Turkish Universities to pandemic was relatively rapid. In all Turkish Universities, New Coronavirus Outbreak Advisory Committee's (COV COMs) are established to run dynamic solutions for distance and remote learning, keep the campuses safe and healthy for the remaining staff (4).

Since March 23, distance learning process was also started in Turkey. According to a survey study on this issue, 121 (64%) of 189 HEIs were started on March 23, while 41 (21.6%) were on March 30 and 25 (13.2%) were on April 6 (10). The universities use distance learning methods synchronously or asynchronously in all courses of formal education programs (Figure 3-4). The total number of courses of Turkish HEIs during spring term was normally 736,341. Approximately 89 and 90 percent of the courses in this context were opened to distance learning by foundation and state HEIs, respectively (Figure 5). Of course the practical part of the education interrupted broadly at the beginning of the pandemic. Particularly engineering, 3+1 and 7+1 programmes, industrial practices, dentistry, nursing, midwifery, pharmacy, physiotherapy practices and also medical degree practices suspended at first. Still, the medical schools are allowed to make their own decision about last year medical students, the internships, to continue or not, to their clinical practices. Also voluntarily work within the hospitals are allowed for those last year students who were soon graduate after completing their internships. Not only Turkey suspended their formal campus education of course, nearly 180 country closed their schools county-wide, either schools at different levels or higher education or all (11). Different approaches and examples from different countries exist (13). The HEIs in USA is given in Table 1, as examples of school re-opening plans in this fall (Table 1).

The pandemic is a dynamic situation. The measures at the beginning of the pandemic, during the pandemic and in post-pandemic period will be different. The economic outcomes of the pandemic will affect the HEIs and their measures for the future. For small HEIs, Covid-19 could be a stimulus for a windfall. Are the HEIs all around the world will be ready for a different kind of teaching this fall? (8) We will see.

Table 1. Plans of some American Universities for fall semester (8)

Boston University (Private)	Leaning toward in-person classes
Cornell College (Private)	Expanded its existing block calendar to 10 3.5-week sessions to allow maximum flexibility to either return to campus or continue distance learning in the fall
Cornell University (Private)	No decision expected until June
Drexel University (Private)	Hopes to receive task-force recommendations on fall semester by early June
Duke University (Private)	Expects final recommendations by the end of August
Harvard University (Private)	The campus will be open, but the provost says "we will need to prepare for a scenario in which much or all learning will be conducted remotely."
Ohio State University (Public)	Leaning toward in-person classes, with a final decision by late June
Princeton University (Private)	Decision expected in early July, asked faculty to assume classes will be online when planning
University of Miami (Private)	"Our expectation is to begin our fall semester on time and on campus, so long as we can do so safely."
Washington State University (Public)	Planning for in-person classes
Yale University (Private)	Decision expected by early July

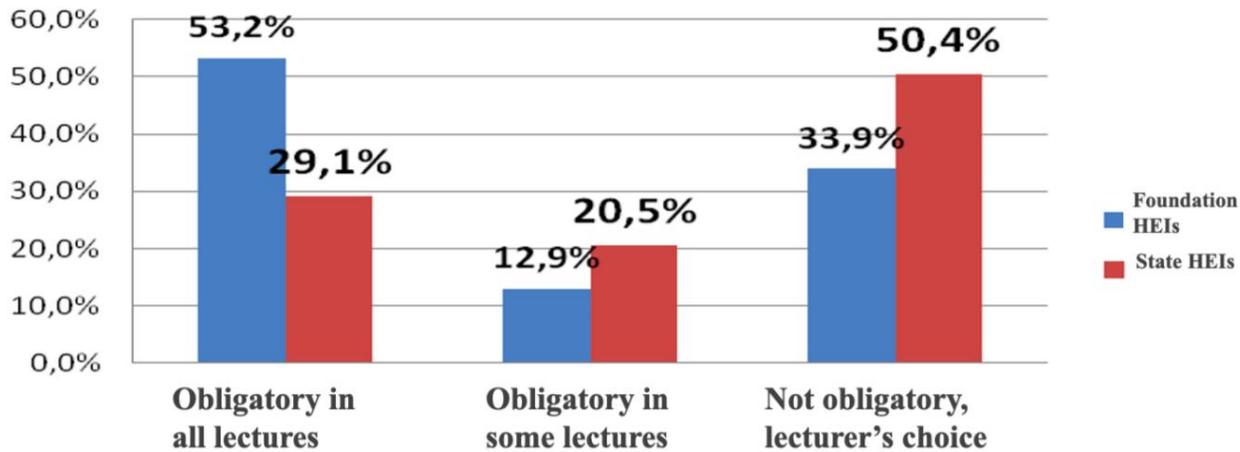


Figure 3. Ratios of synchronous lectures in different programmes of HEIs of Turkey (more than one choice was available) (10)

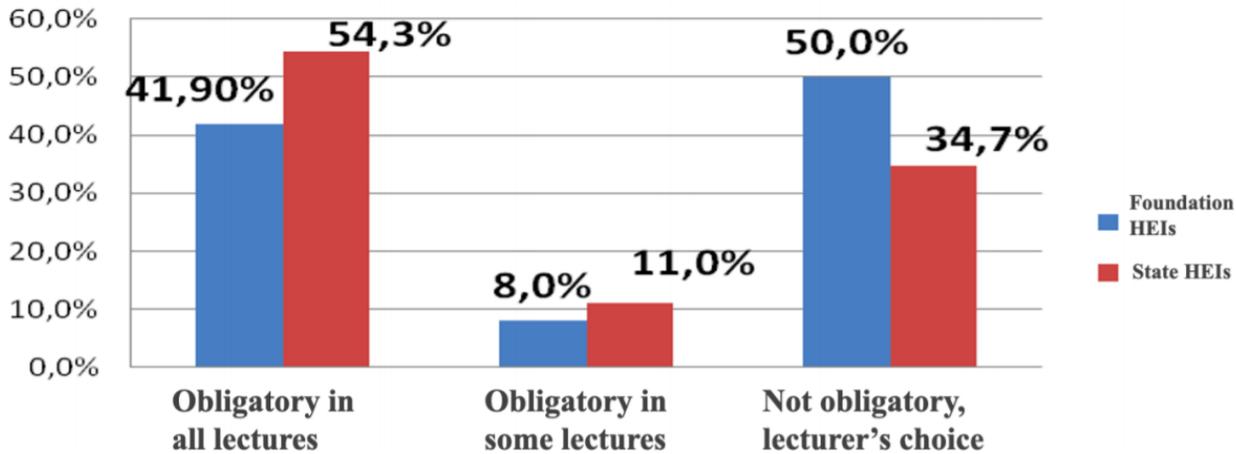


Figure 4. Ratios of asynchronous lectures in different programmes of HEIs of Turkey (more than one choice was available) (10)

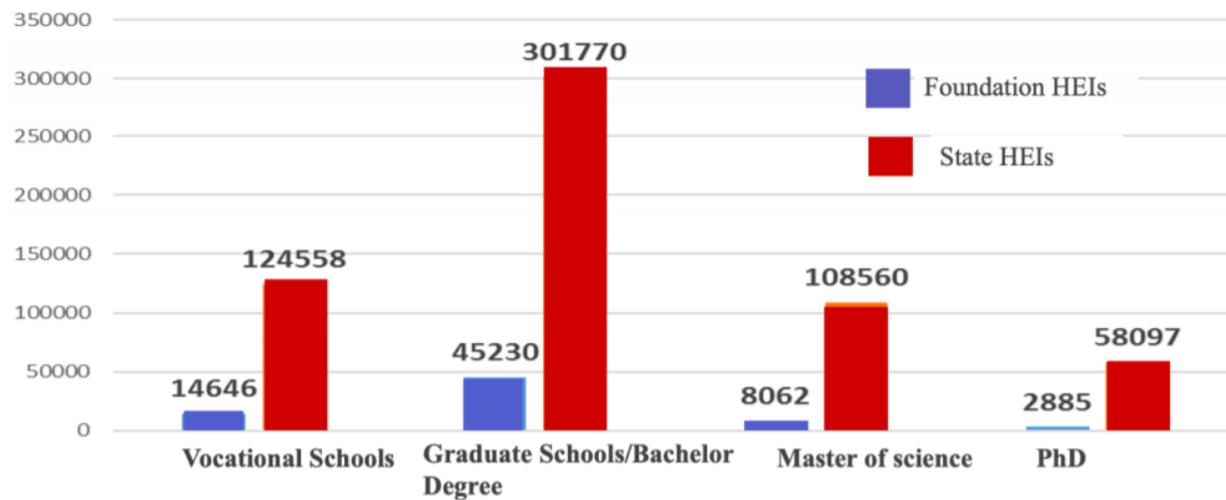


Figure 5. Number of courses opened to distance learning in Turkish HEIs (10)

Among the most affected programmes are medical degrees and other health programmes. While UK medical schools have been urged to fast-track final year medical students into the workforce, in USA, the high probability that medical students in the hospital would be exposed to outbreak cases and the need to conserve PPE seemed to outweigh the educational benefits of students' participation at the beginning of the outbreak (13,14). Even the Association of American Medical Colleges recommended that member schools suspend clinical rotations for medical students for several weeks (14). Although Harvard University designs many things to be remote and distant (teach remotely, learn remotely, work remotely, research remotely, socialize remotely), they underline that medical students need to complete rotations and patient exams to meet graduation requirements. But of course not without ensuring the safety of students, patients, staff and faculty. They also recommend medical students not to be involved in the care of patients with confirmed or suspected COVID-19 (15). This could be a model for other medical schools as well. The practices for different programs and clinical practices for the medical and other programs of health care school students have been concerning (16). About the students' and trainees' involvement in the care of COVID-19 patients are important issues to be solved for different universities who have different infrastructures. We have to be ready which measures to be taken to fill in the blanks after post-pandemic period.

The response of Council of Higher Education to pandemic

The universities are autonomous in Turkey. A Ministry of Higher Education does not exist. But the Council of Higher Education Turkey (CoHE, YÖK) is the constitutionally governing body responsible for strategic planning, coordinating, supervising and monitoring of all higher HEIs in Turkey. Turkish higher education era is a huge one, with almost 8 million students and 207 HEIs. A direct comparison of response to pandemic with other countries' measures would not be fair, since the student number is already double or triple comparing with many other countries. Still, many successful measures are taken (17).

Chronicles of CoHE During COVID-19 Pandemic

- 1st Phase: Close Monitoring
 December 30, 2019- January 2020, close monitoring of the new epidemic in China: One of the executive member of CoHE was selected to Coronavirus Scientific Board of Ministry of Health, which held its 1st meeting on January 10. The Board revised The Pandemic Influenza Plan of 2019 and adapted to new ongoing epidemic in China. First meetings with Executive Board Members about the new epidemic also gathered in CoHE. WHO, which released the Situation Reports daily and declared *global health alert* on January 30 and the *pandemic* on March 11, was closely monitored.

- 2nd Phase, Preparing:

February-March 10, 2020, thinks were getting serious: The pandemic reached to other countries. World was alert. Still no cases in Turkey. Time to perform regulations towards definite applications. International relations department of the CoHE was also informed about the pandemic and was in charge to examine and make reports about the responses of other countries. The exchange programmes, common international researches and international meetings/congress were the main topics in many universities: to cancel them or not? The CoHE release a regulation about international meetings to the universities. The regulation focused on cancelling the elective international meetings, taking proper hygiene precautions in national meetings, avoid making meetings with academicians from countries with high number of cases and avoid stigma if any visiting academicians from those countries exist.

Those times, even The European Society of Clinical Microbiology and Infectious Disease (ESCMID), the society of those who were fighting with the pandemic, was in doubt and tried not to cancel their congress which will be held in April 2020. On March 10, they couldn't stand anymore but had to cancel the congress. They explained the situation as follows: *'After very careful deliberation and consideration, the ESCMID leadership decided yesterday to cancel the on-site part of this year's ECCMID in Paris and to proceed with the preparation of a completely online ECCMID 2020'*. Hundreds of meetings and congresses were already cancelled at that time.

- 3rd Phase, Action:

March 2020, continuous direct contacts with the rectors of the universities: Turkey's first case was announced by the MoH of Turkey on March 10. Continuous and direct connections were established between Higher Education Board Members and university rectorships under the Presidency of CoHE. Transition to online education has been initiated. Online Education Commission was established and composed of specialists on online education, educational technology experts, computer and software experts. This commission prepared a road map for online education during pandemic (7). The Government of Turkey announced school closure on March 12, to be started from March 16. After one week the HEIs of Turkey supposed to start distance learning. Those HEIs with relevant infrastructure and human resources started as soon as possible while some others needed to use others infrastructure or Learning Management Systems. As a third option, a CoHE Courses Platform, which consist of over two thousand open course materials of Turkey's leading universities, was initiated (7).

April 2020, continuous direct contacts with the HEIs: Beside rectors, meetings with the deans of different faculties initiated. Each Executive Board Member of CoHE was responsible from different faculties. Meetings were all held in on-line platforms. The head of each Deans Councils were responsible from making surveys and preparing reports on ongoing distance. All deans gathered to solve common problems and share good practices.

The President of CoHE explained the key-decisions of CoHE in his paper published in University World News as following (7):

- *The universities could use distance learning methods synchronously or asynchronously in all courses in formal education programs, provided that they are limited to the spring semester of 2019-2020 academic year.*
- *Universities, deans and academics are planned to prepare theoretical lessons in programs at all levels through distance learning and to prepare intensive academic calendars for applied lessons in August and September.*
- *The competent boards of HEIs are responsible to perform the issues related to exams and the evaluation of student success in line with the principles determined in a legally controllable manner, by considering the learning outcomes of the related program and the conflicts that may occur in the subsequent processes, and this decision was conveyed to the universities.*
- *The proficiency exams in postgraduate programs, meetings of thesis monitoring committees and thesis defenses can also be held in the digital environment provided that the necessary infrastructure is established and the condition of the examination process is recorded and provided to be auditable.*

- *Universities were asked to consider the disability status of students with disabilities as much as possible in any measures and practices they would take regarding distance education.*
- *The central university exam, which is attended by about two million five hundred thousand students, is postponed to a date considered safe.*

- 4th Phase, New Normalization:

May 2020, the world is preparing to the new normalization. The pandemic is not under control in many countries. According to UNESCO reports around 180 countries closed schools as of May 07 (11). The curve has not decline in many countries yet but several learned how to deal with it. Life goes on and the economic and social concerns are high in many countries. That is why so-called new normalization is started in many countries before the pandemic ends. Without underestimating the seriousness of the current pandemic and the public-health crisis it had caused, HEIs still need continue to higher education and research studies (6).

DISCUSSION and CONCLUSION

COVID-19 pandemic taught us a lot. It seems that we will be discussing the pandemic and the role of universities for a long time while we are facing with different aspects of the pandemic. As it is once stated in an editorial in Nature: *New collaborations are being rapidly forged between universities, and between researchers from different fields and with different expertise, to study, treat and try to curb the virus* (6).

Universities have been facing with tough decisions during pandemic, so the CoHE. The pandemic is a dynamic situation and no one can be prepared hundred percent properly. For the immigrants, international students, those students whose life depend on campus jobs etc., the pandemic time is a time of extraordinary stress. Still the very first and main concern for all universities in the world was distance and remote learning. Many Turkish Universities, especially the foundation universities were ready with their infrastructure: 128 universities of Turkey already had distance learning centers before the pandemic shows up. The CoHE initiated Digital Transformation Project two years ago, and already opened intensive programs for academicians and students in those universities which are located in relatively underdeveloped or developing regions; 6000 lecturers of 16 universities were given digital course material preparation courses and a digital competency course was put in the curriculum of more than 50 thousand students as the credit course (7). Will distance learning raise a generation the society needs? The President of the CoHE, Prof. Saraç raised the issue in his paper in the University World News: *Because the unions such as economy, public administration, health policies, international relations, and European Union will be affected, the change of the paradigm of education will inevitably reveal different social structures in the future. It will be more difficult for the universities to raise people who are reliable with society, respect the differences and have the ideal to contribute to their country and the world that embraces human values*. Still distance learning has many pro and cons to be discussed. Nevertheless for sure the distance learning opportunity kept the HEIs connected with the academicians and students during the pandemic period. What we learned from the pandemic era will strengthen our higher education system in the future.

Conflict of interest

No conflict of interest was declared by the author.

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