

COVID-19 pandemic had negative impacts on clinical training of sports medicine residents

Ömer Serkan Kara¹ , Bülent Ülkar²

¹Department of Sports Medicine, Health Sciences University Gülhane Medical Faculty, Ankara, 06010, Turkey

²Department of Sports Medicine, Ankara University Medical Faculty, Ankara, 06590, Turkey

COVID-19 pandemic affected health care services all around the world. Accordingly, medical education is disrupted at every level from the first grade of medical school to residency programs. Although the theoretical part of the education has somehow been continued with methodological changes, the clinical training of the sports medicine (SM) residents was negatively impacted by the pandemic. In Turkey, clinical training of SM residents mainly consists of examining patients under the supervision of professors at outpatient clinics, 17 months of clinical rotations in several departments and involving in the sports rehabilitation processes of the injured or operated athletes. As of the outburst of the pandemic, hospitals decreased the outpatient admissions and cancelled the sports rehabilitation services to avoid unnecessary contact. Moreover, all residents have been assigned to COVID clinics, some of them worked in intensive care units, as previously reported. (1,2) Ustaoglu reported that more than half of the 215 dermatologists were entrusted with a task related to COVID patients in Turkey. (3) Residents who started their training in 2019 and afterward were subjected to a quite divergent education scheme than it was before pandemic. We aimed to depict the deterioration of resident training in terms of outpatient admissions in SM departments to direct attention to necessity of future planning to take measures in order to eliminate the deficiencies in this unprecedented period.

Data Collection

Six of the eight university hospitals having sports medicine residency programs in Turkey provided statistical data related to outpatient admission numbers on monthly basis from August 2018 to November 2021. Since the ministry of health declared the first COVID-19 case on 11th March, 2020, we asked for the outpatient admission numbers 19 months before and after this date. This data provided by 6 university hospitals were enlisted as UH1- UH6 (Table 1). Descrip-

tive statistical analyses were made using Microsoft Office (Figure 1). The number of patients in the same month of the year before and after March 2020 were compared for all and each clinic separately and demonstrated in a graph (Figure 2) to compare the effect of the pandemic.

Table 1. The raw data demonstrates the monthly alterations due to the pandemic in the number of outpatient admissions to SM departments.

	UH-1	UH-2	UH-3	UH-4	UH-5	UH-6
August 2018	303	302	340	376	165	153
September 2018	434	386	630	309	212	214
October 2018	393	366	630	455	291	421
November 2018	349	346	597	544	238	216
December 2018	316	271	587	476	238	191
January 2019	304	330	805	485	242	211
February 2019	300	330	726	434	303	209
March 2019	366	321	763	532	274	229
April 2019	365	292	823	498	314	183
May 2019	310	305	796	507	301	167
June 2019	272	137	486	348	234	144
July 2019	308	283	509	476	357	245
August 2019	280	285	477	464	288	317
September 2019	431	360	523	548	328	432
October 2019	345	298	684	575	445	377
November 2019	365	289	692	573	340	401
December 2019	384	290	729	631	331	240
January 2020	390	257	678	574	342	219
February 2020	376	234	610	532	371	195
*March 2020	224	159	312	325	265	112
April 2020	17	20	284	29	20	0
May 2020	184	43	191	46	34	0
June 2020	518	107	277	224	187	73
July 2020	519	164	161	314	184	136
August 2020	293	162	172	409	214	162
September 2020	507	156	200	385	199	100
October 2020	415	186	336	386	172	105
November 2020	404	189	245	365	177	72
December 2020	419	156	465	346	150	4
January 2021	407	144	569	354	157	85
February 2021	453	204	551	377	221	111
March 2021	477	187	747	490	289	150
April 2021	474	162	529	393	247	131
May 2021	244	93	370	281	184	102
June 2021	311	153	600	432	325	192
July 2021	269	118	566	317	176	179
August 2021	373	192	790	435	229	253
September 2021	342	191	881	484	209	273
October 2021	356	173	731	432	220	263

*: The first COVID-19 case was declared on 11th of March, 2020, in Turkey.

Published: 01.03.2022

Correspondence: Bülent Ülkar · Ankara Üniversitesi, Tıp Fakültesi, Spor Hekimliği Bölümü, Ankara, Turkey · ulkar@medicine.ankara.edu.tr

Cite this article as: Kara OS, Ülkar B. COVID-19 pandemic had negative impacts on clinical training of sports medicine residents. *Turk J Sports Med.* 2022;57(1):1-2
<http://doi.org/10.47447/tjism.2022.0001>

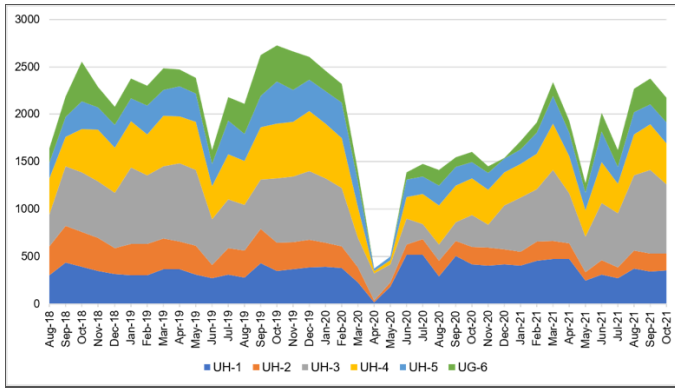


Figure 1. Alterations in the number of admissions to SM outpatient clinics on monthly basis.

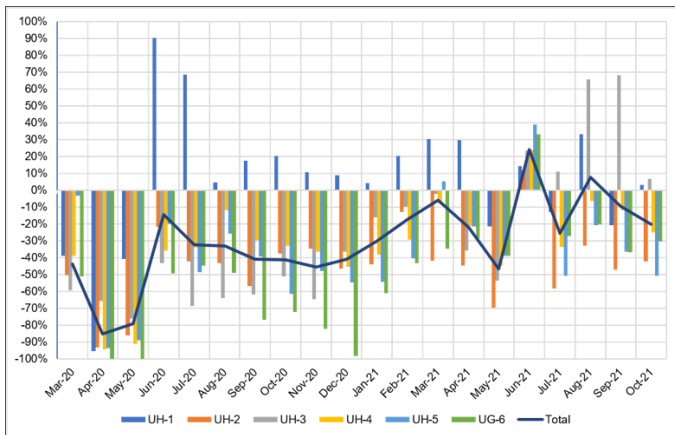


Figure 2. Comparison of monthly outpatient applications after the onset of the COVID-19.

Results and Discussion

The data demonstrated the dramatic drop in the number of admissions to SM clinics with the start of the pandemic in Turkey (Figure 1). Even though the numbers showed an increasing trend after a few months, the total number of admissions were 40% lower than normal for six months (Figure 2). The average number of total admissions has been found to be 30% lower since the beginning of the pandemic. In contrast to the others, UH-1 had an increase in admissions with the pandemic. This was due to the PCR testing of several soccer teams in Ankara, performed in the SM department of UH-1 before vaccination program has started. Another remarkable point in Figure 2 is that UH-3 had a divergent increase in September and October 2021.

Each specialty has unique settings with various challenges requiring different approaches to compensate the deterioration of its well-established pre-pandemic clinical training such as radiology, neurosurgery, and gastroenterology. (4-6) Mok et al. provided some recommendations about how to continue resident training in emergency medicine during the pandemic. (7) Schwartz et al. suggested strategies for orthopedics and traumatology residents to compensate for

the deficiencies in the clinical training. (8) Specialty specific modifications may be established according to the specialty’s conditions and terms in each country. In Turkey, the privilege of prolonging the residency period up to 6 months due to pandemic has been warranted to all residents by the higher education authority (YOK) in November 2020.

Medical doctors should complete a 4 years residency training in one of the 8 university hospitals SM departments in Turkey. The placements are done once or twice a year for each department depending on their need for a resident doctor, and one or two residents can be placed at the same time. This naturally creates 6 to 12 months of gap between each resident if there are no resignations. Therefore, a resident is usually expected to complete any particular part of their residency training, so that the following one can start the same part on time. This systematic has lost its balance during the pandemic. The academic staff who are supervising the residency program need to review and revise it to assure the competency of residents whose trainings were impacted because of the pandemic.

We would like to underline an important issue in SM resident training in Turkey, particularly for those who started their residency programs in the last 3 years. It is obvious that a well-structured compensation method should be introduced based on not only just prolonging the residency period but also improving the training program of residents who had to confront several shortcomings in terms of clinical and academical proficiencies.

Conflict of Interest

The authors declared no conflicts of interest with respect to authorship and/or publication of the article.

Financial Disclosure

The authors received no financial support for the research and/or publication of this article.

REFERENCES

- Chertoff JD, Zarzour JG, Morgan DE, Lewis PJ, Canon CL, Harvey JA. The Early Influence and Effects of the Coronavirus Disease 2019 (COVID-19) Pandemic on Resident Education and Adaptations. *J Am Coll Radiol.* 2020;17(10):1322-28.
- Wong C, Tay W, Hap X, Chia F. Love in the time of coronavirus: training and service during COVID-19. *Singapore Med J.* 2020;61(7):384-386.
- Ustaoglu E. The impact of COVID-19 pandemic in dermatology outpatient clinics in Turkey: A survey study. *J Cosmet Dermatol.* 2021;20(8):2382-2386.
- Khan R, Tandon P, Scaffidi MA, Bishay K, Pawlak KM, Kral J, et al. COVID-19 and Canadian Gastroenterology Trainees. *J Can Assoc Gastroenterol.* 2021;4(3):156-162.
- Kanmounye US, Esene IN. Letter to the Editor “COVID-19 and Neurosurgical Education in Africa: Making Lemonade from Lemons.” *World Neurosurg.* 2020;139:732-733.
- Lanier MH, Wheeler CA, Ballard DH. A New Normal in Radiology Resident Education: Lessons Learned from the COVID-19 Pandemic. *RadioGraphics.* 2021;41(3):E71-E72.
- Mok G, Schouela N, Thurgur L, Ho M, Hall AK, Caudle J, et al. Resident learning during a pandemic: Recommendations for training programs. *CJEM.* 2020;22(5):617-621.
- Schwartz AM, Wilson JM, Boden SD, Moore Jr TJ, Bradbury Jr TL, Fletcher ND. Managing Resident Workforce and Education During the COVID-19 Pandemic: Evolving Strategies and Lessons Learned. *JB JS open access.* 2020;5(2):e0045-e0045.