Assessment of Mental Health Status and Associated Factors Among Physical and Rehabilitation Medicine Physicians Amid the Covid-19 Pandemic

COVID-19 Pandemisi Sürecinde Fiziksel Tıp ve Rehabilitasyon Hekimlerinin Mental Sağlığının Değerlendirilmesi ve İlişkili Faktörlerin Değerlendirilmesi

Onur Engin[1], Başak Şenel Kara[2], Ömer Faruk Dadaş[3], Banu Dilek[4]

[1]Karadeniz Ereğli Devlet Hastanesi, Fiziksel Tıp ve Rehabilitasyon, Zonguldak, Türkiye.
[2]Karadeniz Ereğli Devlet Hastanesi, Psikiyatri Kliniği, Zonguldak, Türkiye.
[3]Ege Üniversitesi, Biyoistatistik Anabilim Dalı, İzmir, Türkiye.
[4]Dokuz Eylül Üniversitesi Hastanesi, Fiziksel Tıp ve Rehabilitasyon Anabilim Dalı, İzmir, Türkiye.

ABSTRACT

Objective: The present study analyzes the mental health status and sleep patterns of Physical Medicine and Rehabilitation (PMR) physicians (physiatrists), as well as other associated factors, during the COVID-19 pandemic.

Method: The physiatrists that made up the sample were reached via an online questionnaire form collecting data on their demographic characteristics and the working conditions in PMR and pandemic outpatient clinics, while the Depression, Anxiety and Stress Scale-Short Form (DASS-21) and Insomnia Severity Index (ISI) were applied to measure mental status and sleep quality, respectively.

Results: The study included 309 PMR physicians. The results of the DASS-21 identified symptoms of depression in 58.6%, stress in 40.5% and anxiety in 54.4% of the physicians during the pandemic, while the results of ISI revealed insomnia symptoms in 45.3%. The DASS-21 depression, anxiety and stress subscales, and the ISI scores of the physicians were found to have increased during the pandemic at a statistically significant degree. Multiple regression analyses revealed a strong relationship between total DASS-21 score, and the adequacy of information about COVID-19, performing procedures requiring close contact with patients, the presence of a person with chronic disease in the household and the female gender. Satisfaction with workplace hygiene, in turn, was found to significantly reduce the respondents' ISI scores.

Conclusion: The mental health and sleep quality of physiatrists have been affected significantly amid the pandemic. Necessary support should be provided to reduce the stress and anxiety experienced by physiatrists during and after the pandemic.

Keywords: coronavirus, COVID-19, mental health, insomnia, physical medicine and rehabilitation

ÖZ

Giriş: Bu çalışmada COVID-19 pandemi sürecinde Fiziksel Tıp ve Rehabilitasyon(PMR) hekimlerinin (fiziatrist), mental sağlık durumları ve uyku düzenlerinin incelenmesi amaçlanmıştır.

Yöntem: Fiziatristlere online anket aracılığı ile ulaşılmış ve demografik özellikleri, FTR ve pandemi polikliniklerindeki çalışma koşulları sorgulanmış, mental sağlık ve uyku kalitesi değerlendirmesi için sırasıyla Depresyon, Anksiyete ve Stres Skalası- Kısa Form (DASS-21) ve Uykusuzluk Şiddet İndeksi (UŞİ) uygulanmıştır.

Bulgular: 309 FTR hekimi çalışmaya dahil edilmiştir. DASS-21 sonuçlarına göre hekimlerin %58,6 depresyon, %40,5 stress ve %54,4 anksiyete, UŞİ skorlarına göre ise %45,3 ünde insomnia semptomları saptanmıştır. Pandemi döneminde DASS-21 depresyon, anksiteye ve stres subskalası ve UŞİ skorlarının istatiksel anlamlı derecede arttığı tespit edilmiştir. Multipl regresyon analizleri toplam DASS-21 Skoru ile COVID-19 hakkında yeterli bilgilenme, hastaya yakın temas gerektiren işlem yapma, ailede kronik hastalık bulunması ve kadın cinsiyet arasında anlamlı ilişki saptanmıştır. Çalıştığı ortamın hijyeninden memnun olmanın UŞİ skorlarını anlamlı derecede azalttığı bulunmuştur.

Sonuç: Fiziatristlerin mental sağlığı ve uyku kalitesi pandemi döneminde belirgin etkilenmiştir. Pandemi sürecinde fiziatristlerin stres ve anksiyetesini azaltmak için gerekli destek verilmelidir.

Anahtar Kelimeler: koronavirus, COVID-19, mental sağlık, insomnia, fiziksel tıp ve rehabilitasyon

INTRODUCTION

Coronaviruses (CoV) are enveloped RNA viruses, being a large family of viruses that cause illnesses ranging from mild infections, such as the self-limiting common cold, to more severe infections such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (1).

In December 2019, cases with pneumonia of an unknown cause were identified in the city of Wuhan, China, and in January 2020, the Chinese health authorities announced the identification of a novel coronavirus (COVID-19)(2). The World Health Organization classified the COVID-19 outbreak as "a public health emergency of international concern" on January 30, 2020 (3).

COVID-19 infections are asymptomatic in some cases, while symptomatic cases may present with fever, cough, dyspnea, nasal congestion, sore throat and gastrointestinal complaints (4). As of September 15, 2020, more than 29 million people had been infected with COVID-19, and 900,000 had died according to WHO data (5). The COVID-19 pandemic has not only had a detrimental effect on the healthcare sector but has also been linked to several social, economic and psychological problems. Based on experiences during previous life-threatening epidemics (SARS, etc.), the coronavirus pandemic can be expected to have psychological effects also on healthcare workers (6). Conditions such as exposure to the cause of a disease with no established treatment, the follow-up of patients with the potential for a worsening in condition at any moment, the burden of treating colleagues, the lack of appropriate personal protective equipment and the assuming of unusual clinical roles can all be expected to have psychological impacts on healthcare workers (7). Other factors with possible effects on healthcare workers include the fear of infecting family members, stigmatization and social isolation (8). Moreover the high rates of infection among healthcare workers further increases their anxiety.

Mental problems such as stress, anxiety and depression in such periods may impair the judgment and attention of physicians and affect their overall well-being. This has led WHO tohighlight the significance of the mental health of healthcare workers and to advise the mandatory protection of mental health to ensure the long-term capacity of the healthcare workforce (9).

Insomnia is one of the leading problems being experienced by healthcare workers during the COVID-19 pandemic, resulting from both psychological factors and varying working conditions. Insomnia has previously been identified in a considerable proportion of healthcare workers during other infectious outbreaks, such as SARS (10).

Like all specialties, physical medicine and rehabilitation physicians (physiatrists) have been actively engaged during the pandemic, working both in the outpatient clinics of their specialties and in the pandemic outpatient clinics and wards. They have not only been exposed to the risk of infection while at work but have also needed to deal with fatigue and insomnia due to shift work and increased working hours. The present study examines the mental health status and sleep quality, and other associated factors, among physiatrists during the COVID-19 pandemic.

MATERIALS AND METHODS

The study was approved by the Zonguldak Bülent Ecevit University Ethics Committee (2020/13). The study data were collected via an online questionnaire form between July and September 2020. The form was released via social media or sent out by e-mail, and volunteers who met the inclusion criteria were asked to respond to the scale items one by one after providing consent for their inclusion in the study. The study included physiatrists working in PMR outpatient clinics and/or pandemic outpatient clinics during the COVID-19 pandemic. The questionnaire was compiled in three sections: The first section garnered demographic data and information on the working conditions of P physicians in the outpatient clinics of their specialties, and in the COVID-19 outpatient clinics and wards; and the second section evaluated the mental health and sleep patterns of the respondents

before the COVID-19 outbreak and in the period since then, with mental health status and sleep patterns assessed using the Depression, Anxiety and Stress Scale-Short Form (DASS-21) and the Insomnia Severity Index (ISI), respectively. The third and final section asked the respondents to rate other factors with the potential to affect their mental health on a five-point Likert scale, such as anxiety related to the potential for infection to the self and family members, the lack of family visits, the effects on social life and limitations in social interactions, social stigmatization due to working in high-risk workplaces, working in an out-of-specialty area, and participating in the treatment of infectious disease when there is a lack of sufficient scientific knowledge on its course and treatment.

The original 42-item Depression, Anxiety and Stress Scale was first developed by Lovibond et al. (1995)(11), while the 21-item short form of the scale was developed later, to measure symptoms of depression, anxiety and stress in both clinical and non-clinical samples. In the short form of the scale, each subscale is measured based on seven items, and the respondents are asked to score each item on a four-point scale from "0: Did not apply to me at all" to "3: Applied to me very much or most of the time". The scores of each item are totaled and multiplied by 2 to match the original score in the DASS-42. Higher scores indicate higher levels of symptoms. The scale was adapted into Turkish by Sarıçam (2018) (12).

The Insomnia Severity Index (ISI) was developed to measure the severity of insomnia symptoms (13) and comprises seven items rated on a scale from 0 to 4. Possible scores range from 0 to 28, in which a score of 0–7 indicates insignificant insomnia, 8–14 indicates subthreshold insomnia, 15–21 indicates moderate insomnia, and 22–28 indicates severe insomnia. The validity and reliability study of the Turkish version was conducted by Boysanet al. (2010)(14). The scale is a self-reported instrument, but can also be applied by caregivers (partner/parent) or clinicians for the assessment of a patient.

Statistical Analysis

Descriptive data were presented as mean, standard deviation, median, minimum, maximum, frequency and percentage. The normality assumption for the quantitative data was tested with a Shapiro-Wilk test. A Wilcoxon Signed-Rank test was used to identify any statistical differences between theDASS-21 and ISI scores before and during the pandemic. Univariate analyses were performed using an Independent Samples t-test for normally distributed variables, and a Mann-Whitney U-test and a Kruskal-Wallis test (a Dunn's test for pairwise comparisons) for non-normally distributed variables. Additionally, correlations between quantitative data were assessed using Spearman's Tho correlation coefficient. The univariate analyses of the DASS-21 subscales included a simple linear regression analysis for variables with $p < 0.05$. The factors affecting the total DASS-21 and ISI scores were established through a multiple regression analysis that included the parameters with $p < 0.05$ (and considered clinically significant) in the univariate analyses. The IBM SPSS Statistics 25.0 (IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.) software package was used for all statistical analyses, for which the level of significance was set at $p < 0.05$.

RESULTS

309 PMR physicians with a mean age of 38.7±9.7 years were included in the study. The demographic data of the physicians included in the study are presented in Table 1.

In the physical therapy units of the hospitals in which the study physiatrists were working, outpatient admissions were halted in 184 (59.5%) and inpatients in 261 (84.5%). Among the physicians, 139 (45%) reported having to perform procedures requiring close contact with patients, including injections, manual therapy and electromyography.

Table 1: Demographic Data			
	Characteristic	**Number**	**%**
Gender	**Female**	195	63.1
	Male	114	36.9
Marital status	**Married**	233	75.4
	Single	76	24.6
Do you have any children?	**Yes**	189	61.2
	No	120	28.8
Do you have any chronic diseasas?	**Yes**	67	21.7
	No	242	78.3
Is there anyone with a chronic disease in your household?	**Yes**	88	28.5
	No	221	71.5
Your job title	**Resident**	80	25.9
	Specialist	166	53.7
	Faculty member	63	20.4
Place of work	**Secondary health care facility (state)**	56	18.1
	Tertiary healthcare facility	188	60.8
	Private hospital and office	46	14.9
	PMR specialty hospital	19	6.1
Has your hospital been declared as a pandemic hospital?	**Yes**	248	80.3
	No	61	19.7
Have you worked at a pandemic hospital?	**Yes**	176	57
	No	133	43

The results of the DASS-21 identified symptoms associated with depression in 58.6%, stress in 40.5% and anxiety in 54.4% of the physicians. The results of the ISI, in turn, revealed symptoms of insomnia in 45.3%. A statistically significant difference was noted in the total DASS-21 score, the DASS-21 depression, anxiety and stress subscale scores, and the ISI scores of the physicians between the values before and during the pandemic ($p<0.001$). The mean total DASS-21 score was 22.78 ± 17.50 before the pandemic compared to 36.22 ± 24.36 during the pandemic. The mean ISI score, in turn, increased from 4.71 ± 3.82 to 7.48 ± 5.30. Table 2 presents the symptom severity of physicians according to the DASS-21 subscale scores.

The univariate analysis revealed higher depression subscale scores ($p=0.014$), stress subscale scores ($p=0.020$) and total DASS-21 scores ($p=0.019$) among women during the pandemic. The anxiety subscale scores and ISI scores were not significantly associated with gender ($p>0.05$).

Physicians living with a family member with a chronic disease recorded higher total DASS-21 ($p=0.046$), stress subscale ($p=0.05$) and anxiety subscale ($p=0.028$) scores, as well as higher ISI ($p=0.021$) scores, while there was no significant association with the depression subscale scores. Table 3 provides the results of the univariate analysis of the relationship of scales and subscales with gender, marital status, parental status, presence of chronic disease and presence of a person with chronic disease in the household.

The residents and specialists recorded higher depression subscale scores than the faculty members in the study ($p=0.05$, $p=0.039$, respectively), while the other subscale scores and total scale scores were not significantly associated with job title.

The stress subscale scores were higher in the university hospital physicians than in those working in private hospitals ($p=0.037$). There was no significant association between place of work and other scales.

The total DASS-21 scores (0.027) and the stress subscale scores (0.008) were higher in physicians who performed procedures requiring close contact with the patient, such as injection, manipulation and electromyography.

Table 2: The DASS-21 Subscale Scores before and during the Pandemic, and the Symptom Severity of Physicians												
		Depression before the pandemic		Depression during the pandemic		Stress before the pandemic		Stress during the pandemic		Anxiety before the pandemic		Anxiety during the pandemic	
		n	%	n	%	n	%	n	%	n	%	n	%
The Symptom Severity (n)	Normal	187	60.5	128	41.4	261	84.5	184	59.5	209	67.6	141	45.6
	Mild	41	13.3	38	12.3	25	8.1	50	16.2	22	7.1	28	9.1
	Moderate	68	22.0	80	25.9	15	4.9	38	12.3	63	20.4	73	23.6
	Severe	9	2.9	30	9.7	8	2.6	27	8.7	8	2.6	27	8.7
	Very severe	4	1.3	33	10.7	0	0	10	3.2	7	2.3	40	12.9

The adequacy of information given by institution on COVID-19 was significantly negatively associated with stress (p=0.002), depression (p=0.01) and DASS-21 (p=0.009) scores. The availability of sufficient personal protective equipment was significantly negatively correlated with stress (p=0.028) and the ISI (p=0.024) scores.

All of the subscale scores, and the DASS-21 total scores and ISI scores were lower among physicians who were satisfied with examination and call room hygiene.

The DASS-21 or ISI scores were not statistically significantly associated with marital status, parental status, presence of chronic disease, duration of practice, working in a pandemic hospital, being diagnosed with COVID-19, working in a pandemic outpatient clinic, or the number of patients examined in the outpatient clinic.

All subscale scores, as well as the DASS-21 and ISI scores, were significantly associated with anxiety over potential infection of the self and family members, the level of impact due to social restrictions, the level of anxiety due to lack of family visits, the impact of social stigmatization and working in an out-of-specialty area (p<0.001).

The multiple regression analyses revealed the total DASS-21 score to be significantly associated with the level of information on COVID-19 (p<0.001), female gender (p=0.018), presence of a person with chronic disease in the household (p=0.017)and performing procedures requiring close contact with patients (p=0.021). The ISI score was significantly associated only with workplace hygiene satisfaction (p=0.002).

The simple linear regression analyses revealed the depression subscale score to be significantly associated with female gender (p=0.014), being a resident (p=0.014) or a physician (p=0.006), adequacy of information on COVID-19 (p=0.001) and hygiene satisfaction (p<0.001).

The simple linear regression analyses also revealed the female gender (p=0.02), presence of a person with chronic disease in the household (p=0.050) and performance of procedures requiring close contact with patients increased the stress subscale scores. Additionally, physicians working in a university hospital (p=0.016) and a state hospital (p=0.033) recorded higher stress subscale scores than those working in other types of hospitals. Information (p<0.001) and hygiene satisfaction (p=0.002) were found to decrease the stress subscale scores.

Based on a simple linear regression analysis, anxiety subscale scoressignificantly increased bythe presence of a person with chronic disease in the household(0.028), and significantly decreased by workplace hygiene satisfaction (p=0.002).

Table 3: Results of Univariate Analysis of Demographic Data

		DASS-Total			DASS depression			DASS anxiety			DASS stress			ISI		
		Mean ± SD	t	p	Mean ± SD	t	p	Mean ± SD	t	p	Mean ± SD	t	p	Mean ± SD	t	p
Gender	Female	38.7 ± 24.7	2.36	0.019	14.1 ± 9.5	2.47	0.014	9.9±7.9	1.73	0.084	14.6±8.9	2.34	0.020	7.4±5.4	-1.4	0.083
	Male	31.9 ± 23.2			11.4 ± 9.3			8.3±7.0			12.1±8.5			7.5±5.0		
Marital status	Married	34.1 ± 23.0	-8.3	0.40	13.0 ± 9.2	-0.84	0.930	8.0±7.0	-1.7	0.08	13.1±8.6	-0.70	0.48	7.3±5.3	-1.71	0.86
	Single	36.8 ± 24.7			13.1 ± 9.6			9.7±7.7			13.9±8.9			7.5±5.3		
Do you have any children?	Yes	35.0 ± 23.9	-1.03	0.30	12.6 ± 9.4	-1.23	0.21	9.0±7.4	-0.70	0.48	13.3±8.6	-0.90	0.36	7.2±5.2	-0.96	0.33
	No	38.0 ± 24.9			14.0 ± 9.6			9.7±7.8			14.3±9.1			7.8±5.3		
Do you have any chronic diseases?	Yes	33.4 ± 23.4	-1.03	0.30	11.3 ± 9.4	-1.7	0.083	8.9±7.0	-0.49	0.62	13.1±8.5	-0.55	0.57	7.7±5.1	0.506	0.61
	No	36.9 ± 24.6			13.6 ± 9.4			9.4±7.7			13.8±8.9			7.4±5.3		
Is there anyone with chronic diseases in your household?	Yes	40.5±27.4	2.0	0.046	14.4±10.6	1.5	0.131	10.8±8.2	2,20	0,028	15.2±9.9	1,97	0,050	8.5±5.6	2.3	0.021
	No	34.4 ±22.8			12.6±8.9			8.7±7.2			13.1±8.3			7.0±5.0		

DISCUSSION

It is revealed in the present study that the mental health and sleep quality of physiatrists have been highly affected during the pandemic and that the factors with the greatest effect on mental health are inadequacy of information, the presence of a person with chronic disease in the household, performing procedures requiring close contact with the patient, and gender.

It was further determined that the female gender and being a resident or a physician increases the odds ofhaving a higher level of depression symptoms.The female gender, the presence of a person with chronic disease in the household and the performance of procedures requiring close contactare associated with higher DASS-21 stress subscale scores; and the presence of a person with chronic disease in the household had negative impact on anxiety symptoms. The factor with the greatest impact on insomnia, in turn, was hygiene satisfaction.

Pandemics can be expected to increase depression, anxiety, stress and insomnia, both in the general population and in frontline healthcare workers. While this is applicable also to COVID-19, the psychological effects of this pandemic, including depression and anxiety, have been further increased due to the lack of firm knowledge of the routes of transmission, the absence of definitive treatment or a vaccine, the spread of the disease around the world through global connections and the wide media coverage (15).

The pandemic has also caused significant changes in the provision of physical medicine and rehabilitation services. Regional and national authorities have

adopted several measures to prevent the spread of the virus, resulting in difficulties in accessing rehabilitation services. This can be expected to negatively affect patients, especially those at high risk of functional limitations and those requiring early rehabilitation. Under these circumstances, PMR physicians have exerted considerable effort in the provision of support to patients in need. All over the world, including Turkey, physiatrists have continued to examine patients in outpatient clinics with certain restrictions, and have also had to determine and manage the status of those treated as outpatients or inpatients. Several precautions are being taken in outpatient clinics and treatment units aimed at infection prevention. It isreported thatthe rehabilitation medicine procedures in New York during the pandemic indicated the utilization of telemedicine to minimize infection. The paper underlined that the number of ambulatory visits were had decreased, but there had been no interruption in service for the patients with urgent conditions, such as suspected fractures or intrathecal baclofen refilling (16).

Besides continuing with the provision of rehabilitation services, physiatrists have also worked in pandemic outpatient clinics and wards. In a previous study evaluating the impact of the first month of the pandemic on physical and rehabilitation medicine, it was established that 46.9% of physiatrists had been assigned to COVID-19 inpatient departments, and emergency and COVID-19 outpatient clinics (17). The present study also found that 57% of the physiatrists had worked in pandemic outpatient clinics.

The ongoing pandemic is expected see an increase in such symptoms as depression and anxiety, and to cause insomnia among physiatrists. Nevertheless, there has to date been no study investigating the mental status of physiatrists, the present study being the first to assess the impact of the COVID-19 pandemic on the mental health and sleep quality of physiatrists.

Among the studies examining the effect of the COVID-19 pandemic on the mental health of physicians, Elbay et al. (18), conducted a study of

442 physicians and identified symptoms associated with depression in 64.7%, anxiety in 51.6% and stress in 41.2%. The assessment of participants using the DASS-21 revealed female gender, younger age, being single and with less work experience to be associated with higher scores, while being a parent was associated with lower scores.

In a study examining the effect of the pandemic on the mental health of healthcare workers in Wuhan, moderate and severe mental disorders were established in 22.4% and 6.2%, respectively (19), while another study in China identified depression in 50.4%, anxiety in 44.6%, insomnia in 34.0% and stress in 71.5% of healthcare workers, with symptoms being more common among frontline and female healthcare workers (20).

In a study evaluating the general population and healthcare workers, psychological problems were established in 18.3% of the participants. The study reported further that the Symptom Checklist-90 Revised scores of the healthcare workers were higher and the female gender to be a risk factor for psychological impact (21).

The results of the DASS-21 in the present study identified depressive symptoms in 58.6%, stress in 40.5% and anxiety in 54.4% of the physicians. The multiple regression analyses, in turn, revealed higher DASS-21 scores among physicians who were female, those with family members with chronic disease in the household, and the need to perform procedures requiring close contacts, such as injections, manipulation and electromyography. The DASS-21 scores were found to be lower among physicians with a higher level of information on the COVID-19 pandemic. Anxiety over infections of the self and family members, social stigmatization, the level of impact due to social restrictions, the level of anxiety due to a lack of family visits, and the level of anxiety related to working in an out-of-specialty area were associated with higher DASS-21 scores.

Another significant problem experienced by physicians during the pandemic is insomnia, caused primarily by stress in the general population (22).

A previous study examining various groups in China found insomnia to be associated with being under the threat of COVID-19 infection, age, gender and region of residence (proximity to Hubei) (23). The study by Zhang et al. (24), in turn, identified insomnia in 36.1% of 1,563 healthcare workers, and found a low educational level, working in an isolated place, fear for contracting COVID-19 infection and uncertainty of disease control to be risk factors for insomnia while being a physician was a protective factor. Another study identified poor sleep quality in three-quarters of healthcare workers during the COVID-19 pandemic, while no significant difference was found between frontline and non-frontline workers (25). The present study identified symptoms of insomnia in 45.3% of the physiatrists based on ISI results. Univariate analyses revealed increased ISI scores when there was a patient with chronic disease in the household. The insomnia scores were lower when there was sufficient protective equipment and satisfaction with examination and call room hygiene. The regression analyses, in turn, identified a statistical effect only for hygiene satisfaction, while sufficient protective equipment and the presence of a patient with chronic disease in the household had no significant effect on insomnia. The ISI scores were higher among physiatrists with greater anxiety over infection to the self and family members, social restriction, working in an out-of-specialty area and stigmatization.

The results of the abovementioned studies and the present study highlight the need to take measures to protect the mental well-being of healthcare workers, and to develop strategies that can aid such key members of the workforce. The available data suggest that taking sufficient breaks from work, family support, adequate training and helpful working environments are effective in reducing stress and anxiety (26). Access to psychological support and protocols for personnel support were found to have protective effects (27,28).

It is known that physicians have difficulty in sharing their mental health problems with their friends, families and supervisors (29). One of the most significant reasons for this is stigmatization.

Improved communication and reducing the stigmatization of mental health issues may help to address mental problems (30). People exposed to potentially traumatic events and at high risk of developing mental problems should be monitored more closely (31). Studies into the protection of mental health should continue after the pandemic has subsided, but until such a time, healthcare workers should be actively monitored and supported with evidence-based therapies when necessary (32).

Limitations of the Study
There are some limitations to the present study. Only volunteer physicians participated in the survey, which might have caused a bias and affected the generalization of the results to the general population. Additionally, the physicians were asked on the same date to quantify their symptoms of depression, anxiety, stress and insomnia before and during the pandemic, which might have resulted in responses considering increases symptoms during the pandemic, and the items for the assessment of retrospective mental health might be influenced by recall bias. Although it has limitations, this study is the first to assess the mental health and sleep patterns of physiatrists and has provided some significant findings. We believe that the study findings may aid health authorities in understanding the psychological effect of the pandemic on healthcare workers and PMR physicians in particular, and in coming up with approaches to minimize such effects.

Conclusion

The COVID-19 pandemic has a significant effect on the mental health and sleep patterns of physiatrists. The factors with the greatest impact on mental health in this period have been identified as the adequacy of information given by institutions about COVID-19, the performance of procedures requiring close contact with patients, the presence of a person with chronic disease in the household and the female gender. The determination of mental health is important when ensuring the necessary precautions are made to counter depression, anxiety, stress and insomnia, and for the associated

treatment. The successful management of these problems would improve the working efficiency of PMRphysicians, and increase the rate of accurate decisions.

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