



Retrospective Investigation of Sleep Disorders in Turkish Judicial System

Türk Hukuk Sisteminde Uyku Bozukluklarının Retrospektif Olarak İncelenmesi

✉ Pınar Uzun Uslu, ✉ Aslı Tekin*, ✉ Aylin Bican Demir**

Eskişehir City Hospital, Clinic of Neurology, Eskişehir, Turkey

*Eskişehir Bar Association, Eskişehir, Turkey

**Bursa Uludağ University Faculty of Medicine, Department of Neurology, Bursa, Turkey

Abstract

Objective: In our study, the extent to which sleep disorders are included in the Turkish Legal System and how the approaches.

Materials and Methods: The study was performed on a web-based basis. Words related to sleep disorders were searched in the jurisprudence program to include the years 1900-2021.

Results: It was seen that there were 1311 cases involving the word sleep, 7 cases involving the word snoring, and 4 case files containing the word sleep apnea. No cases were found that included the words narcolepsy, parasomnia, rapid eye movement behavior disorder, or sleepwalking. The contents of the cases were evaluated from the extent that they were open to access.

Conclusion: Sleeping disorders are a health problem that can have multiple consequences. Because the disease ceases to be a person's sleep problems at night. It can affect the sleep partner at night, it can affect the patient's work during the day, it can affect the people in the working environment, if this person is a driver, it can affect the traffic, if he has a strategic task, it can even affect the society. Of course, diseases that can have such consequences will also have a legal dimension. In our study, the extent to which sleep disorders are included in the Turkish Legal System and how the approaches. According to our research, there were no cases of sleeping sickness as expected yet. However, it is thought that these cases will increase, and based on the approaches in the current cases, physicians regarding sleep should determine behavioral strategies.

Keywords: Sleeping disorders, sleep-related lawsuits, sleep and law

Öz

Amaç: Çalışmamızda uyku bozukluklarının Türk Hukuk Sisteminde ne kadar yer aldığı ve bu konudaki yaklaşımların nasıl olduğunun ortaya konması amaçlanmıştır.

Gereç ve Yöntem: Çalışma web tabanlı olarak yapılmıştır. Ulusal Yargı Ağı Bilişim Sistemi programında 1900-2021 yıllarını kapsayacak şekilde uyku bozuklukları ile ilgili kelimeler aranmıştır.

Bulgular: Uyku kelimesini içeren 1311 olgu, horlama kelimesini içeren yedi olgu ve uyku apnesi kelimesini içeren dört olgu dosyasının olduğu görüldü. Narkolepsi, parasomni, REM davranış bozukluğu ve uyurgezerlik kelimelerini içeren olguya rastlanmadı. Olguların içerikleri erişime açık olduğu ölçüde değerlendirildi.

Sonuç: Uyku bozuklukları, birden fazla sonucu olabilen bir sağlık sorunudur. Çünkü hastalık geceleri kişinin uyku sorunu olmaktan çıkabilmektedir. Gece uyku partnerini etkileyebilir, gündüz hastanın işini etkileyebilir, çalışma ortamındaki insanları etkileyebilir, bu kişi sürücü ise trafiği etkileyebilir, stratejik bir görevi varsa, toplumu bile etkileyebilir. Elbette bu tür sonuçlar doğurabilecek hastalıkların hukuki bir boyutu da olacaktır. Çalışmamızda uyku bozukluklarının Türk Hukuk Sisteminde ne derece yer aldığı ve nasıl yaklaşımlar olduğu ele alınmıştır. Araştırmamıza göre henüz beklendiği gibi uyku hastalığı olgusu yoktur. Ancak bu olguların artacağı düşünülmekte olup, mevcut olgulardaki yaklaşımlardan hareketle hekimlerin uyku ile ilgili davranışsal stratejiler belirlenmesi gerekmektedir.

Anahtar Kelimeler: Uyku bozuklukları, uyku ile ilgili davalar, uyku ve hukuk

Introduction

Being able to spend enough time in sleep and having a healthy sleep is very important for both individual health and public health. Sleep disorders caused by any reason can lead to a desire to sleep during the day, resulting in impaired attention and negative consequences (1).

It has been stated that there may be a decision-making disorder related to sleepiness in the workplace in the emergence of events that have led to terrible consequences such as the Bhopal disaster and the Challenger spacecraft accident in history (2). According to the American Sleep Association, approximately 50-70 million people in the United States have some form of sleep disorder (3). In Turkey, according to the data of the TAPES

Address for Correspondence/Yazışma Adresi: Pınar Uzun Uslu MD, Eskişehir City Hospital, Clinic of Neurology, Eskişehir, Turkey

Phone: +90 222 611 40 00 E-mail: drpınaruzun@gmail.com ORCID-ID: orcid.org/0000-0002-6231-3892

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study, 15.3% of adults had insomnia, 13.7% had obstructive sleep apnoea syndrome (OSAS) symptoms, 9.6% snored, 5.4% increased daytime sleepiness and 5.2% restless legs syndrome findings were detected (4). We think that awareness about sleep disorders has increased through social awareness activities, media and internet. As awareness increases, the number of patients with sleeping sickness increases and the problems that sleep disorders can cause are better known. Patients or lawyers also learn that sleep disorders have a social aspect. Therefore, in our study, we aimed to learn how much sleep disorders take place in the Turkish justice system. Thus, as physicians dealing with sleep disorders, we wanted to determine better what we should do based on these cases.

Materials and Methods

Study data was scanned through the National Judicial Network Information System (UYAP). The words "sleep", "sleep apnea", "narcolepsy", "parasomnia", "sleepwalking" were searched in the jurisprudence program to include the years 1900-2021. Personal information was kept confidential.

Statistical Analysis

This is a screening study and no statistical analysis was performed. The frequency, causes and consequences of cases related to sleeping sickness were examined.

Results

It was observed that there were 1311 records containing the word sleep in the corpus jurisprudence program integrated with the UYAP system. While 23 of them belong to 2021, there were 554 records between 2016-2020, 602 between 2010-2015, and 132 between 1900-2009. Of the cases involving the word sleep in 2021, 14 belonged to the criminal chamber, 6 of them were the decisions of the civil chamber and 3 of them were the decisions of the general assembly of law. Decisions of the General Assembly of Law concerned the labor courts and were concerned with workplaces with sleeping places. The lawsuits of the legal offices were about the order of working hours to meet the need for sleep in workplaces that work 24 hours a day and the necessity of a 4-hour break in these workplaces. Five of the cases belonging to the penal departments were in the context of ill-treatment, 2 of them were to kill the person who was asleep (being unable to defend oneself), 3 of them were in the defense of being asleep due to drug use, 1 of them was deprivation of liberty by putting sleeping pills. making was involved. In 1 case, it was mentioned as the crime of stealing a sleeping set and in 1 case as a personal name (book name). Other criminal cases are fraud in the form of a solution to the sleep problem on the internet, the person's "sleepiness/somnolence" examination finding in the mal practice case, and finally, failure to comply with the obligation to wear a mask in the administrative fine case file is included as a sleeping sickness (african trypanosomiasis?) in the article of the public hygiene law.

When 554 records were evaluated between 2016 and 2020, 244 of them were lawsuits of the general assembly of law and were related to sleep hours in workplaces that work 24 hours a

day. In another case, a worker was fired for sleeping during the daytime shift. In 24 criminal cases, not sleeping was included as ill-treatment for this reason. In one case, there was the crime of threatening to harm while sleeping, in one case, fraud via the internet as a solution to the sleep problem, in one case in the defense file that the pedestrian may be at fault due to the use of sleeping pills in a traffic accident, in one request for custody, it was stated that the child had respiratory problems during sleep, and in 9 cases, he had sleep problems after the incident as a justification for compensation. While scanning the word sleep in 45 cases, it appeared as a sleep set (dowry) in criminal and divorce cases. In 4 cases, the word sleep was encountered as a crime of aiding an armed terrorist organization by buying a sleeping bag. In 35 case files, sleep was used for copyright in a proper noun or in expressions to describe the time or situation. In 28 cases, there was qualified sexual assault, that is, disruption of body integrity while asleep, or assault and willful murder of a sleeping person. In 25 cases, the crime of stealing was committed against people who had fallen asleep naturally or had been put to sleep (with diazepam, quetiapine, inhaler anesthetics). In one case, the word "sleep" was used in the defense of a convict in prison regarding drug possession and detection of benzodiazepines in his urine. In 77 criminal files, the word sleep was used in sentences such as waking up from sleep, alcohol-induced drowsiness, drowsiness, sleepiness due to medication, taking sleeping pills, while in 5 mal practice cases, it was included as an examination finding inclined to sleep. In 8 cases, the expert physicians stated that the person had a sleep disorder while describing the psychiatric findings. In 77 criminal files, the word sleep was used in sentences such as waking up from sleep, alcohol-induced drowsiness, drowsiness, sleepiness due to medication, taking sleeping pills, while in 5 mal practice cases, it was included as an examination finding inclined to sleep. In 8 cases, the expert physicians stated that the person had a sleep disorder while describing the psychiatric findings. Again, in the administrative fine case filed for not complying with the obligation to wear a mask, public hygiene was included as a sleeping sickness in the article of the law.

In 3 civil court cases, the regulation ensuring that drivers do not sleep during the journey was based. This regulation required that drivers who transport cargo or passengers for commercial purposes should work for a maximum of 9 hours in 24 hours and 4.5 hours without interruption in order to ensure that they do not sleep during the journey. In these cases, lawsuits were filed against businesses that acted in violation of the regulation. In one case, it was stated that the person did not declare the diagnosis of chronic obstructive pulmonary disease and OSAS in the life insurance policy made due to a bank loan. Therefore, after his death, the bank requested the cancellation of the policy due to incomplete declaration.

In the case heard in one of the civil courts, the reason for the divorce is that the other party made meaningless noises during sleep and that the plaintiff was not informed about this situation beforehand. In the defense regarding this, it is stated that the person has a health report stating that "the person does not have an obstacle to marriage".

Another civil court case concerned the security guard's napping on the job and his dismissal for that reason. The employer dismissed the employee's employment by describing snoozing while on duty as disrupting the safety of the workplace and therefore not performing his/her duty, and the court found the employer right and rejected the employee's severance pay request. In the case heard in another civil court, a civil servant working as a health technician in the emergency room filed a lawsuit for compensation that he was given night shift despite having a sleep disorder. Although the court of first instance rejected the case, the Regional Court of Justice found the case justified as a result of the appeal.

As for sleep apnea, 4 search results were found. The first of these was an event in the sleep apnea laboratory that only the patient should be in the room. This was supported by the expert report in the case. In one case, mal practice was related to a complication in sleep apnea surgery.

When the Supreme Court decisions containing the word "snoring" were searched, 7 results were found. Four of them were criminal cases and in two of them snoring was used to describe the event. One case was a malpractice case related to a complication in sleep apnea and snoring surgery that we encountered in the search for sleep apnea. The other case was mal practice case related to tonsillectomy performed with complaints of snoring and shortness of breath. The remaining 3 cases were related to the decisions of the Court of Cassation Civil Chamber, and in one divorce case, separation of the beds as a result of snoring was presented as a reason. In the other case, it was about the cartoon magazine claiming that a high-ranking public official was snoring, while the last case was the trademark and patent case regarding the apparatus that was stated to have stopped snoring.

No case files or results containing the word "narcolepsy", "parasomnia" were found in any Supreme Court decision scanned between 1900-2021. No case file or result was found in the case law search for the word "sleepwalking".

Discussion

In a study conducted with patients diagnosed with OSAS, it was shown that the mean vehicle accident risk increased by 3.07% compared to the general population (5). The factors that increase this risk are known as the patient's apnea-hypopnea index (AHI) level, hypoxemia level during sleep, body mass index (BMI) and the severity of daytime sleepiness. However, in recent studies, it was determined that only increased daytime sleepiness among these factors increased the risk of accident even if the patient had severe OSAS. Therefore, the Epworth Sleepiness Score (ESS) is very important in demonstrating this risk. It has been shown that psychomotor vigilance testing and split-attention driving task application can be routinely used to diagnose sleepiness and evaluate response to treatment, especially if more objective testing is required (6). The amendment in the regulation on the health conditions required by the driver candidates and drivers by the Ministry of Interior in Turkey was published in the official gazette issue 29577 on 29 December 2015. According to this regulation, the driver's license is taken back for a period

determined according to the severity of the disease, course, disability, and the characteristics of the drugs used in patients with a disease such as sleep apnea or narcolepsy that impairs consciousness. If these conditions become chronic, if the treatment response is low or if there are side effects that cannot be eliminated from the drugs used, the driver's license may not be issued again. If the BMI of the driver/driver candidates is $>33 \text{ kg/m}^2$, all night sleep test [polysomnography (PSG)] is requested regardless of any other complaints. If the person has "witnessed apnea" and "daytime sleepiness", an all-night sleep test (PSG) is ordered regardless of BMI. Those with an AHI >30 or those with $30 > \text{AHI} > 15$ and increased daytime sleepiness are not allowed to obtain a driver's license without treatment. After receiving the necessary treatment and determining that their diseases are under control, they can get a driver's license/drive with the decision of a 3-person committee consisting of at least one sleep-certified physician (if the 2nd group will get a license, information about the disease and treatment must be entered in the health report). There are not yet any criminal court cases in Turkey involving OSAS or narcolepsy. However, we see more OSAS lately, which is the reason for the increase in awareness of OSAS. For this reason, we should know better the current regulations and laws on this subject. In the evaluation for the driver's license, we first review the diagnosis of OSAS. If the diagnosis is correct, we determine the effectiveness of the treatment. In our own clinic, we want these patients to fill in ESS and question their increased sleepiness during the day, as well as the last 6-month record of the positive airway pressure device they are using. Thus, we are trying to understand whether it is an effective and correct treatment. If a patient with moderate or severe OSAS is going to get a 2nd group driver's license, in addition to these procedures, after sleeping for an effective time with his own device or in his own device settings, we perform the maintenance of wakefulness test (MWT) the next morning. Thus, we make verbal inquiries more objective. Thus, we try to minimize the accidents that may occur with excessive daytime sleepiness in terms of both patients and traffic, and while doing this, we aim to base our legal responsibility on evidence. MWT can help patients with OSAS both to analyze the risk of traffic accidents and to determine the potential for sleepiness that may lead to occupational accidents while issuing a medical report (7). Nevertheless, providing effective treatment of OSAS patients and annual check-ups will be beneficial for both patients and physicians to protect themselves legally. Traffic accidents are one of the leading causes of death in our country. According to the April 2022 data of the Ministry of Interior, General Directorate of Population and Citizenship Affairs, 32 million 321 thousand 21 people have a driver's license. The prevalence of OSAS in the population is 1-5%. In other words, with an optimistic estimation, it is thought that there are 320,000 drivers with OSAS. Therefore, the detection and treatment of these patients will significantly reduce injuries and deaths due to traffic accidents. At this point, it is very important for family physicians, who are the first step of the driver's license examination, to question OSAS symptoms and refer them to the relevant specialist if necessary. On the other hand,

according to Turkish Statistical Institute data, it is seen that there is no medical condition when looking at the faults of the driver or passenger that cause traffic accidents with death and injury. However, this seems far from reality, and at this point, we think that there may be a lack of data transfer between professions or institutions, and deficiencies in authorization and assignment. A few cases in civil courts also indirectly concerned sleep medicine. One of these cases was related to the fact that a security guard could not receive severance pay by being fired because he fell asleep while working. The case was concluded against the employee, since the drowsiness of a security worker here, of course, caused a security weakness. Another case was about keeping a night shift of a health worker with sleeping sickness, and the plaintiff was justified by way of appeal. So, starting from this point, how should the health reports for those with sleeping sickness be treated? For example, in polyclinics, we often conduct a workplace suitability examination for armed private security candidates. In addition, many workplaces, especially those working in shifts, require a health report on whether the person is suitable to work in the shift system. There is no article related to sleeping diseases in the health conditions regulation of the armed private security regulation numbered 31523 of the Ministry of Interior. However, the lawsuit filed shows that increased daytime sleepiness in armed or unarmed security guards poses a major problem for both the person and the workplace. For this reason, PSG should be requested from suspected patients or it should be determined whether patients with OSAS are under effective treatment. In a study on the relationship between night shift and OSAS, PSG was performed in patients with OSAS after the day shift and after the night shift. In half of these patients, an increase in the sleep AHI was detected after the night shift, and it was concluded that acute sleep deprivation may worsen the obstructive sleep apnea index. However, the fact that only 8 patients were evaluated in this study and these patients were not under treatment and the sleep after night shift in normal individuals was not evaluated does not provide sufficient information about staying in the night shift (8). Today, the American sleep medicine association recommends that only patients with untreated OSAS should not stay on night shifts (9). However, it is recommended that these health problems be stated in the relevant reports and periodic sleep doctor checks are recommended.

In two of the divorce cases within the legal department, snoring was shown as the reason that ended the marriage. In the defense, it was stated in the health report obtained before the marriage that the person was healthy. According to the Turkish Civil Code, it is obligatory for people to get married to obtain a "health report" (10). Before marriage, people are examined by family physicians, this examination primarily includes mental health, as well as infectious diseases and genetically transmitted diseases are investigated and counseling services are provided (11). But it is seen that sleeping disorders can be a reason for ending the marriage. According to the current regulation, premarital sleep disorders do not need to be questioned.

Perhaps in the future, it may be possible to provide counseling services by questioning sleeping sickness before marriage. Because sleep disorders often concern the patient as well as the patient's relative.

It is surprising that there are no cases involving the words narcolepsy, parasomnia, and sleepwalking in the criminal chamber files. Article 32/1 of the Turkish Penal Code (TCK) states, a person who, due to a mental illness, cannot perceive the legal meaning and consequences of the act he has committed, or does not have the ability to direct his behavior in relation to this act, cannot be punished. In the content of this article, sleepwalking is also counted among the reasons that abolish criminal responsibility. However, it is accepted that those who commit crimes by not taking the necessary precautions despite knowing that they are sleepwalkers have responsibilities within the framework of negligence provisions (12). The first legal cases involving murder with the presumption of sleepwalking in history were published by Walker in 1968 (13). With the increase in these cases, the current situation has been named as homicidal somnambulism/sleepwalking (14). Cases covered in more detail in the literature are the 1987 Parks case (Toronto) and 1997 Falater (Arizona) cases. Here, while the sleepwalking defense is mostly based on the way the event occurred and witnesses, with the 2005 Lowe case (Manchester), the sleepwalking evidence was based more on scientific data. In this case, the defendant, who was tried for murder, had a history of sleepwalking in his family. There was heavy alcohol use prior to the sleep period when the event occurred. PSG findings performed on 3 consecutive nights, not on the first night, supported sleepwalking. Lowe was found not guilty, but his excessive drinking was used against him. If we were to adapt this case to Turkey, maybe alcohol use might require those who commit crimes by not taking the necessary precautions despite knowing that they are sleepwalking according to article 32/1 of the TCK, to accept that they have responsibilities within the framework of negligence provisions. In the 2008 Thomas (Aberporth) case, the defendant called the police in the morning and said, "I think I was dreaming and I killed my wife", and he explained his dream in all details. Thomas had a history of parasomnia and Parkinson's diagnoses. Two sleep physicians and 1 psychiatrist agreed on the diagnosis of rapid-eye-movement behavior disorder and Thomas was acquitted (15). As it is seen, parasomnia cases are much more complicated cases and require examining the genetic history of the accused, his medical history, the drugs and substances he used, and his psychiatric condition. It also requires multiple PSG examinations and even multiple sleep physician evaluations.

Conclusion

As a result, sleep medicine is still less involved in the Turkish legal system than in other countries. However, awareness of sleeping disorders is increasing and therefore we will encounter more legal issues. For this reason, following exemplary cases both in Turkey and abroad will better reveal the legal dimension of sleep.

Ethics

Ethics Committee Approval: This study does not require ethics committee approval.

Informed Consent: Retrospective study.

Peer-review: Internally and externally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: P.U.U., Concept: P.U.U., Design: P.U.U., Data Collection or Processing: A.T., Analysis or Interpretation: A.B.D., Literature Search: A.B.D., Writing: P.U.U.

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