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#### Research Article | Araştırma Makalesi

# EVALUATION OF FORENSIC CASES ADMITTED TO THE HOSPITAL IN AMASYA

# AMASYA'DA HASTANEYE BAŞVURAN ADLİ VAKALARIN DEĞERLENDİRİLMESİ

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#### ABSTRACT

**Objective:** In this study, it was aimed to determine the demographic characteristics of the forensic cases who applied to Amasya University Sabuncuoğlu Şerefeddin Training and Research Hospital, to reveal the types of cases and to observe the changes in the cases according to the years. It will be examined whether it causes any problems in terms of criminal and compensation law. **Methods:** Forensic cases who applied to the Amasya University Sabuncuoğlu Şerefeddin Training and Research Hospital between

01.01.2018 and 31.12.2022 were examined. 53314 forensic case entries were evaluated.

**Results:** In the 5-year analysis, 53314 cases were evaluated and the mean age was found to be 33.7. 76.2% of the cases were male (n=40618) and 23.8% were female (n=12696). Among all cases, occupational accidents were determined as 6.8%, traffic accidents as 9.7%, and other cases as 83.5%.

**Conclusion:** In our study, it's noteworthy that occupational accident cases are higher than what is reported in the literature. In order to mitigate preventable health issues like occupational accidents, it is essential to organize necessary training sessions and implement precautionary measures. In the context of criminal and compensation law, it is recognized that individuals might experience loss of rights if the types of cases are not accurately identified. To prevent this situation, maintaining records accurately and comprehensively is of paramount importance. **Keywords:** Forensic case, Traffic accident; Occupational accident

#### öz

Amaç: Bu çalışmada Amasya Üniversitesi Sabuncuoğlu Şerefeddin Eğitim ve Araştırma Hastanesine başvuran adli olguların demografik özelliklerinin belirlenmesi, olgu tiplerinin ortaya konulması ve olguların yıllara göre değişiminin gözlemlenmesi amaçlanmıştır. Sonuçlar ceza ve tazminat hukuku açısından değerlendirilecektir.

Yöntem: 01.01.2018-31.12.2022 tarihleri arasında Amasya University Sabuncuoğlu Şerefeddin Eğitim ve Araştırma Hastanesi'ne başvuran adli vakalar incelendi. 53314 adli vaka değerlendirildi.

**Bulgular:** Beş yıllık analizde 53314 vaka değerlendirildi ve yaş ortalaması 33.7 bulundu. Olguların %76,2'si erkek (n=40618) ve %23,8'i kadındı (n=12696). Tüm vakalar arasında iş kazası %6,8, trafik kazası %9,7 ve diğer vakalar %83,5 olarak belirlendi.

Sonuç: Çalışmamızda iş kazası vakalarının literatürde bildirilenden daha yüksek olması dikkat çekicidir. İş kazaları gibi önlenebilir sağlık sorunlarının en aza indirilmesi için gerekli eğitimlerin düzenlenmesi ve önleyici tedbirlerin uygulanması esastır. Ceza ve tazminat hukuku bağlamında, vaka türlerinin doğru bir şekilde belirlenmemesi durumunda bireylerin hak kaybına uğrayabilecekleri bilinmektedir. Bu durumu önlemek için kayıtların doğru ve kapsamlı bir şekilde tutulması büyük önem taşımaktadır. Anahtar Kelimeler: Adli vaka, Trafik kazası, İş kazası

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## Introduction

All cases that result from traffic accidents, assaults, force, explosive and firearm injuries, injuries involving various tools, and similar actions of individuals, or reasons for which they are responsible, fall within the realm of forensic cases.<sup>1,2</sup>

The movements and attitudes of people, animals and vehicles on the road constitute road traffic. A traffic accident is a situation involving one or more vehicles, causing injury or death, or resulting in property damage.<sup>3</sup> Occupational accident is defined as follows in clause A of article 11 of the Social Insurance Law; "An occupational accident is defined as an incident that transpires while the insured individual is engaged in work-related activities. This can include tasks assigned by the employer, the insured being relocated to another location for work-related purposes at the instruction of the employer, occurrences during designated breaks for a lactating insured woman to nurse her child, or situations where the insured uses a vehicle provided by the employer to travel to the work site. Additionally, an occupational accident encompasses incidents that arise during bulk transportation of the insured, resulting in immediate or subsequent physical or psychological impairment.<sup>4</sup> Within the framework of this definition, the "connection of causation" between the accident and the job ensures that the insured receives the appropriate compensation according to the law.<sup>5</sup>

In Article 280 of the Turkish Penal Code (TPC), it is mandatory for physicians and health personnel to report encountered forensic events. Physicians report these situations to the appropriate authorities using a forensic report, which indicates the severity of the trauma experienced by the affected individual as a result of the forensic event.<sup>6</sup> In addition, the cases injured in occupational and traffic accidents are requested to be evaluated by the judicial authorities during the criminal cases and later in the compensation cases.

In this study, it was aimed to determine the demographic characteristics of the forensic cases who applied to Amasya University Sabuncuoğlu Şerefeddin Training and Research Hospital, to reveal the types of cases and to observe the changes in the cases according to the years. It will be examined whether it causes any problems in terms of criminal and compensation law.

## Methods

The study was carried out with the permission of Tokat Gaziosmanpaşa University Clinical Research Ethics Committee. All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

This study is a retrospective cohort study using data from our hospital's automation and archive system. The requirement for written informed consent was waived. In this study, which was planned as a single center, forensic cases who applied to the Amasya University Sabuncuoğlu Şerefeddin Training and Research Hospital between 01.01.2018 and 31.12.2022 were examined. 53,314 forensic case entries were evaluated. In our study, we focused on two pivotal areas, namely occupational accidents and traffic accidents. These areas hold paramount significance within the domains of compensation and criminal law. We organized these accidents into groups and meticulously assessed their distribution across various years.

#### **Statistical Analysis**

Categorical variables were presented with counts and percentages.

#### Results

In the 5-year analysis, 53314 cases were evaluated, and the mean age was found to be 33.7. 76.2% of the cases were male (n=40618) and 23.8% were female (n=12696) (Figure 1).



Figure 1. Gender distribution of cases

Among all cases, occupational accidents were determined as 6.8%, traffic accidents as 9.7%, and other cases as 83.5% (Figure 2).



Figure 2. Types and numbers of cases

When we analyze the distribution of cases across different years, the following patterns emerge: In the year 2018, out of a total of 9640 judicial case applications, 661 were related to occupational accidents, 1021 were linked to traffic accidents, and 7958 pertained to various other cases.

For the subsequent year, 2019, there were a total of 12087 applications. Among these, 675 cases were attributed to occupational accidents, 1,074 cases were associated with traffic accidents, and a significant majority of 10338 cases fell under the category of other miscellaneous cases.

In the year 2020, among the 9,495 judicial cases reported, 708 were classified as occupational accidents, 782 were related to traffic accidents, and 8,005 were categorized as other cases.

In the subsequent year, 2021, a total of 10,365 applications were recorded. Out of these, 681 cases were identified as occupational accidents, 1,009 cases were attributed to traffic accidents, and 8685 cases fell into the broader category of other cases.

Looking at the year 2022, a total of 11,717 cases were submitted. Among these, 887 cases were linked to occupational accidents, 1,279 cases were associated with traffic accidents, and 9,551 cases were categorized as other types of cases (Figure 3).



Figure 3. Distribution of case types and case numbers by years.

#### Discussion

76% of the cases were male and 24% were female. This rate was observed to align with findings from other studies in the existing literature.<sup>7,8</sup> This circumstance can be attributed to the heightened susceptibility of men to trauma due to their greater involvement in social activities compared to women.

In a study by Yemenici et al.; It was determined that 34.8% of the cases were traffic accidents.<sup>9</sup> In another study conducted at Cumhuriyet University; traffic accidents were found to be 30.9% in all cases.<sup>10</sup> In another study conducted in Eskişehir, the rate of traffic accident cases is 42.9%.<sup>7</sup> In the study of Çakır and Şenol, traffic accidents constitute 27.4% of all cases.<sup>8</sup> In the study, traffic accident cases were detected at a rate of 9.6%, which is quite low compared to the examples in the literature. Amasya province is characterized by a significant volume of highway traffic, primarily due to its strategic location along a route that accommodates numerous inter-provincial roads. The low number of

cases is thought to be due to deficiencies in keeping records.

In the study of Güven et al. occupational accidents were found to be 3.1% in all cases.<sup>10</sup> In the study conducted at Karşıyaka State Hospital, it was determined that the rate of w accident cases was 1.7%.<sup>8</sup> In a study conducted in Istanbul, it was stated that 0.79% of the total cases were occupational accidents.<sup>11</sup> It is worth highlighting that the incidence of occupational accident cases, as identified in our study, was notably higher at 6.8% compared to what has been reported in the literature.

The notion of causality holds particular significance within the realms of criminal and compensation law concerning both traffic and occupational accidents. Establishing a causal link also depends on accurately specifying the type of event in the documents with the event date. The only document that shows whether people have had a occupational accident or traffic accident is mostly forensic examination documents with the date of the incident. Individuals may not be able to prove their claims and lose their rights due to reasons such as incomplete information or incorrect records at the time of the incident.

When the distribution of cases by years is examined; It can be said that there is a general increase except for 2020. According to TUIK statistics, traffic accident cases have decreased in 2020.<sup>12</sup> Given that 2020 was a year marked by reduced social interaction due to Covid-related quarantines, the overall decrease in forensic cases can be attributed to this circumstance.

In conclusions, in this study, which sought to unveil the profile of forensic cases in our region, the demographic findings we acquired were generally in line with the existing literature and the outcomes of comparable studies.

In our study, it's noteworthy that occupational accident cases are higher than what is reported in the literature. In order to mitigate preventable health issues like occupational accidents, it is essential to organize necessary training sessions and implement precautionary measures.

In the context of criminal and compensation law, it is recognized that individuals might experience loss of rights if the types of cases are not accurately identified. To prevent this situation, maintaining records accurately and comprehensively is of paramount importance.

#### **Compliance with Ethical Standards**

The study protocol was approved by the Tokat Gaziosmanpaşa University Ethics Committee (Date: 31.08.2023, No: 23-KAEK-206).

#### **Conflict of Interest**

The author declares no conflicts of interest.

#### **Financial Disclosure**

None

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