

Original Article

## Evaluation of murder cases in Tokat province in Türkiye: Analysis of 4 years data

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### Abstract

**Aim:** Homicide-related death cases are one of the most important study topics among forensic medical autopsy applications. In our study, the murders and the reasons for the murders in Tokat province, the sociodemographic characteristics of the victims were examined and discussed with the literature, aiming to reveal the region-specific characteristics.

**Materials and Methods:** This study was conducted by retrospectively examining the postmortem examination and autopsy reports and forensic investigation files conducted by the Gaziosmanpaşa University Faculty of Medicine, Department of Forensic Medicine and Tokat Forensic Medicine Branch Directorate between January 2014 and January 2018, and a total of 52 cases were evaluated in terms of age, gender, cause of murder, place of occurrence, cause of death, distribution of murder cases by months and years, and the method used.

**Results:** In our study, the origin of death of a total of 52 cases between 2014-2018 was determined as homicide, and 41 of the cases were male (78.85%) and 11 were female (21.15%). In our study group, the average age of males was 43.34 (SD±15.88), while this number was 38.27 (SD±18.44) for females, and the cases were between the ages of 15-77. It was observed that there was a remarkable increase in homicide cases in 2017 compared to other years, and when evaluated according to months, homicides were committed most frequently in March, firearms were the most common method of homicide, followed by sharp objects, and there was an equal distribution between the origins of homicide.

**Conclusion:** When the murder cases seen in the Tokat province in the four years mentioned are evaluated by taking into account the sociocultural characteristics of the region, it is seen that the increase in individual armament and land and pasture disputes related to agriculture and animal husbandry, which are the main sources of income of the region, have an effect on the methods and reasons for murder used.

**Keywords:** Autopsy, murder, homicide

### INTRODUCTION

Murder is the act of intentionally ending a person's life [1]. Murders, which have been a serious social problem since the existence of humanity, are one of the most important subjects of study in forensic medicine worldwide. As a result of murder, not only the victim but also the victim's family and society are killed, and the resulting ripple effect spreads fear and uncertainty throughout society [2]. Thus, murder becomes a public health problem that causes serious material and moral losses in societies [3,4].

This social and tragic problem, which is seen too frequently, requires in-depth examination. In our study, it was aimed to investigate the murder cases whose autopsies were performed in Tokat Province, to evaluate their sociodemographic characteristics and to discuss them with the literature.

In this study, in which we investigated murder cases from different aspects, parameters such as time of murder, crime scene, age of the victim, gender of the victim, method of committing the murder and type of weapon used were examined.

### CITATION

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It was aimed to contribute to the literature by examining these parameters.

**MATERIAL AND METHOD**

The postmortem examination and autopsy reports of murder cases conducted between 2014 and 2018 at the Tokat Gaziosmanpaşa University Faculty of Medicine, Department of Forensic Medicine and the Tokat Forensic Medicine Branch Directorate were retrospectively examined.

The ethics committee approval required for this study was obtained from Tokat Gaziosmanpaşa University Non-Invasive Clinical Research Ethics Committee (15.08.2024 - 2024/11).

The cases evaluated as murder were examined in terms of the month and year the incident occurred, the age and gender of the victim, the method of murder, the scene of the crime, the cause of death and the reason for the murder.

**RESULTS**

In our study, the cause of death of a total of 52 cases between 2014-2018 was determined to be homicide, 41 of the cases were male (78.85%), 11 were female (21.15%), the mean age of males was 43.34 (SD±15.88) and females was 38.27 (SD±18.44), and all cases were between the ages of 15-77. The number of cases by gender is shown in Figure 1 and the mean age is shown in Figure 2.

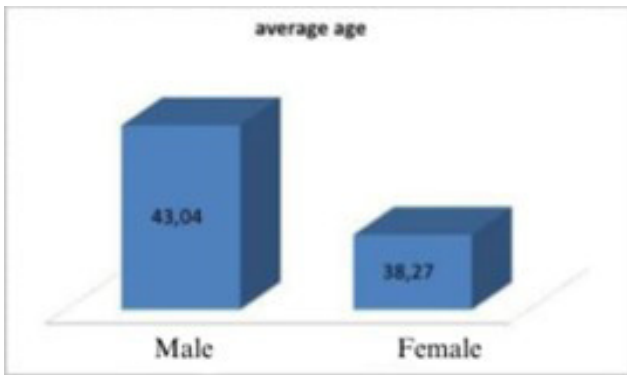


Figure 1. Average age of the cases

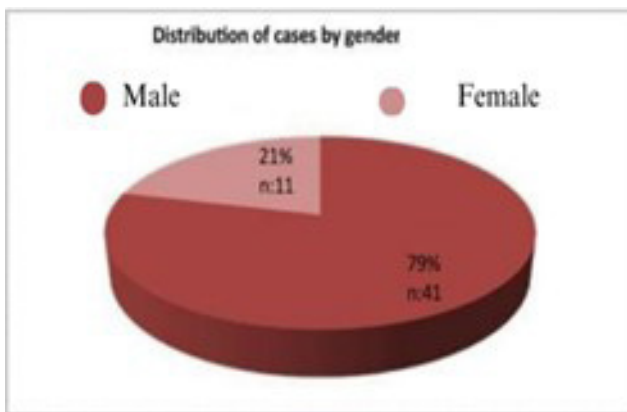


Figure 2. Distribution of the cases by gender

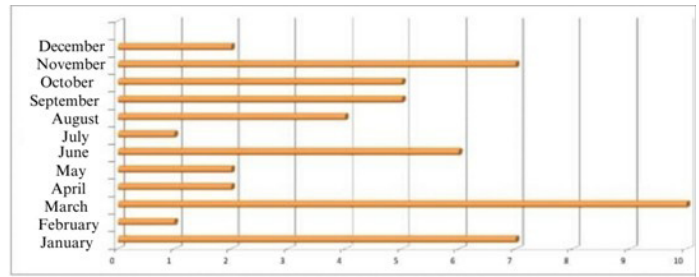


Figure 3. Distribution of number of cases by month

In 2017, there was a notable increase in murder cases compared to other years, and when the frequency of occurrence was evaluated by month, it was determined that the most common murders were committed in March. The distribution by month in which the incident occurred is shown in Figure 3.

In our study, it was determined that firearms were used as the method of murder in 36 (69.2%) of the murder cases, piercing-cutting tools were used in 14 (26.9) and 2 cases were killed by beating. The murder methods used are shown in Figure 4.

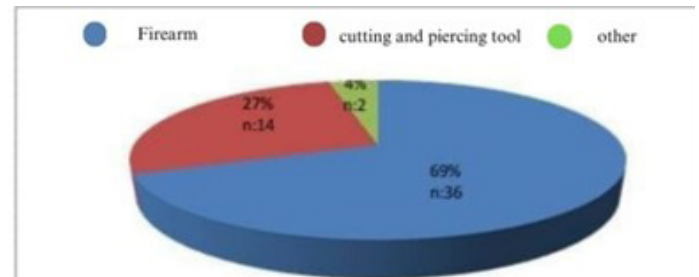


Figure 4. Murder method used

When evaluated according to the crime scene, it was determined that 38 (73%) of the murders were committed in the city center, 14 (27%) in rural areas, and autopsies were performed on all 52 victims. The distribution of cases according to the crime scene is shown in Figure 5.

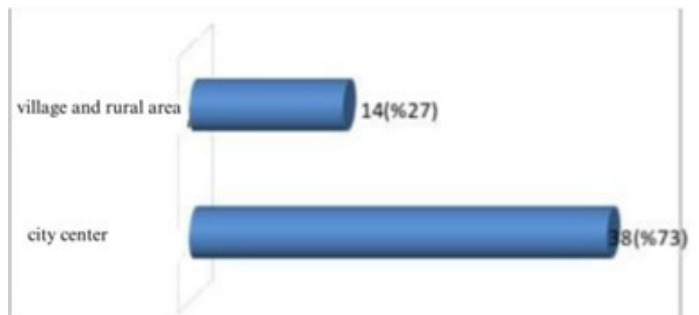


Figure 5. Distribution of cases by scene

When the victims in our study were evaluated in terms of cause of death; it was seen that 11 cases (21.1%) died due to intracranial injuries, 6 cases (11.5%) died due to internal organ damage, 12 cases (23%) died due to major vascular injuries and internal-external bleeding, and 23 cases (44.2%) died due to both internal organ damage and internal-external bleeding. The distribution of cases according to causes of death is shown in Figure 6.

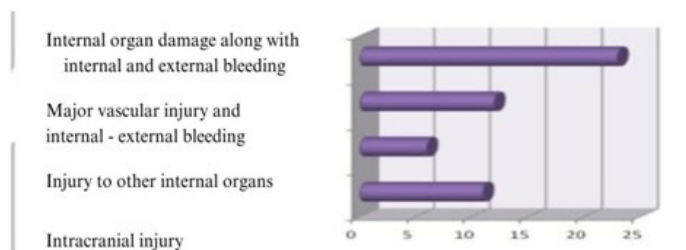


Figure 6. Distribution of deaths by causes

When the reasons for murder were evaluated, although the reasons for murder could not be determined for 13 cases, the main reasons for murder that could be determined were domestic violence, debts, land disputes, blood feuds, etc., and the distribution of cases according to the reasons for murder is shown in Figure 7.

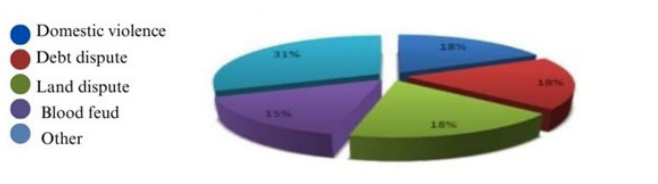


Figure 7. Distribution of homicide according to identifiable causes

## DISCUSSION

Murders, which are the most severe form of violence, are the most serious crimes committed against a person and they cause individual and social anger in our country as well as all over the world [5,6].

In a report on violence prepared in Geneva in 2014, it was stated that 475 thousand people were murdered worldwide in 2012 and that the incidence of murder was higher in underdeveloped countries, and that murders were the third leading cause of death for men aged 15-44 [7]. Although violence and murder rates have decreased from 2000 to 2012, this issue is still widespread and serious [8,9].

In our study, it was determined that male victims were approximately 4 times more than female victims, and this rate was found to be consistent with general literature information [10,11]. Although femicides are also seen quite frequently in our country, the reason why this rate is higher in men can be attributed to the fact that men are more active in social life and are more likely to be in environments where they can be attacked due to their more aggressive nature.

Each year, 200,000 of the murders worldwide are committed against young people between the ages of 15 and 19, which corresponds to 43% of all murders committed in a year [11]. While individuals between the ages of 15 and 19 constituted 7.6% of our study group, the most common age group was the 30-39 age group with a rate of 23%, the mean age of males was 43.34 (SD±15.88) and females was 38.27 (SD±18.44), and the mean age of the victims was higher than the averages found

worldwide. Although the mean age was higher than the value found in the literature, our study found that both women and men were murdered during the age periods when they were active in society and socially productive.

In our study group, the most frequent murder cases were seen in March 2017, and when the incidents were evaluated according to the seasons, it was determined that the most murders were committed in the fall and the least in the winter, although there was no significant difference between them. In a study conducted by Yavuz and his colleagues on murders committed against taxi drivers, it was determined that the most frequent murders were committed in the spring and the least in the winter [12]. It was thought that the fact that murder cases were less common in the winter and more common in warm weather was due to reasons such as the slowdown of social life in the winter and the fact that people spend more time at home.

In our study, it was determined that firearms were the most common method of murder with a rate of 69.2%, while Özgün Ünal and his colleagues' study on femicides found that firearms were the most common method of murder with a rate of 50.1% [13]. We see firearm injuries as the most common method of murder not only in our country but also worldwide, so much so that approximately one in every two murders worldwide is committed with firearms, followed by murders committed with sharp objects [7]. It was thought that this was due to the high lethality of firearms, their ease of use for the attacker, and the fact that they leave the victim more defenseless against the attack compared to other methods.

When the murder cases in our study were evaluated according to the crime scene, it was seen that 38 (73%) of the cases were killed in the city center and 14 (27%) in rural areas. In the study conducted by Soumah and his colleagues in Dakar, it was reported that 50.6% of the victims were killed in the suburbs of the city center of Dakar and 29.3% in rural areas. In studies conducted worldwide, it was reported that most murders were committed in low-income countries and settlements with low economies [14-16].

When the cause of death of the deceased in our study was evaluated; it was seen that 11 cases (21.1%) died due to intracranial injuries, 6 cases (11.5%) due to internal organ damage, 12 cases (23%) due to major vascular injuries and internal-external bleeding, and 23 cases (44.2%) due to both internal organ damage and internal-external bleeding. The study conducted by Soumah et al. in Dakar also reported that the most common cause of death was due to bleeding [14].

When the reasons for murder were evaluated, it was determined that 7 cases were killed due to domestic violence, debt disputes and land disputes. It was determined that 6 of the cases were killed due to blood feuds and 12 due to other reasons, but the reason for murder could not be determined for 13 cases. In the study conducted by Geleri and Demirbilek in Istanbul, it was reported that the most common reasons for murder were arguments,

domestic violence, problematic sexual relationships and money-related arguments [17]. In a study conducted by Swart et al. on adolescent murders in South Africa, the main reasons for murder were arguments, theft, self-defense and sexual assault. (SWART) The fact that land-pasture disputes were at the top of the list with other reasons in our study can be explained by the fact that the main source of income in our province is agriculture and animal husbandry.

## CONCLUSION

Murders, which are as old as human history, are a public health problem that takes away the most basic and important right of a person, the right to life, affects not only the victim but also the victim's family and society, and causes fear, insecurity, material and moral losses in society. It is predicted that they can be prevented by increasing the respect people have for each other's rights. Increasing educational activities for human rights and removing publications in the press that encourage violence can be presented among the suggestions that will contribute to the solution.

### Conflict of Interests

*The authors declare that there is no conflict of interest in the study.*

### Financial Disclosure

*The authors declare that they have received no financial support for the study.*

### Ethical Approval

*The ethics committee approval required for this study was obtained from Tokat Gaziosmanpaşa University Non-Invasive Clinical Research Ethics Committee (15.08.2024 - 2024/11).*

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