

DOI: 10.17986/blm.1614

Adli Tıp Bülteni 2023;28(2):187-193

Dyadic Death Series from An Autopsy Center: Femicide-Suicides Cases

Bir Otopsi Merkezinden Kadın Cinayeti-İntihar Olguları: İkili Ölüm Serisi

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ABSTRACT

Objective: Dyadic death is a term generally used to describe cases in which the murderer committed suicide, usually after a murder, or cases where two people committed suicide together. In the cases that underwent autopsy in Muğla, between 2013 and 2021, the crime scene and dead examination reports were retrospectively analyzed, and those with dyadic deaths were evaluated and these cases were discussed. We believe that creating a database where dyadic deaths are recorded across the country, will shed light on understanding the dynamics of dyadic deaths.

Methods: The crime scene analysis and dead examination reports of autopsies carried out between 2013-2021 in Muğla Forensic Medicine Branch Office were analyzed retrospectively.

Results: In our case series, all 11 bilateral deaths were femicide-suicide and 9 of them used firearms for murder. In one of the cases, femicide occurred with a penetrating tool, and in the other case, it was caused by blunt head trauma.

Conclusion: There is a partner relationship in all of the murders. Except for one case, all of those killed were women and all were spouses/partners or ex-partners. These data in our case series show that dyadic deaths are an indicator of the violence against women in our country.

Keywords: Dyadic death, homicide-suicide, femicide-suicide, autopsy

*Our article was presented as an oral presentation at the 2nd International, 18th National Congress of Forensic Medicine and Forensic Sciences and was included in the congress booklet. Our article has not been sent to another academic journal for evaluation.



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Received/Geliş tarihi: 26.01.2022

Accepted/Kabul tarihi: 29.07.2022

ÖZ

Amaç: İkili ölüm, genellikle bir cinayetten sonra katilin intihar ettiği veya iki kişinin birlikte intihar ettiği durumları tanımlamak için kullanılan bir terimdir. İkili ölümler arasında cinayet-intihar çifti olguları daha sık görülmektedir. Muğla ilinde 2013-2021 yılları arasında otopsi yapılan olgularda olay yeri ve ölü inceleme raporları geriye dönük olarak incelenmiş, ikili ölüm olanlar değerlendirilmiş ve literatür ışığında tartışılmıştır. İkili ölümlerinin tek bir ilde değil, ülke genelinde sistematik olarak kaydedildiği bir veri tabanı oluşturmanın, ikili ölümlerin dinamiklerinin anlaşılmasına ve önleyici tedbirlere ışık tutacağına inanıyoruz.

Yöntem: Muğla Adli Tıp Şube Müdürlüğü'nde 2013-2021 yılları arasında gerçekleştirilen otopsilerin olay yeri inceleme ve ölü muayene raporları geriye dönük olarak incelenmiştir.

Bulgular: Olgu serimizde 11 ikili ölümün tamamı femicide-suicide niteliğindedir ve bunların 9'unda cinayet aracı olarak ateşli silah kullanılmıştır. Olguların birinde kadın cinayeti kesici-delici aletle, birinde ise künt kafa travması ile meydana gelmiştir.

Sonuç: Cinayetlerin hepsinde eş/partner ilişkisi vardır. Öldürülenlerin tamamı kadın ve tamamı eş/partner veya eski partnerdir. Olgu serimizde merhum-katil ilişkisine ilişkin veriler, ikili ölümlerin ülkemizde kadına yönelik şiddetin en uç ve şiddetli biçiminin bir göstergesi olduğunu göstermektedir.

Anahtar Kelimeler: İkili ölüm, cinayet-intihar, kadın cinayeti-intihar, otopsi

INTRODUCTION

Dyadic deaths are used in forensic practice when two people die at the same time or in a short period of time. They can be encountered at most as homicide-suicide pair (1-9) in which one person commits suicide after killing another person, and more rarely as suicide-suicide pair (10-12) in which two people commit suicide together, as suicide-natural death or homicide-natural death pair.

The femicide-suicide type, which is a common form of murder suicide, refers to the suicide of the perpetrator of the murder after women are killed by a man. Femicide was first used in England in 1801 to denote "the murder of a woman" (13). Campbell and Runyan (14) redefined femicides as "all femicides, regardless of motive or perpetrator status". Femicide was defined by Diana Russell (15) in 1976 for misogynistic murders. Suicide following murder is a rare event in the context of crime in general, but femicide-suicide is common in the context of intimate partner murder. When the article titles are examined, the majority (54%) of the titles given to the articles define the crime as an ambiguous murder or murder-suicide and do not specify the relationship between the perpetrator and the victim (12). However, there is mostly a partner relationship between the perpetrator and the victim, and the female case is the victim and the cases should be described as femicide-suicide. The perpetrator's previous suicide threats and the victim's previous are the most important risk factor too (16).

In the most common dyadic deaths that are in the form of femicide-suicide, the most commonly used femicide methods are penetrating injuries such as the use of firearms or sharp objects, applying blunt trauma, and scragging. Apart from these, unusual or rare methods such as killing by hanging and poisoning can also be used (1,3).

Although the most common suicide method used following the femicide is killing himself by hanging, the attacker can

commit suicide by the method he committed the murder, such as wounding with a firearm. In the case of dyadic deaths in the form of femicide-suicide, the closeness degree of the deceased people and the methods of femicide and suicide may vary from country to country or from region to region (1-7,11,12).

In our country, case reports were presented on dyadic deaths but studies involving dyadic death series were rarely presented. In this study, it was aimed to evaluate the dyadic deaths and their forms in autopsy cases in Muğla Forensic Medicine Branch Office.

MATERIALS and METHODS

The crime scene analysis and dead examination reports of autopsies carried out between 2013-2021 in Muğla Forensic Medicine Branch Office were analyzed retrospectively, and those in the form of dyadic deaths were determined. We identified and presented the femicide-suicide dyadic deaths. In one of our cases, after the divorce case, the male partner killed the family members of the female partner. For this reason, this case was considered as "family murder" and this case was included in our article. During the attack, the woman escaped death and was injured, but this case was also evaluated within the scope of femicide.

Permission was obtained from the Forensic Medicine Institute, dated 01.12.2020, and numbered 21589509/2020/1149 for the research.

The age and gender of the cases that are parties to dyadic deaths mutually, crime scene, type of death and killing, and the reasons for the events that were first reflected in the press were tabulated and discussed.

RESULTS

Among the 3,498 autopsy cases carried out in Muğla Forensic Medicine Branch Directorate between 2013 and 2021, 13 dyadic

deaths (3.4 per thousand) including 11 femicide-suicide pairs. A total of 27 people (7.1 per thousand), including 23 people in 11 femicide-suicide cases were dyadic death victims.

Demographic findings regarding dyadic deaths in the form of femicide-suicide are presented in Table 1. Firearms were used in 9 of the 11 cases. There were sharp object injuries in two of the cases including one of them femicide victim, the another one perpetrator. It is understood that death occurred in one case as a result of blunt head injury.

When we look at the number of firearm entry holes in our femicide cases, it is seen that there are 7 entry holes in 1 patient, 6 entry holes in 1 patient, 4 entry holes in 1 patient, and 1 entry hole in 5 patients. There are 25 wounds in 1 female case with a sharp object injury. In case number 7, in which the father-in-law and brother-in-law were killed, the murderer opened fire on the car in which his wife also was while he was returning from the trial of the ongoing divorce case with his wife. His wife was taken to the hospital with serious injuries, and survived after the intervention and treatment in the hospital. For this

reason, this case was considered as “family murder” and this case was included in our article. In this incident, there were 5 entrance holes in one of the 2 people who died and 2 in the other.

Toxicological examination: In the toxicological examination of 23 people with murder-suicide, it was observed that ethanol was found in the blood of 9 people, drug active substances that may have been used while alive in 7 people, and synthetic cannabinoid metabolites with drug-stimulating qualities in 1 person. Of the 9 people with ethanol in their blood, 4 were victims and 5 were perpetrators. There is no statistically significant relationship with alcohol use among those who have a perpetrator-victim relationship. It was seen that the person who was found to have a narcotic-stimulant synthetic cannabinoid metabolite was the perpetrator. It was observed that 2 of the 7 people whose drug active substances were detected had benzodiazepine and antidepressant derivative drugs. No substance from ethanol, drugs or stimulant-drug active substances was detected in the blood of 8 people.

Table 1. Demographic findings on dyadic deaths in the form of femicide-suicide

| Case no | Year | Sex | Age | Cause of death | Relationship between the deceased and the killer | Crime scene | Apparent reason |
|---------|------|---------------|-----|--------------------------|--|-------------|--|
| 1-A | 2014 | Male | 39 | Firearm injuries (gun) | The woman he lived with | Home | It is not known |
| 1-B | | Female-victim | 50 | | | | |
| 2-A | 2015 | Male | 39 | Firearm injuries (gun) | Ex-boyfriend | Home | Because the woman has abandoned him |
| 2-B | | Female-victim | 23 | | | | |
| 3-A | 2015 | Male | 48 | Firearm injuries (gun) | Spouse | Home | The debate after her husband's reaction to coming home late |
| 3-B | | Female-victim | 42 | | | | |
| 4-A | 2016 | Male | 31 | Firearm injuries (rifle) | Spouse | Home | After the debate between them |
| 4-B | | Female-victim | 30 | | | | |
| 5-A | 2017 | Male | 33 | Firearm injuries (rifle) | The woman he lived with | Home | Because the woman wants to leave her |
| 5-B | | Female-victim | 38 | | | | |
| 6-A | 2018 | Male | 56 | Hanging and stab injury | Spouse | Home | It is not known |
| 6-B | | Female-victim | 43 | Blunt head injury | | | |
| 7-A | 2018 | Male | 37 | Firearm injuries (rifle) | Brother-in-law and father-in-law | In-vehicle | Returning from the trial of the ongoing divorce case with his wife |
| 7-B | | Male-victim | 19 | | | | |
| 7-C | | Male-victim | 68 | | | | |
| 8-A | 2019 | Male | 44 | Firearm injuries (gun) | Ex-boyfriend | Pub | Because the woman wants to leave her |
| 8-B | | Female-victim | 20 | | | | |
| 9-A | 2020 | Male | 38 | Firearm injuries (rifle) | Spouse | Home | At the stage of divorce, in the process of removal the man from home |
| 9-B | | Female-victim | 35 | | | | |
| 10-A | 2020 | Male | 21 | Firearm injuries (gun) | The woman he lived with | Home | After the debate between them |
| 10-B | | Female-victim | 39 | Stab injury | | | |
| 11-A | 2021 | Male | 40 | Firearm injuries (rifle) | Ex-boyfriend | Home | Because the woman wants to leave her |
| 11-B | | Female-victim | 35 | | | | |

DISCUSSION

In our case series, 11 dyadic deaths were femicide-suicide pairs. In nine of the 11 femicide-suicide cases, firearms were used as a means of murder, and guns were used in five of them, and rifles were used in four of them. In these nine incidents, the suicide attacks that followed the murder were also carried out with the same weapon. This result is consistent with the femicide-suicide dyadic death literature. Similarly, in a study conducted in Antalya between 1996 and 2005, it was seen that the use of firearms in femicides was in the first place with 61 cases (43.5%) (17).

In the one of the cases where the murder device was not a firearm (case no: 6), perpetrator killed his wife with blunt head trauma and created sharp object wounds in various parts of his body (abdomen, wrists, and neck) and also hung himself with a belt, then he fell down since the belt tore. It was concluded that his death was due to the joint effect of mechanical asphyxia due to hanging and external hemorrhage due to jugular vein incision in the neck. In the another case where the murder device was not a firearm (case no: 10), perpetrator killed his partner with 24 knife wounds and subsequently committed suicide by shooting himself with a hunting rifle. In the case report of suicide following homicide by Özer et al. (5), it was stated that an 18-year-old female and a 31-year-old male were found in a rural area with a shotgun, both had fractures in the facial bones, damage to the brain tissues and the firearm bullet exit hole in the upper part of their heads were detected and the shots were fired from a short distance (almost adjacent). In the case of homicide-suicide dyadic death by Gürses et al. (18), it was reported that the victim of the female case died as a result of a piercing-sharp-crushing tool injury and that the death of the male case occurred as a result of hanging. The death of a female victim as a result of a stab injury is similar to case number 10 in our study. In the case report of homicide-complex suicide by Akçan et al. (10), it was reported that a thirty-year-old man and a thirty-eight-year-old woman were found dead at home, in the postmortem examination of the woman common traumatic findings compatible with the hand strangling were detected in the neck region, the type of death was determined as murder, and in the postmortem examination of the man, it was reported that the left wrist incision and hanging methods were used in accordance with complex suicide. This case bears similarities with our case no. 6, in which there was a male who died as a result of mechanical asphyxia due to hanging and stab injuries. In the study of Viero et al. (2) named dyadic death with one shot; it was understood that the male case was lying in the supine position on the right side, his wife was lying on the left side in the lateral position. Radiological, histological, and autopsy data showed that the incident was a case of femicide-suicide due to a firearm injury that occurred with a single shot (2). It was understood that the same weapon was used in our

cases with femicide-suicide pairs in our study, but we did not have a dyadic death case that occurred with a single shot. In the double hanging case of du Plessis et al. (1), it has been reported that a female and a male corpse were found hanging, the female case had a transparent plastic tie extending from her mouth to the back of her neck, and her wrists were also tied with a similar tie, and the male case did not have such a bond, so the female case was thought to be the victim and this study with the double hanging case was presented as a femicide-suicide pair. In our femicide-suicide dyadic cases, we did not have a similar case of double hanging.

In our whole series of cases in the form of femicide-suicide, those who committed suicide after committing the femicide are men. There is a spouse/partner relationship in all of the murders. Except for case number 7, all of those killed were women and all of them were spouses/partners or ex-partners. In case number 7, in which the father-in-law and brother-in-law were killed, the murderer opened fire on the car in which his wife also was while he was returning from the trial of the ongoing divorce case with his wife, his wife's father and brother died, his wife was taken to the hospital with serious injuries, and survived after the intervention and treatment in the hospital. Therefore, three people died in this incident, and it would be appropriate to consider it as multiple deaths, not dyadic deaths. For this reason, this case was considered as "family murder" and this case was included in our article. During the attack, the woman escaped death and was injured, but this case was also evaluated within the scope of femicide. The gender of the perpetrator and the victim and their being in a family or partner relationship is a common situation that is supported by the literature. Similarly, in one of the cases in a dyadic death case report by Odabaşı et al. (11), the corpse of a woman and a man who died as a result of a gunshot wound was found at the crime scene. According to the testimony of the identity witness, it was learned that the murderer was his husband, whom she divorced three years ago due to severe conflict, and that the spouse she separated constantly threatened her during this period. Rouchy et al. (9) made a compilation on homicide-suicide dynamics and the characteristics of their perpetrators out of 49 studies they had accessed in six electronic databases from October 1993 to August 2019, they stated that most homicide-suicide cases were committed in a family environment and emerged after separation, divorce and domestic conflicts.

In nine of the dyadic deaths in the form of femicide-suicide, the reason for the murder is the separation request of the spouse/partner and the discussions between them. There was no idea about the cause of the murder in two cases since there were no eyewitnesses who knew the court process or the course of the relationship between the partners. In male-dominant cultures, it is observed that men cannot bear the separation demands

of their wives/partners. This emerges as a result of individuals growing away from an environment of gender equality. In the study of Firat et al. (3) named "Understanding femicide and suicide", some of the suggestions given to prevent femicide-suicide cases are as follows; examination of all components of femicide-suicide as well as its aspects and researching risk factors causing femicide-suicide, researching preventive measures in terms of public health and putting into effect legal regulations for this purpose, strengthening health professionals providing primary health care services and/or psychological counselor/psychologist, social worker, child development workers working in Provincial Directorates of Family, Labor and Social Services with mental health and illness-based in-service training, the preparation and implementation of the psychological autopsy protocol (the protocol that includes the collection and examination of all kinds of data about the deceased individuals, that ensures the prevention of such actions by revealing the possible causes of femicide-suicides and the profiles of individuals thanks to the information obtained as a result of the examinations and evaluations) (3).

The data regarding the relationship between the deceased and the murderer in our case series suggest that dyadic deaths are an indicator of the most extreme and severe form of violence against women in our country. We are of the opinion that similar events occur not only in our city but also in other regions of the country, but they did not turn into studies containing serial cases except case reports. In most of the case reports presented in our country, the relationship between the deceased and the murderer is similar, and those who killed and committed suicide were men, and those who died were mostly women. In the case report of dyadic death as a result of the effect of honor in marriage by Zeren et al. (8), two cases, one 27-year-old male and the other 19-year-old female, was found dead in the vehicle, both were single, the male had a gun in his right hand, a firearm bullet entry wound in the right temporal region of the male case on external examination and a firearm bullet exit wound in the left temporal region was found and in the external examination of the female case, in contrast to the male case, there was a firearm bullet entry wound in the left temporal region and a firearm bullet exit wound in the right temporal region. It was determined that entry wounds of the cases were made from the adjacent firing distance. Considering that the male patient had a gun in his hand and the firearm bullet entry wound in the female case was in the left temporal region, it was understood that this situation increased the possibility of femicide-suicide (8).

The age differences of those who died and those who killed do not show any significance. The average age of the murderers is 38.6, the average age of the murder victims is 37.0. The ages and age differences between the men who killed and the women who died in cases 2, 8, and 10 are remarkable. The

murderers were 39, 44 and 21 years old, respectively, while the murder victim women were 23, 20, and 39 years old. In the study of Rouchy et al. (9), it was emphasized that homicide-suicide perpetrators are older than the cases of homicide alone or suicide alone. Our study results also support that view.

Exaggerated violence over the purpose of killing is common in femicide-suicide cases. When we look at the number of firearm entry holes in our case series, it is seen that there are 7 entry holes in 1 patient, 6 entry holes in 1 patient, 4 entry holes in 1 patient, 1 entry hole in 5 patients, and 5 and 2 entry holes in two men cases which were considered as "family murder". There are 25 wounds in 1 female case with a sharp object injury. In our study, in the toxicological examination of 23 individuals with femicide-suicide dichotomies, it was observed that ethanol was found in the blood in 9 people, drug active substances that could be used while alive in 7 people, and synthetic cannabinoid metabolites with narcotic-stimulant characteristics in 1 person. Of the 9 people with ethanol in their blood, 4 are victims and 5 are perpetrators. However, there is no statistically significant relationship with alcohol use among those who have a perpetrator-victim relationship. Considering the studies in the literature showing the relationship between alcohol and drug-stimulant use and partner violence-femicide; research reveals that there is consistency in the relationship between the occurrence of partner violence and the partner's consumption of alcohol or other drugs (19). According to 1998 United States statistics, it was found that more than half of the perpetrators of femicide were drinking, 45% of those convicted of killing a close partner were intoxicated at the time of the crime, and the average blood alcohol concentration was three times the legal limit (20). Several recent studies show associations between the use of certain drugs and partner aggression similar to those found in alcohol (19). In a survey of substance abuse treatment providers, it was estimated that approximately half of substance-addicted men were involved in partner violence in their relationships (21). Comparable partner violence rates among men undergoing substance abuse treatment were also reported in another study (22). It was observed that our study was not compatible with the literature in terms of toxicology.

In our case number 10, which took place in the city center, it was seen that a report was issued to the woman who was killed by her partner in the forensic medicine policlinic due to partner violence at a level that would not pose a life-threatening. It is not known whether the mortal cases coming from the districts have applied to the forensic units due to spouse/partner violence before. However, it is estimated that violence, which did not reach the fatal level before, was experienced in the double murder-suicide deaths that occurred after the woman wanted a divorce and after the argument between them. It has been understood from other studies on femicides that domestic violence can be a precursor to femicides. In fact, in 11

cities in the United States of America, in terms of risk factors for femicide-suicide dual death in abusive relationships, women, 67 of whom were parties to femicide-suicide dual death, and 356 women who were exposed to non-fatal physical abuse were compared. The perpetrator, victim, relationship and event characteristics were analyzed using logistic regression modeling, and the perpetrator's previous suicide threat and the victim's previous marriage to the perpetrator were determined as the two main risk factors specific to femicide-suicide double deaths (16). Therefore, we are of the opinion that necessary institutional psycho-social mechanisms should be implemented in applications of non-lethal violence, in order to prevent both femicide and dyadic femicide-suicide deaths.

In cases where the event is not defined as domestic violence, but only as murder-suicide, the event can be normalized as an ordinary event, the event can be perceived as a rare event, the victim can be blamed by focusing on the actions of the victim, the criminal justice system can be found fault with, the event can be minimized by focusing on an alternative problem in people's lives. The incident can be attributed to the perpetrator's loss of personal control or morale. In cases where the event is defined as domestic violence and called femicide-suicide, the event can be associated with domestic violence and femicide as a social problem (23,24). The cases should be handled as femicide-suicide in the context of domestic violence.

In a study conducted in South Africa; shows that 91.5% of the deaths of legal weapon perpetrators and their victims could have been prevented if this group of perpetrators did not have a legal weapon (25). In our study, we do not have any data on whether the firearms used by the perpetrators in femicide are registered-legal weapons. The inadequacy of easy access to firearms and control mechanisms in our country is an important problem that needs to be solved in order to prevent femicides.

Study Limitations

The limitation of our study is that we could not reach psychological autopsy findings in femicide-suicide cases among dyadic deaths.

CONCLUSION

We believe that psychological autopsy findings and creating a database where dyadic deaths are systematically recorded across the country, will help to understanding the dynamics of dyadic deaths and preventive measures for forensic pathologists and members of the judiciary, especially in femicide-suicide cases and in clarifying the cases where the mode of death is unclear.

Ethics

Ethics Committee Approval: Helsinki Declaration criterias are considered during the study.

Peer-review: Externally and internally peer-reviewed.

Authorship Contributions

Design: Y.B., Data Collection or Processing: Y.B., F.Ç., Analysis or Interpretation: Y.B., E.E., N.N.A., Literature Search: N.N.A., F.Ç., Writing: Y.B., E.E., F.Ç.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

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