

**Dyadic Death: A Case Report**

**İkili Ölüm: Olgu Sunumu**

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**Özet**

İki kişinin birlikte ölümü veya bir cinayeti takiben failin kendisini öldürmesi ikili ölüm (çift ölüm, dyadic death) olarak tanımlanmaktadır. Bu tip ölümler çok nadir görülmekte olup, iki kişinin birlikte intiharından ziyade cinayeti müteakiben intihar şeklinde görülmektedir. İkili ölüm nadir olarak görülse de şiddetin trajik bir formudur. Ailede ve şahit olanlarda psikolojik travma yaratıp, toplumun ve medyanın ilgisini çekmektedir. İkili ölüm etnik, kültürel köken ve sosyal edinimlerden, kullanılan alet ve görülme sıklığı açısından etkilenir. Olgumuz cinayeti takiben intihar olgusu olarak değerlendirilmiş olup konunun literatür eşliğinde değerlendirilmesi amaçlanmıştır.

**Anahtar kelimeler:** İkili ölüm, otopsi, olay yeri

**Abstract**

Death of two individuals in tandem or suicide of the perpetrator after committing a murder is defined as dyadic death. Although these types of death are seen very rarely, they are usually encountered as suicide following homicide rather than suicides of two individuals at the same time. Though rarely seen, dyadic death is a tragic form of violence. Dyadic deaths attract the attention of the public, and media by creating psychological trauma in the family, and those witnessed the incident. Incidence and the instruments used in dyadic death are affected by ethnicity, cultural origin, and social acquisitions. Our case has been evaluated as a case of suicide following a homicide, and assessment of this issue in the light of the literature is aimed.

**Keywords:** Dyadic death, autopsy, crime scene

## **Introduction**

The concept of ‘homicide-suicide’ coined by two words in English is defined as suicide of the perpetrator following his /her killing one or more than one individuals. As its Turkish translation, Öztürel suggested in 1980, the term “refakatli özkıyım, eşli, eşdeşli özkıyım” which means “suicide in companion” in Turkish. However in recent years the concept of “ ikili ölüm” meaning dyadic death in English has been used more frequently (1-3).

The researchers have required that for an event to be termed as ‘dyadic death’ suicide should occur within one week following an event of homicide. It was indicated that rarely seen suicide attracts the attention of media, ranking in importance after murder which primarily affects witnesses of the event, and family members for a prolonged period of time (4,5).

Although psychopathologic etiology involved in dyadic deaths differs from that of suicide of a single individual, predisposing factors were the same such as depression, borderline personality disorders, narcissistic neurosis in combination with physical disorders, isolation, and loss of social prestige. It has been reported that in less frequently seen cases of dyadic death in our country, the perpetrators were males, and they had killed themselves after murdering women with whom they had a love affair (6). It has been concluded from the analysis of these types of cases that incidents of dyadic deaths were seen between individuals in close relationship for a long time, but rarely between foreigners or individuals with short-term familiarity (6).

Our country lack registries, and investigations in which periodic, and regional data related to the cases of suicides following homicides, were recorded regularly. These researches have been rather presented in the form of case reports (6,7). Owing to the rarity of these cases, we aimed to contribute to the literature on this subject.

## **Case Report**

Autopsies of a 18-year old female, and 31-year-old male individuals found in the countryside with a shotgun beside them revealed a trace of gunshot powder soot measuring nearly 0.5 cm in length on the skin of their throats. They were wounded with a hunting rifle fired from a short distance (nearly adjacent shot). Examination of bullet’s trajectory demonstrated that the rifle was fired from in front through inferosuperior direction. When cutaneous, and subcutaneous findings were taken into consideration, badly fractured facial bones of both victims, bullet exit holes on the top of their heads with destructive changes of brain tissues at these site were detected. Autopsy examination of the woman disclosed evidences of pregnancy, and judicial investigation concluded that her male partner was already married. Postmortem examination of the notes written by him suggested that rejected demands of marriage or concerns about termination of this love affair had been the incentives for this case of dyadic death.



**Figure 1:** Crime scene dyadic death



**Figure 2:** Crime scene dyadic death

## Discussion

It has been revealed from investigations on cases of dyadic death that etiologies of episodes of homicide-suicide vary among countries. Usually husband kills his wife and/or children, and then commits suicide. It has been reported that the most prevalent influential triggering factors have been jealousy resulting from problematic relationships or revenge, followed by mental disease, somatic disorders or financial difficulties. Although in episodes of homicide-suicide, frequently firearms have been reportedly used, stabbing, and poisoning have been also mentioned among methods of murdering (8,9).

Amendments to be made on laws and regulations related to the possession of firearms license in Turkey could decrease the incidence of episodes of suicidal

attempts, and cases of homicide-suicide, an issue which should not be overlooked.

In an investigation performed by Milroy with 52 cases of dyadic death, it was disclosed that perpetrators of 49 cases had been male partners, and the triggering factor had been broken relationships. It was also detected that generally the victim had been the spouse or partner (as is the case in our report) (10).

A Hong Kong study investigated cases of homicide-suicide resulting in deaths of 99 aggressors, and 231 victims between years 1989 and 2005. Most of the aggressors were detected to be male (n=68; 68.7%) aged 30-49 years (n=62; 62.6%). Disputes between spouses/partners were the most frequently demonstrated etiologic factor. Mostly spouses/partners (n=46; 46.5%), and children (n=47; 47.5%) were victims. However in contrast to the other study, slaughtering (n=33; 33.3%), and poisoning (n=22; 22.2%) had been reported as the most frequently used killing methods. This divergence had been attributed to legal regulations concerning the use of firearms in Hong Kong (11). In another study where cases of dyadic death detected in Oklahoma between years 1994-2001 were investigated, firearms were used in 71 (97.3%) incidents in which 89 victims, and 73 perpetrators lost their lives. Victims were of female gender (n=71; %79.8), former or current male/female partner of the murderer (n=59; 66.3%) and child (children) of the perpetrator (n= 17; 19.1%). As influential factors divorce/separation from the spouse/partner (30.1%), jealousy (17.8%), other intrafamilial disputes (9.6%), and euthanasia (8.2 %) (especially in older and diseased partners/spouses) had been reported. Children were victimized in 12 (16.4) out of 73 cases of homicide-suicide.

Victimized children had been killed by their families (n=15; 83.3%), his/her sibling (n=1, 5.6%), and former boy friends (n=2; 11.1%). Mental disease had been detected in 20% of the perpetrators, which most frequently consisted of diagnoses of depression, and delusional disorders (5).

In one of the recent largest series about this issue, Bossarte et al analyzed data of 14 centers covering years 2003-2004 where a total of 457 victims lost their lives in incidents of homicide-suicide (n=209) and murder (n=248). Most of the incidents (82.3%) had happened at dwelling places of the victims. A 12.1% of the murdered victims were of pediatric age group, while 68 % of the perpetrators aged between 25-54 years. Psychiatric disorder and /or major depression had been detected in 19.6% of the perpetrators, while 7.2% had a history of psychiatric disorder (4).

Based on data retrieved by Logan et al from 17 separate centers, perpetrators involving in incidents of homicide-suicide were mostly male (91%), and aged between 20-49 years (64%). They had been involved in intrafamilial disputes (53.9%) , and used cutting and stabbing instruments (3.7%) (12)

It has been known that in cases of dyadic death, firearms are generally used. Therefore it can be deduced that restriction of access to firearms might reduce the number of these types of criminal events. Since in some cases, underlying psychiatric disorder is thought to be the triggering factor, we conceive that disclosure of the influential impact of psychiatric disorders on the developmental process of these episodes which have been recently encountered in increasing frequency in our country, and also prophylactic therapy of psychiatric

disorders will be useful measures to be taken beforehand. As a conclusion we believe that autopsy findings, crime scene examination, and criminal investigation should be evaluated in combination so as to conclude that our case is an episode of dyadic death.

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