
Case Report

Dyadic Death due to burns in Chamarajanagar, Karnataka

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Abstract

Dyadic death is defined as a lethal event in which an individual kills another and subsequently commits suicide immediately or with in short period. Homicide-Suicide deaths, though rare, are universal phenomenon reported from all over the world. When a phenomenon of homicide-suicide occurs involving mother as perpetrator, many questions arises and need attention, many facts need consideration and many circumstances need evaluation. The anecdotal Indian literature has described homicide-suicides episodes involving male as a perpetrator but only few reports with mother as assailant had been published. Here, we present a case of a homicide-suicide pact where in the perpetrator is the mother who killed a two and half year old kid and then committed suicide by burns.

Keywords: Murder-Suicide, Dyadic Death, Burns

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Introduction:

Murder-suicide, homicide-suicide, and dyadic death all refer to an incident where a homicide is committed, followed by the suicide of the perpetrator almost immediately or soon after the homicide¹⁻⁴. Suicide pacts are also a form of dyadic death, as seen in the case by Avis and Hutton⁵, where a couple committed suicide by hanging, and the weight of 1 partner was necessary in executing the hanging. The second most common form of homicide-suicide is filicide-suicide^{6, 7}. Rare forms are familicide-suicide, extrafamilial homicide-suicide, and homicides involving parents and siblings⁷. Extrafamilial homicide-suicide does not include only mass murders but also cases where the perpetrator is in a moral or emotional relationship with the victim such as a neighbour, landlord, or employee^{2, 7-9}.

The perpetrators in extrafamilial homicides-suicides can either be adults or adolescents, but adolescents are less likely to commit suicide following the homicide⁷. Here, we present a form of dyadic death where both the suicide and homicide were committed by burns, and we also reviewed selected literature on the subject.

Case Details:

A case was brought to the Department of Forensic Medicine and Toxicology, Chamarajanagar Institute of Medical Sciences, Chamarajanagar on 3rd Jan 2015. As per the magistrate inquest, a mother and a two and half year old son were brought to the casualty of District Hospital, Chamarajanagar on 3rd Jan 2015, where both were declared brought dead and shifted to morgue for Medico-Legal Autopsy.

Autopsy Findings:

Mother:

Body was found in pugilistic attitude. Tongue was partially protruded and bitten. Heat ruptures were present over the cubital fossa in both upper limbs. Skin blisters were present over most

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of the body parts. On pricking, it found to contain serous fluid. 2nd and 3rd degree burns injuries (Fig 1) present over the face, neck, front and back of chest, front and back of abdomen in patches including the genitalia (Fig 2), both upper limbs in patches except palms, both lower limbs in patches except soles. Line of redness was present over the burnt areas (Fig 3). Scalp hairs, eyebrows and eyelashes shows singeing of hairs. Ante-mortem burns injuries of more than 95% involvement of total body surface area.



Fig 1: 2nd and 3rd degree burns injuries.

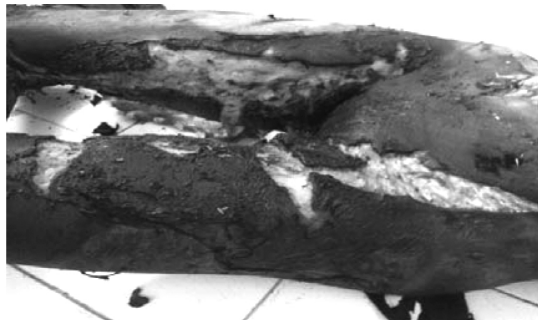


Fig 2: Burns over genital region

Internally, Soot particles (Fig 4) were present over the nasopharynx, larynx, trachea and bronchi. All the other visceral organs were congested. Both lungs were congested and oedematous. Cut section exudes blood mixed with froth. Stomach contains 100ml of yellow coloured partially digested rice meals. No peculiar smell. Normal mucosa.



Fig 3: Line of redness over burnt area

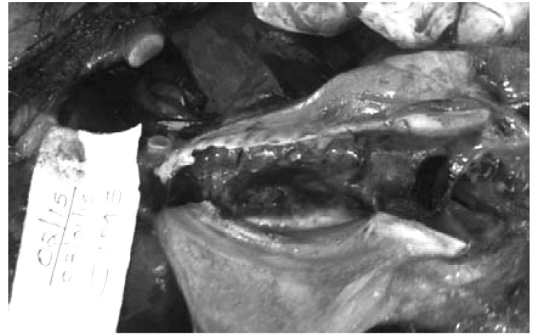


Fig 4: Soot particles in trachea

Child: Body was found in pugilistic attitude (Fig 5). Tongue was partially protruded and bitten. Heat ruptures were present over the cubital fossa in both upper limbs. Skin blisters were present over most of the body parts. On pricking, it is found to contain serous fluid. 2nd and 3rd degree burns injuries present over the face, neck, front and back of chest, front and back of abdomen in patches including the genitalia, both upper limbs including palms, both lower limbs including soles. Line of redness was present over the burnt areas. Scalp hairs, eyebrows and eyelashes shows singeing of hairs. Coils of intestine were protruding out from right flank region. Ante-mortem burns injuries of nearly cent percent total body surface area.



Fig 5: Body in pugilistic attitude

Internally, Soot particles were present over the nasopharynx, larynx, trachea and bronchi. Both lungs were congested and oedematous. Cut section exudes blood mixed with froth. Stomach contains 30ml of yellow coloured partially digested rice meals. No peculiar smell. Normal mucosa. All the other visceral organs were congested. Heat fracture present over the left temporo-parietal region over an area of 13cm × 11cm. Brain matter was partially drained out (Fig 6).

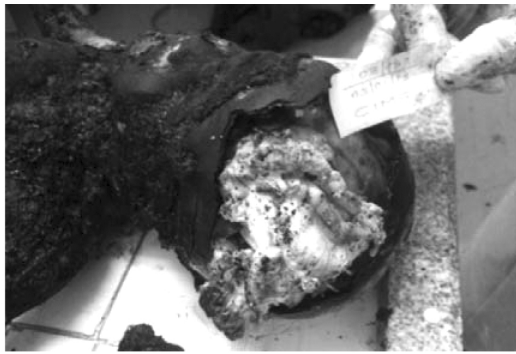


Fig 6: Brain matter partially drained out

Cause of Death: Cause of death was opined as death due to shock as a result of burns injuries sustained.

Discussion:

Homicide-suicide cases are relatively uncommon and vary among different regions². Coid described laws pertaining to homicide-suicide, with the first law pertaining to low homicide-suicide rates in countries with high homicide rates¹⁰. According to Milroy¹⁰, the homicide-suicide rates internationally are as follows: Miami, Fla (1977–1985): 0.55 per 100,000; Australia (1989–1991): 0.16 per 100,000; New Zealand (1976–1989): 0.05 per 100,000; Scotland (1986–1990): 0.05 per 100,000; and England/Wales (1980–1990): 0.07 per 100,000. In Miami, Fla, the homicide-suicide rate is the highest, and the lowest rates are in Scotland and New Zealand²⁻¹⁰. Marzuk et al¹¹ first classified homicide-suicide based on the type of relationship between the victim and perpetrator and on the motivation of the perpetrator (jealousy, mercy killing, etc). This classification has later been modified by Hanzlick and Koponen¹², although the basis of the classification remains the same. In the present case, the relationship between the perpetrator and the victim is mother and son, but the reason for the act is not known. Jena et al³ found that the average annual incident for homicide-suicides in South Africa, Pretoria region, was 1 per 100,000 over a period of 5 years. The victims involved in dyadic deaths and homicidal hangings are usually females, children, mentally disabled individuals, or individuals incapacitated

by drugs, disease, or alcohol^{1, 4, 8, 10, 13-15}. The perpetrator in these cases is usually male^{2-4, 8, 9, 16}. Where females are the perpetrators, the victims are their children, and this is known as filicide-suicide^{2, 4, 6, 9, 17}. In our case also, it can be called as filicide, since the perpetrator is mother and the victim is her son. According to Polson¹ there needs to be a disproportion between the victim and perpetrator to make the crime possible; the victim should be a child or an adult incapacitated by drugs, alcohol, or disease¹. In the study done by Jena et al³, the results showed that the majority of victims were females. The victims in homicide-suicides are either related to or in a close relationship with the perpetrator; victims who are unknown to the perpetrator are rare^{1,2}. Spousal killings (commonly associated with discord in the spousal relationship) and children killed by their parents are the commonest form of homicide-suicide^{1,2,10}. The presence of mental illness, such as depression and schizophrenia, in perpetrators is a very common finding in cases of homicide-suicide^{1,2,8,9}. In our case the mental status of the mother was normal. We have found from the literature review that the common method of killing and of suicide in dyadic deaths is shooting; the reason, whether it is due to the male predominance or availability of firearms, is not clear^{2-4, 8, 17}. Female perpetrators use less violent means of homicide such as poisoning, either by medication or carbon monoxide poisoning², which in our case is by pouring kerosene and setting fire. It is seen that the perpetrator will use the same weapon or method to commit the homicide and suicide, but in some cases, this can differ^{2, 3, 8}, which is the same in our case also, where the method to commit the crime is same.

Conclusion:

In Indian context, mother is placed next to God. When a phenomenon of homicide-suicide occurs involving mother as perpetrator, many questions arise and need attention, many facts need consideration and many circumstances need evaluation. Hence, it is necessary to focus on high risk population with multidisciplinary approach.

Clinical management of after survivals should be done and it is absolutely essential to establish national surveillance system for such episodes to know exact circumstances of each case.

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