**Case report** 

# End of care and caregiver-Dyadic death

### Chaitra Pai<sup>1</sup>, Ullasa Shetty<sup>2</sup>, Shodhan Rao Pejavar<sup>2</sup>, Parinita<sup>2</sup>, Suhel Shetty<sup>2</sup>

<sup>1</sup>Undergraduate, <sup>2</sup>Department of Forensic Medicine & Toxicology, A J Institute of Medical Sciences & Research Centre, Mangaluru, 575 004, Karnataka, India

(Received: October 2023 Revised: November 2023 Accepted: December 2023)

Corresponding author: Ullasa Shetty. Email: drullasshetty@ajims.edu.in

### ABSTRACT

Dyadic death or homicide-suicide is a rare combination of murder followed by suicide by the perpetrator. The culprit usually attempts self-annihilation due to extreme degree of guilt or attempt to escape from criminal punishment. An elderly couple's dead bodies were found by the home nurse when she came for duty. Old lady was found on her bed with a pillow on her face and the husband of the lady was found hanging in the adjacent room. The lady was bedridden for the last 7 years due to a stroke and home nurses were employed for the care. The husband was the main caregiver. The rapid urbanization and children moving towards greener pastures leads to home alone elderly people all over the world. Old age homes are alarmingly mushrooming everywhere and not contributing much to alleviate the stress of geriatric groups. Psychological autopsy, crime scene investigation and other corroborative findings helped to conclude the case as Dyadic Death. The caregiver burnout syndrome is an important entity in this case.

Keywords: Dyadic death; smothering; hanging; caregiver burnout syndrome.

## INTRODUCTION

omicide-suicides or murder -suicides or extended suicides or "dyadic deaths" refer to a homicide followed by the suicide of the perpetrator within one week of the homicide. Dyadic deaths are an uncommon occurrence in forensic networks. The rate of dyadic deaths around the world ranges approximately 0.01- 0.3/100,000 persons per year, with significant national and regional variations(1,2). The dyadic death usually happens within the family involving spouse, kids or lovers. The most important typology concerning murder- suicide is a classification by Marzuk et al., which was later modified by Hanzlick and Koponen (3,4). The common methods used are homicide by shooting, (hanging, strangulation, asphyxia smothering, drowning, Carbon Monoxide poisoning), stabbing, poisoning, burning, fall from height or sometimes non accidental vehicle crash. The suicide methods are usually same method as homicide like shooting, asphyxia, stabbing, poisoning, burning, fall from height or non-accidental vehicle crash (5). In majority of the cases of dyadic death perpetrators are men and victims are females who are usually younger than the perpetrator (current or former intimate partners; 6). When the perpetrator is female, children are the victims. The place of occurrence is usually home or residential area. The common motives are breakdown of intimate relationship, morbid jealousy, revenge, physical and mental illness, spouse/caregiver burnout syndrome, love rejection, financial stress. mercy(love), altruism (to save from the evils of the world), work stress, substance abuse, bullied at school, extreme guilt, fear of punishment, social isolation or alcoholism (7-11).

Investigation of dyadic deaths remains a challenge for the investigators especially in concluding the manner of death as the perpetrator is also dead. Scene of crime reconstruction, detailed autopsy and psychological autopsy are vital to determine the sequence of events. The dyadic death cases are of immense importance as they reflect on the mental health of the society, financial problems of the country or breakdown of family relations. These cases also garner a lot of media attention as well. Here we discuss a rare case of dyadic death in an elderly couple.

### **Case report**

An elderly couple- husband and wife aged 66 and 65 respectively, were found dead by the home nurse when she came for the duty in the early morning hours. The body of the female was found lying on the bed with a pillow on her face (Fig.1) and the body of the male was suspended from the ceiling by a blue and greenish coloured lungi in the adjacent room (Fig.2). The lady was bedridden for the last 7 years due to an episode of stroke and home nurses were employed for her care. The husband was the main caregiver and was depressed due to his wife's long-term illness. His constant apprehension about the wife's care led to the heart-wrenching decision to smother his wife and end his own life by hanging, as he believed no one would care for her if he died first.

### Autopsy findings in the perpetrator

A dark bark coloured parchment like pressure abrasion



Fig. 1: Crime scene



Fig. 2: Crime scene



Fig.3: External examination



Fig. 4: External examination Fig. 5

measuring 41 cm completely encircling the neck (Fig.3). Knot mark was present on the left side of the back of neck. Based on post-mortem, histopathology and chemical analysis report cause of death was opined as mechanical asphyxia consequent upon ante mortem hanging.

### Autopsy findings in the victim

Face was congested and sub conjunctival haemorrhage present. Multiple contusions of sizes varying from 1x0.5x0.3 cm to 6x3x0.5 cm on the face, neck and chest were found (Figs. 4 and 5). Extravasation of blood into sternocleidomastoid was present. Death is due to smothering consequent upon the pressure on the mouth and nostrils.

Mercy or love for the partner and altruism was the reason in this case which was also found in other studies involving elderly couples having chronic illness (16). The rapid urbanization and children moving towards greener pastures leads to home alone elderly people all over the world. Old age homes are alarmingly mushrooming everywhere and not contributing much to alleviate the stress of the aging population. Psychological autopsy, crime scene investigation helped in concluding the case as a dyadic death.

### CONCLUSION

The take home message from this case report is to address the interpersonal relationship between elderly and their caregivers and educate them about caregiver/spouse burnout syndrome. Elderly men in despair may take such drastic steps due to chronic illness of their spouse or self. The chronic illness can result in various mental health issues ranging from

Fig. 5: Internal examination

depression up to homicidal / suicidal tendencies. The home nurses must be sentient of spouse burnout and timely warning from them can prevent such catastrophe.

### **CONFLICT OF INTEREST**

The authors have no conflicts of interest.

### REFERENCES

- Liem, M., Barber, C., Markwalder, N., Killias, M., Nieuwbeerta, P. Homicide-suicide and other violent deaths: An international comparison. Forensic Sci Int. 2011;207(1-3):70-76.
- Eliason, S. Murder-suicide: a review of the recent literature. J Am Acad Psychiatry Law. 2009;37(3):371-376.
- Marzuk, P.M., Tardiff, K., Hirsch, C.S. The epidemiology of murder-suicide. JAMA. 1992;267(23):3179-3183.
- Hanzlick, R., Koponen, M. Murder-suicide in Fulton County, Georgia, 1988-1991. Comparison with a recent report and proposed typology. Am J Forensic Med Pathol. 1994;15(2): 168-173.
- Byard, R.W., O'Donovan, S., van den Huevel, C., Baldock, M. Familial vehicular murder-suicide. J Forensic Sci. 2018;63(4): 1307-1308.
- Zeppegno, P., Gramaglia, C., di Marco, S., Guerriero, C., Consol, C., Loreti, L., *et al.*, Intimate partner homicide suicide: A mini-review of the literature (2012-2018). Curr Psychiatry Rep. 2019;21(3):13.
- Milroy, C.M. The epidemiology of homicide-suicide (dyadic death). Forensic Sci Int. 1995;71(2):117-122.
- Chan, C.Y., Beh, S.L., Broadburst, R.G. Homicide-suicide in Hong Kong, 1989-1998. Forensic Sci Int. 2004;140(2-3):261-267.
- Saint-Martin, P., Bouyssy, M., O'Byrne, P. Homicide-suicide in Tours, France (2000-2005)--description of 10 cases and a review of the literature. J Forensic Leg Med. 2008;15(2):104-109.
- Oliffe, J.L., Han, C.S.E., Drummond, M., Sta. Maria, E., Bottorff, J.L., Creighton, G. Men, masculinities, and murdersuicide. American Journal of Men's Health. 2015;9(6):473-485.

#### Pai et al: End of care and caregiver-Dyadic death

- 11. Graser, R.R. Family murder in South Africa: some possible explanations, Acta Criminology 1992;5(19):75 -80.
- Alexandri, M., Tsellou, M., Antoniou, A., Skliros, E., Koukoulis, A.N., Bacopoulou, F., *et al.*, Prevalence of Homicide-Suicide Incidents in Greece over 13 Years. Int J Environ Res Public Health. 2022;19(13):7736.
- Raddi, S., Baralla, F., D'Argenio, A., Traverso, S., Sarchiapone, M., Marchetti, M. Do homicide perpetrators have higher rates of delayed-suicide than the other offenders? Data from a sample of the inmate population in Italy. Int J Environ Res Public Health. 2022; 19(24):16991.
- Roberts, K., Wassenaar, D., Canetto, S.S., Pillay, A. Homicide-suicide in Durban, South Africa. J Interpers Violence. 2010; 25(5) 877-899.
- 15. Ekberg, J.Y., Griffith, N., Foxall, M.J. Spouse burnout syndrome. J Adv Nurs. 1986;11(2):161-165.
- De Koning, E., Piette, M.H. A retrospective study of murdersuicide at the Forensic Institute of Ghent University, Belgium: 1935-2010. Med Sci Law. 2014;54(2):88-98.