

Domestic Violence and Fatal Outcomes: A Forensic Study in Bangladesh

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Abstract

Background: Domestic violence is a pervasive social and public health problem that can result in fatal outcomes, particularly among women. In Bangladesh, deaths related to domestic violence are often concealed or misclassified, posing significant challenges for accurate death investigation. Medicolegal autopsy plays a crucial role in identifying injury patterns and establishing the cause and manner of death in such cases.

Objective: To analyze fatal domestic violence cases based on medicolegal autopsy findings and to evaluate the role of forensic examination in determining the cause and manner of death.

Methods: A cross-sectional descriptive study was conducted in the Department of Forensic Medicine at International Medical College, Gushulia, Sataish, Tongi, Gazipur, Bangladesh, from December 2022 to December 2023. A total of 200 medicolegal autopsy cases suspected or confirmed to be related to domestic violence were included.

Results: Females constituted 81.0% of victims, with a female-to-male ratio of 4.3:1. The majority of cases belonged to the 21–40 years age group. Husbands were identified as the most common perpetrators (68.5%). Blunt force injuries were the leading cause of death (29.5%), followed by asphyxia (25.0%) and burns (18.5%). Most deaths were classified as homicidal (71.0%) after medicolegal autopsy, while a notable proportion were initially reported as suicidal.

Conclusion: Fatal domestic violence predominantly affects young and middle-aged women in Bangladesh. Medicolegal autopsy is indispensable in revealing concealed homicide, accurately determining cause and manner of death, and supporting justice and prevention strategies.

Keywords: Domestic violence; Fatal outcomes; Medicolegal autopsy; Forensic medicine; Homicidal deaths; Bangladesh.

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Introduction

Domestic violence is a pervasive public health, social, and human rights problem that affects individuals across all socioeconomic strata, with women being disproportionately victimized. It encompasses physical, psychological, sexual, and emotional abuse occurring within intimate partner or familial relationships. While many cases remain hidden due to fear, stigma, and social pressures, the most severe manifestation of domestic violence is death. Globally, a significant proportion of female homicides are attributed to intimate partner or family-related violence, particularly in low- and middle-income countries [1,2].

In Bangladesh, domestic violence remains deeply rooted in sociocultural norms, gender inequality, economic dependence, and limited access to legal remedies. Despite the enactment of laws aimed at protecting women, such as the Domestic Violence (Prevention and Protection) Act, 2010, fatal domestic violence continues to be reported, often under circumstances that obscure its true nature [3,4]. Many deaths occur within the household and may initially be reported as accidents, suicides, or natural deaths, leading to underreporting and misclassification in official statistics.

From a forensic medicine perspective, deaths related to domestic violence pose considerable diagnostic and interpretative challenges. Victims may sustain repeated injuries over time, and fatal trauma may result from cumulative abuse rather than a single incident. The absence of witnesses, delayed medical attention, and unreliable histories further complicate death investigation [5]. In such cases, medicolegal autopsy plays a crucial role in identifying patterns of injury, documenting both recent and healed trauma, and establishing the cause and manner of death through scientific evaluation.

Autopsy-based forensic studies are essential for uncovering the hidden burden of fatal domestic violence. They provide objective evidence that supports criminal justice processes, safeguards victims' rights, and highlights systemic failures in prevention and protection. Moreover, forensic data contribute to public health surveillance, policy development, and the formulation of targeted interventions. Understanding the forensic characteristics of domestic violence-related deaths is therefore vital for addressing this persistent and preventable cause of mortality in Bangladesh [6–8].

Methodology

This cross-sectional descriptive study was carried out in the Department of Forensic Medicine at International Medical College, Gushulia, Sataish, Tongi, Gazipur, Bangladesh, over a period of thirteen months from December 2022 to December 2023. All medicolegal autopsies conducted during the study period constituted the study population. A total of 200 cases suspected or confirmed to be related to domestic violence were included in the study based on predefined inclusion criteria.

Cases were selected from medicolegal autopsies where the history, inquest report, scene findings, or autopsy features suggested violence occurring within a domestic or intimate partner setting. Bodies with complete inquest reports and relevant police documentation were included.

Cases with advanced decomposition obscuring injury interpretation and those with incomplete records were excluded from the study.

Data were collected using a structured data collection form designed for the study. Information recorded included age, sex, marital status, relationship between victim and alleged perpetrator, place of occurrence, alleged history, external and internal injury findings, cause of death, and manner of death. Data sources included police inquest reports, postmortem examination findings, hospital records when available, and ancillary investigation reports such as toxicology and histopathology.

All collected data were checked for completeness and accuracy before being entered into a computerized database. Descriptive statistical analysis was performed, and results were expressed as frequencies and percentages. Ethical approval was obtained from the institutional ethical review committee of International Medical College, and confidentiality of all cases was strictly maintained throughout the study.

Results

A total of **200 fatal domestic violence cases** were analyzed during the study period.

Table 1: Distribution of Cases According to Age and Sex (n = 200)

Age group (years)	Male n (%)	Female n (%)	Total n (%)
≤20	4 (2.0)	14 (7.0)	18 (9.0)
21–30	10 (5.0)	58 (29.0)	68 (34.0)
31–40	12 (6.0)	43 (21.5)	55 (27.5)
41–50	6 (3.0)	27 (13.5)	33 (16.5)
51–60	4 (2.0)	14 (7.0)	18 (9.0)
>60	2 (1.0)	6 (3.0)	8 (4.0)
Total	38 (19.0)	162 (81.0)	200 (100)

Table 1 demonstrates a marked female predominance (81.0%) among fatal domestic violence cases. The majority of victims were aged 21–40 years, with the highest proportion in the 21–30 years age group (34.0%). Female victims outnumbered males across all age groups, while cases above 60 years were least common.

Table 2: Distribution According to Relationship of Alleged Perpetrator (n = 200)

Relationship	Number of cases	Percentage (%)
Husband	137	68.5
In-laws	38	19.0
Intimate partner (non-spouse)	15	7.5
Other family members	10	5.0
Total	200	100

Table 2 shows that husbands were the most common perpetrators of fatal domestic violence (68.5%), followed by in-laws (19.0%). This highlights the predominance of intimate partner and family-related violence in domestic settings.

Table 3: Distribution According to Cause of Death (n = 200)

Cause of death	Number of cases	Percentage (%)
Blunt force injuries	59	29.5
Asphyxia (strangulation/smothering)	50	25.0
Burns	37	18.5
Poisoning	28	14.0
Sharp force injuries	18	9.0
Others	8	4.0
Total	200	100

Table 3 shows that blunt force injuries were the most common cause of death (29.5%), followed by asphyxia (25.0%) and burns (18.5%). Poisoning and sharp force injuries accounted for smaller proportions of cases.

Table 4: Distribution According to Manner of Death (n = 200)

Manner of death	Number of cases	Percentage (%)
Homicidal	142	71.0
Suicidal	43	21.5
Accidental	9	4.5
Undetermined	6	3.0
Total	200	100

Table 4 shows that the majority of deaths were classified as homicidal (71.0%) following medicolegal autopsy. A considerable proportion of cases were initially reported as suicidal (21.5%), while accidental and undetermined deaths constituted a small minority.

Table 5: Injury Pattern Observed in Victims (n = 200)

Injury pattern	Number of cases	Percentage (%)
Multiple injuries	108	54.0
Single fatal injury	52	26.0
Burns only	28	14.0
No visible external injury	12	6.0
Total	200	100

Table 5 indicates that multiple injuries were present in more than half of the cases (54.0%), suggesting repeated or sustained assault. Single fatal injuries accounted for 26.0% of cases, while burn injuries alone were observed in 14.0%. A small proportion of cases showed no visible external injuries.

Table 6: Presence of Defensive Injuries (n = 200)

Defensive injuries	Number of cases	Percentage (%)
Present	88	44.0
Absent	112	56.0
Total	200	100

Table 6 shows that defensive injuries were present in 44.0% of victims, indicating attempts to resist assault, while 56.0% of cases showed no defensive injuries.

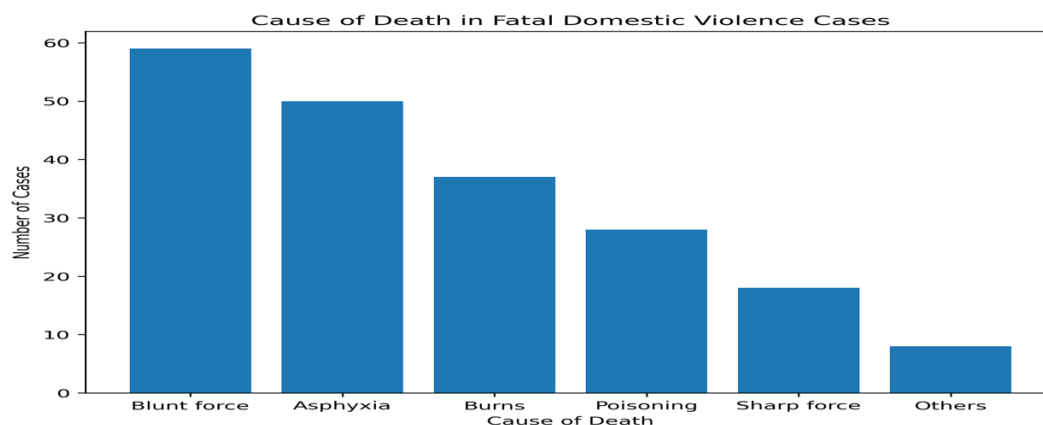


Figure 1: Distribution of fatal domestic violence cases according to cause of death (n = 200).

Figure 1 shows the distribution of fatal domestic violence cases according to cause of death. Blunt force injuries were the leading cause, accounting for the highest number of cases, followed by asphyxia and burns. Poisoning and sharp force injuries contributed to a smaller proportion of deaths, while other causes were least frequent.

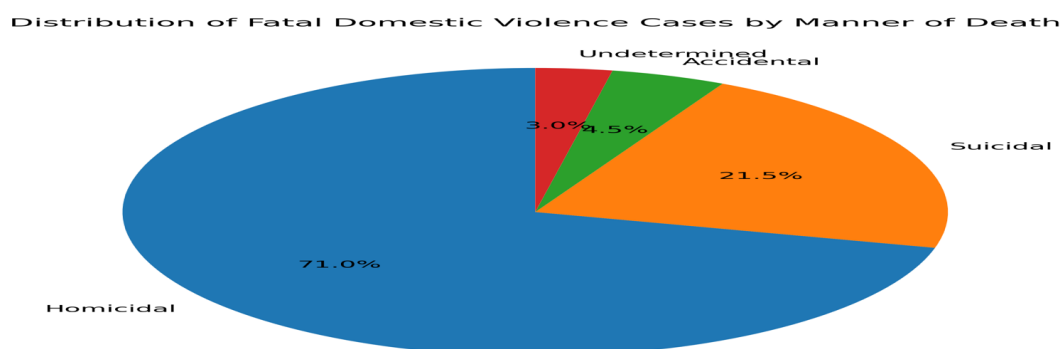


Figure 2 : Distribution of fatal domestic violence cases according to manner of death (n = 200).

Figure 2 illustrates the distribution of fatal domestic violence cases according to the manner of death. The majority of cases were classified as homicidal, while a considerable proportion were reported as suicidal. Accidental and undetermined deaths constituted only a small fraction of the total cases.

Discussion

The present study demonstrates a marked female predominance among fatal domestic violence cases, with females accounting for more than four-fifths of victims. This finding is consistent with global and regional literature indicating that women are disproportionately affected by domestic and intimate partner violence, often resulting in fatal outcomes [1–3]. The concentration of cases in the 21–40 years age group highlights the vulnerability of young and middle-aged women, particularly during reproductive and economically dependent phases of life. Similar age and sex distributions have been reported in autopsy-based studies from South

Asia, underscoring the role of gender inequality, marital stress, and economic dependency as contributing factors [4,5].

The majority of victims were killed by their husbands, followed by in-laws, reflecting the domestic setting and intimate nature of the violence. This pattern aligns with previous studies that identify intimate partners and family members as the primary perpetrators in fatal domestic violence cases [2,6]. The involvement of in-laws further reflects sociocultural dynamics prevalent in Bangladesh, where extended family living arrangements may exacerbate domestic conflicts.

Blunt force injuries emerged as the leading cause of death, followed by asphyxia and burns. These findings are comparable with forensic studies reporting physical assault, strangulation, and burn injuries as common mechanisms in domestic violence fatalities [7,8]. The notable proportion of burn-related deaths may be linked to dowry-related violence and kitchen-related assault scenarios, which have been widely reported in South Asian contexts [9].

Most cases were classified as homicidal following medicolegal autopsy, although a significant proportion had been initially reported as suicidal. This underscores the critical role of forensic autopsy in uncovering concealed homicide and preventing misclassification of deaths [10]. Similar observations have been documented in studies emphasizing that domestic violence-related homicides are often disguised as suicides or accidents [11].

The predominance of multiple injuries suggests repeated or sustained assault rather than a single fatal incident, supporting the chronic nature of domestic abuse. This pattern has been consistently described in forensic evaluations of domestic violence fatalities [7,12].

Nearly half of the victims exhibited defensive injuries, indicating attempts to resist assault. The presence of such injuries strengthens the interpretation of homicidal violence and highlights the violent dynamics within domestic settings [13].

Overall, the table-wise analysis reinforces the indispensable role of medicolegal autopsy in identifying fatal domestic violence, establishing cause and manner of death, and providing objective evidence for justice and prevention strategies [14-17].

Limitations

This study has several limitations that should be considered while interpreting the findings. First, as a cross-sectional, autopsy-based study conducted at a single tertiary care institution, the results may not be fully representative of the overall national scenario of fatal domestic violence in Bangladesh. Second, the study relied primarily on police inquest reports, autopsy findings, and available circumstantial information; underreporting or misclassification of domestic violence at the reporting stage may have led to exclusion of some relevant cases. Third, detailed psychosocial factors such as history of prior abuse, socioeconomic status, substance abuse, and mental health issues could not be consistently assessed due to lack of reliable documentation. Finally, advanced decomposition in some cases limited detailed injury interpretation, which may have influenced the assessment of cause or manner of death.

Conclusion

The present study highlights domestic violence as a significant cause of fatal outcomes in Bangladesh, with women constituting the majority of victims and husbands being the most frequent perpetrators. Young and middle-aged adults were predominantly affected, emphasizing the profound social and public health impact of such deaths. Blunt force injuries,

asphyxia, and burns emerged as the leading causes of death, and most cases were ultimately classified as homicidal following medicolegal autopsy. These findings underscore the indispensable role of forensic medicine in uncovering concealed domestic violence, accurately determining cause and manner of death, and preventing misclassification of fatalities. Strengthening medicolegal investigation, improving documentation, and integrating forensic findings with legal and social support systems are essential to enhance justice delivery and contribute to effective prevention strategies against domestic violence in Bangladesh.

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