Pattern of Homicidal Death among the Post-Mortem Cases in A Metropolitan City of Bangladesh

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ABSTRACT

Background: Homicide means killing one human being by another human. It is a global problem and has significant consequence for both social and economic security of the people as well as national development. This study was aimed to describe the pattern homicidal behavior in a major metropolitan area, Dhaka city and the relationships among socio-demographic characteristics.

Materials and methods: This was a cross-sectional study during the period of July 2017 to June 2018 in the Department of Forensic Medicine, Dhaka Medical College. A total number of 935 cases were autopsied during the period of which 319 cases were included in the study as homicidal death. All the inquest reports and the challan were read through along with post-mortem reports during the study period. The data were collected during the autopsy as well as from the registration books (Govt. records.) in the department of Forensic Medicine, Dhaka Medical College.

Results: Out of 319 homicidal death, 227cases were above the age of 30 years (71.16 % of the total cases), 233 cases were male (73.04 %) and 86 were female (26.96 %) whereas considering religion, the majority were Muslim 284 in number (89.09%) and the rest were of other religion. According to the method of homicide, 198 cases were stab and cut-throat, 81 cases were strangulation, 32 cases were firearm injury & the 08 cases were suffocation.

Conclusion: In this study did not complete their primary education, marital status and occupations. Most of the homicidal death occurred among the young age group which is very alarming to the society and for the nation. So, proper legislative measures and actions should be taken to prevent such occurrence.

KEY WORDS

Homicide; Post-Mortem; Strangulation; Suffocation.

INTRODUCTION

The WHO defines homicide as death by injury purposely inflicted by others. It may be lawful (Justifiable and excusable) or unlawful (Murder, culpable and rash). Justifiable homicide term applies to judicial execution of death sentence permitted by the law of different

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Date of Submitted : 02.02.2020 Date of Accepted : 30.04.2020 countries of the world after the trail in the court.² The excusable homicide caused unintentionally by an act done in good faith. This includes, killing for self-defense when attacked, provided there is no other means of defense, causing homicide due to accident or misadventure, death following a lawful operation, homicide committed by an insane person.³ In 2012, almost half a million people (437,000) across the world died due to unlawful homicide.

Around the globe, 79% of all homicide victims were male and 21% were female. The average homicide rate is at 9.7 per 100,000 males and 2.7 per 100,000 female globally.⁴ In 2018, homicide rate for Bangladesh was 2.4 cases per 100,000 populations. Though, in Bangladesh homicide rate of both sexes fluctuated substantially in recent years, it tended to decrease through 2004 - 2018 period ending at 2.37 cases per 100,000 populations which could be around 3,830 in the year 2018.⁵

Homicidal cut throat is regularly found on both side of the neck at or underneath the level of thyroid cartilage. The course of the wound is transverse or from underneath upwards. A beveling cut can be seen & the edges are sharp & clean-cut. Hesitation cut & tailing are usually absent. The seriousness of the damage is indeed grater.⁶

Strangulation represents an important form of blunt neck trauma requires an understanding of various maneuver used for termination of life. Passing by ligature strangulation or garroting including the chocking of the neck by a ligature pulled that's tight by constrain other than the victim's body weight. Throttling or manual strangulation is the compression of neck with human hands. Chokehold is maneuver initially planned to initially permit law requirement officer to repress rough hoodlums. The "Carotid Sleeper" involves compression of the neck within the twist of the elbow & the "bar arm" move utilize unbending lower arm for compression.

The wounds of the firearms are either penetrating or perforating. The pellets and bullets could often be detected within the body of the deceased during the penetrating wound. The characteristics of the firearm's injury and description depend on the form and quality of the weapon's action.⁸

The suffocation could be a common term to indicate that form of asphyxia where respiratory exchange is obstructed without pressure to the neck or drowning. Smothering, gagging, overlying, chocking & traumatic asphyxia are the different forms of suffocation. This study was aimed to describe the pattern of homicidal death in Dhaka city and their relationship with age, sex, religion and common methods of homicidal death.

MATERIALS AND METHODS

This record based cross-sectional study of postmortem cases was performed at the morgue of the Department of Forensic Medicine, Dhaka Medical College (DMC) Dhaka during the period of July 2017 to June 2018. Most of the victims were brought to DMC morgue from all over the Dhaka city as 35 police stations are under the Dhaka city. A total number of 935 postmortem cases were done during the period. All the inquest reports and the challan were read through along with those postmortem reports during the study period. All the data were collected in a predefined data collection sheet from post mortem registers (Govt. records) and reports. Then, statistical analyses were performed by using the computer software SPSS (Statistical Package for Social Science) 21.0 and were expressed in frequency and percentage. From ethical points of view consent of doctors who performed the autopsies and of victim's relatives has been taken. Necessary approval regarding data collection technique was taken from Dhaka Medical College ethical clearance committee.

RESULTS

A total of 935 cases were autopsied during the study period in Dhaka Medical College morgue, of which 319 cases were homicidal death.

Table I Distribution of 935 postmortem cases according to duration showing that among 319 homicidal deaths maximum occurred during the period of January to March 2018.

Table I Monthly distribution of homicidal cases

Month	No. of Post	No. of	Percentage
	mortem	Homicide	(%)
July 2017	65	21	6.58
August 2017	72	25	7.83
September 2017	76	28	8.77
October 2017	109	26	8.15
November 2017	91	19	5.95
December 2017	97	24	7.52
January 2018	73	29	9.09
February 2018	77	34	10.65
March 2018	71	28	8.77
April 2018	64	27	8.46
May 2018	66	28	8.77
June 2018	74	30	9.40
Total	935	319	100

Table II Distribution of 319 post–mortem cases of Homicidal death according to the age of the deceased showing that, most of them 227 (71.16%) were of 30 years and above.

Table II Distribution of homicide according to age

Age (In year)	Homicidal death	Percentage (%)
10 - 20	25	7.83
20 - 30	67	21.01
30 and above	227	71.16
Total	319	100

Table III Distribution of post-mortem cases of Homicidal death according to the sex of the deceased showing that among 319 homicidal deaths, 73.04% were male and 26.96% were female.

Table III Distribution of homicide according to sex

Sex	Homicidal death	Percentage (%)
Male	233	73.04
Female	86	26.96
Total	319	100

The majority of those homicidal death, 284 (89.09%) occurred among the Muslim people.



Figure 1 Homicide rate according to the Religion of the deceased

Table IV Distribution of post-mortem cases of Homicide according to the method of Homicide showing that among 319 post-mortem cases, most methods of Homicide were by stab and cut throat 198 (62.07%).

Table IV Different methods of homicide

Method	Number of cases	Percentage (%)
Stab & Cut throat	198	62.07
Strangulation	81	25.39
Fire-arms injuries	32	10.03
Suffocation	08	2.51
Total	319	100

DISCUSSION

There are much of thoughtful, high quality and revolutionary research on crime (e.g. homicide) seasonality for more than a century throughout the world. Amongst them, much of the research on crime seasonality over the past 25 years revealed the climatic conditions responsible for observed crime fluctuations across weeks, months, or quarters of the year. Researchers have explored the influence of temperature, humidity, hours of sunlight, level of precipitation and other climatic conditions such as wind and barometric pressure on within-year variations in crime rates. ¹⁰ Similarly, in this study, it was found that these variations of homicidal frequency in different part of the study year.

This study revealed a greater number of male were victims than the women which is near similar with the usual global pattern of sex and age group and had consistence with the study done by other researchers in this field.¹¹

It was observed that the majority of those homicidal death, 284 (89.09%) occurred among the Muslim people in this study. Interestingly, conventional religious beliefs were common among the Muslims of the study group. The present study demonstrated more lack of self and social control which is a powerful correlate of homicide. Religion acts as a safeguard for individuals against the temptation of offending behavior.¹²

Religiously based activity promotes social ties and feelings of belongingness among people with conventional lifestyles. Finally, devotion to religious principles helps internalize moral commitments and promotes obedience to honor a religious system.¹³ Religious beliefs and participation in religious activities alone or in group can help people exercise and improve both of their self-control and social control. Available research indicates that individuals possessing high

levels of religiosity in comparison to individuals possessing low levels of religiosity contribute to higher levels of self and social control which reduces the likelihood for criminal behavior when criminogenic opportunities are available under certain circumstances. ¹³⁻¹⁶ Ethnic heterogeneity exhibited strong direct effects on homicide. Nations with higher levels of ethnic heterogeneity will have higher levels of homicide. Typically, researchers suggested that heterogeneous communities of Muslims or Hindus are living widespread in Bangladesh so, the rate of homicide followed. ¹⁷

It was observed that hypovolemic and neurogenic shock was the most common mode of homicidal death in this study i.e. 198 homicidal cases (62.07%) and cause of death was stab and cut throat wound. This finding was similar to the findings by the authors in New Delhi, India. 18 In this study cause of death by asphyxia was in 81 cases (25.39%) following strangulation, which not in consistence with the study by other researchers.¹⁹ Again 32 cases (10.03%) were related directly to the damage of the vital organs (Brain, heart and lung) following firearm injury or suffocation. Researchers found anterior chest as the frequent site of injury, elaborated by common use of fire arms, which was comparable with other study.²⁰ The time of death whether before or after the arrival in the vicinity of health care system was lacked in the records that were evaluated. Male-female variations of mode of homicide or cause of death were not ascertained in this study.

LIMITATIONS

This was a single centred study so actual scenrio did not reflacted.

CONCLUSIONS

There are variations in the courses of homicide from country to country, region to region and from time to time. This study may serve as an eye opener for the legislative, policy makers and all well alert citizens of the country. Smartness in dealing towards such direction of prevention of the underlined cases plays a vital role for homicide.

RECOMMENDATIONS

In fact, further more coordinated multicenter study can reveal the whole country's true picture. Homicidal death rate is very alarming and sensitive to the society and the nation. Most of the homicidal death occurred among the young age group which is very alarming to the society and for the nation. So, proper legislative measures and actions should be taken to prevent such occurrence.

DISCLOSURE

All the authors declared no competing interest.

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