

## Study on Unnatural Death Patterns in Dhaka City

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### ABSTRACT

Unnatural deaths are the deaths which are caused by any means other than any disease<sup>1</sup>. Unnatural death is an indicator of social and mental health. This retrospective study was done to ascertain the pattern of unnatural deaths, whose autopsies were performed by Forensic medicine dept. of Dhaka Medical College from 1<sup>st</sup> Jan, 1996 to 31<sup>st</sup> Dec, 2000. A total 10436 death recorded were analysed to see their age, sex etc. The study revealed that total number of unnatural deaths were 9413, out of them males were higher than females ( M- 75.78% & F- 24.22%). Results showed that Accidental deaths were 77.22%, Homicidal deaths were 14.02% and Suicidal deaths were 10.76%. Accidental & Homicidal deaths were more common in male, whereas suicidal deaths were more common in female. This study suggest an extensive studies to formulate strategies to prevent those unnatural death to improve the situation.

**Key Words:** Unnatural Death Patterns, Suicidal, Accidental

### Introduction

Now Uncontrolled Population is a burning problem in our country. It is increasing day by day without any development of socioeconomic condition. Our natural growth rate is 2.16%<sup>2</sup>. Due to increasing number of population, our life becoming complex & threatened. Due to poor socioeconomic condition, development of communication, transport & technology, the number of crimes also becoming higher for the last few years. Unnatural death is one of the indicators of the level of social & mental health<sup>3</sup>. Accidents have their own natural history and follow the same epidemiological pattern as any other deaths from disease that is the agent, the host and the environment interacting together to produce injury or damage<sup>4</sup>. They occur more frequently in certain age group, sex etc. Causing more mortality, morbidity and disability rate. Types of accidental deaths include road traffic accidents, domestic accidents, industrial accidents, railway accident, violences etc. Accidental deaths are more common

among all other categories of unnatural deaths in home and abroad. This study is an attempt to explore the pattern of unnatural deaths in Dhaka City, referred to the Forensic Medicine dept. of Dhaka Medical College for Postmortem examinations.

### Materials and Methods

Reports of unnatural deaths examined in the department of Forensic Medicine, Dhaka Medical College from 1<sup>st</sup> Jan. 1996 to 31<sup>st</sup> Dec, 2000, were the source of data. A total 10436 deaths recorded analysed to find out the pattern of unnatural deaths to formulate strategies to prevent and control the number of unnatural deaths. Data were collected and recorded purposively from retrospective records of postmortem examinations and processed by Computer.

### Results

Out of 10436 deaths recorded at DMC Morgue, total number of unnatural deaths were 9413, out of

them 7080(75.22%) were Accidental deaths, 1320(14.02%) were Homicidal deaths & 1013(10.76%) were Suicidal deaths.

**Table I:** Nature of death by age

Age in years	Nature of death		
	Accidental	Homicidal	Suicidal
0-10	1015 (14.34)	91(6.89)	0
11-20	968 (13.67)	117(8.86)	601(59.33)
21-40	3681 (51.99)	815(61.74)	403(39.78)
40+	1416 (20)	197(22.5)	9(0.89)
	7080	1320	1013

As shown in table -I Accidental deaths in age group of 0-10 years were 14.34%, in age group 11-20 years were 13.67%, in 21-40 years were 51.99% & in 41 years & above those were 20%. Homicidal death in age group 0-10 years were 6.89%, in age group 11-20 years were 8.86%, in age group 21-40 years were 61.74% & in age group 41 years and above those were 22.5%. Suicidal death 0-10 years no case was recorded, suicidal deaths in age group 11-20 years were 59.33%, in age group 21-40 years were 39.78% and 41 years and above those were 0.89%.

**Table II:** Nature of death by sex

Sex	Nature of death			Total
	Accidental	Homicidal	Suicidal	
Male	5898(83.31)	966(73.18)	269(26.55)	7133(75.78)
Female	1182(16.69)	354(26.82)	744(73.45)	2280(24.22)

Accidental Deaths (83.31%) & Homicidal Deaths (73.18%) were higher in male than females. Suicidal Deaths were more in females (73.45%) than males (26.55%). (Table- II)

**Table III:** Nature of death by religion

Religion	Nature of death			Total
	Accidental	Homicidal	Suicidal	
Muslim	6514 (92)	1267(96)	952(94)	8733(92.78)
Hindu	496(7)	40(3)	51(5)	587(6.24)
Others	70(1)	13(1)	10(1)	93(0.98)

\* Figures in the parenthesis indicate Percentage

## Discussion

As just observed, most countries have a legal procedure for investigating deaths which are not obvious natural disease<sup>4</sup>. Those deaths which are criminal, suspicious, accidental, suicidal, sudden and unexpected, unexplained or in any way not due to natural causes must be reported for medicolegal investigation<sup>4</sup>.

In this study unnatural deaths were more common in male than female which is similar to the other study. But different from the reports of Rahman AKMS et al<sup>5</sup> who had found that homicidal death were more common than other (Accidental & Suicidal). Homicidal and Accidental deaths were higher in male than female because male are more exposed to external environment than female. Out of all unnatural deaths, Accidental deaths were higher than others, like our neighboring country India. According to a study conducted by The National Transportation Planning and Research center of New Delhi & Trivandram, in every 4 minutes a person is killed or injured in Road accident in India which has a network of 15, 00,000 roads. The study pointed out that the number of accidents per lakh population varies from 5.39 in Assam to 63.72 in Maharashtra. In case of accident rate per 100 sq. km area Kerala had the highest figure with 16.85, followed by West Bengal with 15.98. Accident number per 1000 km of Road length was the highest in Maharashtra, 242 against 168.87 in Gujrat and 145.17 in Tamilnadu. Bangladesh is characterized by high birth rate, high mortality and morbidity rates and high rate of population. According to 1871 census it was 22.79 million, this increase to 35.6 million in 1931, 59.85 in 1951 and 107.99 in 1991. Out of these total population major are Muslims, 13% of total population are Hindus, Buddhist and Christian. Our study pointed out that number of accident per lakh population in our country was 5.32%. It was found that all unnatural deaths were very common in the age between 21-40 years. This is due to the fact that it is most active period of life in both sexes. Suicidal deaths were higher in female than male. This is possible because due to lower socio economic condition, lack of education, dowry system, females were

mentally and physically tortured regularly which stimulate the female to commit suicide. About 71.3% of cases we got the history of torture by husband and his family members for recovery of dowry in our country. Action to prevent accidents or resultant trauma is becoming ever more important is public health since technological development in modern societies is accompanied by an increased risk of accident deaths<sup>7</sup>.

### Conclusion

In the light of this study, it is obvious that accidental deaths were more common among the all other categories of unnatural deaths in Dhaka city. Homicidal and suicidal deaths were also a major portion among the other unnatural deaths. So all possible steps of measures should be carried out to prevent those unnatural deaths to improve the situation.

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