

# Study of Pattern of Injuries in Homicidal Deaths Autopsied at Belagavi Institute of Medical Sciences, Belagavi: A Prospective Study

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## Abstract

Homicide means the killing of one human being as a result of conduct of another. Homicidal deaths are seen in every part of the world but the toll varies from place to place. As per National Crime Records Bureau and Statistics, in 1953 the number of homicidal deaths were 9082 which has exponentially increased to the extent of 29,272 in 2021. Such being the disturbing data and Belagavi being the biggest district of Karnataka state, a detailed study was undertaken on the pattern of injuries in homicidal deaths.

**Materials and Methods:** A Prospective study was conducted on all cases of homicidal deaths registered under Sec 302 IPC autopsied at Belagavi Institute of Medical Sciences from January 1<sup>st</sup> 2016 to June 30<sup>th</sup> 2017 formed the study material. Information on various factors such as age, sex, weapon used, injury pattern were noted for each case in a separate proforma.

**Results:** Among 1265 cases autopsied during the study period, 54 cases were homicidal deaths. Among 54 cases, head injuries were present in 15 cases (27.78%), stab injury involving neck, thorax and abdomen were present in 14 cases (25.93%), injuries caused by asphyxia were seen in 14 cases (25.93%), majority of the victims were males (64.81%) and the predominant age group was 20 to 39 years (48.15%).

**Conclusion:** The homicide being the preventable cause of death, its incidence and prevalence can be reduced by strict implementation of law. The long term, wide-ranging policies are required to eradicate this heinous crime.

**Keywords:** Homicide, Autopsy, Injury pattern, Weapon.

## Introduction

Homicide is killing of a human being by another human being.<sup>1</sup> Today the world has become less

safe than ever before. Increasing violence constantly threatens our well-being, with homicide being one of the scariest threats.

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The word homicide is derived from Latin word homo- "man" and cide- "Icut".<sup>2</sup> Homicidal deaths are seen in every part of the world but the toll varies from place to place.

According to United Nations Office on Drugs and Crime (UNODC) 2019, intentional homicide caused the deaths of almost half a million people (464,000) across the world in 2017. Asia accounted for 23% of total homicide victim worldwide. Around 81% of homicide victims were male. Men aged between 15 and 29 are at the highest risk of homicide globally. The global average homicide rate stands at 6.1 per 100,000 population.<sup>3</sup>

As per NCRB statistics, in 1953 the number of homicidal deaths were 9082 which has exponentially increased to the extent of 29,272 in 2021.<sup>4</sup> As per NCRB(2021) both at national level and Karnataka, majority of the victims were males and they were in the age group of 15 to 45 years.<sup>4</sup> It is clear from all the above data that statistics played a major role in framing policies to curb the different menaces, murder being one of the major among the menace. The pattern of injuries may provide vital information to law enforcement agencies thereby helping the law to punish the accused.

With a large unemployed male population, increasing youth population, rapid urbanization and increasing alcohol and drug abuse, India is a ticking time bomb of everyday violence. Hence a detailed and thorough analysis and presentation of homicidal death is definitely the need of the hour.

#### **AIMS AND OBJECTIVES OF THE STUDY**

To know the pattern of injuries in homicidal deaths autopsied at Belagavi Institute of Medical Sciences, Belagavi.

#### **Materials and Methods**

The present study was conducted in the Department of Forensic Medicine and Toxicology

At Belagavi Institute of Medical Sciences, Belagavi from January 1<sup>st</sup> 2016 to June 30<sup>th</sup> 2017

after getting necessary approval from the Institutional Ethics Committee.

#### **Inclusion criteria:**

All cases of homicidal deaths registered under Sec 302 IPC autopsied at Belagavi Institute of Medical Sciences during the study period.

#### **Exclusion criteria:**

All cases other than homicidal deaths autopsied at Belagavi Institute of Medical Sciences during the study period.

#### **Source of data:**

1. Information about the pattern of injuries sustained by the deceased was obtained from post mortem findings and hospital case records (in admitted cases).
2. The socio demographic profile of the deceased was obtained from police records, hospital records and also by direct interrogation with the next of kin, relatives and friends accompanying the victims.

#### **Results**

During the study period from January 1<sup>st</sup> 2016 to June 30<sup>th</sup> 2017, a total of 1265 cases were autopsied at Belagavi Institute of Medical Sciences, Belagavi. Out of 1265 cases, 54 cases were homicidal deaths constituting 4.26%. Out of 54 cases, 50 cases were registered under Sec 302 IPC and 4 cases which were registered initially under Sec 174(c) CrPC were later converted into Sec302IPC on perusal of autopsy findings. **(Table 1)**

Out of 54 cases, 35 were males (64.81%) and 19 were females (35.19%)- **(Table 2)** and maximum victims 13 (24.07%) each were in the age group of 20-29 years and 30-39 years, followed by 10 cases (18.52%) in the age group of 40-49 years, 6 cases (11.11%) each in the age group of 0-9 years and 50-59 years, and 3 cases (5.55%) in the age group of 10-19 years. **(Table 3)**

In the present study, majority of the victims were from urban area. Out of 54 victims, 35(64.81%) were from urban area and 19 (35.19%) were from rural area. **(Table 4)**

Among 54 cases, head injuries were present in 15 cases (27.78%), stab injury involving neck, thorax and abdomen were present in 14 cases (25.93%), injuries

caused by asphyxia were seen in 14 cases (25.93%), chop wounds involving torso seen in 3 cases (5.55%), burn injuries and blunt trauma to testes and abdomen were seen in 2 cases each (3.70%). Fire arm injury were seen in 1 case (1.85%). Pattern of injuries could not be determined in 3 cases (5.55%) due to skeletonisation/putrefaction of the body. (Table 5 and 6)

Defence wounds were present in 13 cases (24.07%) whereas there was no defence wounds in 38 cases (70.37%). In 3 cases defence wounds could not be commented due to putrefaction/skeletonisation of the body. (Table 7)

**Table No 1: Showing total number of medico-legal autopsies conducted in Belagavi Institute of Medical Sciences during the study period**

Total No of Autopsied Cases	Total No of homicidal deaths among autopsied cases	Percentage
1265	54	4.26%

**Table 2: Showing sex wise distribution of homicidal deaths**

Sex of the deceased	No of cases	Percentage
Male	35	64.81%
Female	19	35.19%
TOTAL	54	100%

**Table 3: Showing Age wise distribution of homicidal deaths**

Age in years	No of cases	Percentage
0-9 yrs	6	11.11%
10-19yrs	3	5.55%
20-29yrs	13	24.07%
30-39yrs	13	24.07%
40-49yrs	10	18.52%
50-59yrs	6	11.11%
60-69yrs	1	1.85%
70-79yrs	1	1.85%
>80yrs	1	1.85%
TOTAL	54	100%

**Table 4: Distribution of homicide according to domicile pattern**

Area	No of homicidal cases	Percentage
Urban	35	64.81%
Rural	19	35.19%
Total	54	100%

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Blunt trauma by kicking/fisting	To testes leading to testicular haemorrhage	1	2	3.70%
	To abdomen leading to foetal death by abruptio placenta	1		
Not known			3	5.55%
TOTAL			54	100%

**Table 6: Showing distribution of stab injuries in homicidal deaths**

Stab injury			Total no of cases	Percentage
Abdomen	Liver	2	7	50%
	Mesentry	2		
	Spleen	1		
	Kidney	1		
	Bowel	1		
Thorax	Heart	2	5	35.71%
	Lung	2		
	Subclavian	1		
	Vessels			
Neck (Injury to major blood vessels)			2	14.29%
TOTAL			14	100%

**Table 7: Showing presence or absence of defence wounds in percentage and numbers**

Defence wounds	Total no of cases	Percentage
Present	13	24.07%
Absent	38	70.37%
Not Known	3	5.56%
TOTAL	54	100%

### Discussion

A prospective study conducted to study pattern of injuries in homicidal deaths among autopsied cases at Belagavi Institute of Medical Sciences, Belagavi for a period of one and half years from January 1<sup>st</sup> 2016 to June 30<sup>th</sup> 2017 reveals that out of 1265 medico-legal autopsies conducted during the study period, 54 cases (4.26%) were of alleged homicidal deaths.

In the present study, majority of the victims were male constituting 64.81% whereas females constituting 35.19%. The ratio of male and female were 1.84:1. The reason for male dominance was probably due to the aggressive nature of male. Similar

findings were observed in the study conducted by Chaudhary B L et al<sup>5</sup> and Basappa S Hugar et al<sup>6</sup>

In the present study it was observed that majority of the victims were in the age group of 20-29 years and 30-39 years i.e., the third and fourth decade of life. Our finding is similar to the study conducted by S. Mohanty et al<sup>7</sup> and Akshat Vij et al<sup>8</sup>.

In the present study majority of the victims were from urban areas constituting 64.81% (35 cases) whereas remaining 35.19% (19 cases) from rural areas. Study by Shetty A K<sup>9</sup> in Belagavi from 2003 to 2008 showed majority of the victims were from rural area constituting 57% which is in contrast to our study, which shows the effects of rapid urbanization in a period of about 14 yrs.

In the present study, 17 cases (31.48%) of victims exhibited evidence of injuries due to sharp weapons. Among 17 victims, 14 (25.93%) were victims of stab injuries involving (abdomen-7, thorax-5 and neck-2) 3 victims (5.55%) had sustained chop wounds.

15 cases (27.78%) sustained head injuries by hard and blunt weapons. 6 victims (11.11%) exhibited evidence of injuries due to strangulation. 5 victims (9.26%) showed evidence of drowning. Burn injuries and throttling were present in 2 cases each (3.70%).

1 victim (1.85%) sustained firearm injury. In our study, majority of victims sustained injuries due to sharp weapons which is similar to the study conducted by S. Mohanty et al<sup>7</sup>. Study conducted by Gadge Sachin et al<sup>10</sup> shows majority of victims (65.7%) sustained injuries by blunt weapons which is in contrast to our study.

Our study showed 24.07% exhibited evidence of defence wounds and 70.37% of victims had no defence wounds.

### Conclusion

Man by nature is a fighting animal. Hence to expect a society without crime will be a myth. What's said above though is the reality to core, but still a crime like murder is and will always be undigestable. Meticulously planned & well conceived murders are the ones which pose grave threat to society. The problem at hand can be solved or settled by killing some human being, this very thought is horrendous and the even more horrible & unfathomable part of a murder is the culprit thinking that he can easily escape from clutches of law after such heinous crime.

Conviction rate for homicide is alarmingly less. Causes for such low conviction rates range from poor police investigation, witness turning hostile due to threat, shortage of investigating officers, lack of evidence and poor performance of the prosecutors. Faster trial of cases aided by fast and thorough investigation will, in all probability, increase the conviction rate and thus create a fear psychosis in the society that murderers will never go unpunished.

Fear of law is the need of the hour to curb such heinous crimes. The average homicide rate can be declined further, if Forensic experts, Police & Judiciary all work in unison & leave no stone unturned in getting conviction. Government should invest in socioeconomic development to bring down the rate of violent crimes.

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### References

1. Reddy K.S.N. The Essentials of Forensic Medicine and Toxicology. 33rd ed. New Delhi: The Health Sciences Publishers; 2014. p.290.
2. Bardale R. Principles of Forensic Medicine and Toxicology. 2nd ed. New Delhi: The Health Sciences Publishers; 2017. p.294.
3. Report by United Nation Office of Drugs and Crime. <https://diligentias.com/report-by-united-nation-office-of-drugs-and-crime/> accessed on 7/8/2023.
4. Crime in India 2021 | National Crime Records Bureau. <https://ncrb.gov.in/en/Crime-in-India-2021>. Chapter-2A Murder (States/UTs). Updated on 3/8/2023 accessed on 7/8/2023
5. Chaudhary B L, Kumar Mukesh, Yadav Pradeep, Band Rahul. Pattern of homicide: A retrospective study of Central Delhi. International Journal of Medical Toxicology and Legal Medicine. 2013;15 (3&4):25-30.
6. Hugar B S, Chandra G, Harish S, Jayanth S H. Pattern of Homicidal deaths. Journal of Indian Academy of Forensic Medicine. 2010;32(3):194-198.
7. Mohanty S, Mohanty S.K, Patnaik K.K. Homicide in Southern India: A five year retrospective study. Forensic Medicine and Anatomy Research. April 2013;1(2):18-24.
8. Vij A, Menon A, Menezes R.G, Kanchan T, Rastogi P.A. Retrospective review of homicides in Mangalore, South India. Journal of Forensic and Legal Medicine. 2010; 17(6):312-315.
9. Shetty A K. Trends of homicidal deaths in and around Belgaum, Karnataka. Medico-Legal Update. 2010; 10(1):5-6.
10. Gadge Sachin, Zine K.U, Batra A.K, Kuchewar S.V, Meshram R.D, Dhawane S.G. Medico-Legal study of Homicide in and around GMC, Aurangabad. Medico-Legal Update. 2011;11(2):56-58.