

January-June 2020

Volume 29

Issue 1

PRINT ISSN: 2277-1867

ONLINE ISSN: 2277-8853



# JOURNAL OF FORENSIC MEDICINE SCIENCE AND LAW

Official Publication of Medicolegal Association of Maharashtra

## **Editor-in-chief**

Dr Ravindra Deokar

## **Associate Editors**

Dr Sadanand Bhise

Dr Sachin Patil

**MULTISPECIALITY, MULTIDISCIPLINARY, NATIONAL  
PEER REVIEWED, OPEN ACCESS, MLAM (SOCIETY) JOURNAL**

### **Editorial Office Address**

Department of Forensic Medicine & Toxicology, Third Floor, Library Building, Seth G S Medical College & KEM Hospital, Parel, Mumbai-400 012. Email id: [mlameditor@gmail.com](mailto:mlameditor@gmail.com) Phone: 022-24107620 Mobile No. +91-9423016325



# JOURNAL OF FORENSIC MEDICINE SCIENCE AND LAW

(Official Publication of Medicolegal Association of Maharashtra)  
Email.id: [mlameditor@gmail.com](mailto:mlameditor@gmail.com)

PRINT ISSN:  
2277-1867

ONLINE ISSN:  
2277-8853

## *Original Research Article*

### **Study of Profile of Homicidal Deaths at Mortuary Complex of a Tertiary Care Centre in Bhavnagar Region**

Moga H<sup>a</sup>, Parmar AP<sup>b\*</sup>

<sup>a</sup> Junior Resident, <sup>b</sup> Professor & Head,

Department of Forensic Medicine & Toxicology, Government Medical College & Sir Takhtasinhji General Hospital, Bhavnagar, Gujrat, India- 364001.

#### Article Info

**Received on:** 25.11.2019  
**Accepted on:** 30.11.2019

#### Key words

Homicide,  
Assault,  
Murder.

#### Abstract

The retrospective study is undertaken to analyze the profile of homicidal deaths occurring in Bhavnagar region to understand the relations of murders with demographic and personal data. The knowledge thus gained can be highlighted to reveal magnitude of its impact on the society as well as to attempt solution to assist global efforts to design evidence-based policies to prevent and reduce crime in those areas and population groups where violence is most acute. In our study, autopsy cases received by our hospital morgue registered and /or opined as homicidal deaths in 2018 were analyzed in this retrospective cross-sectional study. 89.47% cases were males. Most of the homicide victims were young men in the age group 21 to 30 years (44.73%). Urban and rural areas found to have same proportions of homicide victims – 50% each. On Wednesday, least number of homicides occurred – only 5.26%. Most homicide incidents occurred between 4 pm to 12 o'clock at night (57.90%). January, September and November have highest & same occurrence of homicide - 14.29%. Season of summer has highest occurrence of homicide – 42.10%.

#### 1. Introduction

Homicidal crime rate data are considered among the most representative and comparable crime indicators. For the same, this study explores and analyses the recent patterns of the homicidal deaths and its demographic, social and medico-legal aspects in one of the major cities of Gujarat state. Murder is the highest level of aggression found in all cultures. <sup>1</sup> The incidence of such heinous crimes provokes worries in the general population. Explanations for these crimes can be found, among others, in the rapid macroeconomic phenomenon of

internationalization, urbanization, and motorization and their related consequences on people and communities, life styles and practices. <sup>2</sup> The retrospective study is undertaken to analyze profile of homicidal deaths occurring in Bhavnagar region to understand the relations of murders with demographic and personal data. The knowledge thus gained can be highlighted to reveal magnitude of its impact on the society as well as to attempt solution to assist global efforts to design evidence-based policies to prevent and reduce crime in those

**How to cite this article:** Moga H, Parmar AP. Study of Profile of Homicidal Deaths at Mortuary Complex of a Tertiary Care Centre in Bhavnagar Region. J For Med Sci Law 2020;29(1):12-15.

**\*Corresponding author:** Dr. Amit P Parmar, Professor & Head, Department of Forensic Medicine & Toxicology, Government Medical College & Sir Takhtasinhji General Hospital, Bhavnagar, Gujrat, India - 364001. Email: [kda2308@yahoo.com](mailto:kda2308@yahoo.com) (M): +91- 9925011608

areas and population groups where violence is most acute.<sup>3</sup> Information about place and time settings is vital as they can help in providing the pertinent information of murder and directs the murder investigation.<sup>4</sup> Young offenders are becoming increasingly violent and this is a cause for concern, as they are future generation.<sup>5</sup> Previously similar studies have been done in the same region by Parmar DJ et al.<sup>6</sup>

## 2. Aims & Objective:

- To analyze various aspects of homicidal autopsy cases according to victim's individual profile like Age, Sex, and Area of living i.e. Rural or Urban.
- To analyze various aspects of homicide cases according to the crime's occurrence like Season, Day, Time and Month wise variation of homicide cases.
- To draw public attention and awareness regarding current patterns of homicidal offences.

## 3. Methodology:

Approval from Institutional Ethics Committee taken before conducting this study. This is a retrospective cross-sectional study of 12 months duration of year 2018. This is a record-based study of homicidal cases, performed at the mortuary complex of our tertiary care hospital.

Data is collected from police papers, information by relatives of the deceased & from the post mortem examination of the deceased in a pre-designed proforma maintaining confidentiality.

All cases registered by police officials as homicides and all cases in which manner of death is given as homicide after conducting the post mortem examination during the study period of year 2018 were included in this study.

All cases registered by police officials as other than homicides, all cases in which manner of death is given as other than homicide after conducting the post mortem examination during the study period of year 2018 & any cases subjected for post mortem examination with alleged or suspected history of homicide but which were later registered as non-homicidal based on the post mortem examination findings, circumstantial evidence and investigation by the police and any cases where data was incomplete were excluded. Data was analyzed using Microsoft Excel.

## 4. Results:

Total of 38 (3.63%) Homicidal cases observed out of 1048 total post mortem examinations performed in the year of 2018.

**Table 1: Gender-wise Distribution of Homicidal Cases**

Sr. No	Gender	Cases (n=38)	%
1	Male	34	89.47
2	Female	4	10.53

**Table 2: Age-wise Distribution of Homicidal Cases**

Sr. no	Age group (Years)	Cases (n=38)	%
1	0-1	3	7.89
2	1-10	0	0
3	11-20	5	14.29
4	21-30	17	44.73
5	31-40	3	7.89
6	41-50	2	5.26
7	51-60	5	14.29
8	61-70	3	7.89

Rural and urban areas show same proportions of homicide victims – 18 cases each (50% each).

**Table 3: Month & Season Wise Distribution of Assault Incidents**

Sr. no	Season	Month	Cases (n=38)	%
1	Winter	January	2	5.26
2		February	1	2.63
3	Summer	March	3	7.89
4		April	3	7.89
5		May	5	14.29
6		June	5	14.29
7	Monsoon	July	1	2.63
8		August	1	2.63
9		September	5	14.29
10		October	5	14.29
11	Winter	November	6	15.79
12		December	1	2.63

## 5. Discussion:

The findings and results of proportions of homicidal deaths according to total post mortem examinations performed in the respective institution in the region are lower than the Global homicide rate i.e. 6.9 and the homicide rate of Asia, Europe and America which is 3, 4 and 16 respectively.<sup>3</sup> Male victims constitute 89.47% of which 44.73% with the age group 21 to 30 years (Table 1). Parmar DJ et al<sup>6</sup>,

Rastogi AK et al<sup>7</sup>, Gupta A et al<sup>8</sup>, Dhaval J Patel<sup>9</sup>, Zanzrukiya KM et al<sup>10</sup>, Mada P et al<sup>11</sup> found similar results (Table 2). Second most proportion of victims observed in 11 to 20 years group which is 14.29%. These findings differ with the findings by Gupta A et al<sup>8</sup>, Dhaval J Patel<sup>9</sup>, G Angam et al<sup>12</sup>.

**Table 4: Time of Day-wise Distribution of Assault Incidents**

Sr. No	Time	Cases (n=38)	%
1	Morning 5 AM to 12 at noon	3	7.89
2	Afternoon 12 at Noon to 4 PM	5	14.29
3	Evening 4 PM to 12 at Midnight	22	57.90
4	Night 12 at Midnight to 5 AM	1	2.63
5	Unknown	7	18.42

**Table 5: Day of the Week-wise Distribution of Assault Incidents**

Sr. No	Time	Cases (n=38)	%
1	Monday	6	15.79
2	Tuesday	3	7.89
3	Wednesday	2	5.26
4	Thursday	6	15.79
5	Friday	4	10.53
6	Saturday	6	15.79
7	Sunday	6	15.79
8	Unknown	5	14.29

Most homicide incidents occur in Season of Summer from months of March to June having 44.36% cases (refer to Table 3). These findings are similar to Rastogi AK et al<sup>7</sup> & Dhaval J Patel<sup>9</sup>, Zanzrukiya KM et al<sup>10</sup>. Findings differ with the findings by G Angam et al<sup>12</sup>. Considering the time of the assault, most homicide incidents fall in between 4 PM to 12 o'clock in Midnight – 57.90% (Table 4). Gupta A et al<sup>8</sup>, Dhaval J Patel<sup>9</sup>, Basappa S. Hugar et al<sup>13</sup> found similar results. Unfortunately, few criminological studies have acknowledged the importance of time of homicide incidents as part of their study.<sup>8,9,13,14,15,16,17</sup> Regarding time settings of murder, details about the exact time of murder incidents were not published in many cases.<sup>6,7,10,11,12</sup> What is known is that the majority of homicides in India occur during late evenings and at night.<sup>14</sup> In Salfati CG, Dupont F.<sup>15</sup> study, 69.0% of the

victims were killed while it was dark outside. However, this observation was in contrast with Sri Lanka, where the majority of homicides took place during the daytime.<sup>16</sup> A Malaysian study done by Kamaluddin M et al<sup>17</sup> based on information from newspaper indicated that the majority of Malaysian murders took place during late evening or night time. Compared to Rastogi AK et al<sup>7</sup>, there is no relation to assault day of the week found with distribution of cases in our study. (Table 5)

## 6. Conclusion:

The result of age group proportions involved in homicidal incidents in these and many other similar studies is alarming for the nation as the youth are more involved in this type of assaults. Male gender seen more may be due to higher mobility and more socially active status. Males aged 21 to 30 years are more active, violent, and more vulnerable to the fast-changing social trends and culture.

Probably because of the weather in summer, most homicidal incidents observed as people go out regularly and meet other people more during summer because of no rain and much cold.

People tend to go out mostly in evening, hence the more cases falling in 4 PM to 12 O'clock at night time period.

For better results and evaluation of various aspects discussed here, long study time period should be considered. More researches needed indeed, and researchers should include data related to time, day & season of the homicidal incidents in these type of studies for better evaluation in future.

## Funding:

This research received no specific grant from any funding agency in the public, commercial, or non-profit sectors.

## Declarations of interests:

The authors declare that there is no conflict of interest.

## References:

1. Mohanty MK. Variants of homicide: a review. *Journal of clinical forensic medicine*. 2004 Aug 1;11(4):214-8.
2. World Health Organization. The impact of violence; Lives lost and health harmed. World report on violence and health. Geneva 2002:1-11.
3. United Nations Office on Drugs and Crime

- (UNODC). Global Study on Homicide Trends, Contexts, Data.2011, p.15.
4. Kamaluddin M, Shariff N, Matsaat G. Mechanical profiles of murder and murderers: An extensive review. *Malays. J. Pathol.* 2018 Apr ;40(1):1-10.
  5. Shivakumar BC, Vishwanath D, Srivastava PC. Trends of homicidal deaths at a tertiary care centre Bengaluru. *Journal of Indian Academy of Forensic Medicine.* 2011;33(2):120-4.
  6. Parmar DJ, Bhagora LR, Parmar RD, Suvera KM. Recent trends of homicidal deaths in Bhavnagar region-A two-year retrospective study. *IAIM.* 2015 Aug;2(8):45-54.
  7. Rastogi AK, Singh BK, Dadu SK, Thakur PS, Lanjewar AK, Raput PP. Trends of homicidal deaths in Indore (MP) region one-year retrospective study. *Journal of Indian Academy of Forensic Medicine.* 2013;35(4):343-5.
  8. Gupta A, Rani M, Mittal AK, Dikshit PC. A study of homicidal deaths in Delhi. *Medicine, science and the law.* 2004 Apr;44(2):127-32.
  9. Patel DJ. Analysis of homicidal deaths in and around Bastar region of Chhattisgarh. *Journal of Indian Academy of Forensic Medicine.* 2012;34(2):139-42.
  10. Zanzrukiya K, Tailor C, Chandegara P, Govekar G, Patel U, Parkhe S. Profile of homicidal death cases at government medical college & new civil hospital, Surat. *International Journal of Medical Science and Public Health.* 2014 Jul 1;3(7):885-9.
  11. Mada P, Krishna PH. A comprehensive study on homicidal deaths in hyderabad. *Journal of Indian Academy of Forensic Medicine.* 2013;35(4):312-6.
  12. Angam G, Maring SK, Singh KP. A Study of Homicide Victims in JNIMS Hospital, Imphal. *Journal of Indian Academy of Forensic Medicine.* 2018;40(2):143-5.
  13. Hugar BS, Harish S, SH J. Pattern of homicidal deaths. *Journal of Indian Academy of Forensic Medicine.* 2010;32(3):194-8.
  14. Mohanty MK, Kumar TM, Mohanram A, Palimar V. Victims of homicidal deaths—an analysis of variables. *Journal of Clinical Forensic Medicine.* 2005 Dec 1;12(6):302-4.
  15. Salfati CG, Dupont F. Canadian homicide: An investigation of crime-scene actions. *Homicide studies.* 2006 May;10(2):118-39.
  16. Edirisinghe PA, Kitulwatte ID. Extreme violence—homicide; an analysis of 265 cases from the offices of JMO Colombo and Ragama—a study from Sri Lanka. *Legal Medicine.* 2009 Apr 1;11: S363-5.
  17. Kamaluddin M, Shariff NS, Mat Saat GA. Epidemiological profiles of murders and murder victims in Peninsular Malaysia from 2007 to 2011 a reported by a newspaper. *IOSR J Humanities and Soc Sci.* 2014; 19 (7): 73-81.