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## A socio epidemiological study of homicidal death in Varanasi District (Uttar Pradesh)

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### Abstract

**Introduction:** Homicide is the killing of one human being by another human being, is the most heinous crime in any civilization and leading cause of unnatural deaths. Land dispute, money including dowry, love and extra marital affairs are the main motive behind these crimes executed with the help of Blunt weapons, sharp weapons, firearms, strangulation, homicidal hanging, smothering, drowning, burns, poisoning etc.

**Material and Methods:** Present study was carried out with the help of cases brought for Post-mortem examination in the mortuary of Department of Forensic Medicine, Institute of Medical Sciences (IMS), Banaras Hindu University (BHU), Varanasi, over a span of 1<sup>st</sup> October 2016 to 31<sup>st</sup> march 2018.

**Observation and Results:** Homicidal deaths were recorded in 200 cases (6.7%) out of 2976 medico legal cases.

**Discussion:** homicidal deaths were highest among 21-40 age groups with highest frequency in rainy season especially in September month by Hindu married male belonging to rural areas because of land disputes.

**Keywords:** Homicidal death, age, gender, Socio-economical etc.

### Introduction

Homicide is defined as killing of one human being by another human being, due to highest level of aggression in all social groups. Murder is most serious crime in any civilization and leading cause of unnatural deaths. Two elements of crime, Mens -rea and Actus - reus should work together to commit murder. The main motives behind the homicidal deaths are money disputes, land disputes, love triangle, extra marital affairs and political gain. Assaults by Blunt weapons, sharp weapons, firearms, strangulation, homicidal hanging, smothering, drowning, burns, poisoning etc. are various patters of homicidal deaths throughout the globe. Use of firearm for homicidal death is increasing day by day in developed and developing counties, because of easy availability of technically advanced firearms and increasing areas of terrorist groups. In the present paper we are dealing with socio epidemiological factors affecting the pattern of homicidal death in Varanasi region <sup>[1, 2, 3, 4]</sup>.

### Material and methods

Present study entitled "A socio - epidemiological study of homicidal death in Varanasi district in Uttar Pradesh" is carried out with the help of cases brought for Post-mortem examination in the mortuary of Department of Forensic Medicine, Institute of Medical Sciences (IMS), Banaras Hindu University (BHU), Varanasi, over a span of 1<sup>st</sup> October 2016 to 31<sup>st</sup> march 2018. During this period total 2976 postmortem were conducted in Department of Forensic Medicine, IMS, BHU, Varanasi. Out of which 200 cases were taken for this study which included homicidal death. Collection of data includes questionnaires relevant to homicidal death and interview sessions at the time of autopsy with the concerned investigating officer, parents of the victims, other family members and relatives of the victims, neighbor's and other persons accompanying the deceased. Data also collected from police inquest, post-mortem register and reports, hospital memos in hospitalized cases, death certificate if hospital death is there, /other relevant reports etc.

### Observations and results

During the study period from 1<sup>st</sup> October 2016 – 31<sup>st</sup> March 2018, a total 200 homicidal death cases were recorded out of 2976 medico-legal postmortem examination conducted at the mortuary of Department of Forensic Medicine, Institute of Medical Sciences, Banaras Hindu University.

### Correspondence

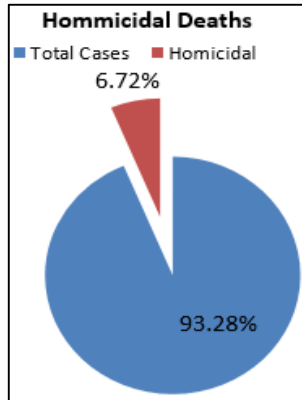
#### Ramkrishna Mishra

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**Table1:** Showing incidence of homicidal death in medico-legal autopsies.

Duration	Total cases	Homicidal deaths	Percentage
1 <sup>st</sup> October 2016 - 31 <sup>st</sup> March 2018	2976	200	6.72%

Table 1 shows incidence of homicidal death were recorded in 200 cases (6.72%) out of 2976 medico legal cases, suggesting that the incidence of homicidal deaths were fairly low in Varanasi region.

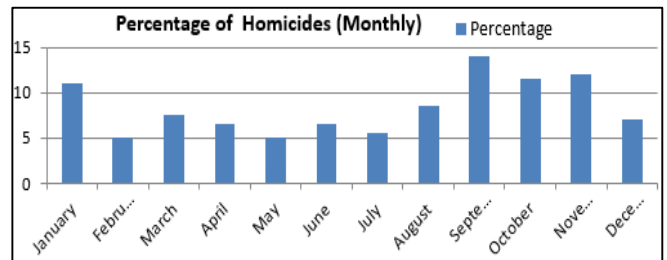


**Fig1:** Showing homicidal death out of total cases received in mortuary

**Table 2:** Showing month wise distribution of homicidal Death cases.

S.NO	Months	Percentage
1	January	11
2	February	5
3	March	7.5
4	April	6.5
5	May	5
6	June	6.5
7	July	5.5
8	August	8.5
9	September	14
10	October	11.5
11	November	12
12	December	7
	Total	100

Table 2 shows a month wise break-up of victims of homicidal death during the study period. Out of 200 homicidal deaths, maximum of 14% cases were recorded in September 2017, the incidence in November was 12%, the incidence in October was 11.5 % and the incidence in January was 11%. The incidence of homicide in rest of months was only in single digits. Thus, incidence of homicides was highest in September.

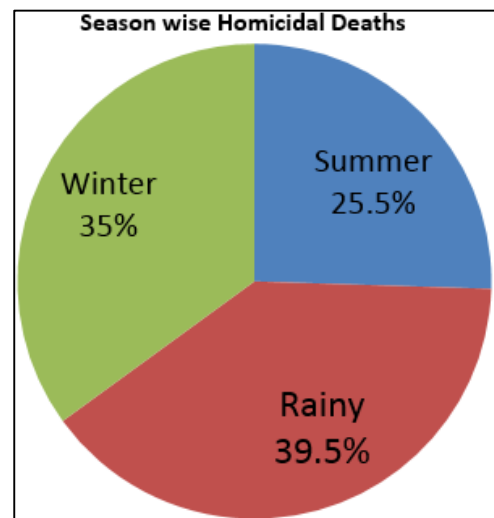


**Fig 2:** Showing monthly distribution of homicidal case

**Table 3:** showing season wise distribution of homicidal victims.

S. No	Season	Total no. of victims	Percentage
1	Summer (march-June)	51	25.5
2	Rainy (July-October)	79	39.5
3	Winter (November-February)	0	35
	Total	200	100

Table 3 shows the season wise break- up of homicidal death cases. Maximum incidence was recorded during the rainy season (July – October) comprising of 39.5% cases followed by winter (November – February) 35% cases, whereas in summer (March – June) 25.5% cases were recorded.



**Fig 3:** Showing season wise distribution of homicidal death

**Table 4:** showing the age incidence of homicidal death.

S. No	Age group	Total no.	Percentage
1	0-10	1	0.5
2	11-20	14	7
3	21-30	60	30
4	31-40	55	27.5
5	41-50	27	13.5
6	51-60	25	12.5
7	61-70	14	7
8	71 &above	4	2
	Total	200	100

Table No: 4 shows that maximum no. of cases were found in between 21-40 years age group, totaling 115 (57.5%).

However, the age group 21 -30 years was more vulnerable age accounting for 60 cases (30%). In the age group 31 – 40

years recorded 55 cases (27.5%), in age group 41-50 years recorded 27 cases (13.5%), and in the age group 51-60 years recorded 25 cases (12.5%). In the age group 11-20 years the incidence was 14 cases (7%) and in 61-70 years the incidence was 14 cases (7%). Similarly, in the age group 0-10 years only 1 case of homicide was recorded. In the older age group beyond 71 years only 4 cases of homicide were recorded, signifying that person in this age group were least involved as far as homicidal cases were concerned.

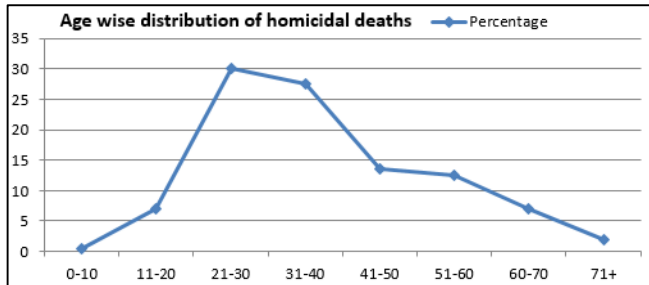


Fig 4: Showing age wise distribution of homicidal deaths

Table 5: showing the gender of homicidal victims.

Sex	Total No.	Percentage
Male	168	84
Female	32	16
Total	200	100

Table 5 shows the gender distribution amongst homicidal victims. Out of 200 homicidal death males were 168 (84%) and female were 32 (16%). This clearly reflected that there was a predominance of males as compared to female in homicidal deaths. The percentage of homicidal death amongst male was about 5.25 times more than those of the female.

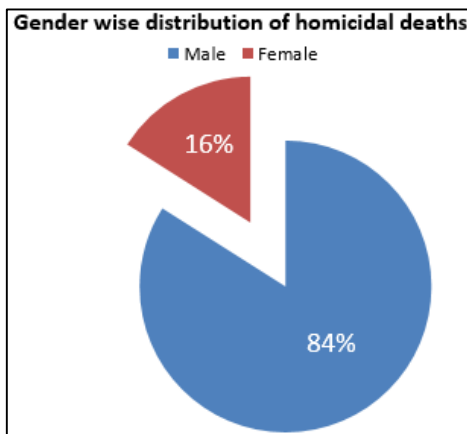


Fig 5: Showing gender wise distribution of homicidal deaths

Table 6: showing habitat wise incidence of homicidal victim.

S. no	Habitat	Total no.	Percentage
1	Rural	114	57
2	Urban	70	35
3	Unknown	16	8
	Total	200	100

Table 6 shows incidence of homicidal death in rural v/s urban population. Incidence of homicide in rural population was more than is 114 cases (57%) and urban area recorded 70 cases (35%). There were 16 unknown cases (8%) where the habitat was not known.

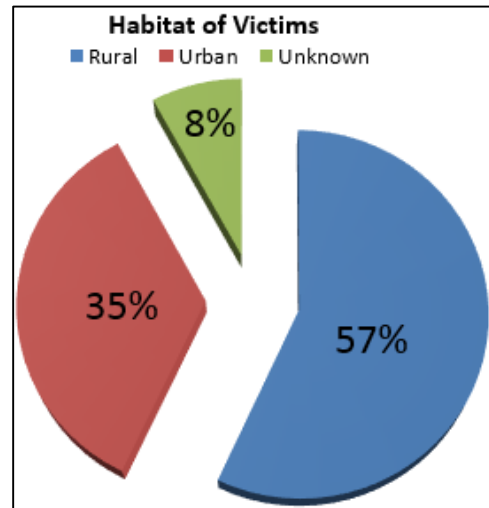


Fig 6: Showing habitat of homicidal victims

Table 7: showing the religion wise distribution of homicidal victims.

Religion	Total no.	Percentage
Hindus	156	78
Muslims	36	18
Unknown	8	4
Total	200	100

Table 7 shows the religion wise break-up of homicidal victims. Hindus dominated Muslims and other religions. There were 156 (78%) Hindus, Muslims were only 36 (18%). In 8 cases religion of victims could not be determined.

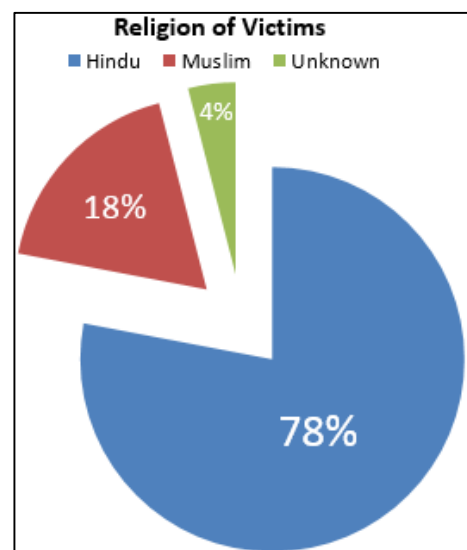


Fig 7: Showing religion of homicidal victims

Table 8: showing the marital status of homicidal Death cases.

S. No	Marital status	Total no.	Percentage
1	married	142	71
2	unmarried	42	21
3	Status unknown	16	8
	Total	200	100

Table 8 shows the marital status of homicidal victims. Out of 200 homicidal deaths a major group of individuals were married accounting 142 (71%). There were 42 unmarried individuals and in 16 cases marital status of deceased could not be determined.

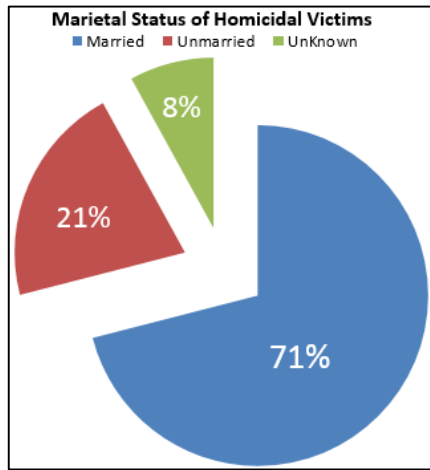


Fig 8: Showing marital status of homicidal victims

Table 9: showing the educational status of homicidal victims.

S. No	Educational status	Total no.	percentage
1	literate	124	62
2	illiterate	60	30
3	Status unknown	16	8
	Total	200	100

Table 9 shows the educational status of homicidal victims. Literate individuals exceeded illiterate as far as incidence of homicidal deaths were concerned, 62% were literate and 30% illiterate. However literacy status of 16 persons could not find out.

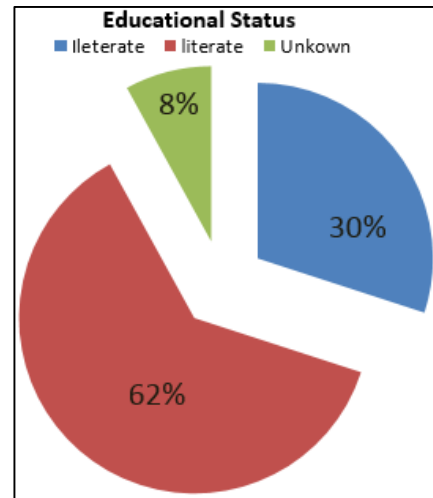


Fig 9: Showing educational status of homicidal victims

Table 10: Showing the occupation of most of the victims

S. No.	Occupation	Total No	Percentage
1	Agriculture	56	28
2	Business	26	13
3	Laborer	24	12
4	Service	22	11
5	Unemployed	20	10
6	Student	14	7
7	Unstable job	12	6
8	House wife	8	4
9	Unmarried girl	2	1
10	Unknown	16	8
	Total	200	100

Table10: shows the occupation of the victims i.e. 28% were involved in agriculture followed by businessman 13%, laborers 12%, service 11%, Unemployed 10%, student 7%, unstable job 6%, House wife 4%, Unmarried girl 1% and Unknown were 8%.

incidence was 2.4% and in south Delhi it was increased from 5.2% to 6.4% (1982). The incidence is increasing not only rural areas but also in urban areas like Bombay, Delhi, Bangalore, Kolkata etc.

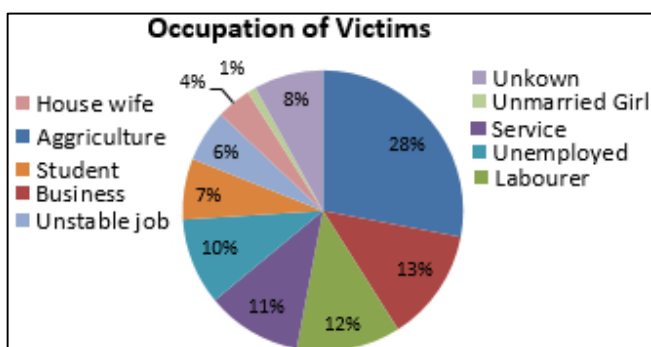


Fig 10: Showing occupation of homicidal victims

**Discussion**

No civilization on this earth is free from crime. Homicide continue to be the most important and heinous crime committed by Homo sapiens (Subramanian, B.V et al 1979). In India total crime rate during 1978 and 1982 constitute 1.4% and 3.2% respectively. In Varanasi during 1973-1975

A total of 29, 75, 711 cognizable crimes under Indian Panel code (IPC) were reported in 2016, showing an increase of 0.9% over 2015 (29, 49, 400 cases) (ncrb.gov.in crime report 2017 table 1.1) [5]. Uttar Pradesh accounted for 9.5% of total IPC crime reported in country followed by Madhya Pradesh (8.9%), Maharashtra (8.8%) and Kerala (8.7%). Delhi UT reported highest crime rate (974.9) under IPC crimes followed by Kerala (727.6) against national average of 233.6. (Table-1A ncrb.gov.in crime report 2017) [5]. UNODC (United Nations office on Drugs and crime) reported a global average intentional homicide rate of 6.2 per 100,000 population for 2012 (in their report titled “Global Study on Homicide 2013”) [6]. UNODC calculated a rate of 6.9 in 2010 & 7.6 in 2004.

In our study we have observed homicidal death cases during time period October 2016 to March 2018 accounted for 200 i.e. 6.72% out of 2976 medico-legal autopsy (Table1). It is observed that the incidence of homicidal death is fairly low this may be due to the fact that our study has excluded the disputed alleged dowry death cases and cases of accidental female burns.

Total of (30,450) cases of murder were reported during 2016, showing a decline of (5.2%) over 2015 (32,127 cases). Uttar

Pradesh (4,889 cases) reported the highest number of cases of murder accounting for 16.1% followed by Bihar with 8.5% (2,581) and Maharashtra with 7.6% (2,299 cases) during 2016. (Table-2A.1 ncrb.gov.in crime report 2017) <sup>[7]</sup>. Earlier a study conducted by Rajeew Kumar <sup>[8]</sup> on homicide during period 1.7.1999 to 30.11.2000 reported incidence of homicide was 23.1% in Varanasi region. Our finding are in consistent with the finding of Sachidananda Mohanty *et al* (2013) <sup>[9]</sup> who reported incidence of homicide cases 6.94% in their-Five year retrospective study of Homicide in southern India. A study conducted by B.C. Shivkumar, D. Vishwanath and Prem Chandra Srivastva <sup>[10]</sup> on trends of homicidal deaths at a tertiary care centre of Bangalore during the period of October 2004 to September 2006 reported 4.76% cases of alleged homicidal death. Our findings are also in consistent with those of Sheikh and Subramanian (1995) <sup>[11]</sup> who reported incidence of 5.57% in their series and suggested that homicidal deaths are increasing day by day.

A month wise distribution of victims (Table 2) showed that September recorded the highest incidence of 28(14%) cases followed by October 23 (11.5%) cases, January 22(11%) cases, whereas, lowest incidence was during February and May with 10(5%) cases each. In a nutshell, rainy season (July to October) recorded highest incidence of homicides 79 cases (39.5%) followed by winter season (November to February) 70 cases (35%) and summer (March to June) recorded 51 cases (25.5%) homicide (Table 3) which is similar in trends reported by Sheikh and Subrahmanyam (1995) <sup>[11]</sup> in his study conducted during the period 1991-1993 have reported 178 death cases in Surat. These authors have reported 71 homicidal deaths during rainy season, 57 in winter and 50 in summer season. Pradeep K Mishra *et al* (2012) <sup>[12]</sup> in Bhopal found that 33.9% homicidal cases occur in summer followed by 33.03% each in monsoon and winter.

In our study maximum number of death cases were of younger age group i.e. between 21-40 years and the maximum number of homicides were in the age group of 21-30 years (30%) followed by age group of 31-40years (27.5%). Only 4 cases recorded were more than 71 years age whereas 4 case of infanticide included (Table 4). Gupta *et al* (1983) <sup>[13]</sup> reported out of 372 cases of homicide from Varanasi region area during 1978-1979, that most of cases (48.41%) were young adults (25-44 years) followed by those(27.41%) who were middle aged(45-64) and 14.24% were adolescents(15-24 years). Our finding in respect to maximum number of homicide in the age group of 21-30 years was corroborated by Kohli and Aggarwal (1996) <sup>[14]</sup>

Among the sufferers the males were 168 (84%) as compared to females (16%) with ratio 5.25:1 (Table 5). Gupta *et al* (1979) <sup>[15]</sup> analyzed 82 cases of homicidal firearm deaths and showed that as many as 79(96.3%) were males. Similar finding that males outnumbered Females were reported by Sheikh and Subramanian (1995) <sup>[11]</sup> Who reported that males were about 4.5 times more victimized than that of females .Dikshit and Anil Kumar (1997) <sup>[16]</sup> reported males are 4 times more victimized than the females, also reported by Sachidananda Mohanty (2013) <sup>[9]</sup> and B.C. Sivakumar (2006) <sup>[10]</sup> M:F was 3:1.The causes for male predominance may be because of unemployment, revenge, lack of patience, intake of alcohol and indulgence in violent activities. The lower incidence in females is mainly attributed to custom, social values and preference to stay indoors.

A locality wise incidence of homicidal death cases showed predominance of rural 57% versus urban area 35% (Table

6).The status of 16 cases could not be determined. The reasons behind this is due to the fact that normal population of rural habitat is about twice the urban population in Varanasi area. Other reason could be that there are more frequent disputes over landed and other properties in rural areas. Murthy and Agnihotri (2000) <sup>[17]</sup> have reported a predominance of homicidal cases in urban area I.e. 244 out of 360 cases and rural area accounted for only 116 victims. Thus our finding are contradictory of those of Murthy and Agnihotri (2000) <sup>[17]</sup>.

Our Findings (Table 7) in respect to religion wise break- up of homicidal death cases exhibited that maximum victims were Hindus i.e.156 (78%) cases and Muslims accounted for 36 (18%) cases. In 4% cases religion could not be found out. It is due to predominance of Hindu population over Muslim in our country. Our Findings are consistent with the isolated report of Kohli and Aggarwal (1996) <sup>[14]</sup> who observed predominance of Hindus 64.4% over Muslims 27.6%.

In our study (Table 8) on marital status of victim revealed that 71% victims were married and 21% were unmarried. It is in conformity with those of Sheikh and Sbrahmanyam (1995) <sup>[11]</sup> who reported an incidence of 69.66% in married victims but more than 65% as reported by Rajeew Kumar (2000) <sup>[8]</sup>. It is noted that marriage takes place comparatively at earlier age in Varanasi region. Thus till they are grown to the age they are already married and burdened with family and other social responsibilities. Problems out of marriage including, poor marital relation, domestic quarrels and conflicts over properties affects homicidal incidences.

In our study (Table 9), it was observed that literate death cases exceeded illiterate. There were 124 literate victims (62%) and 60 (30%) illiterate victims. It may be assumed that involvement of more literate persons is probably due to increasing literacy rate, unemployment, competition and depression in day to day life and rapid industrialization in urban areas. Our findings are consistent with those of Sheikh and Subramanian (1995) <sup>[11]</sup> who also reported a higher incidence of homicide (60.68%) among literate individuals

It is noted (Table 10) that maximum number 62(31%) of victims were involved in agriculture followed by those in business (15%) and Laborers (12%). It may be said person in agriculture occupation were more vulnerable to be homicidal victim in Varanasi region. This may be explained by the fact that there are large populations engaged in agriculture, disputes on landed properties. Similar findings were reported by Nabachandra (1984) <sup>[18]</sup> who found maximum no of (31.46%) victims from farming followed by business (14.63%).

### Summary and conclusion

Homicide (murder) means killing of one human being by another human being. Murder is defined in section 300 IPC and punishable under section 302 IPC. Homicide comes under cognizable offence, offence for which a police may arrest the offender without the warrant issued by court.

Trends of homicide differ from country to country, region to region and from time to time. Most vulnerable age group is 21-30 years and least is above 71 years. Maximum numbers of homicidal cases (57.5%) were recorded between 21-40 years age group. Males were involved 5.25 times more than that the females. Married people (71%) were more commonly involved than unmarried. Literate individuals (62%) exceeded illiterate. Hindus dominated over Muslims and other religious group. Incidence of homicide is more (57%) in rural

population as compared to urban population. During our study period maximum of (14%) cases recorded in September month followed by October (11.5). Season wise distribution of homicide cases showed maximum incidence in rainy season (July to October) 39.5% followed by winter (November to February) 35%. Maximum number of homicide victims belong to Agriculture 31% followed by business class 15% and laborers 12%.

### Limitations

1. Study was confined to a very small area, only Varanasi district.
2. The information about the victims was only based on the history provided by police, family members of the victims and the persons accompanying the dead body, inquest reports. There was no actual crime scene visited by authors.
3. This study does not include suspected burn cases of dowry death and suspected poisoning cases because of procedural delay of viscera examination.

### References

1. Gupta Avnesh *et al.* A study of Homicidal Deaths in Delhil, Medicine, Science and Law. 2004; 44(2):127-132.
2. Narayana Reddy KS. The Essentials of Forensic Medicine and Toxicology|| Medical Book Company, Hyderabad. 2007; 26:251-252.
3. Parikh CK. Parikh's Text Book of Medical jurisprudence, Forensic Medicine and Toxicology for Classrooms and Courtrooms, CBC Publishers and Distributors, New Delhi. 1990; 6:2.1, 3.51, 4.23pp.
4. Pattern of Homicidal Deaths Dr. Basappa Hugar S, Dr. Girish Chandra YP, Dr. Harish S, Dr. Jayanth SH. NCRB Records, 2016, 27. <http://ncrb.gov.in> (Table 1.1).
5. NCRB Records, 2016, 28. <http://ncrb.gov.in> (Table 2A.1).
6. International homicide count rate per 100,000 populations, by country/ territory (2000-2012). Data for UNODC report titled Global study on homicide, 2013. UNODC Homicide Statics, 2013.
7. Study of the Pattern of homicidal deaths in Varanasi region of India.
8. Rajeev Kumar, Sachidananda Mohanty, Sujan Kumar Mohanty, Kiran Kumar Patnaik, 2013, 1-10. <http://file.scrip.org/Hml/3-2790007-29906.htm>
9. Shivakumar BC, Vishwanath D, Srivastava PC. Trends of homicidal deaths at a tertiary care centre, Bengaluru. Journal of Indian Academy of Forensic Medicine, 2004; 120-125.
10. Sheikh I, Subramanian BV. Study of homicide in Surat with special reference to changing trends JFMT. 1995; 12:8-15.
11. Pradeep Mishra K *et al.* Pattern of injuries in homicidal deaths in Bhopal region. JIAFM. 2012; 34(3):196-98.
12. Das Gupta SM, Tripathi CB. A study of the Homicide cases occurring in Varanasi Area. Indian Medical Gazette. 1983; 117(9):285-288.
13. Kohli A, Aggarwal BBL. Pattern of murder cases in North East Delhi JFMT. 1996; 13:36-38.
14. Gupta AK, Das Gupta SM, Rastogi BL. Study of Injuries from Firearm in Medico legal Autopsies. Thesis Submitted for the Degree of Doctor of Medicine Forensic Medicine, Institute of Medical Science, BHU, Varanasi, 1979.
15. Dikshit PC, Kumar A. Study of homicidal death in

central Delhi JFMT. 1997; 14:44-46.

16. Murthy OP, Agnihotri Ak. Homicidal death in South Delhi JIAFM. 2000; 22:9-11.
17. Nabachandra H. Study of Homicidal firearm injuries in medicolegal autopsies. Thesis submitted for the Degree of Doctor of Medicine, Institute of Medical Sciences, B.H.U., Varanasi.