RESEARCH ARTICLE

PROFILE OF HOMICIDAL DEATH CASES AT GOVERNMENT MEDICAL COLLEGE & NEW CIVIL HOSPITAL, SURAT

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ABSTRACT
Background: Surat is one of the fastest growing cities in Asia, situated in the southern region of the Gujarat state of India. Homicidal crimes are one of darkest & inevitable part of any society. We analyzed the current trend of homicidal crimes in Surat in this epidemiological study.
Aims & Objective: To analyze various demographic, social and forensic aspects of homicidal crimes in Surat.
Materials and Methods: Profiles of total 119 homicidal autopsy cases studied retrospectively, which were conducted during 2011 & 2012 at FMTD, GMC & NCH, Surat. The observations were compared with previous studies conducted in same region as well as studies conducted in other regions.
Results: In the present study, the incidence rate of homicidal deaths was 2.79% and major age group amongst the victims was 21-30 years i.e. 30.25%. In 72.27% cases the victims were male. The chief mode of death was Haemorrhagic shock involving 57.14% of cases. In most cases 31.37% sharp edged and pointed type of weapons were used by the accused.
Conclusion: The current incidence rate of homicidal deaths in Surat shows a declining trend recently. Maximum affected victims were young adult males but cases of homicides of females and children are increased in recent years. The chief mode of death was haemorrhagic shock and most common part of body receiving fatal homicidal injury was neck. Most common method for homicide was producing mechanical injuries mainly by sharp cutting weapons but mere manual force also used in significant number of cases.
Key Words: Homicidal Death; Murder; Weapons; Violent Offences; Surat

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Introduction

"You must not use your God given body for killing God's creatures, whether they are human, animal or whatever"
– Yajurveda 12.32

Homicide is defined as killing of one human being by another human being.[10] It is one of the leading causes of unnatural deaths. To commit a murder, two elements - Mensrea which means preplanning or a forethought and Actusreus which means the actual execution- should work together to constitute the crime.[9] Homicide is a cruel act of mankind. It reveals one of the darkest sides of the society. Homicidal crimes represent a reasonable proxy for all kinds of violent crimes in general and as all other violent crimes are not been recorded or notified by the system, homicide can be considered the 'tip of the violence iceberg'. So the 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 medicolegal aspects in one of the major cities of Gujarat state.

The aims & objectives of this study were as follow. To analyze various aspects of homicidal autopsy cases. To find out age, sex, religion, season and month wise variation of homicidal cases. To find out distribution of various modes of death and various types of weapons used in homicidal offences. To draw public attention and awareness regarding current patterns of homicidal offences.

Previously similar studies have been done in the same region by Moh. I. Sheikh and P. Prajapati et al during 1991-93 and 2004-05 respectively.[2,3] Several other authors have also conducted similar studies at various other regions of India. Relevant findings of those studies are compared with findings of current study and cited here by.

Materials and Methods

All types of murder cases described in IPC S.300 & S.301 and Infanticides were also included in this study. The data was collected retrospectively of period from 1st January, 2011 to 31st December, 2012 during which total 4264 autopsy cases were conducted at the mortuary of New Civil Hospital, Surat. The autopsy cases conducted at New Civil Hospital, Surat includes cases from south zone, south-east zone, east zone and part of central zone of Surat city as well as the referral cases from peripheral

health centers of Surat, Dang, Bharuch, Navsari, Vapi and Valsad districts and Daman (Union Territory). Amongst all the cases, total 119 cases were confirmed as homicidal, either by police investigations or found to be homicidal in autopsy. Detailed history regarding age, sex, religion, address, incidence of offence, circumstances, weapons used in the offence etc. were collected from inquest punchnama, marnottar form, other documentary records, photographs and from statements of concerned police investigating officers and relatives of victim. Autopsies were conducted as per standard autopsy protocol. Post-mortem report notes, reports of chemical analysis, histopathological examinations & other reports of various tests from forensic science laboratory were taken under stringent consideration. The collected data was analyzed and was compared with previous studies.

Results

Maximum cases of homicide (15.96%) were reported in the month of December (Table 1) followed by 13.44 % cases in the month of April. In view of seasons, 41.17% of cases reported in winter followed by 38.65% cases in summer and 20.16% cases in monsoon (Table 2). Male gender was victim in 72.27% cases (Table 3). Male to female victims' ratio was 2.60:1. In age distribution, 30.25% were amongst the age group of 21 to 30 years followed by 22.69 % cases from age group of 31 to 40 yrs. Only 1 case (0.84%) of infanticide was noted and same in the elderly age group only 1 victim (0.84%) was above 70 years of age. 9.24 % victims were children of age group of 1 to 10 years (Table 4). Considering the religion, 78.99 % of victims were Hindu whereas religion of 10.08 % victims was not known (Table 5). Majority of victims died due to Haemorrhagic shock(57.14%), which was followed by Asphyxial deaths contributing in 24.37% of cases (Table 6). 26.05% demonstrated fatal injuries over the Neck (including mouth & nose). Head (Cranio-cerebrum) received fatal injuries in 23.53% cases (Table 7). Sharp edged and pointed ended type of weapons used in most (31.37%) of cases by the assailants which was followed by the Hard and blunt type of weapons in 27.73% of cases. One conspicuous observation which we found that in 14 (11.73%) cases only manual force like kicks, punches, hard push & fall down of the victim, throttling by hand etc. were conceived by victims (Table 8). Sharp cutting weapons used by the assailants in 40 (33.61%) cases. Blunt & Hard weapons used in 33 (27.73%) cases. A rare type of method- poisoning was also used in one case in 2012 (Table 9).

Table-1: Month Wise Distribution

Month\Year	2011	2012	Total	%
January	8	3	11	9.24
February	7	3	10	8.4
March	8	4	12	10
April	6	10	16	13.44
May	7	2	9	7.56
June	5	4	9	7.56
July	3	4	7	5.88
August	2	3	5	4.2
September	2	3	5	4.2
October	4	3	7	5.88
November	4	5	9	7.56
December	13	6	19	15.96
Total	69	50	119	100

Table-2: Season Wise Distribution

Season\Year	2011	2012	Total	%
Winter (Nov-Feb)	32	17	49	41.17
Summer (March-June)	26	20	46	38.65
Monsoon (July-Oct)	11	13	24	20.16
Total	69	50	119	100

Table-3: Sex Wise Distribution

Sex\Year	2011	2012	Total	%
Male	51	35	86	72.27
Female	18	15	33	27.73
Total	69	50	119	100

Table-4: Age Wise Distribution

Age\Year	2011	2012	Total	%
<1 year	1	0	1	0.84
1-10 years	6	5	11	9.24
11-20 years	10	6	16	13.44
21-30 years	19	17	36	30.25
31-40 years	16	11	27	22.69
41-50 years	10	9	19	15.96
51-60 years	4	2	6	5.04
61-70 years	2	0	2	1.68
>70 years	1	0	1	0.84
Total	69	50	119	100

Table-5: Religion wise distribution

Religion\Year	2011	2012	Total	%
Hindu	54	40	94	78.99
Muslim	8	5	13	10.92
Unknown	7	5	12	10.08
Total	69	50	119	100

Table-6: Mode of death wise distribution

Mode of Death\Year	2011	2012	Total	%
Haemorrhagic Shock	40	28	68	57.14
Neurogenic Shock	11	6	17	14.28
Septicemic shock	2	0	2	1.68
hypovolamic shock	2	0	2	1.68
Haemorrhagic and Septicemic shock	1	0	1	0.84
Asphyxia	13	16	29	24.37
Total	69	50	119	100

Table-7: Part of body on which fatal homicidal injury conceived

Body Part\Year	2011	2012	Total	%
Head	15	13	28	23.53
Neck (including nose & mouth)	17	14	31	26.05
Head and Neck	1	0	1	0.84
Neck and Chest	3	0	3	2.52
Chest	6	5	11	9.24
Abdomen	8	7	15	12.6
Chest and Abdomen including Back	8	7	15	12.6
Multiple Parts or Whole body	11	4	15	12.6
Total	69	50	119	100

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Table-8: Type of weapon used by accused

Weapon Type\Year	2011	2012	Total	%
Hard and blunt	17	16	33	27.73
Sharp edged and pointed	23	13	36	31.37
Sharp edged and heavy	4	1	5	4.2
Soft Ligature	1	5	6	5.04
Hard ligature	4	4	8	6.72
Cloth for gagging	2	0	2	0.17
Firearm	1	0	1	0.84
Inflammable material	7	3	10	8.4
Poison	0	1	1	0.84
Manual force	7	7	14	11.76
Hard Blunt + Sharp edged	3	0	3	2.52
Total	69	50	119	100

Table-9: Method of homicide wise distribution

Method of Homicide\Year		2011	2012	Total	Grand Total	%	%
Mechanical injuries	assault by hard and blunt weapons	17	16	33	85	27.73	71.42
	assault by Sharp cutting weapons	26	14	40		33.61	
	assault by hard blunt & sharp cutting weapons	3	0	3		2.52	
	assault by hard push & fall, kicks, punches	4	4	8		6.72	
	assault with fire arm	1	0	1		0.84	
Asphyxial death	ligature strangulation	5	9	14	23	11.76	17.81
	throttling	4	3	7		5.88	
	gagging	2	0	2		0.17	
Other	burns	7	3	10	10	8.4	9.24
	poisoning	0	1	1	1	0.84	
Total		69	50	119	119	100	100

Discussion

In the present age of urbanization and industrialization, homicidal crimes are inevitable part of all offences. Financial disputes, infidelity, love affairs, Poverty, stress, poor educational and recreational facilities, migratory population, easy accessibility of addictive substances and weapons of violent offences, poor temperament, unemployment, substance abuse etc. are some provocating circumstances for such type of violent offences.

In the present study of two year duration, homicidal rate was 2.79% of total autopsy cases. These findings and results are lower than Global homicide rate i.e. 6.9 and homicide rate of Asia, Europe and America which is 3, 4 and 16 respectively.[1] These figures are also lower than the previous observations made by M. I. Sheikh, P. Prajapati et al, H. Basappa et al & Gerg & Verma but higher than J. Shah et al.[2-6] This finding supports that homicidal crimes have decreased recently which correlates with the global trend.[1]

Maximum cases (15.96 %) were reported in the month of December followed by 13.44 % cases in the month of April. Gerg & Verma noticed maximum cases in September and August months.[6] Regarding the seasonal variation, in this study 41.17 % cases reported in winter followed by 38.65% cases in summer and 20.16% cases in monsoon. A. Rastogi et al also noted low homicidal incidences in monsoon.[7]

Majority victims were male (72.27%) in this study which correlates with most of other studies may be because Male gender involved more predominantly in outdoor activities, professional work and also in aggressive physical activities and risk taking behaviour. But cases of female victims in this study (27.73%) is higher than observations of M. I. Sheikh and P. Prajapati et al which shows recent change in established pattern.[2,3]

Maximum cases 30.25% were amongst the age group of 21 to 30 years followed by 22.69 % cases from age group of 31 to 40 years (being second dominant age group) which is similar to all other studies but the rate in age group of 1-10 year (9.24%) children is higher than observations of M. I. Sheikh, P. Prajapati et al and lower than H. Basappa.[2,3,5]

78.99 % of victims were belong to Hindu religion and 10.92 % belong to Muslim religion whereas religion of 10.08 % victims were not known (Table 5) Which is similar to findings of Pathak & Sharma.[8] This could be due to more Hindu population in this region where this study conducted.

Regarding to the modes of death, majority (57.14%) victims had died due to Haemorrhagic shock which was followed by Asphyxial deaths contributing in 24.37% of cases. A. Rastogi et al also found similar observations.[7]

Maximum cases (26.05%) demonstrated were of fatal injuries over the Neck(including mouth & nose) which includes cut throat wounds, stab wound, strangulation, gagging & smothering. Head (Cranio-cerebrum) being the second most common part of the body receiving fatal injuries in 23.53% of total cases which is contradictory to Prajapati et al who found the chest and abdomen and J. Shah et al who described the head as a chief body part receiving the fatal injuries.[3,4]

We found that sharp edged and pointed ended weapons were used in most (31.37%) cases that correlates with observations of M.I. Sheikh and H. Basappa et al but differs from findings of Prajapati et al and Rastogi et al who found hard and blunt weapons in most cases.[2,3,5,7] We also found that in 11.73% cases only manual force

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like kicks, punches, hard push & fall down the victim, throttling by hand etc. were used by assailants that shows probably the impulsive violence at the moment of incidence.

In majority of cases, chief method of killing used by the assailants was by producing mechanical injury (71.42%) e.g. assault by sharp cutting weapons used in 40 (33.61%) cases and by blunt & Hard weapons used in 33(27.73%) cases. Asphyxial death was observed in 23(17.81%) cases which correlates with the findings of M. I. Sheikh, P. Prajapati et al, and J. Shah et al.[2-4]

The limitation of this study is that autopsy cases from north zone, west zone, north-west zone and part of central zone of Surat city are conducted at SMIMER Hospital, Surat and those cases are not included in current study. Also a suggestion for future studies is that multicentred studies should be done regularly to have an accurate picture of trends of homicidal crimes in a state or nation.

Conclusion

The incidence rate of homicidal deaths was 3.28% during 2011 and 2.3% during 2012, being average of 2.79% which shows a declining trend recently. Maximum affected age group was 21 to 30 years i.e. Young adults. Male sex was the predominant gender of victims but cases of homicides of females and children up to age of 10 years are increased in recent years. Highest cases reported in winter season, especially in December month. The chief mode of death was haemorrhagic shock followed by asphyxia being the second most common. Most common part of body to which fatal homicidal injury conceived was neck (including mouth & nose). Most common type of weapon used for the offence was sharp edged & pointed ended weapons but mere manual force was also used in significant number of cases. Most common method for homicide was producing mechanical injuries mainly by sharp cutting weapons.

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