■ *Original Article*

Medicolegal Study of Suspected Homicide Cases in a Teaching Hospital in Eastern Nepal

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Abstract

Introduction: Homicide means killing of one human being as a result of conduct of another human being. This study of medico-legal and epidemiological details of homicidal cases would help in enhancement of various stakeholders in law enforcing agencies with the view to benefit the process of scientific crime detection and proper administration of justice at large. **Objective:** To identify the various medico-legal and epidemiological factors involved in homicide. **Materials and method:** A prospective cross-sectional study was conducted in fatal homicide victims brought for medico-legal autopsy in BPKIHS, during the period of 15th April 2009 to 14th July 2010.Data were collected using pre tested questionnaire by direct interview to the visitors of victim, information from the police record along with postmortem examination of the victim. **Results**: Out of the total 50 cases, the ratio of male to female victim was 4:1. More than half of the victims were of age 21-40 years (52%). More of the homicide victims were of rural areas (56%) and illiterate (32%). Injuries by sharp weapon were most common cause of death (36%) very closely followed by firearm injuries (34%). Most of the victim remained totally deprived of any medical help (60%). **Conclusion:** The homicide victims in eastern Nepal constituted illiterate adult male from rural area a dominant group. Sharp weapons were commonly employed in this region for homicide. Fatality of the victim can be highly minimized if medical and surgical interventions are be promptly prearranged. Proper counseling for developing positive attitude and controlling the aggression in youth have to be Promoted at large by the government.

Keywords: Homicide, Medico-legal, sharp weapon injury, firearm injury

Introduction

Homicide is just killing by one who plans the death of another with malice aforethought, one who looks the purpose to kill but means to inflict serious injury only and the one who acts in want of disregard of human life. [1]

Killing of human being is one of the most serious of major crimes. Since very long times law were framed by different judicial authority in a bit to prevent its further occurrence. In spite of all, there has been a phenomenal rise in the incidence of homicide all over the world and also in Nepal, perhaps due to a highly intensified struggle for survival in the face of fast industrialization and urbanization. Murder is most often impulsive, violent & explosive act. [2]

This present study was planned to be based on the Medico-legal autopsies that was carried out in the mortuary of the Department of Forensic Medicine & Toxicology, at B. P. Koirala institute of Health Sciences, Dharan, that caters for the dead bodies coming from nearly the entire eastern developmental

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region of Nepal. It was therefore undertaken with the view to find out and analyze thoroughly all the aspects related with the homicide. The knowledge of various epidemiological and medicolegal factors of homicide along with different weapons used in homicidal cases in eastern Nepal would be helpful to the medicolegalist and the members of the law enforcing agencies such as the police and the judiciary, and ultimately that will be helpful in the process of scientific crime detection and proper administration of justice at large in such cases.

Materials and Methods

A Hospital based Cross Sectional Study was conducted in fatal homicidal victims brought for medicolegal autopsy in the mortuary of Dept. of Forensic Medicine & Toxicology, BPKIHS, during the period from 2066-01-01 B.S. to 2067-03-32 B.S. (April 2009 to July 2010). All the victims with a definite history of homicide were included in the study. Unidentified body and body with no definite history were excluded in the study.

Data was collected using pre-tested questionnaire by direct interview to the relatives of victim, information from police record (muchulka) along with findings in the postmortem examination of the victim.

Statistical Analysis

The data collected were entered in Microsoft excel worksheet and then analyzed using SPSS 10.0 version. Detailed descriptive statistics was done.

Results

A total of 50 cases of homicide autopsied during the above mentioned period showed following results (see the tables).

Table I: Age distribution of the victims

Age in years	No. of cases	Percentage
0 – 10	1	2
11 – 20	4	8
21 – 30	15	30
31 – 40	11	22
41 – 50	9	18
51 – 60	4	8
61 – 70	3	6
71 – 80	3	6
Total	50	100.00

Table II: Sex distribution of the victims

Sex	No. of cases	percentage
Male	40	80
Female	10	20
Total	50	100.00

Discussion

The study was aimed to know the various epidemiological and medico legal aspects related with the victims of the homicide. Maximum cases of homicidal victims belong to the age group 21-30 years, 15 (30%) followed by 31-40 years and 41-50 years. This was in accordance with Pradip K et al [3], Sachidananda M. Manoj K. Sreemanta K.D [4] and Avneesh G. Mukta R. Anil K.M. P.C.Dikshit [5]. The high incidence of fatalities in above age group may be explained by the fact that they are more often required to deal with the outer world to pursuit their work. Another explanation can be that these group of people are more short tempered than both the extreme ages people.

As to the sex distribution among homicidal cases we have far above majority of them, males 40 (80%) than females 10 (20%) i.e. male & female victims are in the ratio of 4:1.A preponderance of male over female in homicidal violence have been consistently reported by most of workers from all jurisdiction i.e. Wolfgang, Clintok, Pokorny, Cameron, Fatteh, Tosayanand, Subramanyam[2, 7, 8, 9, 11, 12.] Chandra found a male: female ratio of and 6:1 in his series [15].Saharan analysed in his study that males are affected much more than female and are in the ratio of 4.7:1[14].This male preponderance proves about the fact that male members of the community commonly engage in outdoor pursuit and indulge more in violent activities as compared to their female counterparts. This could also be attributed to the fact that menfolk bear a greater share of the socio-economic burden in this region connected mainly with agriculture, service and labour.

It is evident from Table III that more vicims were from rural areas 28 (56%) than when areas 22 (44%). The results obtained may be attributed to the fact that the papulation of the eastern nepal is predominantly rural residing mostly in the village where their lives & propedies are relatively less protective as companed to their wcban-counterpart.

Table III: Habitat of the victims

Habitat	No. of cases	percentage
Rural	28	56%
Urban	22	44%

Table IV makes obvious the educational status of victims in our series. 16(32%) were illiterate. 13(26%) could go only up to primary standard, 9(18%) educated up to secondary and 6(12%), higher secondary. There were 2 (4%) graduates 1 (2%) Post – graduate and 1 (2%) professional. Our studies, corresponds with the studies of Illiterate or poorly literate as larger proportion of victims in one hand correlated with the larger rural population involved in homicidal violence, on the other hand, these illiterates or poorly literate signifying "Empty mind is devil's workshop" involve themselves in various types of violence leading to homicidal events. Lesser number of educated people in these activities proves beyond doubt about the value of education which brings thoughtful way of life, engagement of various kinds of progressive works and others.

Table IV: Educational status of victims

Factors	No. of cases	percentage
Illiterate	16	32
Primary	13	26
Secondary	9	18
Higher Secondary	6	12
Graduate	2	4
post – graduate	1	2
Professional	1	2
Not known	2	4
Total	50	100.00

It has been shown by the present study that the offence of murder could occur at any time but the highest number of incidences 9(18%) occurred during late evening (7p.m to 10p.m), followed by those cases which occurred during early morning (4a.m to 7a.m) and evening (4p.m to 7p.m) were same 8 (16%). In morning (7a.m to 10a.m) and mid-day (10a.m to 1p.m) were same 6 (12%). At night (10p.m to 1a.m) there were 5(10%) cases whereas in the afternoon (1p.m to 4p.m) there were 4(8%). 2 (4%) cases occurred in late night (1a.m to 4a.m).

Table V: Time of Incidence

Factors	No. of cases	Percentage
Early morning (4AM to 7 AM)	8	16
Morning (7 AM to 10 AM)	6	12
Mid-Day (10 AM to 1 PM)	6	12
Afternoon (1 PM to 4 PM)	4	8
Evening (4 PM to 7 PM)	8	16
Late Evening (7 PM to 10 PM)	9	18
Night (10 PM to 1 AM)	5	10
Late night (1AM to 4 AM)	2	4
Not known	2	4
Total	50	100.00

Our study corresponds with the study of Pokorny, who also had the time of incidence maximum during late evening time[13]. But, it differs from Asuni and Fatteh in which case this particular period occupies the 2nd place. [10, 11]In the light of above facts it would be identified that timing of maximum incidence which has emerged from the studies points to the habitat and their local day to day activities. As most of the people in this area finish their work by evening and then sit for drinking or come out of their place, few with frustration of their daily work, so most of the activities happens during late evening and hence the time of choice for violent activities also.

We can observe the fact regarding the medical care given to the victims from Table VI. In majority of cases, 30(60.0%) victims remained totally deprived of any medical help and only in substantial number 20(40.0%) of cases they had the opportunity of it in one way or other. The most prominent reason of the deprivation of medical help could be seriousness of the injuries, the place of incidence, which are mostly field, farm or roadside. The lack of convenience, distance, and fear to get involved in the litigation by the common people leave the victim on his/her own fate and thus majority of them die either on the spot or due to delay on the way to medical centre.

Table VI: Whether victims received any medical care

Factors	No. of cases	Percentage
Medical care received	20	40.00
Medical care not received	30	60.00
Total	50	100.00

Method wise highest number of cases 17(34%) was by firearms and then by blunt weapon 12(24%). This was followed by stab injury in 7(14%) then by sharp weapon (light) in 6(12%), sharp weapon (heavy) in 12 (5.85), strangulation in 3(6%) & in 1 (2%). It is in accordance of study by Debra L. K. et al where highest numbers of victims were of firearms [17]. Out of 17 firearm homicide cases one was by police encounter. In the light of these observations it might be concluded that cultural background predisposes the choice of weapon. Because of the reasons like, growing literacy, urbanization and sudden increase in terrorists activities making firearms freely & cheaply available, has made possible for more people to go for it. The other major reasons to be attracted towards it is its inherited quality, for it can be used conveniently from considerable distance, gives the opportunity to the shooter to escape &, the possibility of apprehension is least.

Table VII: Methods of Homicide

Methods	No. of cases	Percentage
Blunt weapon	12	24
Sharp weapon (light)	6	12
Sharp weapon (heavy)	5	10
Stab injury	7	14
Strangulation	3	6
Gun shot	17	34
Total	50	100.00

This table is an account of various causes of death in homicidal cases in which the maximum victims 21(42%) died of shock and hemorrhage followed by which 17(34%) died due to coma, 9(18%) died instantaneously due to the involvement of vital organs & 3(6%) victims died due to asphyxia. Subhramanyam in his studies have also reported shock and hemorrhage to be the most frequent cause of death[12]. But Adelson differs as hemorrhage alone was not the cause of death in a significant majority of his cases; it was cranio-cerebral trauma which occupies second position in our study series[6].

Table VIII: Cause of death in homicidal cases

Causes	No. of cases	Percentage
Instantaneous death	9	18
Coma	17	34
Asphyxia	3	6
Shock and hemorrhage	21	42
Total	50	100.00

Conclusion

It is concluded that the various types of homicide in Eastern Nepal involve young adult, males either illiterate or primary schooled and agriculturist by profession. Most of the victims were killed in the evening. For most of the cases, unfortunately no medical treatment was available for the victim. In majority of the cases death of the victims was slow following shock and hemorrhage. Sharp weapons (eg Khukuri) and firearms were the instruments commonly employed in homicidal attack in this area. The availability of doctors and properly managed health centers are must to save lives in such circumstances. Sharp and dangerous weapons are accessible to everybody very easily so proper law should be there to control them. Over all law and order of the country has to be strong to minimize such cases in the future.

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