

THE PATTERN AND FATALITY OF WEAPONS USED IN HOMICIDE DEATH

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ABSTRACT

Homicide death is the highest level of aggression found in all cultures. Incidence of homicide is on the rise worldwide and pattern is also changing except for the motive, type of weapon used in homicide. Homicide means killing of one human being, as a result of conduct of another. All over the world weapons are commonly used for killing a person. Weapons are defined as 'These are means or mechanical devices, which when applied in a hostile manner will produce lesions or wounds. The present prospective study from January 2010 to December 2020 for a period of 11 years. The data for the study was collected from Kundara police station in Kollam district. It was observed that out of the total 60 established cases of homicides. 23 deaths were reported due to a weapon used in homicide death. Easy access and high lethality make knife is most commonly used weapons in homicide death. The most preferred sites of assault were head and even an isolated injury over these areas can prove fatal. Although most of the victims died due to spot death. The primary motive for homicide is alcohol intoxication. The familial issues between husband and wife also plays a significant role in cases of homicidal death. The present study aimed to determine the relationship between fatality of injury and nature of the weapons in homicide death. The fatal head injuries are mainly caused by wood, stone, iron rod, axe, and glass bottle.

Keywords: Homicide Death, Pattern, Fatal Injury, Motive

CHAPTER-1

INTRODUCTION

Homicide has been a widely studied topic within the field of Criminology and Criminal Justice. Homicide is defined as killing of one human being by another human being and is one of the leading causes of unnatural deaths. Killing of an individual is the highest level of aggression found in all the cultures.

Murder is considered the most heinous of violent offenses and offenders are subject to the most extreme forms of punishment within the legal system, including death. The term murder can be dated back to before the 12th century and stems from Middle English murder and Old English morþor; meaning “secret killing of a person, unlawful killing” (Online Etymology Dictionary, 2001). The term homicide dates back to the 13th and 14th centuries, and stems from the Latin word homicidium; homo meaning “man” and cidium meaning “to kill” (Online Etymology Dictionary, 2001). Murder is often used interchangeably with the word homicide – is defined by the United States Department of Justice (2016) as “the willful (non-negligent) killing of one human being by another.”

Homicide is prevalent widely all over the world due to rapidly increasing population; urbanization; poverty; unemployment; frustration; illiteracy; prevalent economic, social and political environment; insurgency; terrorism; drug addiction; jealousy; enmity; easy availability of weapon and the widening gap between the rich and the poor. Killing a person by another is known since ages. Only the methods employed has changed which has seen a drastic change in the recent years. New methods and techniques are used to kill the individual. The crime of committing homicide or murder or taking another man’s life wilfully is as old as the existence of man. Viewed in this context it would be seen that homicide was a common practice with the people in ancient Indian as in all other ancient civilization of the world. Revenge, quarrel, anger, jealousy, loss of prestige etc. have been the real motives leading to the worst and most dreaded act of homicide, all over the world throughout the ages. Homicide or killing of fellow human being by a man therefore has been a perennial phenomenon either in the form of human sacrifices or mass-massacres in wars or killing of a particular individual here and there actuated by personal motive whether offensive or defensive.

1.1. The Homicide Event

The homicide event consists of collective transactions between the victim, offender, and a possibly audience, where each individual contributes to the development and shaping of each other's behaviors (Luckenbill, 1977). Luckenbill (1977) characterized the transactions as character contest that escalates due to the actor's attempts to save face. These transactions are often coercive in nature, with one party attempting to achieve the compliance of another by threatening and/or inflicting pain as a form of punishment (Tedeschi & Felson, 1994). Tedeschi and Felson (1994) posit that offender make the decision to use coercive actions by making "rational choices" after balancing the odds of achieving a desired outcome with the possible cost of engaging in such actions. However, these "rational" decisions are often made under duress, in a short period of time, and under the influence of alcohol or some emotion; thus, resulting in the failure to fully evaluate the potential consequences or any alternative options. During the homicide transactions, weapons are often used to facilitate compliance, inflict pain, or mete out punishment (Decker, 1996; Tedeschi & Felson, 1994). Despite the abundance of weapon types that can be used in the commission of this crime, research has consistently found that the most frequently used weapon in homicides is a firearm Cooper & Smith, 2012). Decker (1996) was one of the first scholars to explore the relationship between motivation and weapon choice in homicide. He found that when the motive was instrumental, a firearm was used in incidents involving family members, close friends, and other intimates. He also found that the motive was more likely to be expressive in acquaintance-involved homicides that involved physical force, and in stranger homicides that involved a firearm. Decker (1996) suggests that "motive has clear implications for the choice of means by which death is inflicted" (p. 437). His findings coincide with Cook (1983), which suggest that weapon choice in a crime is an indicator of offender intent. Furthermore, at the national level, husbands who are a part of a younger couple are more likely to use strangulation when they kill their wives, while husbands who are a part of an older couple are more likely to use long barrelled firearms, blunt objects, and other types of weapons (Fox & Allen, 2014). Catanesi and colleagues (2011) found that gender plays a role in the choice of weapon. Males are more likely to use firearms or knives, and females are more likely to use weapons that are easily accessible in the moment when the homicide occurs, as women are more likely to kill someone they are romantically involved with. Research also suggests that firearms are more often used in homicides involving strangers and acquaintances when compared with homicides that involve family members or friends (Fox & Allen, 2014). Cooper and Smith's (2012) study also found that homicides committed by a friend/acquaintance and homicides committed by a stranger were more likely to involve a firearm than those committed by an intimate or family member. Chan and Beauregard's (2016) recent study explored a distinct dimension

related to weapon choice in homicides. Their analyses of male sexual homicide offenders using Supplementary Homicide Reports from 1976 to 2011 showed that the characteristics of victims impact the choice of weapon. Specifically, males are more likely to kill adults with knives and other cutting objects, and younger victims with their bare hands. Similarly, offenders who target females are more likely to use their hands, while those who target males are more likely to use a weapon. Although they only examined one very specific type of homicide, these findings give further support to research focusing on motive and weapon type, because they show that intent and victim characteristics are related to weapon choice.

Cornish and Clarke (1986) differentiated between two types of decision points in their explanation of rational choice—involvement and event decisions. Involvement decisions encompass the initial choice to engage in a crime, while event decisions focus on the decision to commit a specific type of crime. As it relates to homicide, involvement would encompass the decision to engage in a violent act against the potential victim, while the event would consist of the decision to end the victim's life. The decision process also does not necessarily have to involve careful planning and premeditation prior to the criminal event. They posit that immediate situational factors inform the decision-making process and can alter the sequence of events, resulting in decisions being made last-minute with only rudimentary or no planning, and offenders basing their decision on an assessment of incentives within the immediate situation. Homicide transactions do not need to involve a weapon because it is possible to end a person's life with one's hands and feet. However, the presence of a weapon has been shown by researchers to influence the transactions that culminate in a murder (Tedeschi & Felson, 1994). Knives, blunt objects, firearms, and other weapons can facilitate the commission of a violent act, but of these, a firearm can guarantee victory during coercive transactions given its lethality (Cook, 1983). Unlike knives and blunt objects that require that the offender comes within physical contact distance of the victim to commit the homicide (Wright & Decker, 1997), and heighten the chance that the offender leaves some form of identifying evidence behind at the scene, firearms require no physical contact between offender and victim (Cook, 1983).

Wright and Decker (1997) found that robbers select their weapons based on its capacity to help them get the job done, the vulnerability of the potential victim, the lethality of the weapon in the event the crime does not go as planned, and if the weapon is available to them. In relation to assaults, Cook (1983) posited that those offenders are more likely to use a weapon, specifically a firearm, if the victim is considered invulnerable. Similarly, Felson and Steadman (1983) found that the behavior of victims during assaults influenced that of offenders, and that in events where the victim resisted the assault and/or displayed a weapon first, the offenders were more likely to use a weapon themselves.

The incidence of homicide is increasing world-wide and the pattern is also changing because of population explosion, changing life style modern needs of the man and easy availability of various type of weapon. Alcohol intoxication, drug addiction, easy availability of weapon, the widening gap between the rich and the poor etc are the causes of homicidal deaths. Young and adult generation is mostly involved in the homicidal deaths.

The murder weapon is helpful to the prosecution because it is extremely powerful evidence against the suspect. In addition to the weapon producing potential DNA or fingerprint evidence, it also potentially can sometimes produce an actual record of the suspect purchasing the weapon. These factors, as well as potentially finding the weapon in a suspect's actual or constructive possession, are all strong examples of circumstantial evidence which is often necessary especially in cases where there is weak direct evidence. Detailed examination of wounds helps in prediction of the weapon used in the killing. Nature of the weapon used and the gravity of the injury inflicted together play a decisive role in identifying the charges to be held against the said accused which further determine the punishment in each case. The study of wounds to assess the weapon used in crime can provide valuable baseline information and also guides in collection of evidences in favour of the prosecution. Beyond its direct impact, homicide death has serious negative effects on the lives of surviving family members, particularly children. Psychological effects include anxiety, depression, post-traumatic stress disorder, aggression, guilt and a heightened sense of vulnerability.

The nature of homicide has clearly had an impact on the clearance rate and it is important to elucidate these changes. This information can lead to new insights about murderers and potential murderers and the evolving nature of homicide. On the other hand, public safety implications of this research are even more important to consider. As mentioned earlier, the declining clearance rate affects both specific and general deterrence for current and future offenders. Society is morally opposed to the act of murder, and its laws and criminal justice system should reflect that. However, if the clearance rate continues to decline without inquiry, then offenders may not view murder as a serious crime with a certainty of punishment. In addition, those victims and families already affected by homicide do not receive the justice they deserve from apprehending and prosecuting the offender. Therefore, it is worthwhile to investigate possible contributing factors to the declining clearance rate for homicide and the changing nature of homicide in recent times for both knowledge and public safety reasons.

The presence of a weapon, and the type of weapon used on the victim is a well-cited variable that can influence the clearance rate of a homicide, which factors affect the choice of weapon in a homicide, and how access to specific types of weapons has an effect in the transactions that culminate in this crime. To

date, little is known about whether an offender brings the weapon with them to the homicide event with the intent to use it, or if the choice of weapon is opportunistic and the offender simply comes across it in the homicide scene. The relationship between weapon choice and the offender, more knowledge of the covariates of weapon choice and the dynamics related to it can further shed light into the situational transactions that lead to homicide and inform policy. This study contributes to the homicide literature by examining the covariates of weapon choice and the situational dynamics related to the type of weapon utilized by offenders to carry out the lethal event. A further aim of this study is to determine the most common situational factors that lead to the initial decision to use specific weapon types. In what variables influence the use of a particular type of weapon in a homicide, and how does the method of weapon retrieval, or lack thereof, affect the choice of weapon. The findings fill the aforementioned voids in the literature by shedding light on the variables that lead to the use of a specific weapon, and how the presence of specific weapon types impacts the manner in which a homicide takes place. Although they only examined one very specific type of homicide, these findings give further support to research focusing on motive and weapon type, because they show that intent and victim characteristics are related to weapon choice. Homicides sparked by a perceived threat and those that involved some type of planning by the victim or offender were also more likely to be carried out with firearm relative to a knife, blunt object, or other weapon. In addition, events involving a perceived threat were also more likely to involve the offender leaving the scene to retrieve their desired weapon or calling someone to retrieve the weapon and bring it to carry out the homicide.

The findings related to the use of knives, blunt objects, and other weapons also lend credence to the assumptions of rational choice. The availability of these weapons on the scene served to facilitate the homicide occurrence. During the homicide transactions, the availability of these weapons might have provided the impetus for the offender to believe that they could prevail in the confrontation, thus providing favor in the cost–benefit analyses to escalating in the transactions that resulted in a homicide. Other weapons are significantly more likely to be used relative to firearms when the victim and/or offender are under the influence of alcohol or drugs.

The present study was thus undertaken to analyse the weapons used commonly in homicidal deaths in the study region. The study focuses on the weapons used in homicide, with weapons classified as such as clubs or blunt objects. Homicidal pattern varies from region to another, and are influenced by many factors like commonly available weapons, method of killing etc. the various patterns of weapons used in homicidal death such as sharp weapon, blunt weapons etc. The pattern and nature of the injury is influenced by the

force transmitted, weight of object or weapon and nature of the surface of blunt object. The study evaluates the pattern and nature of weapons in over a period of eleven years (2010-2021) and correlates the pattern, nature and configuration of injury with the alleged weapon or object used to inflicting it.

CHAPTER-2

REVIEW OF LITERATURE

This chapter discusses the available knowledge including substance findings and comprehensive summary of previous research on a topic.

Homicide is prevalent widely all over the world due to rapidly increasing population; urbanization; poverty; unemployment; frustration; illiteracy; prevalent economic, social and political environment; insurgency; terrorism; drug addiction; jealousy; enmity; easy availability of weapon and the widening gap between the rich and the poor. Killing a person by another is known since ages. Only the methods employed has changed which has seen a drastic change in the recent years. New methods and techniques are used to kill the individual.

In a study on the topic, A retrospective review of homicides in Mangalore, South India. The head was found to be the most common site of injury followed by the extremities, abdomen and chest. In 49.4% of the cases, the victims had sustained sharp force injuries while in 34.8% blunt force injuries were present. Fatal injuries to the head were the commonest cause of death Vij A, (2010). In a study on the topic, A study of homicidal deaths in medico legal autopsies at UMMC Kuala Lumpur. Approximately 71.9% of victims came from the semiskilled and unskilled group. A majority of victims were married (47%). Injuries caused by sharp weapons (41%) were the most common cause of death, followed by blunt trauma and firearm injuries. Kumar V, (2005). In the study based on the topic, A study of homicidal deaths in Delhi. The commonest age group of the victims was 21-30 years (38%). Males were victimized three times more often than females. The incidence of crime was slightly more at night than in the daytime, though evenly distributed during the winter and summer seasons. In our series, sharp weapon injuries were the most common type (34.9%) followed by blunt force injuries (15.9%). Defense wounds were present in 35 cases (15%). Violent rage/quarrel was the motive in 61 cases. (Avneesh Gupta, 2004).

Some researchers have suggested that the presence and degree of facial injury may hold significant psychological meaning, and therefore may be a useful indicator of victim-offender relationship (Trojan & [Type here]

Krull, 2012). Some researchers postulate that severe facial injury may indicate depersonalization (symbolic destruction of who a person is through destruction of the face), or may simply be a method employed to hinder identification of the victim (Salfati & Canter, 1999).

While the psychological, medical, and criminological communities have extensively explored the prevalence rates of victim, offender, and offense characteristics, very few have specifically explored variations in wounding patterns and associated crime scene behaviors across victim-offender relationship and type of homicide (Trojan & Krull, 2012).

Some researchers conceptualize the motive as instrumental or expressive, while others conceptualize individual crime scene behaviors as being instrumental or expressive. Either way, “it is often assumed that instrumental and expressive crimes are unique in the characteristics of their offenders, victims, and situational elements” (Miethe & Regoeczi, 2004, p. 102). In terms of the crime and motivation, Miethe and Regoeczi (2004) were able to distinguish homicide situations unique to expressive or instrumental motives based on victim-offender relationship, the offender’s age, number of offenders, intrasexual relations, intraracial relations, and the offender’s gender. For instance, stranger relationships were found in two-thirds of instrumental homicide situations, but were non-existent in expressive homicide situations. In comparison to instrumental situations, expressive homicide situations were over-represented by offenders in their 30s (77% vs. 18%), intraracial attacks (99.8% vs. 74%), and involving no strangers (100% vs. 35%).

Early research findings additionally indicate that in the homicides of spouses from 1976-1985, men were more likely to be killed by stabbing and women were more likely to be bludgeoned with an object or beaten with fists, hands, or feet when the mechanism of death was not a firearm (Cooper & Smith, 2011). Several studies found that weapons other than firearms, were significantly related to higher homicide clearances because of the additional forensic evidence produced by using other weapons (Addington, 2006).

During the homicide transactions, weapons are often used to facilitate compliance, inflict pain, or mete out punishment (Tedeschi & Felson, 1994). Despite the abundance of weapon types that can be used in the commission of this crime, research has consistently found that the most frequently used weapon in homicides is a firearm (Cooper & Smith, 2012). Despite the abundance of weapon types that can be used in the commission of this crime, research has consistently found that the most frequently used weapon in homicides is a firearm (Pizarro, 2008). Distinct patterns emerge in the examination of other homicide motives. For example, both national- and city-level studies suggest that drug-motivated homicides are more likely to be carried out with a firearm (Portera & Leon, 2002).

Most homicides consist of a single offender and single victim, and homicides involving multiple offenders or multiple victims are a rarity (Bureau of Justice Statistics, 2005; U.S. Department of Justice, 2016). While the above cited statistics indicate a person is more likely to be killed by someone they know, homicide investigators and researchers have long explored ways of further refining methods of identifying potential perpetrators by examining crime scene behavior. To that end, one area of homicide research suggests that location of wounds, severity of wounds, and the weapon used to inflict injury or cause death may be valuable indicators of victim-offender relationship and may vary depending on the type of homicide (Douglas & Ressler, 2006)

National crime statistics indicate that 72% of all homicides in 2015 were committed with firearms (U.S. Department of Justice, 2016). “Other dangerous weapons” (e.g., blunt objects) were used in 12.4% of cases, knives and cutting instruments were used in 11.5% of homicides, and personal weapons (e.g., hands, fists, or feet) in 4.5% of cases. However, not all homicides follow national trends, and a large body of literature finds that violence inflicted upon a victim could be critical in classifying a crime (Douglas, 2006) and the way that violence is inflicted may vary depending on victim-offender relationship and/or type of crime (Thomas, Dichter, & Matjowski, 2011).

Some researchers postulate that severe facial injury may indicate depersonalization (symbolic destruction of who a person is through destruction of the face), or may simply be a method employed to hinder identification of the victim (Salfati & Canter, 1999). While the psychological, medical, and criminological communities have extensively explored the prevalence rates of victim, offender, and offense characteristics, very few have specifically explored variations in wounding patterns and associated crime scene behaviors across victim-offender relationship and type of homicide (Trojan & Krull, 2012).

The early 20th century saw increasingly substantive scientific inquiry into the study of homicide after vital statistics compiled from data supplied by federal registration bureaus across the United States were expanded and made more accessible (Brearley, 1932; Eckberg, 1995). Although the accuracy and reliability of early vital statistics data remains questionable, the formation and implementation of the Uniform Crime Reporting (UCR) Program by the International Association of Chiefs of Police (IACP) and the Federal Bureau of Investigation (FBI) in 1930 aimed to address reliability issues and provide widely accessible, uniform national statistics (United States Department of Justice, 2010). These reports outline national and local crime statistics, and provide specific details pertaining to different types of offenses (e.g., age, race, gender, circumstances, weapons used), including homicide and other felony offenses (e.g., burglary, robbery, and rape). By 1950, the UCR provided homicide data for 2,297 cities encompassing almost seventy

million people (Wolfgang, 1958). Intimate partner homicide is defined as the willful killing of a person who was a spouse, ex-spouse, boyfriend, girlfriend, former boyfriend/girlfriend, live-in partner, or former live-in partner of the offender (Astion & O'Brien, 2009).

National crime statistics indicate that 72% of all homicides in 2015 were committed with firearms (U.S. Department of Justice, 2016). Knives and cutting instruments were used in 11.5% of homicides, “other dangerous weapons” in 12.4% of cases, and personal weapons (e.g., hands, fists, or feet) in 4.5% of cases. In a study examining data collected over a 28-year period from 1980 to 2008, Cooper and Smith (2011) reported that the trends found in intimate partner homicides are similar to U.S. national trends, with firearms accounting for over two-thirds of murders. Indeed, the availability of a firearm in domestic violence situations is found to increase risk of homicide almost 500% (Mercy & Saltzman, 1989). Early research findings additionally indicate that in the homicides of spouses from 1976-1985, men were more likely to be killed by stabbing and women were more likely to be bludgeoned with an object or beaten with fists, hands, or feet when the mechanism of death was not a firearm (Cooper & Smith, 2011).

Moreover, empirical examinations of body injury severity to date have been restricted by methodological limitations related to sampling, a lack of standardized measures of injury severity, and inconsistent definitions of victim-offender relationship (Drawdy & Myers, 2004). The scant amount of literature that currently exists exploring body injury patterns posits that more severe body injury is often associated with closer victim-offender relationships; however, none has explored this hypothesis across different types of homicide (Trojan & Krull, 2012).

CHAPTER – 3

METHODOLOGY

This chapter discusses the methodology adopted by the researcher conducting the study. The present chapter discusses about objectives, need and significance of the study, hypothesis, universe, material and methods, statistical analysis and tools and techniques.

3.1. Aim

To study the Pattern and Fatality of weapons used in homicide death.

3.2. Objectives

1. To find out the most commonly used weapons in homicide death.
2. To find out the fatality of injury caused by weapon in homicide death.

3.3. Need and Significance of the Study

Today, much attention is devoted towards homicide crime and also used type of weapons in homicide deaths. The homicide criminality has been a neglected field of research though the fact that their number is very large. There is a definite need for more in depth and intensive study on homicide criminality to acquire greater insight in to the problem.

The murder weapon is helpful to the prosecution because it is extremely powerful evidence against the suspect. If the scene is one of apparent violence, then the blood flow patterns may indicate the type of weapons and how it was used. Linking suspects to victims is the most important and common type of linkage accomplished by physical evidence in criminal investigations. These factors, as well as potentially finding the weapon in a suspect's actual or constructive possession, are all strong examples of circumstantial evidence which is often necessary especially in cases where there is weak direct evidence.

3.4. Scope of the Study

The study of weapons in homicide death will help to analyses which type of weapons and pattern are commonly used in particular area and thus help in criminal investigation. The collection of such data in future related studies would be a rich source of information.

3.5. Variables of the Study

Variables are defined as something that can change or can have more than one value. According to Kerlinger (1983), “variable is a property that takes on different values.” It is a logical grouping of attributes (Babbie, 1983). There are different types of variables and one of its classifications is independent and dependent variables. The independent variable is the antecedent and dependent variable is the consequent (Kaur, 2013). The independent and dependent variables of the present study are given below,

3.5.1. Independent Variable

- Age
- Gender
- Types of weapons.

3.5.2. Dependent Variable

- Wound pattern
- Fatality of injury
- Motive of murder.

3.6. Hypotheses

- H1 - There is an association between weapons used in homicide death and fatality of injury.
- H0 – There is no association between weapons used in homicide death and fatality of injury.

3.7. Universe

- The data for the study was collected from Kundara Police Station in Kollam District.

3.8. Data Processing and Analysis

Statistical tool of data interpretation and analysis is to be used to arrive at a scientific understanding of the problem in its various dimension.

3.9. Samples of the Study

Data for the study was collected from Kundara police station in Kollam district. Homicide death case report from 2010-2020 were collected for the study. Total of 23 cases were included in the study.

Out of total 60 homicide death reported in Kundara police station from 2010 to 2020 the presence of weapon was observed in 23 cases.

3.10. Tools and Techniques

- Inquest papers and other relevant documents.
- First Information Report (FIR).
- Autopsy report.

3.11. Statistical Analysis

Statistical analysis was conducted utilizing Statistical Package for the Social Sciences (SPSS), (version 25). Microsoft Excel is used for preparing spread sheet, pie chart and bar chart.

CHAPTER – 4

RESULTS AND DISCUSSIONS

This chapter discusses the results and discussion of present study. Results are interpreted from the frequency tables. Result is presented in the form bar chart and pie chart.

In the present study, a total 23 of homicide death cases are evaluated and studied.

Table 1: Age of the Offender in Homicidal Death

Age of Offender in Homicide Death					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Youth	6	26.1	26.1	26.1
	Middle Aged	15	65.2	65.2	91.3
	Senior Citizen	2	8.7	8.7	100.0
	Total	23	100.0	100.0	

Figure 1: Age of the Offender in Homicidal Death

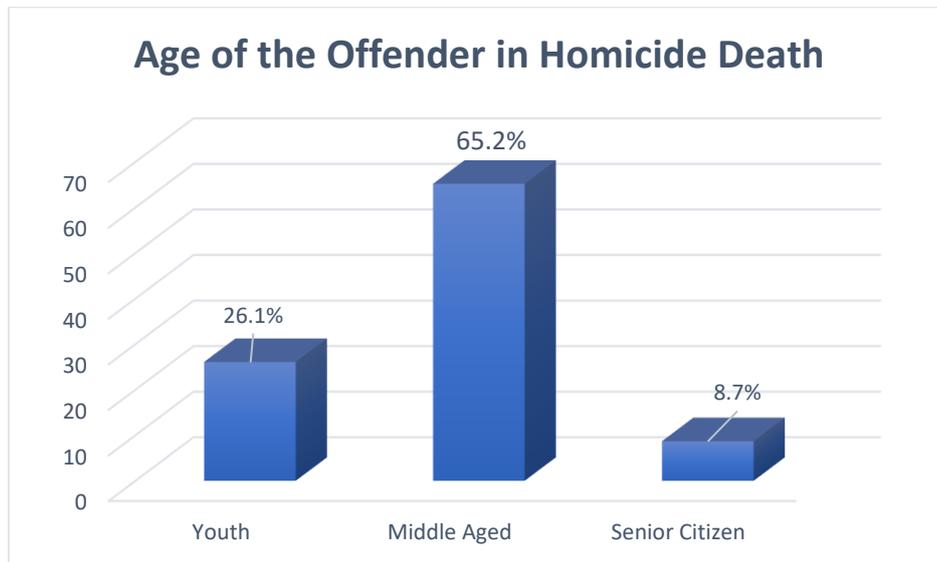


Table: 1 illustrates the age of the offender in homicide death. The results shows that a significant proportion of the offenders belong to the middle-aged group (65.2%) and 26.1% are youth were as Senior citizen contributed to (8.7%). It is inferred that the most of offenders are middle aged group.

Table 2: Gender of the Offender in Homicide Death

Gender of Offender in Homicide Death					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	22	95.7	95.7	95.7
	Female	1	4.3	4.3	100.0
	Total	23	100.0	100.0	

Figure 2: Gender of the Offender in Homicide Death

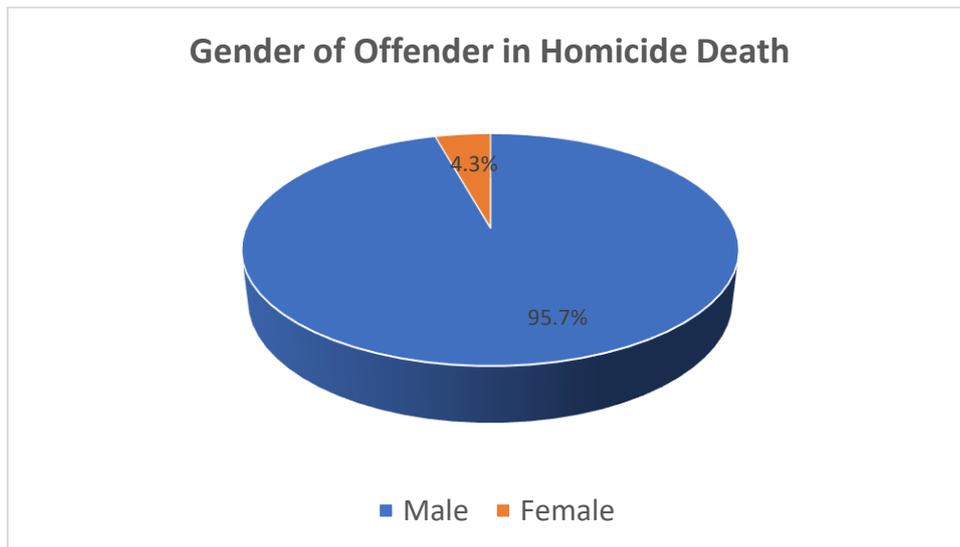


Table: 2 illustrates the gender of the offender in homicide death. The results shows that three- fourth of the offenders were male (95.7%) and only a small proportion were females (4.3%). Hence, it is inferred that the most of offenders are male.

Table 3: Age of the Victim in Homicide Death

Age of the Victim in Homicide Death					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Youth	9	39.1	39.1	39.1
	Middle aged	14	60.9	60.9	100.0
	Total	23	100.0	100.0	

Figure 3: Age of the Victim in Homicide death

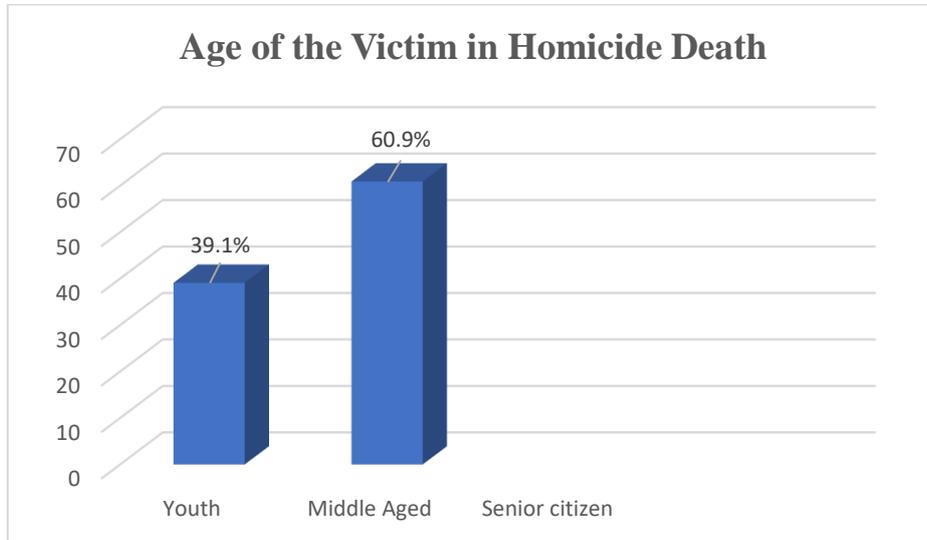


Table: 3 illustrates the age of the victim in homicide death. The result shows that a significant proportion of the victims belong to the middle-aged group (60.9%) and youth (39.1%). It is inferred that the most of victims are middle aged group.

Table 4: Gender of the Victim in Homicide Death

Gender of Victim in Homicide Death					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	16	69.6	69.6	69.6
	Female	7	30.4	30.4	100.0
	Total	23	100.0	100.0	

Figure 4: Gender of Victim in Homicide Death

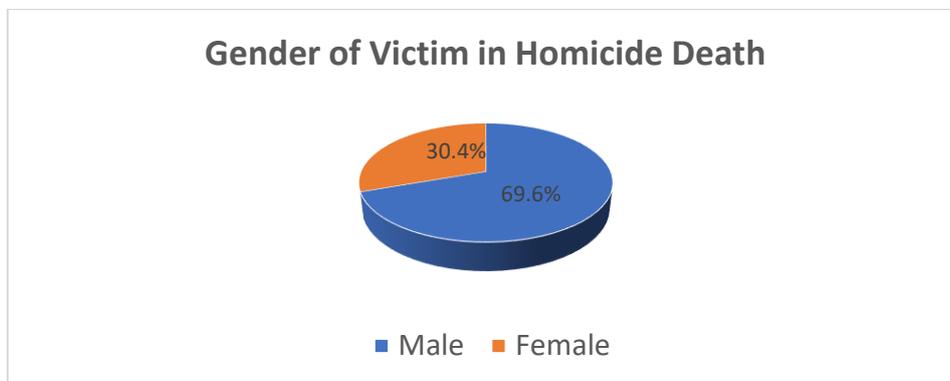


Table: 4 illustrates the gender of victim in homicidal death. The result shows that more than half of the victims are male (69.6%) and only a small proportion were females (30.4%). Hence, it is inferred that the most of offenders are male.

Table 5: Weapons Used in Homicide Death

Weapons Used in Homicide Death					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Wood	6	26.1	26.1	26.1
	Knife	7	30.4	30.4	56.5
	Axe	3	13.0	13.0	69.6
	Stone	3	13.0	13.0	82.6
	Iron Rod	2	8.7	8.7	91.3
	Glass Bottle	2	8.7	8.7	100.0
	Total	23	100.0	100.0	

Table: 5 shows the weapons used in homicide death. the result shows that most frequently used weapon in homicide death is knife (30.4%), followed by wood (26.1%), axe (13.0%), stone (13.0%), iron rod (8.7%) and glass bottle (8.7%). It is inferred that easy access and high lethality make knife is most commonly used weapons in last years of cases in weapon used in homicide death.

Table 6: Fatal Injury Resulted in Homicide Death

Fatal Injury Resulted in Homicide Death					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Head Injury	14	60.9	60.9	60.9
	Abdominal / Stomach Injury	7	30.4	30.4	91.3
	Neck Injury	2	8.7	8.7	100.0
	Total	23	100.0	100.0	

Table: 6 illustrate the fatal injury resulted in homicide death. The result shows that most observed fatal injury is head injuries (60.9%), followed by abdominal or stomach injury (30.4%) and Neck injury (8.7%). It is inferred from the above result the most preferred sites of assault were head and even an isolated injury over these areas can prove fatal in most of the cases of homicide death.

Table 7: Motive of Murder

Motive of Murder					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Alcohol Intoxication	14	60.9	60.9	60.9
	Fight Between Husband and Wife	7	30.4	30.4	91.3
	Revenge	2	8.7	8.7	100.0
	Total	23	100.0	100.0	

Table: 7 illustrate the motive of murder. The result shows that main motive for the homicide was Alcohol intoxication (60.9%), followed by fight between husband and wife (30.4%). Only (8.7%) of the homicide deaths were due to revenge between the assailant and the victim. It is inferred that the primary motive for homicide is alcohol intoxication. The familial issues between husband and wife also plays a significant role in cases of homicidal deaths.

Table 8: Place of death

Place of Death					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Spot Death	15	65.2	65.2	65.2
	During Treatment in Hospital	8	34.8	34.8	100.0
	Total	23	100.0	100.0	

Table: 8 shows that place of death in homicide death. The result shows that most of the victims of homicide death died on the spot of scene of crime (65.2%) and (34.8%) of the victims died during the treatment in hospital. It is inferred from the above result that be majority of the victims lose his /her life at the scene of crime itself in homicide deaths.

Table:9 Chi- square test for the association between fatality of injury and the nature of the weapons.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	37.238 ^a	10	.000
Likelihood Ratio	36.505	10	.000
Linear-by-Linear Association	.660	1	.417
N of Valid Cases	23		

a. 18 cells (100.0%) have expected count less than 5. The minimum expected count is .17.

Fatal Injury Resulted in Homicide Death * Weapons Used in Homicide Death Crosstabulation									
			Weapons Used in Homicide Death					Total	
			Wood	Knife	Axe	Stone	Iron Rod		Glass Bottle
Fatal Injury Resulted in Homicide Death	Head Injury	Count	6	0	1	3	2	2	14
		% Within fatal Injury Resulted in Homicide Death	42.9%	0.0%	7.1%	21.4%	14.3%	14.3%	100.0%
		% Of Total	26.1%	0.0%	4.3%	13.0%	8.7%	8.7%	60.9%
	Abdominal / Stomach Injury	Count	0	7	0	0	0	0	7
		% Within Fatal Injury Resulted in Homicide Death	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% Of Total	0.0%	30.4%	0.0%	0.0%	0.0%	0.0%	30.4%
	Neck Injury	Count	0	0	2	0	0	0	2
		% Within fatal Injury Resulted in Homicide Death	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
		% Of Total	0.0%	0.0%	8.7%	0.0%	0.0%	0.0%	8.7%
Total	Count	6	7	3	3	2	2	23	
	% Within Fatal Injury Result in Homicide Death	26.1%	30.4%	13.0%	13.0%	8.7%	8.7%	100.0%	
	% Of Total	26.1%	30.4%	13.0%	13.0%	8.7%	8.7%	100.0%	

Table: 9 illustrate an association between fatality of injury and the nature of weapons used in homicide death. The result indicates that there is the significant association between fatality of injury and the nature of weapons used in homicidal death. As the p – value is less than 0.05, the alternative is hypothesis accepted. Therefore, it is concluded that, there is the significant association between fatality of injury and type of weapon used in homicide death.

The result shows that the head injury is mainly caused by wood (49.9%), stone (21.4%), iron rod and glass bottle (14.3%) and axe (7.1%). It also shows that abdominal/ stomach injury is mainly caused by Knife (30.4%). In the case of neck injury, the weapon used is axe (8.7%). Result also shows that knife was never used to inflict fatal injury to head.

Based on the above findings, it is inferred that the fatal head injuries are mainly caused by wood, stone, iron rod, axe, glass bottle. Knives are usually not used to inflict fatal head injury in case of homicide deaths. In abdominal/ stomach injury, the commonly used weapons are knives. Axe were the most commonly used weapons in cases of homicide death to inflict neck injuries.

CHAPTER – 5

SUMMARY AND CONCLUSION

This chapter discusses the summary and conclusion of present study, we found the nature and pattern of weapon used homicidal death. The following conclusions have been drawn based on the findings of the present study.

- In majority of the offenders were middle aged group (65.2%) followed by Youth (26.1%) and Senior citizen (8.7%).
- The majority of offender were male (95.7%).
- In majority victims were under middle aged category (60.9%), and followed by youth (39.1%).
- The majority of victim were male (69.6%) and female victims were least (30.4%).
- The most frequently used weapon in homicide death is knife (30.4%), followed by wood (26.1%), axe and stone (13.0%), iron rod and glass bottle (8.7%).

- The most observed fatal injury in homicide death is head injuries (60.9), followed by abdominal and stomach injury (30.4%) and Neck injury (8.7%).
- The main motive behind the homicide death was Alcohol intoxication (60.9%), followed by fight between husband and wife (30.4%). Only (8.7%) of the homicide deaths are due to revenge between the assailant and the victim.
- That most of the victim of homicide deaths died on the spot of scene of crime (65.2%). (34.8%) of the victims of homicide deaths died during the treatment in hospital.
- Head injury is mainly caused by wood (49.9%), stone (21.4%), iron rod and glass bottle (14.3%) and axe (7.1%).
- It also shows that abdominal/ stomach injury is mainly caused by Knife (30.4%).
- In the case of neck injury, the weapon used in the homicide death cases are axe (8.7%).

5.1. LIMITATION

The present study was confined only to the Kundara police station jurisdiction. The study was based on the inquest reports, first information reports and autopsy reports of the homicide death cases reported under the Kundara police station jurisdiction for the 11 years. The future research can look in to more aspects by incorporating more cases and other police station jurisdictions.

5.2. SUGGESTIONS

Based on the findings of the present study, the following suggestions have been made:

- Marital disputes and family problems is one of the primary motives in homicide death. These issues must be addressed by referring the parties to an appropriate agency or counsellor.
- Alcohol intoxication is one of the major causes for the higher incidence of male offenders in homicide death. Hence, initiatives should be taken to reduce and prevent harmful alcohol related criminal activities. Some of the initiatives includes public education, alcoholism assessments and treatment programs.

REFERENCES

- Alvarez Cussen, S. L. (2017). Patterns of injury in homicide relationships: Clinical, psychological, and investigative implications.
- Anil Aggrawal, A., (2014). *Essentials of Forensic medicine and toxicology*. Avichal publishing company. (First edition), 168.
- Bhupinder, S., Kumara, T. K., & Syed, A. M. (2010). Pattern of homicidal deaths autopsied at Penang Hospital, Malaysia, 2007-2009: a preliminary study. *The Malaysian journal of pathology*, 32(2), 81–86.
- Brennan, I. R., & Moore, S. C. (2009). Weapons and violence: A review of theory and research. *Aggression and Violent Behavior*, 14(3), 215-225.
- Catanesi, R., Carabellese, F., Troccoli, G., Candelli, C., Grattagliano, I., Solarino, B., &
- Chan, H. C., & Beauregard, E. (2016). Choice of weapon or weapon choice? Examining the
- Chanana A, Raih, Mittals, *Blunt force injuries in culpable homicides*, choice. *Homicide Studies*, 18, 298-317
- Cornish, D. B., & Clarke, R. V. (Eds.). (1986). *The reasoning criminal: Rational choice perspectives on offending*. Transaction Publishers.
- Gupta Avneesh et al.2004. “A study of homicidal deaths in Delhi”, *Medicine, Science and Law*, 44 (2): 127-132.
- Gupta S, Prajapati P. Homicide trends at Surat region of Gujarat, India. *Journal of Forensic Medicine and Toxicology*. 2009; 26:45–48.
- Gupta, A., Rani, M., Mittal, A. K., & Dikshit, P. C. (2004). A study of homicidal deaths in Delhi. *Medicine, science and the law*, 44(2), 127-132.
- Gupta, N., Aggarway, N. K., & Verma, S. K. (2018). Pattern of homicidal deaths in north east Delhi and NCR. *Journal of forensic medicine and toxicology*, 35(1), 70.

- Gurdjian E S, Webster J E, Lissner H R (1949), studies on skull fracture with particular reference to engineering factors. *Am J Surg* 1949; 78(5): 736-42.
- Handlos, P., Uvíra, M., Dokoupil, M., & Marecová, K. (2019). Axe injury pattern in homicide. *Forensic Science, Medicine and Pathology*, 15(3), 516-518.
- Hugar, B. S., Harish, S., Chandra, Y. G., Praveen, S., & Jayanth, S. H. (2012). Study of defence injuries in homicidal deaths—An autopsy study. *Journal of forensic and legal medicine*, 19(4), 207-210.
- Hugar, B. S., YP, G. C., Harish, S., & SH, J. (2010). Pattern of homicidal deaths. *Journal of Indian Academy of Forensic Medicine*, 32(3), 194-198.
- Karim, A., Afridee, H. A., & Abid, M. A. (2017, July). Pattern of Fatal Injury and Weapon Used in Homicidal Deaths on Autopsy in Peshawar. In *Medical forum monthly* (Vol. 28, No. 7, pp. 123-125).
- Kiran Kumar Patnaik (2017). Pattern of isolated fatal mechanical injury in homicidal deaths – Across Sectional Study.
- Kiran Kumar Patnaik, *pattern of isolated fatal mechanical injury in homicidal deaths – Across sectional study*, 2017.
- Korosec, L. (2012). The changing nature of homicide and its impact on homicide clearance rates: A quantitative analysis of two trends from 1984-2009.
- Kumar, V., Li, A. K., Zaniyal, A. Z., Lee, D. A., & Salleh, S. A. (2005). A study of homicidal deaths in medico-legal autopsies at UMMC, Kuala Lumpur. *Journal of clinical forensic medicine*, 12(5), 254–257.
- Marri, M. Z., Bashir, M. Z., Munawar, A. Z., Khalil, Z. H., & Khalil, I. u. (2006). Analysis of homicidal deaths in Peshawar, Pakistan. *Journal of Ayub Medical College, Abbottabad : JAMC*, 18(4), 30–33.
- Mohanty, M. K., Panigrahi, M. K., Mohanty, S., Dash, J. K., & Dash, S. K. (2007). Self-defense injuries in homicidal deaths. *Journal of forensic and legal medicine*, 14(4), 213–215.
- Mohanty, S., Mohanty, M. K., Panigrahi, M. K., & Das, S. K. (2005). Fatal head injury in homicidal victims. *Medicine, science, and the law*, 45(3), 244–248.
- Narayana Reddy K.S, 2007. “The essentials of Forensic Science Medicine and Toxicology” Medical Book Company, Hyderabad, 26th edition: 251-252 pp.

- Patnaik, K. K., Das, S., Mohanty, S., & Panigrahi, H. (2017). Pattern of Isolated Fatal Mechanical Injury in Homicidal Deaths: A Cross-Sectional Study. *Journal of clinical and diagnostic research: JCDR*, 11(9), HC01.
- Pelletier, K. R., & Pizarro, J. M. (2019). Homicides and weapons: Examining the covariates of weapon choice. *Homicide studies*, 23(1), 41-63.
- Pradeep K. Mishra, Jayanthi Y, Sandeep S, Dubey BP (2012). "Pattern of injuries in homicidal deaths in Bhopal region. *J Ind Acad Forensic Med* 2012;34: 194-8.
- Prajapati, P., Sheikh, M. I., & Patel, S. (2010). A study of homicidal deaths by mechanical injuries in Surat, Gujarat. *Journal of Indian Academy of Forensic Medicine*, 32(2), 134-138.
- Preti. A., Miotto. P, 2000. Death by homicide in Italy, 1980: Age and Gender Difference among victims", *Medicine, Science and Law*, 40(3): 233-240.
- Singh RKS. Analysis of changing pattern of unnatural deaths during 1991-1995. *J Ind Forensic Med Toxicology* XIV 1997(1); 23-25.
- Vij, A., Menon, A., Menezes, R. G., Kanchan, T., & Rastogi, P. (2010). A retrospective review of homicides in Mangalore, South India. *Journal of forensic and legal medicine*, 17(6), 312–315.