Original Research Paper

Profile of Disease Related Deaths in Custodial Cases An Autopsy Based Experience

[1]Satinder Pal Singh, [2]Dalbir Singh, [3]Akashdeep Aggarwal, [4]Surinder Singh Oberoi, [5]Krishan Kumar Aggarwal

Abstract

The death of a person in custody always raises suspicion of torture at the hands of authorities culminating in death. In view of above, the present study was conducted to bring to light the pattern of deaths among the prison population of northwest India and suggest suitable preventive measures. This study extended over a period of four years (January 2010 to December 2013) and analysed 60 such cases. Male predominance was observed. The maximum number of fatalities (26.6%) occurred in 21-30 years age group. Most (80%) of the prisoners belonged to rural areas. Contrary to the common perception, natural causes (80%) were responsible for death in the majority of cases, with lung pathologies (29.2%) as the major killer. The study concluded that provision of timely and adequate health care to prison inmates is likely to bring down the morbidity & mortality. It is likely to bring down the morbidity and mortality among prison inmates and also save the authorities from the unnecessary mental agony and harassment of getting accused of the death of the person.

Key Words: Prison, Custody, Death, Autopsy, Human rights

Introduction:

Death in custody is a serious issue as it raises the question mark on the fundamental rights of a citizen. These incidences not only cast a shadow over the image of police, but also raise eyebrows concerning the health related facilities available to prisoners.

As per the directions of the National Human Rights Commission (NHRC) of India, all such deaths must be investigated by a magistrate, the entire process of autopsy should be videographed followed by submission of the report within 24 hours of autopsy. [1]

Death is an inevitable event of life, it cannot always be presumed to be consequent to foul play.

Corresponding Author:

[1]Senior Resident,
Department of Forensic Medicine,
PGIMER, Chandigarh, India, Pin code 160012
E-mail: spsingh9988@yahoo.co.in
[2]Profe & HOD, Dept. of Forensic Medicine,
PGIMER, Chandigarh, India, Pin code 160012
[3]Assoc. Prof, Dept. of Forensic Medicine,
Govt. Medical College, Patiala,
Punjab, India, Pin Code 147001
[4]Addl. Prof, Dept. of Forensic Medicine,
GMC, Patiala, Punjab, India
[5]Prof, Department of Forensic Medicine,
GMC, Patiala, Punjab, India
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The data shows majority cases of morbidity and mortality among the prisoners to be the result of natural causes. [2, 3] In view of above the present study was conducted to bring to light the pattern of deaths among the prison population from this region of northwest India.

Material and Method:

The present retrospective study was conducted in Government Medical College, Patiala which is a leading tertiary care institute of northwest India that caters to the health needs of the local population. During the study period from January 2010 to December 2013, a total of 60 prisoners were admitted in this hospital for various conditions and died.

These prisoners belonged to the local jail and represent the local prisoner population only. Their dead bodies were subjected to medico-legal autopsy as required by Indian laws.

The data were collected from the post-mortem records, medical records, police inquest reports and toxicological records of prisoners. The data thus collected was subsequently analysed and compared with other national and international studies.

Observations and Results:

During our study period from January 2010 to December 2013, a total of 2510 medico-legal autopsies were conducted out of which 60 (2.3%) deaths involved prison inmates. Though male predominance was observed (96.6%), it

was not found to be statistically significant (p value 0.666 and chi square 6.724).

The proportion of deaths was highest in 21-30 years (31.6%) followed by 31-40 years (23.3%) and 41-50 years (15%) age groups.

The minimum number of deaths was observed in 51-60, 61-70 and >70 year age groups (10% in each group). (Fig.1) In 11-20 years age group, three prisoners were detected and all were above the age of 18 years, which is the legal age of adulthood in India. Statistical significance was observed for age with maximum number of deaths in the younger age groups (p value = 0.012, chi square = 14.60).

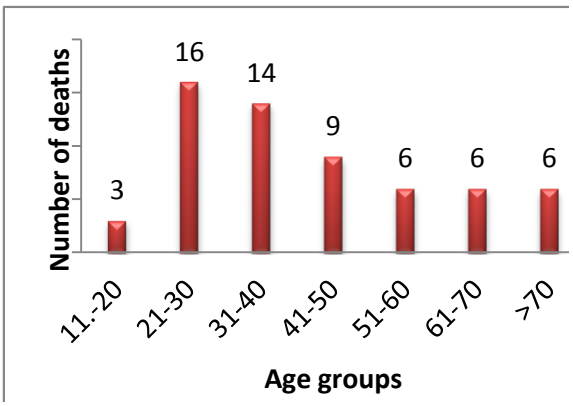
Rural preponderance was observed (80%) and was found to be statistically significant (p value = 0.024, chi square = 18.55).

The month of January (16.7%) recorded the highest number of cases followed by October (13.3%) while the minimum number of cases was observed in the months of May and June (1.7% each). No significant statistical relation to the season was observed (p value 0.405, chi square = 28.118).

Table 1: Distribution of Natural/Unnatural Deaths among Prisoners

Natural Causes of Death	Cause of death	Percentage
	Lung pathology	29.2
	Heart pathology	16.7
	Neuro pathology	10.4
	GIT pathology	4.1
	More than organ system involved	25
	Cancer	4.1
	Renal pathology	10.4
	Total	100
Unnatural Causes of Death	Poisoning	66.7
	Hanging	25
	Burns	8.3
	Total	100

Fig. 1: Age wise Distribution of Cases



Death from natural causes was observed in a majority of cases (80%). Among the natural causes, lung related pathology was the main killer (29.2%) and 86% of lung pathology related deaths were attributed to tuberculosis (n=12) followed by pneumonitis due to other pulmonary pathologies.

Among the unnatural causes of death, the top position was occupied by poisoning that affected around two thirds of the prisoners.

Out of a total of 8 poisoning deaths, 50% were due to Aluminium phosphide (ALP) followed by Organophosphorus (OPC) and Chloro compounds (CC) (25% each). One case of homicidal thermal burns was also reported. (Table1)

Discussion:

The present study revealed that the custodial deaths constitute 2.39% share of total unnatural deaths reported at this hospital. The observation that males were predominantly affected is also consistent with the findings of other studies done in India [2, 3] and other developed countries like USA, [4] Australia, [5-7] Canada [8] and UK. [9-11]

The greater involvement of males may be explained by the fact they are more commonly involved in criminal activities and likely to be present in larger numbers in jails and consequently die in greater numbers.

The age range varied from 21 years to 80 years and the mean age was found to be 43.9 years. It was discovered that the most frequently affected age group has been 21-30 years, followed by 31-40 years. Comparable findings were observed in India [3] Canada [8] and UK [12] with a mean age of 46.4 years, 40.9 years and 38.4 years respectively.

However, contrasting findings were observed in another study conducted in the UK [10] where 65-74 years age group was found to be most frequently affected. More deaths in the younger group can be possibly be explained by the fact that people in the age group are most energetic and prone to greater stresses of life and constitute the largest number of prisoners in India and consequently show maximum deaths as was reported by the National Crime Records Bureau of India in 2012.

The present study found that rural population (i.e., area of usual residence of the prisoner before the arrest) was more commonly affected. However, the rural population may be overrepresented as a vast majority of India's population still resides in rural areas (about 68.8% in 2011 as per census data).

The current study found that natural causes were responsible for death in 80% of the cases which is in accordance with other national [2] and international studies, viz. USA [4,13,14] UK [9,10] and Australia. [15]

Among natural causes, lung pathologies were the leading causes of death. Concordant findings were also reported from India [3] and UK [9] showing lung pathology followed by cardiovascular pathology as the leading causes of death. Some studies conducted overseas, viz. UK [10, 12] on the other hand, observed cardiovascular diseases as the leading cause of death. Tuberculosis is prevalent in 40% of the total Indian population and is still an important cause of preventable deaths.

The observation that tuberculosis was the main offender in deaths related to lung diseases indicates that this treatable medical condition is getting ignored in prisoners.

According to National Crime Records Bureau, the jails in Punjab had inmate strength of 27449 in 2013 against the capacity of sanctioned capacity of 18629 indicating 144% occupancy. The resultant overcrowding might be a contributory factor for dissemination of tuberculosis from one person to another and consequent development of the disease.

Contrary to our finding that poisoning was the leading cause of death, the industrialized world, i.e., Australia [5, 16, 17] and UK [9] presented a different picture with hanging as the leading cause of death followed by multiple traumas. A Canadian study [8] reported violent causes as the most frequent cause of death in men led by suicide by strangulation (31.8%) poisoning (16.9%) and homicide (5.6%).

The access of prisoners to poisons like ALP, OPC and CC indicates lapses in jail security. Easy availability of ligature material poses a difficult problem for the jail staff as even a shirt can be used for the purpose and hence a close vigil of prisoners is essential at all the times. (Table 2)

Conclusion:

Death from natural diseases that can be properly treated with adequate and timely medical facilities is a serious lapse that should be addressed at the earliest.

On the other hand, deaths from poisoning and hanging throw light on the loose security of our jails leading to access of prisoners to poisonous substances and ligature materials that can be used to commit suicide.

The authors are of the view that respective governments should improve the infrastructure of the jails through requisite financial support and tighten vigilance to decrease fatalities in prisoners.

The problems of long delays in the judicial system and mistreatment at the hands of jail authorities should be addressed. Proper arrangement should be made to ample living space to each prisoner.

A more humane approach to their genuine needs of prisoners is likely to bring relief to the families of the prisoners and relieve the jail staff of unwanted stress of being responsible for the deaths of prisoners.

Limitations:

The study might not represent a true picture of prison fatalities in this region of India as it included only the cases that presented at a particular health institute.

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Table 2: Comparison with Various National and International Studies

S. N	Study	Study Year	Sex	Most frequently affected age group	Incidence	Type of death (most common)
1	USA, Maryland[14]	1990	Males	-	-	Natural, 68.62%
2	Netherlands, Amsterdam[18]	1997	-	-	-	Unnatural (Suicide, 33.8% Intoxications 32.2%)
3	USA, Nebraska[19]	1999	Males 94%	41-50 yrs, 29.4%	-	Unnatural, 52.9% (Suicide, 33.3%) Natural, 45.1%
4	Australia, Victoria[7]	2000	Males 93.7%	Mean age 34.6 yrs, >50% deaths- less than 33 yrs old	2.09 deaths/1000 prisoners	Unnatural,81.25% (Accidental,32.2% Suicides, 30.2%)
5	Canada, Ontario[8]	2002	Males 97.2%	Mean age (males) 40.9 yrs	420.1/100000 (for federal institutions)	Unnatural, 59% Natural,41%
6	South Africa[20]	2003	21-30 yrs, 48.7%	Males, 100%	-	Unnatural
7	India, New Delhi[1]	2008	Males 100%	21-30 yrs, 53.8%	-	Unnatural, 76.9%
8	India,Chandigarh[2]	2010	Males 95%	46-55 yrs, 21.1%	-	Natural, 89% Unnatural, 11%
9	UK[9]	2011	Males 72%	21-50 yrs	-	Natural,66%
10	Present study (India, Patiala)	2014	Male 96.6%	21-30 yrs, 26.6%	2.3% of total autopsies	Natural, 81.6% Unnatural,18.3%