

ORIGINAL ARTICLE

Study of Natural Deaths in Custody at Tertiary Care Hospital in Rajasthan

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Abstract:

As death is final outcome of life, it is inevitable in prisoners too. Pattern of deaths can reveal living conditions and practices in a population. This study was conducted to observe the pattern of natural deaths among prisoners autopsied at a tertiary care hospital in Jaipur during April 2017 to March 2018. During this period 16 cases of alleged natural deaths in custody were autopsied comprising of 15 males and 1 female. The natural deaths were almost evenly distributed in all age groups. Carcinoma was leading cause of death in (37.5%) cases, followed by cardio-vascular causes in (25%) cases, intracranial hemorrhage in (12.5%) cases, septicaemia in (12.5%) cases, tuberculosis associated with HIV in (6.25%) case and Pneumonia associated with Parkinsonism in (6.25%) cases. All (100%) of the natural deaths received medical attention prior to death and died in hospital. Injuries were present in 5 cases (31.25%) but were not attributed to causing deaths.

Keywords: Prisoners; Natural death; Custodial death; Carcinoma; Cardiac illness.

Introduction:

There were 4,66,084 prisoners in Indian jails in end of year 2018 with numbers steadily increasing^{1,2} and same is true for international prisons.^{3,4}

The inmates in custody are marginalized people who have poor access to healthcare in the community, but on the flip side, prisons also provide a rare opportunity to screen for and treat illnesses, particularly contagious and chronic ones.^{5,6} The living conditions in prisons must be healthy so that the prisoners are not punished twice, once by incarceration and a second time by illness. Updated studies on prisoner morbidity and mortality are important as prison healthcare is the responsibility of state-run public health services and such work may contribute in developing further nation-wide standards for prison healthcare, an issue that is increasingly recognised.⁷⁻⁹ The International Covenant on Economic, Social and Cultural Rights (ICESR) states that prisoners have a right to the highest attainable standard of physical and mental health.

Studies world-wide have reported that mortality rates from natural causes are higher than external causes in prisoners.¹⁰⁻¹⁵ Whereas some studies have revealed just the opposite.¹⁶⁻¹⁸ Some studies have compared prevalence of diseases of prison populations with general population; and found infectious diseases and mental illnesses to be more common among prisoners^{19,20} whereas as per a study in France, the overall mortality rate due to natural causes was lower among prisoners.²¹

Prisoners are known to have increased rates of morbidity, in

particular, serious mental disorders,²² tuberculosis^{23,24} hepatitis and other infectious diseases,²⁵⁻²⁷ and self-reported physical ill-health especially in elderly.²⁸ Proposals are given to improve prisoners health.²⁹

There are always allegations of custodial torture, human rights violations, deliberate ill-treatment and failure to provide timely medical aid by the authorities to the deceased prisoners. Hence, the investigation helps to protect the interests of all parties involved: the deceased, the next of kin, the detaining authorities, and society as a whole.³⁰ It can also determine any pattern or practice that may have brought about the deaths; as any pattern of deaths in any population group is an indicator of living conditions of its members.

If the death is attributed as natural (caused solely by disease and/or the ageing process) some of the common questions that arise are- (a) Was the death avoidable with proper prevention, care and treatment? (b) Were the living conditions in jail up to the standards? (c) Was the prisoner provided with necessary and timely treatment for his/ her illness?

Though it is true that not every case of death in custody will be avoidable but it is possible to reduce the number of such deaths by preventive measures.¹⁴ Hence this study was carried out to know the prevalent pattern of natural deaths among prisoners.

Materials and Methods:

The present study was an observational descriptive study of 1 year duration at tertiary care hospital in Rajasthan. After receiving approval of Institutional Ethics Committee all cases of alleged custodial deaths from April 2017 to March 2018 were observed and only deaths due to natural causes, (confirmed by inquest report, postmortem findings, visceral examination reports, clinical records, investigation and evaluation of circumstances) were included in this study. All the cases where cause of death was concluded to be due to external causes and cases where cause of death remained in-conclusive till writing of this research were

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excluded from this study.

Information collected included age, sex, type of custody, place of death, medical attention received, past medical history if known, allegations of foul play/negligence and cause of death. The postmortem was conducted and observations made regarding injuries, and gross pathology. The available documents of the deceased (treatment record, Inquest report, viscera chemical and histopathological examination reports, other available documents) were also studied. The observations were recorded in tabulated form and data extracted from them was evaluated.

Results:

Of all custodial death cases autopsied during study period, 16 were due to natural causes which included 15 males and 1 female. All the deceased prisoners were in jail custody.

The age distribution of these cases was as follows:- 2 cases (21 to 30 years); 3 cases (31-40 years); 2 cases (41-50 years); 3 cases (51-60 years); 3 cases (61-70 years) and 3 cases (71-80 years). The youngest prisoner was 23 years old who died due to epitheloid sarcoma and oldest was 79 years old who died due to Septicemia consequent to intestinal pathology. Mean age of death was 52.6 years. All the cases of natural deaths were brought alive to the tertiary care hospital, admitted in various wards and given treatment prior to death. None of the natural deaths occurred in prison or in police custody. The cases had survival period after admission as follows- n=5 (less than 12 hours), n=4 (12 to 24 hours); n=4 (1 day to 7 days); n=1 (1 to 2 weeks) and n=2 (2 to 3 weeks).

The Magistrate inquest report mentioned cause of death as "due to illness" in all cases.

During postmortem, signs of injuries were present in 5 cases (31.25%) (n=3 had old healing lesions; n=1 lesions at various stages of healing and n=1 old abrasion). None of the injuries were fatal. No injuries were present in 11 cases. Histopathological examination of viscera was done for all prisoners and pathological changes found in all cases.

The cause of death was attributed to carcinoma in n=6 (37.5%) cases, cardio-vascular cause in n=4 (25%) cases, intracranial hemorrhage in n=2 (12.5%) cases, septicaemia in n=2 (12.5%) cases, tuberculosis associated with HIV in n=1 (6.25%) case and Pneumonia associated with Parkinsonism in n=1 (6.25%) case.

Carcinoma (n=6) was sporadically distributed among the population. 4 case of carcinoma were in 20 to 50 years age group and 2 cases were in 60-70 years age. Mean age for death due to carcinoma was 44.8 years. No cases were present in 51-60 yr and 71-80 yr age groups.

Cardiac cases were sporadically distributed in 50 to 72 years age; no case was present below 50 years age groups. Mean age for death due to cardiac cause was 60.25 years.

Intracranial hemorrhage was present in 2 cases, one was 40 years old male who had acute hemorrhage and died on same day. The second case was 52 years old male who had chronic hemorrhage and was admitted for 2 days before death. Mean age for death due to Intra cranial hemorrhage was 46 years.

2 cases of septicemia were observed, both were in 71-80 years age group. One had vertebral collapse, was bed ridden and subsequently developed septicemia. The second case was known case under follow up for malignancy, Koch chest and type 2 diabetes mellitus and during postmortem necrosed part of small intestine was found with signs of septicemia. Mean age for death due to septicemia was 77.5 years.

Discussion:

A predominance of males (n=15) 93.75% was noted as compared to females (n=1). Similar male preponderance has also been noted in other studies on natural custodial deaths.^{20,31-33} This male preponderance may be due to more numbers of male detentions which is also illustrated by national data of male and female prisoners.² A further study is required over a period of time to know pattern of deaths solely among female prisoners and also studies to compare patterns of deaths among male prisoners and female prisoners.

We divided our study population in 10 years age intervals and found an almost even distribution of cases in all the age groups. If we divide the population as per young age (20-40 years); middle age (40-60 years) and old age (above 60 years), then also we observe an almost even distribution of cases in all age groups. However, in other studies clear-cut age discriminations were noted of old age³³ and in some studies of younger age groups^{13,35-41} which may be due to more inmates in jail of this age group.²

In a 10 year study at California the modal age of custodial deaths at state supervised facilities was observed to change from 30-34 year in 1994 to 45- 49 years in 2003. But, the death rate was higher for 55-74 year old in custody compared to general population.⁴ The authors proposed need of probing into the general conditions of elderly prisoners and ways to make them more apt for geriatric prisoners.

A person in custody lives in entirely different set of conditions than outside world. If living conditions are good, this may even restore his health and well being thus prolong his life. In our study maximum cases (30%) belonged to greater than 61 years age group which corresponds to life expectancy of general public and also which likely explains maximum cases of Carcinoma followed by Myocardial infarction in present study. Carcinoma has been observed to be most common in other studies.¹¹ Cardiovascular illness (25% cases) were second leading cause of death with majority cases due to Ischemic heart diseases. Data regarding bulk of Cardiovascular causes of deaths are varied in various studies which range from 16.7% to 59.3% according to the age groups having most mortality.^{11,16,20,43}

The incidence of custodial death and the pattern of their causes reveal a lot about prevailing living conditions of prisons. The incidences of custodial deaths vary from time to time and also across different regions of the world. In a 65 years (1939-2004) retrospective exploratory analysis from Maryland, Cardiovascular disease was found to be the most frequent cause of death from the 1930s to the 1970s, with exception of 1940s, when syphilis and tuberculosis became most frequent. Asphyxia due to suicidal hangings was the predominant cause of death in the 1980s. Drug intoxication deaths were common in 1990s and

2000s. Sudden unexplained deaths involving violent behavior, the use of multiple restraints, and drug intoxication were identified after 1980s which coincided with increased cocaine abuse.⁴⁴

In a study at Souses, Tunisia during 2006-15 death occurred inside prison in 42.3% cases and in hospital in 57.7% cases. They found violent deaths more prevalent in 18-30 yr age group and natural deaths in 51-60 years age group.¹¹ In Souses, there is a common practice of sentence suspension for medical reasons for the terminally ill prisoners according to their disease evolution. This practice is not reflected in our data as some prisoners had known chronic illnesses at terminal stages.

Prisoners constitute a high risk group for acquisition of tubercular infection as compared to general population owing to overcrowding, closed living conditions with insufficient ventilation, in addition to poor nutrition.

In England and Wales over a 20-year period 16% deaths were attributed to respiratory causes and standardised mortality rates and ratios from respiratory pneumonia and from other infectious causes were found to be higher than general population. This study highlighted the need for the screening and effective treatment of infectious diseases in prisoners.²⁰ Respiratory diseases especially tuberculosis, have been implicated to have substantial load in causing natural deaths in many studies.^{11,33,34,38,39}

Studies in other parts of world show varying Tuberculosis rates.⁴⁰ In our study only one case (6.25%) of tuberculosis was observed which was also associated with retro-viral disease. This may indicate either good living conditions of prisoners at Jaipur or may be erroneous observation made due to small sample size and small study period. Further studies need to be made in this direction to see whether this observation is duplicated or not especially at lower level jails like tehsil. No deaths were reported due to other communicable diseases. In our study, septicaemia was found in 2 cases which were both very old and suffering from systemic diseases (71-80 years).

Strengths and Limitations: This was a comprehensive study and for concluding cause of death we took into account all the available records to us, but final full investigation report was outside purview of this study. In absence of investigation reports of Magistrate and Human Right's commission, it is possible that scientific conclusion drawn was inadequate.

It was observed that proper records pertaining to prisoner's past medical illnesses and medical treatment, history of any addiction, duration of detention etc, were not available. Some may have contracted illness during confinement and some may have had pre-existing illnesses. In absence of such record no observations can be made regarding prevention measures. There was non-availability of previous medical records, informations regarding duration of custody and final full investigation report.

Our study was limited to 1 year of study period. A long duration study like Maryland,⁴⁴ is desired in this region to get an overview of changing trends and circumstances which are reflected in patterns of deaths of persons under custody.

Recommendations: Maximum deaths occurred due to

carcinoma; this highlights the need of collecting data of prisoner regarding personal, medical, surgical and family history, stringent pre-arrest health checkup, follow-ups and screening of prisoner population for early signs of malignancy. All this medical record should be computerized for easy availability and further reference.

5 cases in our study had evidences of old injuries. Though these injuries were not direct causes of deaths in these cases, but indicate towards falls and unintentional injuries. Therefore the interiors of prison cells residing such patients may need certain changes.

Most of the deaths occurred within 48 hours of admission to hospital which indicates that prisoners were brought to hospital in terminal critical condition. This suggests scope for updating medical facilities available in jail. Most importantly, the prisoners themselves must be trained to evaluate their own physical condition and report to doctors at first instinct. The people related with custodial responsibilities should also be properly trained for providing primary aid and to recognize when medical intervention is required. This will enable to differentiate between malingering and true illnesses. It must also be emphasized to prison staff that not giving timely medical aid to prisoner is an act of grave negligence.

Providing proper and timely medical aid with digitalized medical record keeping are the major areas which can be further worked upon. A structured delivery of health care services can be provided by setting up "Prison Health Services" which would enable police administration to provide timely and appropriate medical aid as per each prisoner's need. Appropriate use of telemedicine to access super-specialties of medical field at referral institutes can bring world class healthcare at prison's doorsteps.

Conflict of Interest: The authors declare that there is no conflict of interest.

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