ORIGINAL RESEARCH PAPER
Volume - 12 | Issue - 03 | March - 2023 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

ANALYSIS OF DEATH IN MENTAL HEALTH CARE HOSPITALS- AN AUTOPSY BASED 10 YEAR RETROSPECTIVE STUDY

Forensic Medicine

Dr. Ratheesh Punnath Thadathil Associate Professor(CAP), Department of Forensic Medicine, Government Medical College, Kozhikode.

Dr. Priyatha Ponnappan* Assistant Professor, Department of Forensic Medicine, Government Medical College, Kozhikode. *Corresponding Author

ABSTRACT

Admission and discharge to the mental health care centres are regulated by various sections of mental health act. The mental health centres focuses on treatment of primary psychiatric illness with limited medical management for other illness. Most of the time mentally ill persons are considered as a burden for the family and society as a result of which once they get admitted in hospitals they have to remain there for a long period or till the end of their life in the hospital. The causes and circumstances of death of a person in mental health care centre is entirely different from the healthy population living outside. In north kerala mentally ill persons are treated mainly in Govt. mental health care hospital, Kuthiravattom, Kozhikode. The Govt medical college Kozhikode is a tertiary care centre and the Department of Forensic Medicine undertakes medico legal post mortem examinations of the district of Kozhikode as well as neighbouring districts of respective jurisdiction. The death cases from the mental hospital with medico legal implications are subjected for medico legal autopsy in the Medical College. The author had noticed a recent increase in the number of cases with evidence of gross neglect on the body. So we decided to analyse the various causes and circumstances of death in mental health care hospital based on the post mortem records of previous 10 yrs. This retrospective study showed that there is not only a recent increase in number of deaths but also high incidence of severe bed sore, infections in the cases. The leading cause of death was found out to be infections followed by cardiac causes , most of which were preventable in nature. Based on the observations in this study we have formulated some suggestions to improve the conditions of the mental health care system and increasing the quality of life and death of mentally ill patients.

KEYWORDS

mentally ill persons, personal hygiene, infections , health policy

INTRODUCTION

Mental health care hospitals are the centers where patients are admitted on various grounds as regulated by various sections of Mental Health Act 1987[1]. Once admitted, a vast majority of them remain in the hospitals or they succumb to death that are unrelated to their mental illness. The various factors and circumstances leading to death often goes unreported. Psychiatric illness may be casually related to cause of death by means of poor health habits and lack of proper medical care and intervention. Various studies have showed that the mortality rates in psychiatric patients are more when compared to common population[2]

However the bereaved family will be a least participant of internal investigation and face barriers in full disclosure and providing relevant supporting documents. The patients with severe mental illness(SMI) die at an earlier age than the general population on an average of 25 years earlier. The major contributors towards the mortality is almost 60% is due to underlying medical conditions such as cardiovascular, pulmonary or infectious diseases rather than 30-40% mortality resulting from suicides and injuries. The disparity should be viewed with caution and subjected to studies.It has to be intervened for improvement as most of the deaths from these medical conditions could have been preventable with prompt diagnosis and proper management . Unfortunately not much studies have been undertaken in the past as it does not evoke family and public interests especially such deaths may be a result of failure in health care system or various policy matters in that sector.

This study is taken up to analyze the deaths in mental hospital and various factors leading to it. The study aims at highlighting the magnitude of medical illnesses among the mentally ill patients,the co morbidities they are prone to, the non compliance towards treatment, the need for timely interventions to prevent such deaths.

AIMS

1. Analysis of cause of death in patients admitted in Government Mental Health Care Centre , Kuthiravattom.
2. Analysis of various factors and circumstances contributing to death.

OBJECTIVES

1. To categorize the various factors contributing to death(preventable / non preventable)
2. To evaluate the medical care given for the terminal illness.
3. To suggest towards policy making with regard to general health care improvement.

MATERIALS AND METHODS

Case Design: Retrospective cross sectional study.
Study Duration: 10 years (2006-2015)
Study Material : Autopsy case records of Department of Forensic Medicine, Government Medical College, Kozhikode

Inclusion Criteria

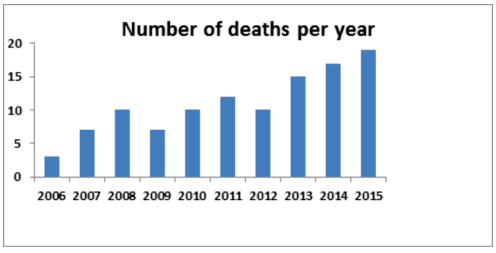
All deaths in mental health hospital which were subjected for post mortem examination at the Department of Forensic Medicine, Government Medical College, Kozhikode

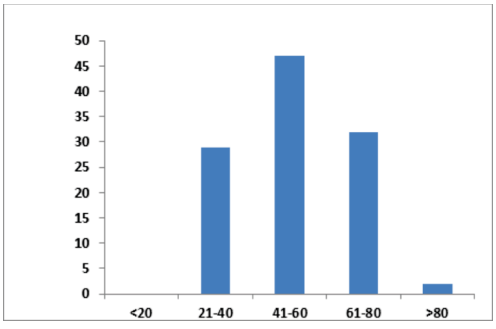
Exclusion Criteria

Deaths that occur within 1 week of admission to mental health centre.

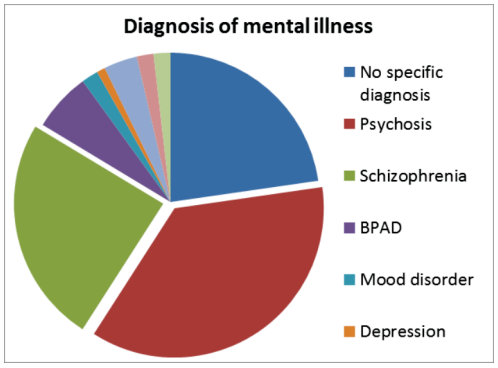
RESULTS

Total number of cases analyzed was 110. Of which 61.8% were males (n=68) and 38.2% were females (n=42). 74.5% were Keralites and 25.5% were non Keralites. 22.7% of cases lacks a proper psychiatric diagnosis at the time of death.





Major psychiatric illnesses diagnosed were psychosis (36.4%) and schizophrenia(24.5%). Many of the patients had recorded comorbid physical illnesses at the time of admission, among which diabetes mellitus and pulmonary tuberculosis were the common ones. 2.7% (n=3) were retro positive at the time of admission.



25.5% of patients were getting medical treatment for their co morbid illnesses. Duration of stay in mental health care hospital is 1-5 years for 23.6% of cases. 13.6% died within 4 weeks of admission.

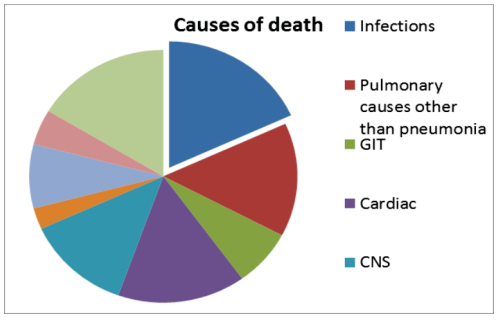
Maximum stay in hospital was 18 years for two cases. There were 18 cases who stayed more than 10 years (16.4%). 87.3% were admitted in general ward where as 12.7% were in isolation ward.

30% (n = 33) of cases were found dead in their bed and 29.1% (n =30) were found in an unresponsive state. 10% of cases presented with complaints of decreased food intake for days and another 10% with complaints of breathlessness. Other terminal presentations included abdominal pain (5.5%), chest pain (1.8%), altered sensorium (1.8%), fever (2.7%), hematemesis (3.6%), and trauma (4.5%).

58.2% of patients were shifted to tertiary level hospital for the management of terminal illnesses.

5.5% died within an hour of reaching tertiary care hospitals (n =6).

- 29.1% survived for 5-10 days in tertiary care hospitals and died from there. Only 6.4% survived for more than 10 days. The analysis showed that the clinician of the tertiary care hospital couldn't make/ couldn't get time to make a proper working diagnosis of the medical conditions in 51.8% of cases. 94.5% of the cases the inquests were prepared by magistrates and a medico legal autopsy was carried out in NHRC format. 98.2% of cases were having treatment records of mental health care hospital and tertiary care hospitals available at the time of autopsy for perusal. The post mortem examination showed poor oral hygiene (2.7%) and poor personal hygiene for 4.5% of cases. 60.9% of cases were showing bed sores. Grade 4 bed sores (deep sores with severe infection) was seen in 15.5 % of cases. In addition to bed sores 48.2% cases showed generalized skin infection also. There were evidence of therapeutic intervention in 10% cases. Various forms of infections were the leading causes of death in the preset study (18.2%) of which aspiration pneumonia stands in front with 15 cases (13.6%). 3.6% died following AIDS. 12.7% died following PTB. 14.5% of cases died following pulmonary pathology other than pneumonia.



In 8 cases death was due to gastro intestinal diseases of which 5 were due to perforation peritonitis.

17 cases (15.5%) were died due to cardiac problems of which coronary artery disease is the commonest one (11.8%). 12.7% of patients died following various CNS pathology which included CVA (3.6%), meningitis (3.6%), encephalopathy (1.8%) and chronic SDH (3.6%). There were 18 cases which died following other miscellaneous causes like chronic kidney diseases (4.5%), pyelonephritis (5.5%) , malnutrition (2.7%), pulmonary thromboembolism etc. There were 3 cases of homicides(2.7%) and 9 cases of suicides (8.2%)- all were hanging cases).4.5% of death was due to chocking of food particles.

The cross tabulation of various factors with duration of hospital stay showed a linear relationship with increased incidence of pulmonary infections, which was statistically significant also. There were increased incidence of bedsores in patients with prolonged hospital stay. All 9 cases of suicides happened within one year of admission and all were of the same manner of causation.

DISCUSSION

The importance of mental health care were emphasised by Bengal enquiry of 1818 and it remarked that the care is sub optimal which in turn as a reason for increased deaths in the asylums[3]. The inadequacies in terms of building, lack of man power,poor handling of patients by the staffs, poor access to basic needs etc.

The analysis of deaths in mental health care hospital showed that there is progressive increase in the number of deaths in years. Males were predominant .There is significant increase in the death of non-Keralites which is in line with the generalized increase in migrants to the state. Although the patients admitted with history of physical illness were getting medical care, most of the time the timely diagnosis and emergency management is lacking as evidenced by the high proportion of cases of found dead in the mental hospital.

Patients with prolonged hospital stay were found to have more bed sores and generalized skin infections which are clinically significant and suggestive of lack of personal care and hygiene supervision.

At the time of terminal illnesses the physicians in tertiary care hospitals are finding it difficult to arrive at a working diagnosis as there is lack in proper history of events and proper medical documentation.

Evidence of active therapeutic interventions are grossly lacking in most of the cases, which may be due to lack of active support from the relatives or bystanders. Often these patients die as destitute in medical wards.

Various studies have shown that the prevalence of chronic cardiovascular diseases, such as hypertension, coronary artery disease, arrhythmia, hyperlipidemia, and stroke, among people with mental illness is much higher than that of the general population[5].

Leading cause of death is various forms of infections, which seems to be preventable in nature. This observation is different from the study conducted in NIMHANS [4] and many studies outside India where the leading cause of death was cardiovascular pathologies.

There are various studies on in patient suicides in mental hospital setting, of which authors formulated that two categories of high risk patients in terms of suicides- first group being agitated, psychotic schizophrenic patients during the early phase of admission and the second one less acute, depressive patients who seems to be responding positively with treatments[6].

Comparison with a previous study from NIMHANS

Criteria	NIMHANS	Present study
Duration	26 yrs (1983-2006)	10 yrs (2006-2015)
Total number of cases	303	110
Male : Female	202:101	68:42
Age group		
21-40	44.6%	26.4%
41-60	32.7%	42.7%
61-80	-	29%
Diagnosis of mental illness		
No proper diagnosis	7%	22.7%
Psychosis	8.6%	36.4%
Schizophrenia	25.7%	24.5%
Mood disorder	19.8%	1.8%
Depression	11.2%	0.9%

Comorbid conditions	NIMHANS	Present study
H/O physical illness at the time of admission	39%	28.2%
CVS (hypertension)	5%	4.5%
Endocrine (Diabetes)	4.7%	6.4%
CNS	11.2%	4.5%
HIV	2.6%	2.7%
PTB	1.3%	3.6%
Cause of death		
CVS	43.6%	15.5%
Respiratory	14.9%	14.6%
Infections	10.1%	18.2%
CNS	9.9%	12.7%
Suicides	7%	8.1%

The miserable death following neglect is not uncommon in mental health care hospitals all around the world. All deaths in such centers should be viewed seriously. There are many factors which contribute to such deaths which includes Inadequate man power,Non availability of medical attendants, non availability of responsible care takers, over crowding of inpatients,Communicable disease outbreaks with in hospitals and non compliance from the patients for treatment and prevention is a threat for management of such conditions

SUMMARY AND CONCLUSION

This study enlightens the important causes and circumstances associated with the deaths of mentally ill persons in mental health care hospitals. It opens door for the need of regular clinical examination from physicians and supervision from supporting staffs . Timely picking of medical and surgical emergencies and providing the emergency medical care should be ensured with a routine meticulous screening and documentation. Intense supervision and better supporting care should prevent suicides in patients with tendencies of deliberate self harm. The observations in this study can be used while formulating health policies in the field of mental health and ensure the 'dignity of death' and a quality in end of life care.

REFERENCES

1) Mental Health Act, 1987. Bare act with short comments; Commercial Law Publishers, Delhi, 2007.
2) Babigian HM, Odoroff CL. The mortality experience of a population with psychiatric illness. Am J Psychiatry. 1969;126:470–480.
3) Nagaraja D, Murthy P, Venkatasubramanian G. 1st ed. New Delhi: National Human Rights Commission; 2008. Human Rights Initiatives in Mental Health Care in India: Historical Perspectives; pp. 39–40.
4) Shinde SS, Nagarajaiah NJC, Narayanaswamy JC, et al. . Mortality among inpatients of a psychiatric Hospital: Indian perspective. Indian J Psychol Med 2014;36:142–6. 10.4103/0253-7176.130974
5) Son S, Kim YJ, Kim SH, Kim JI, Kim S, Roh S. Effects of Chronic Diseases on All-Cause Mortality in People with Mental Illness: A Retrospective Cohort Study Using the Korean National Health Insurance Service-Health Screening. International Journal of Environmental Research and Public Health. 2022; 19(16):9989.
6) Sharma V, Persad E, Kueneman K. A closer look at inpatient suicide. J Affect Disord. 1998;47:123–9.