

Research Article

MORTALITY TREND IN TERTIARY CARE HOSPITAL OF NANDED IN MAHARASHTRA

***Kulkarni S.K. and Doibale M.K.**

Department of Preventive & Social Medicine, DR.S.C.G.M.C. Nanded, Maharashtra, India

**Author for Correspondence*

ABSTRACT

Records of vital events like death constitute an important component of the Health Information System. Hospital-based death records provide information regarding the causes of deaths, case fatality rates and age and sex distribution, which are of great importance in planning health care services. The objective was to find trend of mortality of patients admitted to a tertiary care hospital. All deaths that occurred during the 3-year period, i.e., 2010-2012, except medico legal deaths, were considered for present study. The present study shows that there is declining trend of mortality rate from 2010 (26.13) to 2012 (23.52).

Keywords: *Vital Events, Case Fatality Rate, Mortality, Medicolegal Deaths*

INTRODUCTION

Records of vital events like death constitute an important component of the Health Information System. Hospital-based death records provide information regarding the causes of deaths, case fatality rates and age and sex distribution, which are of great importance in planning health care services (John, 1980).

Traditionally and universally, most epidemiological studies begin with mortality data, which is relatively easy to obtain and, in many countries, reasonably accurate. Many countries have routine systems for collection of mortality data and causes of death are important and widely used for number of purposes they may employ in explaining trends and differentials in overall mortality, indicating priorities of actions and in the assessment and monitoring of public health (Park, 2011).

Although diseases have not changed significantly through human history, their patterns have. It is said that every decade produces its own pattern of disease.

To the epidemiologist, the most important event and the least equivocal measure of health is death, which could be called the absolute opposite of health.

Mortality statistics reveal much about the health of the population: Ones derived statistics and life expectation at birth and at various subsequent ages is often cited as an indicator of population health when comparisons are made over time and between nations for designing intervention programs, allocation of resources and indicating priorities. It is essential to know the frequency of disease or death. But this is not static, and is changing. It is also important to decide whether the observed change reflects change in incidence, in case fatality or both. It is equally important to determine whether that observed trend in mortality is genuine or is it due to change in nomenclature or classification of disease, changes in accuracy of diagnosis or changes in statistical classification or allocation of priorities (John, 1980). The Medical Records Department in a teaching hospital has a system of compilation and retention of records; yet, acquisition of meaningful statistics from these records for health care planning and review is lacking.

Mortality data from hospitalized patients reflect the causes of major illnesses and care-seeking behavior of the community as well as the standard of care being provided. There is a paucity of information about direct causes of child mortality in developing countries (John, 1980).

This information also provides the basis for patient care and helps the administration in managing day-to-day hospital affairs. So with this background kept in mind & lack of availability of data on mortality statistics, the present study was aimed to study the trend in a tertiary care hospital.

Objectives: To study trend of mortality of patients admitted to a tertiary care hospital.

MATERIALS AND METHODS

A retrospective analysis was done with records from medical record section of patients who died in Guru Govind Singh, a tertiary care hospital attached to Dr. S.C. Govt Medical College, Nanded, Maharashtra.

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All case records of indoor patients after discharge or death, except deaths of medico legal cases, are submitted in the Medical Record Section that works under the Department of community medicine of Dr. S.C. Govt Medical College, Solapur. All deaths that occurred during the 3-year period, i.e., 2010-2012, except medico legal deaths, were considered for present analysis. Case sheets of deaths for years 2010-2013 i.e., the 3-year period, were analyzed to study the trend of deaths.

RESULTS & DISCUSSION

Table 1: Distribution of year-wise mortality rate

| Year | IPD | Deaths | Mortality rate/1000IPD |
|------|-------|--------|------------------------|
| 2010 | 62058 | 1622 | 26.13 |
| 2011 | 62462 | 1488 | 23.82 |
| 2012 | 68780 | 1618 | 23.52 |

The present study shows that there is declining trend of mortality rate from 2010 (26.13) to 2012 (23.52). In the study by Godale *et al.*, (2013), the mortality trend was linear for the period 2005-2009. A similar finding was reported by Joshi *et al.*, (2006). Male deaths were more than female deaths during 2010-2012.

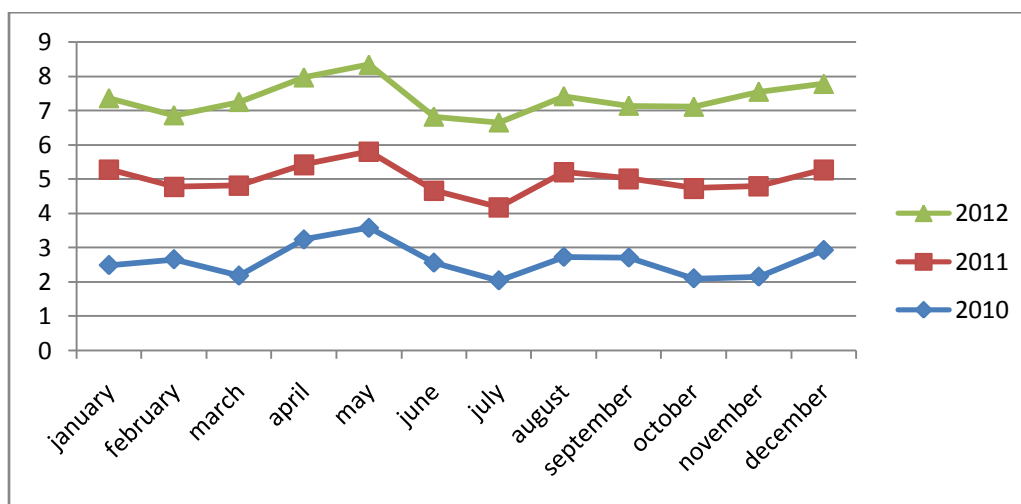


Figure 1: Seasonal distribution of mortality rate

Maximum death rate was seen in the month of May in all 3 years, and minimum were seen in July. John (1980) mentioned that the mortality trend with time was usually either upward or downward, and a seasonal trend of deaths was observed in the present study, but was not seen by Roy *et al.*, (2008).

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