ABSTRACT

Morbidity and mortality statistics are an important resource for research and informing policy in any country as it reflects on the public health status. Majority of the mortality in the medical wards occur within the first few days following admission. Factors such as age, sex, diagnosis, co-morbidities, social-economic factors and duration of hospital stay have been show to affect mortality. There is a paucity of such studies in Kenya.

**Objective:** This study sought to describe the causes and circumstances around early mortality among inpatients in the KNH Medical Wards.

**Design:** An observational cohort study comprising of a retrospective and prospective arm.

**Methodology:** The study was conducted from 7th April to 18th June 2014. The retrospective arm reviewed the files of patients who had died within seven days of admission to the medical wards six months prior to the study onset. The purpose of this arm was to determine the overall mortality and case specific mortality rate. The prospective arm followed up patients for seven days to ascertain the seven-day mortality rate and associated factors. Post mortems were conducted in a proportion of these patients.

**Results:** 695 files were reviewed in the retrospective arm while 193 patients were recruited into the prospective arm. The mean age of the participants in the retrospective and prospective arms were 46.7 years (Range 15-107 years) and 44.5 years (Range 15-100 years) respectively. The overall mortality rate was 29.6%. The seven-day mortality rate was 17.6%. Malignant neoplasms at 12.5% were the leading cause of death followed by congestive heart failure at 10.5%. The leading comorbidity was HIV at 42%, followed by hypertension at 18.8% and diabetes at 8.7%. The median Karnofsky’s Score at admission and the mean duration of stay in hospital in days were the two variables strongly associated with risk of dying.

**Conclusion:** The 7 day mortality rate was high. Malignancies were the commonest cause of death. Most of the early deaths were preventable.