TITLE OF ABSTRACT

A study of the clinical characteristics, risk factors and mortality outcomes of patients

admitted with acute decompensated heart failure to general medical wards and intensive

care units in a tertiary care hospital in South India (CHROME-HF)

DEPARTMENT: General Medicine

NAME OF CANDIDATE: Dr. Kevin John John

DEGREE AND SUBJECT: MD General Medicine

NAME OF GUIDE: Dr. Thambu David Sudarsanam

OBJECTIVES

The study was conducted to determine the incidence density of mortality, median

survival time, predictors of mortality and the costs incurred by patients admitted with

acute decompensated heart failure.

METHODS

This study was a prospective observational cohort study of patients admitted with acute

decompensated heart failure, diagnosed clinically using the Boston Criteria. The

recruitment of participants took place between January 2014 and December 2017 and

patients were followed by telephonic interview prospectively till June 2018. Continuous

data were described using mean and standard deviation. Person time was calculated in

months and the incidence density was calculated. Time to event data was performed by

using Kaplan-Meier estimate and was used to calculate the survival time. Unadjusted and adjusted analyses were done using Cox-proportional hazard regression analyses to determine predictors of mortality.

RESULTS

A total of 338 patients participated in the study. Fifty one percent were males; the mean age 58.8 years. Fifty nine percent had diabetes, 55.6% hypertension, 24.3% dyslipidemia and 39.6% previously diagnosed heart failure. The incidence density of mortality was 6.47 deaths per 100 person-months. The median duration of survival was 921 days.

Cyanosis, previous stroke or transient ischemic attack, lactate > 2mmol/L, troponin T >50pg/ml and class D heart failure independently predicted 6-month mortality; Seattle heart failure model did not. The mean total direct cost of admission was ₹1,18,690.94.

Key words: HF: Heart failure, ADHF: Acute Decompensated Heart Failure, HFpEF: Heart Failure with Preserved Ejection Fraction, HFrEF: Heart Failure with Reduced Ejection Fraction, HFmrEF: Heart Failure with Mid-Range Ejection Fraction