NEJM Journal Watch

NEJMGROUP.ORG

Trends in Heart Failure Outcomes

Although overall mortality has changed little between 2002 and 2013, noncardiovascular mortality has increased, especially among the oldest old.

We have made substantial progress in improving outcomes for patients with ischemic heart disease, but what about for patients with heart failure? Investigators examined a clinical database of about 7% of the U.K. population to assess trends in 1-year mortality and hospital admissions among 86,833 patients with a diagnosis of incident heart failure from 2002 through 2013 (aged ≥80, 48%; ≥3 comorbidities, 79%; women, 49%).

The 1-year mortality was 32%; it declined modestly over the study period, with a rate ratio of 0.94 in an analysis adjusted for sex, age, comorbidities, and socioeconomic status. However, causes of death shifted. Cardiovascular causes dropped by 27%, but noncardiovascular causes increased by 22%. In 2013, cardiovascular causes were the most common (43%), followed by neoplasms (15%), infections (13%), and chronic respiratory conditions (12%). Deaths due to infections (notably, influenza and pneumonia) increased the most, rising 60%. In subgroup analysis comparing patients aged <80 with older patients, mortality declined only in the younger group. The increase in noncardiovascular mortality primarily occurred in the older group. Deaths due to cardiovascular causes occurred more in men and cancer and infections more in women. Socioeconomic deprivation was associated with 19% higher mortality. After adjustment for patients' characteristics and comorbidities, hospitalization rates in the year after discharge declined 6% over the period, with cardiovascular hospitalizations accounting for only half.

COMMENT

This study is packed with information that reinforces the lessons of daily practice. Generally, patients with heart failure in the real world are elderly and have substantial comorbidity and high risks for adverse outcomes. Progress is modest; to a large extent, reductions in cardiovascular mortality are being replaced by increases in noncardiovascular mortality. These patients need a holistic approach beyond heart care, and clinicians should begin discussions about end-of-life preferences at the time of the incident diagnosis. And we need more studies that focus on, rather than exclude, the complex patients who actually constitute our everyday practice — especially those with socioeconomic deprivation.

— Harlan M. Krumholz, MD, SM

Dr. Krumholz is the Harold H. Hines, Jr., Professor of Medicine in the Section of Cardiovascular Medicine at the Yale University School of Medicine, New Haven, Connecticut.

Conrad N et al. Temporal trends and patterns in mortality after incident heart failure: A longitudinal analysis of 86,000 individuals. **JAMA Cardiol** *2019 Sep 3; 4:1102. (https://doi.org/10.1001/jamacardio.2019.3593)*