Clinical characteristics and outcome of those >=90 years receiving intensive care in a regional hospital: a retrospective observational study
Shum HP (1), King HSB (1), Yan WW (1)
Department of Intensive Care, Pamela Youde Nethersole Eastern Hospital

Keywords:
Elderly
Outcome
Critical Care

Introduction
As the prognosis of very elderly patients is generally limited, admissions to intensive care among these patients are often restricted. Therefore, only very few information is available on their prognosis.

Objectives
To evaluate the clinical characteristics and outcome of critically ill patients >=90 years old and compared with those between 70 and 79 years old.

Methodology
Retrospective analysis of administrative data of patients admitted between 1/1/2009 and 31/12/2013 to an ICU of a regional hospital.

Result
Over 5 years, 109 patients aged >=90 years old were admitted (1.4% total ICU admission). Their median age was 92 and predominantly female (62.4%). The majority of patients (96.3%) were emergency admission with 36.7% for postoperative care. Compared with those aged 70-79, those aged >=90 years old had similar prevalence of comorbidities (except metastatic carcinoma), comparable chance to receive mechanical ventilation but less likely to have renal replacement therapy (RRT) (16.2% vs. 4.6%). Despite having similar disease severity as assessed by Acute Physiology and Chronic Health Evaluation (APACHE) IV minus age score, they have higher ICU, hospital, 90-day, 180-day and 2-year mortality. After adjustment of disease severity, co-morbidities and the use of RRT, their 2-year mortality differed by 1.9 times. Around 60% of patients aged >=90 years old could be discharged home but only 41.3% survived 2 years after ICU admission. This is the first local study focused on critically ill patients aged >=90 years old. Despite the fact that two-third of them could be discharged home following treatment in ICU, only around 40% survived 2 years from ICU admission. These findings provided useful information for ICU triage purpose.