



## Service Priorities and Programmes Electronic Presentations

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### **Clinical characteristics and outcome of those $\geq 90$ years receiving intensive care in a regional hospital: a retrospective observational study**

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#### **Keywords:**

Elderly

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#### **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  $\geq 90$  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  $\geq 90$  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  $\geq 90$  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  $\geq 90$  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  $\geq 90$  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.