

Elderly Mortality in Portuguese ICU – an 11 years survey

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- Average life expectancy has increased, resulting in a shift in world populations demographics.
- Older age is associated with higher prevalence of chronic illness and functional impairment, contributing to an increased rate of hospitalization and admission to intensive care.
- Main predictive outcome factors in elderly ICU population:
 - Pre-morbid functional limitation
 - Chronic co-morbidities
 - Severity of the acute illness
 - Planned Vs unplanned admission
 - Age itself ? Sarcopenia

- Retrospective cohort study of elderly admissions in public, mainland Portuguese ICU's during 11 years (2000 to 2010). The sample was divided into 2 age groups:
 - 65-74 years
 - 75 and above

Primary endpoints

analyze elderly ICU admission

ICU

in-hospital mortality of elderly admitted in

- **Purpose:** analyze the changes in-hospital mortality of patients older than 65-years-old admitted in Portuguese ICU's during an 11 years period.

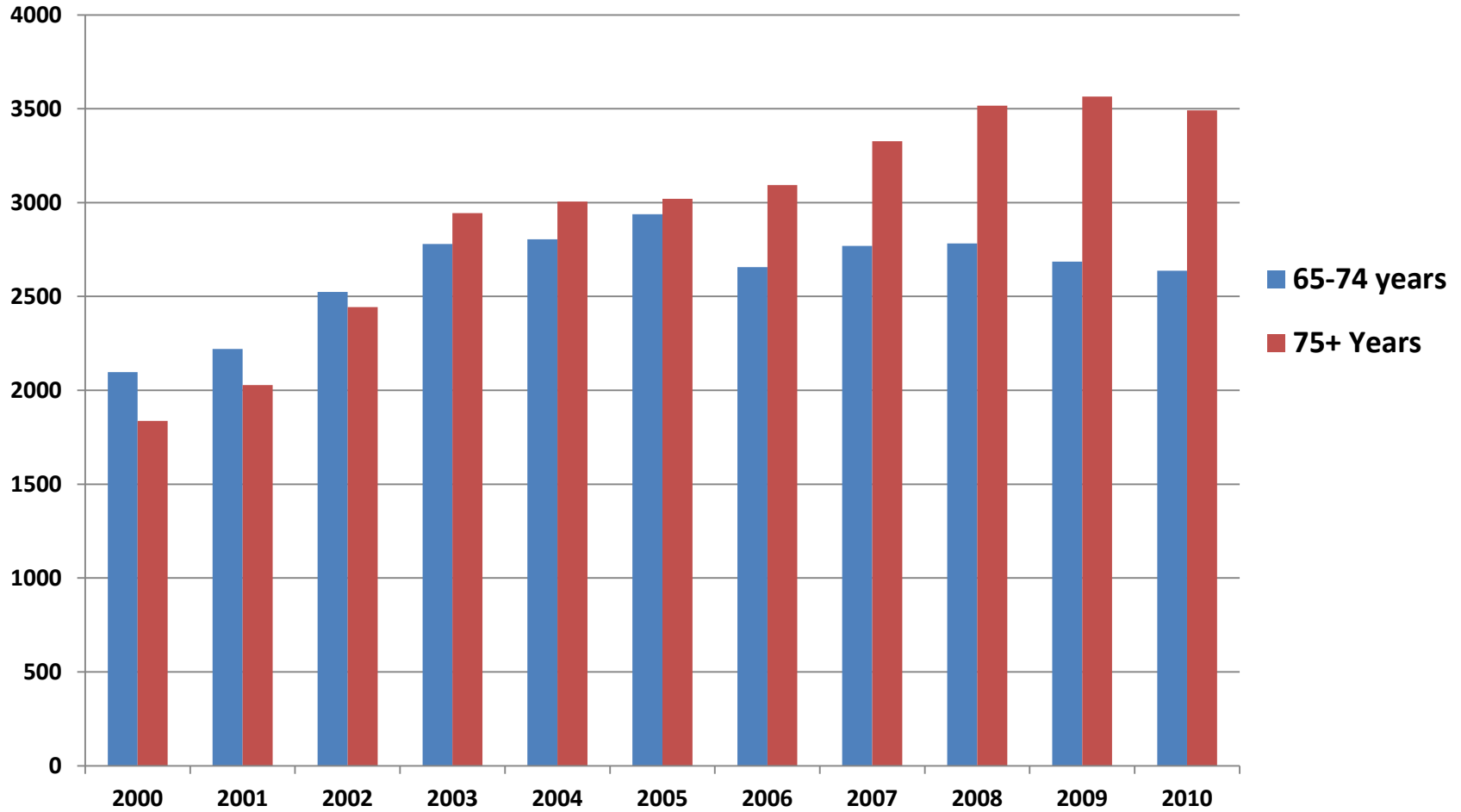
Results

- During the 11 years were admitted 61166 elderly patients.
- 57,3% were men and 42,7% women.

Age	
65-74 years	≥ 75 years
28893 (47,2%)	32273 (52,8%)

Sex			
Male		Female	
65-74 years	≥ 75 years	65-74 years	≥ 75 years
17913	17149	10979	15124

Evolution of ICU elderly admissions along the years



In-Hospital Mortality

61166 elderly admitted

31065 deceased (50,8%)

30101 survived (49,2%)

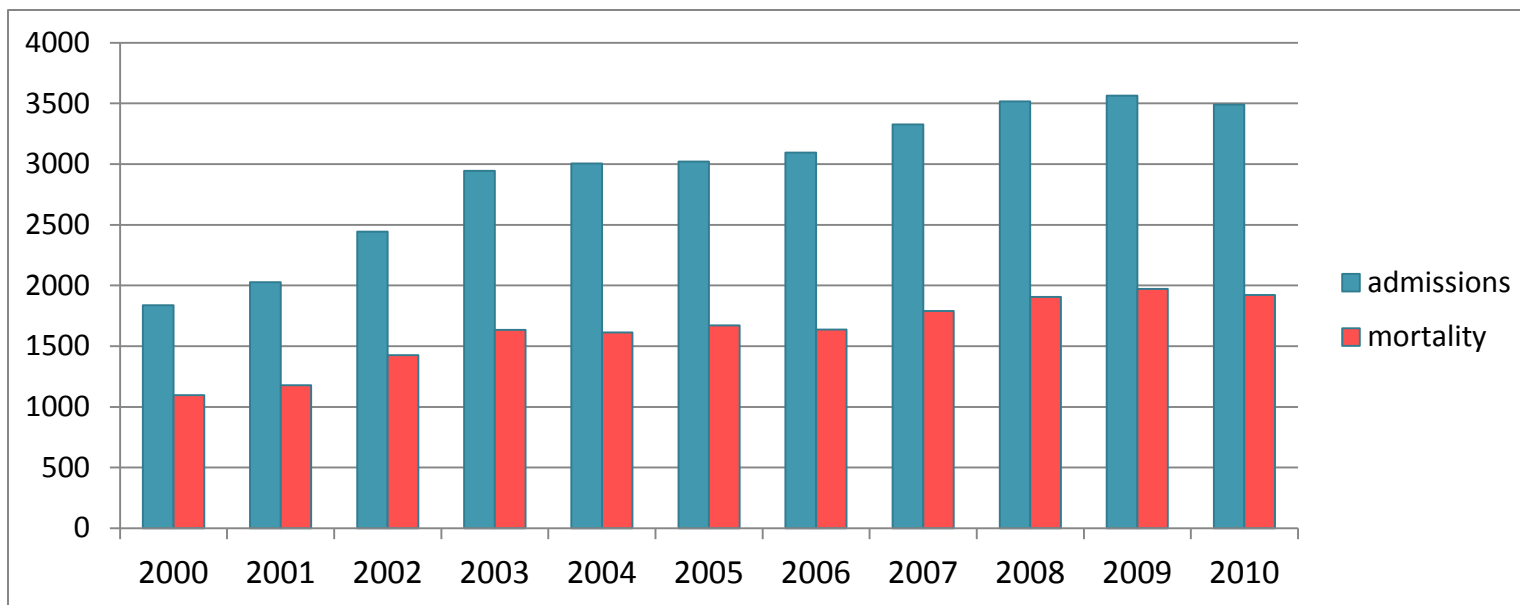
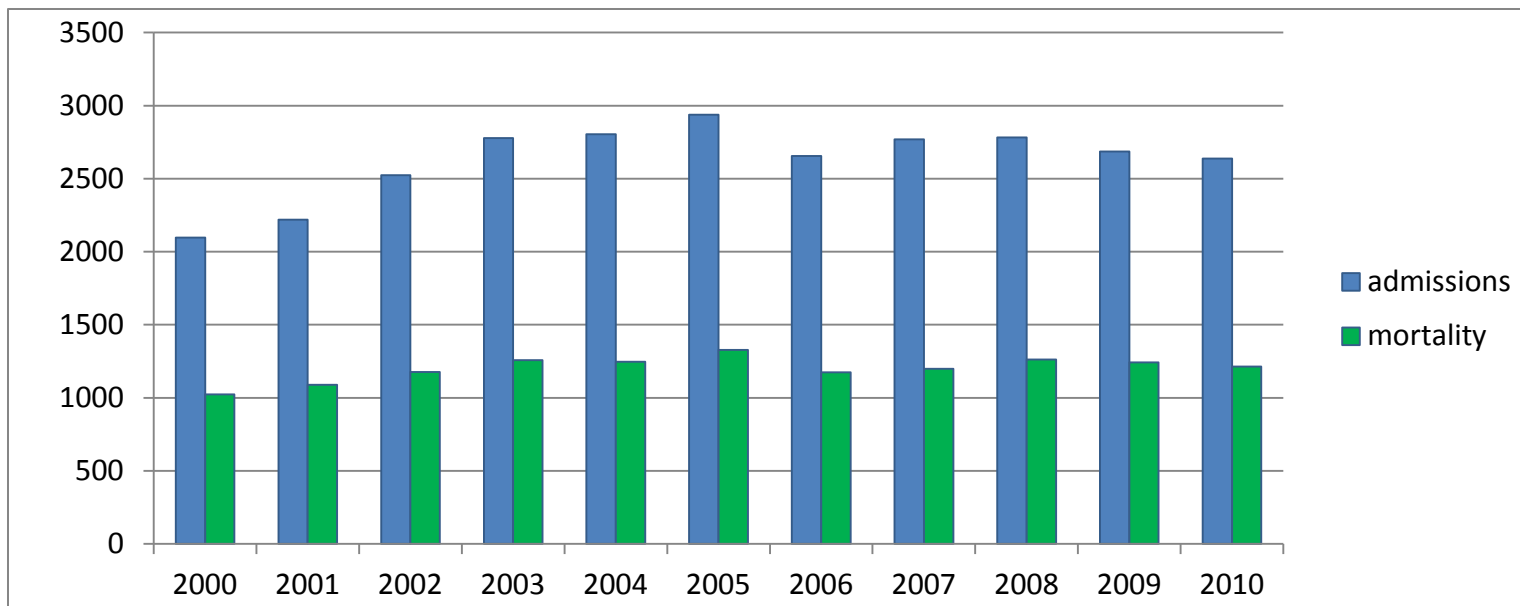
65-74 years
13215 (45,7%)

≥75 years
17850 (55,3%)

65-74 years
15678 (54,3%)

≥75 years
14423 (44,7%)

In-hospital mortality evolution over the years in relation with admissions



Mortality over the years



- The number of elderly patients admitted in Portuguese ICU has increased over the years.
 - on the group 65-74 years, the admissions increased **25%** (2097 patients in 2000 and 2637 in 2010),
 - in the age group 75 and above the increase was **90%** between year 2000 (1837 patients) and 2010 (3491).

- In-Hospital mortality on the overall group was 50,8%, being superior in the age group 75 and above (55,3% versus 45,7% in the group 65-74 years).

BUT

- Over the years, in-hospital mortality has a reduction in both groups (more significant in the group 75 and above):
 - 65-74 years group has passed of 48,8% to 46,1%,
 - ≥ 75 years has passed of 59,7% to 55%.

Conclusions

- The number of elderly patients in ICU has increased, but the overall mortality has a slight decrease.
- Age *per se* is not predictive of poor prognosis for ICU patients.
- ICU cares are an expensive and scarce resource, but this study shows that is not ethically correct limit ICU admissions to elderly patients, by the age.

- Elderly patients compose a significant and increasing proportion of patient receiving critical care.
- They have an increase mortality but the relation with the age is not straightforward.
- Elderly patients aren't a homogenous group, and clear admission criteria should be defined.

Consider:

- Patient autonomy (levels of frailty and disability).
- Co-morbidities
- Physiologic age, not chronologic age
- The expected impact of treatment on the outcome
- Patient preferences
- Discussion with family

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Thank You!

