Overall mortality and causes of death in newly admitted nursing home residents

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# Background

In spite of a rapidly ageing population, there is a lack of population-based data on mortality among nursing home residents in Southern Europe.

## Aims

To assess mortality rates, their determinants, and causes of death in newly admitted nursing home residents in the Veneto region (northeastern Italy).

#### Methods

19,392 subjects aged  $\geq$  65 years admitted to regional nursing homes during 2015–2017 were recruited in a cohort mortality study based on linked health records. Risk factors for mortality were investigated by Cox regression. The distribution of causes of death was retrieved from death certificates.

#### Results

Mortality peaked in the first 4 months after admission; thereafter the monthly mortality rate fluctuated around 3% in males and 2% in females. Overall mortality was 23% at 6 months and 34% at 1 year. In addition to age, gender, and dependency, main risk factors for mortality were recent hospitalization (first 4 months after entry into the facility), and the burden of comorbidities (subsequent follow-up period). The most represented causes of mortality were similar in the first and in the subsequent period after admission: cardiocerebrovascular diseases, neurodegenerative diseases, respiratory diseases, and infections.

### Discussion

The first months after admission represent a period at high risk of mortality, especially for patients with a recent hospitalization. Causes reported in death certificates suggest mainly an acute deterioration of pre-existing chronic conditions.

## Conclusion

Health care plans should be personalized for newly admitted vulnerable patients. Palliative care needs should be recognized and addressed for high-risk non-cancer patients.