

Data from the French national hospital database (PMSI)

THE NATIONAL BURDEN IN FRANCE OF HOSPITAL CARE FOR PATIENTS WITH HEPATIC ENCEPHALOPATHY

OBJECTIVES

Hepatic encephalopathy (HE) is a complication of cirrhosis characterized by a broad spectrum of neuropsychiatric manifestations. According to the clinical symptoms there are two types of HE: covert HE and overt HE (OHE).

In France, the prevalence of OHE was estimated at **25,000 patients** (21,000 to 30,000 patients).

OBJECTIVES :

- ✓ Assess the public health burden of hospitalisations for OHE, the incidence rate and the characteristics of hospitalisations.
- ✓ Study the factors independently associated with length of stay in patients with HE.

METHODS

STUDY POPULATION

A retrospective cohort was performed from national PMSI database 2012 and 2013. The code for clinical hepatic encephalopathy, ICD-10 K72 * « Hepatic insufficiency, not classified elsewhere », lacks specificity. A selection algorithm for inpatient with EH was implemented by medical expertise, according to the expression of the disease main symptoms.

ADVANCED STATISTICAL ANALYSIS

Negative binomial regression model to estimate the link between lengths of stay and HE patient's characteristics like :

- ✓ **Patients' features:** age, sex
- ✓ **Comorbidities:** malnutrition, renal failure, bacterial infection and respiratory diseases
- ✓ **Clinical pathway:** stays in reanimation, intensive care units and death.

RESULTS

COHORT CHARACTERISTICS

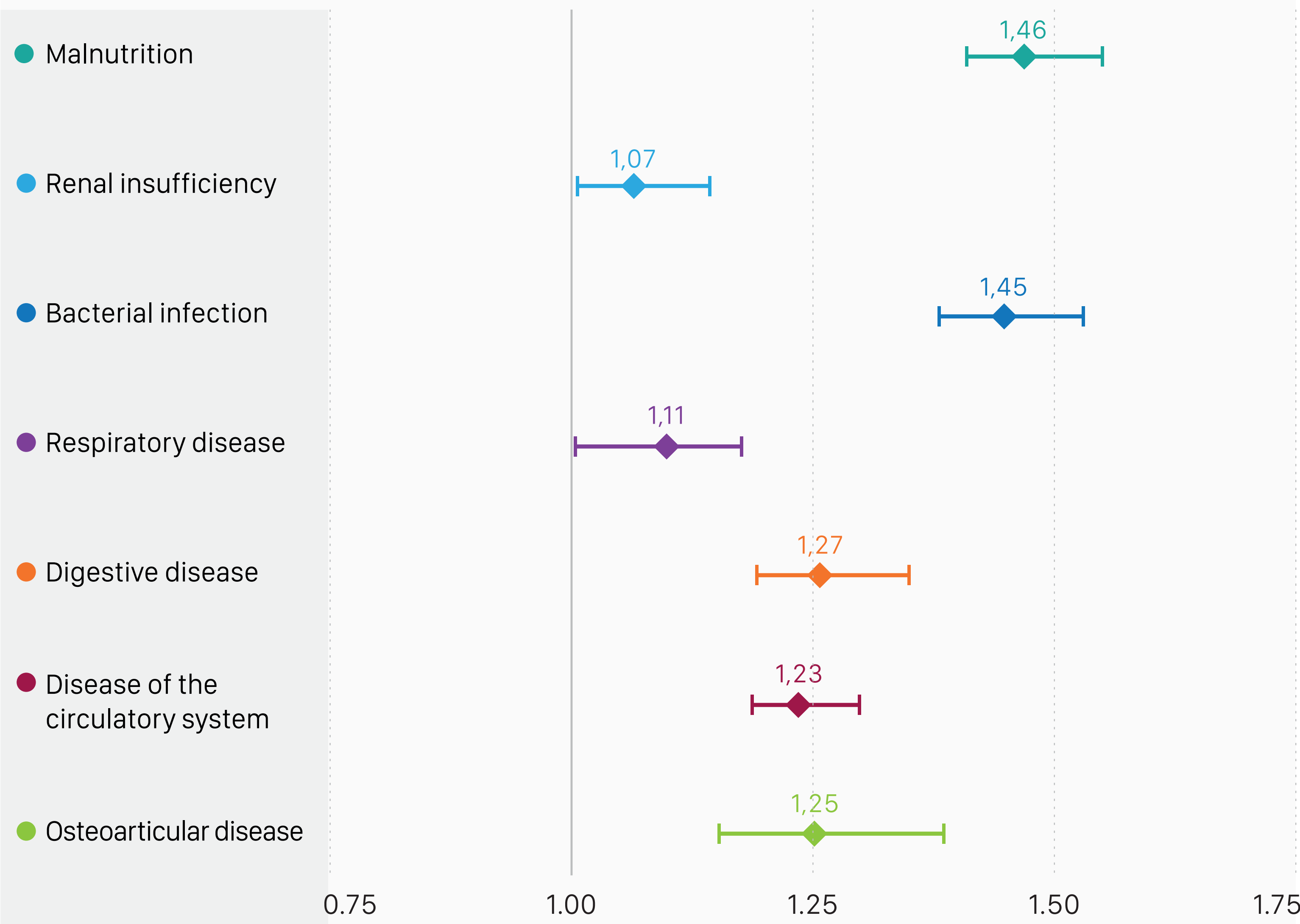
Study period	2012, 2013
Nb patients	27,156
Mean age	63,1 ± 13,8
Nb hospitalisations	34,492
Mean length of stay (days)	15
Intensive care units	30%
Medical stays	80%
Chirurgical stays	12%
Euros	40 million

ADVANCED STATISTICAL ANALYSIS

The mean length of HE stay was 15 days (SD 19 days) and the median was 10 days.

A negative binomial regression was performed on **5,391 patients hospitalized in 2012** and followed one year. The length of stay was **46% longer for patients with malnutrition**, and **45% longer in case of a bacterial infection** (Figure 1). The length of stay was 27% and 25% longer for patients with digestive diseases and musculoskeletal diseases, respectively.

FIGURE 1. COMORBIDITIES AFFECTING LENGTH OF STAY



CONCLUSION

The mean length of stay in patients with HE was high (15 ± 19 days). The binomial model confirmed the significant **longer length of stay** induced by patients with **comorbidity** such as **malnutrition, bacterial infection, digestive** and **musculoskeletal diseases**.

The annual economic burden of HE hospitalisations in France amounted to **€40 million**.

