

# Supportive and palliative care research and audit conference

Wednesday 30 November 2016

## Oral and poster abstract submission template

Abstracts must conform to the following requirements:

- Include a short title (up to 20 words) and the author's names (asterisk the presenting author)
- Maximum length: 250 words
- Structure: background/objectives, methods, results, implications
- Include presenting author's contact details (including name, job title, institution and email address).

Abstracts should be submitted to [samantha.wilkinson@srft.nhs.uk](mailto:samantha.wilkinson@srft.nhs.uk) by 5pm on Friday 30 September 2016.

**Title: Multiple cause of death and hospital death in patients with end-stage liver disease in England, 2001-2014**

**Author(s): Jen-Kuei Peng\*, Irene J Higginson, Wei Gao**

**1. Jen-Kuei Peng\***

**Institution: Cicely Saunders Institute of Palliative Care, Policy & Rehabilitation, King's College London**

**Job title: PhD student**

**Email address: [jen-kuei.peng@kcl.ac.uk](mailto:jen-kuei.peng@kcl.ac.uk)**

**2. Irene J Higginson**

**Institution: Cicely Saunders Institute of Palliative Care, Policy & Rehabilitation, King's College London**

**Job title: Professor, Head of Department, Head of Division and Director of Cicely Saunders Institute**

**Email address: [irene.higginson@kcl.ac.uk](mailto:irene.higginson@kcl.ac.uk)**

**3. Wei Gao**

**Institution: Cicely Saunders Institute of Palliative Care, Policy & Rehabilitation, King's College London**

**Job title: Senior Lecturer in Statistics and Epidemiology**

**Email address: [wei.gao@kcl.ac.uk](mailto:wei.gao@kcl.ac.uk)**

## **Abstract**

### **Background**

End-stage liver disease (ESLD) is a major cause of mortality in England with high hospital death rates. However, little is known about what these patients died from. This study aims to describe the multiple causes of death (CoD) and their association with hospital death.

### **Methods**

Population-based observational study using the Office of National Statistics Death Registration Database of England, 2001-2014. All non-accidental adult decedents with liver disease (International Classification of Disease 10<sup>th</sup> edition: K70-K76) as their underlying/contributory CoD were included. The study outcome was hospital death. Explanatory variables were age at death, gender, year of death, marital status, index of deprivation, and CoDs mentioned on the death certificate (including 4 liver-specific and 12 general conditions).

### **Results**

A total of 102281 patients were included, of whom 76644 (74.9%) died in hospital. Hospital deaths reduced from 77.0% (2001-2004) to 73.2% (2009-2014). Those who were female or married were more likely to die in hospital. After adjusting for potential confounders, patients with sepsis (adjusted odds ratio (AOR) 9.07, 95% confidence interval 7.88-10.44), peritonitis (AOR: 7.56, 6.36-8.99), or renal failure (AOR: 4.09, 3.70-4.53) as their contributory CoD had higher chances of hospital death, while those with alcohol-related disorders were in marked contrast (AOR: 0.43, 0.41-0.45).

### **Implications**

Infection and renal failure were highly associated with hospital death in patients with ESLD. Strategies to prevent and manage these problems may be of value in improving end of life in these patients. Besides, the reasons of the disproportional low hospital deaths in patients with alcohol-related disorders need to be explored.