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## The Use of Palliative Performance Score in Patients with End-Stage Liver Disease

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## Introduction

- Palliative Care services are often underutilized in patients with End-Stage Liver Disease (ESLD) and often only initiated at the end of life
- The Palliative Performance Score (PPS) is an important tool used in Palliative Care to assess functional status
- PPS has five functional dimensions: ambulation, activity level and evidence of disease, self-care, oral intake, and level of consciousness
- The aim of this study is to determine if there is a correlation between Model for End-Stage Liver Disease (MELD) score and PPS in ESLD patients
- MELD is used to predict mortality and to prioritize liver transplant allocation in ESLD patients

## Methods

- A retrospective analysis was performed using a database of all the inpatient Palliative Care consults at our tertiary, urban liver transplant center from March 2006 to April 2015
- 294 of 4394 consults were for ESLD patients
- PPS from the Palliative Care consult and hospital length of stay were identified
- MELD-Na score was calculated from the day the consult was performed
- Patients with underlying liver malignancies and those without laboratory data for MELD-Na calculation were excluded

## Results

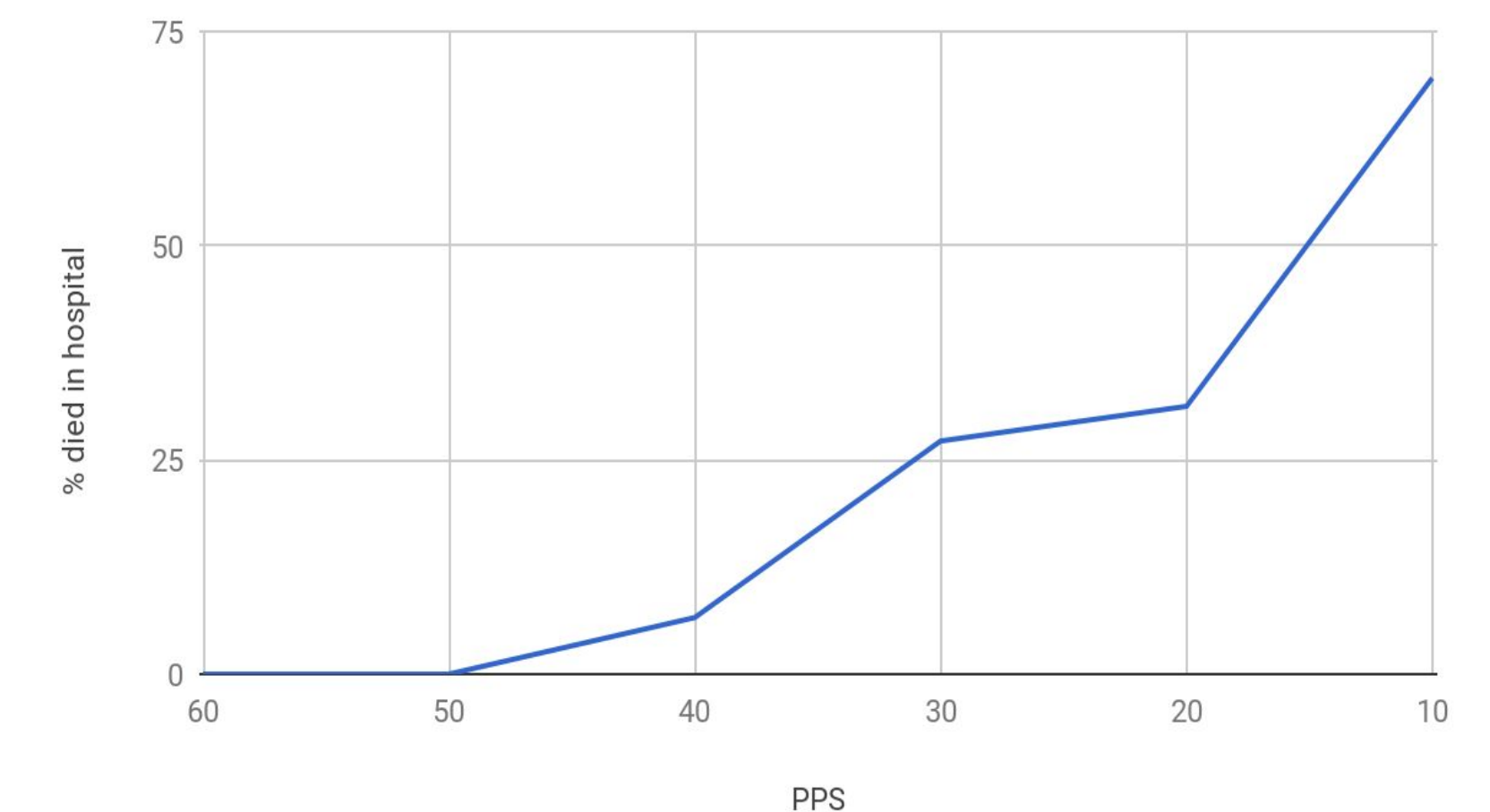
- 110 ESLD patients met our inclusion criteria
- Average MELD-Na of these patients was 30 (95% CI 28.1-31.8)
- Average PPS of these patients was found to be 23.7% (95% CI 21.0-26.4)
- Patients were stratified by PPS and an average MELD-Na score was calculated for each PPS (Table 1)
- 46 of the 110 ESLD patients (41.8%) were found to have the lowest possible Palliative Performance Score of 10%
- Patients with a PPS of 10% were found to have an in-hospital mortality of 69.3%. All other patients with a PPS of 10% were discharged on hospice care
- The relationship between Palliative Performance Score and in-hospital mortality was also charted (Graph 1)

N	PPS	MELD average
46	10%	31.6
16	20%	35.3
22	30%	28.8
15	40%	25.1
9	50%	23.6
2	60%	18.5
<b>110</b>	<b>23.70%</b>	<b>30</b>

Table 1. Average MELD stratified by PPS.

## Results

PPS v In-Hospital Mortality



Graph 1. In-Hospital Mortality stratified by PPS.

## Discussion

- Analysis of this patient population showed that worsening PPS correlates with worsening MELD
- PPS may offer a complementary means of predicting mortality and evaluating transplant candidacy
- PPS may also help hepatologists to evaluate more objectively the functional status of ESLD patients
- In the future, Palliative Care may play an increasingly important role in ESLD symptom management and transplant evaluation