

# Undetected Cognitive Impairment and Decision-Making Capacity in Patients receiving Hospice Care

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## **Abstract: Objectives**

Cognitive dysfunction is common in patients with advanced, life-threatening illness and can be attributed to a variety of factors (e.g., advanced age, opiate medication). Such dysfunction likely affects decisional capacity, which is a crucial consideration as the end of life approaches and patients face multiple choices regarding treatment, family, and estate planning. This study examined the prevalence of cognitive impairment and its impact on decision-making abilities among hospice patients with neither a chart diagnosis of a cognitive disorder nor clinically apparent cognitive impairment (e.g., delirium, unresponsiveness).

## **Design**

110 participants receiving hospice services completed a one-hour neuropsychological battery, a measure of decisional capacity, and accompanying interviews.

## **Results**

In general, participants were mildly impaired on measures of verbal learning, verbal memory, and verbal fluency; 54% of the sample was classified as having significant, previously undetected cognitive impairment. These individuals performed significantly worse than the other participants on all neuropsychological and decisional capacity measures, with effect sizes ranging from medium to very large (0.43–2.70). A number of verbal abilities as well as global cognitive functioning significantly predicted decision-making capacity.

## **Conclusions**

Despite an absence of documented or clinically obvious impairment, more than half of the sample had significant cognitive impairments. Assessment of cognition in hospice patients is warranted, including assessment of verbal abilities that may interfere with understanding or reasoning related to treatment decisions. Identification of patients at risk for impaired cognition and decision-making may lead to effective interventions to improve decision-making and honor the wishes of patients and families.

## **Strengths/uniqueness:**

- Novel study design evaluating cognition with modified neuropsychological testing and not just screening tests.
- reasonably large number of people recruited to participate (n=110) screened 4732 to get that number
- good variety and number of neuropsychological tests administered including the widely used MMSE. Tried to determine premorbid IQ.
- Good acknowledgement of their pitfalls

## **Weaknesses:**

- Statistical difference on tests such as the MMSE do not necessarily correlate to actual deficits
- did not look at functional impairment
- no data regarding medication effect from home hospice patients
- The capacity to consent brief assessment tool used in study has not been validated as a way to assess capacity.
- no evidence that patients with these testing deficits actually have an effect on decision making.
- unlikely that their study design would ever be feasible as a way to test for cognitive impairment in our patients.

**Relevance to palliative care:** Almost on a daily basis we discuss treatment options with patients. This article brings up the point that many patients who appear cognitively intact may have some cognitive deficits near the end of life that can affect their decision making abilities. It simply stresses the point that we should work closely with both patients and their families when making decision about care.