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In patients aged 70 and above, male and female, how does the length of stay after treatment compared to early discharge impact the patient's level of orientation?

Amanda Ames, Caitlin Chasse, Jamie Beaupre

Background

The length of stay after treatment can put patients' health and well-being at a disadvantage. Length of stay can not only cause delirium but can also have detrimental impacts on pre-existing comorbidities. By decreasing a patient's length of stay following the completion of treatment, there are lower levels of adverse outcomes that not only benefit the patient but also those around them.

Problem

Patients who have an increased length of stay are subjected to an increase in their preexisting comorbidities, cognitive dysfunction, and delirium. These patients are more likely to become readmitted, develop persistent delirium, and even experience death as opposed to the patients who are discharged immediately following their completion of treatment.

Review of Literature (1)

Title: Short-term outcomes of patients with a long stay in an internal medicine service.

Purpose: This study was conducted to observe the effects of a prolonged stay on elderly patients.

Method: 11,948 patients with a mean age of 74.5 were admitted to a University Hospital between January 1, 2013, and December 31, 2017. The patients in this study had lengths of stay greater than 30 days during the 5 years. Outcome variables were a very long length of stay, in-hospital mortality, and adverse outcomes in the first 30 days after discharge.

Results: 2.8% of the 11,948 patients had a prolonged stay ranging between 31 and 146 days with a median length of 39 days. Overall, the prognosis of the patients with extended lengths of stay was worse than the patients that discharged before the 30 days.

Conclusion and Evidence Level: The average length of stay after being admitted is between 8 to 11 days for most patients. Those with existing comorbidities, cognitive dysfunction, functional and/or social factors may have an increased length of stay that can lead to an increase in their pre-existing conditions as stated above. The percentage of patients with prolonged length (3%) had a high impact on the activity of hospital services and cost per day. The factors associated with an extended length of stay correlate with having early adverse outcomes after discharge such as being readmitted within 30 days, admission to the ICU, and/or death.

Review of Literature (2)

Title: Persistent delirium in older hospital patients: an updated systematic review and meta-analysis.

Purpose: This study was conducted to gain an understanding of the progression of delirium into persistent delirium and dementia as well as its association with dementia progression over time.

Method: This is a systematic review, using 23 relevant studies from MEDLINE, EMBASE, PsycINFO, and the Cochrane Database of Systematic Reviews on January 11, 2022. Of the 3,186 patients with a mean age of 82 years, 39 patients were reported to have persistent delirium. The information used was the level of delirium at follow-up for older hospitalized patients outside a critical and palliative care setting.

Results: Studies were found to be at moderate risk of bias. Most of the studies either did not report details of dementia ascertainment or based it on a diagnosed medical history. Delirium prevalence at discharge was estimated to be 36%. Age was not found to be associated with a higher prevalence of persistent delirium. The prevalence of persistent delirium was 16% at 12 months.

Conclusion and Evidence Level: Prolonged delirium and incident delirium can result in brain atrophy for this population. Exposing patient to longer than necessary stays in an acute care setting has detrimental and irreversible effects on the brain the this age population. Patients benefit from short stay and/or moving to a long term/rehab facility where they can get more mental stimulation from their surroundings.

Review of Literature (3)

Title: Delirium and associated length of stay in critically ill patients.

Purpose: This study was conducted to evaluate the impact of delirium on ICU and hospital length of stay (LOS).

Method: Prospective studies and randomized controlled trials of patients in the ICU with delirium published between January 1, 2015, and December 31, 2020, were evaluated. Outcome variables including ICU and hospital length of stay were obtained.

Results: Forty-one studies met the inclusion criteria. The mean difference in ICU length of stay between patients with and without delirium was significant at 4.77 days; for hospital length of stay, this was significant at 6.67 days.

Conclusion and Evidence Level: ICU and hospital length of stay and associated costs were significantly higher for patients with delirium, compared to those without delirium. Further research can provide insight into the required resources for the prevention of delirium which can potentially optimize the quality of care. Ultimately, research supports that by discharging a patient as early as possible following completion of care, they are less likely to develop delirium.

Next Steps

The next step is to further investigate and gather information on how the length of stay can affect a patient both physically and cognitively. By conducting more research, changes can be implemented to benefit both the patient and those around them.

References

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