Geriatric Trauma Patients in the Emergency Department: Length of Stay, Intensity of Care, and Post ED Destination

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RESULTS

A Mann-Whitney U test was performed to test Ho1. Results indicated no significant difference between the groups in ED LOS (p=.184). Chi-Square analysis was performed for Ho2 & 3. Results for Ho2 are not included here due to several cells with lower than expected cell count which is most likely the result of patients transferred to the hospital having received ED services somewhere else, creating an artificially low value for intensity of services. Due to few patient deaths and few patient discharges to home or other locations from the ED, data analysis was limited to post ED destinations in the hospital.

Results indicated a significant difference in post ED destination with patients aged 19-64 years more likely to go to OR and med/surg and patients over 65 more likely to go to critical care.

BACKGROUND

The geriatric population more frequently uses EDs as compared to many other groups. Once in the ED, they have more tests, longer lengths of stay, utilize more resources, and have increased frequencies of admission. Treatment disparities are hard to ascertain due to the unique combination of trauma, advanced age, physiology, unique neurological issues, and chronic illness complicates treatment for many geriatric trauma patients.

Few studies utilize data from Level 1 trauma centers or academic medical centers. No existing studies discuss the importance of intensity of service in the ED as related to treatment disparities.

OBJECTIVES

This study tested the following hypotheses:

1. Geriatric trauma patients, as compared to non-geriatric trauma ED patients, are more likely to have longer lengths of stay in the emergency department.
2. Geriatric trauma patients, as compared to non-geriatric trauma ED patients, receive less intensive care in the emergency department.
3. Geriatric trauma and non-geriatric trauma patients ED patients differ significantly in post-ED destination upon admission to the hospital.

RESULTS

Descriptive data show:

- A greater percentage of males in the 18-64 years old group.
- Most patients in both groups were identified as white.

- ISS and GCS scores were similar for both groups.
- Hospital length of stay (LOS) was two days longer for the 65+ age group.
- EDLOS was nearly identical.

CONCLUSION

Trauma registry data from a level I trauma center indicate no significant differences in EDLOS but significant differences in post ED destination for patients in different age groups.

NEXT STEPS

Further data analysis is warranted and should focus on transfer patients, including services received at other hospitals and in transit.