

RACIAL DISPARITIES IN TREATMENT OUTCOMES FOR SPINAL CORD INJURY

Odera A Umeano BA; Shivanand P. Lad MD PhD; Isaac Karikari; Aravind Somasundaram; Beatrice Ugiliweneza MSPH; Carlos A. Bagley MD; Oren N. Gottfried MD; Robert E. Isaacs MD; Chirag G. Patil MD MS; Maxwell Boakye MD
Duke University Medical Center



Introduction

Spinal Cord Injury (SCI) is an acute trauma to the spinal cord or neural elements around the spinal cord resulting in temporary or permanent sensory and motor deficit¹⁻³. Studies indicate that although 66% of SCI occur in Caucasians, there is a growing number of other racial groups affected by SCI;⁵ however, there has been a lack of research concerning racial disparities in outcomes.

Methods

A retrospective analysis using the National Trauma Data Bank (NTDB) from 2000-2009 was performed. With this database, we studied the Medicaid population, controlling for socioeconomic status and access to care. African Americans, Caucasians, Hispanics, Asians and Native Americans were included in the study. We calculated adjusted odds ratios to examine the relationship between racial backgrounds and mortality, length of ICU stay, length of hospital stay, in hospital complications, and patient disposition.

Results

Significant differences were found in length of hospital stay, with African American and Hispanic populations having longer hospital stays than Caucasian and Asian patients. For all type complications, African Americans (OR 1.228, CI 1.11-1.356) and Native Americans (OR 1.618, CI 1.083-2.419) were more likely than white and Hispanic patients to have in hospital complications. For disposition status, African Americans (OR 0.844, CI 0.730-0.976) and Asians (OR 0.475, CI 0.297-0.760) were less likely than Caucasians or Hispanic populations to be discharged to an acute rehabilitation program.

Conclusions

The results from our large scale study (n=18,671) demonstrates a number of racial disparities following SCI, including rate of complications, length of stay and disposition to acute rehabilitation centers.

Learning Objectives

By the conclusion of this discussion, participants should be able to:
1) Describe the importance of evaluating how differences in racial background affect treatment outcomes after SCI.
2) Discuss, in small groups, the potential effects of racial disparities in SCI outcomes.
3) Identify an effective treatment strategy for SCI incorporating the determined effects of racial disparities.

References

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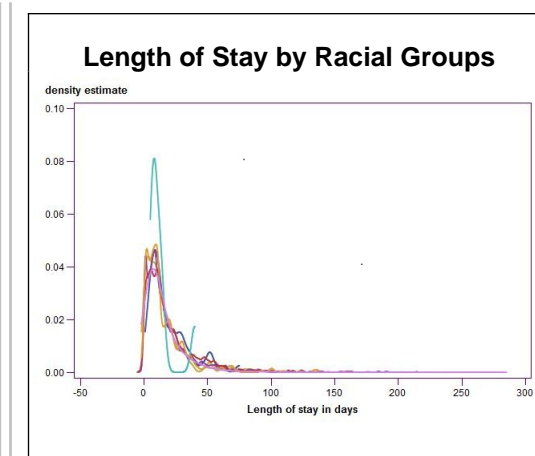


Figure 1: Length of stay by racial groups

Figure Legend

- American Indian
- Native Hawaiian
- Asian
- Other
- Black
- White
- Hispanic