Quick Review of Model System Research

Epidemiology of Comorbid Conditions Among Adults 50 Years and Older With Traumatic Brain Injury

What is the study about?

Multiple comorbidities that affect recovery is a real concern for aging individuals with traumatic brain injuries (TBI). The aim of this study was to detail the most common co-occurring comorbid conditions among adults fifty years and older with TBI.

Who participated in the study?

Participants in this study (n = 2134) were fifty years and older with moderate to severe TBI and enrolled in the TBI-Model Systems Program from 2007- 2014.

How was the study conducted?

This study used data from a longitudinal study that has been documenting individuals with moderate to severe TBI and who have undergone inpatient rehabilitation at participating TBI-Model Systems centers. Up to twenty International Classification of Disease – 9th Revision (ICD-9) codes per participant from inpatient care medical records were extracted. These ICD-9 codes were then used to categorize comorbid conditions for each participant.

What did the study find?

The three most commonly occurring comorbid categories found in this study were hypertensive disease, respiratory system diseases, and fluid component imbalances. Three clusters of comorbid codes were broadly classified as: 1) acute medical diseases/infections, 2) chronic conditions, and 3) substance abuse disorders. The authors state that these findings are important for older adults with TBI and may help explain why this group of TBI people have poorer clinical outcomes.

Disclaimer: The contents of this quick review have not been reviewed by the author of the original study.

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