Issues of Attrition in a Population Study of Traumatic Brain Injury (TBI) Followed to 3 Years Post-Trauma

Abstract:

Objective: The Tasmanian Neurotrauma Register began prospective data collection in December 2003 as part of a population study of TBI in southern Tasmania. The overall research aim of the TNTR is to provide comprehensive assessment data on outcome across a number of domains, including cognitive, psychosocial and medical. The aim of the present paper is to discuss the issues involved in following a population cohort of TBI patients over multiple time points - one month, three months, six months, twelve months, two years and three years post-trauma.

Method: A population sample of more than 1,000 individuals presenting with TBI at the Department of Emergency Medicine, Royal Hobart Hospital, participated. Data were collected on a range of demographic, clinical, cognitive and psychosocial variables up to three years post-injury. Attendance and attrition data were examined using a number of methods.

Results: Participants with more severe TBIs (measured using length of Post Traumatic Amnesia) showed higher retention rates in the study. Attendance was also found to be related to demographic variables, including age and gender. Educational history and socioeconomic status are still under analysis.

Discussion: The issue of attrition from large sample studies warrants further investigation, given the risk of biased findings from differential drop-out. Different methods of calculating attrition need to be addressed when investigating outcome after TBI, particularly given the characteristics of those at risk of sustaining head injury.