

In Sickness and Health: Traumatic Brain Injury and Risk of Short-run Divorce

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In a study of over 2,500 married TBI patients in 2010, a propensity score matching method is used to estimate the risk of short-run (5 year) divorce. Using detailed Danish registry data, the first of its kind for this issue, the impact of gender, number of children, marriage length, and income are analyzed versus a control group of healthy non-brain-damage patients.

The average treatment effect found for TBI patients on the risk of divorce is 0.75 percentage points ($p < 0.05$). For a population mean divorce rate in the 5-year period of 4%, this corresponds to about a 20% relative higher risk for TBI patients of divorce in the short-run.

To examine whether this effect is a result of the trauma of illness or potentially a channel from personality changes from TBI, we examine a sub-group of brain damage, Transient Cerebral Ischemia (TCI), which has no neurological effects, and find no increased risk of divorce.

Factors which significantly contribute to lower divorce risk are higher age, longer marriage length. Additionally, a “staying together for the kids” effect is found, where divorce risk drops if the TBI patient has children. There is no gender or income effect found to be contributing to this risk differential.

One potential explanation of this higher risk could be the cost of becoming an “unpaid caregiver” for one’s partner. This cost decreases with age and could explain the significant drivers of divorce found in our model.

This paper provides evidence supporting an increased focus on family issues for brain damage patients, which physicians, rehabilitation practitioners, and politicians could use for improving outcomes for this group.