Factors influencing rehabilitation outcome in adult traumatic brain injury in Qatar

**Aim:** To analyze the factors influencing outcome in traumatic brain injury (TBI) rehabilitation in Qatar.

**Design & Methods:** It was a retrospective descriptive study of 50 patients with TBI collected during Jan 2004 to Sep 2007 from the Rehabilitation Unit of Rumailah Hospital, Hamad Medical Corporation.

Demographic and clinical variables included; age at admission, length of stay in acute care (LOSa), and length of stay in rehabilitation (LOSr), Rancho Level (RLA) and Glasgow Coma Scale (GCS). Functional outcomes were functional independence measure on admission (FIMa) and functional independence measure on discharge (FIMd).

**Results:** Significant positive correlation was observed of FIMd with FIMa and Rancho level (r = 0.69, p = 0.00 and r = 0.70, p = 0.00) respectively where as there was no correlation between FIMd and GCS score. Negative correlation was observed between FIMd and age as well as LOSa (r = -0.47, p = 0.01) and (r = -0.49, P = 0.00) respectively. Multivariate regression analysis was performed taking age, Rancho, FIMa, mobility, GCS and LOSa variables as independent and FIMd as dependent variable. The model could explain 70% of variation.

**Conclusion:** In our study Rancho level of cognitive functioning, FIMa and mobility variables were found most influential factors in functional outcome.