

(6.5%). Those with unknown insurance status, race, or ethnicity were excluded from analyses of those variables.

Results: Hospitalization incidence for the sample was significantly lower in the two years following a NPE, $X^2(1, N = 245) = 26.98, p < .001$, compared to the two years prior. The mean number of hospitalizations were also lower following a NPE ($t(244) = 4.83, p < .001$). Insurance status did not show a significant main effect or interaction on mean number of hospitalizations over time. Regarding demographic variables, there was no significant main effects of race/ethnicity group or interaction between race/ethnicity and hospitalization rate change over time. However, there was a significant interaction between hospitalization rate change over time and gender ($F(2,42) = 4.74, p = 0.030$). A significant decrease in hospitalizations over time was seen for males ($p < .001$), while females showed a trend-level decrease that approached significance ($p = .06$).

Conclusions: Consistent with previous research, significant reductions in hospitalization incidence and mean number of hospitalizations were seen following a NPE. This finding did not vary based on insurance status. However, hospitalization outcomes varied as a function of gender. These findings suggest that completing a NPE following a traumatic brain injury may contribute to improved hospitalization outcomes, but it does not appear that this benefit is seen equally for all patients. Insurance status may play a role in accessibility to care and hospitalization outcomes in this population, but that relationship is likely influenced by other factors, including racial identity, gender, and income. Future research is needed to investigate the extent that NPEs impact hospitalization rates in the broader context of insurance, demographic factors, and socioeconomic status.

Categories: Acquired Brain Injury (TBI/Cerebrovascular Injury & Disease - Adult)

Keyword 1: traumatic brain injury

Keyword 2: neuropsychological assessment

Keyword 3: minority issues

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6 A Study to Assess the Impact of Injury Severity on Disease Specific Quality of Life After Traumatic Brain Injury (TBI)

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Objective: To assess the impact of injury severity on disease specific quality of life after Traumatic Brain Injury

Participants and Methods: The study was carried out in Department of Neurosurgery, Post Graduate Institute of Medical Education and Research, Chandigarh, India after obtaining ethical clearance from Institute Ethics Committee.

Sixty consecutive patients aged 18 and above with moderate to severe TBI (GCS score of 3-12 at admission) attending the Outpatient Department of Neurosurgery Specialty were screened. Out of 60 participants, 40 had moderate TBI (GCS 9-12) and 20 patients had severe TBI (GCS 3-8). The participants having any pre-existing major psychiatric disorders, intellectual disability, current or past history of substance abuse, degenerative and/or progressive condition, terminal illness and past history of TBI were excluded. Written informed consent was obtained from each participant. Socio-demographic details and information about clinical status at the time of admission and discharge were obtained from participant and hospital records. Disease specific quality of life was measured by QOLIBRI (Quality of life after brain injury). It is a self-reported measure comprising of 37 items. The first part assesses the subjects' satisfaction with his HRQL in 4 domains (cognition, self, daily life and autonomy, and social relationships). The second part measures how much the subject is bothered after TBI in 2 domains (emotions and physical problems). The other tools administered were Glasgow Outcome Scale and Barthel's Index of Activities of Daily Living (functional status); Mini Mental State Examination (cognitive status); Hospital Anxiety and Depression Scale (anxiety and depression).

Results: The data was analyzed using statistical package for social sciences software version 21 (SPSS). There were no significant differences between both groups with regard to age, gender,

education status, marital status, family type and place of residence. Both groups were similar with regard to mode of injury and duration of injury. With regard to treatment during admission both groups had significant differences. Among severe TBI group 90% underwent surgical intervention whereas among moderate TBI group only 45% underwent surgical intervention. Significant difference was present in GCS score at discharge between both the groups.

After 6 months of injury both groups had no significant difference with regard to functional status, global cognitive functioning, anxiety and depression. With regard to quality of life significant difference emerged between the groups on QOLIBRI total score. On various subscales of QOLIBRI – significant differences were noted only in the domains of social relationship and emotions. There were no differences between them on domains of cognition, self, daily life and physical problems.

Conclusions: After 6 months of TBI, the participants in both groups (Moderate TBI and severe TBI) had similar functioning with regard to daily activities and psychological functioning. With regard to quality of life both groups emerged to be significantly different on overall quality of life and domains of social relationship and emotions.

Categories: Acquired Brain Injury (TBI/Cerebrovascular Injury & Disease - Adult)

Keyword 1: brain injury

Keyword 2: quality of life

Keyword 3: neuropsychological assessment

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7 Domain-Specific Assessments for Metacognition in Older Adults Sustaining Traumatic Brain Injury

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Objective: Metacognitive deficits are common following traumatic brain injury (TBI), and this

has important implications for recovery, social relationships, and rehabilitative outcomes (Chiou et al., 2011; Flashman & McAllister, 2002; Ownsworth & Fleming, 2005). Metacognitive deficits have historically been measured using self-report (Allen & Ruff, 1990; Newman et al., 2000; Sherer et al., 1995; Sherer et al., 1998), which is problematic as individuals with an awareness of deficit cannot accurately reflect on their own condition (Akturk & Sahin, 2011). In the past two decades, studies have transitioned to using more objective measures to assess metacognition, including error monitoring tasks (McAvinue et al., 2005; Yeung & Summerfield, 2012) and tasks using retrospective confidence judgments (RCJs) (Busey et al., 2000). Importantly, both tasks are used to study “metacognition,” but clear distinctions as to what domains these tasks measure has not been elucidated. Additionally, both tasks have been linked to executive functioning broadly, but error detection tasks are uniquely associated with measures of attention and self-reported anxiety (Hoerold et al., 2008; O’Keefe et al., 2007), indicating that there may be distinct processes that comprise metacognition. It is a goal to determine what domains these tasks represent so proper assessments of metacognitive ability can be conducted in this population.

Participants and Methods: Participants included 23 older adults with moderate-severe TBI and 16 age, sex, and education matched healthy control (HC) individuals ages 53-80. All participants received identical neuropsychological test batteries, including two tasks of metacognition (error monitoring task, RCJ task), neurocognitive tasks of attention (Digit Span – Forward, Trail Making Test A) and executive functioning (Digit Span – Backward, Trail Making Test B), and a self-report measure of anxiety (Brief Symptom Inventory – Anxiety subscale). To determine overlapping constructs measured by the two metacognitive tasks, these tasks were correlated with each other and with an attention composite, executive functioning (EF) composite, and anxiety measure in the TBI and HC groups.

Results: In the TBI group, the metacognitive tasks were significantly correlated with each other ($r=-0.47$, $p=0.022$). The RCJ task was associated with EF ($r=0.47$, $p=0.025$), but not with attention ($r=0.20$, $p=0.358$) or anxiety ($r=0.25$, $p=0.248$). The error detection task was associated with EF ($r=-0.48$, $p=0.021$) and attention ($r=-0.46$, $p=0.026$), but not with anxiety ($r=-0.19$, $p=0.383$). In the HC group, there were