17% of people with traumatic brain injury attempted suicide


QUESTION: What is the prevalence and correlates of suicidality following traumatic brain injury?

Design
Cross sectional study.

Setting
One hospital brain injury rehabilitation unit; Sydney Australia.

Participants
All hospital outpatients with traumatic brain injury sustained between the ages of 16–65 were invited to participate over a 24 month period. 172 of 181 accepted. Exclusion criteria were people attending the outpatient clinic for the first time; inability to speak English or answer survey items, and brain injury within the past 12 months. Mean age at injury was 31 years; mean time post-injury was 5 years; 23% were women.

Main outcome measures
Suicide ideation and hopelessness were assessed using the Beck Scale for Suicide Ideation and the Beck Hopelessness Scale. Data were collected on self-reported suicide attempts; known suicide risk factors, and demographic, injury and psychosocial factors.

Main results
35% of participants had clinically significant levels of hopelessness, 23% had suicidal ideation and 17% attempted suicide over a mean of 5 years following traumatic brain injury. Suicide attempts were correlated with emotional and psychiatric disturbance and suicidal ideation. Injury severity and preinjury suicide risk factors did not increase suicide attempts following brain injury.

Conclusions
Suicidal thoughts and attempts are a common reaction to traumatic brain injury. Emotional and psychiatric disturbance should be assessed and people with high levels of hopeless and suicide ideation closely monitored.

COMMENTARY
All traumatic brain injuries are different. Their consequences cannot always be predicted from the immediate medical circumstances. Although traumatic brain injury often has frontal lobe involvement, lesions can be diffuse and difficult to identify, even with modern neuroradiological investigations. Recognised post-injury symptoms are traditionally cognitive, with attentional, memory and executive dysfunctions. There has been a strong research and clinical emphasis on assessing and treating these dysfunctions. In contrast to stroke research, emotionality has not featured strongly in studies of traumatic brain injury. Yet people with traumatic brain injury have severe emotional reactions. Most clinicians know a case of attempted or completed suicide in this group. Within research environments, emotional reactions have been regarded as secondary to the cognitive effects of traumatic brain injuries - and therefore of secondary concern. Against this background, this paper is important. It is the largest systematic study of suicidal thinking and attempted suicide among people with traumatic brain injury to date.

The social and cultural limitations of the study must be acknowledged. It is from one centre in a country where athleticism and good health are often prioritised. The findings need to be replicated in other settings. Despite this, the paper has clear clinical implications. In addition to routine neuropsychological testing for cognitive dysfunction, people with brain injuries should be assessed for emotional disturbance. Following the pioneering work of Prigatano, there is increasing recognition of the need for psychotherapeutic components in brain-injury rehabilitation programmes. Simpson and Tate reinforce the importance of these emotional assessments.

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