

# FOCUS ON RESEARCH

## THE FURTHER OUTCOME OF HOSPITALISED HEAD INJURIES

### Researchers

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### Aim

To determine, the late outcome of a representative cohort of patients admitted to hospital after a head injury 6 years previously to determine the early and late factors correlating with persisting disability and handicap, including those associated with change between assessments at one and 6 years.

### Project Outline/Methodology

The study was based upon a cohort that had been prospectively identified, 6 years previously, as having been admitted to hospital with a head injury and whose outcome had been determined one year later. Participants who were traced and consented were assessed by postal questionnaire, telephone and interpersonal interview using structured, validated methods to assign an overall outcome using the Glasgow Outcome Scale Extended (a measure of disability and handicap after brain injury). A range of psychological, health and social factors were investigated, including concentration and memory, self-esteem, stress, mood, anxiety, alcohol and drug use, illness or injury, ability to carry out day to day tasks, care support and employment.

### Key Results

Of the 475 survivors at one year, 115 (25%) had died by 6 years. Amongst those surviving at 6 years, disability remained a frequent finding (50%) and similar to the rate found at one year. Both the persistence of disability and the development of disability after previous recovery, showed stronger associations with indices of disturbed/adverse psychological and social functioning such as depression, anxiety and lower self-esteem than with indices of the early severity of injury (eg coma) or at memory and learning ability at 6 year follow-up. Despite the high incidence of persisting disability, few participants reported having had rehabilitation.

### Conclusions

Admission to hospital even after a minor head injury is followed 6 years later by disability in a high proportion of survivors.. Disability, whether

persisting or emerging over this follow-up period is strongly associated with psychological and social factors.

### What does this study add to the field?

Most other studies have reported on selected sub-groups of the head injury population and have not provided data from soon after injury to late follow-up. Few have considered relationships between psychological functioning and day to day difficulties living in the community. The findings here extend the published observations of disability reported one year after injury in this unique cohort. They identify a high level of burden from post head injury disability in the community. The close associations with psychological and social factors, point to the potential for treatment, even late after injury.

### Implications for Practice or Policy

The extremely low access to rehabilitation services reported points to the need to establish co-ordinated systems for follow-up of all head injury victims admitted to hospital and to the develop support and rehabilitative services.

### Where to next?

Prospective evaluations are required of existing and new services for head injured patients; progressing to formal, prospective, randomised comparisons to determine the existence and extent of benefit.

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