

# Managing agitation during early recovery in adult patients with traumatic brain injury: An international survey



Epworth  
Research

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## Introduction

- Agitation is one of the most disruptive sequelae in the early stages of recovery following traumatic brain injury (TBI)
- Approximately 50% of patients with TBI exhibit agitation in early TBI recovery
- There is limited evidence for the efficacy of non-pharmacological and pharmacological interventions for reducing agitation
- Information on current international practice may inform the development of guidelines for managing agitation in TBI care worldwide

## Aim

- This worldwide survey investigated how clinicians define, measure and manage agitation during early TBI recovery

## Participants

- This survey was distributed to healthcare professional worldwide working with patients in early TBI recovery who exhibited agitation
- 309 clinicians completed the survey in full, from 34 countries worldwide
- Clinicians worked predominantly as neuropsychologists, occupational therapists, rehabilitation physicians, and nurses
- Clinicians worked mainly in inpatient rehabilitation and acute care settings

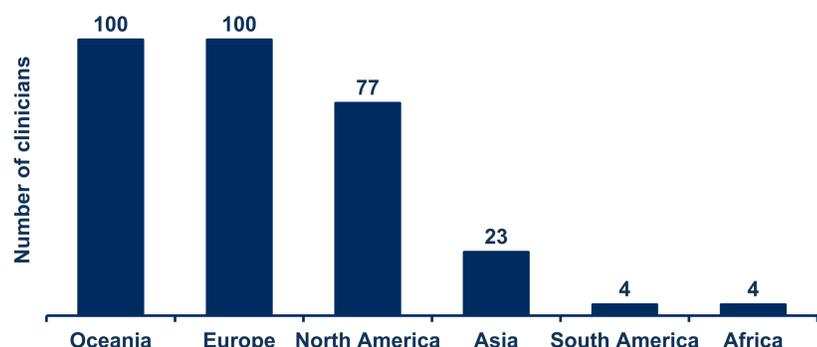


Figure 1. Regions where clinicians were based

## Measures

- Online survey distributed via brain injury rehabilitation networks worldwide
- The survey explored:
  1. Type of behaviours associated with agitation
  2. Tools used to measure agitation
  3. Pharmacological and non-pharmacological management of agitation
  4. Resources and training for managing agitation

## Results: Defining agitation

- The behaviours clinicians most frequently associated with agitation were verbal and physical aggression, followed by restlessness

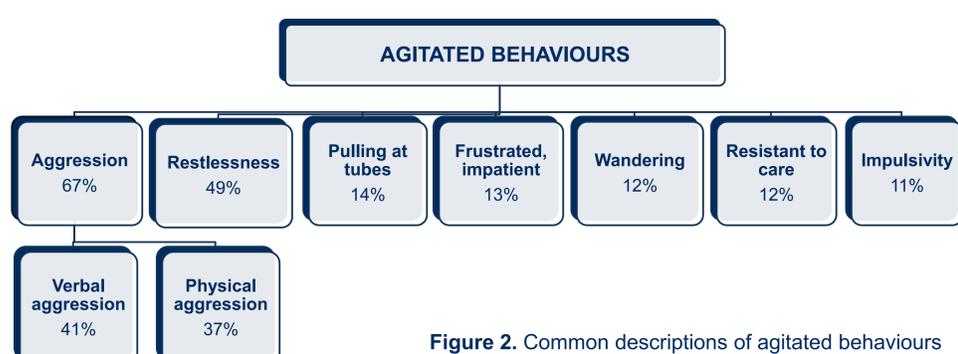


Figure 2. Common descriptions of agitated behaviours

## Results: Measuring agitation

- 75% of clinicians reported formally measuring agitation

Tools for measuring agitation	% clinicians
Agitated Behavior Scale (ABS)	39%
Non-standardised behavioural monitoring	25%
Rancho Los Amigos Scale (RLAS)	21%
Overt Aggression Scale (OAS)	6%

## Results: Managing agitation

- 99% of clinicians reported use of non-pharmacological interventions

Examples of non-pharmacological strategies	% clinicians
Providing familiarising information	85%
Providing orientation cues	82%
Managing patients in single rooms	81%
Reducing noise levels	80%
Lowering bed closer to the floor	75%
Use of preventative strategies	75%
Equipping bed with safety rails	71%
Dimming lights	67%
Limiting visiting hours	66%
One-to-one staffing arrangements	65%
Consistent staffing	63%



90% of clinicians reported use of pharmacological interventions, mainly antipsychotics

### Common first-line drugs:

- Quetiapine, propranolol, olanzapine, sodium valproate, trazodone

### Commonly avoided drugs:

- Typical antipsychotics (e.g. haloperidol), benzodiazepines, stimulants

## Results: Training and guidelines

- Clinicians mainly learnt to manage agitation through:
  - Peer consultation and supervision (70%)
  - On-the-job learning (68%)
- 54% of clinicians had written guidelines for managing agitation
- Clinicians with sufficient training and written guidelines had significantly greater confidence in their ability to manage agitation

7/10 clinicians' average confidence level in managing agitation

52% clinicians satisfied with agitation management in their services

## Conclusions

- Clinicians are using a range of interventions; thus, there is an urgent need to evaluate their effectiveness in reducing agitation
- Clinicians with sufficient training and guidelines felt more confident, indicating the value of formalised training and guidelines for managing agitation
- There is a clear need for a consistent, effective and service-wide approach to managing agitation during early recovery in TBI care settings worldwide