

NeuroRehab Evidence Database

Target Area: Challenging Behaviour

Neurological Group: Traumatic Brain Injury

Wade et al. (2006). The efficacy of an online cognitive-behavioural family intervention in improving child behaviour and social competence following pediatric brain injury. *Rehabil Psychol*, 51(3): 179-189.

PEDro score - 6/10

Method / Results

Design

• Study Design: RCT.

- Population: 39 families of children with moderate to severe TBI (Mean age = 11 years old; 56% male, mean lowest Glasgow Coma Scale (GCS) score=11.4).
- **Groups:** Assigned to online:
 - 1. Family-centred problem-solving (FPS: n=20, 55% male, mean age=10.9 years)
 - 2. Internet Resources Comparison (IRC: n=20, 60% male, mean age=11 years)
- **Setting:** Family home with computer.

Primary outcome measure/s:

- Child Behaviour Checklist (CBCL).
- Problem Solving and Communication subscale from the Family Assessment Device (FAD).
- Home and Community Social Behaviour Scale (HCSBS) measuring self-management.

Secondary outcome measure/s:

- Children's ratings of ease of use and helpfulness.
- Children's ratings of emotional reactions to the web site and videoconferences.

Results: HCSBS scores significantly improved for the FPS group more than did the IRC. Those who were older (more than 11 years old) and from lower socioeconomic status, had larger effect sizes.

Rehabilitation Program

Aim: To use online CBT to improve childhood adjustment to TBI.

Materials: Computer, broadband connection, web camera and printer in each family's home; website and sessional content designed by authors.

Treatment Plan:

- Duration: 14 separate web-based sessions completed by families at own pace over several months (specific number of months not reported).
- Procedure: Each session 1-2 weeks to complete. Therapist assisted if not completed in 2-4 weeks. Following completion of each session, therapist organised tele-conference to review.
- **Content:** 8 core sessions are outlined, with topics and key features:
 - 1. Overview, identify goals: learn about family.
 - **2.** Positive problem orientation: the importance of attitude.
 - 3. Learn steps of problem solving.
 - **4.** Cognitive changes: identify strategies to reduce frustration.
 - **5.** Behaviour changes: antecedent behaviour management strategies.
 - **6.** Communication: listening/positive communication strategies.
 - 7. Crisis management: skills for crises, assessment of needs.
 - **8.** Planning for the future: review what works, plan for transitions.

Remaining 6 sessions tailored to individual context including stress management, working with schools, sibling concerns, anger management, pain management, marital communication.