
**What problems did the researchers study and why?**
- Pediatric TBI results in many long term challenges – children suffer physical, cognitive, and behavioral problems that can persist for a long time; the behavioral changes are most difficult for parents to handle
- Treating the child and treating the family has mutual influence, therefore family-based therapy a promising strategy
- Rehabilitative services can be difficult to get to or local providers may not possess experience, so a web-based intervention may be useful to overcome these challenges → researchers tested efficacy of “Family Problem Solving”, an online intervention targeting families with TBI kids, for reducing parental burden while improving TBI kid’s behavior and cognitive-social challenges.

**Who participated in the study?**
- Convenience sample of 6 families – 2 girls, 4 boys, all between ages 5-16 years, injury having occurred more than 15 months previously
- no control over ethnicity, SES, or marriage status
- 4/6 had home computers; 2 had limited experience with computers

**How was the research conducted?**
- Participants recruited from trauma registry of urban children’s hospital
- Dell computers with monitors and web camera installed; all with high speed internet access
- Each family met with therapist once before beginning to establish rapport, educate about materials, get history, etc. Everyone with an interest in child was allowed to attend
- Families met with therapist every 1-2 weeks via video-conferencing; families complete web-based, self-guided materials between appointments
- Web-based program designed to be used collaboratively by family; sessions targeted core problems such as problem-solving, communication, and behavioral management skills
- Measures included Family Burden of Injury, parental distress, depression, and anxiety, child adjustment, and therapeutic alliance

**What were the results of this study?**
- Feasibility: all families and individuals completed intervention
- Parent outcomes: significant decline in most measures of stress including perception of burden and depression
- Child outcomes: significant improvement on social behavior scale, but no other areas
- Therapeutic alliance: parents reported high levels of confidence in their therapists

**What do the researchers think this study contributes? What are its limitations?**
- All families completed, indicating early feasibility
- Specifically, web-based intervention successfully reduced parental stress and child behavioral problems, with some evidence that executive function behaviors in children improved
- Interesting example of family-wide participation in this kind of therapy
Pediatric traumatic brain injury (ped-TBI) results in long term challenges for families, including increased parental stress and behavioral problems in children. Compounding these difficulties is that many families live far from therapy centers or do not have local therapists experienced in ped-TBI. Web-based interventions may be able to help this situation. To test this, researchers recruited 6 families from an urban children’s hospital trauma register to participate in a home-based, web intervention called “Family Problem Solving” (FPS). Of the six ped-TBI, 2 were female, 4 were male, all between ages 5-16. Computers were installed in the families’ homes, and left as compensation for participation. Then, families each met with a therapist for an initial discussion and training on the FPS. Thereafter, families did regular web-based sessions together, and met with therapists every 1-2 weeks. Results showed significant decreases in parental stress on many scales including perception of burden and depression. Children showed significant improvement in social behavior, though not in meta-cognitive skills. Feasibility of this intervention is demonstrated by 100% adherence of all families. Though the sample is too small and specific to be widely generalized from, and compensation may have influenced outcome, it still provides sufficient evidence that a web-based family intervention can successfully address parental stress and child behavior problems following pediatric traumatic brain injury. More research is recommended for the impact of face-to-face meetings on developing therapeutic alliance and large, randomized trials for testing web-based interventions for families. (241 words)