

Telerehabilitation intervention for children following acquired brain injury (ABI) - a pilot study

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Introduction

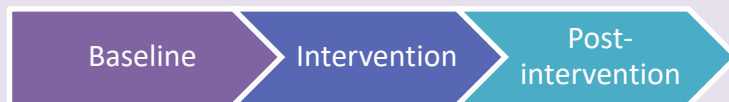
Telerehabilitation can be used as a means to promote function and participation in children with various disabilities. However, research is required to examine the effectiveness of these technologies and facilitate their impact on functional improvement in children following ABI.

The Aim of the current study is to examine the feasibility and effectiveness of occupation based telerehabilitation with children and adolescents following ABI.

Materials and Methods

Participants: N=3 (3 M) 11 < Age (yrs) < 18

Study design:



Outcome Measures: WeeFIM[®] CASP © C+PM Canadian Occupational Performance Measure PedsQL[™]

The intervention: Tele-conferencing Based on The Cognitive Orientation to Daily Occupational Performance Approach

References

- Mandich, A., & Polatajko, H. J. (2004). *Enabling occupation in children: The cognitive orientation to daily occupational performance (CO-OP) approach*. Canadian Association of Occupational Therapists.
- Ng, E. M., Polatajko, H. J., Marziali, E., Hunt, A., & Dawson, D. R. (2013). Telerehabilitation for addressing executive dysfunction after traumatic brain injury. *Brain injury*, 27(5), 548-564.

Results

Participant	COPM Canadian Occupational Performance Measure	CASP [©]		WeeFIM [®]	PedsQL [™]	
		P	SR		P	SR
1	↑	↑	↑	↑	↑	↑
2	↓	↑	↑	↑	↑	↑
3	↓	↓	↓	↑	↓	↓

" I am still continuing to use the strategy I learned today and it has become routine. I am able to organize and get ready within 15-20 minutes not including eating breakfast. "

Conclusions

- ❖ The intervention was found to be partially appropriate for adolescents with ABI.
- ❖ Parent support and assistance in ongoing training can facilitate reaching goals.
- ❖ Severe Cognitive Impairments such as: Memory impairment and executive functioning impairment can negatively impact Feasibility and Effectiveness of the intervention.
- ❖ Research is necessary to investigate specific cognitive domains and factors that are fundamental for success.