



International Bobath Instructors Training Association

An international association for adult neurological rehabilitation

IBITA

FROM THE EDUCATION COMMITTEE – October 2007

RECENT ARTICLES OF INTEREST

Practitioner and Organizational Barriers to Evidence-based Practice of Physical Therapists for People With Stroke.

Salback MN, Jaglal SB, Korner-Bitensky N, Rappolt S, Davis D.
Phys Ther. 2007;87: 1284-1303.

This study identifies barriers (educational, attitudes and beliefs, interest and perceived role, and self efficacy) and organizational barriers (support and resources) to physical therapists' use of evidence-based practice for people with stroke. The authors surveyed 270 PT's treating people with stroke in Canada.

The results indicate that less than 50% of the therapists had studied EBP in school, or in post-professional courses. While 78% agreed that research findings are useful, 55% thought that a divide exists between research and practice. Self efficacy ratings for searching and appraising the literature ranged between 50% and 80% and below 50% for appraising and understanding statistical analysis.

As pointed out by Dr. Pamela Duncan in a commentary on this well-designed study, some barriers to use of evidence in practice (best practice) may lie with the research-based interventions themselves. She suggests that researchers must examine inclusion and exclusion criteria for participants (*perhaps implying that the subjects in research protocols may not be reflective of patients we see on a daily basis in rehab settings*), evaluate the feasibility of implementing these research interventions in clinical practice, and select clinically relevant outcomes that may be valued by patients as well as insurers.

This is an important article for clinicians beginning to design research protocols.

Improving hand function in stroke survivors: a pilot study of contralaterally controlled functional electrical stimulation in chronic hemiplegia.

Knutson JS, Harley MY, Hisel TZ, Chae J.
Arch Phys Med Rehabil. 2007; 88: 513-520.

The objective of this pilot study (3 subjects in chronic phase of recovery) was to assess the feasibility of a new intervention designed to stimulate the paretic hand extensor muscles. Subjects controlled the intensity of the stimulation, and thus the degree of hand opening, by volitionally opening the unimpaired contra lateral hand - the opening of the contra lateral hand was detected by electrodes placed inside a glove. Subjects used the stimulator and glove for 6 weeks: active repetitive hand opening 2 hours/day at home and functional tasks 1.5 hours/2x week in the clinic.

Voluntary finger extension, finger movement control and scores on the box and block (BBT) test increased at end of treatment and at 1 month. Improvements declined at 3 months. The investigators were encouraged by the results and are conducting further investigations.

I was able to watch videotapes of the protocol and results and was fascinated by the quality of finger/hand function. The glove was modelled after a 'Nintendo' type game glove. While they started training with bilateral symmetrical hand tasks, they progressed to uni manual tasks.

Patterns and predictors of swallowing resolution following adult traumatic brain injury.

Ward ED, Green K, Morton AL.
J Head Trauma Rehabil. 2007;22: 184-191.

This study examines patterns of swallowing resolution and outcomes in people with TBI in an acute care setting. They also documented risk factors or predictors for resolution of swallowing impairments. 117 patients were studied during their acute post injury care.

Results: 75% of patients were evaluated by 2 weeks post injury, started oral feeding by 17 days, and were able to stop supplemental intake by 3 weeks. On the average, 22 days after admission 47% had progressed to normal diet and fluids.

Predictors: Duration to the first swallowing evaluation and some preliminary support for severity of CT scan and presence/absence of a tracheotomy.

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