Coolen, A., Kirby, R. (2004) Wheelchair skills training program for clinicians: A randomized controlled trial with occupational therapy students. Archives of Physical Medicine and Rehabilitation, 85(7), 8. NARIC Accession Number: J48128. Project Number: H133A010401. Abstract: Study examined the impact of a brief, formalized period of skills training on the wheelchair skills of undergraduate students of occupational therapy (OT). All participants received the standard university OT curriculum. Students randomly allocated to the intervention group were also trained on the 50 skills that make up the Wheelchair Skills Training Program (WSTP). Pre- and post-training evaluations indicated that students in the WSTP group demonstrated greater improvement in their wheelchair skills than students in the control group. Findings suggest that the WSTP, added to the standard curriculum, is an effective way to improve the wheelchair skills performance of OT students.

Richards, L., Latham, N. (2005) Characterizing occupational therapy practice in stroke rehabilitation. Archives of Physical Medicine and Rehabilitation, 86(12), Supplement (2), 10. NARIC Accession Number: J50100. Project Number: H133B990005. Abstract: Study describes how occupational therapy (OT) services provided during inpatient stroke rehabilitation vary by admission functional status and over time, and how time spent in various OT activities relates to functional status at discharge. Patients were categorized by the number of 4-hour blocks of OT they received and by admission upper extremity (UE) dressing score on the Functional Independence Measure. In each group, the percentage of time spent in 16 activities and the percentage of patients who received each activity was calculated. Results showed that the majority of OT time was spent in impairment-focused activities or training basic activities of daily living. Treatment progressed to more advanced activities over time; however, little time was spent on community integration or leisure activities and with very few patients. For patients who were admitted requiring at least maximum assistance in UE dressing, more time spent in higher level activities (community integration, functional mobility) was associated with greater success in rehabilitation.

McNaughton, H., DeJong, G. (2005) A comparison of stroke rehabilitation practice and outcomes between New Zealand and United States facilities. Archives of Physical Medicine and Rehabilitation, 86(12), Supplement (2), 6. NARIC Accession Number: J50106. Project Number: H133B990005. Abstract: Study examined differences in stroke rehabilitation practice and outcomes between inpatient rehabilitation facilities in the United States (U.S.) and New Zealand (NZ). Results showed that NZ patients tended to be older, fatter, and more likely to live alone before stroke, but U.S. patients scored somewhat worse on measures of disability and comorbidity at the beginning of stroke rehabilitation. U.S. patients had a much shorter rehabilitation length of stay but received more intensive physical therapy and occupational therapy during the stay, both in terms of the number of days on which they were seen and the total number of minutes of therapy. Outcomes were better for U.S. patients, with fewer discharged to institutional care.

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NIDRR Grantees on the Cutting Edge

Constraint-Induced Movement Therapy Modified for Rehabilitating Arm Function in Stroke Survivors with Plegic Hands, University of Alabama (H133G050222) led by Gitendra Uswatte, PhD. Theresa San Agustin, MD, Project Officer. Abstract: Based on positive findings from a pilot study, this project conducts a randomized, controlled clinical trial to rigorously test the efficacy of a modification of Constraint-Induced Movement (CI) therapy for rehabilitating arm function in chronic stroke patients with severe upper-extremity impairment. CI therapy is a rehabilitation method that has been shown in controlled studies to produce large improvements in real-world upper-extremity use in individuals with chronic stroke. Up until now, survivors of stroke with plegic hands have been excluded from CI therapy protocols, whether on a research or clinical basis. In the modified therapy, participants receive CI therapy, combined with other treatment modalities, for six hours per day. The treatment package includes tone management/movement facilitation, training of more-impaired arm use using shaping, functional task practice, restraint of the less-impaired arm in the laboratory and at home, and a package of behavioral methods for transferring gains from the laboratory to the home situation. Participants are also introduced to assistive and orthotic devices that might facilitate use of their more-impaired arm in their daily life.

Interdisciplinary Rehabilitation Research Post-Doctoral Program, University of Florida (H133P020005) led by William C. Mann, PhD. Margaret Campbell, PhD, Project Officer. Abstract: This project addresses the shortage of rehabilitation researchers through an interdisciplinary postdoctoral training program in rehabilitation research. The focus is on recruiting and training postdoctoral fellows with backgrounds in professions of high need, specifically rehabilitation engineering, physical therapy, and occupational therapy. There is also a strong focus on recruiting members of groups that have been traditionally underrepresented in rehabilitation research positions. The participating faculty for this program have large funded programs of rehabilitation research and also have considerable

A search of listings in The Cochrane Library of systematic reviews using “occupational therapy” turned up 259 reviews of healthcare interventions, 75 reviews of effects, 1,064 controlled trials, 11 methodology reviews, 10 health technology assessments, and 102 economic evaluations. Visit thecochranelibrary.org to review these resources!

For April, RehabWire looks at current research in occupational therapy.
experience in serving as mentors for advanced research training. The program offers postdoctoral fellowships from two to three years to qualified individuals interested in rehabilitation research. Postdoctoral fellows focus in an area related to one of the levels of these models: neurological rehabilitation, rehabilitation engineering, and rehabilitation outcomes research. Find out more at: www.hp.ufl.edu/rehabscii

An International View
A quick search of the database at the Center for International Rehabilitation Research Information and Exchange. More abstracts are available at cirrie.buffalo.edu.

Is early occupational therapy in extremely pre-term infants of benefit in the long run?
Author(s): Salokorpi T, Rautio T, Kajantie E, Von Wendt L

Occupational therapy intervention with children survivors of war.
Author(s): Simo Algado S, Mehta N, Kronenberg F, Cockburn L, et al.

The meaning and form of occupational therapy as experienced by women with psychoses: A phenomenological study.
Author(s): Ivarsson AB, Soderback I, Ternestedt BM

Preventing unnecessary hospital admissions: An occupational therapy and social work service in an accident and emergency department.
Author(s): Carlill G, Gash E, Hawkins G

Occupational therapy adaptation of the home environment in Sweden for people with asthma.

Role overlap between occupational therapy and physiotherapy during in-patient stroke rehabilita-
Author(s): Booth J, Hewson A

[How highly valued is occupational therapy? A survey of general practitioners].
[Welchen Stellenwert Hat Die Ergotherapie? Eine Umfrage Bei Hausarzten]
Author(s): Kraus E

April is Occupational Therapy Month
Visit the American Occupational Therapy Association for events, activities, promotional items, and, of course, information on OT, and where to find a therapist at www.aota.org

Where Can I Find More?
A quick keyword search is all you need to connect to a wealth of disability and rehabilitation research. NARIC’s databases hold more than 75,000 resources. Visit www.naric.com/research to search for literature, current and past research projects, and organizations and agencies in the US and abroad.

Current Literature - Selections from REHABDATA
Abstract: Study was conducted to examine the effects of a modified constraint-induced therapy (mCIT) on the upper-limb function of patients with subacute stroke. Participants were randomly assigned to 1 of 3 conditions: (1) mCIT intervention consisting of half-hour physical and occupational therapy sessions emphasizing affected arm use 3 times per week, for 10 weeks while the less affected arms were restrained 5 days per week during 5 hours identified as times of frequent use; (2) traditional rehabilitation; or (3) no therapy. After intervention, only patients receiving mCIT exhibited substantial reductions in arm impairment and improvements in arm function.

Abstract: Study explored the relationship between receipt of home-based occupational therapy (OT) services and changes in activities of daily living (ADL) and instrumental ADL among elderly patients. Two groups of older patients discharged from hospitals, sub-acute and skilled nursing facility rehabilitation programs, or who were living in the community and qualified for home care services were compared. One group received OT services and the other did not. Participants who received OT demonstrated improved ADL scores in three areas (dressing, toileting, and walking) while those who did not receive OT did not show improvement.

Abstract: Article identifies key principles of participatory action research that can be used to develop and evaluate community-based occupational therapy services. The participatory action research approach generally involves six steps: (1) delineating the problem, (2) choosing action, (3) design and assessment, (4) engaging in action, (5) data collection, and (6) reflexive knowledge. This approach is illustrated using two case examples of programs for individuals with chronic fatigue syndrome and those with autoimmune deficiency syndrome.

Colored blocks like these are used by OTs to help patients rebuild strength and coordination in their upper limbs.
Photo credit: Barb Ballard, Chantilly VA