Rehabilitation

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Jason Ovens
Head of Library & Knowledge Services
Title: Reduced Dual-Task Performance in MS Patients Is Further Decreased by Muscle Fatigue.

Citation: Neurorehabilitation & Neural Repair, 01 June 2015, vol./is. 29/5(424-435), 15459683
Author(s): Wolkorte, Ria, Heersema, Dorothea J., Zijdewind, Inge


Citation: Physical Therapy, 01 June 2015, vol./is. 95/6(934-943), 00319023
Author(s): Richardson, Julie, DePaul, Vincent, Officer, Alexis, Wilkins, Seanne, Letts, Lori, Bosch, Jackie, Wishart, Laurie

Abstract: Background. The incidence of stroke and subsequent level of disability will increase, as age is the greatest risk factor for stroke and the world's population is aging. Hospital admissions are too brief for patients to regain necessary function. Research to examine therapy delivered within the home environment has the potential to expedite relearning of function and reduce health care expenditures. Purpose. This case report describes the use of the knowledge-to-action cycle (KTA) to develop and evaluate an evidence-based approach for rehabilitation in the home that incorporates self-management and task-oriented functional training (TOFT) for people with stroke. Case Description. The KTA cycle was used to guide adaptation of evidence from self-management and TOFT into an approach titled START (Self-Management and Task-Oriented Approach to Rehabilitation Training). Three stakeholder symposiums identified barriers and supports to implementation. Clinical practice leaders were engaged as partners in the development of the intervention. An online learning management system housed the resources to support therapist training. Therapist focus groups were conducted and stroke outcomes were used to assess patient response. Outcomes. Eight therapists completed 4 workshops and applied the home intervention in 12 people with stroke. A mentoring process for therapists included feedback from peers and experts after viewing treatment videos. Therapist response was determined from the focus groups; patient response was measured by standardized assessments. The therapists noted that the intervention was easier to implement with patients who were motivated and had minimal cognitive impairment. Discussion. The KTA cycle provided a structure for the development of this evidence-based rehabilitation intervention, which was feasible to implement in the home. Further evaluation needs to be undertaken to assess the effectiveness of START.

Full Text: Available from EBSCOhost in Physical Therapy
Available from ProQuest in Physical Therapy


Citation: Australian Occupational Therapy Journal, 01 June 2015, vol./is. 62/3(187-196), 00450766
Author(s): Belchior, Patrícia, Korner-Bitensky, Nicol, Holmes, Melanie, Robert, Alexandra

Abstract: Background/aim Despite the amount of research evidence pointing to functional changes experienced by individuals with mild cognitive impairment (MCI), we still do not understand how occupational therapists are currently addressing these concerns. Thus, we designed a national study to investigate Canadian occupational therapists practices with this clientele. Methods We conducted a Canada-wide online survey to investigate occupational therapists’ practices with clients with potential MCI. Clinicians were prompted by a case vignette that described two clients: one vignette included cues associated with amnestic MCI (aMCI), the other non-amnestic MCI (naMCI). Specifically, clinicians were asked to identify potential concerns and to indicate the screening and assessment tools they would use in clinical practice. Results Two hundred and eighty-five participants met the inclusion criteria and were included in the final analysis. The average clinician age was 38.6 (SD = 10.3), 92% were female and
71.2% worked full-time. Almost all clinicians identified a concern in both vignettes, with cognitive concerns being identified more frequently than functional concerns [i.e. Instrumental Activities of Daily Living (IADL) concerns]. In terms of assessment practices, 18 standardised IADL assessments and 10 standardised cognitive assessments have been reported. Conclusion Encouragingly, almost all clinicians identified a concern. However, some are still missing the IADL cues. Moreover, the lack of consensus in terms of which assessment practices to employ indicates that clinicians might benefit from guidelines in this area of practice.

**Title:** The effects of modified constraint-induced therapy combined with mental practice on patients with chronic stroke.  
**Citation:** Journal of Physical Therapy Science, 01 May 2015, vol./is. 27/5(1585-1588), 09155287  
**Author(s):** Jin Hyuck Park

**Abstract:** [Purpose] The purpose of this study was to investigate the effects of the modified constraint-induced therapy (mCIT) combined with mental practice (MP) on patients with chronic stroke. [Subjects] The subjects were 26 patients with chronic stroke. [Methods] Patients were randomly assigned to the mCIMT + MP group or the MP group. All subjects were administered mCIT consisting of (1) therapy emphasizing affected arm use in functional activities 5 days/week for 6 weeks and (2) 4 hours of restraint of the less affected arm 5 days/week. The mCIT + MP subjects received 30-minute MP sessions provided directly after therapy sessions. To compare the two groups, the Action Research Arm Test (ARAT), Fugl-Meyer Assessment of Motor Recovery after stroke (FM), and Korean version of Modified Barthel Index (K-MBI) were performed. [Results] Both groups showed significant improvement in ARAT, FM, and K-MBI after the interventions. Also, there were significant difference in ARAT, FM, and K-MBI between the two groups. [Conclusion] mCIT remains a promising intervention. However, its efficacy appears to be enhanced by use of MP after mCIT clinical sessions.

**Title:** Goal setting practice in services delivering community-based stroke rehabilitation: a United Kingdom (UK) wide survey.  
**Citation:** Disability & Rehabilitation, 01 July 2015, vol./is. 37/14(1291-1298), 09638288  
**Author(s):** Scobbie, Lesley, Duncan, Edward A., Brady, Marian C., Wyke, Sally

**Abstract:** Purpose: We investigated the nature of services providing community-based stroke rehabilitation across the UK, and goal setting practice used within them, to inform evaluation of a goal setting and action planning (G-AP) framework. Methods: We designed, piloted and electronically distributed a survey to health professionals working in community-based stroke rehabilitation settings across the UK. We optimised recruitment using a multi-faceted strategy. Results: Responses were analysed from 437 services. Services size, composition and input was highly variable; however, most were multi-disciplinary (82%; n = 335/407) and provided input to a mixed diagnostic group of patients (71%; n = 312/437). Ninety one percent of services (n = 358/395) reported setting goals with 'all' or 'most' stroke survivors. Seventeen percent (n = 65/380) reported that no methods were used to guide goal setting practice; 47% (n = 148/315) reported use of informal methods only. Goal setting practice varied, e.g. 98% of services (n = 362/369) reported routinely asking patients about goal priorities; 39% (n = 141/360) reported routinely providing patients with a copy of their goals. Conclusions: Goal setting is embedded within community-based stroke rehabilitation; however, practice varies and is potentially sub-optimal. Further evaluation of the G-AP framework is warranted to inform optimal practice. Evaluation design will take account of the diverse service models that exist.

**Title:** Introduction to the Special Issue: Issues in Career Development and Vocational Rehabilitation for People With Multiple Sclerosis.  
**Citation:** Rehabilitation Research, Policy & Education (Springer Publishing Company, Inc.), 01 June 2015, vol./is. 29/2(106-108), 21686653  
**Author(s):** Rumrill Jr., Phillip D.
Title: Differential Vocational Rehabilitation Service Patterns Related to the Job Retention and Job-Seeking Needs of Individuals With Multiple Sclerosis.

Citation: Rehabilitation Research, Policy & Education (Springer Publishing Company, Inc.), 01 June 2015, vol./is. 29/2(109-121), 21686653
Author(s): Tansey, Timothy N., Strauser, David, Train, Michael P., Bishop, Malachy, Chung-Yi Chiu, Kayap, Cahit, Fong Chana

Title: An Overview of Multiple Sclerosis: Medical, Psychosocial, and Vocational Aspects of a Chronic and Unpredictable Neurological Disorder.

Citation: Rehabilitation Research, Policy & Education (Springer Publishing Company, Inc.), 01 June 2015, vol./is. 29/2(122-134), 21686653
Author(s): Rumrill Jr., Phillip D., Roessler, Richard T.

Title: Effect of Rehabilitation Technology Services on Vocational Rehabilitation Outcomes of Individuals With Multiple Sclerosis.

Citation: Rehabilitation Research, Policy & Education (Springer Publishing Company, Inc.), 01 June 2015, vol./is. 29/2(183-192), 21686653
Author(s): Chung-Yi Chiu, Tansey, Timothy N., Fong Chan, Strauser, David, Traín, Michael P., Arora, Simran

Title: Contrasting opinions on the role of the right hemisphere in the recovery of language. A critical survey.

Citation: Aphasiology, 01 September 2015, vol./is. 29/9(1020-1037), 02687038
Author(s): Gainotti, Guido

Abstract: Background: The role of the right hemisphere (RH) in the recovery of language is quite controversial. Aims: The aim of the present survey consisted in taking into account three main models advanced to explain the reconstitution of language systems: (1) the "perilesional hypothesis," which maintains that language recovery is mainly subsumed by left hemisphere (LH) tissue adjacent to the lesion; (2) the "right hemisphere hypothesis," which assumes that restitution of language entails an increased participation of the RH; and (3) the "disinhibition hypothesis," which maintains that recovery is facilitated by disruption of inhibitions exerted by RH regions over LH language areas. Methods & Procedures: The prognostic factors in poststroke aphasia are discussed first, focusing attention on factors that could subsume an increased participation of the RH to the recovery of language. Then results obtained with techniques of noninvasive brain stimulations of the RH are taken critically into account. Outcomes & Results: As for the prognostic factors, the following points are stressed: (1) the anatomical extension of the LH lesion plays an important role both on the degree and on the path of recovery; (2) the RH structures involved in the recovery of language are generally mirror structures of the damaged LH areas; and (3) the time elapsed since the onset of aphasia influences the contribution that contralateral and ipsilesional areas give to the recovery of language. As for results obtained with techniques of noninvasive brain stimulations of the RH, this point remains controversial, because most authors support the "disinhibition hypothesis," but theoretical and factual reasons suggest caution in the interpretation of these results. Conclusions: Since the meaning of the RH activations and of results obtained with techniques of noninvasive brain stimulations remain controversial, some tentative recommendations to clarify these issues are advanced.

Full Text: Available from Taylor & Francis in Aphasiology
Title: Life goals and social identity in people with severe acquired brain injury: an interpretative phenomenological analysis.

Citation: Disability & Rehabilitation, 01 July 2015, vol./is. 37/14(1234-1241), 09638288

Author(s): Martin, Rachelle, Levack, William M. M., Sinnott, K. Anne

Abstract: Purpose: While there is a growing body of literature exploring life goals in rehabilitation, little research has been undertaken that includes the voice of the end-user. This study examined the views and experiences of people with severe acquired brain injury regarding the place of 'life goals' in residential rehabilitation. Methods: Interpretative phenomenological analysis was used to collect and analyze data from five semi-structured interviews with participants in a residential rehabilitation setting. Results: Three inter-related themes emerged from this study. Social connectedness (being 'part of things') emerged as a life goal of central importance for all participants (Theme 1). However, in order to achieve this sense of belonging, the participants needed to tentatively balance the opportunities arising within their environmental milieu (Theme 2) with the interpersonal factors relating to their unchanged, changed and changing self-identity (Theme 3). Conclusions: This study suggests that social identity and social connectedness ought to be primary foci of rehabilitation rather than matters only of secondary concern. Consideration needs to be given to both the environmental contexts and the intrapersonal strategies that support people who require residential rehabilitation services to achieve social connection, and thus their life goals, following a severe acquired brain injury.

Title: Exploring the decision-making process in the delivery of physiotherapy in a stroke unit.

Citation: Disability & Rehabilitation, 01 July 2015, vol./is. 37/14(1277-1284), 09638288

Author(s): McGlinchey, Mark P., Davenport, Sally

Abstract: Purpose: The aim of this study was to explore the decision-making process in the delivery of physiotherapy in a stroke unit. Methods: A focused ethnographical approach involving semi-structured interviews and observations of clinical practice was used. A purposive sample of seven neurophysiotherapists and four patients participated in semi-structured interviews. From this group, three neurophysiotherapists and four patients were involved in observation of practice. Data from interviews and observations were analysed to generate themes. Results: Three themes were identified: planning the ideal physiotherapy delivery, the reality of physiotherapy delivery and involvement in the decision-making process. Physiotherapists used a variety of clinical reasoning strategies and considered many factors to influence their decision-making in the planning and delivery of physiotherapy post-stroke. These factors included the therapist's clinical experience, patient's presentation and response to therapy, prioritisation, organisational constraints and compliance with organisational practice. All physiotherapists highlighted the importance to involve patients in planning and delivering their physiotherapy. However, there were varying levels of patient involvement observed in this process. Conclusions: The study has generated insight into the reality of decision-making in the planning and delivery of physiotherapy post-stroke. Further research involving other stroke units is required to gain a greater understanding of this aspect of physiotherapy.

Title: Motivational interviewing for improving recovery after stroke.

Citation: Cochrane Database of Systematic Reviews, 01 June 2015, vol./is. /6(0-), 1469493X

Author(s): Cheng D, Qu Z, Huang J, Xiao Y, Luo H, Wang J

Abstract: Psychological problems are common complications following stroke that can cause stroke survivors to lack the motivation to take part in activities of daily living. Motivational interviewing provides a specific way for enhancing intrinsic motivation, which may help to improve activities of daily living for stroke survivors. To investigate the effect of motivational interviewing for improving activities of daily living after stroke. We searched the Cochrane Stroke Group's Trials Register (November 2014), the Cochrane Central Register of Controlled Trials (CENTRAL; 2015, Issue 1), MEDLINE (1948 to March 2015), EMBASE (1980 to March 2015), CINAHL (1982 to March 2015), AMED (1985 to March 2015), PsycINFO (1806 to March 2015), PsycBITE (March 2015) and four Chinese databases. In an effort to identify further published, unpublished and ongoing trials, we searched ongoing trials registers and conference proceedings, checked
reference lists, and contacted authors of relevant studies. Randomised controlled trials (RCTs) comparing motivational interviewing with no intervention, sham motivational interviewing or other psychological therapy for people with stroke were eligible. Two review authors independently selected studies for inclusion, extracted eligible data and assessed risk of bias. Outcome measures included activities of daily living, mood and death. One study involving a total of 411 participants, which compared motivational interviewing with usual care, met our inclusion criteria. The results of this review did not show significant differences between groups receiving motivational interviewing or usual stroke care for participants who were not dependent on others for activities of daily living, nor on the death rate after three-month and 12-month follow-up, but participants receiving motivational interviewing were more likely to have a normal mood than those who received usual care at three-months and 12-months follow-up. There is insufficient evidence to support the use of motivational interviewing for improving activities of daily living after stroke. Further well designed RCTs are needed.

Full Text:
Available from Wiley in Cochrane Library, The

Title: Pharmacological Approaches to Delaying Disability Progression in Patients with Multiple Sclerosis.

Citation: Drugs, 01 June 2015, vol./is. 75/9(947-977), 00126667
Author(s): Wiendl, Heinz, Meuth, Sven

Abstract: In individuals with multiple sclerosis, physical and cognitive disability progression are clinical and pathophysiological hallmarks of the disease. Despite shortcomings, particularly in capturing cognitive deficits, the Expanded Disability Status Scale is the assessment of disability progression most widely used in clinical trials. Here, we review treatment effects on disability that have been reported in large clinical trials of disease-modifying treatment, both among patients with relapsing-remitting disease and among those with progressive disease. However, direct comparisons are confounded to some degree by the lack of consistency in assessment of disability progression across trials. Confirmed disability progression (CDP) is a more robust measure when performed over a 6-month than a 3-month interval, and reduction in the risk of 6-month CDP in phase III trials provides good evidence for the beneficial effects on disability of several high-efficacy treatments for relapsing-remitting disease. It is also becoming increasingly clear that therapies effective in relapsing-remitting disease have little impact on the course of progressive disease. Given that the pathophysiological mechanisms, which lead to the long-term accrual of physical and cognitive deficits, are evident at the earliest stages of disease, it remains a matter of debate whether the most effective therapies are administered early enough to afford patients the best long-term outcomes.

Title: Increasing upper-limb joint range of motion in post-stroke hemiplegic patients by daily hair-brushing.

Citation: British Journal of Neuroscience Nursing, 01 June 2015, vol./is. 11/3(112-117), 17470307
Author(s): Takako Minagawa, Ayako Tamura, Takako Ichihara, Yukari Hisaka, Shinji Nagahiro

Abstract: Background: Post-stroke hemiplegic patients of chronic phase often have troubles with their activities of daily life, because of the decrease in upper-limb joint range of motion and the pain of shoulder. Aim: To use a hair-brushing movement intervention with the assistance of a nurse as therapy for increasing the upper-limb joint range of motion in the acute phase in patients with hemiplegia following their first stroke. Method: This study analysed a control group and an intervention group of 26 patients each. The first measurements were made 1-2 days after stroke onset and again on the sixth day from the first measurements. The intervention comprised hair-brushing movements made by patients with the assistance of a nurse. Six joint movement angles were measured on the affected and unaffected sides. Results: Compared with the control group, the intervention group showed a significantly increased (p=0.002) passive joint range of motion in shoulder abduction and external rotation movements on the affected side. Conclusion: Hair-brushing intervention with assistance from nurses increased the joint range of motion of shoulder abduction and external rotation movements.
Title: Improving arm function in chronic stroke: a pilot study of sensory amplitude electrical stimulation via glove electrode during task-specific training.

Citation: Topics in Stroke Rehabilitation, 01 June 2015, vol./is. 22/3(169-175), 10749357
Author(s): Sullivan, Jane, Girardi, Madeline, Hensley, Melissa, Rohaus, Jordan, Schewe, Clay, Whitney, Colby, Hansen, Piper, Muir, Kimberly

Title: Does training with traditionally presented and virtually simulated tasks elicit differing changes in object interaction kinematics in persons with upper extremity hemiparesis?

Citation: Topics in Stroke Rehabilitation, 01 June 2015, vol./is. 22/3(176-184), 10749357
Author(s): Fluet, Gerard G., Merians, Alma S., Qiu, Qinyin, Rohafaza, Maryam, VanWingerden, Anita M., Adamovich, S. V.

Title: The effect of pelvic floor muscle training on sexual function in men with lower urinary tract symptoms after stroke.

Citation: Topics in Stroke Rehabilitation, 01 June 2015, vol./is. 22/3(185-193), 10749357
Author(s): Tibaek, S., Gard, G., Dehlendorff, C., Iversen, H. K., Eradal, J., Biering-Sørensen, F., Dorey, G., Jensen, R.

Title: Post-exercise hypotensive responses following an acute bout of aquatic and overground treadmill walking in people post-stroke: a pilot study.

Citation: Topics in Stroke Rehabilitation, 01 June 2015, vol./is. 22/3(231-238), 10749357
Author(s): Lai, Byron, Jeng, Brenda, Vrongistinos, Konstantinos, Jung, Taeyou

Title: A systematic review of studies reporting multivariable models to predict functional outcomes after post-stroke inpatient rehabilitation.

Citation: Disability & Rehabilitation, 15 July 2015, vol./is. 37/15(1316-1323), 09638288
Author(s): Meyer, Matthew J., Pereira, Sheliah, McClure, Andrew, Teaseil, Robert, Thind, Amardeep, Koval, John, Richardson, Marina, Speechley, Mark

Abstract: Purpose: This systematic review summarizes the utility of variables available at acute discharge after stroke for predicting functional independence at discharge from inpatient rehabilitation. Methods: A systematic review of four electronic databases (Medline, EMBASE, PsycINFO and CINAHL) was conducted to identify studies reporting multivariable models predicting post-rehabilitation Barthel Index (BI) or Functional Independence Measure (FIM®) scores. In studies meeting inclusion criteria, the frequency with which candidate predictors were found statistically significant was calculated and summarized. Results: A total of 3260 articles were screened, of which 27 were included and 63 multivariable models of discharge BI or FIM® were reported. In all, 126 candidate predictors of BI or FIM® were explored. Variables found to be most significant most frequently included admission functional level (BI or FIM®), National Institute of Health Stroke Scale (NIHSS), dysphasia, impulsivity, neglect, previous stroke, and age. Conclusions: Only a selected group of variables have repeatedly proven to be significant predictors of functional ability after post-stroke inpatient rehabilitation.

Title: Short stick exercises for fall prevention among older adults: a cluster randomized trial.

Citation: Disability & Rehabilitation, 01 July 2015, vol./is. 37/14(1268-1276), 09638288
Author(s): Yokoi, Katsushi, Yoshimasu, Kouichi, Takemura, Shigeki, Fukumoto, Jin, Kurasawa, Shigeki, Miyashita, Kazuhsia
**Abstract:** Purpose: To investigate the effects of short stick exercise (SSEs) on fall prevention and improvement of physical function in older adults. Methods: A cluster randomized trial was conducted in five residential care facilities. The intervention group (n = 51) practiced SSEs for six months, followed by routine care for six more months. The control group (n = 54) received ordinary care for 12 months. The primary outcome measure was the number of fallers, taking into account the time to first fall using the Kaplan-Meier method. The secondary outcome measures were physical and mental functions. Results: The number of fallers was significantly lower in the intervention group (n = 6) than in the control group (n = 16) during the 12 months. The adjusted hazard ratio for a first fall in the intervention group compared with the control group was 0.15 (CI, 0.03 to 0.74, p = 0.02). The fall-free period was significantly longer in the intervention group than in controls (mean ± SD, 10.1 ± 3.0 versus 9.0 ± 4.1 months, p = 0.027). The functional reach and sit and reach tests were significantly improved at three and six months. Conclusion: The SSEs appeared effective for fall prevention and improvement of physical function in older adults.

**Title:** Ankle dorsiflexion may play an important role in falls in women with fibromyalgia.

**Citation:** Clinical Biomechanics, 01 July 2015, vol./is. 30/6(593-598), 02680033

**Author(s):** Góes, Suelen M., Leite, Neiva, Stefanello, Joice M.F., Homann, Diogo, Lynn, Scott K., Rodacki, André L.F.

**Abstract:** Background Fibromyalgia is a chronic pain condition, which involves reduced range of motion. This leads to gait changes and high incidence of falls. The understanding of the gait patterns in subjects with fibromyalgia and their relationship with falls may be useful when designing intervention programs. The purpose of this study was to evaluate the range of motion of the hip and ankle joints during gait in women with and without fibromyalgia. Further, we determined the relationship between joint range of motion and falls in this population. Methods Middle-aged women (16 with fibromyalgia and 16 as control group) were recruited. Pain intensity, physical activity level, and fall prevalence were assessed. Three dimensional gait analysis provided temporal and joint kinematic variables. Findings In general, hip and ankle range of motion were similar between groups, except that fibromyalgia group showed higher plantar flexion during toe-off (P < 0.05) and reduced dorsiflexion during stance phase (P < 0.05). Additionally, in the fibromyalgia group the higher number of falls was correlated to reduced dorsiflexion during stance phase. This limitation in dorsiflexion was related to longer length of time with fibromyalgia symptoms. Interpretation Women with fibromyalgia showed a higher number of falls, reduced dorsiflexion during stance phase, and increased plantar flexion during toe-off. Also, the higher number of falls reported in the fibromyalgia group was related to reduced dorsiflexion during stance phase, which was correlated to a longer length of time living with fibromyalgia symptoms. These data suggest that improving ankle kinematics in patients with fibromyalgia may help prevent falls and improve mobility.

**Title:** Association Between Male Sex and Increased Mortality After Falls.

**Citation:** Academic Emergency Medicine, 01 June 2015, vol./is. 22/6(708-713), 10696563

**Author(s):** Nakada, Taka-aki, Nakao, Shota, Mizushima, Yasuaki, Matsuoka, Tetsuya

**Title:** Falls prevention interventions in older adults with cognitive impairment: A systematic review of reviews.

**Citation:** International Journal of Therapy & Rehabilitation, 01 June 2015, vol./is. 22/6(289-296), 17411645

**Author(s):** Booth, Vicky, Logan, Pip, Harwood, Rowan, Hood, Victoria

**Abstract:** Aim: This critical review explores the review material on falls prevention interventions in older adults with cognitive impairment, such as dementia. Method: A systematic review of reviews was conducted using the following bibliographic databases: PubMed/Medline, EMBASE, AMED, CINAHL and the Cochrane electronic library. The search terms used were: ‘falls’, ‘rehabilitation’, ‘falls prevention’, ‘interventions’, ‘cognitive impairment’, ‘dementia’, and ‘Alzheimer’s disease’. All available studies were marked against predetermined inclusion and exclusion criteria. Results: Of the seven review articles that
met the inclusion criteria, only one had a homogenous population of adults with a cognitive impairment. The most reported intervention was exercise, which was included in all seven reviews of 91 studies. Multifactorial and multicomponent falls prevention programmes were also frequently reported. Reports of efficacy were inconsistent for all the interventions reported. Conclusion: Evidence for falls prevention interventions for adults with cognitive impairment is varied and inconclusive. When compared with the literature on falls interventions in healthy older adult populations, both primary and synthesis studies in older adults with cognitive impairment are lacking in number, quality and homogeneity of sample population and interventions. Promising results are emerging but clinical recommendations cannot be made at this time.

Full Text: Available from EBSCOhost in International Journal of Therapy & Rehabilitation

Title: Management of Falls in Community-Dwelling Older Adults: Clinical Guidance Statement From the Academy of Geriatric Physical Therapy of the American Physical Therapy Association.

Citation: Physical Therapy, 01 June 2015, vol./is. 95/6(815-834), 00319023
Author(s): Avin, Keith G., Hanke, Timothy A., Kirk-Sanche, Neva, McDonough, Christine M., Shubert, Tiffany E., Hardage, Jason, Hartley, Greg

Abstract: Background. Falls in older adults are a major public health concern due to high prevalence, impact on health outcomes and quality of life, and treatment costs. Physical therapists can play a major role in reducing fall risk for older adults; however, existing clinical practice guidelines (CPGs) related to fall prevention and management are not targeted to physical therapists. Objective. The purpose of this clinical guidance statement (CGS) is to provide recommendations to physical therapists to help improve outcomes in the identification and management of fall risk in community-dwelling older adults. N. Kirk-Sanchez, PT, PhD, Department of Physical Therapy, University of Miami, Coral Gables, Florida. C.M. McDonough, PT, PhD, Department of Health Policy and Management, Health and Disability Research Institute, Boston University School of Public Health, Boston, Massachusetts, and Geisel School of Medicine at Dartmouth, Hanover, New Hampshire. T.E. Shubert, PT, PhD, Shubert Consulting, Chapel Hill, North Carolina. Design and Methods. The Subcommittee on Evidence-Based Documents of the Practice Committee of the Academy of Geriatric Physical Therapy developed this CGS. Existing CPGs were identified by systematic search and critically appraised using the Appraisal of Guidelines, Research, and Evaluation in Europe II (AGREE II) tool. Through this process, 3 CPGs were recommended for inclusion in the CGS and were synthesized and summarized. Results. Screening recommendations include asking all older adults in contact with a health care provider whether they have fallen in the previous year or have concerns about balance or walking. Follow-up should include screening for balance and mobility impairments. Older adults who screen positive should have a targeted multifactorial assessment and targeted intervention. The components of this assessment and intervention are reviewed in this CGS, and barriers and issues related to implementation are discussed. Limitations. A gap analysis supports the need for the development of a physical therapy-specific CPG to provide more precise recommendations for screening and assessment measures, exercise parameters, and delivery models. Conclusion. This CGS provides recommendations to assist physical therapists in the identification and management of fall risk in older community-dwelling adults.

Title: Translating a Fall Prevention Intervention Into Practice: A Randomized Community Trial.

Citation: American Journal of Public Health, 01 July 2015, vol./is. 105/7(1475-1481), 00900036
Author(s): Guse, Clare E., Peterson, Donna J., Christiansen, Ann L., Mahoney, Jane, Laud, Purushottam, Layde, Peter M.

Abstract: Objectives. We examined whether community translation of an effective evidence-based fall prevention program via standard monetary support can produce a community-wide reduction in fall injuries in older adults and evaluated whether an enhanced version with added technical support and capacity building amplified the fall reduction effect. Methods. We completed a randomized controlled community trial among adults aged 65 and older in (1) 10 control communities receiving no special resources or guidance on fall prevention, (2) 5 standard support communities receiving modest funding to implement Stepping On,
and (3) 5 enhanced support communities receiving funding and technical support. The primary outcome was hospital inpatient and emergency department discharges for falls, examined with Poisson regression. Results. Compared with control communities, standard and enhanced support communities showed significantly higher community-wide reductions (9% and 8%, respectively) in fall injuries from baseline (2007-2008) to follow-up (2010-2011). No significant difference was found between enhanced and standard support communities. Conclusions. Population-based fall prevention interventions can be effective when implemented in community settings. More research is needed to identify the barriers and facilitators that influence the successful adoption and implementation of fall prevention interventions into broad community practice.

Title: Longitudinal Analysis of Physical Performance, Functional Status, Physical Activity, and Mood in Relation to Executive Function in Older Adults Who Fall.

Citation: Journal of the American Geriatrics Society, 01 June 2015, vol./is. 63/6(1112-1120), 00028614
Author(s): Best, John R., Davis, Jennifer C., Liu-Ambrose, Teresa

Abstract: Objectives To examine whether good executive function (EF; the cognitive processes important for goal-oriented and controlled behavior) at baseline and maintenance of EF over time predict maintenance of physical performance, functional status, physical activity, and mood over a 1-year period, and conversely, to examine whether baseline functioning in these noncognitive domains predicts maintenance of EF over the same period of time. Design 12-month prospective cohort study. Setting Vancouver Falls Prevention Clinic. Participants Community-dwelling older adults (N = 199; mean age 81.6 ± 6.5; 63% female) referred to the clinic after a fall. Measurements At each time point, structural equation modeling created a latent EF variable from performance on five EF tasks. Physical performance (physiological falls risk and gait speed), instrumental activities of daily living (IADLs), physical activity, and depressive symptoms were also assessed at each time point. Results Higher baseline EF predicted decreases in depressive symptoms (P = .005) and maintenance of IADLs (P = .006) from baseline to follow-up. Improvements in EF correlated with increases in gait speed (P = .005) and physical activity (P = .03) and with the maintenance of IADLs (P = .002) over follow-up. All effects were independent of demographic characteristics and global cognitive function. Baseline performance in the noncognitive domains did not predict changes in EF. Conclusion In older fallers, EF is a marker of resiliency in several noncognitive domains and should therefore be assessed. Furthermore, interventions to improve EF should be tested in older fallers with EF deficits.

Sources Used:
The following databases are used in the creation of this bulletin: Amed, Cinahl & Medline.

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