Rehabilitation

Current Awareness Bulletin

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Jason Ovens
Library & Knowledge Service Manager
Title: Rehabilitation or compensation: time for a fresh perspective on speech and language therapy for dysphagia and Parkinson's disease?

Citation: International Journal of Language & Communication Disorders, 01 July 2012, vol./is. 47/4(351-364), 13682822
Author(s): Smith, Sarah K., Roddam, Hazel, Sheldrick, Heulwen

Abstract: Background: Dysphagia is a common symptom of Parkinson's disease and can have negative consequences for physical health and quality of life. A variety of treatment options are available to clinicians working with people who have dysphagia and Parkinson's disease. These options can be broadly categorized as being compensatory or rehabilitative in nature. Aims: To explore the evidence behind treatment options available to clinicians working with dysphagia and Parkinson's disease and to draw conclusions about whether compensatory or rehabilitative approaches are likely to provide the best outcomes for our patients. Methods & Procedures: A critical literature review of compensatory and rehabilitative interventions for dysphagia in Parkinson's disease was undertaken. Relevant studies were analysed for their robustness and potential clinical applications. General conclusions were drawn based on the evidence base identified in this review. Main Contribution: This review outlines the lack of evidence supporting both compensatory and rehabilitative methods of treating dysphagia in Parkinson's disease. It directs clinicians and researchers towards areas that require further investigation. Conclusions & Implications: To date, compensatory methods of treating dysphagia in Parkinson's disease have received more research attention than rehabilitative methods and yet neither approach has a strong evidence base. This review argues that rehabilitative methods could possibly have greater potential to increase swallowing safety and improve quality of life in the long-term than compensatory methods alone. However, at present there is a lack of research in this area.

Title: Communication and swallowing problems after stroke.

Citation: Nursing & Residential Care, 01 June 2012, vol./is. 14/6(282-286), 14659301
Author(s): Richards, Emma

Abstract: Speech and language therapists play a vital role to prevent a decline in quality of life. Emma Richards outlines the benefits of assessment and intervention with the nursing home population.

Full Text: Available in fulltext at EBSCOhost

Title: Comparison of Brunnstrom movement therapy and motor relearning program in rehabilitation of post-stroke hemiparetic hand: A randomized trial.

Citation: Journal of Bodywork & Movement Therapies, 01 July 2012, vol./is. 16/3(330-337), 13608592
Author(s): Pandian, Shanta, Arya, Kamal Narayan, Davidson, E. W. Rajkumar

Abstract: Summary: Background: Motor recovery of the hand usually plateaus in chronic stroke patients. Various conventional and contemporary approaches have been used to rehabilitate the hand post-stroke. However, the evidence for their effectiveness is still limited. Objective: To compare the hand therapy protocols based on Brunnstrom approach and motor relearning program in rehabilitation of the hand of chronic stroke patients. Methodology: Design: Randomized
trial. Setting: Outpatients attending the occupational therapy department of a rehabilitation institute. Subjects: 30 post-stroke subjects (35.06 ± 14.52 months) were randomly assigned into two equal groups (Group A and Group B), Outcome Measures: Brunnstrom recovery stages of hand (BRS-H), Fugl–Meyer assessment: wrist and hand (FMA-WH). Intervention: Group A received Brunnstrom hand manipulation (BHM). BHM is the hand treatment protocol of the Brunnstrom movement therapy, which uses synergies and reflexes to develop voluntary motor control. Group B received the Motor Relearning Program (MRP) based hand protocol. MRP is the practice of specific motor skills, which results in the ability to perform a task. Active practice of context-specific motor task such as reaching and grasping helps regain the lost motor functions. Results: Both the therapy protocols were effective in rehabilitation of the hand (BRS-H; p = 0.003 to 0.004, FMA-WH; p < 0.001). However, the results were statistically significant in favor of group A undergoing BHM for FMA-WH (p < 0.004) and FMA item VIII (hand motor recovery) (p < 0.033). Conclusion: BHM was found to be more effective than MRP in rehabilitation of the hand in chronic post-stroke patients.

Title: Treadmill Training for Individuals with Parkinson Disease.

Citation: Physical Therapy, 01 July 2012, vol./iss. 92/7(893-897), 00319023
Author(s): Earhart, Gammon M., Williams, April J.

Abstract: <LEAP> highlights the findings and application of Cochrane reviews and other evidence pertinent to the practice of physical therapy. The Cochrane Library is a respected source of reliable evidence related to health care. Cochrane systematic reviews explore the evidence for and against the effectiveness and appropriateness of interventions--medications, surgery, education, nutrition, exercise--and the evidence for and against the use of diagnostic tests for specific conditions. Cochrane reviews are designed to facilitate the decisions of clinicians, patients, and others in health care by providing a careful review and interpretation of research studies published in the scientific literature. Each article in this PTJ series summarizes a Cochrane review or other scientific evidence resource on a single topic and presents clinical scenarios based on real patients to illustrate how the results of the review can be used to directly inform clinical decisions. This article focuses on a patient with mild to moderate Parkinson disease. Can treadmill training improve the gait of individuals with Parkinson disease?

Full Text: Available in fulltext at EBSCOhost
Available in fulltext at ProQuest

Title: Retraining Postural Responses With Exercises Emphasizing Speed Poststroke.

Citation: Physical Therapy, 01 July 2012, vol./iss. 92/7(924-934), 00319023
Author(s): Gray, Vicki L., Juren, Larissa M., Ivanova, Tanya D., Garland, S. Jayne

Abstract: Background. Postural responses are impaired after stroke, with reduced or delayed muscle activity in the paretic leg muscles. Objective. The efficacy of exercises emphasizing speed of movement in modifying postural responses to perturbations that were not practiced was investigated. Design. This was a dual cohort design. Methods. A convenience sample of 32 individuals with hemiparesis poststroke (mean number of weeks poststroke11.3, SD4.1) who were recruited upon discharge from an inpatient rehabilitation hospital and a control group of age- and sex-matched individuals who were healthy (n32) performed a single session of exercise emphasizing speed of movement. To assess postural responses to internal perturbation, unilateral arm raise and load drop tasks were performed before exercises (pre-exercise), immediately after exercises (post-exercise), and 15 minutes after exercises (retention). The time to burst peak and
area of the biceps femoris muscle (BF) electromyographic (EMG) activity in the arm raise task was measured with the arm acceleration and velocity of the center of pressure (COP) excursion. For the load drop task, the anticipatory EMG deactivation area of the BF was calculated. In both tasks, the vertical ground reaction forces were recorded for each leg separately. Results. Before exercise, EMG and force platform measures were smaller in the stroke group than in the control group. After exercise, the paretic BF time to burst peak decreased, the paretic BF EMG area increased, and the COP velocity increased in the arm raise task, as did the paretic BF anticipatory EMG deactivation area in the load drop task. The stroke group was weight bearing more symmetrically after exercises. Most changes were retained 15 minutes after the exercises.

Limitations. The retention period was short, and there was no control group of individuals with stroke. Conclusions. The results of this efficacy study demonstrated that fast movement exercises improved postural responses to perturbations that were not practiced.

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

Title: Constraint-Induced Movement Therapy Alters Cerebral Blood Flow in Subacute Post-Stroke Patients.

Citation: American Journal of Physical Medicine & Rehabilitation, 01 September 2012, vol./is. 91/9(804-809), 08949115
Author(s): Treger, Iuly, Aidinof, Lena, Lehrer, Hiela, Kalichman, Leonid

Title: Botulinum toxin use in neuro-rehabilitation to treat obstetrical plexus palsy and sialorrhea following neurological diseases: A review.

Citation: NeuroRehabilitation, 01 July 2012, vol./is. 31/2(117-129), 10538135
Author(s): Intiso, Domenico, Basciani, M.

Abstract: In neuro-rehabilitation, botulinum toxin (BTX) as adjunct to other interventions can result in a useful therapeutic tool treating disabled people. Other than spasticity, numerous motor and non motor disorders can complicate clinical course and hamper rehabilitative process of neurological impaired patients. A review of BTX use in treating muscular imbalance of children with obstetrical brachial plexus palsy and in reducing sialorrhea following neurological diseases including amyotrophic lateral sclerosis (ASL), Parkinson disease and cerebral palsy (CP) is provided. Clinicians have to face unique and difficult to treat clinical conditions such as ulcers, sores and abnormal posture and movement disorders due to neurological affections. BTX effectiveness in treating some of these conditions is also provided. Since, neurologically disabled subjects can show complex dysfunction, prior to initiating BTX therapy, specific functional limitations, goals and expected outcomes of treatment should be evaluated and discussed with family and caregivers.

Title: An adolescent with intact motor skills and intelligence after infant hemorrhagic stroke without rehabilitation therapy: A case report.

Citation: NeuroRehabilitation, 01 July 2012, vol./is. 31/2(157-160), 10538135
Author(s): Lee, Shenghuo, Yan, Tiebin, Lu, Xiao

Abstract: Devastating intracerebral hemorrhagic stroke is rarely encountered in children, but it has a high mortality rate. The case of a 15-year-old boy who survived a major stroke at 40 days
old is described. He showed no significant motor or intelligence impairment in adolescence until he was hospitalized for transient left hand tremors and slight left hand weakness caused by a cyst. The patient's almost complete motor recovery highlights the power of neural plasticity in young patients. The pediatric stroke was huge, but this did not affect his adolescent movement or intelligence, demonstrating the great neuroplastic potential of the developing human brain. These observations may help increase our knowledge about stroke in children and improve the treatment of pediatric stroke patients.

Title: Effects of forced use combined with scheduled home exercise program on upper extremity functioning in individuals with hemiparesis.

Citation: NeuroRehabilitation, 01 July 2012, vol./is. 31/2(185-195), 10538135
Author(s): Park, Hae-Yean, Yoo, Eun-Young, Park, Soo Hyun, Park, Ji-Hyuk, Kang, Dae-Hyuk, Chung, Bo-In, Jung, Min-Ye

Abstract: Objectives: The aims of this study were to 1) investigate the effects of forced use combined with scheduled home exercise program compared to forced use only on increasing upper extremity functioning, 2) examine whether increased upper extremity functioning generalized to activities of daily living (ADL) functioning, and 3) explore participants' psychosocial functioning. Methods: A single-subject A-B-A'-C research design was employed in this study. The intervention consisted of two conditions: forced use only (intervention period B), and forced use in addition to scheduled home exercise program (intervention period C). Results: The results were as follows: 1) Forced use combined with scheduled home exercise program compared to forced use only allowed individuals with stroke to take part in exercise programs on their own within their home setting, ultimately improving their upper extremity functioning. 2) The program's promotion of performance in ADL tasks have the advantage of keeping participants focused so that a number of exercises can be maintained throughout the intervention. 3) Finally, forced use combined with scheduled home exercise program showed partial effects on improving the participants' psychosocial functioning. Conclusion: The results of the present study suggest that forced use combined with scheduled home exercise program compared to forced use only has the potential to be a cost- and resource-efficient method for intensifying rehabilitation.

Title: Virtual reality in the rehabilitation of the arm after hemiplegic stroke: a randomized controlled pilot study.

Citation: Clinical Rehabilitation, 01 September 2012, vol./is. 26/9(798-806), 02692155
Author(s): Crosbie, Jh, Lennon, S, McGoldrick, Mc, McNeill, Mdj, McDonough, Sm

Full Text: Available in fulltext at ProQuest

Title: Home-based treadmill training for individuals with Parkinson’s disease: a randomized controlled pilot trial.

Citation: Clinical Rehabilitation, 01 September 2012, vol./is. 26/9(817-826), 02692155
Author(s): Canning, Colleen G, Allen, Natalie E, Dean, Catherine M, Goh, Lina, Fung, Victor SC

Full Text: Available in fulltext at ProQuest

Title: An analysis of the “goal” in aphasia rehabilitation.

Citation: Aphasiology, 01 August 2012, vol./is. 26/8(971-984), 02687038
**Title:** The close relatives of people who have had a traumatic brain injury and their special needs.

**Citation:** Brain Injury, 01 August 2012, vol./is. 26/9(1084-1097), 02699052
**Author(s):** Lefebvre, Hélène, Levert, Marie-Josée

**Abstract:** Primary objective: This study aims to paint a picture of the needs of people close to individuals with a TBI and the services offered to answer these needs, from the point of view of the individuals with a TBI and health professionals. Research design: This study has a qualitative design and a reflexive group was used to collect data. The démarche réflexive d'analyse en partenariat, DRAP (developing reflexive analysis for partnership) was used as a data collection method. The sample comprised Montreal family members \( n = 4 \), Outaouais family members \( n = 8 \), Abitibi family members \( n = 7 \); Montreal care providers \( n = 9 \), Outaouais care providers \( n = 9 \), Outaouais care providers \( n = 11 \) and Abitibi care providers \( n = 9 \). Main outcomes and results: The results show that people close to individuals with a TBI need information on the health problem, specifically with regard to the diagnostic, the prognostic, and the factors that influence it, as well as the steps towards rehabilitation, and care and services. The results show that close ones need specific, quality services and continuity of services. Conclusion: In conclusion, the pertinence of this study lies in the desire of close ones and health professionals to ease the adaptation process imposed by a TBI, and to promote the well-being of informal caregivers.

**Title:** Reliability of the Motor Learning Strategy Rating Instrument for Children and Youth with Acquired Brain Injury.

**Citation:** Physical & Occupational Therapy in Pediatrics, 01 August 2012, vol./is. 32/3(288-305), 01942638
**Author(s):** Kamath, Trishna, Pfeifer, Megan, Banerjee-Guenette, Priyanka, Hunter, Theresa, Ito, Julia, Salbach, Nancy M., Wright, Virginia, Levac, Danielle
**Abstract**: Purpose: To evaluate reliability and feasibility of the Motor Learning Strategy Rating Instrument (MLSRI) in children with acquired brain injury (ABI). The MLSRI quantifies the extent to which motor learning strategies (MLS) are used within physiotherapy (PT) interventions. Methods: PT sessions conducted by ABI team physiotherapists with a convenience sample of children with ABI (4-18 years) were videotaped and independently scored later by two raters trained in MLSRI use. Intraclass correlation coefficients (ICCs) and 95% confidence intervals (CIs) estimated intra- and inter-rater reliability. Results: Eighteen PT sessions were evaluated. Intra- and inter-rater reliability ICCs for total score were 0.86 (95% CI: 0.66-0.94) and 0.50 (95% CI: 0.08-0.78), respectively. MLSRI category ICCs were 0.56-0.86 (intra-rater) and 0.16-0.84 (inter-rater). Conclusions: Intra-rater reliability of MLSRI total score was excellent. Moderate inter-rater reliability may partially be due to inconsistent item interpretation between raters. Revisions and further reliability testing are required before recommending the MLSRI for clinical and research use.

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**Title**: Effect of carer education on functional abilities of patients with stroke.

**Citation**: International Journal of Therapy & Rehabilitation, 01 July 2012, vol./is. 19/7(380-385), 17411645

**Author(s)**: Mudzi, Witness, Stewart, Aimee, Musenge, Eustasius

**Abstract**: Background/Aim: Stroke is a well-documented public health problem in low, middle, and high-income countries. Post stroke, patients are discharged home quite early and usually need help with activities of daily living. This help is usually provided by informal carers. The purpose of this study was to establish the effect of carer education on functional abilities of patients with stroke in a low resource setting where access to rehabilitation post discharge was limited. Methods: A randomised controlled trial consisting of two groups (control and experimental) each with 100 patients and their carers was used. The carers in the control group received individualised training as was needed to help look after the person with stroke. The patient's functional abilities were measured using the Barthel Index and the Rivermead Mobility Index. Measurements were taken at discharge, 3, 6 and 12 months post discharge from hospital. Results: Patients were discharged home with low functional abilities and though they improved over time, they did not do so to satisfactory levels. Carer education alone did not result in significant improvements in patients' functional abilities. Implications and conclusion: There is a need to devise new ways of providing rehabilitation to patients post discharge from hospital e.g. strengthen domiciliary visits. Carers require more support to enable them to positively influence patient outcomes post stroke.

**Full Text**: Available in fulltext at EBSCOhost

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**Title**: Suitability of Nintendo Wii Balance Board for rehabilitation of standing after stroke.

**Citation**: Physical Therapy Reviews, 01 October 2012, vol./is. 17/5(311-321), 10833196

**Author(s)**: Harvey, Nathan, Ada, Louise

**Abstract**: Background: Normal standing requires ongoing postural adjustments while performing a variety of everyday tasks. Reduced muscle strength and dexterity affect the ability to stand after stroke. Biofeedback has been shown to be effective in training lower limb activities in people with stroke. Nintendo Wii, Nintendo Wii Balance Board, and Nintendo Wii Fit Plus are potentially useful devices for providing feedback to train standing after stroke. Objectives: What specific Nintendo Wii Fit Plus games are suitable for rehabilitation of standing in patients with stroke? Method: A criteria-based review of the Nintendo Wii Fit Plus was carried out to determine the movements required, feedback provided, demands upon the patient, difficulty of and instruction provided by
the Nintendo Wii Fit Plus games in the context of stroke rehabilitation. Seventy-five Nintendo Wii Fit Plus games were reviewed and 20 were included for in-depth review. Major findings: The games require movements of the centre of mass in different directions, provide feedback in different ways and place additional physical and cognitive demands upon the patient. Only five games are suitable for people who have severely impaired ability to stand. Six games are suitable for people with moderately impaired standing and nine games are suitable only for people with mildly impaired standing ability. Game goals and the position of the patient can be modified to make the games target physiotherapy goals. Conclusions: Enough suitable games exist to make the Nintendo Wii and Nintendo Wii Fit Plus an appropriate biofeedback device for rehabilitation of standing after stroke.

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Available in fulltext at Physical Therapy Reviews; Note: Customer code:ruh-bath Username:library Password:movie

Title: Sexual Functioning 1 Year After Traumatic Brain Injury: Findings From a Prospective Traumatic Brain Injury Model Systems Collaborative Study.

Citation: Archives of Physical Medicine & Rehabilitation, 01 August 2012, vol./is. 93/8(1331-1337), 00039993
Author(s): Sander, Angelle M., Maestas, Kacey Little, Pappadis, Monique R., Sherer, Mark, Hammond, Flora M., Hanks, Robin

Abstract: Sander AM, Maestas KL, Pappadis MR, Sherer M, Hammond FM, Hanks R, and the NIDRR Traumatic Brain Injury Model Systems Module Project on Sexuality After TBI. Sexual functioning 1 year after traumatic brain injury: findings from a prospective Traumatic Brain Injury Model Systems collaborative study. Objective: To investigate the incidence and types of sexual difficulties in men and women with traumatic brain injury (TBI) 1 year after injury, as well as their comfort level in discussing problems with health care professionals. Design: Prospective cohort study. Setting: Community. Participants: Persons with TBI (N=223; 165 men and 58 women) who had been treated at 1 of 6 participating TBI Model Systems inpatient rehabilitation units and were living in the community. Interventions: None. Main Outcome Measures: Derogatis Interview for Sexual Functioning-self-report (DISF-SR); Global Sexual Satisfaction Index (GSSI); structured interview regarding changes in sexual functioning; and comfort level discussing sexuality with health care professionals. Results: Women with TBI scored significantly below the normative sample for all subscales of the DISF-SR, including sexual cognition/fantasy, arousal, sexual behavior/experience, and orgasm. Men scored significantly below the normative sample on all scales except arousal. Women reported greater dysfunction than men for sexual cognition/fantasy and arousal. Twenty-nine percent of participants reported dissatisfaction with sexual functioning on the GSSI, with a greater percentage of men reporting dissatisfaction. Sixty-eight percent of participants indicated that they would spontaneously raise issues of sexual difficulties with health care professionals, while the remainder would either bring it up only if directly asked or would not discuss it at all. Conclusions: Sexual difficulties were present in a substantial portion of community-dwelling people with TBI at 1 year after injury. Educational interventions to increase awareness among people with TBI and rehabilitation professionals are warranted, as well as interventions to improve sexual functioning.

Title: Comorbid Disease in Persons With Traumatic Brain Injury: Descriptive Findings Using the Modified Cumulative Illness Rating Scale.

Citation: Archives of Physical Medicine & Rehabilitation, 01 August 2012, vol./is. 93/8(1338-1342), 00039993
Author(s): Holcomb, Erin M., Millis, Scott R., Hanks, Robin A.

Abstract: Abstract: Holcomb EM, Millis SR, Hanks RA. Comorbid disease in persons with traumatic brain injury: descriptive findings using the Modified Cumulative Illness Rating Scale. Objective: To provide descriptive findings regarding the overall health status and prevalence of medical comorbidities experienced by traumatic brain injury (TBI) patients. Design: Inception cohort design with cross-sectional follow-up at 1 to 15 years. Setting: Rehabilitation hospital. Participants: Adults (N=258) with moderate to severe TBI. Interventions: Not applicable. Main Outcome Measure: The Modified Cumulative Illness Rating Scale is a 14-item rating scale used to indicate health status by rating impairment across 14 different domains. Results: The TBI sample had lower rates of comorbidities compared with other rehabilitation populations, including stroke and orthopedic samples. The most commonly encountered medical conditions within our sample were eyes, ears, nose, and throat problems, psychiatric or behavioral disturbances, hypertension, and musculoskeletal injury at mild to moderate severity. Prevalence of conditions did not differ by sex, race, or cause of TBI. Conclusions: The current TBI sample was relatively healthy with few medical comorbidities. Further, the Modified Cumulative Illness Rating Scale may better be used as a standardized checklist to assess for the presence of co-occurring conditions, given the near absence of conditions in the higher range of severity.

Title: A Longitudinal Study of Major and Minor Depression Following Traumatic Brain Injury.

Citation: Archives of Physical Medicine & Rehabilitation, 01 August 2012, vol./is. 93/8(1343-1349), 00039993
Author(s): Hart, Tessa, Hoffman, Jeanne M., Pretz, Christopher, Kennedy, Richard, Clark, Allison N., Brenner, Lisa A.

Abstract: Abstract: Hart T, Hoffman JM, Pretz C, Kennedy R, Clark AN, Brenner LA. A longitudinal study of major and minor depression following traumatic brain injury. Objective: To examine patterns of change and factors associated with change in depression, both major (major depressive disorder [MDD]) and minor, between 1 and 2 years after traumatic brain injury (TBI). Design: Observational prospective longitudinal study. Setting: Inpatient rehabilitation centers, with 1- and 2-year follow-up conducted primarily by telephone. Participants: Persons with TBI (N=1089) enrolled in the Traumatic Brain Injury Model Systems database, followed at 1 and 2 years postinjury. Interventions: Not applicable. Main Outcome Measure: Patient Health Questionnaire-9. Results: Among participants not depressed at 1 year, close to three fourths remained so at 2-year follow-up. However, 26% developed MDD or minor depression between the first and second years postinjury. Over half of participants with MDD at year 1 also reported MDD the following year, with another 22% reporting minor depression; thus three fourths of those with MDD at year 1 experienced clinically significant symptoms at year 2. Almost one third of those with minor depression at year 1 traversed to MDD at year 2. Polytomous logistic regression confirmed that worse depression at year 1 was associated with higher odds of depression a year later. For those without depression at year 1, symptom worsening over time was related to year 2 problematic substance use and lower FIM motor and cognitive scores. For those with depression at year 1, worsening was associated with lower cognitive FIM, poor social support, and preinjury mental health issues including substance abuse. Conclusions: Major and minor depression exist on a continuum along which individuals with TBI may traverse over time. Predictors of change differ according to symptom onset. Results highlight importance of long-term monitoring for depression, treating minor as well as major depression, and developing interventions for comorbid depression and substance abuse.
Title: Variation in Adherence to New Quality-of-Care Indicators for the Acute Rehabilitation of Children With Traumatic Brain Injury.

Citation: Archives of Physical Medicine & Rehabilitation, 01 August 2012, vol./is. 93/8(1371-1376), 00039993

Author(s): Rivara, Frederick P., Ennis, Stephanie K., Mangione-Smith, Rita, MacKenzie, Ellen J., Jaffe, Kenneth M.

Abstract: Abstract: Rivara FP, Ennis SK, Mangione-Smith R, MacKenzie EJ, Jaffe KM. Variation in adherence to new quality-of-care indicators for the acute rehabilitation of children with traumatic brain injury. Objective: To determine variations in care provided by 9 inpatient rehabilitation units for children with traumatic brain injury (TBI) using newly developed quality indicators. Design: Retrospective cohort study. Setting: Nine inpatient rehabilitation units. Participants: Children (N=174; age range, 0–17y) admitted for the inpatient rehabilitation of moderate to severe TBI. Interventions: Not applicable. Main Outcome Measures: Adherence to 119 newly developed quality-of-care indicators in 7 different domains: general care, family-centered care, cognitive-communication, motor, neuropsychological, school, and community integration. Results: There was substantial variation both within and between institutions in the percentage of patients receiving recommended care in the 7 domains. The lowest scores were found for the school domain. Only 5 institutions scored above 50% for all quality indicators, and only 1 institution scored above 70% overall. Greater adherence to quality indicators was found for facilities with a higher proportion of therapists with pediatric training and for facilities that only admitted children. Patient volume was not associated with adherence to quality indicators. Conclusions: The results indicate a tremendous variability and opportunity for improvement in the care of children with TBI.

Title: Factors Influencing Selection for Rehabilitation After Stroke: A Questionnaire Using Case Scenarios to Investigate Physician Perspectives and Level of Agreement.

Citation: Archives of Physical Medicine & Rehabilitation, 01 August 2012, vol./is. 93/8(1457-1459), 00039993

Author(s): Kennedy, Genevieve M., Brock, Kim A., Lunt, Alison W., Black, Susan J.

Abstract: Abstract: Kennedy GM, Brock KA, Lunt AW, Black SJ. Factors influencing selection for rehabilitation after stroke: a questionnaire using case scenarios to investigate physician perspectives and level of agreement. Objectives: To explore the key factors involved in decision making when selecting patients for rehabilitation after stroke and to examine the level of agreement among physician assessors regarding admission to rehabilitation. Design: Questionnaire. Setting: Health services with rehabilitation units in Victoria, Australia. Participants: Rehabilitation unit physicians. Interventions: Not applicable. Main Outcome Measure: Questionnaire with 2 components: the clinical and nonclinical factors that influence decision making and clinical case scenarios. Results: Responses were received from 17 physicians from 12 of the 18 health services in Victoria. The most influential clinical factors listed by the respondents were prognosis, social supports, anticipated discharge destination, age, and anticipated length of stay. Key nonclinical factors were prioritization of internal health service referrals, patient’s residence, and workforce capacity. Analysis of the clinical scenarios of patients with severe stroke showed that there was variability in the responses, with high levels of agreement for some cases and low levels for others. Almost all respondents agreed that prognosis was a key factor, yet, within the case scenarios, the reasons given for accepting or not accepting the patient demonstrated different opinions on the prognosis of the case presented. Conclusions: The decision-making processes in selection for rehabilitation and the factors that influence that
decision require further investigation to optimize the use and outcomes from rehabilitation resources.

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**Title:** The Aphasic Storyteller: Coconstructing Stories to Promote Psychosocial Well-Being After Stroke.

**Citation:** Qualitative Health Research, 01 October 2012, vol./is. 22/10(1303-1316), 10497323

**Author(s):** Bronken, Berit Arnesveen, Kirkevold, Marit, Martinsen, Randi, Kvigne, Kari

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**Title:** 'You needed to rehab ... families as well': family members' own goals for aphasia rehabilitation.

**Citation:** International Journal of Language & Communication Disorders, 01 September 2012, vol./is. 47/5(511-521), 13682822

**Author(s):** Howe, Tami, Davidson, Bronwyn, Worral, Linda, Hersh, Deborah, Ferguson, Alison, Sherratt, Sue, Gilbert, Jocelyn

**Abstract:** Background: Aphasia affects family members in addition to the individuals with the communication disorder. In order to develop appropriate services for the relatives of people with aphasia post-stroke, their rehabilitation goals need to be identified. Aim: The aim of the current investigation was to identify the rehabilitation goals that family members of individuals with aphasia have for themselves. Methods & Procedures: Forty-eight family members of adults with aphasia post-stroke participated in in-depth semi-structured interviews to identify the rehabilitation goals they had for themselves. All the interviews were transcribed verbatim and analysed using qualitative content analysis. Outcomes & Results: Analysis revealed seven categories of goals that the family members had for themselves: to be included in rehabilitation, to be provided with hope and positivity, to be able to communicate and maintain their relationship with the person with aphasia, to be given information, to be given support, to look after their own well-being, and to be able to cope with new responsibilities. A few participants reported that, at certain times during the rehabilitation process, they did not have any goals for themselves. Conclusions & Implications: This study highlights that family members of individuals with aphasia have a number of aphasia-related rehabilitation goals for themselves. In order to provide a family-centred approach to rehabilitation, health professionals, including speech-language pathologists, need systematically to identify and address family members' goals in light of the categories revealed in this investigation.

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**Title:** Reducing Depression in Stroke Survivors and Their Informal Caregivers: A Randomized Clinical Trial of a Web-Based Intervention.

**Citation:** Rehabilitation Psychology, 01 August 2012, vol./is. 57/3(196-206), 00905550

**Author(s):** Smith, Gregory C., Egbert, Nichole, Dellman-Jenkins, Mary, Nanna, Kevin, Palmieri, Patrick A.

**Abstract:** Purpose/Objectives: To develop and test the efficacy of a Web-based intervention for alleviating depression in male stroke survivors (SSs) and their spousal caregivers (CGs) that blends both peer and professional support. Design and Methods: The research consisted of an intervention protocol evaluated by a focus group of rehabilitation professionals, a "think aloud" session conducted with female stroke CGs, and a usability test of the intervention's online features with 7 female stroke CGs. Efficacy of the final protocol was tested in a 2-group randomized clinical trial with a sample of 32 CG-SS dyads. The CGs in the intervention condition received an online...
group intervention. Intervention components were based on the Stress Process Model. Those CGs in a control condition received minimal support with individualized access to relevant online information. Measures of depression, as well as the secondary outcomes of mastery, self-esteem, and social support, were obtained from SSs and CGs at pretest, posttest, and 1-month later. Results: At posttest and 1 month later, CGs in the intervention condition reported significantly lower depression than CGs in the control condition with baseline depression controlled. There was no significant effect on depression among SSs. Although no significant treatment effects for either SSs or CGs were found on the secondary outcomes, posttreatment changes on some constructs were significantly correlated with change in depression. Conclusions/Implications: CGs benefit from Web-based programs that help them better understand both their emotional needs and those of the SS.

Title: Life satisfaction of couples 3 years after stroke.

Citation: Disability & Rehabilitation, 01 October 2012, vol./is. 34/17(1468-1472), 09638288
Author(s): Achten, Diana, Visser-Meily, Johanna M. A., Post, Marcel W. M., Schepers, Vera P. M.

Abstract: Purpose: To compare the life satisfaction of stroke patients to that of their spouses, and to examine spouses' variables as determinants of the patients' life satisfaction. Method: Patients with a first-ever stroke who were admitted to an inpatient rehabilitation centre and their spouses were included (n = 78 couples). Measurements took place 3 years after the stroke. Life satisfaction was measured using the Life Satisfaction Questionnaire (LiSat-9). Results: More spouses (50%) than patients (28%) were dissatisfied with their life as a whole. Spouses were also more likely to be dissatisfied with all other domains of life satisfaction than patients. The associations between the life satisfaction of patients and of spouses were weak (Cramer's V 0.00-0.43). In the backward linear regression analysis both patients' participation in social activities and spouses' life satisfaction were significantly related to patients' life satisfaction. A total of 17.8% of the variance of patients' life satisfaction could be explained by the model. Conclusions: Both spouse and patient in a couple experience decreased life satisfaction in the chronic phase after stroke, spouses even more so than patients. The life satisfaction of stroke patients was significantly related to spouses' life satisfaction. Family-centred care should be an important part of the rehabilitation process.

Title: Staff and patient views of the concept of hope on a stroke unit: a qualitative study.

Citation: Journal of Advanced Nursing, 01 September 2012, vol./is. 68/9(2061-2069), 03092402
Author(s): Tutton, Elizabeth, Seers, Kate, Langstaff, Deborah, Westwood, Martin

Abstract: tutton e., seers k., langstaff d. & westwood m. (2012) Staff and patient views of the concept of hope on a stroke unit: a qualitative study. Journal of Advanced Nursing 68(9), 2061-2069. Abstract Aim. This study explores the experience of hope for patients and staff in the context of a British stroke unit. Background. Hope is identified as a useful concept for exploring how people find meaning in recovery from illness. Uncovering the experience of hope in acute stroke care has provided evidence that can be used to facilitate rehabilitation. Methods. The methodology drew on the principles of ethnography, undertaking unstructured qualitative interviews with ten patients, ten multidisciplinary staff and 21 hours of participant observation including informal discussions with staff and patients. Data collection took place between November 2007 and November 2008. Findings. Four themes were identified: suffering, struggling with no hope and despair, hope for recovery and realistic hopefulness. Hope was experienced in the context of suffering a stroke demonstrated as loss of function, loss of mental capacity and dependency. Patients struggled to maintain a sense of hopefulness while feeling close to a slippery slope towards despair and death. Hope was expressed as a strong desire to recover, get back to normal and a time to reflect on their lives so far. Staff identified realistic hopefulness as
focused on keeping things real while balancing giving hope and avoiding false hope. Conclusion. Hope is placed within the emotional challenges of suffering and struggle inherent in recovery from stroke. The staff work with patients' hopes but offer realistic hopefulness as a practical strategy for recovery. Further interventions are required for working with feelings of despair or no hope.

Full Text:
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Title: The DRESS trial: a feasibility randomized controlled trial of a neuropsychological approach to dressing therapy for stroke inpatients.

Citation: Clinical Rehabilitation, 01 August 2012, vol./is. 26/8(675-685), 02692155
Author(s): Walker, Marion F, Sunderland, Alan, Fletcher-Smith, Joanna, Drummond, Avril, Logan, Pip, Edmans, Judi A, Garvey, Katherine, Dineen, Robert A, Ince, Paul, Horne, Jane, Fisher, Rebecca J, Taylor, Jenny L

Full Text:
Available in fulltext from Clinical Rehabilitation at ProQuest

Title: Effects of gait rehabilitation with a footpad-type locomotion interface in patients with chronic post-stroke hemiparesis: a pilot study.

Citation: Clinical Rehabilitation, 01 August 2012, vol./is. 26/8(686-695), 02692155
Author(s): Tanaka, Naoki, Saitou, Hideyuki, Takao, Toshifumi, Iizuka, Noboru, Okuno, Junko, Yano, Hiroaki, Tamaoka, Akira, Yanagi, Hisako

Full Text:
Available in fulltext at ProQuest

Title: Bobath Concept versus constraint-induced movement therapy to improve arm functional recovery in stroke patients: a randomized controlled trial.

Citation: Clinical Rehabilitation, 01 August 2012, vol./is. 26/8(705-715), 02692155
Author(s): Huseyinsinoglu, Burcu Ersoz, Ozdincler, Arzu Razak, Krespi, Yakup

Full Text:
Available in fulltext at ProQuest

Title: Gender differences in quality of life after stroke and TIA: a cross-sectional survey of out-patients.

Citation: Journal of Clinical Nursing, 01 August 2012, vol./is. 21/15/16(2386-2391), 09621067
Author(s): Franzén-Dahlin, Åsa, Laska, Ann Charlotte

Abstract: Aims and objectives. To explore how a stroke or a transient ischemic attack affects quality of life and to identify gender differences. Background. The negative effect of a stroke on the patients' quality of life has previously been studied, while the effect on patients with transient ischemic attack (TIA) is more unknown, especially in relation to gender. As poor quality of life may have a negative effect on rehabilitation it is important to investigate quality of life in this group. Design. A descriptive cross-sectional survey. Methods. All stroke and transient ischemic attack patients appointed to the out-patient stroke clinic between May 2008-August 2009 were asked to complete the Nottingham Health Profile. Results. Of 1048 patients, 379 (50%) of the stroke
patients and 117 (40%) of the patients with transient ischemic attack completed the form within the first months after onset. Female stroke patients were significantly more negatively affected in all domains except the social domain than were male stroke patients. Female transient ischemic attack patients were significantly more negatively affected in all domains than were male transient ischemic attack patients. Male stroke patients had a significantly more negatively affected quality of life than male transient ischemic attack patients in the emotional, energy, social and total domains, while female stroke patients and female transient ischemic attack patients were equally negatively affected. Conclusions. This study shows that female stroke patients are more negatively affected in their quality of life than male stroke patients and that female transient ischemic attack patients are as affected as female stroke patients. This indicates that female patients with both stroke and TIA need more attention concerning their life situation. Relevance to clinical practice. Increased knowledge about how transient ischemic attack patients are affected, indicate that this group need support postdischarge to the same extension as stroke patients.

Title: A review of measures to evaluate participation outcomes post-stroke.

Citation: British Journal of Occupational Therapy, 15 September 2012, vol./is. 75/9(403-411), 03080226
Author(s): Kessler, Dorothy, Egan, Mary

Abstract: Background: Stroke is one of the most common disabling conditions of adulthood. Participation problems are extremely common post-stroke. Occupational therapists, by virtue of their commitment to enabling occupation, are in a strong position to help stroke survivors improve their participation. To demonstrate effectiveness, occupational therapists must be able to provide evidence of post-treatment changes in participation. Objective: The objective of this paper was to identify participation measures that have been developed for, or tested with, individuals who have experienced a stroke and to review them for use as occupational therapy outcome measures. Method: A literature review was carried out to locate relevant tools. These tools were then rated for psychometric and clinical properties that are critical for clinical outcome measurement. In addition, the theoretical fit of each evaluation with occupational therapy's commitment to client-centredness was considered. Results: Ten evaluations were identified and rated. These ratings were designed to assist occupational therapists to choose a participation measure for their practice. Conclusion: Selection and use of such a measure will help occupational therapists to document its effectiveness in improving participation among stroke survivors.

Title: Stroke rehabilitation and discharge planning.

Citation: Nursing Standard, 05 September 2012, vol./is. 27/1(35-39), 00296570
Author(s): Kerr, Peter

Abstract: Nurses play a pivotal role in the rehabilitation and discharge planning process of patients who have had a stroke. The nurse's role in the wider stroke multidisciplinary team is complex and diverse and, as such, stroke nurses may find it hard to describe their role and how it fits into the rehabilitation and discharge planning process. A definition of the stroke nurse role in prominent publications such as those of the Scottish Intercollegiate Guidelines Network and the Royal College of Physicians is lacking. This article emphasises the role of the stroke nurse in the rehabilitation and discharge planning process in the stroke unit, while highlighting the complexity, diversity and importance of this role in providing holistic care and support for patients who have survived a stroke. The author draws on his clinical experience of stroke nursing practice in primary, secondary and tertiary care in west central Scotland.
Title: Experiences of Caregiving, Satisfaction of Life, and Social Repercussions Among Family Caregivers, Two Years Post-Stroke.

Citation: Social Work in Health Care, 01 September 2012, vol./is. 51/8(725-742), 00981389
Author(s): Lurbe-Puerto, Kàtia, Leandro, Maria-Engracia, Baumann, Michèle

Abstract: Cerebrovascular diseases are a public health and social policy priority in Europe due to their high prevalence and the long-term disability they may result in (as the principal cause of handicap). Increasingly, family caregivers take over the care at home of these patients. Two years post-stroke, our study analyzed the feelings of family caregivers from Luxembourg and northeastern Portugal toward their experience of caregiving and its repercussions on social and couple relationships, life satisfaction, and socioeconomic characteristics. Participating hospitals identified survivors and consent was sought by letter. Patients (n = 62) and their main caregivers (n = 46 pairs) were interviewed at home. The mean life satisfaction of caregivers was similar, but the experience of providing care differed in terms of family support, and disruptions of the caregivers' family responsibilities. More Portuguese respondents gave activities up, found little time for relaxation, and estimated that their health had deteriorated; more Luxembourgers felt strong enough to cope. More Portuguese spouses reported an impact on their sex lives. Family caregivers represent a “population at risk.” Social workers can help them by providing domestic assistance, undertaking coaching activities, fostering favorable attitudes, and offering reassurance. Home-based rehabilitation in Europe involving family care must take account of cultural lifestyle issues.

Title: Nintendo Wii As a Training Tool in Falls Prevention Rehabilitation: Case Studies.

Citation: Journal of the American Geriatrics Society, 01 September 2012, vol./is. 60/9(1781-1783), 00028614
Author(s): Taylor, Matthew J. D., Shawis, Teshk, Impson, Rebecca, Ewins, Katie, McCormick, Darren, Griffin, Murray

Title: Encouraging family engagement in the rehabilitation process: a rehabilitation provider’s development of support strategies for family members of people with traumatic brain injury.

Citation: Disability & Rehabilitation, 15 November 2012, vol./is. 34/22(1855-1862), 09638288
Author(s): Foster, Allison M., Armstrong, Jonathan, Buckley, Ann, Sherry, Joanne, Young, Tony, Foliaki, Soana, James-Hohaia, Te Miria, Theadom, Alice, McPherson, Kathryn M.

Abstract: Purpose: After a moderate to severe traumatic brain injury, it is widely recommended that family members be actively engaged in the client’s rehabilitation journey because evidence suggests that this is associated with better outcomes. The ability of family members to fully engage in rehabilitation may be hindered by the barriers (logistical and psychological) they encounter. However, rehabilitation services can facilitate family engagement through a person-centred approach that provides support to remove barriers. Limited published guidance exists regarding practical and effective methods for delivering such support. This paper describes how one rehabilitation service has developed an eight-tiered approach. Key messages and
implications: Family support is provided by explicit structuring of services to include (i) early engagement, (ii) meeting cultural needs, (iii) keeping families together, (iv) actively listening, (v) active involvement, (vi) education, (vii) skills training, and (viii) support for community re-integration. Implementation of these support strategies are individualised based on the expressed needs of each family. Families report a high level of satisfaction with the service. Conclusion: A practice-based quality improvement model identified challenges, implemented changes, and observed/evaluated the results to successfully develop a multifaceted strategy for supporting families, thereby encouraging their engagement in rehabilitation. Ongoing refinements and evaluation are planned.

Title: 'Tell me what you want, what you really really want....': asking people with multiple sclerosis about enhancing their participation in physical activity.

Citation: Disability & Rehabilitation, 15 November 2012, vol./is. 34/22(1887-1893), 09638288
Author(s): Hale, Leigh A., Smith, Catherine, Mulligan, Hilda, Treharne, Gareth J.

Abstract: Purpose: This paper provides a review of research that emphasizes the importance of listening to the people whom health professionals serve when promoting participation and engagement in rehabilitation. We report on the development of an approach aiming to optimize long-term adherence in physical activity for people with multiple sclerosis (MS). This approach was very different to those based on current evidence-based exercise recommendations, although the objectives for both approaches were similar. Key message: We argue that only by ensuring that people living with chronic disability not only have a voice but a voice that is listened to, can health professionals truly engage in evidenced-based practice that works in application and meets the needs, desires and capabilities of people with MS and other chronic health conditions.

Title: The Effects of Modified Melodic Intonation Therapy on Nonfluent Aphasia: A Pilot Study.

Citation: Journal of Speech, Language & Hearing Research, 01 October 2012, vol./is. 55/5(1463-1471), 10924388
Author(s): Conklyn, Dwyer, Novak, Eric, Boissy, Adrienne, Bethoux, Francois, Chemali, Kamal, Smith, Anne, Ziegler, Wolfram

Abstract: Objective: Positive results have been reported with melodic intonation therapy (MIT) in nonfluent aphasia patients with damage to their left-brain speech processes, using the patient’s intact ability to sing to promote functional language. This pilot study sought to determine the immediate effects of introducing modified melodic intonation therapy (MMIT), a modification of MIT, as an early intervention in stroke patients presenting with Broca's aphasia. Method: After a randomized controlled single-blind design, 30 acute stroke survivors with nonfluent aphasia were randomly assigned to receive MIT treatment or no treatment. A pre/post test, based on the responsive and repetition subsections of the Western Aphasia Battery, was developed for this study. Results: After 1 session, a significant within-subject change was observed for the treatment group's adjusted total score (p = .02), and a significant difference between groups was found for adjusted total score (p = .02) favoring the treatment group. The treatment group also showed a significant change in their responsive subsection scores (p = .01) when their pre-tests from Visit 1 to Visit 2 were compared, whereas the control group showed no change, suggesting a possible carry-over effect of MIT treatment. Conclusion: This study provides preliminary data supporting the possible benefits of utilizing MMIT treatment early in the recovery of nonfluent aphasia patients.
Title: Computer-based assistive technology and changes in daily living after stroke.

Citation: Disability & Rehabilitation: Assistive Technology, 01 September 2012, vol./is. 7/5(364-371), 17483107
Author(s): Lindqvist, Eva, Borell, Lena

Abstract: The aim of this study was to examine in depth how computer-based assistive technology (AT) for cognitive support influenced the everyday lives of both persons who had had a stroke and their significant others. Method: Four participants, who had experienced cognitive limitations after a stroke, and their significant others were included in the study. The study included an intervention with a specific type of computer-based AT that was installed in the homes of the four participants for a 6-month period. Semistructured interviews were conducted before the installation to learn about the participants needs and repeated interviews took place after the installation. All collected data were analyzed based on qualitative methodology. Results: The findings illustrated how routines developed with support from the AT influenced the participants towards increased control of their everyday life, and also created daily structure and helped them regain social contacts. The findings demonstrated how the spouses also benefitted and could reduce their reminding and checking responsibilities. Conclusion: Computer-based AT has the potential to bring about changes in the everyday life for people with cognitive limitations by supporting the development of routines and by introducing, maintaining, reinforcing or regaining valuable activities. [Box: see text].

Title: How does cognitive ability affect stroke rehabilitation outcomes?

Citation: International Journal of Therapy & Rehabilitation, 01 August 2012, vol./is. 19/8(458-462), 17411645
Author(s): Gurr, Birgit, Ibbitson, Joseph

Abstract: Background: This paper discusses literature findings on the impact of pre-stroke degenerative cognitive impairments (pre-stroke dementia) on post-stroke rehabilitation outcomes. This association has practical implications for stroke rehabilitation services which are faced with the dilemma that pre-stroke cognitive impairment may be a cause of stroke and, on the other hand, stroke may cause cognitive deficits. Content: The link between pre-stroke dementia and stroke is described by explaining how vascular and neurodegenerative pathology contribute to stroke occurrence and to stroke related impairment. Stroke seems to be more closely related to dementia than previously thought and vascular factors appear to be at the core of a wide range of dementing disorders. The literature reviewed emphasises how cognitive performance at stroke onset can give indications about the anticipated level of post-stroke functional independence. Conclusion: The importance of assessing and monitoring cognitive performance of stroke survivors using reliable neuropsychological procedures is emphasised. The assessment results help to estimate rehabilitation potential, to plan the most effective interventions and to optimise post-hospital discharge arrangements. This helps clinicians on stroke units to make rehabilitation decisions addressing both cognitive variables and professional standards.

Full Text: Available in fulltext at EBSCOhost

Title: A pilot study exploring head and shoulder movement in visual field deficits following stroke.

Citation: International Journal of Therapy & Rehabilitation, 01 August 2012, vol./is. 19/8(471-477), 17411645
Author(s): Taylor, Lisa, Poland, Fiona, Stephenson, Richard
Abstract: Objective: This study investigated the effects of a systematic treatment programme on head and shoulder movement for individuals with visual field deficits following stroke, providing evidence in a clinical area that is reportedly poorly understood and has received little attention (Thumser et al, 2010). Design: The study used a single case method based on an ABC design--incorporating a pre-treatment baseline phase (A), treatment phase of 4 weeks (B), and post-treatment baseline phase (C) at week 5 and week 17. The subjects received 30 minute sessions twice weekly for 4 weeks. Results: An initial autocorrelation co-efficient calculation with a non-significant result is necessary to enable further analysis of the data--which was achieved with the current study data. Subsequent visual analysis indicated a reduction in the angle between the head and shoulder for both subjects when turning to the left but only for Subject 1 when turning to the right; celeration lines were applied to the data to indicate the significance of the results. The celeration lines were statistically significant for Subject 1 turning to the left and for Subject 2 turning to the right in addition two standard deviation band was statistically significant for Subject 2 turning to the right. Conclusions: The data from this study provide preliminary support for a theory of head and shoulder movement change following visual field deficit as a result of stroke. The change of movement measured following the introduction of the systematic treatment programme suggests that use of the systematic treatment programme may influence the head and shoulder movement of individuals with visual field deficits as measured during this study.

Full Text: Available in fulltext at EBSCOhost

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