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New / Updated Guidance from NICE

Consultation on updated guideline to assess and prevent falls in older people

Date: 2024

We're seeking views from health and care staff on our draft recommendations. One key proposal is that occupational therapists carry out home hazard assessments rather than other healthcare professionals. The evidence reviewed during guideline development indicated fewer falls with this approach.

The guideline also includes new recommendations for those in residential care and updated recommendations for hospital and community settings.

Guidance for and to support neurodivergent SLTs in their careers

Royal College of Speech and Language Therapists (RCSLT)

Date: 2024

[Written by neurodivergent speech and language therapists, the guidance focuses on how all SLTs can be allies and support neurodivergent SLTs in the workforce, with the aim of promoting inclusion and belonging, improving workforce retention and recognising the strengths and lived experience of the neurodivergent workforce.

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1. **An Investigation of the Professional Resilience Strategies Used by Experienced Occupational Therapists**

Authors: Ashby, Samantha;Watkins, Katrina and Wales, Kylie

Publication Date: 2025

Journal: OTJR : Occupation, Participation and Health

Abstract: There is a paucity of research into the strategies occupational therapists use to maintain career longevity professional resilience. The objective of the study was to identify the strategies used by occupational therapists to maintain their professional resilience. Descriptive statistics were used to analyze data from a cross-sectional survey that investigated the professional resilience strategies used by experienced occupational therapists. Valid responses were received from 489 occupational therapists from 29 countries. The most used professional resilience strategies were maintaining a belief in the value of occupational therapy, taking time for reflection on positive outcomes, using personal time management strategies, and engagement in informal and formal professional support networks. A range of professional resilience strategies are used by experienced occupational therapists in health and social care settings. The findings can be used by managers and workplace organizations to support their occupational therapy workforce.; Competing Interests: Declaration of Conflicting InterestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

2. **Using Electronic Health Record Data for Occupational Therapy Health Services Research: Invited Commentary**

Authors: Cogan, Alison M.;Roberts, Pamela and Mallinson, Trudy

Publication Date: 2025

Journal: OTJR : Occupation, Participation and Health

Abstract: Health services research (HSR) is a field of study that examines how social factors, financing systems, organizational structures and processes, health technologies, and personal behaviors affect access to health care, the quality and cost of health care, and health and well-being. HSR approaches can help build the occupational therapy evidence base, particularly in relation to population health. Data from electronic health record (EHR) systems provide a rich resource for applying HSR approaches to examine the value of occupational therapy services. Transparency about data preparation procedures is important for interpreting results. Based on our findings, we describe a six-step cleaning protocol for preparing EHR and billing data from an inpatient rehabilitation facility for research and provide recommendations for the field based on our experience. Using and reporting similar strategies across studies will improve efficiency and transparency, and facilitate comparability of results.; Competing Interests: Declaration of Conflicting InterestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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3. **Cardiopulmonary Exercise Testing, Rehabilitation, and Exercise Training in Postpulmonary Embolism**

Authors: Dharmavaram, Naga;Esmaeeli, Amir;Jacobson, Kurt;Brailovsky, Yevgeniy and Raza, Farhan

Publication Date: 2025

Journal: Heart Failure Clinics

Abstract: Long-term exercise intolerance and functional limitations are common after an episode of acute pulmonary embolism (PE), despite 3 to 6 months of anticoagulation. These persistent symptoms are reported in more than half of the patients with acute PE and are referred as "post-PE syndrome." Although these functional limitations can occur from persistent pulmonary vascular occlusion or pulmonary vascular remodeling, significant deconditioning can be a major contributing factor. Herein, the authors review the role of exercise testing to elucidate the mechanisms of exercise limitations to guide next steps in management and exercise training for musculoskeletal deconditioning.

4. **Occupational Therapy Practitioners' Perceptions of Providing Services for the Acute Postpartum Population**

Authors: Sidar, Sarah S. and Skuthan, Alysha

Publication Date: 2025

Journal: OTJR : Occupation, Participation and Health

Abstract: Occupational therapy practitioners' (OTP's) perceptions of their role in working on the acute postpartum hospital unit are unknown. The objective of this research was to determine the perspectives of OTP's enrolled in a continuing education course to gain competency in providing services to acute postpartum patients. Investigators engaged in a phenomenology consisting of semi-structured interviews with six OTP's working in acute care hospitals preparing to work on the postpartum unit. Three themes emerged from transcripts: (a) Its' Not THAT Different; (b) Willing To Try; and (c) Shifting Focus To Mom. OTPs working in hospitals identified existing skills applicable to working with acute postpartum patients, a need for additional learning to enhance competence, and a desire to focus support for the birthing person to improve maternal outcomes. Hospital onboarding and/or entry-level OTP programs should consider including education on the postpartum population. Future research should focus on program implementation on acute postpartum hospital units.; Competing Interests: Declaration of Conflicting InterestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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5. **Barriers, facilitators and referral patterns of general practitioners, physiotherapists, and people with osteoarthritis to exercise**

Authors: Bhardwaj, Avantika;Hayes, Peter;Browne, Jacqui;Grealis, Stacey;Maguire, Darragh;O'Hora, John;Dowling, Ian;Kennedy, Norelee and Toomey, Clodagh M.

Publication Date: 2024

Journal: Physiotherapy

Abstract: Background: Barriers and facilitators of general practitioners (GPs), physiotherapists (PTs), and people with hip and knee osteoarthritis (PwOA) may influence uptake of and referral to guideline-based exercise treatments for OA.; Objective: To identify barriers and facilitators of GPs, PTs and PwOA to uptake of and referral to exercise treatments for OA.; Methods: An online survey was circulated to GPs, PTs, and PwOA in Ireland from March to September 2021. Data were collected on demographics, barriers and facilitators, and referral patterns to exercise treatments for OA. Frequency distributions were used to illustrate demographics, barriers and facilitators, and referral patterns to exercise treatments for OA.; Results: 388 stakeholders responded (GPs = 148; PTs = 154; PwOA = 86). Barriers and facilitators were related to (1) stakeholder (e.g., patient tiredness and fatigue), (2) healthcare setting (e.g., appropriate referrals from GP or other sources), and (3) treatment (e.g., low-cost community-based exercise programmes) factors. While 91% of GPs would refer PwOA to physiotherapy if no barriers existed, only 60% would in their current practice. Only 33% of PwOA reported receiving a GP referral to physiotherapy.; Conclusion: Stakeholder, healthcare

setting and treatment barriers and facilitators of GPs, PTs, and PwOA influence uptake of and referral to exercise treatments for OA. Future strategies Future strategies addressing these factors may improve implementation of guideline-based management for OA. CONTRIBUTION OF THE PAPER.

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6. **Exploring the effectiveness of circuit training rehabilitation on balance, gait, and fatigue in multiple sclerosis: a systematic review and meta-analysis**

Authors: Cardini, Rebecca;Corrini, Chiara;Bertoni, Rita;Anastasi, Denise;Cattaneo, Davide and Gervasoni, Elisa

Publication Date: 2024

Journal: Physiotherapy 125, pp. 101413

Abstract: Background: People with Multiple Sclerosis (PwMS) often experience imbalance, gait dysfunction, and fatigue. Circuit Training (CT) can be viable for improving balance, gait, and fatigue in MS. To the author's knowledge, no studies have systematically reviewed the existing literature evaluating the effectiveness of CT in PwMS.; Objectives: To investigate the effectiveness of CT in improving balance, gait, and reducing fatigue in PwMS and provide a quantitative and qualitative synthesis of Randomized Controlled Trials (RCTs).; Data Sources: MEDLINE, Cochrane Central Register of Controlled Trials, EMBASE, CINAHL, Google Scholar, and PEDro Database (Dec 2021 to May 2024).; Study Selection: RCTs using CT in PwMS including balance, gait, or fatigue outcomes.; Data Synthesis: Search inclusion criteria were: i) available full text, ii) CT rehabilitation, iii) balance, gait, or fatigue measured as outcomes, and iv) articles in English. Full text articles were analyzed by two screeners. If there was disagreement regarding inclusion, a further reviewer was consulted. No discrepancies were found.; Results: We identified 878 studies, 14 studies were eligible including 716 PwMS with a mean (standard deviation) age of 49.9 (10.9) years, disease duration of 10.8 (7.2) years, and Expanded Disability Status Scale score of 4.3 (0.9) points. RevMan 5.4.1 was used to run the meta-analysis. We found a significant overall effect on Berg Balance Scale (Mean Difference (MD) = 6.07 points, 95%CI:1.40,10.75; p = 0.01) and in Fatigue Severity Scale (MD = 0.98 points, 95%CI:0.30,1.66; p = 0.005) in favor of CT. We did not find a significant effect in Timed Up and Go (MD = 0.46 second, 95%CI:-0.04,0.96; p = 0.07), in Six-Minute Walk Test (MD = 17.46 m, 95%CI:-8.06,42.97; p = 0.18), and in Modified Fatigue Impact Scale (MD = 3.34 points, 95%CI:-0.41,7.09; p = 0.08) in favor of CT. We assessed methodological quality using RoB 2.0, and quality of evidence using GRADE.; Limitations: Small number of studies, all identifying having some risk of bias.; Conclusion: Circuit training can have positive effects on PwMS in terms of increasing balance, gait, and reducing fatigue. Further research is needed.; Systematic Review Registration Number: PROSPERO CRD42021286834. CONTRIBUTION OF THE PAPER.; Competing Interests: Conflict of interest The authors declare that they have no conflict of interest. (Copyright © 2024 Chartered Society of Physiotherapy. Published by Elsevier Ltd. All rights reserved.)

7. **No thanks and not for me: A qualitative study of barriers to prehabilitation participation**

Authors: Clemons, Jacob;Zhou, Zeyi;Hoy, Sydni Au;Gerber, Scott Q.;Nambiar, Anjali;Kwon, Angela and Kin, Cindy

Publication Date: 2024

Journal: Surgery

Abstract: Background: Prehabilitation programs have been shown to improve functional status prior to surgery, postoperative recovery, and even long-term outcomes. However, these programs often lack participation, often by patients who seem to need it the most. This study aimed to identify the primary reasons for patients' declining enrollment or low adherence to a prehabilitation program.; Methods: We recruited adult patients who had undergone or planned to undergo major abdominal surgery for semistructured one-on-one audio-recorded interviews. Interviews were transcribed verbatim and iteratively coded deductively and inductively. Thematic analysis was performed.; Results: We interviewed 11 patients, at which point we reached thematic saturation. The patients were on average 53 years old (range 38-75) and 27% were women and 73% were men. The pooled kappa score was 0.81, indicating concordance among the coding researchers. Seven potential barriers to prehabilitation participation and adherence were identified: poorly timed recruitment efforts, misconceptions about prehabilitation diet recommendations, competing priorities that made prehabilitation less feasible, lack of family alignment, belief that prehabilitation would not be helpful, concerns over specific prehabilitation program components, and belief that prehabilitation is helpful for others but not for themselves.; Conclusion: Low participation and adherence limit the success and reach of many prehabilitation programs. Improved timing and content of communication by the prehabilitation team is critical for improving recruitment of patients. Flexibility and customization may reframe prehabilitation as feasible rather than a difficult chore, increasing participation and adherence. Understanding patients' concerns and readiness to adopt new health behaviors is a necessary component of any behavioral intervention.

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8. **A systematic literature review of the impact of impaired self-awareness on the process of rehabilitation in acquired brain injury**

Authors: Di Somma, Rebecca and Fleming, Peter

Publication Date: 2024

Journal: Brain Injury

Abstract: Background: Impaired self-awareness (ISA) is common in individuals with an acquired brain injury (ABI) and can lead to reduced awareness of one's difficulties. Previous reviews have found that ISA impacts on functional outcomes in rehabilitation. However, to date there has not been a systematic literature review which examines how ISA impacts on the process of rehabilitation in ABI populations.; Method: A literature search was conducted using several databases in May 2024, including Academic Search Premier, CINAHL, MEDLINE, APA PsycARTICLES and APA PsycINFO. Seventeen articles were selected for the review and were analyzed using Narrative Synthesis.; Results: Four themes arose from the findings,

including goal setting, treatment adherence, engagement and willingness to change and time spent in hospital. ISA was found to impact on the value adult ABI participants placed in rehabilitation, which decreased treatment compliance, motivation, and engagement. ISA also impacted on goal setting and behavior and resulted in a longer length of time spent in hospital.; Conclusion: This review emphasizes the impact of ISA on various aspects/processes of rehabilitation in ABI and provides considerations of how clinicians might adapt interventions to manage these difficulties.

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9. **Rehabilitation of stage-one scapholunate instability (ReSOS): An online survey of UK practice**

Authors: Holmes, Martin K.;Miller, Caroline and Mansfield, Michael

Publication Date: 2024

Journal: Hand Therapy

Abstract: Introduction: Scapholunate instability is one of the most frequent types of wrist instability, but optimal management is not established. This research aims to identify current conservative management strategies for stage-one scapholunate instability and how these interventions are evaluated in the UK. Methods: A cross-sectional online survey of UK physiotherapists and occupational therapists with self-reported experience in the rehabilitation of stage-one scapholunate instability (ReSOS), was developed using the CROSS guideline and a clinical vignette. The frequency of treatment strategies was collated via a five-point Likert-type scale and evaluation strategies via fixed-response answers at three-to-six, seven-to-eleven and after 12 weeks post-injury. Data were analysed descriptively. Results: Forty-three electronic surveys were completed and analysed. Thirty physiotherapists and 13 occupational therapists responded, with 90% working in the NHS. Activity advice and education was the most frequently used treatment at all time-points (100%, 98%, 98%). Quick-DASH was most frequently used region-specific patient reported outcome measure at all time-points (72%, 60%, 67%). Discussion: Despite some identified themes, including neuromuscular rehabilitation strategies, the supporting evidence is limited in the ReSOS. It is unclear what rehabilitation and evaluation strategies are optimal and the development of a consensus on best practice is recommended.

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10. **Efficacy of pelvic floor muscle training with physical therapy for low back pain: A systematic review and meta-analysis**

Authors: Lim, Youngeun;Do, Yerim;Lee, Seon Heui and Lee, Haneul

Publication Date: 2024

Journal: Clinical Rehabilitation 38(12), pp. 1590–1608

Abstract: Objective: To assess the efficacy of pelvic floor muscle training and physical therapy interventions in patients with low back pain. Data sources: The Ovid–Medline, Ovid–Embase, Cochrane Library, CINAHL, Web of Science, and PEDro databases were searched for randomised, controlled trials published in English or Korean between database inception and September 2024. Review Methods: Studies providing pelvic floor muscle training in individuals

with low back pain were included. The risk of bias using the Cochrane Risk of Bias 2 tool and the grading of recommendation, assessment, development, and evaluation (GRADE) system was used to evaluate the quality of evidence. The meta-analysis was performed using Review Manager software 5.4. Results: Nineteen studies were included in this review. Pelvic floor muscle training showed low certainty evidence for improving pain (standardised mean difference = −0.73, 95% CI −1.10, −0.36]) and reflected a clinically meaningful reduction in pain. The evidence for disability improvement had a low certainty (mean difference = −5.21, 95% CI −7.15, −3.26]) due to high heterogeneity. Substantial improvements in pain and disability were observed when pelvic floor muscle training was added to standard physical therapy, with low certainty of evidence supporting these findings. Whereas pelvic floor muscle training substantially improved pain compared to other interventions, there was no marked improvement in disability. Conclusion: Pelvic floor muscle training is potentially beneficial in addition to physical therapy for reducing low back pain, particularly in pregnancy-related cases. However, the evidence should be interpreted considering the quality and risk of bias.

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11. **Physical Therapy Utilization Prior to Biceps Tenodesis or Tenotomy for Biceps Tendinopathy**

Authors: McDevitt, Amy;Cleland, Joshua;Hiefield, Paisley;Bravman, Jonathan and Snodgrass, Suzanne

Publication Date: 2024

Journal: International Journal of Sports Physical Therapy 19(11), pp. 1477–1489

Abstract: Introduction: Surgery for the management of individuals with long head of the biceps tendon (LHBT) tendinopathy is common. Little is known about physical therapy (PT) utilization prior to surgery. The purpose of this review was to investigate the use of PT prior to biceps tenodesis and tenotomy surgeries by assessing the number of visits and the types of interventions. A secondary objective was to report on themes of PT interventions. Methods: A retrospective observational cohort study design was used to analyze medical records and report on patient visits, procedure codes based on active or passive interventions, and themes of interventions utilized by PT. Results: Patient records (n=308) were screened for eligibility, n=62 (20.1%) patients attended PT prior to surgery. The median number of PT visits was four (IQR=3.5), and 39/62 (63%) patients had four or more visits to PT. Active interventions were used in 54.5% (533/978) of the codes billed; passive interventions were used in 45.5% (445/978) of the codes. There was high utilization of therapeutic exercise 93.4% (498/533) of active procedure codes] including muscle performance/resistance, functional activity, motor control and stretching. Manual therapy 84.3% (375/445) of passive procedure codes] included soft tissue mobilization, non-thrust manipulation (glenohumeral joint and cervical spine) and thrust manipulation (thoracic spine). Conclusions: PT was not commonly utilized prior to undergoing biceps tenodesis and tenotomy surgery. Further research is needed to understand the reasons for low utilization. Level of Evidence: 3b

12. **Dementia content and delivery in physiotherapy curricula: an international study of entry level physiotherapy programmes in Ireland the United Kingdom and New Zealand**

Authors: O'Sullivan, Trish;Foley, Tony;Timmons, Suzanne and McVeigh, Joseph G.

Publication Date: 2024

Journal: Physiotherapy

Abstract: Objectives: Physical impairments associated with dementia include reduced gait speed, and diminished postural control, which can lead to an increase in falls and hip fractures. Physiotherapy can play a key role in many aspects of dementia care, including falls risk prevention, gait re-education and end of life care. However, there is a lack of dementia education in entry level physiotherapy programmes. The aim of this study was to map the dementia content and delivery in the current undergraduate and entry level physiotherapy curricula in Ireland the United Kingdom and New Zealand.; Design: This cross-sectional survey-based study was distributed via the online survey tool Qualtrics XM. The survey was designed using the map of Kern's curriculum design framework.; Setting: Higher educational institutes (HEIs) that offered an undergraduate (BSc) and/or MSc (entry level) physiotherapy programmes in Ireland United Kingdom and New Zealand were included.; Participants: The academic lead for dementia education in the HEI was invited to participate in the survey.; Results: Of the 69 eligible HEIs contacted, 49 responded, giving a response rate of 71%. Different sources informed curriculum design, including patient and public involvement, published guidelines and policies and expert clinicians. The time allocated to dementia teaching across the curricula varied, with under half of the programmes only allocating two hours. The lack of service user input was seen as a perceived weakness of many programmes as was the non-standardisation and generalisability of teaching.; Conclusion: Whilst dementia education is included in many HEI programmes, we need to consider more time, a curriculum that meets learner's needs and include the patient voice. Further research is needed to develop bespoke dementia curricula specific to physiotherapy. CONTRIBUTION OF THE PAPER.; Competing Interests: Conflict of interest None declared.

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13. **Yoga, Physical Therapy and Home Exercise Effects on Chronic Low Back Pain: Pain Perception, Function, Stress, and Quality of Life in a Randomized Trial**

Authors: Oz, Muzeyyen and Ulger, Ozlem

Publication Date: 2024

Journal: Perceptual and Motor Skills

Abstract: Low back pain is a common health problem. In this study, we investigated the effects of yoga, physical therapy (PT), and home exercise (HE) on pain perception, function, stress, and quality of life in chronic low back pain (cLBP). We randomly assigned 54 participants to three distinct treatment groups: (a) a physical therapy group (PT) who received spinal stabilization exercises (SSE) combined with local heat and transcutaneous electrical stimulation; (b) a home exercise group (HE) who received SSE as part of the home program;

and (c) a yoga group who received yoga exercises. The primary outcome measures were a Visual Analog Scale (VAS) for measuring pain, and the Oswestry Disability Index (ODI) to measure function. Secondary outcome measures were the Tampa Kinesiophobia Scale (TKS), Central Sensitization Inventory (CSI), pain sensitivity (L3 and deltoid R/L PPTs), Spielberger State-Trait Anxiety Inventory (STAI), plasma cortisol and DHEA-S levels, Transversus Abdominis (TrA) muscle activation, and the Nottingham Health Profile (NHP). Assessments were conducted before and after a six-week intervention period. All three groups demonstrated improvements in pain on the VAS, function on the ODI, pain sensitivity on the L3 and deltoid R/L PPTs, CSI, anxiety on the STAI, TrA muscle activation, and quality of life on the NHP ($p < .05$). The PT group exhibited a more pronounced improvement on the ODI score ($p < .05$) than the other groups. Cortisol levels only decreased in the PT group ($p < .05$). The exercises did not impact DHEA-S and NHP-S parameters. Thus, all interventions resulted in decreased stress, pain intensity, pain sensitivity, central sensitization, and improved function and quality of life; there was no singularly superior approach between interventions. These findings will aid in tailoring treatment programs for managing cLBP according to individual needs.; Competing Interests: Declaration of Conflicting InterestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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14. **Predictive factors and dose-response effect of rehabilitation for upper limb induced recovery after stroke: systematic review with proportional meta-analyses**

Authors: Salvalaggio, Silvia;Gianola, Silvia;Andò, Martina;Cacciante, Luisa;Castellini, Greta;Lando, Alex;Ossola, Gianluca;Pregnolato, Giorgia;Rutkowski, Sebastian;Vedovato, Anna;Zandonà, Chiara and Turolla, Andrea

Publication Date: 2024

Journal: Physiotherapy

Abstract: Background and Purpose: To date, factors with predictive value for upper limb (UL) recovery after stroke are acknowledged, but little is known on clinical features predicting outcome in response to rehabilitation. The purpose of this review is to investigate whether any factor allows identification of Responders to rehabilitation, and whether clinically important recovery of motor function relies on modalities and dose of intervention received, at different times after stroke.; Methods: A systematic review with proportional meta-analysis was conducted. Longitudinal single-cohort studies on patients undergoing rehabilitation after stroke were included. Predictive features investigated in the included studies were reported. The primary outcome was the Fugl-Meyer Assessment for Upper Extremity, and effect sizes (ES) of different rehabilitation doses were calculated.; Results: Only 6% of the included studies (n = 141) investigated predictive factors. Studies providing more than 30 hours of therapy induced small to large clinical effect (ES from 0.38 to 0.88). Task-oriented approach led to the largest effect, both in the subacute (ES = 0.88) and chronic (ES = 0.71) phases. Augmenting interventions provided higher effect in the chronic rather than subacute phase. Integrity of the corticospinal tract, preservation of arm motor function and specific genetic biomarkers were found to be associated with motor recovery DISCUSSION AND CONCLUSIONS: Trials on motor recovery after stroke should incorporate analysis of factors associated with rehabilitation outcomes. Task-oriented interventions should be delivered more than 30 hours (high dose) to induce the greatest improvement.; Systematic Review Registration Number: Systematic Review Registration Number PROSPERO CRD42021258188. CONTRIBUTION OF THE

PAPER.; Competing Interests: Conflict of interest None declared.

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15. **Physiotherapy-led care versus physician-led care for persons with low back pain: A systematic review**

Authors: Severijns, Pieter;Goossens, Nina;Dankaerts, Wim;Pitance, Laurent;Roussel, Nathalie;Denis, Corentin;Fourré, Antoine;Verschueren, Pieter;Timmermans, Annick and Janssens, Lotte

Publication Date: 2024

Journal: Clinical Rehabilitation

Abstract: Objective: To summarise the evidence on the effect of physiotherapy-led versus physician-led care on clinical outcomes, healthcare use, and costs in persons with low back pain. Data sources: PubMed, Web of Science, CINAHL, Embase, and PEDro were systematically searched with the latest search performed in July 2024. Reference lists of articles were hand-searched. Review methods: Studies comparing clinical outcomes, healthcare use, or costs between adults with low back pain first consulting a physiotherapist and those first consulting a physician were included. Methodological quality was assessed with the Newcastle-Ottawa Scale. Study design, clinical setting, patient characteristics, and group effects were extracted. Findings on outcomes assessed in two or more studies were synthesised narratively. Certainty of evidence was determined using the GRADE approach. Results: Eighteen studies comprising 1,481,980 persons with low back pain were included. Most studies were non-randomised retrospective or prospective cohort studies. In primary care (15 studies), consistent evidence, though of mostly very low certainty, indicated that physiotherapy-led care leads to higher patient satisfaction, less use of medication, injections and imaging, fewer physician's visits, lower total healthcare costs, and less sick leave compared to physician-led care, without increased harm. In emergency care (three studies), evidence of very low certainty showed that physiotherapy-led care leads to shorter waiting and treatment times, and fewer hospital admissions. Conclusion: Physiotherapy-led care is a clinically, time- and cost-effective care pathway for low back pain, although the certainty of evidence was overall very low. Further high-quality research with a greater focus on clinical outcomes is warranted.

16. **The patient's perspective on rehabilitation with wireless accelerometers, activity tracking and motivational feedback following knee replacement: A qualitative study prior to a randomised controlled trial (KneeActivity)**

Authors: Skov, Cecilie D.;Holsgaard-Larsen, Anders;Kock Wiil, Uffe;Lindberg-Larsen, Martin;Varnum, Claus and Jensen, Charlotte M.

Publication Date: 2024

Journal: International Journal of Medical Informatics

Abstract: Background: As healthcare systems evolve, individuals are expected to be more involved in managing their health and rehabilitation. A wireless medical accelerometer (SENS motion®) has been developed to collect objective data on physical activity. The number of patients requiring knee replacement is rising, but the motivational effect of medical accelerometers in the rehabilitation after knee replacement remains unexplored. This study aims to employ a user-driven approach to tailor the SENS motion® technology for patients undergoing knee replacement prior to testing the refined technology in a randomised controlled trial.; Methods: The study used a Participatory Design research methodology, emphasising collaboration and user involvement. It was carried out in three sessions, each aimed at refining the SENS motion® system toward the needs of the patient group in focus. The first session involved six healthcare professionals who provided written feed-back. The second and third sessions included testing and subsequent interviews of patients (n = 10). After each session, conducted in iterative processes (plan, act, observe, reflect), SENS motion® system revisions were implemented according to the patient's wishes. The data collected were then analysed using qualitative content analysis.; Results: Prior to patient testing, healthcare professionals identified functional and technical errors that required modifications. Patient interviews revealed that (1) there were positive attitudes towards the SENS motion® system, (2) patients were motivated by daily step counts and geographical locations, especially when they were familiar with landmarks, and (3) active involvement of family members was found to be feasible, which contributed to a sense of solidarity during the rehabilitation process.; Conclusion: This study applied a user-driven approach to customise health technology for postoperative rehabilitation in knee replacement patients. Initially, the technology had both technical and functional problems, but system revisions based on patient feedback improved its acceptance. The refined technology is undergoing testing in a randomised design.; Competing Interests: Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

17. **Rehabilitation Protocol Variability Following Arthroscopic Bankart Repair and Remplissage for Management of Anterior Shoulder Instability: A Systematic Review**

Authors: Villarreal-Espinosa, Juan;Reinold, Michael M.;Khak, Mohammad;Shariyate, Mohammad J.;Mita, Carol;Kay, Jeffrey and Ramappa, Arun J.

Publication Date: 2024

Journal: International Journal of Sports Physical Therapy 19(10), pp. 1172–1187

Abstract: Background: Augmentation of an arthroscopic Bankart repair with the remplissage (ABR) procedure has shown to confer a decrease in recurrence rates, yet, at the expense of potentially compromising shoulder motion. Purpose/Hypothesis: The purpose was to examine clinical studies that described a post-operative rehabilitation protocol after an arthroscopic Bankart repair and remplissage procedure. It was hypothesized that a review of the literature would find variability among the studies and that, among comparative studies, there would be a limited distinction from protocols for isolated Bankart repairs. Study design: Systematic Review Materials and Methods: A search was conducted using three databases (PubMed, EMBASE, and CINAHL) according to the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) guidelines. The following terms were combined while utilizing Boolean operators: (Bankart lesion OR labral tear) AND (remplissage). Studies evaluating patients after arthroscopic stabilization for unidirectional anterior glenohumeral instability with the addition of the remplissage procedure and at least 1 year follow-up were included for analysis. Results: A total of 41 studies (14 Level IV, 24 Level III, 2 Level II, and 1 Level I) were included with a total of 1,307 patients who underwent ABR. All patients had <30% glenoid bone loss and a range of 10-50% humeral head size Hill-Sachs lesion. Type and position of immobilization were the most reported outcomes (41/41) followed by time of immobilization (40/41). Moreover, 23/41 studies described their initial post-operative shoulder range of motion restrictions, while 17/41 specified any shoulder motion allowed during this restrictive phase. Time to return to sport was also described in 37/41 of the retrieved studies. Finally, only two of the 27 comparative studies tailored their rehabilitation protocol according to the specific procedure performed, underscoring the lack of an individualized approach (i.e. same rehabilitation protocol for different procedures). Conclusion: The results of the present systematic review expose the variability among rehabilitation protocols following ABR. This variability prompts consideration of the underlying factors influencing these disparities and underscores the need for future research to elucidate optimal rehabilitation. Based on the results of this systematic review and the senior authors´ clinical experience, a rehabilitation approach similar to an isolated Bankart repair appears warranted, with additional precautions being utilized regarding internal rotation range of motion and external rotation strengthening. Level of Evidence: Level 3

18. **Neurocognitive and Neuromuscular Rehabilitation Techniques after ACL Injury, Part 1: Optimizing Recovery in the Acute Post-Operative Phase- A Clinical Commentary**

Authors: Wilk, Kevin E.;Ivey, Morgan;Thomas, Zachary M. and Lupowitz, Lewis

Publication Date: 2024

Journal: International Journal of Sports Physical Therapy 19(11), pp. 1373–1385

Abstract: Anterior cruciate ligament (ACL) injury rates are on the rise, despite improved surgical techniques and prevention programs. While traditional rehabilitation emphasizes the restoration of motion, strength, and physical performance, emerging research highlights the importance of addressing neurocognitive deficits that can persist after injury. These deficits, including altered proprioception, impaired motor control and muscle recruitment, as well as heightened reliance on visual feedback, can significantly increase the risk of re-injury and impede return to sport. The purpose of this clinical commentary is to outline a proposed comprehensive approach to rehabilitation that challenges the neurocognitive system to optimize rehabilitation outcomes and reduce reinjury risk. Thus, this clinical commentary discusses the rationale for integrating neurocognitive training into all phases of ACLR rehabilitation, from initial injury to eight weeks post-surgery. It details the neurophysiological changes caused by ACL injury and presents evidence supporting the use of exercises that challenge visual attention, decision-making, and motor planning. A comprehensive rehabilitation framework incorporating both physical and neurocognitive components is proposed, aiming to improve long-term outcomes and reduce re-injury risk. Level of Evidence: 5

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19. **Rehabilitation for adults with an intellectual disability and mental health and behavioural complexities: A scoping review**

Authors: Williams, Jonathan;Shahzad, Saman;Manandhar-Richardson, Mizla;Jaydeokar, Sujeet;Bramwell, Vicky;Garland, Adam;Hutchinson, Christine and Odiyoor, Mahesh

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Abstract: Background: There has been significant focus in the past decade on reducing admissions to assessment and treatment units for people with intellectual disabilities experiencing mental health or behavioural concerns. This has included the development of intensive support functions of National Health Service Learning Disability services to bolster community support and treatment for people at risk of admission. However, in recent years, there has been increased consideration of service development to include rehabilitation functions which would aim to proactively provide medium-term additional input to individuals with a complexity of need. This input would aim to improve future trajectories and support the individuals to remain living a good life in their own community. This review focuses on community and in-patient approaches to meeting a complexity of need. Method: A scoping review was carried out according to established best practice guidelines. Papers returned from the search were screened by the following inclusion criteria (a) Models or Outcomes of

Rehabilitation; (b) Intellectual Disability Population; (c) Sample being 18 or above and (d) longer than short-term stay/treatment, defined as 6 months or longer; and (e) Mental health and/or behaviour complexities. The search was conducted in electronic databases CINAHL, PsycInfo, Medline, Embase and Social Policy & Practice. Here, 3790 articles were initially identified and 27 were ultimately included in the review. Findings: There are few studies evaluating rehabilitation for people with intellectual disabilities and mental health or behavioural concerns. There was some evidence that accessing assessment and treatment inpatient provision resulted in clinical improvements. Some studies demonstrated initial evidence that longer term rehabilitation was beneficial as a step-down from inpatient care. Some key principles were identified in terms of rehabilitation approaches: the need for person-centred creative approaches, suitable staff training, focus on building skills, and a focus on increasing quality of life. Conclusion: There are some indicators of what good rehabilitation services might comprise for people with an intellectual disability, who have rehabilitation needs. However, far more research and guidance are required in this area. In particular, it is unclear whether rehabilitation is best provided within an inpatient or community model, and further detail is required about optimal components of such rehabilitation. Accessible Summary: Some people with an intellectual disability will need extra help with their mental health. People with more complicated needs might need support for a longer period of time.Longer term services can be in hospitals or in the community. These are called rehabilitation services.There is some research to show that rehabilitation services should be person-centred and help the person learn new skills. The staff should have the right training and should help the person improve their quality of life. Much more research needs to be done on rehabilitation services for people with intellectual disabilities.
