Dear Joe Bloggs,

Welcome to your Evidence Update email from KnowledgeShare. The resources listed below have been chosen based on the interests you have provided. I hope they are useful. Please contact me via email if you would like a copy of any of the journal articles. If you would like to change the interests we have listed, stop receiving the notifications, or request a search on a specific topic, please don't hesitate to let me know.

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Mary

**Physiotherapy**

**Articles**

*The following journal articles are available from the Library and Knowledge Service electronically or in print. Please follow links to access full text online, contact me to order copies, or call into your nearest library.*

**A systematic review of cost-effective treatment of postoperative rotator cuff repairs.**
[Further studies are needed to determine effective dosing of physical therapy after rotator cuff repair. Cryotherapy is favorable and cost-effective using simple methods for delivery.]
Contact the library for a copy of this article

**Aerobic exercise training for adults with fibromyalgia.**
Bidonde J. *Cochrane Database of Systematic Reviews* 2017;(6):CD012700.
[Evidence shows that aerobic exercise may improve HRQL, pain, stiffness, and physical function, and probably leads to similar numbers of people dropping out from each group. Aerobic exercise does not seem to improve fatigue. The quality of the evidence was considered to be low or moderate because of the small numbers of people included in the studies, some issues involving study design, and low certainty of results.]
Freely available online

**Aquatic therapy for children with Duchenne muscular dystrophy: a pilot feasibility randomised controlled trial and mixed-methods process evaluation.**
[This feasibility study showed that, although aquatic therapy for Duchenne muscular dystrophy is valued, its delivery in tertiary centres poses problems and further intervention
development is needed before a full randomised controlled trial]

*Freely available online*

**Effect of cardiorespiratory and strength exercises on disease activity in patients with inflammatory rheumatic diseases: a systematic review and meta-analysis.**


[The results of this review suggest beneficial effects of exercises on inflammation, joint damage and symptoms in patients with IRDs.]

*Freely available online*

**Effect of physical activity and dietary restriction interventions on weight loss and the musculoskeletal function of overweight and obese older adults with knee osteoarthritis: a systematic review and mixed method data synthesis.**


[Meta-analysis was only possible to evaluate mobility (6min walk test) at 6 months and the pooled random effect 15.05 (95% CI -11.77 to 41.87) across two trials with N = 155 participants did not support the combined intervention programme. Narrative synthesis showed clear differences in favour of a reduced body weight and an increased 6min walk in the intervention group compared with control groups.]

*Freely available online*

**Effectiveness of conservative interventions including exercise, manual therapy and medical management in adults with shoulder impingement: a systematic review and meta-analysis of RCTs.**


[Although there was only very low quality evidence, exercise should be considered for patients with shoulder impingement symptoms and tape, ECSWT, laser or manual therapy might be added. NSAIDS and corticosteroids are superior to placebo, but it is unclear how these treatments compare to exercise.]  

*Freely available online*

**Effects of water-based exercise on bone health of middle-aged and older adults: a systematic review and meta-analysis.**


[Water-based exercise may have benefits with respect to maintaining or improving bone health in postmenopausal women but less benefit when compared to land-based exercise. Further research is required on this topic.]

*Freely available online*

**Exercise interventions and prevention of fall-related fractures in older people: a meta-analysis of randomized controlled trials.**


[Our findings implied that exercise interventions were effective in preventing fall-related fractures and reducing risk factors of fall-related fractures in older people.]

*Contact the library for a copy of this article*

**Facilitators and barriers to exercise adherence in patients with osteopenia and**
osteoporosis: a systematic review.
[The aim of this study was to categorize the facilitators and barriers of exercise and identify methods to promote exercise adherence in the osteoporosis population. Despite the fair methodological quality of included randomized controlled trials (RCTs), less than 75 % identified facilitators and barriers to exercise. Methods to promote and measure exercise adherence were poorly reported.]
Contact the library for a copy of this article

Interventions to increase adherence to therapeutic exercise in older adults with low back pain and/or hip/knee osteoarthritis: a systematic review and meta-analysis.
[Meta-analysis provides moderate-quality evidence that booster sessions with a physiotherapist assisted people with hip/knee osteoarthritis to better adhere to therapeutic exercise. Individual high-quality trials supported the use of motivational strategies in people with chronic low back pain and behavioural graded exercise in people with osteoarthritis to improve adherence to exercise.]
Available with an NHS OpenAthens password for eligible users

Is Pilates an effective rehabilitation tool? A systematic review.
[The majority of the clinical trials in the last five years into the use of Pilates as a rehabilitation tool have found it to be effective in achieving desired outcomes, particularly in the area of reducing pain and disability.]
Contact the library for a copy of this article

Physical and mechanical therapies for lower limb problems in juvenile idiopathic arthritis: a systematic review with meta-analysis.
[There is a paucity of research evaluating physical and mechanical therapies for lower limb problems in JIA. No physical therapy has been evaluated in RCT and mechanical therapy evaluation is limited to foot orthoses and shoe inserts for foot and ankle pain. The existing research is hampered by small sample sizes. Until further research is conducted, the effectiveness of mechanical and physical therapies for lower limb problems in JIA remains unclear.]
Freely available online

Specific or general exercise strategy for subacromial impingement syndrome -- does it matter? A systematic literature review and meta analysis.
Shire AR. BMC Musculoskeletal Disorders 2017;18:158.
[There is insufficient evidence to support or refute the effectiveness of specific resistive exercise strategies in the rehabilitation of subacromial impingement syndrome. More high quality research is needed to accurately assess this. This review provides suggestions on how to improve the methodological design of future studies in this area.]
Freely available online

Systematic review of nondrug, nonsurgical treatment of shoulder conditions.
[Shoulder conditions addressed were shoulder impingement syndrome (SIS), rotator cuff-associated disorders (RCs), adhesive capsulitis (AC), and nonspecific shoulder pain. Low- to moderate-quality evidence supported the use of manual therapies for all 4 shoulder conditions. Low-level laser was the only modality for which there was moderate evidence supporting its use for all 4 conditions.]
*Contact the library for a copy of this article*

The effectiveness of combined exercise interventions for preventing postmenopausal bone loss: a systematic review and meta-analysis.
[Our findings suggest that combined exercise interventions appear to be effective in preserving postmenopausal women's BMD at the lumbar spine, femoral neck, total hip, and total body.]
*Contact the library for a copy of this article*

[This review reveals benefits of NM for back and neck pain, but the effect of NM for other conditions remains unclear.]
*Contact the library for a copy of this article*

The role of muscle strengthening in exercise therapy for knee osteoarthritis: a systematic review and meta-regression analysis of randomized trials.
[Exercise interventions following the American College of Sports Medicine (ACSM) criteria for strength training provide superior outcomes in knee extensor strength but not in pain or disability. An increase of less than 30% in knee extensor strength is not likely to be clinically beneficial in terms of changes in pain and disability.]
*Contact the library for a copy of this article*

Therapeutic interventions for improving self-reported function in patients with chronic ankle instability: a systematic review.
[The main findings from this systematic review were balance training provided the most consistent improvements in self-reported function for patients with CAI.]
*Available with an NHS OpenAthens password for eligible users*

Timing of rehabilitation on length of stay and cost in patients with hip or knee joint arthroplasty: a systematic review with meta-analysis.
[Early initiation of rehabilitation following total hip arthroplasty, total knee arthroplasty, or unicompartmental knee arthroplasty is associated with a shorter LOS, a lower overall cost, with no evidence of an increased number of adverse reactions. Additional high quality studies with standardized methodology are needed to further examine the impact of early
initiation of physical therapy among patients with joint replacement procedures.

Freely available online

Reports

The following report(s) may be of interest:

Musculoskeletal conditions and multimorbidity.
Arthritis Research UK; 2017.

[The purpose of this report is to explore why and how musculoskeletal health should be considered as part of multimorbidity. It examines why the presence of musculoskeletal disease such as osteoarthritis or back pain can have an overall impact on the health, wellbeing and independence of a person living with multimorbidity. By 2018, it's expected that there will be 2.9 million people in the UK living with multimorbidity, a substantial increase from 1.9 million in 2008.]

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