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MORE RESEARCH NEEDED

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What it's all about...



The Cochrane Library and other sources regularly publish new reviews, some of which highlight the lack of good quality studies on which to base recommendations. This is a good starting point for identifying a new area of research.

**NOT SURE
WHERE TO
START?**

This bulletin highlights recently published work that requires further research to be undertaken - get your inspiration here...

**WANTING
TO DO
SOME
RESEARCH
?**

The second step is to find out what else has been published. If you would like a literature search on any of these topics please contact the Library Service on ext 53831.

Recently published

But more research is needed...



Decision coaching for people making healthcare decisions

Authors' conclusions: Decision coaching may improve participants' knowledge when used with evidence-based information. Our findings do not indicate any significant adverse effects (e.g. decision regret, anxiety) with the use of decision coaching. It is not possible to establish strong conclusions for other outcomes. It is unclear if decision coaching always needs to be paired with evidence-informed information. Further research is needed to establish the effectiveness of decision coaching for a broader range of outcomes.

Exercise-based cardiac rehabilitation for coronary heart disease

Authors' conclusions: This updated Cochrane Review supports the conclusions of the previous version, that exercise-based CR provides important benefits to people with CHD, including reduced risk of MI, a likely small reduction in all-cause mortality, and a large reduction in all-cause hospitalisation, along with associated healthcare costs, and improved HRQoL up to 12 months' follow-up. Over longer-term follow-up, benefits may include reductions in cardiovascular mortality and MI. In the last decade, trials were more likely to include females, and be undertaken in LMICs, increasing the generalisability of findings. Well-designed, adequately-reported RCTs of CR in people with CHD more representative of usual clinical practice are still needed. Trials should explicitly report clinical outcomes, including mortality and hospital admissions, and include validated HRQoL outcome measures, especially over longer-term follow-up, and assess costs and cost-effectiveness.

Beta-blockers in patients without heart failure after myocardial infarction

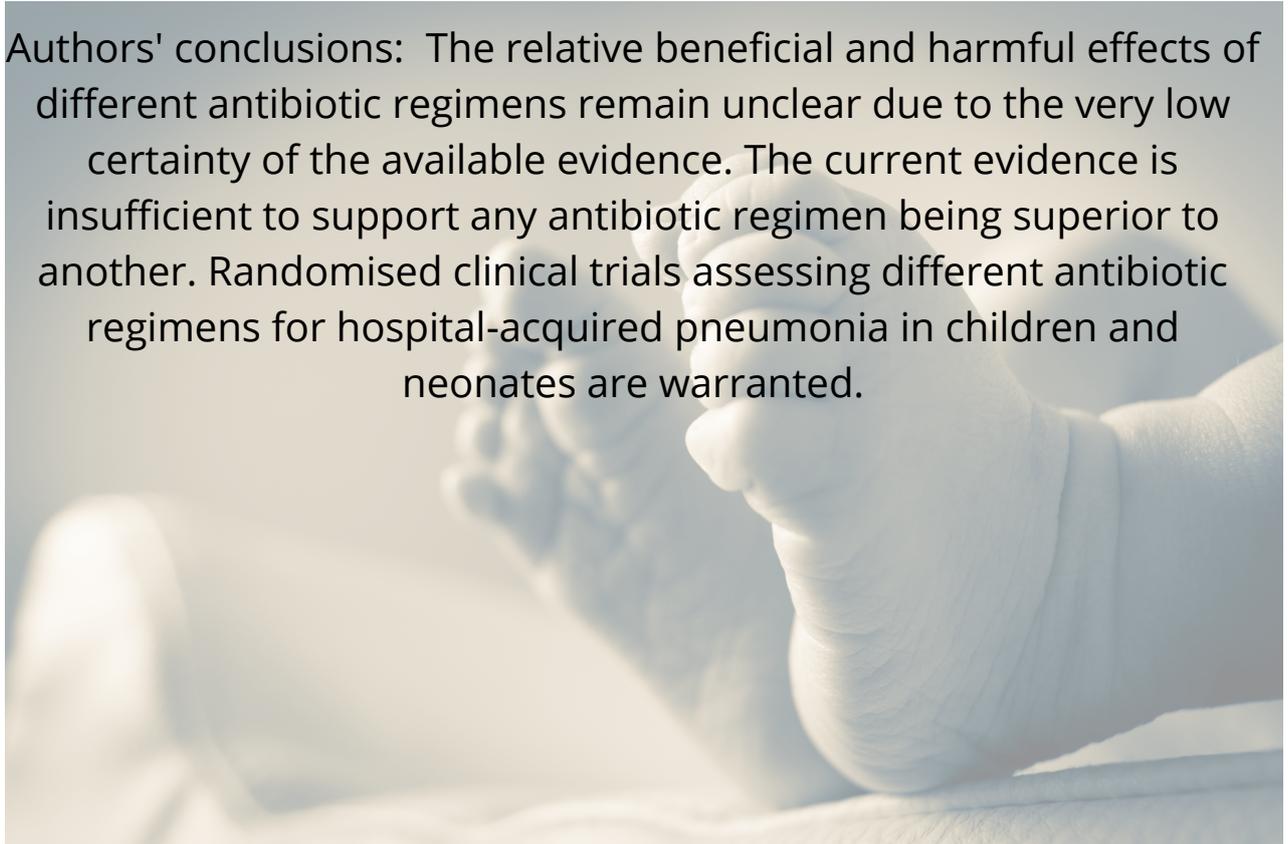
Authors' conclusions: Beta-blockers probably reduce the risks of all-cause mortality and myocardial reinfarction in patients younger than 75 years of age without heart failure following acute myocardial infarction. Beta-blockers may further reduce the risks of major cardiovascular events and cardiovascular mortality compared with placebo or no intervention in patients younger than 75 years of age without heart failure following acute myocardial infarction.

These effects could, however, be driven by patients with unrecognised heart failure. The effects of beta-blockers on serious adverse events, angina, and quality of life are unclear due to sparse data or no data at all. All trials and outcomes were at high risk of bias, and incomplete outcome data bias alone could account for the effect seen when major cardiovascular events, angina, and myocardial infarction are assessed. The evidence in this review is of moderate to low certainty, and the true result may depart substantially from the results presented here. Future trials should particularly focus on patients 75 years of age and older, and on assessment of serious adverse events according to ICH-GCP and quality of life. Newer randomised clinical trials at low risk of bias and at low risk of random errors are needed if the benefits and harms of beta-blockers in contemporary patients without heart failure following acute myocardial infarction are to be assessed properly. Such trials ought to be designed according to the SPIRIT statement and reported according to the CONSORT statement.



Antibiotics for hospital-acquired pneumonia in neonates and children

Authors' conclusions: The relative beneficial and harmful effects of different antibiotic regimens remain unclear due to the very low certainty of the available evidence. The current evidence is insufficient to support any antibiotic regimen being superior to another. Randomised clinical trials assessing different antibiotic regimens for hospital-acquired pneumonia in children and neonates are warranted.



Antiepileptic drugs for seizure control in people with neurocysticercosis

Authors' conclusions: Despite neurocysticercosis being the most common cause of epilepsy worldwide, there is currently no evidence available regarding the use of AEDs as seizure prophylaxis among people presenting with symptoms other than seizures. For those presenting with seizures, there is no reliable evidence regarding the duration of treatment required. Therefore, there is a need for large scale randomised controlled trials to address these questions.



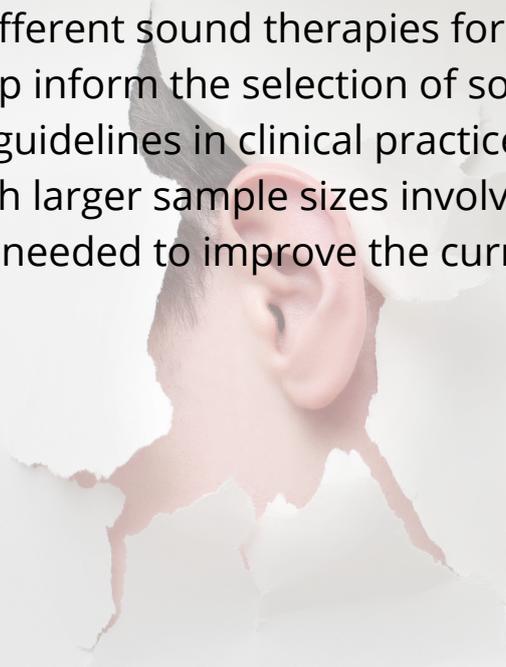
From other sources...



Efficacy of sound therapy interventions for tinnitus management: A protocol for systematic review and network meta-analysis

Results: The effect estimates of the direct comparisons (when available) were very similar to those of the NMA. Overall, sound stimulation alone performed better than medication alone, educational consultation alone, and no treatment. Combination therapy, such as sound stimulation plus educational consultation and sound stimulation plus drug therapy, yielded significantly better outcomes with regard to the alleviation of tinnitus than individual treatments.

Conclusion: This is the first NMA to evaluate and compare the effectiveness of different sound therapies for the management of tinnitus. It may help inform the selection of sound therapy and the development of guidelines in clinical practice. Future studies of sound therapy with larger sample sizes involving multiple medical centers are needed to improve the current evidence.



Effects of High Intensity Interval Training and Sprint Interval Training in Patients with Asthma: A Systematic Review

Objective: The aim of this study is to review the effects of high-intensity interval training (HIIT)/sprint interval training (SIT) on asthma symptoms, cardiorespiratory functions, and other variables among asthmatic patients. Data Sources: Randomized controlled trials published between January 2000 and January 2021 were searched in PubMed/MEDLINE, Web of Science, and Cochrane Library databases. Study Selections: Following pre-specified inclusion criteria, this review included 7 randomized controlled studies that compare HIIT/SIT as an intervention with any other intervention and/or control group. Results: Of the included studies only 4 reported the chronic phase effects of the HIIT/SIT protocols. HIIT and SIT protocols applied in studies differ. HIIT improved forced expiratory volume in 1 s (FEV₁) in the acute phase and maximal oxygen consumption (VO₂max) in the chronic phase in the asthmatic patients ($p < 0.05$). Conclusion: To our knowledge, our systematic review is the first study evaluating the effects of HIIT/SIT protocols on asthma patients. HIIT/SIT protocols have beneficial effects on asthma patients. In order to better understand the results of these training procedures, studies that will be designed with high methodology are needed.



Health service use among adults with cerebral palsy: a mixed-methods systematic review

Results: Fifty-seven studies (31 quantitative, 26 qualitative) of 14 300 adults with CP were included. The proportion of adults using services ranged from 7% (95% confidence interval [CI]: 2-13%) for urologists to 84% (95% CI: 78-90%) for general practitioners.

Incidence of visits ranged from 67 (95% CI: 37-123) hospital admissions to 404 (95% CI: 175-934) general practitioner visits per 100 person-years. Qualitative themes highlighted issues regarding accessibility, caregivers' involvement, health workers' expertise, unmet ageing needs, transition, and health system challenges.

Interpretation: Adults with CP used a wide range of health services but faced context-specific challenges in accessing required care. Appropriate service delivery models for adults with CP are required. This review emphasizes a need to develop an appropriate service model for adults with CP to meet their needs.

Autogenic Training for Reducing Chronic Pain: a Systematic Review and Meta-analysis of Randomized Controlled Trials

Results: A total of 13 eligible studies ($k = 15$ comparisons) including 576 participants were identified. Random-effects meta-analyses revealed a significantly positive, moderate effect of AT on the primary outcome pain compared to passive control groups ($g = 0.58$, 95% CI [0.36; 0.79], $k = 9$, $I^2 = 0\%$). In comparison with other psychological interventions, no difference was found ($g = -0.05$, 95% CI [-0.30; 0.20], $k = 6$, $I^2 = 0\%$). Sensitivity analyses proved the robustness of findings. Overall risk-of-bias judgment was 'some concerns' in the majority of studies.

Conclusions: Beneficial effects of AT on pain reduction were demonstrated, but findings are prone to bias. Furthermore, high methodological quality RCTs are needed to strengthen the promising evidence of AT for individuals with chronic pain.

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GET IN TOUCH

If you would like to get involved with research or have an idea for a project contact the R&D Department who can offer advice and support on getting started.

The Clinical Research Centre is located on the Second Floor within Area 5 of Blackpool Victoria Hospital.

**For general enquiries, please call us on: 01253 65 5547
Or email: bfwh.researchideas@nhs.net**

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