



Practical Evidence About Real Life Situations (PEARLS) are succinct summaries of Cochrane Systematic Reviews for primary care practitioners.

PEARLS provide guidance on whether a treatment is effective or ineffective, prepared as an educational resource and not replacing clinician judgment in the management of individual cases. View PEARLS online at: www.cochraneprimarycare.org.

382: LIMITED EVIDENCE FOR BENEFIT OF AMITRIPTYLINE FOR NEUROPATHIC PAIN AND FIBROMYALGIA IN ADULTS

written by **Brian R McAvoy**

Clinical question: How effective is amitriptyline for neuropathic pain and fibromyalgia in adults?

Bottom line: Amitriptyline probably does not work in neuropathic pain associated with HIV or treatments for cancer. Amitriptyline probably does work in other types of neuropathic pain (painful diabetic neuropathy, post-herpetic neuralgia, and post-stroke pain, and in fibromyalgia), though we cannot be certain of this. A best estimate is that amitriptyline provides pain relief in about 1 in 4 (25%) more people than does placebo (NNT* = 4.6 [95% confidence interval 3.6–6.6]), and about 1 in 4 (25%) more people than placebo report having at least 1 adverse event, probably not serious but disconcerting. *NNT = number needed to treat to benefit 1 individual.

Caveat: There were no studies that could provide an answer that was trustworthy or reliable because most studies were relatively old, and used methods or reported results that we now recognise can make benefits seem better than they are.

Context: Amitriptyline is a tricyclic antidepressant that is widely used to treat chronic neuropathic pain and fibromyalgia, and is recommended in many guidelines. These types of pain can be treated with antidepressant drugs in doses below those at which the drugs act as antidepressants.

Cochrane Systematic Review: Moore RA et al. Amitriptyline for neuropathic pain and fibromyalgia in adults. Cochrane Reviews, 2012, Issue 12. Art. No.: CD008242. DOI: 10.1002/14651858. CD008242.pub2.

This review contains 21 studies involving 1437 participants.

385: COMPUTER-GENERATED REMINDERS INFLUENCE PROFESSIONAL PRACTICE

written by **Brian R McAvoy**

Clinical Question : How effective are computer-generated reminders delivered on paper to healthcare professionals on professional practice and health care outcomes?

Bottom Line : There was moderate quality evidence that computer-generated reminders delivered on paper to healthcare professionals achieved a moderate (7%) absolute improvement in processes of care. Median improvement in processes of care also differed according to the behaviour the reminder targeted: for instance, reminders to vaccinate improved processes of care by 13.1% (absolute improvement) compared with other targeted behaviours. Reminders to discuss issues with patients were the least effective. Two characteristics emerged as significant predictors of improvement: providing space on the reminder for a response from the clinician, and providing an explanation of the reminder's content or advice. Reminders were not associated with significant improvements in health care outcomes.

Caveat : None of the included studies reported outcomes related to harms or adverse effects of the intervention, such as redundant testing or overdiagnosis.

Context: Healthcare professionals do not always provide care that is recommended or that reflects the latest research, partly because of information overload or inaccessibility. Reminders may help doctors overcome these problems by reminding them about important information or providing advice, in a more accessible and relevant format, at a particularly appropriate time.

Cochrane Systematic Review Arditì C et al. Computer-generated reminders delivered on paper to healthcare professionals: effects on professional practice and health care



outcomes. *Cochrane Reviews*, 2012, Issue 12. Art. No.: CD001175. DOI: 10.1002/14651858. CD001175.pub3. This review contains 32 studies involving over 102,000 participants

381: ORAL TREATMENTS EFFECTIVE FOR TINEA PEDIS

written by **Brian R McAvoy**

Clinical question: How effective are oral treatments for tinea pedis?

Bottom line: Terbinafine and itraconazole were more effective than no treatment, and terbinafine appeared to give a significantly better cure rate than griseofulvin. In addition, terbinafine may require a shorter treatment period (2 weeks), which is preferable for maximising patient compliance. No significant difference was detected between terbinafine and itraconazole, fluconazole and itraconazole, fluconazole and ketoconazole, or between griseofulvin and ketoconazole, although the trials were generally small. All drugs reported adverse effects, with gastrointestinal effects being most commonly reported.

Caveat: Of the included trials, only 5 were published in recent years, with the other 10 trials having been published pre-1996. The quality of reporting of the trials was variable, and, in general, the method of generating the randomisation sequence and concealing allocation was not clearly reported, with the result that the trials were at unclear risk of bias for these domains. A similar omission was the lack of blinding of outcome assessors, especially with respect to the assessment of clinical signs and symptoms, as this outcome is, by its nature, subjective. Only 3 trials assessed the condition beyond 3 months.

Context: About 15% of the world's population suffers from tinea pedis. Oral therapy is usually used for chronic conditions or when topical treatment has failed.

Cochrane Systematic Review: Bell-Syer SEM et al. Oral treatments for fungal infections of the skin of the foot. *Cochrane Reviews*, 2012, Issue 10. Article No. CD003584. DOI: 10.1002/14651858.CD003584.pub2.

This review contains 15 studies involving 1438 participants.

383: PSYCHOLOGICAL THERAPIES EFFECTIVE FOR PATHOLOGICAL AND PROBLEM GAMBLING

written by **Brian R McAvoy**

Clinical question : How effective are psychological therapies (cognitive behavioural therapy [CBT], motivational interviewing [MI], integrative therapies, and Twelve-step Facilitated Group Therapy) for pathological and problem gambling?

Bottom Line: Data from nine studies indicated benefits of CBT in the period immediately following treatment. However, there were few studies across longer periods of time (e.g. 12 months) after treatment, and little was known about whether effects of CBT were lasting. Data from three studies of MI therapy suggested some benefits in terms of reduced gambling behaviour, but not necessarily other symptoms of pathological and problem gambling. There were also few studies that provided evidence on integrative therapies (two studies) and other psychological therapies (one study), and there was insufficient data to evaluate the efficacy of these therapies.

Caveat: A substantial amount of the evidence came from studies that suffered from multiple limitations, and these may have led to overestimations of treatment efficacy. There was variability in the nature of the interventions classified as CBT, and the effects of individual and group CBT were also combined. The data on MI therapy came from few studies and conclusions require further research.

Context: The prevalence of pathological and problem gambling has been found to vary internationally, with studies suggesting anywhere between 0.2% (in Norway) and 5.3% (in Hong Kong) of individuals affected.¹ The term 'pathological gambling' is derived from psychiatric diagnostic systems, such as the Diagnostic and Statistical Manual of Mental Disorders. Problem gambling is also sometimes used to describe a subclinical level of the psychiatric disorder or alternatively, a broader category of severe gambling based on a continuum model of gambling-related harm.

Cochrane Systematic Review: Cowlshaw S et al. Psychological therapies for pathological and problem gambling. *Cochrane Reviews*, 2012, Issue 11. Art. No.: CD008937. DOI: 10.1002/14651858. CD008937.pub2. This review contains 14 studies involving 1,245 participants.



377: CAUTION REQUIRED WITH TOTAL DISC REPLACEMENT FOR CHRONIC BACK PAIN

written by **Brian R McAvoy**

Clinical question: How effective is total disc replacement (TDR) for chronic low back pain (LBP) in the presence of lumbar disc degeneration?

Bottom line: TDR compared with conventional fusion surgery for degenerative disc disease appeared to result in a small but clinically irrelevant improvement with respect to pain relief, disability and quality of life in a selected population, in the short term (two years, with only one study extended to five years). As harm and complications may occur after years, the spine surgery community should be prudent about adopting this procedure on a large scale.

Caveat: Although the risk of bias of five studies could be considered low, the most important items, sequence generation, allocation concealment, blinding, and comparable baseline values were not met in most studies. Currently available trials did not assess adjacent level disease and facet joint degeneration adequately.

Context: In the search for better surgical treatment of chronic LBP in the presence of disc degeneration, TDR has received increasing attention in recent years. A possible advantage of TDR compared with fusion is maintained mobility at the operated level, which has been suggested to reduce the chance of adjacent segment degeneration.

Cochrane Systematic Review: Jacobs W et al. Total disc replacement for chronic back pain in the presence of disc degeneration. *Cochrane Reviews*, 2012, Issue 9. Art. No.: CD008326. DOI: 10.1002/14651858. CD008326.pub2. This review contains 40 studies involving over 7,000 participants.

387: MANY INTERVENTIONS EFFECTIVE FOR ACTINIC KERATOSES

written by **Brian R McAvoy**

Clinical Question: How effective are topical, oral, mechanical and chemical interventions for actinic keratoses?

Bottom Line: For individual lesions, photodynamic therapy appears more effective and has a better cosmetic outcome than cryotherapy. For field-directed treatments, diclofenac, 5-fluorouracil, imiquimod, and ingenol mebutate had similar efficacy, but their associated adverse events and cosmetic outcomes were different. Skin irritation was associated with some of these treatments, such as diclofenac and 5-fluorouracil, but other side effects were uncommon. The choice of treatment options depended on the number of lesions, the individual's desired results and tolerance to the treatments.

Caveat: The review included a broad variety of interventions for actinic keratoses and a large number of outcomes. There was no evidence that treating actinic keratoses prevented squamous cell carcinoma.

Context: Actinic keratoses are a skin disease caused by long-term sun exposure, and their lesions have the potential to develop into squamous cell carcinoma. Treatments for actinic keratoses are sought for cosmetic reasons, for the relief of associated symptoms, or for the prevention of skin cancer development. Detectable lesions are often associated with alteration of the surrounding skin (field) where subclinical lesions might be present. The interventions available for the treatment of actinic keratoses include individual lesion-based (e.g. cryotherapy) or field-directed (e.g. topical) treatments.

Cochrane Systematic Review: Gupta AK et al. Interventions for actinic keratoses. *Cochrane Reviews*, 2012, Issue 12. Art. No.: CD004415. DOI: 10.1002/14651858. CD004415.pub2. This review contains 83 studies involving over 10,036 participant

388: TOPICAL CORTICOSTEROIDS EFFECTIVE FOR NASAL POLYPS

written by **Brian R McAvoy**

Clinical Question: How effective are topical corticosteroids in patients with chronic rhinosinusitis with nasal polyps?

Bottom Line: Topical nasal corticosteroids should be considered part of medical treatment for chronic rhinosinusitis with nasal polyps. Topical nasal corticosteroids had beneficial effects on symptoms, polyp size and



polyp recurrence, with little evidence of significant adverse effects. When a low dose was compared to a high dose of topical corticosteroid, no difference was evident for symptom control, polyp size and polyp recurrence. The effect on polyp size may be greater when the topical corticosteroid is administered after sinus surgery.

Caveat: Although these data consistently favoured topical corticosteroids, there was also significant heterogeneity seen and variability in the effect size. There was not enough information regarding the extent of previous surgery to consider the role of simple polypectomy versus more comprehensive sinus surgery. Symptoms were scored differently across included studies.

Context: Nasal polyps develop as a result of chronic inflammation of the mucous lining of the nose and sinuses and they can cause nasal obstruction, poor sinus drainage, and loss of smell/taste, a runny nose or nasal congestion. Topical corticosteroids have been the most widely used treatment, with each clinician using different regimens, at different doses, in different settings and with or without sinus surgery

Cochrane Systematic Review: Kalish L et al. Topical steroids for nasal polyps. *Cochrane Reviews*, 2012, Issue 12. Art. No.: CD006549. DOI: 10.1002/14651858.CD006549.pub2. This review contains 40 studies involving 3,624 participants.

RHEUMATOID ARTHRITIS

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. They draw on existing guidance, which provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

This quality standard covers the diagnosis and management of rheumatoid arthritis in adults (16 years and older).

(Source: NICE Quality standards, QS33, June 2013; available at <http://guidance.nice.org.uk/QS33>)

TOBACCO: HARM-REDUCTION APPROACHES TO SMOKING

Nicotine inhaled from smoking tobacco is highly addictive. But it is primarily the toxins and carcinogens in tobacco smoke – not the nicotine – that cause illness and death. The best way to reduce these illnesses and deaths is to stop smoking – ideally, stopping in one step (sometimes called ‘abrupt quitting’). (See the NICE pathway on smoking)

However, there are other ways of reducing the harm from smoking, even though this may involve continued use of nicotine. This guidance is about helping people, particularly those who are highly dependent on nicotine, who:

- may not be able (or do not want) to stop smoking in one step
- may want to stop smoking, without necessarily giving up nicotine
- may not be ready to stop smoking, but want to reduce the amount they smoke.

It recommends harm-reduction approaches which may or may not include temporary or long-term use of licensed nicotine-containing products.

The guidance is for: commissioners, managers and practitioners with public health as part of their remit, organisations that provide education and training, manufacturers and retailers of licensed nicotine-containing products.

It is especially aimed at those involved in providing advice about stopping smoking, including those working in smoking cessation services.

The recommendations cover awareness-raising, advising on, providing and selling licensed nicotine-containing products; self-help materials; behavioural support; and education and training for practitioners.

This guidance does not cover ‘reduced exposure cigarettes’, ‘smokeless tobacco’ or any other products containing tobacco. In addition, it does not provide advice for women who are pregnant or maternity services.

(Source: NICE Public health guidance, PH45, June 2013; available at <http://guidance.nice.org.uk/PH45>)