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.

372: Citalopram effective for major depression

written by Brian R McAvoy

Clinical question: How effective is citalopram in comparison with tricyclics, heterocyclics, other selective serotonin reuptake inhibitors (SSRIs) and other conventional and non-conventional antidepressants in the acute-phase treatment of major (moderate-to-severe) depression?

Bottom line: Citalopram was more efficacious than paroxetine and reboxetine, and more acceptable (lower drop-out rate) than tricyclics, reboxetine and venlafaxine. However, it seemed to be less efficacious than escitalopram. Follow-up extended to 6 months.

Caveat: Economic analyses were not reported. Sponsorship bias and publication bias had the potential for overestimating treatment effects.

Context: Antidepressant drugs remain the mainstay of treatment in moderate-to-severe depression. During the past 20 years, SSRIs have progressively become the most commonly prescribed antidepressants.

Cochrane Systematic Review: Cipriani A et al. Citalopram versus other antidepressive agents for depression. Cochrane Reviews, 2012, Issue 7. Article No. CD006534. DOI: 10.1002/14651858. CD006534.pub2. This review contains 37 studies involving over 6000 participants.

371: Insufficient evidence for exercise preventing gestational diabetes mellitus

written by Brian R McAvoy

Clinical question: How effective is physical exercise for pregnant women for preventing glucose intolerance or gestational diabetes mellitus (GDM)?

Bottom line: Compared with routine antenatal care, exercise programmes, including individualised exercise with regular advice, weekly supervised group exercise sessions or home-based stationary cycling, either supervised or unsupervised, had no clear effect on preventing GDM or improving insulin sensitivity.

Caveat: None of the trials reported large-for-gestational age babies, perinatal mortality or long-term outcomes for women or their babies. No information was available on health service costs. All trials were conducted in high-income countries.

Context: GDM affects a significant number of women each year. GDM is associated with a wide range of adverse outcomes for women (type 2 diabetes mellitus) and their babies (birthweight >4kg and birth trauma). Recent observational studies have found physical activity during normal pregnancy decreases insulin resistance and therefore might help to decrease the risk of developing GDM.

Cochrane Systematic Review: Han S, Middleton P and Crowther CA. Exercise for pregnant women for preventing gestational diabetes mellitus. Cochrane Reviews, 2012, Issue 7. Article No. CD009021. DOI: 10.1002/ 14651858. CD009021.pub2. This review contains 5 studies involving 1115 participants.

368: Psychological interventions may be effective for non-cardiac chest pain

written by Brian R McAvoy

Clinical question: How effective are psychological interventions for symptomatic management of non-specific chest pain in patients with normal coronary anatomy?

Bottom line: Psychological treatments, especially cognitive behavioural therapy and hypnotherapy, may be effective in terms of reduced chest pain frequency in the short term (up to 3 months) for the treatment of non-specific chest pain.

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The evidence for brief interventions was less clear. No adverse effects of psychotherapy were found.

Caveat: The benefits of treatment were not sustained beyond 3 months. There was no effect on the severity of the chest pain. The evidence was limited to small trials of questionable quality.

Context: Recurrent chest pain in the absence of coronary artery disease is a common, difficult-to-treat problem that can lead to excess use of medical care. A substantial number of patients are not reassured by negative medical assessment, reporting persistent pain and limitations. Psychological factors appear to be of importance for treatment.

Cochrane Systematic Review: Kisely SR et al. Psychological interventions for symptomatic management of non-specific chest pain in patients with normal coronary artery anatomy. Cochrane Reviews, 2012, Issue 6. Article No. CD004101DOI: 10.1002/14651858.CD004101.pub4. This review contains 15 studies involving 803 participants.

367: No benefits of omega-3 fatty acid on cognitive function in older people

written by Brian R McAvoy

Clinical question: How effective is omega-3 long chain polyunsaturated fatty acid (PUFA) supplementation for the prevention of dementia and cognitive decline in cognitively healthy older people?

Bottom line: There was no benefit to cognitive function (measured by mini-mental state examination, word learning, digit span and fluency) from omega-3 PUFA supplementation taken for 6 to 40 months in cognitively healthy people over 60 years old. Supplementation was generally well tolerated. The most commonly reported side effects were mild gastrointestinal problems. All 3 studies were of high quality.

Caveat: None of the studies examined the effect of omega-3 PUFA on incident dementia. Longer-term studies may identify changes in cognitive function. Omega-3 PUFA supplements may have other health benefits.

Context: Evidence from observational studies has suggested that diets high in omega-3 PUFA may protect people from cognitive decline and dementia. Oily fish, such as salmon, mackerel, herring and sardines, are a rich source of omega-3 PUFAs, which are essential for brain development.

Cochrane Systematic Review: Sydenham E et al. Omega-3 fatty acid for prevention of cognitive decline and dementia. Cochrane Reviews, 2012, Issue 6. Article No. CD005379. DOI: 10.1002/14651858.CD005379.pub3. This review contains 3 studies involving 3536 participants.

366: Phone messaging increases attendance at healthcare appointments

written by Brian R McAvoy

Clinical question: How effective are mobile phone messaging reminders for attendance at healthcare appointments?

Bottom line: There was moderate quality evidence that mobile phone text-messaging reminders were more effective than no reminders, and low quality evidence that text-messaging reminders with postal reminders were more effective than postal reminders alone. Text-messaging reminders were similar to telephone reminders in terms of their effect on attendance rates, and were more cost-effective than telephone reminders.

Caveat: The studies were heterogeneous and the quality of the evidence was low to moderate. None of the studies reported on health outcomes, user evaluation of the interventions, user perceptions of safety, costs or potential harms, or on any adverse effects of the interventions.

Context: Missed appointments are a major cause of inefficiency in healthcare delivery, with substantial monetary costs for the health system, leading to delays in diagnosis and appropriate treatment. Patients' forgetfulness is one of the main reasons for missed appointments, and reminders may help alleviate this problem. Mobile phone messaging applications could provide an important, inexpensive delivery medium for reminders for healthcare appointments.

Cochrane Systematic Review: Car J et al. Mobile phone messaging reminders for attendance at healthcare appointments. Cochrane Reviews, 2012, Issue 7. Article No. CD007458. DOI: 10.1002/14651858.CD007458.pub2. This review contains four studies involving 3547 participants.