

Relay *Cochrane!*



Canadian Cochrane Centre

< Volume 18 –November 2011>

In the News

Cochrane Canada Symposium 2012 Health Evidence for ALL



Save the Date! 2012 Cochrane Canada Symposium

The 10th Annual Cochrane Canada Symposium will be held 9 - 10 May 2012, with presymposium workshops from 7 - 8 May. Winnipeg, Manitoba has been chosen to host this year's Symposium, and the theme is "Health Evidence for ALL." You can learn more about the 2012 Cochrane Canada Symposium at ccc-symposium.cochrane.org. The website will be updated continually with new information, so be sure to keep checking. We hope to see you in Winnipeg!

The Canadian Cochrane Centre is moving!

As of 2 December 2011 the CCC will be located at The Ottawa Hospital -General Campus. Our new address will be:
The Ottawa Hospital - General Campus
Centre for Practice-Changing Research (CPCR)
501 Smyth Road, Box 711
Ottawa, ON K1H 8L6

Cochrane Canada Annual Report 2010 - 2011

Cochrane Canada's annual report for the financial year 1 September 2010 – 31 August 2011 has been released! Visit our [website](#) to view the report online and read about the achievements of the Centre, Review Groups, Field and Methods Groups over the past year.

Former Cochrane CWHN rep Wins Governor General's Award

Long-time women's health advocate and the Canadian Women's Health Network founding Executive Director, Madeline Boscoe, was awarded the Governor General's Award in Commemoration of the Persons Case.

For over 30 years, Madeline Boscoe has been a voice for Canadian women's health as a public health nurse, a researcher, an educator and an advocate.

Read more about Madeline's work and the Governor General's Award [here](#).

SYMPOSIUM NEWS

Cochrane Canada Symposium 2012

Join us at the 10th Annual Cochrane Canada Symposium in Winnipeg! Find more information at ccc-symposium.cochrane.org/

Webinars: Cochrane Canada Live

A primer to Cochrane Diagnostic Test Accuracy reviews

7 December 2011,
11 a.m. EST

Learn from Dr. Mariska Leeflang, Co-Convenor, Cochrane Screening and Diagnostic Tests Methods Group, and member, Cochrane Diagnostic Test Accuracy Working Group, about what diagnostic test accuracy reviews are and what they can be used for.

Click [here](#) to fill in the registration form and return to ccnc-iph@uottawa.ca.

Cochrane for Practice

The use of blunt needles compared to sharp needles for preventing needle stick injuries in surgical staff

Surgeons and their assistants are at risk of needle stick injuries and glove perforations when performing percutaneous procedures, where access to inner organs or other tissue is done via needle-puncture to the skin, rather than using an open approach. There is a risk of exposure to blood, which can lead to infection with HIV or other blood-borne viruses. A study was done to examine the effectiveness of using blunt needles compared to sharp ones for preventing needle stick injuries. Ten registered controlled trials involving 2961 participating surgeons were reviewed. It was found that if using a sharp needle, a surgeon sustains an average of one glove perforation in three operations. The use of a blunt needle reduces the risk of glove perforation by a relative risk of 0.46, meaning blunt needles will prevent one glove perforation in six operations. Surgeons reported that the force needed for a blunt needle is higher, but it was still rated as acceptable in five out of six studies. There is high-rated evidence to suggest the use of a blunt needle in percutaneous procedures will reduce the risk of surgeons and their assistants contracting infectious diseases through needle stick injuries.

[Blunt versus sharp suture needles for preventing percutaneous exposure incidents in surgical staff](#)

Cochrane for Policy

Public release of performance data in changing the behaviour of healthcare consumers, professionals or organizations

It is becoming more common for information about the performance of hospitals, health professionals or providers and healthcare organizations to be released to the public. The purpose of releasing such information is for quality improvement such as changing the behaviour of healthcare consumers, providers and purchasers. The purpose of this review is to determine the effectiveness of the release of performance data into public domain. Four studies including 35,000 consumers and 1560 hospitals were looked at, and three of those studies examined consumer behaviour in the US. It was found in two consumer studies that publishing data had no effect on health plan choices in a Medicaid population. The other study found a small positive effect on patient volumes for coronary artery bypass grafting and low-complication outliers for lumbar discectomy, though the positive effects lasted no longer than two months. The fourth study looked for any improvements in the care of Canadian patients with acute heart attack and congestive heart failure. No effects were found on the process-of-care indicators, but there were some improvements in individual indicators as well as heart attack mortality rates. No changes in awareness, attitude, views and knowledge of performance data and costs were reported. No firm conclusions can be drawn on the effects of releasing performance data due to sparse, low-quality evidence.

[Public release of performance data in changing the behaviour of healthcare consumers, professionals and organisations](#)

Cochrane Library Spotlight – Issues 9-11, 2011

Alternative Therapies

Dance therapy for schizophrenia

Schizophrenia is a long-term disabling illness that can cause people to have both “positive” and “negative” symptoms. Positive symptoms include hearing voices and other alterations of the senses along with having delusions, and negative symptoms include poverty of speech, lack of drive, lack of feeling, social withdrawal and flattening of the mood. Dance therapy is sometimes used on patients with schizophrenia to help them explore their feelings in a non-verbal way. The therapist helps the patient interpret their movement as a link to their personal feelings. One single blind study involving 45 participants was reviewed to evaluate the effects of dance therapy versus standard care. It compared 10 weeks of group dance therapy plus standard care with ten weeks of group supportive counselling plus standard care, and both groups were followed up with after four months. After the 10-week treatment, there was a significant improvement in mental state with the dance therapy group, but no difference in outcomes such as satisfaction with care, leaving the study early, quality of life or adverse effects. Over 30 per cent of participants were lost from both groups at the four-month follow up, making it impossible to measure any long-term effects.

[Dance therapy for schizophrenia](#)

Asthma

Does controlling exposure to house dust mites improve asthma?

Asthma is the most common chronic disease among children, and is triggered by allergens (substances that cause an allergic reaction). The major allergen in house dust comes from mites, and it is believed that controlling a person’s exposure to house dust mites, chemically and physically, will reduce asthmatic symptoms. This study’s objective is to assess the effects of reducing exposure to house dust mites on people with asthma that is triggered by mites. The study included 55 trials with 3121 patients. Thirty-six trials involved physical methods such as mattress encasings, 10 trials involved chemical methods and eight trials involved a combination of both. None of the interventions were found to be effective, though many trials were of poor quality and may have had exaggerated outcomes. There was no significant difference in the number of patients improved, asthma symptoms scores or medication usage. The author’s recommendation is that further studies are not likely needed, though if conducted, they should be methodologically rigorous and use different methods than previous studies.

[House dust mite control measures for asthma](#)

Cancer

Treatment for cardiac problems caused by antibiotic chemotherapy for childhood cancer

Anthracyclines are antibiotic drugs used to treat cancer in both adult and child patients. This method of treatment can cause the patient to develop cardiotoxicity, which is damage to the heart muscle. Several medical treatments are used to treat patients with cardiac dysfunction, but it is unknown if the treatments used for adult patients are beneficial for children. This study looked at two randomized controlled trials (RCT) with a total of 203 patients. One compared enalapril, a drug used to treat high blood pressure, with a placebo, and the other trial compared phosphocreatine, a substance with the ability to produce muscular energy, with a controlled treatment. The first RCT showed no difference in overall survival, mortality due to heart failure, development of clinical heart failure and quality of life between the treatment and control group. It did have a short-term beneficial effect on child cancer patients with cardiac dysfunction, but it had no significant effect on

important outcomes and was linked to side effects such as dizziness and fatigue. The second trial found no effect of a short term treatment using phosphocreatine in child cancer patients. High-quality studies are needed to show if there are drugs to improve heart function in child cancer patients.

Medical interventions for treating anthracycline-induced symptomatic and asymptomatic cardiotoxicity during and after treatment for childhood cancer

Child Health

Xylitol sugar supplement for preventing middle ear infection in children up to 12 years of age

Acute otitis media (AOM) is the most common bacterial infection among children in the United States. AOM is an acute middle ear infection that approximately 83 per cent of children experience at least once by the time they are three. There are limitations and concerns over its treatment with antibiotics and surgery, so the purpose of this study is to examine the efficacy and safety of xylitol, a natural sugar substitute, in preventing AOM in children up to 12 years old. Xylitol has been used as a natural sweetener in chewing gum, toothpaste and medicine, and it can reduce the risk of tooth decay. Three registered controlled trials (RCTs) involving 1836 healthy Finnish day care students were reviewed, along with one RCT that involved 1277 Finnish day care students with respiratory infections. It was found that xylitol reduces the risk of healthy students developing AOM by 25 per cent, and xylitol in the form of chewing gum and lozenges is most effective. No adverse effects were found, though xylitol had no effect on preventing AOM in children during respiratory infection.

Xylitol for preventing acute otitis media in children up to 12 years of age

Diabetes

Surgical and non-surgical methods of cleaning and removing dead tissue from sores on the feet of people with diabetes

It is estimated that 15 per cent of people with diabetes are affected with foot ulceration at some point in their lives. Foot ulceration (open sores on the feet that go through the skin) can result in serious consequences and possibly even amputation. A common method for speeding up the process of ulcer healing is debridement, which is the cleaning and removal of dead tissue and callus, which can be done surgically or with special dressings and gels (such as hydrogels). This study was done to determine the most effective method for speeding up the process of ulcer healing. Six registered controlled trials were looked at: four involving hydrogels, one involving larval therapy and one evaluating surgical debridement. It was found that surgical debridement showed no significant benefit over standard treatment, and there was insufficient evidence on the effects of larval treatment. It was found that hydrogels result in faster healing than gauze and standard care.

Debridement of diabetic foot ulcers

Mental Health

Cognitive reframing for carers of people with dementia

Dementia care is challenging for family carers. There is evidence to suggest that psychosocial interventions for family caregivers can reduce their psychological morbidity and delay their relatives from being institutionalized. This study focuses on the effectiveness of one element within psychosocial interventions, called cognitive reframing. Cognitive reframing intends to reduce the carer's stress by changing certain beliefs, such as beliefs about their responsibilities to the person with dementia, their own need for support and why their relatives behave as they do. The study found that cognitive reframing has a positive effect on psychological morbidity, stress, and in particular, the carer's anxiety. No effects were found for carer's coping, appraisal of the burden, reactions to their relative's behaviours or institutionalization of the person with dementia. It is recommended that cognitive

reframing be used alongside other interventions for a higher impact.
Cognitive reframing for carers of people with dementia

Public Health

Time effects of blood pressure lowering drugs for the treatment of high blood pressure

A morning surge in blood pressure in a person with primary hypertension is known to increase the risk of a heart attack or stroke for the first few hours of being awake. Variations in blood pressure levels display circadian rhythms, meaning there is a change in behavior following a 24-hour cycle, usually in response to light and darkness. To determine whether it is more effective to administer blood pressure-lowering drugs in the morning or the evening, this study examined 21 randomized controlled trials, including 1993 patients. Data suggests that nighttime drug administration achieves better blood pressure control than in the morning. However, no difference was found on its effect on death and adverse cardiovascular outcomes.

Evening versus morning dosing regimen drug therapy for hypertension

Senior's Health

Vitamin C for preventing and treating tetanus

Tetanus is a severe disease that is produced by *Clostridium tetani*, a bacterium that can infect penetrating wounds contaminated by foreign materials such as soil. Tetanus is commonly contracted in developing countries, particularly amongst the elderly and young children due to vaccination coverage being very low. In animal studies, specifically with rats, vitamin C has been found to protect against the purified tetanus toxin. To assess the effect of vitamin C on tetanus in humans, this study found one trial conducted in Bangladesh that involved 117 tetanus patients of various ages. It was found that in children ages one to 12 years old, Vitamin C treatment was associated with a 100 per cent reduction in tetanus mortality. In people ages 13 to 30, vitamin C was associated with 45 per cent reduction in tetanus mortality. Though results were promising, the trial was not properly conducted. Therefore, caution is required when interpreting the findings. Further investigation is required to investigate the role of vitamin C in tetanus treatment for seniors.

Vitamin C for preventing and treating tetanus

Smoking Cessation

Does tobacco advertising and promotion make it more likely that adolescents will start to smoke

Tabacco companies deny targeting their marketing strategies to young non-smokers, but it is likely that tobacco advertising and promotion influences the attitudes of non-smokers and makes them more likely to try smoking. This study looked at 19 studies involving over 29,000 non-smokers to determine if tobacco advertising does in fact influence a young person's decision to try smoking. Studies measured participants' exposure or receptivity to advertisements in a variety of ways, and one study measured the number of tobacco advertisements in magazines read by participants. Behaviour change was reported in all studies that involved participants who reported not smoking at baseline. The non-smokers who were more aware of tobacco advertising were more likely to have experimented with cigarettes or become smokers at the follow-up in 18 out of the 19 studies. This study found enough evidence to suggest that tobacco advertising and promotion increases the likelihood that adolescents will start to smoke.

Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours

Women's Health

Immersion in water in labour and birth

Labouring in water is a birthing method that some women prefer, and enthusiasts suggest that it increases maternal relaxation, reduces analgesia requirements and promotes a midwifery model of care. Some concerns of laboring in water or waterbirth are the risks of neonatal water inhalation or maternal/neonatal infection. This study was conducted to assess how this particular birthing method affects maternal, fetal, neonatal and caregiver outcomes. Twelve trials involving 3243 women were looked at that compared early immersion to late immersion in the first stage of labour, immersion in the second stage of labour and no immersion. It was found that immersion in water during the first stage of labour significantly reduces epidural/spinal analgesia requirements without any adverse affects in labour duration, operative delivery rates and neonatal well-being. One trial reported that immersion during the second stage of labour increased women's overall satisfaction with their birth experience. No trials were found on immersion during the third stage, and further research is needed to assess the impact on fetal and maternal morbidity. [Immersion in water in labour and birth](#)

What's Ahead

Cochrane Canada Live - December 2011

Check out this webinar! Participation is open to anyone.

- 7 December (11 a.m. EST) – Learn from Dr Mariska Leeflang, Co-Convenor, Cochrane Screening and Diagnostic Tests Methods Group, and member, Cochrane Diagnostic Test Accuracy Working Group about what diagnostic test accuracy reviews are and what they can be used for.

For more webinar details and to register: ccc.cochrane.org/cochrane-canada-live-webinars

2012 Cochrane Canada Symposium

Join us at the 10th Annual Cochrane Canada Symposium in Winnipeg! Find more information at ccc-symposium.cochrane.org/

The Canadian Cochrane Centre is one of 14 independent, not-for-profit Cochrane Centres worldwide. Over 2,795 people in Canada contribute to The Cochrane Collaboration and Cochrane Systematic Reviews.

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