

# Relay Cochrane!



Canadian Cochrane Centre

< Volume 20 – June 2012 >

## In the News

### Minister Aglukkaq announces new appointment of Dr Terry Klassen to the Governing Council of the Canadian Institutes of Health Research

University of Manitoba Dean of Medicine Dr Brian Postl congratulates the Faculty of Medicine's Dr Terry Klassen on his appointment to the Governing Council of the CIHR. The Honourable Leona Aglukkaq, Minister of Health announced 4 June the appointment of Dr Terry Klassen, to the Governing Council of the Canadian Institutes of Health Research (CIHR) for a three-year term.

[Click here](#) to read more.

### CCC Welcomes New Advisory Board Chair

The Canadian Cochrane Centre (CCC) is pleased to welcome Krista Connell, CEO of the Nova Scotia Health Research Foundation (NSHRF), as the new Chair of our Advisory Board. The Advisory Board provides a balance of high-level, strategic perspectives from across the Canadian healthcare landscape and has the capacity to strengthen the development of CCC activities, linkages and funding stability in Canada with their strategic advice and strong capacity for an advocacy role.

Krista began her involvement with the Canadian Cochrane Centre in 2007, when she participated in the new Board Structure. She has been a member at large and also participated on the CCC's Funding Committee from 2008-2010. The NSHRF also hosted the 7<sup>th</sup> Annual Canadian Cochrane Symposium in 2009.

Welcome Krista!

### Where's the Evidence? A Top Ten List of Cochrane Reviews

*Presented by the Canadian Cochrane Centre and the Canadian Institutes of Health Research*

Every day new health research studies are covered in the media worldwide. One day you may read that coffee is bad for your health; the next day you'll hear that the same cup of java reduces your risk of disease. How can you sort through the complex and often conflicting world of scientific research to make sound health decisions? And where can you find accurate and reliable information written in plain language? Try [The Cochrane Library](#).

In honour of the 10th Annual [Cochrane Canada Symposium](#), which took place in Winnipeg last month, the Canadian Cochrane Centre and the

## SYMPOSIUM NEWS

### Cochrane Canada Symposium 2012

The 10<sup>th</sup> Annual Cochrane Canada Symposium took place in Winnipeg, Manitoba from 9 – 10 May 2012. To view the 2012 presentations, [click here](#).

Canadian Institutes of Health Research are pleased to present a top ten list of Cochrane Reviews that have helped clarify health questions that concern many of us.

Visit our [website](#) to view the full list.

### ***Rx for Change* has been updated**

The *Rx for Change* database is a first in class tool for promoting optimal therapy. It provides a unique source of evidence summaries specific to interventions geared towards changing health practitioner or consumer behaviours around drug prescribing and use.

Latest updates include:

- Professional Section – literature up to September 2011
- Consumer Section – literature up to September 2011

For more information, please visit [Rx for Change](#).

## **Cochrane for Practice**

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### **Position in the second stage of labour for women without epidural anaesthesia**

There are several different positions that women use to deliver a baby, such as being upright (sitting, squatting, kneeling) or lying down. This review aims to assess the benefits and risks of the different birthing positions for women who are not using an epidural. This review included 22 trials with a total of 7280 women. There was no significant impact on the duration of labour for any of the positions. However, women who sat in an upright position during the second stage of labour experienced a reduction in episiotomies (surgical cut in the perineum), fewer abnormal fetal heart patterns and fewer assisted deliveries than the women lying down. Women lying down during labour experienced less blood loss. Authors recommend that results be interpreted with caution, as the methodological quality of the studies is questionable.

More research is needed.

[Position in the second stage of labour for women without epidural anaesthesia](#)

## **Cochrane for Policy**

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### **Centralization of care may prolong survival in women with ovarian cancer, and possibly more generally, gynaecological cancer**

Gynaecological cancers, such as ovarian, uterine or cervical, are the second most common cancers among women (breast cancer is the first). It has been suggested that centralized care improves outcomes in gynaecological cancer, and this review aims to examine its effectiveness. Three studies involving 9000 women were analyzed, and it was found that institutions with onsite gynaecological oncologists may prolong survival in women with ovarian cancer compared to general hospitals. A meta-analysis of three other studies involving over 50,000 women found that teaching or regional cancer centres may prolong survival of women with any gynaecological cancer compared to hospitals. The largest out of those three studies included all gynaecological malignancies and involved 48,981 women, so findings extend beyond just ovarian cancer. Further studies are needed to assess the quality of life associated with the centralization of gynaecological care, as well as its effectiveness on outcomes of other gynaecological cancers besides ovarian.

## Cochrane Library Spotlight – Issues 3, 4 & 5 2012

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### Asthma

#### Physical training for asthma

People who suffer from asthma tend to refrain from physical activity due to fear of their symptoms worsening, medical advice or family influence. This can result in reduced physical fitness, neuromuscular co-ordination and self-confidence. There have been conflicting studies in the past on the effect physical training has on the respiratory system and people with asthma, and this review aims to get a better understanding. The authors included 19 studies with a total of 695 participants. Six studies found physical training improved cardiopulmonary fitness by increasing participants' maximum oxygen uptake, and four studies found an increase in maximum expiratory ventilation. This review found clinically and statistically significant data that shows exercise can improve cardiopulmonary fitness. People with asthma should be encouraged to participate in regular fitness activities without fear of worsening their symptoms.

[Physical training for asthma](#)

### Cancer

#### Bisphosphonates in multiple myeloma

Multiple Myeloma is cancer of the plasma cells in bone marrow that grows inside and outside of bones. This can lead to fractures in long bones and the spine and can be treated with a family of drugs called bisphosphonates. The purpose of this review (an update of a review from 2002, and again in 2010) was to investigate if bisphosphonates can improve overall survival, progression-free survival and the number of fractures in people with multiple myeloma. Twenty studies were included with a total of 6692 patients. Of those studies, 16 compared bisphosphonates with a placebo or no treatment, and four compared one kind of bisphosphonates with another. Two studies (2464 patients) were added that were not included in the 2010 update. It was found that the use of bisphosphonates reduces vertebral fractures, skeletal-related events and pain. No significant adverse effects were identified, and no evidence suggested that one kind of drug is better than the other. However, zoledronate appears to be superior to placebo and etidronate in improving overall survival.

[Bisphosphonates in multiple myeloma: a network meta-analysis](#)

### Child Health

#### Non-pharmacological interventions for acute pain in infants

Infancy is a stage of ongoing development and it is not uncommon for children ages three years and under to experience pain throughout that period after an acutely painful procedure such as needles. However, if the pain is left untreated it can cause distress and have lasting implications throughout their lifetime. This review investigates the effects of non-pharmacological interventions for managing acute pain in infants, not including breast milk, sucrose and music. The authors analyzed 51 studies with a total of 3396 participants. Twenty-nine studies looked at heel sticks, a minimally invasive way of taking blood samples from infants, and 10 studies looked at needles. The studies show that the most effective interventions for pain-regulation and pain reactivity were non-nutritive sucking-related

interventions, kangaroo care, swaddling and rocking/holding. Though there is evidence to suggest that these non-pharmacological interventions can be used to manage acute pain in infants, there were significant differences in each study regarding the level of effectiveness of the interventions. Therefore, results should be interpreted with caution.

[Non-pharmacological management of infant and young child procedural pain](#)

## Mental Health

### **Atypical Antipsychotics benefit people with dementia but the risks of adverse events may outweigh the benefits, particularly with long term treatments**

People suffering from dementia often experience periods of aggression, agitation and psychosis. Atypical antipsychotics have become the drug of choice for treatment of such symptoms, and this systematic review aims to evaluate their effectiveness. Nine studies were included in the meta-analysis, five of which have been published in peer-reviewed journals. Most studies involved risperidone or olanzapine treatments compared to a placebo. The authors found that both drugs significantly improved symptoms of aggression, and there was a significant improvement in psychosis among risperidone treated patients. There was not enough data to measure the effects on cognitive function. Serious adverse cerebrovascular effects, such as stroke, were noted in the controlled groups of both drugs, the drop-out rate was higher, and there was an increased risk of mortality. In view of these safety concerns, atypical antipsychotics such as risperidone and olanzapine should not be routinely used unless there is severe risk of distress or physical harm to those living with or caring for the patient.

[Atypical antipsychotics for aggression and psychosis in Alzheimer's disease](#)

## Public Health

### **Cutting down or changing the fat we eat may reduce our risk of heart disease**

Reducing and modifying the fat we eat has different effects on cardiovascular risk factors, but it is unclear on how it effects other important health outcomes. This review is an update from a 2010 Cochrane Review and looks at the effects that reducing/modifying dietary fat intake can have on total mortality, cardiovascular mortality and cardiovascular morbidity. This update looked at 24 comparisons involving 65,508 participants. It was found that reducing saturated fat intake lowered the risk of cardiovascular disease, such as heart attacks, angina, strokes and the need for heart surgery, by 14 per cent. This outcome was seen in studies of fat modification (not reduction) over a period of two years in studies of men. No results were found on the effect on total mortality or cardiovascular mortality. The findings only suggest a small reduction in the risk of heart and vascular disease. However, this update concludes that modifying, not reducing, the fat in our food by replacing saturated fats with unsaturated fats for the duration of at least two years would be beneficial for all people.

[Reduced or modified dietary fat for preventing cardiovascular disease](#)

## Senior's Health

### **A review of the ways that healthcare professionals can improve the use of suitable medicines for older people**

Taking multiple medications for a chronic illness is very common amongst seniors for the purpose of treating symptoms and preventing the illness from advancing. However, sometimes taking multiple medications, known as polypharmacy, can be harmful. This review investigates the interventions that healthcare professionals use when prescribing medications to determine which are most effective for improving the use of polypharmacy and reducing medical-related problems in seniors. The authors examined 139 studies and

included 10 in the review. One study looked at computer decision support and nine looked at pharmaceutical care such as identifying, preventing and resolving medication-related problems, promoting the correct use of medications and encouraging health promotion and education. The review found that the interventions demonstrated an average reduction of -6.78 in inappropriate medication use, using the Medication Appropriateness Index. It is unclear if this translates into a clinically significant improvement. However, it was found that these interventions do help in terms of reducing inappropriate prescribing and reducing medicine-related issues.

[Interventions to improve the appropriate use of polypharmacy for older people](#)

## Smoking Cessation

### **Can training health professionals to ask people if they smoke increase offers of advice and help patients quit?**

There is evidence to suggest that more people are likely to quit smoking if they receive advice and support from their doctor. Providing skills training to healthcare professionals can lead them to have greater success in stopping their patients from smoking. This review examines the effectiveness of skills training programs in the delivery of smoking cessation interventions. Seventeen studies were included, and a meta-analysis of 14 studies found that training programs produced statistically and clinically significant results in favour of smoking cessation. The studies also found an increased rate of continuous abstinence after the intervention has taken place. The evidence shows that training programs help healthcare professionals identify smokers and increase the number of people who quit smoking. However, the intervention showed no difference in the provision of nicotine gum and other replacement therapies.

[Training health professionals in smoking cessation](#)

## Women's Health

### **Treatments for female pattern hair loss**

Many women experience hair loss or thinning of the hair at the top or front of the head. This is known as female pattern hair loss or androgenic alopecia, most commonly occurring in postmenopausal women. The purpose of this review is to determine the most effective treatment for androgenic alopecia. Twenty trials were included involving 2349 participants. Ten trials investigated the effects of different concentrations of minoxidil, a drug that increases hair growth. Data from four studies suggested that nearly twice as many women treated with minoxidil reported a moderate increase in hair growth compared to women given a placebo. Seven studies reported an increase of 13.28 in total hair count per cm<sup>2</sup> in the minoxidil group. There were no adverse effects reported in either group, besides additional hair growth on areas other than the scalp when taking minoxidil (five per cent) twice daily. This review found that minoxidil is more effective than a placebo for the treatment of female pattern hair loss, though the majority of the studies were assessed as high risk of bias. More studies are needed to determine the sustainability of the effects after stopping the treatment.

[Interventions for female pattern hair loss](#)

## What's Ahead

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### **Cochrane Canada Live – 2012**

#### **Review Manager 5 for New Authors**

30 October 2012, 1200 EST (1 hour)

Learn from John MacDonald, Managing Editor, Cochrane Inflammatory Bowel Disease and Functional Bowel Disorders Review Group, on how to use Review Manager for your Cochrane Review. We'll cover the basics, from opening and saving your files to uploading additional figures, tracking changes to conducting meta-analysis.

[Click here](#) to register!

**Reporting Guidelines for Equity-Focused Systematic Reviews - Equity-Extension of the PRISMA Statement**

11 December 2012, 1200 EST (1 hour)

Join presenters from the Equity Methods Group – Peter Tugwell, Vivian Welch, and Jennifer O'Neill – to learn about new reporting guidelines for systematic reviews with an equity focus: those with interventions that target disadvantaged populations, are aimed at reducing social gradients across populations, or are likely to have important effects on equity. You'll learn about using the equity-extension checklist for your systematic review and you'll be asked to provide ideas and feedback regarding dissemination and KT strategies.

[Click here](#) to register!

For more webinar details and to register: [ccc.cochrane.org/cochrane-canada-live-webinars](http://ccc.cochrane.org/cochrane-canada-live-webinars)

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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