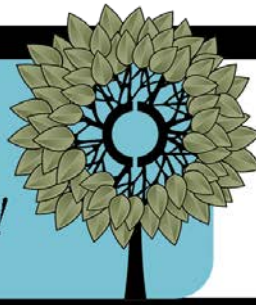


# Relay Cochrane!



Canadian Cochrane Centre

< Volume 21 – August 2012 >

## In the News

### Alzheimer's and Dementia: Where's the Evidence? A list of Cochrane Reviews

The Canadian Institutes of Health Research (CIHR) has recently highlighted a collection of Cochrane Reviews related to Alzheimer's disease and dementia.

Alzheimer's disease is the main cause for dementia and is currently irreversible and without a cure. CIHR is leading the International Collaborative Research Strategy for Alzheimer's Disease, an initiative that engages Canadian researchers in international dementia research. The initiative aims to provide Canadians with the latest evidence on prevention, diagnostic testing and treatment approaches to Alzheimer's disease.

Cochrane Reviews synthesize research findings and are a reliable source of evidence on the effectiveness of healthcare treatments and diagnostic testing. A multitude of reviews related to Alzheimer's disease have been published in *The Cochrane Library*, and CIHR has collected several on what's been proven to work, or proven *not* to work, in the prevention and treatment of the disease.

To view the list of Cochrane Reviews, [click here](#).

### Launch of the Evidence Informed Healthcare Renewal Portal

Health system policy-makers and stakeholders now have easier, faster access to policy-related information focused on healthcare renewal in Canada.

Canada's **Evidence-Informed Healthcare Renewal (EIHR) Portal** is a continuously updated repository of policy-relevant documents including jurisdictional reviews, stakeholder position papers, and intergovernmental communiqués that can support transformation and innovation in healthcare renewal.

The EIHR Portal, managed by a collaboration between the [McMaster Health Forum](#) and the [Canadian Institutes of Health Research](#), is housed on the [Health Systems Evidence](#) website.

[Click here](#) to read more.

## COLLOQUIUM NEWS

### Cochrane Colloquium 2013

The Cochrane Collaboration's 21<sup>st</sup> Colloquium will be held in Quebec City from 19 – 23 September 2013.

This event will also be a celebration of the Collaboration's 20<sup>th</sup> anniversary, and we plan to make it a party you won't want to miss!

Stay tuned as we continue to update you throughout the planning process. Please note the colloquium web address is [colloquium.cochrane.org](http://colloquium.cochrane.org). Information about the Quebec City Colloquium will be uploaded to the website beginning in November.

### Cochrane Colloquium 2012

The Canadian Cochrane Centre is off to Auckland, New Zealand from 30 September – 3 October 2012 for The Cochrane Collaboration's 20<sup>th</sup> Colloquium. Visit the [website](#) for more details about this year's event.

Please email the Centre's Communications Associate, Catherine McNair, at [cmcnair@ohri.ca](mailto:cmcnair@ohri.ca) if you need to reach the Centre during this time.

### Connect with us online

Connect with the CCC using social media to get daily updates on recent healthcare news and to interact with Cochrane Canada's online community!



## Why should we translate Cochrane Reviews into French? A view from Cameroon

Editorial by Lawrence Mbuagbaw & Harriet MacLehose  
Published in *The Cochrane Library*

The Cochrane Collaboration is a leader in the preparation of high-quality systematic reviews, but they are prepared and available mainly in the English language. This alone greatly undermines the potential of Cochrane Reviews as building blocks for decision-making in many low- and middle-income countries, including those in Africa, where evidence about the benefits and harms of healthcare interventions is needed urgently.

There are two main reasons why more efforts should be steered towards translating Cochrane Reviews into the French language . . .

[Click here](#) to continue reading.

## Cochrane for Practice

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### **Audit and feedback: effects on professional practice and patient outcomes**

Providing audit and feedback is meant to improve the performance of healthcare professionals, either on its own or paired with other types of interventions. However, it is unclear if audit and feedback actually prove to be effective. This review investigates the effect that audit and feedback have on the practice of healthcare professionals, as well as patient outcomes. There were 140 studies included in this review, which measured the effects of audit and feedback primarily on doctors, but on nurses and pharmacists as well. It was found that feedback is most effective when the subject's baseline performance is low, the source of feedback is a supervisor or colleague, the feedback is given more than once and provided in both verbal and written form and a clear target goal or action plan is given. In addition, the level of effectiveness may be influenced by the type of behaviour the audit and feedback is targeting. More studies are needed to determine if audit and feedback are more effective when combined with other interventions.

[Audit and feedback: effects on professional practice and healthcare outcomes](#)

## Cochrane for Policy

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### **Electric fans for reducing the health effects of heatwaves**

In 2003, a heatwave occurred in Europe that led to an estimated 30,000 deaths. In the event of a heatwave, one common method of relief is the electric fan. However, it is unclear whether or not the electric fan does more good than harm. This review aims to find out if electric fans contribute to or impede heat loss during a heatwave. No studies were identified that met the inclusion criteria of the search. A few low-quality studies were found that reported mixed results, but based on the lack of research, this review does not support or refute the use of electric fans during a heatwave. People should make themselves aware of local policy and guidelines when considering its use. More studies are needed in order to inform future policies and guidelines on this growing issue.

[Electric fans for reducing adverse health impacts in heatwaves](#)

### **Alternative Therapy**

#### **Exercise for depression**

Treatment for depression often includes antidepressants and/or psychotherapy, but some people find exercise to be an effective alternate therapy. This review looks at the effects that exercise has on depression, as well as drop-out rates, costs, quality of life and adverse effects. Thirty-two trials were found, involving a total of 1858 participants. Studies comparing exercise with no treatment or a control intervention found that exercise moderately improved depression. There was no difference in drop-out rates between the exercise and control group, and insufficient data was found on costs, quality of life and adverse effects. Overall, exercise does help improve depression, though more studies are needed to confirm these findings.

[Exercise for depression](#)

### **Asthma**

#### **Do weight loss programs have beneficial effects on asthma outcomes in people with asthma?**

In recent years, the number of people experiencing asthma and obesity has increased globally, but it is unclear if there is a connection between the two, or what effect weight loss has on asthma symptoms. The purpose of this review is to assess the effects that various weight loss interventions have on asthma symptoms amongst people who are severely overweight. Four studies were included in this review with a total of 197 patients. Due to the lack of studies and small sample size, the results of these studies must be interpreted with caution. It was found that people who participated in supervised physical activity, low calorie diet and anti-obesity drugs had a significant decrease in their need for asthma medication in the short-term compared to those who did nothing. There was also some improvement in lung function. People in the treatment group had significant weight loss, which was still significant at the one-year follow-up. Though weight loss does seem to improve asthma symptoms, better designed and reported studies are needed, especially in children and in low-income countries where these types of interventions may not be feasible.

[Weight loss interventions for chronic asthma](#)

### **Child Health**

#### **Using antiretroviral drugs to treat children under two years old who have HIV infection**

If infants with HIV do not receive antiretroviral therapy (ART), the virus will most likely develop into AIDS and cause death before two years of age. However, it is unclear when to start ART in infants, what type of ART regimen is best to use or if it's best to switch regimens at a certain point. This review aims to summarize the available evidence on this topic and inform the management of ART in children under two. Of the 1921 studies found, five were included in this review. It was found that ART reduces disease progression and the risk of death in infants by 75 per cent. Two ART regimens were looked at: nevirapine (NVP) and lopinavir/ritonavir (LPV/r). It was found that the risk of treatment failure was 2.01 times higher with NVP than with LPV/r, and the risk of virological failure was 2.28 higher with NVP as well. The issue is that LPV/r is less cost effective

and is currently only available in a liquid that must be refrigerated, which is difficult for low-income countries. Studies show that switching from LPV/r to NVP after nine months may reduce chances of virological failure, but the testing of viral levels is expensive and often unavailable. Other ongoing trials are exploring ways to give a stronger drug combination to infants.

Effectiveness of antiretroviral therapy in HIV-infected children under two years of age

## Diabetes

### **Enhanced glucose control for preventing and treating diabetic neuropathy**

Ten per cent of people with diabetes are affected by diabetic neuropathy at the point of diagnosis, and 40 – 50 per cent of diabetics develop it after 10 years. Diabetic neuropathy is nerve damage that occurs due to high blood sugar levels caused by diabetes. Enhanced glucose control is known to be the best treatment, but there are no systematic reviews on this topic. The purpose of this review is to examine the effects of glucose control on diabetic neuropathy in people with type 1 and type 2 diabetes. Seventeen studies were identified: seven involving type 1 diabetes, eight involving type 2 and two studies involving both forms. It was found that enhanced glucose control significantly reduces the risk of diabetic neuropathy in people with type 1 diabetes. A similar outcome was found in people with type 2 diabetes, though the results were less significant. Though the intervention decreases the risk of diabetic neuropathy, there were reports of a significant increase in severe hypoglycemic episodes in people with both types of diabetes, which needs to be taken into account when considering use of the intervention.

Enhanced glucose control for preventing and treating diabetic neuropathy

## Home-based Care

### **Interactive computer-based interventions for weight loss or weight maintenance in overweight or obese people**

The World Health Organization estimates that by 2015, 1.5 billion of the world's population will be obese or overweight. Obesity can lead to serious health problems such as diabetes, heart disease, hypertension and stroke. One method of weight loss is in-person treatment such as personal training sessions, though interactive computer-based programs may also be effective. This review aims to estimate the effect that computer-based interventions have on weight loss or weight maintenance. A total of 18 studies were included with 4140 participants. Results found that after six months, those who participated in the computer-based program had a greater chance of losing weight and keeping it off than those with little to no treatment. However, computer-based programs are not as effective as frequent in-person treatment. More studies are needed to determine the cost effectiveness of computer-based weight loss programs.

Interactive computer-based interventions for weight loss or weight maintenance in overweight or obese people

## Public Health

### **Antiretroviral pre-exposure prophylaxis (PrEP) for preventing HIV in high-risk individuals**

There are 2.7 million people infected with HIV each year, clearly demonstrating the need for more effective prevention strategies. One possible reliable tool is antiretroviral pre-exposure prophylaxis (PrEP). This review aims to measure the drug's effectiveness in

preventing HIV infection in high-risk individuals. Twelve studies were included with a total of 9849 participants. Participants included individuals in a relationship with someone who is HIV positive, men who have sex with men and other individuals considered to be high-risk. When comparing PrEP with a placebo it was found that PrEP significantly reduced the risk of HIV infection. It has a higher success rate when it includes two drugs, tenofovir disoproxil fumarate and emtricitabine, rather than just one or the other. No significant adverse effects were reported.

[Antiretroviral pre-exposure prophylaxis \(PrEP\) for preventing HIV in high-risk individuals](#)

### **Mobile phone messaging reminders for attendance at healthcare appointments**

Missed doctors appointments can cause increased costs within the healthcare system, leading to delays in treatment and diagnosis. One way to prevent people from forgetting their doctor's appointment is by sending them a reminder via text message. This review aims to investigate the effects of mobile text messaging, as well as patients' and doctors' evaluation of the intervention, costs and any negative effects. Four studies involving 3547 participants were included in this review. It was found that compared to no reminder, text message reminders increased attendance rates. When comparing text messaging with regular phone call reminders, there was little difference. However, by using both text message and phone reminders, attendance rates increased higher than just a phone call alone. One study also found that text messaging is more cost effective than using landlines. Though the four studies were of moderate quality, more studies are needed in order to determine the true effect.

[Mobile phone messaging reminders for attendance at healthcare appointments](#)

## **Seniors Health**

### **Benefits of antihypertensive drugs for mild hypertension are unclear**

Individuals with mildly elevated blood pressures who have no history of heart disease are the ones most likely to use antihypertensive drugs as a preventative measure. This review investigates whether or not hypertensive drugs are actually effective in decreasing the risk of heart disease and death in people with mild hypertension. Four trials involving 8912 participants were included in this review. It was found that after four to five years of treatment, hypertensive drugs did not reduce total mortality, heart disease, stroke or total cardiovascular events. Treatment caused nine per cent of patients to drop out due to adverse effects. More high-quality trials are needed to truly determine if the benefits of hypertensive drugs outweigh the harm.

[Pharmacotherapy for mild hypertension](#)

## **Smoking Cessation**

### **Can interventions delivered by dental professionals help tobacco users quit?**

Tobacco use can lead to adverse effects on oral health, such as cancer and gum disease. Dental professionals have the opportunity to educate smokers on these issues and increase tobacco cessation and abstinence rates. The purpose of this review is to determine the effectiveness of interventions for smoking cessation when delivered by an oral health professional. Fourteen studies involving over 10,500 participants were included in this review, looking at the effects on both cigarette smokers and smokeless tobacco users. After

pooling the 14 studies together, it was found that tobacco interventions by oral health professionals do help people quit, as well as increase abstinence rates at six months or longer. However, when looking at the studies individually, rather than pooling them together, the results were inconsistent. Though no conclusive recommendations can be made, it is clear that interventions given by dental professionals do help people to quit smoking.  
Training health professionals in smoking cessation

## **Women's Health**

### **Long-term hormone therapy for perimenopausal and postmenopausal women**

Hormonal therapy (HT) is used amongst older women for controlling menopausal symptoms as well as preventing cardiovascular disease, osteoporosis and cancer. This review – an update of a 2005 Cochrane Review – aims to investigate the effects of HT on perimenopausal and postmenopausal women. Twenty-three studies involving 42,830 women were looked at. The mean participant age was 60 years old, and all studies that were found focused on postmenopausal women. It was found that HT significantly increases the risk of a coronary event, venous thrombo-embolism, stroke, breast cancer, gallbladder disease and death from lung cancer. Oestrogen-only HT has many of the same risks apart from risk of breast cancer. The only significant benefit found was a decrease in risk of fractures after long-term use for women with osteoporosis. It is generally recommended that HT only be used as management for osteoporosis in women at significant risk.

Long-term hormone therapy for perimenopausal and postmenopausal women

## **Workplace Health**

### **Ergonomic intervention for preventing work-related musculoskeletal disorders of the upper limb and neck**

Many people develop physical disorders due to their field of work; one of the most common ones being musculoskeletal disorders of the upper arm and neck. Actions have been taken to minimize physical discomfort in the workplace, for example, new equipment, more breaks or less work hours. However, the evidence as to whether or not these interventions work has never been assessed. This review looked at 13 studies, which mainly took place in an office setting and involved 2397 workers. Studies found that those who used an alternative computer mouse paired with an arm rest were half as likely to develop a neck/shoulder disorder compared to those who used neither. However, little effect was had on upper limb disorders. Low-quality evidence found that an alternative mouse paired with an arm rest is more effective than a conventional mouse with an arm rest. More high-quality studies are needed to confirm these results and examine the effects of other interventions.

Ergonomic design and training for preventing work-related musculoskeletal disorders of the upper limb and neck in adults

## What's Ahead

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### Cochrane Canada Live – 2012

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

30 October 2012, 12 p.m. EST (1 hour)

#### **Risk of Bias Assessment of RCTs in Cochrane Reviews**

20 November 2012, 12 p.m. EST (1 hour)

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

11 December 2012, 12 p.m. EST (1 hour)

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

### Training and Events Newsletter

The Canadian Cochrane Centre is releasing its very first Training and Events newsletter on 4 September 2012. If you would like to be put on the mailing list, [click here](#).

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.

The CCC is funded by the Canadian Institutes of Health Research.

*Relay Cochrane!* is published quarterly  
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