

< Volume 14 - November 2010 >

In the News

Canadian Cochrane Centre Director elected to The Cochrane Collaboration Steering Committee

Dr Jeremy Grimshaw, Canadian Cochrane Centre (CCC) director and Canada Research Chair in Health Knowledge Transfer and Uptake, was recently named co-chair of The Cochrane Collaboration Steering Committee (Board of Directors) at the 18th Cochrane Colloquium in Keystone, Colorado. Visit our website's media page for the full <u>media release</u>.

This significant appointment will be featured in the January 2011 issue of *University Affairs* magazine.

Five years and counting

Cochrane Canada's Five-Year Achievement Report 2005 – 2010

Cochrane Canada has just launched a Five-Year Achievement Report to outline our goals and accomplishments with the wrap up of our first term of sustainable funding. Our five review groups, two methods groups, field and centre have been busy producing reviews, improving methods, spreading the knowledge of Cochrane in Canada and training more than 3,300 Canadians in knowledge utilization and nearly 1,200 in Cochrane systematic review production. Download the complete report on our homepage at <u>ccc.cochrane.org</u> to find out more about Cochrane Canada's progress over the last five years.

Want to become a Cochrane review author? The newly registered Occupational Safety and Health Group wants you!

Jani Ruotsalainen, Managing Editor (ME) of the Cochrane Occupational Safety and Health Group, just recently visited Cochrane groups in Ottawa to learn more about the role from seasoned MEs and about how Cochrane review groups function. He feels there is already a lot of great author talent in Canada and hopes to involve these skills in his review group. Those interested should contact him to discuss whether they'd like to:

- a) formulate a new title;
- b) pick a title from the group's priority list (see website), or
- c) complete an update of an existing OSH review

More information is available at osh.cochrane.org.

Child Health Coordinator, Terry Klassen, named to US Institute of Medicine

Dr Klassen was elected into the Institute of Medicine (IOM) on 11 October 2010 for his demonstrated outstanding professional achievement and commitment to

SYMPOSIUM 2011

Cochrane Canada 9th Annual Symposium Early Exposure to Cochrane: accessible, credible, practical

16-17 February 2011 Fairmont Pacific Rim Vancouver, BC

ccc-symposium.org

Pass it on! Click <u>here</u> to forward to a friend or colleague.

service. Election into the IOM is considered one of the highest honours in the field of health and medicine. Dr Klassen, along with Coordinator of the Cochrane Child Health Field, is director of the Manitoba Institute of Child Health and a professor in the Department of Pediatrics at the University of Manitoba and the Winnipeg Children's Hospital. Visit the <u>IOM website</u> for the election announcement.

Only one month left to sign up for a free six-month trial and 10% discounted subscription to *The Cochrane Library*

The Canadian Cochrane Centre has made arrangements with Wiley-Blackwell to allow individual Canadians to sign up for a free six-month trial to *The Cochrane Library*. In addition, both individual users and organizations can purchase a year-long subscription to the Library at a 10% discount. These offers are valid through December 2010. Visit this link to find more information and to sign up. Please be assured that we are still working diligently to establish permanent free access for *Cochrane Library* users in Canada.

Cochrane for Practice

Musculoskeletal Decision Aids for Patients

The Cochrane Musculoskeletal Group (CMSG) has recently launched 10 Decisions Aids to help patients determine which treatment is best for them. The Decision Aids are tools that help people become involved in decision-making by providing information about the options and outcomes of a treatment and by clarifying personal values. They are designed to complement, rather than replace, counselling from a health practitioner. This evidence-based tool prepares consumers to participate in decision-making by:

 providing evidence-based information about a treatment option including benefits, harms, probabilities, and scientific uncertainties;

• helping people clarify the value they place on the benefits, harms, and scientific uncertainties by describing the options and asking people which benefits and harms matter most to them; and

• providing structured guidance in the steps of decision-making and communication of their informed values with others involved (e.g., their health care provider or family).

Visit the CMSG's <u>website</u> for more information and to download the Decision Aids.

Cochrane for Policy

Do speed cameras reduce road traffic crashes, injuries and deaths?

The authors of this review analyzed the effect of speed cameras on speeding, road traffic crashes, injuries and deaths by comparing what was happening in road areas before the introduction of speed cameras and after their introduction, and by analyzing what was happening in comparable road areas where no speed cameras were introduced during the study period. Thirty-five studies met the pre-set criteria. All studies reporting speed outcomes reported a reduction in average speeds post intervention with speed cameras. A reduction in the proportion of speeding vehicles (drivers) over the accepted posted speed limit ranged from eight to 70% with most countries reporting reductions in the 10 to 35% range. All 28 studies measuring the effect on crashes found a lower

number of crashes in the speed camera areas. Reductions ranged from eight to 49% for all crashes, with reductions for most studies in the 14 to 25% range, in the vicinity of camera sites. For injury crashes, the decrease ranged between eight to 50%, and for crashes resulting in fatalities or serious injuries the reductions were in the range of 11 to 44%. Studies of longer duration showed that positive trends were either maintained or improved with time.

Cochrane Library Spotlight – Issues 9-11, 2010

Alternative therapies

Chinese herbal medicine may help reduce menstrual pain

Dysmenorrhoea is a very common complaint that refers to painful menstrual cramps in the abdomen. Primary dysmenorrhoea refers to pain of an unknown cause (i.e. no medical condition is identified). The review found promising evidence for the use of Chinese herbal medicine in reducing menstrual pain in the treatment of primary dysmenorrhoea, compared to conventional medicine such as NSAIDs and the oral contraceptive pill, acupuncture and heat compression. No significant adverse effects were identified in this review. However, the findings should be interpreted with caution due to the generally low methodological quality of the included studies. Chinese herbal medicine for primary dysmenorrhoea

Asthma

Telehealthcare interventions for long-term asthma

The potential benefits of telehealthcare include greater accessibility for patients, reduced time and cost expenditure associated with travelling, earlier detection of disease exacerbations and associated reduced risk of hospital admissions for asthma. The authors' searches identified a large body of trial evidence and also a substantial body of work in progress. This revealed that telehealthcare initiatives are unlikely to be of benefit in improving guality of life for the majority of people with relatively mild asthma, but these interventions may prove useful in preventing exacerbations and hospital admissions in people with more severe asthma.

Telehealthcare for asthma

Cancer

Single-agent antibiotic treatment for cancer patients with fever and low white blood cell counts

Cancer patients develop neutropenia, a decrease in the neutrophil subset of the white blood cells, as a result of chemotherapy. Neutropenia exposes patients to infections, mainly bacterial. Forty-four studies comparing different antibiotics were found. Cefepime resulted in significantly higher mortality compared to all other antibiotics combined, at the end of patients' hospital stay or 30 days after entry into the study. The risk was 39% higher with cefepime, ranging from four to 86% increased risk. No explanation was found for this when looking into other outcomes reported in the primary studies. Piperacillin-tazobactam resulted in lower mortality than other antibiotics. The other antibiotics (ceftazidime, imipenem and meropenem) showed comparable efficacy, with a lower rate of antibiotic changes for imipenem or meropenem and a higher rate of severe diarrhea with these two antibiotics. Conclusions suggest that piperacillin-tazobactam might be the preferred antibiotic for the treatment of cancer patients with fever and neutropenia and that cefepime should not be used. Antibiotic selection (other than cefepime) depends on the individual patient and the type of bacteria prevalent in the specific hospital. Anti-pseudomonal beta-lactams for the initial, empirical, treatment of febrile neutropenia: comparison of beta-lactams

Public Health

Probiotics for treating diarrhea

The main risk associated with acute infectious diarrhea is dehvdration and it is mainly treated with rehydrated fluids. However, these fluids do not reduce the stool volume or shorten the episode of diarrhea. Probiotics are 'friendly' bacteria that improve health and are not harmful. A number of randomized controlled trials have been done to see whether probiotics are beneficial in acute infectious diarrhea. Cochrane researchers identified 63 trials (including 8,014 people - mainly infants and children) and found that probiotics were not associated with any adverse effects. Nearly all studies reported a shortened duration of diarrhea and reduced stool frequency in people who received probiotics compared to the controls. Overall, probiotics reduced the duration of diarrhea by around 25 hours, the risk of diarrhea lasting four or more days by 59% and resulted in about one fewer diarrheal stool on day two after the intervention. The researchers concluded that these results were very encouraging, but more research is needed to identify exactly which probiotics should be used for which groups of people, and also to assess the cost effectiveness of this treatment.

Probiotics for treating acute infectious diarrhoea

Smoking Cessation

Stage-based interventions for smoking cessation

This review compared stage-based smoking cessation programs with standard (unstaged) programs, or with 'usual care', or with assessment only. The researchers found 41 stage-based trials, covering more than 33,000 smokers, which measured quit rates at least six months after treatment. Only four of the 41 trials directly compared the same intervention in a standard and a stage-based version. This showed the stage-based version was neither more nor less effective than the standard. Eighteen trials which compared stage-based self-help programs with any control condition showed better success rates for the intervention groups. Thirteen trials of stage-based individual counselling versus any control condition showed a similar benefit for the interventions, whether staged or unstaged. This review's evidence shows that providing self-help or counselling support to smokers trying to quit is more effective than 'usual care' or simple observation. However, the extra value of fitting that support to the smoker's stage of change is currently unclear.

Stage-based interventions for smoking cessation

Women's health

Instruments for assisted vaginal delivery

This review of 32 studies (6,597 women) looked at assisted or instrumental vaginal deliveries in women in the second stage of labour. The main comparisons were between forceps or ventouse. There are also comparisons between different types of ventouse. The analyzed outcomes were the success of the particular instrument in achieving the delivery and the rate of complications for both mother and baby. Results showed that forceps were the better instrument in terms of achieving a successful delivery. However, it was also associated with higher rates of complications for the mother - perineal trauma, tears, requirements for pain relief and incontinence. There were risks of injury to the baby with both types of instrument. Comparisons between different types of ventouse revealed that the metal cup was better at achieving successful delivery than the soft cup, but with more risk of injury to the baby. There were no significant differences between the handheld and the standard vacuum.

Choice of instruments for assisted vaginal delivery

Vitamin A supplementation during pregnancy for maternal and newborn outcomes

The results of this review do not suggest a role for antenatal vitamin A supplementation to reduce maternal or perinatal mortality. There is, however, good evidence that antenatal vitamin A supplementation reduces maternal anaemia in women who live in areas where Vitamin A deficiency is common or who are HIV-positive. The available evidence suggests a reduction in maternal infection but these data are not of a high quality and further trials would be needed to confirm or refute this. The review included 16 randomized trials where vitamin A was commenced pre-pregnancy or during pregnancy and in some cases continued into the postnatal period. Vitamin A supplementation did not reduce the risk of maternal mortality, perinatal and newborn mortality, stillbirth, preterm birth, low birth weight or newborn anaemia. The risk of maternal anaemia, infection and night blindness was reduced. In one study, for women who were HIV-positive, the addition of vitamin A to supplements of iron and folate did result in fewer low birth weight babies (less than 2.5 kg at birth). Vitamin A supplementation during pregnancy for maternal and newborn outcomes

What's Ahead

Cochrane Canada Live – late 2010 series

Check the Cochrane Canada Live page for upcoming webinar dates and titles.

Cochrane Canada 9th Annual Symposium

16-17 February 2011 Presymposium 14-15 February Fairmont Pacific Rim, Vancouver, BC Early Bird registration ends 15 December 2010

Presymposium workshops include:

- Cochrane Standard Author Training
- Cochrane Evidence for Healthcare Providers
- The Health Systems Evidence Evidence to support policy-making and
- management
- Knowledge Translation for Researchers: What do we know about Why, What and How?
- Risk of Bias Assessment for Cochrane EPOC-relevant studies

ccc-symposium.org

The Canadian Cochrane Centre is one of 14 independent, not-for-profit

Cochrane Centres worldwide. Over 2,067 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 four times a year – <u>pass it on!</u> To subscribe, email <u>cochrane@uottawa.ca</u> Canadian Cochrane Centre 1 Stewart St (229) Ottawa, ON, Canada K1N 6N5 www.ccc.cochrane.org