



Current Resources for Evidence-Based Practice, September/October 2008

Published simultaneously in *Journal of Obstetric, Gynecologic & Neonatal Nursing* 2008;37(5).

NEW VERSION OF THE COCHRANE HANDBOOK FOR SYSTEMATIC REVIEWS OF EFFECTS CONTAINS MAJOR REVISIONS

In February 2008, a new version of the *Cochrane Handbook for Systematic Reviews of Effects* was released in an online format.¹ A print version is expected by October 2008. This major revision includes a new format and many added features. New additions reflect an evolving understanding of quality within research evidence and refinements to assure that Cochrane reviews continue to meet high standards and address a wide range of clinically important topics.

The *Cochrane Handbook* is the official guide for authors and readers of Cochrane reviews of the effects of health care interventions. This reference describes how reviews are prepared and maintained and outlines their standard content and format. Accepted methods for searching, selecting, assessing, and analyzing studies and for interpreting and reporting conclusions are catalogued. Information about special review types and methodologies is also covered.

Several changes are of interest to Cochrane review readers. Of note is a change in the definitions and reporting methods for review updates. Changes to existing reviews will be classified as updates only if a new study search is undertaken; other changes are designated as amendments. Changes in authorship, major changes to a protocol, or changes resulting in new conclusions will generate a new citation in the *Cochrane Database of Systematic Reviews* (CDSR), where the nature of the change will be identified.

In the methods section of the handbook, a new tool has been developed to evaluate whether the risk of bias is low, high, or uncertain in the domains of randomization, allocation concealment, blinding, incomplete data, and selective outcome reporting in the included studies.

In the section devoted to special topics, new areas of inquiry are addressed. Because not all topics of clinical interest are amenable to randomized study designs, non-randomized studies will be included in future Cochrane reviews, with recognition of the increased risk for systematic error and special attention to methods for

detecting and accounting for selection bias and confounders. The new handbook also calls for greater analysis and reporting of adverse effects of treatments. Finally, Cochrane overviews of reviews are planned, to compile and summarize available reviews of multiple interventions aimed at a single condition or problem.

The changes and new additions are summarized in a PDF document that is available from *The Cochrane Collaboration* Web site (www.cochrane.org/resources/handbook/).

REFERENCE

1. Higgins JPT, Green S, editors. *Cochrane Handbook for Systematic Reviews of Interventions*, version 5.0.0. Available without charge from: www.cochrane-handbook.org

FROM COCHRANE DATABASE OF SYSTEMATIC REVIEWS (CDSR), ISSUE 1, 2008

New Systematic Reviews

- Allopurinol for preventing mortality and morbidity in newborn infants with suspected hypoxic-ischaemic encephalopathy
- Antenatal lower genital tract infection screening and treatment programs for preventing preterm delivery
- Dietary advice in pregnancy for preventing gestational diabetes mellitus
- Effect of timing of umbilical cord clamping of term infants on maternal and neonatal outcomes
- Immediate start of hormonal contraceptives for contraception
- Oestrogens for preventing recurrent urinary tract infection in postmenopausal women
- Strategies for communicating contraceptive effectiveness
- Surfactant for pulmonary hemorrhage in neonates

Updated Systematic Reviews

- Acupuncture for induction of labour
- Barrier agents for adhesion prevention after gynaecological surgery
- Cervical insemination versus intra-uterine insemination of donor sperm for subfertility
- Chinese herbal medicine for primary dysmenorrhoea
- Interventions for emergency contraception

- Maternal nutrient supplementation for suspected impaired fetal growth
- Nasal continuous positive airway pressure immediately after extubation for preventing morbidity in preterm infants
- Nasal versus oral route for placing feeding tubes in preterm of low birth weight infants
- Progestogen for preventing miscarriage
- Routine perineal shaving on admission in labour
- Therapeutic ultrasound for postpartum perineal pain and dyspareunia
- Treatments for secondary postpartum haemorrhage

Cochrane reviews are available by subscription to *The Cochrane Library*, and review abstracts are available without charge. See www.thecochranelibrary.com

FROM DATABASE OF ABSTRACTS OF REVIEWS OF EFFECTS (DARE)

Recent Abstract Entries Assessing Quality of Systematic Reviews

- Combined vitamin C and E supplementation during pregnancy for preeclampsia prevention: A systematic review
- Community-based strategies to promote cervical cancer screening
- Effectiveness of prenatal treatment for congenital toxoplasmosis: A meta-analysis of individual patients' data
- Evidence-based strategies for implementing guidelines in obstetrics: A systematic review
- Female sexual satisfaction and pharmaceutical intervention: A critical review of the drug intervention studies in female sexual dysfunction
- Impact of packaged interventions on neonatal health: A review of the evidence
- Isoflavone supplements containing predominantly genistein reduce hot flash symptoms: A critical review of published studies
- Prenatal exposure to misoprostol and congenital anomalies: Systematic review and meta-analysis
- Rapid point-of-care HIV testing in pregnant women: A systematic review and meta-analysis
- Rapid tests for group B Streptococcus colonization in labouring women: A systematic review
- Virologic versus cytologic triage of women with equivocal Pap smears: A meta-analysis of the accuracy to detect high-grade intraepithelial neoplasia

DARE abstracts are available without charge from: www.york.ac.uk/inst/crd/crddatabases.htm#DARE

EVIDENCE-BASED REVIEWS FROM OTHER SOURCES

Featured review: Lally JE, Murtagh MJ, Macphail S, Thomson R. More in hope than expectation: A systematic

review of women's expectations and experience of pain relief in labour. BMC Med 2008;6:1-10. Available without charge from: www.biomedcentral.com/1741-7015/6/7

A systematic review of 32 qualitative and quantitative studies explored women's expectations versus actual experiences of pain and pain relief during labor. Women's involvement in decision making was also examined. Studies focused on pharmacologic pain relief because of a lack of literature on non-pharmacologic methods. Women's expectations and experiences in four areas were summarized: quality and severity of pain, use and effectiveness of pain medications, control in labor, and involvement in decision making. A discrepancy between women's expectations before labor and their experiences afterward was found across all themes. Key findings were that women tended to underestimate the intensity of pain but that expectations shaped experiences to some degree; most women wanted access to effective pain relief, but their expectations and actual use of medication were discordant; women wanted control over what was done to them and how they behaved in labor with some favoring control over pain and others favoring control over care. The degree of perceived control correlated with satisfaction. Women rarely mentioned active decision-making and reported the greatest influence from media and social ties.

Comment: This review supports the notion that pregnant women need improved education to develop realistic expectations about the full range of experiences and care options they may encounter in labor, along with support for decision-making which includes anticipatory guidance and values clarification.

Featured review: Hanley J. Neonatal infections: Group B streptococcus. BMJ Clin Evid 2008;01:323.

This systematic review and appraisal compared the effectiveness of neonatal antibiotic prophylaxis versus monitoring and selective treatment for asymptomatic newborns with known risk factors for group B streptococcal infection. It evaluated two systematic reviews comprising three randomized controlled trials. Risk factors for group B streptococcal infection in the studies included: confirmed maternal group B streptococcal infection or colonization, intrapartum fever, prolonged rupture of membranes greater than 18 hours or chorioamnionitis/amnionitis, and low birth weight or prematurity. None of the trials found a significant increase in the incidence of disease or rate of mortality associated with monitoring and selective antibiotic treatment of neonates based on clinical or laboratory evidence of infection. Two of these trials were of poor quality with potentially insufficient power to detect important differences, while one was of moderate quality.

Comment: Because the incidence of neonatal group B streptococcal disease is very low, large sample sizes are

needed to detect differences in the outcomes of treatment strategies. However, routine antibiotic prophylaxis of at-risk neonates introduces potential harms, including anaphylaxis and increased antibiotic resistance, and, according to this review, may be no more effective than selective treatment based on indication of infection.

Featured review: Collaborative Group on Epidemiological Studies of Ovarian Cancer. Ovarian cancer and oral contraceptives: Collaborative reanalysis of data from 45 epidemiological studies including 23,257 women with ovarian cancer and 87,303 controls. Lancet 2008;371:303–14.

Data from 45 observational studies were pooled and reanalyzed to assess the magnitude and persistence of protective effects of oral contraceptive pill (OCP) use on ovarian cancer. The analysis showed a 27% overall decrease in the relative risk of ovarian cancer for women who had ever used OCPs compared to controls. The dose of estrogen did not affect the reduction of risk. Longer use of OCPs conferred greater protection. These effects persisted for more than 30 years, diminishing slowly such that the proportional risk reduction ranged from 29% for women who had discontinued OCPs 10 years ago, to 15% for those who stopped 20 to 29 years ago. The protective effects did not vary significantly after controlling for demographic and medical risk factors for ovarian cancer. The rate of mucinous ovarian tumors was unaffected by OCP use.

Comment: This pooled analysis provides new information about the scope of protection from ovarian cancer associated with OCP use. The results suggest that 200,000 cases may have already been prevented over the last 50 years. Because OCP use continues to rise, this public health benefit of OCP use can be expected to increase over time.

Recent Evidence-Based Reviews

- Arbyrn M, Bergeron C, Klinkhamer P, Martin-Hirsch P, Siebers AG, Bulten J. Liquid compared with conventional cervical cytology. *Obstet Gynecol* 2008;111:167–77.
- Brancato RM, Church S, Stone PW. A meta-analysis of passive descent versus immediate pushing in nulliparous women with epidural analgesia in the second stage of labor. *J Obstet Gynecol Neonatal Nurs* 2008;37:4–12.
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- Ma DF, Qin LQ, Wang PY, Katoh R. Soy isoflavone intake increases bone mineral density in the spine of menopausal women: Meta-analysis of randomized controlled trials. *Clin Nutr* 2008;27:57–64.
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- Zhou B, Sun Q, Cong R, Gu H, Tang N, Yang L, Wang B. Hormone replacement therapy and ovarian cancer risk: A meta-analysis. *Gynecol Oncol* 2008;108:641–51.
- Zwicker JG, Harris SR. Quality of life of formerly preterm and very low birth weight infants from pre-school age to adulthood: A systematic review. *Pediatrics* 2008;121:e366–76.

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Note: All past columns are available online at www.childbirthconnection.org.