Resources for Evidence-Based Practice, January/February 2004
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This column highlights new and recently updated systematic reviews and overviews of best research evidence that clarify knowledge about effects of specific practices in maternal/newborn and women’s health.

From Cochrane Database of Systematic Reviews (CDSR), Issue 3, 2003


The Cochrane labor support review has been entirely reconstructed with the following new elements: reviewer team, title, protocol, large randomized controlled trials (RCTs), and subgroup analyses. It also includes expanded background and discussion sections. The new review summarizes experiences of nearly 13,000 women who participated in 15 RCTs. Women who received continuous labor support were less likely than women who did not have continuous labor support to have regional analgesia or any analgesia/anesthesia, give birth with vacuum extraction or forceps, give birth by cesarean, and report dissatisfaction or negatively rate their experience. A subgroup analysis examined the impact of the type of person providing continuous support. Effects were stronger when the person was not a regular member of the hospital staff and was an outsider present expressly to provide support. Compared to women without continuous support, those with support from nonhospital caregivers were 26% less likely to give birth by cesarean section, 41% less likely to have an instrumental birth, 28% less likely to use any analgesia or anesthesia, and 36% less likely to be dissatisfied with their childbirth experience.

Comment: Continuous labor support has no known downsides and can help women have a satisfying childbirth experience and avoid risks associated with cesareans and other major interventions. The organization of care in modern maternity units appears to limit the effectiveness of labor support provided by members of the hospital staff. It is a priority to clarify whether this basic component of safe and effective maternity care also offers economic advantages. Full text of the review is available without charge from http://www.maternitywise.org/prof/laborsupport.

New Systematic Reviews
- Amniocentesis and chorionic villus sampling for prenatal diagnosis
- Deep versus shallow suction of endotracheal tubes in ventilated neonates and young infants
- Early intravenous nutrition for the prevention of neonatal jaundice
- G-CSF and GM-CSF for treating or preventing neonatal infections
- Gowning by attendants and visitors in newborn nurseries for prevention of neonatal morbidity and mortality
- Male circumcision for prevention of heterosexual acquisition of HIV in men
- Oestrogen supplementation, mainly diethylstilbestrol, for preventing miscarriages and other adverse pregnancy outcomes
- Oral immunoglobulin for the prevention of rotavirus infection in low birth weight infants
- Rectal analgesia for pain from perineal trauma following childbirth
- Regional (spinal, epidural, caudal) versus general anaesthesia in preterm infants undergoing inguinal herniorrhaphy in early infancy
- Repeat doses of prenatal corticosteroids for women at risk of preterm birth for preventing neonatal respiratory disease
- Surgical versus medical treatment with
cyclooxygenase inhibitors for symptomatic patent ductus arteriosus in preterm infants

• Treatments for gestational diabetes and impaired glucose tolerance in pregnancy
• Vitamin E supplementation for prevention of morbidity and mortality in preterm infants

Updated Systematic Reviews

• Dopamine versus dobutamine for hypotensive preterm infants
• Growth hormone for in vitro fertilization
• Oral beta-blockers for mild to moderate hypertension during pregnancy
• Ovulation suppression for endometriosis
• Phenobarbital prior to preterm birth for preventing neonatal periventricular haemorrhage
• Planned cesarean section for term breech delivery
• Support during pregnancy for women at increased risk of low birthweight babies
• Treatment of infantile spasms

Cochrane Reviews are available by subscription to The Cochrane Library or through various publishing partners. Abstracts of Cochrane Reviews are available without charge. See http://www.cochrane.org/reviews/ for abstracts and subscription details.

From Database of Abstracts of Reviews of Effects (DARE)


This review of prenatal and/or postpartum interventions was performed to determine effective ways to promote, protect, and support breastfeeding within primary care. The authors report results from 27 internally valid randomized controlled trials and 10 internally valid quasi-random studies enrolling a total of 20,253 women. The most effective interventions tended to span the prenatal period or both prenatal and postpartum periods and to offer face-to-face information, guidance, and support. The research supports intensive interventions that combine group sessions, individual sessions, and/or home visits over time. It does not support breastfeeding promotion with mixed messages (e.g., concurrent with providing infant formula) and brief nonintensive interventions (including giving breastfeeding messages among other topics and through isolated printed materials). The DARE abstract authors give a high rating to the overall quality of this review.

Comment: The WHO/UNICEF Baby-Friendly Hospital Initiative (BFHI, see http://www.cdc.gov/breastfeeding/compend-babyfriendlywho.htm) provides evidence-based recommendations for breastfeeding support during hospitalization for childbirth. BFHI and the review featured here together provide guidance to help clinicians effectively support breastfeeding throughout the childbearing cycle. Optimal breastfeeding support in primary care may require services that go beyond routine prenatal and postpartum maternity care visits.

Recent Abstract Entries Assessing Quality of Systematic Reviews

• Accuracy of outpatient endometrial biopsy in the diagnosis of endometrial cancer: a systematic quantitative review
• Are fluid-based cytologies superior to the conventional Papanicolaou test: a systematic review
• Diagnostic accuracy of large-core needle biopsy for nonpalpable breast disease: a meta-analysis
• Efficacy of physical therapy methods and exercise after a breast cancer operation: a systematic review
• Fetal bradycardia due to intrathecal opioids for labour analgesia: a systematic review
• Laparoscopic surgery is not inherently dangerous for patients presenting with benign gynaecologic pathology: results of a meta-analysis
• Luteal phase support in infertility treatment: a meta-analysis of the randomized trials
• Management of mild chronic hypertension during pregnancy: a review
• Patient-controlled epidural analgesia versus continuous infusion for labour analgesia: a meta-analysis
• Psychological consequences of predictive genetic testing: a systematic review
• Tolterodine versus oxybutynin in the treatment of urge urinary incontinence: a meta-analysis
• US characterization of ovarian masses: a meta-analysis

DARE abstracts are available without charge from http://nhscrd.york.ac.uk.

Evidence-Based Reviews From Other Sources


Although coronary heart disease (CHD) is the most common cause of death in women, most CHD research reports do not provide useful data about its prevention diagnosis and treatment in women. The Agency for...
Healthcare Research and Quality commissioned this evidence overview to assess the best available research about women with a focus on 1) accurate noninvasive tests for identifying CHD; 2) effective treatments for CHD; 3) risk factors for CHD and effects of modifying these; 4) relative use of tests, risk factor modification, and treatments in women and men; and 5) prognostic value of biochemical markers for diagnosing acute myocardial infarction or unstable angina. This comprehensive search for evidence focused on 42 specified subtopics and yielded just 162 useable articles. Most articles used less definitive observational designs (versus experimental designs or systematic reviews), and good-quality data were only available to address six of the subtopics. For specific details on the quality and results of currently available research, readers are referred to the summary and full report, available online.

Comment: Although federal policies have succeeded in increasing the proportion of female participants in research, few subgroup results or focused studies are available to guide practice for women relating to these critical questions.

Recent Evidence-Based Reviews


**Commentary: Resources to Guide Effective Professional Practice**

Do continuing education meetings improve professional practice and health outcomes? Do decision aids for people facing treatment or screening decisions improve their knowledge and increase their participation in decision making? Does editorial peer review improve the quality of reports of biomedical studies? A growing number of systematic reviews are available to help clarify results of the best available research about these and other questions relating to effective professional practice and health services delivery.

Within the Cochrane Collaboration, three review groups prepare and maintain systematic reviews in this broad area. The Effective Practice and Organization of Care Group evaluates continuing education, regulatory, organizational, quality assurance, and other interventions to improve service delivery. The Consumers and Communication Group evaluates interventions that affect consumers’ interactions with health professionals, services, and researchers; and the Methodology Review Group evaluates aspects of carrying out research and disseminating research results. Issue 4, 2003 of *The Cochrane Library* includes 48 completed systematic reviews from these groups and 42 protocols of additional reviews in preparation. The Cochrane Collaboration Web site (http://www.cochrane.org/) contains abstracts of completed reviews and titles of reviews under development from these groups, along with links to their Web sites and PDF files of their newsletters. These resources can help policy makers, administrators, educators, researchers, and clinicians improve practice.

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