EVIDENCE-BASED PRACTICE

Resources for Evidence-Based Practice, March/April 2004
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This column highlights new and recently updated systematic reviews and overviews of 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 4, 2003

New Systematic Reviews

- Anticoagulant and aspirin prophylaxis for preventing thromboembolism after major gynaecological surgery
- Calcium supplementation on bone loss in postmenopausal women
- Combined spinal-epidural versus epidural analgesia in labour
- Cooling for newborns with hypoxic ischaemic encephalopathy
- Early discharge with home support of gavage feeding for stable preterm infants who have not established full oral feeds
- Effect(s) of assisted hatching on assisted conception (IVF & ICSI)
- Erythromycin for the prevention of chronic lung disease in intubated preterm infants at risk for, or colonized or infected with Ureaplasma urealyticum
- Formulas containing hydrolysed protein for prevention of allergy and food intolerance in infants
- Gonadotrophin-releasing hormone analogues for endometriosis: bone mineral density
- Individual psychotherapy in the outpatient treatment of adults with anorexia nervosa
- Lactational amenorrhea for family planning
- Local oestrogen for vaginal atrophy in postmenopausal women
- Nonsteroidal anti-inflammatory drugs for primary dysmenorrhoea
- Pentoxifylline for neonatal sepsis
- Progestogen for preventing miscarriage
- Risedronate for the prevention and treatment of postmenopausal osteoporosis
- Selenium supplementation to prevent short-term morbidity in preterm neonates
- Steroid therapy for meconium aspiration syndrome in newborn infants

Updated Systematic Reviews

- Antidepressants versus placebo for people with bulimia nervosa
- Closure versus non-closure of the peritoneum at caesarean section
- Developmental care for promoting development and preventing morbidity in preterm infants
- Elective high frequency oscillatory ventilation versus conventional ventilation for acute pulmonary dysfunction in preterm infants
- Energy and protein intake in pregnancy
- Homeopathy for induction of labour
- Inositol for respiratory distress syndrome in preterm infants
- Interventions for nausea and vomiting in early pregnancy
- Magnesium sulphate versus diazepam for eclampsia
- Magnesium sulphate versus phenytoin for eclampsia
- Maternal dietary antigen avoidance during pregnancy and/or lactation for preventing or treating atopic disease in the child
- Radiant warmers versus incubators for regulating body temperature in newborn infants
- Treatments for symptomatic urinary tract infections during pregnancy
- Vaginal prostaglandin (PGE2 and PGF2a) for induction of labour at term
- Vitamin E supplementation for prevention of morbidity and mortality in preterm infants

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)

Featured review: Franklin C, Grant D, Corcoran J, O’Dell Miller P, Butlman L. Effectiveness of prevention programs
This review examined the effectiveness of community-, school- and clinic-based programs in reducing sexual activity, increasing contraceptive use and reducing pregnancy rates in adolescents. The authors analyzed 32 studies, including 5 randomized controlled trials and 11 with quasi-experimental or non-randomized experimental designs. Overall, the programs did not have a significant effect on sexual activity and had a small favorable impact on rates of contraceptive use and pregnancy. Clinic (versus non-clinic) programs and community-based (versus school-based) programs were more effective in increasing contraceptive use and reducing pregnancy rates. Programs combining contraceptive distribution and knowledge-building were more effective in increasing contraceptive use than programs with education alone. Programs emphasizing contraceptive use and distribution were more effective in reducing pregnancy than either programs that emphasized abstinence or those emphasizing education without knowledge building. DARE reviewers caution that these results should be considered exploratory rather than definitive.

**Comment:** The U.S. teen birth rate has declined since 1991. This review provides guidance that may facilitate continued progress in this critical area.

**Recent Abstract Entries Assessing Quality of Systematic Reviews**

- Accuracy of cervicovaginal fetal fibronectin test in predicting risk of spontaneous preterm birth: systematic review
- Azithromycin versus doxycycline for genital chlamydial infections: a meta-analysis of randomized clinical trials
- Cimicifuga racemosa: a systematic review of its clinical efficacy
- Effectiveness of interventions to enhance physician screening for breast cancer
- Elective repeat cesarean delivery versus trial of labor: a meta-analysis of the literature from 1989 to 1999
- Hormone replacement therapy and prevention of nonvertebral fractures: a meta-analysis of randomized trials
- An evidence-based medicine approach to the treatment of endometriosis-associated chronic pelvic pain: placebo-controlled studies
- Physical activity in the primary prevention of estrogen-related cancers: is it effective?
- A quantitative, systematic review of randomized controlled trials of epidurine versus phenylephrine for the management of hypotension during spinal anesthesia for cesarean delivery
- A rapid and systematic review of the clinical effectiveness and cost-effectiveness of topotecan for ovarian cancer
- Resistance training and bone mineral density in women: a meta-analysis of controlled trials

**EVIDENCE-BASED REVIEWS FROM OTHER SOURCES**


These evidence overviews concisely summarize results of recent systematic reviews relevant to labor pain management. Part I covers systematic reviews on women’s satisfaction with the childbirth experience (including the role of labor pain issues), continuous labor support, warm water baths, sterile water injections, positioning, and touch and massage, as well as a narrative (i.e., non-systematic) review on the nature of labor pain. Part II covers systematic reviews on parenteral opioids, epidural analgesia, and nitrous oxide, as well as narrative reviews on paracervical blocks and on access to, use of, and decision-making about methods of labor pain relief. In addition to these reports, a companion editorial and educational handout for pregnant women are available online and in the printed issue.

**Comment:** Ensuring access to an array of methods for labor pain relief will help address the diverse needs, preferences, and experiences of childbearing women. In labor, different methods can be used simultaneously, sequentially, or as back-up if preferred methods prove to be unavailable or inadequate. These papers can help facilities and caregivers increase options for labor pain relief and support women in making informed decisions.


The US Preventive Services Task Force (USPSTF) commissioned this review to develop recommendations for effective primary care practice to improve initiation and duration of breastfeeding. The review was limited to studies...
carried out in developed countries. Reviewers analyzed 30 randomized controlled trials and 5 systematic reviews of breastfeeding interventions carried out during the prenatal period, the postpartum period, or both. Overall, focused individual or group education sessions (which may include skills training, discussion, and/or provision of equipment) increased initiation and short- but not long-term duration of breastfeeding. One-to-one in-person or telephone support did not affect initiation but increased short- and longer-term breastfeeding. Overall, the included studies that assessed written materials alone showed no effect. The authors did not find adequate data to clarify the effectiveness of peer counselors and rooming-in. Commercial discharge packs were harmful or unhelpful. The journal website includes a table summarizing the included studies.

Comment: The USPSTF has used this research to develop both summary and detailed statements of recommendations and rationale for “Behavioral Interventions to Promote Breastfeeding,” available in online and printed versions of the journal. USPSTF recommends that primary caregivers refer women to structured breastfeeding promotion programs consistent with the evidence review. The evidence review, full recommendations and rationale statement, and a fact sheet are available without charge on the USPSTF web pages, at: http://www.ahrq.gov/clinic/gcspu.htm

Recent Evidence-Based Reviews


COMMENTARY: “NETTING THE EVIDENCE” HEALTH CARE WEB PORTAL

The “Netting the Evidence” website (http://www.nettingtheevidence.org.uk/ accessed 12/18/2003) is an excellent place to look when seeking a resource or answer to a question about evidence-based health care. This portal for evidence-based health care is developed at the University of Sheffield within the School of Health and Related Research (ScHARR). The scope is international.

“Netting the Evidence” is conveniently organized by function (searching, appraising, implementing) and by different types of media (virtual library of articles, software, journals, databases). There is also a directory of organizations, an A-to-Z listing of all entries, and a search box. Each entry includes a hyperlink to the entrée page of the resource and a description of the content. One shortcoming of the site is that some of these descriptions have not been updated to reflect the evolving resources, which in many instances have been updated and expanded.

The treasure trove of valuable and interesting resources available through this portal clarifies that the evidence-based paradigm has provided a compelling and fruitful approach to professional practice for organizations, government agencies and individuals throughout the world. The site provides access to tutorials, glossaries, checklists, search strategies, bibliographies, article series, presentations, conferences, and workshops, among other resources. It has much to offer to clinicians, administrators, policy-makers, students, teachers, and researchers.

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