TRANSLATING BEST EVIDENCE INTO MATERNAL AND NEWBORN PRACTICE

The previous commentary in this column (September/October 2004) discussed the state of the science of translating knowledge into evidence-based practice. This commentary points to reports of several large-scale projects to close evidence-practice gaps in maternal and newborn care. The next commentary will identify reports of efforts to promote appropriate use of cesarean section.

Recent notable reports of efforts to implement safe and effective practice include:


- **Leviton LC, Orleans CT. Promoting the uptake of evidence in clinical practice: A prescription for action. Clin Perinatal 2003;30(2):403–17.** Identifies conditions that foster practice change and presents case studies of a multicenter project to use prenatal corticosteroids for fetal maturation and a national campaign to increase smoking cessation among pregnant women.

- **Horbar JD, Carpenter JH, Buza J, Soil RF, Suresh G, Bracken MB, Leviton LC, Plsek PE, Sinclair JC. Collaborative quality improvement to promote evidence based surfactant for preterm infants: A cluster randomised trial. BMJ 2004;329(7473):1004.** Reports impact of multifaceted intervention (audit and feedback, multidisciplinary workshop, ongoing support) to promote appropriate use of surfactant in preterm infants at 57 intervention and 57 control hospitals in North America.

FROM COCHRANE DATABASE OF SYSTEMATIC REVIEWS (CDSR), ISSUE 3, 2004

New Systematic Reviews

- Air versus oxygen for resuscitation of infants at birth
- Albumin infusion for low serum albumin in preterm newborn infants
- Antibiotic prophylaxis for operative vaginal delivery
- Antibiotics for preventing recurrent urinary tract infection in non-pregnant women
- Combined oral contraceptive pills for treatment of acne
- Common antiepileptic drugs in pregnancy in women with epilepsy
- Feeding interventions for growth and development in infants with cleft lip, cleft palate or cleft lip and palate
- Intramuscular penicillin for the prevention of early onset group B streptococcal infection in newborn infants
- Luteal phase support in assisted reproduction cycles
- Maintenance therapy with calcium channel blockers for preventing preterm birth after threatened preterm labour
- Nasal versus oral route for placing feeding tubes in preterm or low birth weight infants
- Progestogens in combined oral contraceptives for contraception
- Prophylactic antibiotics to reduce morbidity and mortality in neonates with umbilical artery catheters
- Soy formula for prevention of allergy and food intolerance in infants
- Vaginal chlorhexidine during labour to prevent early-onset neonatal group B streptococcal infection
Updated Systematic Reviews

- Early surfactant administration with brief ventilation vs selective surfactant and continued mechanical ventilation for preterm infants with or at risk for respiratory distress syndrome
- Hormonally impregnated intrauterine system (IUS) versus other forms of reversible contraceptives as effective methods of preventing pregnancy
- Hormone replacement therapy in postmenopausal women: endometrial hyperplasia and irregular bleeding
- Interventions for emergency contraception
- Minilaparotomy and endoscopic techniques for tubal sterilization
- Psychotherapy for bulimia nervosa and binging
- Spinal manipulation for primary and secondary dysmenorrhea
- Sucrose for analgesia in newborn infants undergoing painful procedures
- Topical umbilical cord care at birth

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)

Recent Abstract Entries Assessing Quality of Systematic Reviews

- Complementary and alternative medicine (CAM) in reproductive-age women: A review of randomized controlled trials
- Counseling in the clinical setting to prevent unintended pregnancy: An evidence-based research agenda
- Do interventions make a difference to bereaved parents: A systematic review of controlled studies
- Early detection and diagnosis of breast cancer: A literature review; an update
- Indications for therapy and treatment recommendations for bacterial vaginosis in nonpregnant and pregnant women: A synthesis of data
- Intrathecal opioids versus epidural local anesthetics for labor analgesia: A meta-analysis
- Review of automated and semi-automated cervical screening devices
- Safety of implantable contraceptives for women: Data from observational studies
- Surveillance mammography after treatment for primary breast cancer
- A systematic review of the reproductive system effects of metformin in patients with polycystic ovary syndrome
- Treatment of established osteoporosis: a systematic review and cost-utility analysis

- Women, sex, and HIV: Social and contextual factors, meta-analysis of published interventions, and implications for practice and research

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

EVIDENCE-BASED REVIEWS FROM OTHER SOURCES


This review summarizes results of 42 randomized or quasi-randomized trials that assessed impact of psychological, supportive, and educational interventions on postpartum depression in women. Pharmacologic and hormonal interventions were excluded. The interventions took place during pregnancy, during labor, or after birth and were used with all childbearing women, those at risk for postpartum depression, or those with identified or probable depression. Postpartum counseling by professionals with specific additional training was consistently effective in reducing depressive symptoms and overall depression among women with depression or probable depression. One woman was helped for every 2 to 3 who received such an intervention. Just one program directed to all women (“redesigned community postnatal care”) had a positive impact on depression. The following interventions cannot be recommended for this purpose at present: continuity of care, labor support, postpartum debriefing, and enhancing mother-infant interaction.

Comment: Postpartum depression is common and consequential, yet many women with this condition do not request or receive help. Outreach and counseling intervention programs are warranted.


This full report and companion documents assess relevant research and present resulting guidelines for cesarean practice in the United Kingdom’s National Health Service. The project addressed risks and benefits of cesarean section, specific cesarean indications, interventions to limit morbidity with cesarean surgery and postoperative care, strategies for avoiding cesarean deliveries, and impact of organizational and environmental factors on cesarean rates. The process involved a multidisciplinary working group with 2 rounds of public comment. Companion documents include evidence tables, a shorter version of the guideline, a concise algorithm, a quick reference guide, and a summary for childbearing women and the general public.

Comment: Belief and practice about mode of delivery have been changing rapidly without benefit of a systematic
weighing of the best available research. This major set of resources can support informed decision making and safer and more effective professional practice.


The US Preventive Services Task Force has recently reviewed evidence to update its recommendation about routine ovarian cancer screening. The Task Force found that the best available research suggests that potential harms outweigh potential benefits and recommends against routine screening. The group found no evidence that any screening test reduces mortality from ovarian cancer, and is concerned that diagnostic testing is invasive and can lead to unnecessary surgery and anxiety. In addition to the recommendation statement, evidence tables and references are available.

**Comment:** The first randomized controlled trials of screening for ovarian cancer are underway and will help clarify the value of screening for all women and for women at elevated risk for ovarian cancer.

**Recent Evidence-Based Reviews**