This column highlights new resources that clarify knowledge about effects of specific practices in maternal/newborn and women’s health. The focus is on new and recently updated systematic reviews and overviews of best research evidence. The column identifies recent additions to three major evidence-based databases:

- **Cochrane Database of Systematic Reviews (CDSR)** uses a standardized method to minimize bias and review studies that evaluate effects of specific health care practices. This Cochrane Collaboration product is a leading source of high-quality reviews.

- **Database of Abstracts of Reviews of Effects (DARE)** is a compilation of structured abstracts of quality-assessed systematic reviews. Staff at the United Kingdom National Health Service’s Centre for Reviews and Dissemination use quality criteria to determine whether a review is included and to develop abstracts.

- **Clinical Evidence** is a source of overviews of the best available research about effects of interventions. These overviews from the BMJ Publishing Group generally examine multiple questions (for example, prevention and treatment) about specific health concerns.

The column also identifies recent evidence-based research reviews from other sources, and ends with a commentary.

**Cochrane Database of Systematic Reviews (CDSR), Issue 2, 2003**

Featured review: Anderson GC, Moore E, Hepworth J, Bergman N. Early skin-to-skin contact for mothers and their healthy newborn infants.

Early skin-to-skin contact between mothers and newborns is a widespread characteristic of mammalian biology, including human evolution until the 20th century. In light of diverse research suggesting that early separation of mothers and infants may be harmful, this review was conducted to examine effects of early skin-to-skin contact between mothers and their healthy newborns on breastfeeding, other maternal and infant behaviors, physiology, psychology and other outcomes. The review summarizes 16 randomized controlled trials and one quasi-randomized trial that met the authors’ criteria for relevance and methodologic adequacy. Collectively, the studies included 806 mother-infant pairs with diverse socioeconomic backgrounds from 6 different countries. The authors describe the overall methodologic quality of the studies as “marginally adequate.” The contact began at birth or up to 24 hours after birth. Mother-baby pairs with early skin-to-skin contact had significantly better performance on all measures of breastfeeding status and duration in the 8 studies that examined this topic. Infants with early skin-to-skin contact were more likely to maintain temperature in the neutral thermal range (all 4 studies measuring infant temperature outcomes), were less likely to cry (both studies examining this outcome), and had higher blood glucose (1 study) and a lower respiratory rate (1 study). Overall, in the eight studies that examined maternal attachment behaviors, mothers with early skin-to-skin contact displayed more affectionate behaviors. The results suggest a possible dose-response relationship with respect to maternal behavior. Although this appears to attenuate over time, studies found some behavior differences at 3 months and 1 year after birth. The review found no significant negative effects of early skin-to-skin contact.

Comment: Early skin-to-skin contact appears to be an exceptional practice that has important benefits and no downsides. Changes in hospital routines to promote early skin-to-skin contact and minimize postpartum mother-infant disturbances could lead to improved rates and duration of breastfeeding and enhanced mother-infant attachment. Effects of early skin-to-skin contact should be evaluated in more rigorous randomized controlled trials.
Updated

- Antibiotics for preterm rupture of membranes
- Antibiotics for treating bacterial vaginosis in pregnancy
- Biochemical tests of placental function for assessment in pregnancy
- Fetal electrocardiogram (ECG) for fetal monitoring during labour
- Interventions for suspected placenta praevia
- Magnesium sulphate and other anticonvulsants for women with pre-eclampsia

Women’s Health

New

- Chemotherapy alone versus endocrine therapy alone for metastatic breast cancer
- Combined contraceptives: effects on weight
- Combined hormonal versus nonhormonal versus progestin-only contraception in lactation
- Oestrogens for urinary incontinence in women
- Periurethral injection therapy for urinary incontinence in women
- Regular self-examination or clinical examination for early detection of breast cancer
- Surgery versus medical therapy for heavy menstrual bleeding

Updated

- Biphasic versus monophasic oral contraceptives for contraception
- Biphasic versus triphasic oral contraceptives for contraception
- Interventions for treating trichomoniasis in women
- Intra-cytoplasmic sperm injection versus conventional techniques for oocyte insemination during in vitro fertilisation in patients with non-male subfertility

Newborn Care

New

- Epinephrine for the resuscitation of apparently stillborn or extremely bradycardic newborn infants
- Ibuprofen for the prevention of patent ductus arteriosus in preterm and/or low birth weight infants
- Ibuprofen for the treatment of a patent ductus arteriosus in preterm and/or low birth weight infants
- Indomethacin for asymptomatic patent ductus arteriosus in preterm infants
- Infant position in neonates receiving mechanical ventilation
- Inhaled versus systemic corticosteroids for the treatment of chronic lung disease in ventilated very low birth weight preterm infants
- Metalloporphyrins for treatment of unconjugated hyperbilirubinemia in neonates
- Supplemental oxygen for the treatment of prethreshold retinopathy of prematurity

Updated

- Kangaroo mother care to reduce morbidity and mortality in low birthweight infants
- Nasal continuous positive airways pressure immediately after extubation for preventing morbidity in preterm infants

Cochrane Reviews are available by subscription to The Cochrane Library or through various publishing partners (see http://www.update-software.com/Cochrane/). Abstracts of all Cochrane Reviews are available without charge at: http://www.cochrane.org

DATABASE OF ABSTRACTS OF REVIEWS OF EFFECTS (DARE)

Featured review: Boath E, Henshaw C. The treatment of postnatal depression: a comprehensive literature review. [Abstract 20015472]

This review summarized research of varying study designs to assess the following treatments for postpartum depression: drug therapies (including prescription anti-depressants, hormones, and supplements), psychological therapies, combined drug and psychological therapies, and other approaches. Diverse tools were used to assess depression and outcomes. The DARE reviewers focused their assessment and abstract on the evidence from only the randomized controlled trials included in this review (9 studies enrolling a total of 476 women). Because the trials were small, covered a broad range of interventions, and had methodologic limitations, they provide no guidance about clearly safe and effective ways to help women experiencing postpartum depression.

Comment: On the basis of the Edinburgh Postnatal Depression Scale screening tool, 19% of participants in Listening to Mothers: The First National U.S. Survey of Women’s Childbearing Experiences scored likely to be depressed in 2002 (see http://www.maternitywise.org/listeningtomothers/). It is an urgent priority to carry out large well-conducted trials to identify safe and effective interventions to help women resolve postpartum depression.

Pregnancy and Birth

- Cervical length and dilatation of the internal cervical os detected by vaginal ultrasonography as markers for preterm delivery: a systematic review
- The effectiveness of home visiting as a delivery strategy for public health nursing interventions to clients in prenatal and postnatal period: a systematic review
• Improving communication between health professionals and women in maternity care: a structured review
• Labor induction with 25 µg versus 50 µg intravaginal misoprostol: a systematic review
• Nitrous oxide for relief of labor pain: a systematic review
• Prophylactic ephedrine prevents hypotension during spinal anesthesia for cesarean delivery but does not improve neonatal outcome: a quantitative systematic review

Women’s Health

• Complementary/alternative therapies for premenstrual syndrome: a systematic review of randomized controlled trials
• Does this woman have an acute uncomplicated urinary tract infection?
• Effectiveness of interventions to improve follow-up after abnormal cervical cancer screening
• The effectiveness of interventions to promote mammography among women with historically lower rates of screening
• The effectiveness of the Mirena coil (levonorgestrel-releasing intrauterine system) in menorrhagia
• Efficacy of nafarelin in assisted reproductive technology: a meta-analysis
• Efficacy of patient letter reminders on cervical cancer screening: a meta-analysis
• Inreach and outreach interventions to improve mammography use
• Misoprostol for women’s health: a review
• Research on complementary/alternative medicine for patients with breast cancer: a review of the biomedical literature
• Screening for chlamydial infection
• Third generation oral contraceptives and risk of venous thrombosis: meta-analysis
• Tibolone for postmenopausal women: systematic review of randomized trials

Newborn Care

• Does pacifier use cause ear infections in young children?
• Effectiveness of WBC reductions in neonates: what is the evidence of benefit?
• A systematic review of the effectiveness and cost-effectiveness of palivizumab (Synagis) in the prevention of respiratory syncytial virus (RSV) infection in infants at high risk of infection
• The use of dexamethasone in the prevention of postextubation stridor in pediatric patients in PICU/NICU settings: an analytical review

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

Clinical Evidence, Online Updates Between Issue 8, December 2002, and Issue 9, June 2003

Pregnancy and Birth

Updated
• Congenital toxoplasmosis
• HIV: mother to child transmission
• Nausea and vomiting in early pregnancy
• Pre-eclampsia and hypertension

Women’s Health

Updated
• Anorexia nervosa
• Breast cancer (non-metastatic)
• Candidiasis (vulvovaginal)
• Dysmenorrhea
• Fibroids (uterine myomatosis, leiomyomas)
• Fracture prevention in post-menopausal women
• Genital chlamydial infection
• Genital herpes
• Infertility and subfertility
• Pelvic inflammatory disease
• Premenstrual syndrome
• Recurrent cystitis in non-pregnant women
• Wrinkles

Newborn Care

Updated
• Reducing pain during blood sampling in infants
• Sudden infant death syndrome

Clinical Evidence is available in online and print versions at: http://www.clinicalevidence.com

Evidence-Based Reviews from Other Sources


This systematic review summarizes the best available research about effects of strategies available to primary care clinicians for identifying women experiencing intimate partner violence and for intervening in this situation. Although screening tools have demonstrated reasonable accuracy in identifying abuse, no study was found that measured the impact of screening tools on improved outcomes for women. No studies of interventions for use in primary care settings met criteria for inclusion in this review. With respect to potential referrals from primary care settings, the review found fair evidence that spending at least one night in a shelter, in combination with advocacy and counseling services, is associated with decreased re-abuse and increased quality of life. Benefits of other
possible interventions for women (including counseling alone, prenatal counseling, and shelter alone) and of interventions for couples and/or abusing partners are unclear, primarily due to limitations of the research. The review also summarizes research on several interventions outside the scope of primary care: emergency departments, social interventions, and legal and policy interventions. Due to research limitations and disappointing results, the review was unable to identify clearly effective strategies in these areas. Limited attention to possible harms of both screening and intervention (for example, reprisal violence) is a shortcoming of this entire body of research.

Comment: Although existing evidence does not show that routine screening and referral of women for intimate partner violence in primary care settings improve outcomes of the women screened, identification of abuse may help clinicians understand and care for individual women. Given the considerable lifetime prevalence of intimate partner violence against women, rigorous research on clinically important outcomes of screening and intervention strategies is urgently needed.

**Featured review: Vaginal birth after cesarean (VBAC).**


This systematic review was carried out within the Evidence-based Practice Program of the Agency for Healthcare Research and Quality to assess the evidence for benefits and harms of vaginal birth versus cesarean birth for women with a history of cesarean birth. Although all potential benefits and harms of both cesarean birth and vaginal birth are of potential interest, the review focused specifically on outcomes related to having had a prior cesarean. The researchers examined predictors of, and rates of achieving, vaginal birth after cesarean (VBAC) in women planning VBAC; compared outcomes in women who have a planned VBAC to outcomes in women who have a planned repeat cesarean; and considered factors involved in making this decision. In all prospective cohort studies, 76% of women who planned VBAC gave birth vaginally. No randomized controlled trials (RCTs) were available to examine outcomes in otherwise comparable women experiencing planned VBAC versus planned repeat cesarean. For several important outcomes, the quality of evidence was poor (infant death and neurologic impairment rates, maternal infection rate) or fair-poor (uterine rupture rate, maternal hysterectomy rate). In the best available studies, some outcomes were better in women who had a planned VBAC (e.g., infection) and some were better in those who had a planned repeat cesarean (e.g., symptomatic uterine rupture), while data were conflicting or insufficient for other outcomes. The researchers concluded that “data are insuffi-

cient to allow conclusions about the most appropriate delivery choice for a given patient.”

Comment: This review has several major implications. All women with a prior cesarean birth should be offered the opportunity for evidence-informed decision making, with attention to the full range of outcomes of possible interest, when considering how to give birth in subsequent pregnancies. Recent U.S. trends of declining access to VBAC (see http://www.maternitywise.org/listeningtomothers/) force surgical birth on most women with a history of cesarean birth, a practice that does not reflect the best available research. More definitive research is urgently needed.

**Pregnancy and Birth**

Women’s Health


Newborn Care


COMMENTARY: COCHRANE CENTRAL REGISTER OF CONTROLLED TRIALS, AN ESSENTIAL RESOURCE FOR IDENTIFYING HIGH-LEVEL RESEARCH

A well-conducted systematic review of the best available research is the optimal way to clarify the most definitive knowledge about the safety and effectiveness of health care practices. In the previous issue of this Journal, this commentary considered ways to locate systematic reviews on topics of interest.1 Unfortunately, up-to-date systematic reviews are not available to answer many questions about effects of care. If an appropriate systematic review cannot be found, it is generally of greatest value to turn to the next highest level of evidence, individual randomized controlled trials, to clarify effects of care.

The Cochrane Central Register of Controlled Trials (CENTRAL) is the premier resource for identifying reports of controlled trial research in health and medicine.2 This searchable continually growing database within The Cochrane Library now contains citations (with abstracts, if available) to over 375,000 controlled trial reports. The United States Cochrane Center develops and maintains CENTRAL as the leading bibliographic resource for preparing Cochrane reviews, and provides support for searching this database on its website.3,4

The CENTRAL database is compiled systematically through the cooperation of a large global network of participants and is updated quarterly. Sources include regular electronic searches of leading bibliographic databases, regular hand searches of nearly 2,500 journals, searches of other trial registers, and conference proceedings and other “gray literature.” All identified controlled trial reports are included in CENTRAL, with no limits placed on languages and when or where the studies were conducted. This database includes many items that are not available through conventional bibliographic databases, which yield a surprisingly limited proportion of available trial reports for many search topics.

Topical “specialized registers” within CENTRAL contain citations for trials that are within the scope of Cochrane Collaborative Review Groups, such as the Pregnancy and Childbirth Group (about 8,500 entries at this time), the Neonatal Group (about 2,200 entries), and the Fertility Regulation Group (about 3,000 entries). A list of codes that can be used to search these specialized registers (for example, SR-PREG) is available online.3

Access to CENTRAL and other databases in The Cochrane Library is by institutional or individual subscription to The Cochrane Library, with Internet, CD-ROM, and server-based local system options.5

REFERENCES


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