Resources for Evidence-Based Practice, September/October 2004

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Published simultaneously in Journal of Midwifery and Women’s Health 2004; 49(5).

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 2, 2004

New Systematic Reviews
- Antipsychotic drugs for non-affective psychosis during pregnancy and postpartum
- Conservative management of pelvic organ prolapse in women
- Domestic violence screening and intervention programmes for adults with dental or facial injury
- Giving women their own case notes to carry during pregnancy
- Mechanical devices for pelvic organ prolapse in women
- Neoadjuvant chemotherapy for locally advanced cervix cancer
- Percutaneous central venous catheters versus peripheral cannulae for delivery of parenteral nutrition in neonates
- Platinum containing regimens for metastatic breast cancer
- Psychological interventions for women with metastatic breast cancer
- Spinal versus epidural anaesthesia for caesarean section

- Transfer of preterm infants from incubator to open cot at lower versus higher body weight

Updated Systematic Reviews
- Bladder neck needle suspension for urinary incontinence in women
- Early volume expansion for prevention of morbidity and mortality in very preterm infants
- Immersion in water in pregnancy, labour and birth
- Massage for promoting growth and development of preterm and/or low birth-weight infants
- Medical methods for first trimester abortion
- Population-based interventions for reducing sexually transmitted infections, including HIV infection
- Thyrotropin-releasing hormone added to corticosteroids for women at risk of preterm birth for preventing neonatal respiratory disease

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
- Administration of recombinant granulocyte colony-stimulating factor to neonates with sepsis: a meta-analysis
• Analgesia in labour and fetal acid-base balance: a meta-analysis comparing epidural with systemic opioid analgesia
• Cesarean delivery for twins: A systemic review and meta-analysis
• Contraception for women in selected circumstances
• Drug therapy of urinary urge incontinence: A systematic review
• Expectant management versus labor induction for suspected fetal macrosomia: A systematic review
• Interventions to increase breast screening uptake: Do they make any difference?
• Interventions to reduce unintended pregnancies among adolescents: A systematic review of randomized controlled trials
• Meta-analysis of Pap test accuracy
• Meta-analysis of the effectiveness of HIV prevention interventions for women
• The newborn individualized developmental care and assessment program is not supported by meta-analyses of the data
• Nitroglycerin as a uterine relaxant: A systematic review
• Nonpharmacologic relief of pain during labor: Systematic reviews of five methods
• Overview of randomized perioperative polychemotherapy trials in women with early-stage breast cancer
• Preconception care: A systematic review
• Quality of life in patients undergoing systemic therapy for advanced breast cancer
• A review of clinical trials to prevent mother-to-child HIV-1 transmission in Africa and inform rational intervention strategies
• A review of the clinical effectiveness and cost-effectiveness of routine anti-D prophylaxis for pregnant women who are Rhesus-negative
• A review of the literature on debriefing or non-directive counselling to prevent postpartum emotional distress

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 systematic reviews and randomized controlled trials that have evaluated the effectiveness and harms of treatments for urinary stress incontinence in women. The review identifies three nonsurgical interventions that are likely to be beneficial: pelvic floor muscle exercises, pelvic floor electrical stimulation, and regimens using weighted vaginal cones. Among these, exercises appear to have the best safety and acceptability profile. The review concludes that there is insufficient evidence to assess the role of estrogen supplements. Two surgical interventions are likely to be beneficial: laparoscopic and open retropubic colposuspension. Two other surgical interventions are classified as involving tradeoffs between benefits and harms: needle colposuspension and suburethral slings. There was no evidence to compare anterior vaginal repair to no or sham treatment, and this technique was less effective than retropubic colposuspension. Future updates will incorporate treatment with tension-free vaginal tape and measures for prevention of postpartum stress incontinence. An independent research firm that avoids conflicts of interest prepared this review.

Comment: Although many treatments are being developed for urinary stress incontinence, pelvic floor muscle exercises continue to be appropriate as the first line of treatment.


This review summarizes the limited evidence evaluating treatments for women who experience depression after childbirth at the level of systematic reviews and randomized controlled trials (RCTs). Some support was found for the effectiveness of the following interventions: cognitive behavioral counseling of individuals (two RCTs), nondirective counseling (two RCTs), interpersonal psychotherapy (one systematic review with only one RCT), and psychodynamic therapy (one RCT). Also, one small RCT of mothers who were not breastfeeding found that fluoxetine might be helpful. The reviewer considers the following interventions to be of unknown effectiveness: other antidepressant drugs, estrogen, light therapy, cognitive behavioral counseling with groups, mother-infant interaction coaching, psychoeducation with partner, and mother-to-mother peer support by telephone.

Comment: High rates of depression in the postpartum period raise concerns for mothers, infants, and families. Individual counseling and psychotherapy have the best, albeit limited, support from higher level research. Identifying and fostering access to effective interventions for depression in new mothers is an urgent priority.


Despite clear evidence that breastfeeding is the safest way to feed babies, a large proportion of babies in the United States and worldwide are fed formula, either exclusively or in combination with breast milk. This systematic review was carried out to assess what is known about risks associated with reconstituting the current generation of breast milk substitutes, and to identify methods...
that are likely to be safest. To provide a context for the review, authors also described the range of infant formula products marketed for normal newborns in one large U.K. supermarket: 31 different preparations were available, most of which required mixing before use. The authors found no reviews and included only five primary data studies of any designs that were carried out in developed countries after 1977 to investigate reconstitution of formula feeds for healthy term infants. Firm conclusions cannot be drawn due to methodologic problems, including small numbers (together the studies described experiences of 524 women in the U.S., the U.K., and Australia). Moreover, the most recent study was published in 1991, and they do not assess the range of products that are currently on the market. All five studies found errors in reconstitution, with a tendency to overconcentrate, although underconcentration also occurred.

Comment: Many breast milk substitutes sold in the United States and worldwide require reconstitution. The World Health Organization’s International Code of Marketing of Breast-milk Substitutes was developed to protect and promote breastfeeding and ensure the proper use of breast milk substitutes when necessary. Limited research attention has been paid to safe use of breast milk substitutes. The authors argue that little attention has also been paid to this concern in practice.

Recent Evidence-Based Reviews


**Commentary: Adopting Best Evidence in Practice**

An unprecedented body of knowledge is being developed to clarify the effectiveness and safety of health care practices. If we do not use this to inform practice, however, its value is questionable.

Australia’s National Institute of Clinical Studies (NICS) is an agency that improves health care by helping to close the gap between best available evidence and current clinical practice. NICS recently invited international leaders in effective professional practice to a meeting to explore the state of the science of translating knowledge into evidence-based practice and help develop strategies to foster this translation. The papers have been published as a supplement to Medical Journal of Australia (March 15, 2004) and are available online without charge at http://www.mja.com.au/public/issues/180_06_150304/suppl_contents_150304.html.

These concise and up-to-date articles cover many core topics: the magnitude of the gap between best evidence and practice, evidence-based implementation of evidence-based care, selecting and using clinical guidelines, theory of diffusion of innovation, barriers and incentives for desired practice change, change at the organizational level to foster clinical change, audit and feedback to clinicians, sustaining change, and the problem of information overload. This material would be of interest to caregivers, administrators, policy makers, teachers, students, and researchers.

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