QUALITY CHECKLISTS FOR ASSESSING AND REPORTING RESEARCH

Collaborative international multidisciplinary teams are developing, assessing, and refining systems for evaluating and reporting research. This tutorial identifies the leading tools, their purpose, and how to access current versions and learn more about them (e.g., names of developers, evaluations and other publications). The checklists and related resources can help producers strengthen the quality of research and research reports and help users assess the quality of research and research reports.

Checklists for evaluating quality are available for:

- Grading quality of evidence and strength of recommendations: GRADE, Grading of Recommendations Assessment, Development and Evaluation (http://www.gradeworkinggroup.org/)
- Assessing proposals for and monitoring randomized controlled trials (RCTs): ASSERT, A Standard for the Scientific and Ethical Review of Trials (http://www.assert-statement.org/)

Checklists for improved transparency in research reporting are available for:

- Reporting meta-analyses of RCTs: QUOROM, Quality of Reporting of Meta-Analyses (http://www.consort-statement.org/Evidence/evidence.html#quorom)
- Reporting meta-analyses of observational research: MOOSE, Meta-Analysis of Observational Studies in Epidemiology (http://jama.ama-assn.org/cgi/content/full/283/15/2008)
- Reporting RCTs: CONSORT, Consolidated Standards of Reporting Trials (http://www.consort-statement.org)
- Reporting observational intervention studies: TREND, Transparent Reporting of Evaluations With Nonrandomized Designs (http://www.trend-statement.org/)

- Reporting studies of diagnostic accuracy: STARD, Standards for Reporting of Diagnostic Accuracy (http://www.annals.org/cgi/content/abstract/138/1/W1)
- Reporting guidelines: COGS, Conference on Guideline Standardization (http://gem.med.yale.edu/cogs/)
- Reporting results of Internet surveys: CHERRIES, Checklist for Reporting Results of Internet E-Surveys (http://www.jmir.org/2004/3/e34/)

FROM COCHRANE DATABASE OF SYSTEMATIC REVIEWS (CDSR), ISSUE 1, 2005

New Systematic Reviews

- Audio recordings of consultations with doctors for parents of critically sick babies
- Interventions for infantile esotropia
- Interventions to prevent hypothermia at birth in preterm and/or low birthweight babies
- Opioids for neonates receiving mechanical ventilation
- Oral-antiestrogens and medical adjuncts for subfertility associated with anovulation
- Prevention and treatment of postpartum hypertension
- Surgical approach to hysterectomy for benign gynaecological disease
- Thrombolytic agents for arterial and venous thromboses in neonates
- Wound drainage for caesarean section

Updated Systematic Reviews

- Air versus oxygen for resuscitation of infants at birth
- Hands and knees posture in late pregnancy or labour for fetal malposition (lateral or posterior)
- In vitro fertilisation for unexplained subfertility
- Neuromuscular paralysis for newborn infants receiving mechanical ventilation
- Taxane containing regimens for metastatic breast cancer
- Tubal flushing for infertility

Cochrane Reviews are available by subscription to The Cochrane Library (see http://www.thecochranelibrary.com or contact emrw@wiley.com for details). Abstracts of
Cochrane Reviews are available without charge from http://www.thecochranelibrary.com

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

FROM DATABASE OF ABSTRACTS OF REVIEWS OF EFFECTS (DARE)

Recent Abstract Entries Assessing Quality of Systematic Reviews

- Accuracy of cervical transvaginal sonography in predicting preterm birth: A systematic review
- Accuracy of outpatient endometrial biopsy in the diagnosis of endometrial hyperplasia
- Acyclovir prophylaxis to prevent herpes simplex virus recurrence at delivery: A systematic review
- Aspirin for prevention of preeclampsia in women with historical risk factors: A systematic review
- Beyond the complete blood cell count and C-reactive protein: A systematic review of modern diagnostic tests for neonatal sepsis
- Childbirth education outcomes: An integrative review of the literature
- Hormone replacement therapy and the sensitivity and specificity of breast cancer screening: A review
- Human papillomavirus infection and use of oral contraceptives
- Imaging in appendicitis: A review with special emphasis on the treatment of women
- Labor induction versus expectant management for postterm pregnancies: A systematic review with meta-analysis
- Management of neonatal hyperbilirubinemia
- Newborn hearing screening
- Oral contraceptives use and the risk of myocardial infarction: A meta-analysis
- Preventive health care, 2001 update: Screening mammography among women aged 40-49 years at average risk of breast cancer
- Review of validation studies of the Edinburgh postnatal depression scale
- Saline contrast hysterosonography in abnormal uterine bleeding: A systematic review and meta-analysis
- School-based prevention programs for eating disorders: Achievements and opportunities
- Surveillance mammography after treatment of primary breast cancer: A systematic review
- A systematic review of autologous fat transfer for breast augmentation
- A systematic review of herbal medicinal products for the treatment of menopausal symptoms
- A systematic review of the accuracy of ultrasound in the diagnosis of endometriosis
- A systematic review of the clinical effectiveness of tension-free vaginal tape for treatment of urinary stress incontinence
- Targeted group antenatal prevention of postnatal depression: a review

EVIDENCE-BASED REVIEWS FROM OTHER SOURCES


To address the global scale of neonatal mortality (about 4 million newborn deaths per year) and limited improvements in this measure in recent decades, this extensive review assessed the impact of community-based prenatal, intrapartum, immediate newborn, and postpartum strategies and interventions on perinatal and neonatal health in developing countries. Reviewers identified a package of 13 priority interventions from this review and 6 from other sources for broad implementation in middle- and low-income countries, as well as numerous research priorities.

Comment: This review played a central role in an extraordinary series of evidence-into-action articles in March 2005 issues of The Lancet, with the aim of dramatic achievable global reductions in neonatal mortality.


This systematic review evaluated the efficacy and safety of ginger (Zingiber officinale) for nausea and vomiting during pregnancy. Six double-blind randomized controlled trials (RCTs) enrolling 675 women met criteria for efficacy studies. Ginger was more effective than placebo and similar in effectiveness to vitamin B6 in reducing or eliminating nausea and vomiting. Five of the 6 RCTs and 1 prospective cohort study with 187 women considered harms. Although the studies did not raise major safety concerns, the duration of exposure was brief, and there may have been too few participants to detect actual differences.

Comment: The common pregnancy discomfort of nausea and vomiting occurs most frequently during a period when the developing embryo and fetus are especially vulnerable to teratogenesis. Better-quality available research suggests that ginger may offer women relief without harm, but larger studies are needed to further clarify questions of safety.

The Agency for Healthcare Research and Quality commissioned this evidence report to address key questions about symptoms associated with menopause and ways to relieve them. In better studies, menopause was associated with an increase in vasomotor symptoms and vaginal dryness, but not with cognitive disturbance. Studies were inconsistent regarding sleep disturbance, somatic symptoms, urinary complaints, mood symptoms, sexual dysfunction, and quality of life. The review examined 192 randomized controlled trials assessing benefits and harms of various drugs and other remedies for relief of menopausal symptoms. Estrogen was most consistently effective for vasomotor symptoms and was associated with breast tenderness, uterine bleeding, and less common adverse effects. Several other drugs were effective for hot flashes in women with breast cancer, but evidence of therapeutic effects for other specific situations was limited. Investigators identified many research gaps.

Comment: Major research gaps exist regarding several core issues, including prevalence and timing/duration of symptoms, optimal treatment regimens, effectiveness of lifestyle and behavioral interventions, adverse effects, and treatment for women with hysterectomy, oophorectomy, cancer, but evidence of therapeutic effects for other specific situations was limited. Investigators identified many research gaps.

Recent Evidence-Based Reviews


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