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UPDATED FAMILY PLANNING GUIDELINES FROM THE WORLD HEALTH ORGANIZATION

In April 2008, the World Health Organization (WHO) convened a panel of experts to review evidence and update global guidance for family planning. Eighty-six new recommendations and 165 revisions to existing guidelines are included in the updated documents, *Medical Eligibility Criteria for Contraceptive Use*, 4th edition, which was released in November 2009,[1] and *Selected Practice Recommendations for Contraceptive Use*, 2nd edition, 2008 update.[2] The first document discusses use of specific contraceptive methods in women with underlying diseases, conditions, and characteristics, while the second details clinical management for various contraceptive methods. To update these resources, new primary evidence was identified and appraised using the US Preventive Services Task Force grading system, and systematic reviews were conducted using the Meta-analysis of Observational Studies in Epidemiology (MOOSE) and Quality of Reporting of Meta-analyses (QUOROM) reporting tools. The new eligibility criteria include recommendations regarding postpartum intrauterine device use, and the criteria for contraceptive use in women with lupus, deep vein thrombosis or pulmonary embolism, and viral hepatitis; adolescents who are obese; and women taking antiviral and antimicrobial agents. Updated management guidelines cover missed oral contraceptive pills and the timing of repeat progestogen-only injectables and management of bleeding for women using them. Nine systematic reviews that formed the basis of many of these recommendations were published in the October 2009 issue of *Contraception*.[3]

Systematic reviews, with or without meta-analysis, increasingly form the basis of clinical guidelines and resources, such as the recently updated family planning guides from the World Health Organization. Those who conduct systematic reviews need tools to assess and report the quality of underlying studies, and those who use them need tools to assess their quality in order to confidently make clinical decisions based on their findings. In October 2009, the QUOROM Statement was revised and renamed Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA).[4] A new revised and expanded 27-item checklist and flow sheet were developed to help prospective authors improve the way they conduct and report systematic reviews and meta-analyses.

1. Department of Reproductive Health and Research, World Health Organization. Medical eligibility criteria for contraceptive use, 4th ed. Geneva: World Health Organization; 2009. Available at: *http://whqlibdoc.who.int/publications/2009/9789241563888_eng.pdf*
2. Department of Reproductive Health and Research, World Health Organization. Selected practice recommendations for contraceptive use, 2nd ed. Geneva: World Health Organization; 2004. Available at: *http://whqlibdoc.who.int/publications/2004/9241562846.pdf*; 2008 update available at: *http://whqlibdoc.who.int/hq/2008/WHO_RHR_08.17_eng.pdf*
3. Contraception 2009;80(theme issue):323–408.
4. Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. PLoS Med 2009;6:e1000097. Available at: *http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000097*

FROM *COCHRANE DATABASE OF SYSTEMATIC REVIEWS* (*CDSR*), ISSUE 1, 2010

New Systematic Reviews

- Acupuncture for uterine fibroids
- Antenatal cardiotocography for fetal assessment
- Antibiotic prophylaxis versus no prophylaxis for preventing infection after cesarean section
- Cervical preparation for first trimester surgical abortion
- Cesarean delivery for the prevention of anal incontinence
- Exercise for dysmenorrhoea
- Fetal and umbilical Doppler ultrasound in high-risk pregnancies
- Medical treatments for incomplete miscarriage (less than 24 weeks)
- Progestational agents for treating threatened or established preterm labour
- Progestin-only pills for contraception
- Repeated use of pre- and postcoital hormonal contraception for prevention of pregnancy

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Updated Systematic Reviews

- Amnioinfusion for meconium-stained liquor in labour
- Bed rest with or without hospitalisation for hypertension during pregnancy
- Breast stimulation for cervical ripening and induction of labour
- Education for contraceptive use by women after childbirth
- Interventions for varicose veins and leg oedema in pregnancy
- Kinesthetic stimulation versus methylxanthine for apnea in preterm infants
- Maternal hydration for increasing amniotic fluid volume in oligohydramnios and normal amniotic fluid volume
- Physical activity programs for promoting bone mineralization and growth in preterm infants
- Postnatal parental education for optimizing infant general health and parent-infant relationships
- Preoxygenation for tracheal suctioning in intubated, ventilated newborn infants
- Rest during pregnancy for preventing preeclampsia and its complications in women with normal blood pressure
- Sucrose for analgesia in newborn infants undergoing painful procedures

Cochrane Reviews are available by subscription to *The Cochrane Library*, and review abstracts are available without charge. See *http://www.cochrane.org/reviews/*

FROM *DATABASE OF ABSTRACTS OF REVIEWS OF EFFECTS* (*DARE*)

Recent Abstract Entries Assessing Quality of Systematic Reviews

- A meta-analysis of passive descent versus immediate pushing in nulliparous women with epidural analgesia in the second stage of labor
- A systematic review of interventions to increase awareness, knowledge, and folic acid consumption before and during pregnancy
- A systematic review of studies validating the Edinburgh Postnatal Depression Scale in antepartum and postpartum women
- A systematic review of telephone support for women during pregnancy and the early postpartum period
- Abortion and the risk of subsequent preterm birth: A systematic review with meta-analyses
- Antibiotics versus placebo in the treatment of women with uncomplicated cystitis: A meta-analysis of randomized controlled trials
- Are hygroscopic dilators better than vaginal prostaglandins for induction of labour? A systematic review
- Bone health in postmenopausal women with early breast cancer: How protective is tamoxifen?
- Computer aids and human second reading as interventions in screening mammography: Two systematic reviews to compare effects on cancer detection and recall rate
- Management of minor cervical cytological abnormalities: A systematic review and a meta-analysis of the literature
- Meta-analysis of walking for preservation of bone mineral density in postmenopausal women
- Understanding barriers for adherence to follow-up care for abnormal Pap tests

DARE abstracts are available without charge at *http://www.crd.york.ac.uk/crdweb/*

EVIDENCE-BASED REVIEWS FROM OTHER SOURCES

*Featured review: Singata M, Tranmer J, Gyte GML. Restricting oral fluid and food intake during labour. Cochrane Database Syst Rev 2010;1:*CD003930

Oral intake of food and fluids during labor has traditionally been restricted to prevent the rare but serious complication of aspiration of stomach contents under general anesthesia (Mendelson syndrome). Advances in anesthesia and greater use of regional analgesia for childbirth have led to questions about this policy. A Cochrane review of five studies assessing data from 3130 women explored risks associated with oral fluid and food intake during active labor in women at low risk for surgical complications.One study compared effects of no oral intake to eating and drinking at will, while in the others women who were allowed only water were compared to those provided access to specific foods and fluids or carbohydrate drinks. All studies were randomized or quasi-randomized trials, and were assessed for quality using predetermined criteria; data were pooled using meta-analysis whenever appropriate. There was no statistically significant difference in risk observed for any of the primary outcomes: cesarean delivery, operative delivery, or 5-minute Apgar scores <7. There were also no observed differences in length of labor, maternal nausea and vomiting or ketosis, use of pain medication or oxytocin, or newborn neonatal intensive care unit (NICU) admissions. None of the studies assessed maternal satisfaction. In addition, no woman in any study experienced Mendelson syndrome. In the largest of the trials, there was non-differential misclassification across the study arms, as 29% of women who were free to eat or drink chose not to, while 20% of women who were assigned to water only ate during labor; this measurement error might have blunted differences between the groups.

Comment: This study suggests that low-risk laboring women do not incur heightened perinatal risk if they eat and drink in labor and that they should be allowed to make that determination themselves. These findings are

important because intravenous hydration, commonly used in labor for women whose oral intake is restricted, does carry some degree of risk, including the risks of water intoxication and hyponatremia for the mother or hypoglycemia for the newborn. Future studies should assess women's experiences of eating and drinking in labor and of policies that restrict their options.

Featured review: Ip S, Chung M, Raman G, Trikalinos TA, Lau J. A summary of the Agency for Healthcare Research and Quality's evidence report on breastfeeding in developed countries. Breastfeed Med 2009;4(Suppl 1):S17–30.

A new article summarizes many significant findings from an extensive evidence report on the effects of breastfeeding on infant and maternal outcomes in developed countries, conducted by the Agency for Healthcare Research and Quality (AHRQ) in 2007. The report provided an overview of 28 existing systematic reviews and meta-analyses, comprising 400 primary studies, along with a new meta-analysis of 75 primary studies whose data had not previously been systematically reviewed or pooled. Most of the data were from observational studies. An expert panel provided guidance on selected breastfeeding outcomes for review from the list of potential outcomes associated with exclusive breastfeeding in term infants. Primary studies were assessed for quality, and the results of poor quality studies were excluded from review conclusions. For infants, a history of exclusive breastfeeding for at least 3 months was associated with a reduced risk of acute ear, lower respiratory, and gastrointestinal infections and sudden infant death syndrome, as well as a reduced risk of longer term outcomes, including atopic dermatitis, obesity, diabetes, and childhood asthma and leukemia. For mothers, a history of breastfeeding was associated with significant reductions in the risk of breast and ovarian cancer, as well as reduced risk of type 2 diabetes in those with no history of gestational diabetes. The review did not find a significant benefit for infants in terms of improved cognitive function, and demonstrated no effects in mothers on postpartum depression, weight loss, or osteoporosis.

Comment: This comprehensive review of many health benefits to infants and mothers associated with exclusive breastfeeding provides a useful summary of a wide range of outcomes; taken as a whole, this large body of evidence provides a basis for discussions that can be reframed to consider the risks of not breastfeeding.

Featured review: Crepaz N, Marshall KJ, Aupont LW, Jacobs ED, Mizuno Y, Kay LS, et al. The efficacy of HIV/STI behavioral interventions for African American females in the United States: A meta-analysis. Am J Public Health 2009;99:2069–78.

A rigorous meta-analysis was conducted to assess the efficacy of individual and group behavioral interventions for preventing HIV and sexually transmitted infections (STIs) in African American women in the United States. A meta-analysis of 37 studies including 13,354 primarily low-income inner-city African American women and teens showed a 37% reduced odds of any unprotected sex and 19% reduced odds of any STI diagnosis at up to 1 year follow-up associated with all combined behavioral interventions, compared to controls. Stratified analysis revealed greater efficacy for interventions that were gender- and culture-specific, delivered by women, and focused on empowerment in relationships and negotiation of safer sex through role-playing, as well as skill-based training in condom use. Further studies are needed to explore the efficacy of behavioral interventions in African American women from higher income brackets and rural areas.

Comment: African American women are disproportionately represented among US women who acquire HIV, and three-quarters of cases in this population are transmitted through heterosexual behavior with high-risk men. Targeted, culturally appropriate, and gender-specific behavioral interventions aimed at addressing empowerment of African American women in sexual relationships appear to be an effective prevention strategy to protect against HIV and STI transmission.

Recent Evidence-Based Reviews

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