

VII. Synopsis

Theme 1: Beneficial forms of care

Effectiveness demonstrated by clear evidence from controlled trials.

Basic care

- Pre- and peri-conceptual folic acid supplementation to prevent recurrent neural tube defects
- Folic acid supplementation (or high folate diet) for all women envisaging pregnancy
- Assistance (especially behavioral strategies) to stop smoking during pregnancy
- Balanced energy and protein supplementation when dietary supplementation is required
- Vitamin D supplementation for women with inadequate exposure to sunlight
- Iodine supplementation in populations with a high incidence of endemic cretinism

Screening and diagnosis

- Doppler ultrasound in pregnancies at high risk of fetal compromise

Pregnancy problems

- Antihistamines for nausea and vomiting of pregnancy that is resistant to simple measures
- Local imidazoles for vaginal Candida infection (thrush)
- Local imidazoles instead of nystatin for vaginal Candida infection (thrush)
- Administration of anti-D immunoglobulin to Rh-negative women whose newborn baby is not Rh-negative
- Administration of anti-D immunoglobulin to Rh-negative women at 28 weeks of pregnancy
- Antibiotic treatment of asymptomatic bacteriuria
- Tight as opposed to too strict or loose control of blood sugar levels in pregnant diabetic women
- External cephalic version at term to avoid breech birth
- Offering induction of labor after 41 completed weeks of gestation

Childbirth

- Physical, emotional and psychological support during labor and birth
- Continuous support for women during labor and childbirth
- Agents to reduce acidity of stomach contents before general anaesthesia
- Oxytocics to treat postpartum hemorrhage
- Prophylactic oxytocics in the third stage of labor
- Active versus expectant management of third stage of labor

Problems during childbirth

- Absorbable instead of non-absorbable sutures for skin repair of perineal trauma
- Polyglycolic acid sutures instead of chromic catgut for repair of perineal trauma

Care after childbirth

- Consistent support for breastfeeding mothers
- Personal support from a knowledgeable individual for breastfeeding mothers
- Unrestricted breastfeeding
- Local anesthetic sprays for relief of perineal pain postpartum
- Cabergoline instead of bromocriptine for relief of breast symptoms in non-breastfeeding mothers

Theme 2: Forms of care likely to be beneficial

The evidence in favor of these forms of care is strong, although not established by randomized trials

Basic care

- Avoidance of heavy physical work during pregnancy

Screening and diagnosis

- Ultrasound to resolve questions about fetal size, structure, or position
- Selective use of ultrasound to assess amniotic fluid volume
- Selective use of ultrasound to estimate gestational age in first and early second trimester
- Ultrasound to determine whether the embryo is alive in threatened abortion
- Ultrasound to confirm suspected multiple pregnancy
- Ultrasound for placental location in suspected placenta previa
- Clinical history to assess risk of pre-eclampsia
- Regular monitoring of blood pressure during pregnancy
- Testing for proteinuria during pregnancy
- Uric acid levels for following the course of pre-eclampsia
- Fundal height measurements during pregnancy

Pregnancy problems

- Ultrasound to facilitate intra-uterine interventions
- Antacids for heartburn of pregnancy if simple measures are ineffective
- Bulking agents for constipation if simple measures are ineffective
- Local metonidazole for symptomatic trichomonal vaginitis after the first trimester
- Antibiotics for symptomatic bacterial vaginosis
- Antiplatelet agents to prevent pre-eclampsia
- Calcium to prevent pre-eclampsia, for women at high risk or with low calcium in diet
- Balanced protein/energy supplementation for impaired fetal growth
- Ultrasound surveillance of fetal growth in multiple pregnancies
- Screening all pregnant women for blood group iso-immunization
- Anti-D immunoglobulin to Rh-negative women after any uterine bleeding, intrauterine procedure, or abdominal trauma during pregnancy
- Routine screening for, and treatment of, syphilis in pregnancy Rubella vaccination of seronegative women postpartum
- Screening for and treatment of chlamydia in high prevalence populations
- Cesarean section for active herpes (with visible lesion) in labor with intact membranes

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- Prepregnancy counseling for women with diabetes Specialist care for pregnant women with diabetes
 - Home instead of hospital glucose-monitoring for pregnant women with diabetes
 - Ultrasound surveillance of fetal growth for pregnant women with diabetes
 - Allowing pregnancy to continue to term in otherwise uncomplicated diabetic pregnancies
 - Careful attention to insulin requirements postpartum
 - Encouraging diabetic women to breastfeed
 - Repeat ultrasound scanning of a low-lying placenta in late pregnancy
 - Delaying planned cesarean section for placenta previa until term
 - Cesarean section for placenta previa covering any portion of the cervical os
 - Ultrasound examination for vaginal bleeding of undetermined origin
 - External cephalic version for transverse or oblique lie at term
 - Tocolysis for external cephalic version of breech, particularly if unsuccessful otherwise
 - External cephalic version for breech in early labor if the membranes are intact
 - Corticosteroid administration after prelabor rupture of the membranes preterm
 - Vaginal culture after prelabor rupture of the membranes preterm
 - Antibiotics for prelabor rupture of the membranes with suspected intrauterine infection
 - Not stopping spontaneous labor after prelabor rupture of the membranes preterm
 - Elective delivery for prelabor rupture of the membranes preterm with signs of infection

Childbirth

- Respecting women's choice of companions during labor and birth
- Respecting women's choice of place of birth
- Presence of a companion on admission to hospital
- Giving women as much information as they desire
- Freedom of movement and choice of position in labor
- Change of mother's position for fetal distress in labor
- Intravenous beta-mimetics for fetal distress in labor to "buy time"
- Respecting women's choice of position for the second stage of labor and giving birth
- Guarding the perineum versus watchful waiting during birth

Problems during childbirth

- Maternal movement and position changes to relieve pain in labor
- Amniotomy to augment slow or prolonged labor
- Continuous subcuticular suture for perineal skin repair
- Primary rather than delayed repair of episiotomy breakdown
- Delivery of a very preterm baby in a center with adequate perinatal facilities
- Presence of a pediatrician at a very preterm birth

Care after birth

- Keeping newborn babies warm
- Prophylactic vitamin K to the baby to prevent hemorrhagic disease of the newborn

Synopsis

- Nasopharyngeal suctioning of infants who have passed meconium before birth
- Presence of someone skilled in neonatal resuscitation at birth of all infants likely to be at risk
- Oxygen for resuscitation of distressed newborn infants Cardiac massage for infants born with absent heart beat
- Encouraging early mother-infant contact
- Encouraging early breastfeeding when mother and baby are ready
- Skilled help with first breastfeed
- Flexibility in breastfeeding practices
- Antibiotics for infectious mastitis in breastfeeding women
- Breast binding and fluid restriction for suppression of lactation

Theme 3: Forms of care with a trade-off between beneficial and adverse effects
Women and caregivers should weigh these effects according to circumstances, priorities, and preferences

Basic care

- Continuity of caregiver for childbearing women
- Legislation restricting type of employment for pregnant women

Screening and diagnosis

- Routine ultrasound in early pregnancy
- Chorion villous sampling versus amniocentesis for diagnosis of chromosomal abnormalities
- Serum alpha-fetoprotein screening for neural-tube defects

Pregnancy problems

- Corticosteroids to promote fetal maturity before preterm birth in diabetic pregnancy
- Routine elective cesarean for breech presentation
- Induction of labor for prelabor rupture of the membranes at term
- Induction instead of surveillance for pregnancy after 41 weeks gestation

Childbirth

- Intermittent auscultation during labor
- Midline versus mediolateral episiotomy, when episiotomy is necessary
- Prophylactic ergometrine/oxytocin (syntometrine) versus oxytocin alone in the third stage of labor

Problems during childbirth

- Mechanical methods for cervical ripening or induction of labor
- Endocervical versus vaginal prostaglandin for cervical ripening before induction of labor
- Oral prostaglandin E2 for induction of labor with a ripe cervix
- Natural prostaglandins versus oxytocin for induction of labor
- Soft versus rigid vacuum extractor cups
- Ampicillin versus broader spectrum antibiotics for cesarean section

Care after childbirth

- Prophylactic antibiotic eye ointments to prevent eye infection in the newborn
- Prophylactic versus 'rescue' surfactant for very preterm infants

Theme 4: Forms of care of unknown effectiveness

There are insufficient or inadequate quality data upon which to base a recommendation for practice

Basic care

- Formal preconceptional care for all women
- Calcium supplementation to improve pregnancy outcome
- Magnesium supplementation to improve pregnancy outcome
- Zinc supplementation to improve pregnancy outcome
- Antigen-avoidance diets to reduce risk of an atopic child'

Screening and diagnosis

- Placental grading by ultrasound to improve perinatal outcome
- Doppler ultrasound of uterine artery for pre-eclampsia
- Measuring hematocrit and platelets for following the course of pre-edampsia
- Fetal biophysical profile for fetal surveillance

Pregnancy problems

- Vitamin B6 for nausea and vomiting of pregnancy if simple measures are ineffective
- Ginger for nausea and vomiting of pregnancy
- Acid suppressing drugs for heartburn
- Rutosides for hemorrhoids
- Rutosides for varicose veins
- Exercise and education programs for backache
- Increased salt intake for leg cramps
- Oral magnesium for leg cramps
- Progestogens for threatened abortion with a live fetus
- Human chorionic gonadotrophin (hCG) for threatened abortion with a live fetus
- Hospitalization for women with pregnancy-induced hypertension
- Bed rest for women with pre-eclampsia
- Magnesium sulphate for pre-eclampsia
- Interventionist versus expectant management for severe early onset pre-eclampsia
- Hospitalization and bed-rest for impaired fetal growth
- Abdominal decompression for impaired fetal growth
- Prophylactic antibiotics for prelabor rupture of membranes at term or preterm
- Postpartum prophylactic antibiotics after prelabor rupture of membranes
- Bed-rest to prevent preterm birth
- Sweeping of the membranes to prevent post-term pregnancy
- Nipple stimulation to prevent post-term pregnancy

Childbirth

- Pre-admission assessment to determine if labor is in the active phase
- Routine artificial rupture of the membranes to detect meconium-stained amniotic fluid in labor
- Maternal oxygen administration for fetal distress in labor
- Institutional routines for repeating blood pressure measurements in labor
- Nipple stimulation to prevent postpartum hemorrhage
- Misoprostol in the third stage of labor to prevent postpartum hemorrhage
- Early versus late clamping of the umbilical cord at birth
- Methods for delivery of the placenta in the third stage of labor

Problems during childbirth

- Free mobility during labor to augment slow labor
- Early use of oxytocin to augment slow or prolonged labor
- Active management of labor
- Immediate versus delayed clamping of the umbilical cord of preterm infants

Care after childbirth

- Tracheal suctioning for meconium in babies without respiratory depression
- Routine use of antiseptics on the umbilical cord stump

Theme 5: Forms of care unlikely to be beneficial

The evidence against these forms of care is not as firmly established as for those in theme 6

Basic care

- Routinely involving doctors in the care of all women during pregnancy and childbirth
- Routinely involving obstetricians in the care of all women during pregnancy and childbirth
- Not involving obstetricians in the care of women with serious risk factors
- Advice to restrict sexual activity during pregnancy
- Prohibition of all alcohol intake during pregnancy
- Imposing dietary restrictions during pregnancy
- Routine hematinic supplementation in pregnancy in well-nourished populations
- High-protein dietary supplementation
- Restriction of salt intake to prevent pre-eclampsia

Screening and diagnosis

- Routine use of ultrasound for fetal measurement in late pregnancy
- Reliance on edema to screen for pre-eclampsia
- Screening for "gestational diabetes"
- Routine glucose challenge test during pregnancy
- Routine measurement of blood glucose during pregnancy
- Insulin plus diet treatment for 'gestational diabetes'
- Diet treatment for 'gestational diabetes'
- Routine fetal movement counting to improve perinatal outcome

- Routine use of Doppler ultrasound screening in all pregnancies
- Calcium supplementation for leg cramps
- Screening for, and treatment of, vaginal candidal colonization without symptoms
- Screening for, and treatment of, vaginal trichomonas colonization without symptoms
- Screening for, and treatment of, bacterial vaginosis without symptoms
- Bed-rest for threatened abortion
- Reducing salt intake to prevent pre-eclampsia
- Diuretics for pregnancy-induced hypertension
- High protein dietary supplementation for impaired fetal growth
- Treatment of group B streptococcus colonization during pregnancy
- Cesarean section for non-active herpes simplex before or at the onset of labor
- Amniotomy in HIV-infected women
- Elective delivery before term in women with otherwise uncomplicated diabetes
- Elective cesarean section for pregnant women with diabetes
- External cephalic version before term to avoid breech presentation at birth
- Induction of labor to prevent cephalopelvic disproportion

Childbirth

- Withholding food and drink from women in labor
- Routine intravenous infusion in labor
- Wearing face masks during labor or for vaginal examinations
- Frequent scheduled vaginal examinations in labor
- Routine directed pushing during the second stage of labor
- Early bearing down during the second stage of labor
- Routine manual exploration of the uterus after vaginal birth
- Injectable prostaglandins in the third stage of labor
- Encouraging early suckling to prevent postpartum hemorrhage

Theme 6: Forms of care likely to be ineffective or harmful ***Ineffectiveness or harm demonstrated by clear evidence***

Basic care

- Dietary restriction to prevent pre-eclampsia

Screening and diagnosis

- Contraction stress cardiotocography to improve perinatal outcome
- Nipple-stimulation test cardiotocography to improve perinatal outcome
- Non-selective use of non-stress cardiotocography to improve perinatal outcome

Pregnancy problems

- Adrenocorticotrophic hormone (ACTH) for severe vomiting of pregnancy
- Saline cathartics for constipation
- Lubricant oils for constipation
- Diethylstilbestrol during pregnancy

- Elective delivery for prelabor rupture of the membranes preterm

Childbirth

- Routine enema in labor
- Routine pubic shaving in preparation for childbirth
- Electronic fetal monitoring without access to fetal scalp sampling during labor
- Rectal examinations to assess labor progress
- Requiring a supine (flat on back) position in the second stage of labor
- Routine use of the lithotomy position for the second stage of labor
- Routine or liberal episiotomy for birth
- Ergometrine instead of oxytocin prophylaxis in the third stage of labor

Problems in childbirth

- Glycerol-impregnated catgut for repair of perineal trauma

Care after childbirth

- Sodium bicarbonate for asphyxiated babies
- Routine restriction of mother-infant contact
- Routine nursery care for babies in hospital