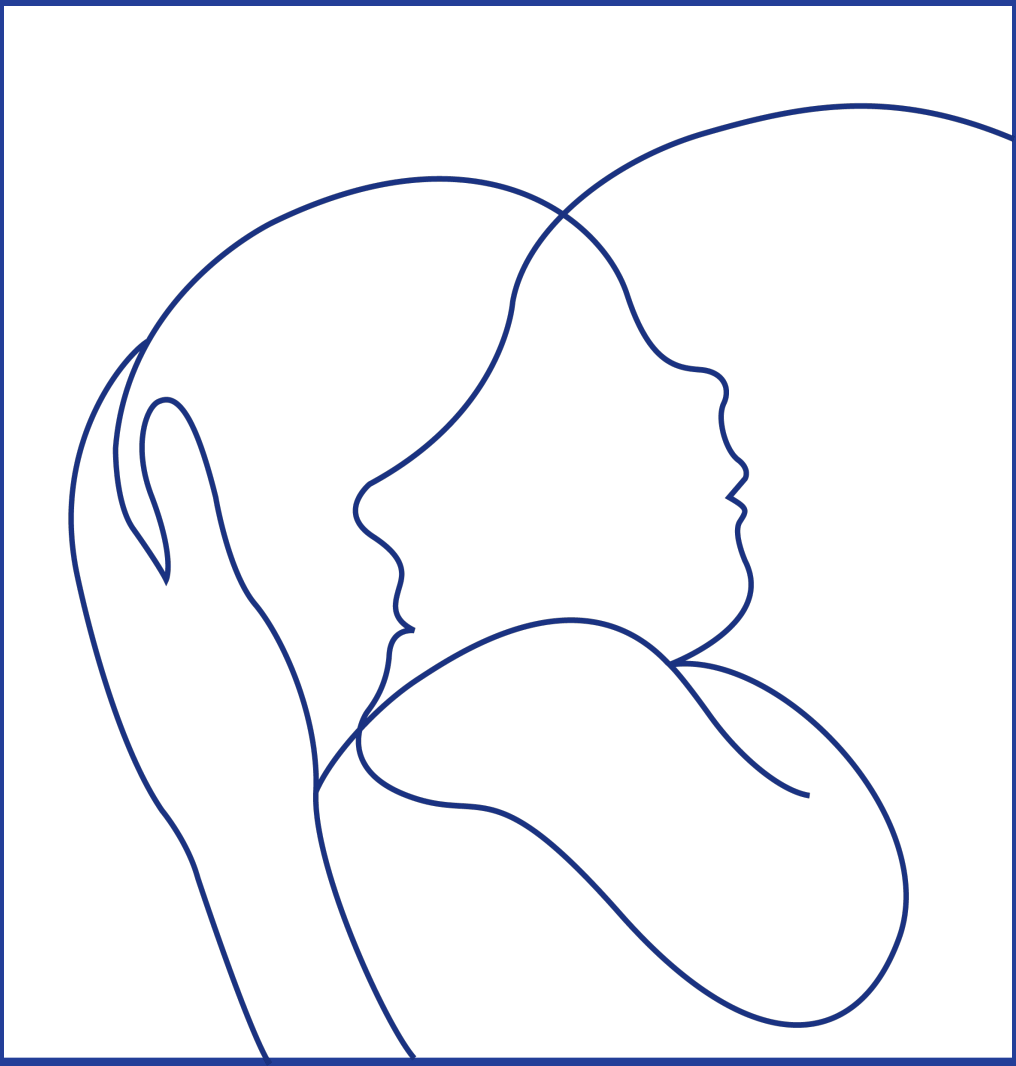
Life-Saving Skills

Manual for Midwives

4th Edition



Guide for Caregivers

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What is the *Guide for Caregivers*?

The *Guide for Caregivers* is a vital part of the LSS Manual package. It provides a clinical reference for topics taught in LSS. It is divided into the following major sections to facilitate finding information when you are providing care.

1. **Danger Signs** – lists the most common complication signs and symptoms for pregnancy related problems in women, and for newborns.
2. **Emergency Referral Plan** – asks questions to help the family and midwife develop an emergency referral plan
3. **Emergency Treatment** – describes diagnostic procedures and emergency treatment for shock and convulsions.
4. **Complaint and Findings Chart** – lists the most common symptoms and signs of complaints or complications described in the LSS manual. This chart offers the most likely problem for a complaint or finding of a woman (newborn) and gives the page number of the protocol for the possible problem.
5. **Protocols** – provide woman and newborn care guidelines for complications, common complaints of pregnancy, and labor problems discussed in LSS. This section must be reviewed in-country and adapted for local situations.
6. **Counseling** – outlines information for antenatal, postpartum, breast feeding, LAM, HIV, and family planning.
7. **Formulary** – lists drugs for complications and complaints with space to add drugs for your situations.
8. **Procedures** – explains some common procedures midwives may need to use in their health facility.
9. **Tests** - describes how to do some common tests midwives may use in their health facility. Additional testing may need to be done in a laboratory at a hospital.
10. **Skill Checklists** – gives a step by step outline for each skill procedure in Modules 2 through 10. The learner and trainer fill out the appropriate skill checklist and discuss how the steps were performed. The checklist may be used after training, to review and practice skills or as reference.

Guide for Caregivers

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Notes

1. Danger Signs

During Pregnancy. A healthy pregnant woman has no serious problems or danger signs. Women may have danger sign complaints but do not know they are serious. These danger signs are not common but may be life threatening. Ask about danger signs during pregnancy at every visit.

Danger Signs During Pregnancy

• Any bleeding • Headaches • Visual problems: spots in front of your eyes, blurry vision • Abdominal (epigastric) pain, severe heart burn • Fever	• Bad smelling vaginal discharge • Convulsions • Baby not moving as usual • Losing weight, and/or chronic: cough, diarrhea, skin rash, or infections

Postpartum. After the baby is born, the healthy woman and her newborn have no serious problems or danger signs. Talk with her and her family about what to do and where to go for referral if a danger sign develops for immediate care.

Danger Signs Postpartum

Woman	Newborn
• Too much bleeding • Fever • Abdominal pain • Foul smelling lochia • Convulsions • Losing weight, and / or chronic: cough, diarrhea, skin rash, or infections	• Breathing too slow or too fast, or having trouble breathing • Weight: low birth weight, too small • Feeding problems: not able to suck, not feeding well • Temperature: too hot or too cold • Signs of infection: any redness or pus discharge in eyes or umbilicus, pustules • Stools and vomiting: watery stools, no stool by third day • Unusual cry, rolling eyes, tetany, convulsions, irritable, lethargy, limp

2. Emergency Referral Plan

A woman, her family and community are the first ones to see a problem that starts at home. Encourage the **woman and her family to make an emergency plan**.

Family Emergency Plan

- Who will decide there is a problem?
- Who will decide to get help?
- Where will you go? How will you get there?
- How much will it cost? Transportation? Care?
- What money will be used to pay the cost for an emergency?
- Who will you ask to help give you care on the way? Who will go with the woman and baby?
- Who will give permission for the woman to travel?
- Who will be available to give blood if it is needed?
- Who will care for the home and children?

A **midwife must be ready** to go with a woman or baby to a referral facility that has the skills and equipment to manage the complications.

Midwife Emergency Plan During Referral

- Have emergency equipment and supplies ready.
- Ask family members about transport, money, helpers, blood donors.
- Refer quickly. Go with the woman, baby, and family.
- Take referral form. Give report of problem / actions.
- Stay calm and supportive.
- Give woman or newborn care during referral:
  - **Monitor** general condition.
  - **Position** according to problem.
  - **Keep warm** but not too hot. Put baby skin to skin.
  - **Protect from injury**. Hold and support during referral.
  - Continue to **give fluids**.

3. Emergency Treatment: Shock & Convulsions

Shock is a life threatening emergency! When you see a woman or baby with a problem, quickly decide how sick they are. You must find out: **is the woman or baby alive?**

Call for Help to assist you provide care.

A – Is the airway open? Can the woman talk? Does the baby cry? If **woman** can not talk, make sure mouth and nose are clear and open. Lay the woman on one side with head tilted back to keep the airway open. If **baby** does not cry, make sure the mouth and nose are clear and open. Position baby on the back with the head slightly extended, in the 'sniffing position'.

B – Is breathing present? If the woman or baby is not breathing, help them breathe.

C – Circulation? Is the heart beating? If the heart is not beating, help the heart beat, see Skill Checklist Module 6: **Resuscitation** - CPR.

S – Shock? Is the woman or baby in shock?

LOOK & FEEL FOR SHOCK SIGNS AND SYMPTOMS

Woman		Newborn	
Pulse	Weak, fast (140 or above)	Heart Rate	Fast (above 180)
BP	Low (systolic below 80)		
Skin	Cold, clammy, pallor	Skin	Cold, pallor
Breath	Fast, shallow (above 30)	Breathing	Slow (less than 20)
Brain (CNS)	Anxious, restless, weak	Brain (CNS)	Lethargy, no response

Finding. There is no shock.

Actions. If there is no shock or after you have stabilized the woman or newborn for the emergency, use the problem solving method and the Complaint and Findings Chart, pages 8-17, to identify the problem and give care.

Finding. There is shock.

Actions. If there is shock, stabilize the woman or baby. Give immediate life saving care. Emergency or shock care is needed immediately.

1. Keep airway open.
2. Monitor breathing.
3. Monitor heart rate.
4. Prevent or treat shock:
   a. Keep woman or baby warm.
   b. Put in shock position.
   c. Give fluids.
   d. Identify cause, treat, REFER.

Finding. There are fits or convulsions.

Actions. The jerking movements of the muscles last from a few seconds to many minutes. There is often loss of consciousness. Convulsions come from an irritation to the brain caused by pregnancy (eclampsia), poisoning, infection (meningitis), high fever, severe dehydration, hypoglycemia, and other problems. Many pregnant women who have eclampsia will die or lose their babies.

1. Treat the cause of the convulsions if known and refer to the doctor or hospital after the convulsion. See Complaint and Findings Chart, pages 8-17.
2. Stay calm and reassure the family.
3. Clear airway: Keep a clear airway by helping (1) the woman lie on her side on floor or a flat surface so that anything in her mouth can run out, (2) hold newborn in 'sniffing' position.
4. Protect from injury: Keep the woman (newborn) from hurting herself by moving away hard or sharp objects. Do not try to stop the jerking movements. Do not put or pour anything into the person's mouth as she is not able to swallow. Do not leave her alone.
5. After the convulsion, the woman (newborn) may be confused and sleepy.
6. Go with her to the doctor or hospital as soon as possible after the convulsion. Move her gently. On the way keep her warm and protect her from injury.
7. Explain to the woman and her family what you are doing. Tell the family that convulsions are an emergency.

4. Complaint and Findings Chart

Overview

The Complaint and Findings Chart for Pregnancy-Related Problems in Woman, and for Newborn is a list of common complaints. It is used as a guide in determining the most likely cause of the problem the woman or family came to see you about (complaint).

a. **When you first see a woman** who says she is not well or her family says she is not well, LOOK for the A,B,C,S (airway open, breathing present, circulation-heart beating, shock) and at the same time, ASK:

- Are you pregnant? If yes, how many months pregnant?
- Are you bleeding?
- Did you just deliver? If yes, is the placenta out?

b. **When you first see a newborn** and the mother or family says the baby is not well, LOOK for the A, B, C, S (airway open, breathing present, circulation / heart beating, shock) while you are looking, ASK.

- When was the baby born? Does the baby suck breast?

After you have treated the woman (or newborn) for the emergency and she is stable, follow the problem solving method.

- ASK and LISTEN: What is wrong? (complaint) When did it start? Any treatment given? Did it help?
- LOOK and FEEL: Look for the problem. Look and feel for anything that is not normal (pain, tenderness, swelling, drainage, discharge, odor, redness)?
- IDENTIFY THE PROBLEM. Use the Complaint and Findings Chart on pages 8-16.
- TAKE APPROPRIATE ACTION according to the Protocols and your country directives.
- EVALUATE / REPEAT THE PROCESS. Decide the results of the care. Find out whether there is a change in the problem using the problem solving process.

How to Use the Complaint and Findings Chart

Use the following **example**, to get use to the Complaint and Findings Chart. A woman tells you that she has a fever. *ASK when did it start, did she take any treatment, did the treatment help?*

1. Look in the Complaint and Findings Chart, pages 11 and find, 'fever'. The first signs/symptoms says "breast hot, painful with swelling".

2. **ASK and LISTEN,** and **LOOK and FEEL**

   a. Ask questions for the signs and symptoms listed.

      - ***ASK*** *the woman whether she has breast pain.*
        She says no.

   b. Skip the next line as it is for NEWBORN.

   c. The following line says "frequency and burning when passing urine."

      - ***ASK*** *the woman whether she has any frequency or burning when passing urine.*
        She says yes she has frequency and burning when passing urine.

   d. A possible problem listed is Urinary Tract Infection. Turn to page 53, the Protocol: Infection - UTI. On the protocol for UTI, you read there may be an upper or lower UTI and decide to find out whether she has upper UTI (kidney infection) or lower UTI (bladder infection):

      - ***ASK*** *about lower abdominal pain. Take temperature. FEEL for back tenderness.*
        She says she does have low abdominal pain over her bladder area. She does not have back tenderness. Her temperature is 99.6 F.

   e. Turn to ABDOMINAL PAIN in the Complaint and Findings Chart on page 8. Ask questions for the signs and symptoms listed.

      - ***ASK*** *do you have any vaginal discharge?*
        She says no. (You decide she probably does not have any STI. You see that she looks pregnant.)

      - ***ASK*** *when did you see your last menses?*
        She is pregnant, about 5 months now.

f. Turn to MISSED MENSES in the Complaint and Findings Chart page 12.

- ***ASK*** *her if this is her first pregnancy?*
  She says yes.
- ***ASK*** *if she is having any complaints or problems with her pregnancy (other than the complaint today)?*
  She says no.
- ***ASK*** *if she is registered at ANC.*
  She says no but she plans to come next month.

3. **IDENTIFY PROBLEM AND TAKE ACTION**

You find:

- She has fever.
- She has frequency, burning when passing urine.
- She has low abdominal pain.
- She does NOT have any vaginal discharge.
- She is 5 months pregnant, is not registered at ANC.

PROBLEM # 1: You look again at the Protocol: UTI page 53. Urinary infection is dangerous for a pregnant woman and can cause her to start labor too early if not treated. You decide that she has a bladder infection (low grade fever along with her symptoms of frequency and burning when passing urine, and low abdominal pain without vaginal discharge help you make the decision).

TAKE ACTION FOR PROBLEM #1. Look in the Protocol: UTI for **bladder infection.** You see that she does not need to be referred now. Manage according to protocol.

PROBLEM # 2: She is 5 months pregnant, this is her first pregnancy and she is not registered at ANC.

TAKE ACTION FOR PROBLEM #2. Look in the **Counseling: Antenatal** page 78 & 84. Manage according to the discussion.

Complaint and Findings Chart

Complaint	Findings	Problem	Page
Abdominal pain with fever	Vaginal discharge, yellow	STI Sepsis	**54, 47**
	Vaginal discharge, foul odor, bloody, early pregnancy	Infection Associated with Abortion	**32, 34**
	Vaginal discharge, foul odor, bloody, postpartum	Postpartum Infection	**50**
	Frequent & burning when passing urine	Urinary Tract Infection	**53**
Abdominal pain without fever	Headache, visual problems, epigastric pain	Pre-eclampsia	**38**
	Frequent & burning when passing urine	Urinary Tract Infection	**53**
Abdominal pain with missed menses	Pregnant & tender uterus	Abruptio Placenta	**41**
	Vaginal bleeding, severe abd pain, shock	Ectopic Pregnancy	**41**
	Vaginal bleeding, early pregnancy	Abortion	**32**
Anemia	See tiredness with anemia, page 15		
Baby Died	Mother sad, breasts swollen	Newborn Death	**36**
Backache	Fever & back pain	UTI	**53**
	Vaginal discharge, yellow, low abd pain	STI or Sepsis	**54, 47**
	Vaginal bleeding after missed menses	Abortion	**32**
	Missed menses	Pregnancy	**83**
Bleeding	See vaginal bleeding, page 15		

Complaint	Findings	Problem	Page
Bleeding cord stump	NEWBORN: Cord stump bleeding(first 1-2 days of life), newborn weak	Bleeding Cord Stump	**74**
Bleeding circumcision	NEWBORN: weak, pale, crying, fresh blood	Bleeding Circumcision	**74**
Breast feeding problems	Cracks on nipples, no or little milk	Breast Feeding Problems	**91**
Breast swelling	Breast feeding, no fever	Breast Engorgement	**92**
	Usually one breast is hot, painful, hard, & red swelling, very tender, with fever	Mastitis	**47**
	Hot, painful, & red swelling usually area of one breast, with fever	Breast Abscess	**49, 194**
Convulsion with fever	NEWBORN: bulging fontanel, stiff neck	Meningitis	**64, 68**
	NEWBORN:: unable to suck, stiff body	Tetanus	**57**
	NEWBORN: not sucking well, rapid breathing, vomiting, coughing, septic cord stump	Newborn Sepsis	**64**
Convulsion without fever	Pregnant, BP over 140/90	Eclampsia	**38**
	NEWBORN: after difficult or assisted birth	Birth Trauma	**REFER**
	NEWBORN:: born too small	Low Birth Weight	**71**

Complaint	Findings	Problem	Page
Cough, chronic	Weight loss	Tuberculosis	REFER
Diarrhea	CHRONIC fever, skin rashes, infections	Maybe AIDS	**110** **REFER**
	NEWBORN: 5 or more watery stools, tenting skin	Diarrhea and Dehydration	**74**
Diminished vision	Pregnant, headache, epigastric pain, BP over 140/90	Pre-eclampsia	**38**
Epigastric pain	Pregnant, headache, visual changes, BP over 140/90	Pre-eclampsia	**38**
Eye trouble	Pregnant, headache, epigastric pain, BP over 140/90	Pre-eclampsia	**38**
	NEWBORN: first days of life, thick green or yellow discharge, pus usually both eyes, eyelids swollen	Eye Infection (ophthalmia neonatorum)	**66**
Feeling faint, weak	Pale mucous membranes	See tiredness (anemia)	
	BP below 90/60, fast pulse, skin moist	Shock	**3**
	Vaginal bleeding	See vaginal bleeding	
Feeling sad, afraid	May not be able to take care of baby / self, may not have family support, may be abused	Mood &/or Abuse, see Counseling: Postpartum	**119**

Complaint	Findings	Problem	Page
Fever	Breast hot, painful with swelling	Breast Abscess	**49**
	NEWBORN:: not sucking well, rapid breathing, vomiting, coughing, septic cord stump	Newborn Sepsis	**47**
	Frequency and burning when passing urine	Urinary Tract Infection	**53**
	Early pregnancy, abd pain, vaginal discharge, foul odor, bloody	Infection Associated with Abortion	**32**
	Term pregnancy, ruptured membranes	Choro-amnionitis	**47**
	Postpartum, abd pain, vaginal discharge, foul odor, bloody	Postpartum Infection	**47**
	Vaginal discharge, yellow, low abd pain	PID or Sepsis	**54, 47**
	Chills, headache, flu	Malaria	**47**
	CHRONIC diarrhea, skin rash. infections	May be AIDS	**110 REFER**
Frequent passing urine with pain or burning	Abdominal pain with or without fever	Urinary Tract Infection	**53**
	Vaginal discharge, yellow	STI or Sepsis	**54, 47**
Genital sores	See sores on the genitals		
Headache & pregnant	BP 140/90 or above, epigastric pain, visual problems	Pre-eclampsia	**38**
	BP 140/90 or above	Hypertension	**38**
Hemorrhage	See vaginal bleeding		

Complaint	Findings	Problem	Page
High blood pressure 140/90 or above	Pregnant, first half of pregnancy	Hypertension	**38**
	Pregnant, headache, epigastric pain, visual changes	Pre-eclampsia	**38**
Itching	Nipples itching, pain or burning in nipples at least 1 week, baby not sucking well	Yeast (candidiasis, moniliasis)	**55**
Jaundice	NEWBORN: rapid breathing, septic cord stump	Newborn Sepsis	**64**
	NEWBORN: jaundice starts 3-4 days after birth	Physiological jaundice	**75**
	NEWBORN:: jaundice starts 24 hours after birth	Serious jaundice	**75**
Leaking urine / feces	Urine or feces runs freely, history of difficult delivery	Fistula	REFER
Missed menses (missed period)	Mild nausea, vomiting, sleepy, 'thinks she is pregnant', cervix is soft and bluish	Early Pregnancy	**78**
	Taking birth control pills or injection	Medicine Effect (from FP method)	**96**
Baby without a mother	NEWBORN: Mother died or baby abandoned	Newborn without a mother	**74**
Not able to move one arm or leg	NEWBORN: Loss of movement in one limb, weak, difficult vaginal birth.	Not able to move one arm or leg	**75**

Complaint	Findings	Problem	Page
Not interested in her baby	Feeling sad or afraid, may not take care of baby / self, no family support, may be abused	Mood / Abuse, see Counseling: Postpartum	**119**
Not sucking breast or not sucking breast well	NEWBORN: Fever, cough, rapid breath, septic cord, vomiting	Newborn Sepsis (omphalitis)	**65**
	NEWBORN: Very sick, any sepsis	Septicemia, Shock	**69**
	NEWBORN: Mother has cracked nipples, or little milk	Breast Feeding Problems	**89**
	NEWBORN: Born too small	Premature	**71**
	NEWBORN: Unable to open mouth, stiff body	Tetanus	REFER
	NEWBORN: White spots or redness in mouth	Thrush (yeast)	**70**
Noisy breathing	NEWBORN: Fever, not sucking well, rapid breathing, flaring nostrils	Newborn Sepsis (pneumonia)	**68**
Painful menses (painful periods)	Vaginal discharge, yellow	STI or Sepsis	**54, 74**
	Frequent, painful, or burning when passing urine	Urinary Tract Infection	**53**
Perineal pain	After delivery: continuous trickle of bright red bleeding, sometimes clots	Cervical or Vaginal Laceration	**46**
Red eyes, swollen eyelids	NEWBORN: first days of life, thick green or yellow discharge, usually both eyes	Eye Infection (ophthalmia neonatorum)	**66**

Complaint	Findings	Problem	Page
Scalp swelling	NEWBORN: swelling on scalp, bulging or depressed fontanel	Scalp with Swelling	**75**
Skin color	NEWBORN: jaundice, color blue or pale	Not Usual Skin Color	**75, 76**
Skin dry or tenting	NEWBORN: sunken eyes and anterior fontanel	Diarrhea and Dehydration	**74**
Skin rashes or lesions	CHRONIC: diarrhea, fever, infections	Maybe AIDS	**110 REFER**
Skin sores or peeling	NEWBORN: pus & rash, pustules, scars	Skin Infection	**69, 70**
Sores on genitals	Painless	Syphilis	**56**
	Painful dirty yellow ulcer	Chancroid	**56**
	Painful beef red ulcer	Granuloma inguinale	**56**
	Multiple shallow ulcers or vesicles	Herpes	**56**
	Chronic nonhealing ulcer	Cancer	REFER
	Flat topped warts	Syphilis warts	**56**
	Cauliflower warts	Viral warts	**56**
	Many small itching sores	Scabies	REFER
Swelling of the legs, feet	Pregnant, both lower legs	Edema of pregnancy	**83**
	One leg only swollen red hot to touch	Cellulitis	**REFER**
	One leg only painful swollen red hot to touch	Thrombo-phlebitis	**47**

Complaint	Findings	Problem	Page
Swollen or red eyes	NEWBORN: first days of life; thick green or yellow discharge usually both eyes, eyelids swollen	Eye Infection (ophthalmia neonatorum)	**66**
Temperature not normal	Too hot or too cold, signs of sepsis, shock	Temperature Too High, Too Low	**76**
Too small at birth	NEWBORN: low birth weight, small for gestational age	Premature	**71**
Tiredness with anemia	Chronic cough	Tuberculosis	REFER
	Poor, little iron in diet	AN Nutrition	**84**
	Pregnant, pale conjunctiva / nails	AN Anemia	**35**
Trouble Breathing	NEWBORN: just born	Birth Asphyxia	**61**
	NEWBORN: fever, fast breath, flaring nostrils	Pneumonia	
Vaginal bleeding (continued next page)	NOT PREGNANT, taking oral contraceptives	FP Medicine Effect	**96**
	NOT PREGNANT, IUD in place	IUD Effect	**96**
	EARLY PREGNANCY, mild abd pain	Abortion	**32**
	EARLY PREGNANCY, abd pain, fever, odor	Septic Abortion	**32**
	EARLY PREGNANCY, severe abd pain, shock, spotting	Ectopic	**41**
	PREGNANT MORE THAN 28 WEEKS: painless bright red bleeding	Placenta Previa	**41**

Complaint	Findings	Problem	Page
Vaginal bleeding (continued)	PREGNANT MORE THAN 28 WEEKS: dark red bleeding tender uterus abd pain	Abruptio Placenta	**41**
	AFTER DELIVERY: uterus soft, not contracting	Uterine Atony	**44**
	AFTER DELIVERY: placenta still in uterus	Retained Placenta	**44**
	AFTER DELIVERY: placenta incomplete	Incomplete Placenta	**44**
	AFTER DELIVERY: continuous trickle of bright red bleeding, sometimes clots	Cervical or Vaginal Laceration	**44**
	AFTER DELIVERY UP TO SIX WEEKS: Bloody vaginal discharge, foul odor, fever, abd pain	Postpartum Infection	**44**
	NOT PREGNANT, PREGNANT OR AFTER DELIVERY	None of the above	REFER
Vaginal discharge (continued next page)	Itching+++, frothy foul smelling discharge	Trichomonas	**55**
	Itching++, thick white cheesy discharge	Yeast (candidiasis, moniliasis)	**55**
	Itching+, discharge +++, with fishy smell	Bacterial vaginosis	**56**
	Yellow discharge with red, raw cervix	Cervicitis	REFER

Complaint	Findings	Problem	Page
Vaginal discharge (continued)	Fever, low abdominal pain, yellow discharge	Pelvic infection (PID)	**54**
	Profuse irritating discharge with dysuria	Gonorrhea, Chlamydia	**54**
Visual changes / problems	Pregnant, headache, epigastric pain, BP above 140/90	Pre-eclampsia	**38**
Vomiting	Mild nausea sleepy, missed menses, 'thinks she is pregnant'	Early Pregnancy	**82**
	NEWBORN:: rapid breathing, septic cord stump	Newborn Sepsis	**64**
	NEWBORN:: stiff neck, bulging fontanel	Meningitis	**68**
Weight loss	Chronic cough	Tuberculosis	REFER
	Chronic skin rashes, diarrhea, infection	Maybe AIDS	**110** **REFER**
	Pregnant	Not enough food	**84**

5. PROTOCOLS

A Disease Discussion and Care Guide

About the protocols.

Protocols are standard accepted medical procedures for the treatment and care of a complication or complaint. Protocols are usually written. The protocols in this Guide target pregnancy-related problems in the woman and newborn problems. The protocols are based on the complications and common complaints as discussed in the *Life – Saving Skills Manual for Midwives, 4th edition.* For more information about the complications and common complaints, read in the LSS manual. The treatment and care considers safe, available, low cost interventions. The protocols are in three groups: Labor, Woman, and Newborn. Each group has complications and common complaints listed in alphabetical order. They are also listed in the table of contents by page number and at the beginning of each of the 3 groups.

Adapting the protocols.

The protocols are suggested procedures for treatment and care. They have been reviewed by a team of experienced woman and newborn care providers and educators in10 countries led by the authors of LSS. The treatments are based on current researched evidenced and practiced based experience. They must be adapted to local conditions and resources taking into account Ministry of Health Standards and Procedures. One way to locally review the protocols:

1. Identify the pregnancy-related problems and needs in the woman and the newborn problems.
2. Review the protocols and/or skill checklists for the identified problems.
3. Examine the medications. Confirm the local name, dose and methods of administering.
4. Develop the referral system and look at factors such as availability of emergency care, cost, transportation, distance, and acceptability.
5. Adapt the protocols by adding the new or changed information.

Labor Protocols

Fetal Distress:

- Heart Rate
- Meconium
- Activity

Woman Distress in Labor:

- Blood Pressure, Pulse, Temperature
- Condition of Bladder
- Presentation & Position (breech, occipitoposterior position, shoulder dystocia, face, brow, shoulder presentation, transverse lie or multiple pregnancy)
- Membranes (premature rupture)
- Cord Prolapse
- Uterine Inertia
- CPD or Obstructed Labor

First Stage Monitoring Slow Labor Progress Using the Partograph:

- False Labor
- Prolonged Latent Phase
- Between Alert and Action Line
- At and Beyond Action Line

Second Stage Slow Descent:

- Bladder full
- Cervix not dilated
- Membranes intact
- Not pushing effectively
- Fear
- Pushing position
- Contractions weak
- Dehydration
- Molding increasing
- Fetus in difficult or impossible position
- Woman or fetus general condition poor
- No progress of pushing with effective contractions

FETAL DISTRESS IN LABOR

Fetal Distress		Action in Labor
FETAL HEART RATE	• Heart rate faster than 160, or slower than 120 beats per minute OR • Sudden change in sound of heart rate OR • Heart rate during and at end of contraction less than normal heart rate between contractions	• Be prepared for a depressed newborn at delivery. **In second stage:** • Check woman's temperature and urine to decide if fast FHR due to dehydration or infection. • Hydrate woman, change her position, and deliver her as soon as possible with episiotomy and vacuum extractor as needed. • Remember to check for cord around the neck as soon as the baby's head is delivered. **Not in second stage:** • Check woman's temperature and urine • LISTEN to FHR during a contraction, and for 15-30 seconds after contraction ends. • Position change (not on back) frequently after listening to an abnormal heart rate. • Hydrate, watch for cord prolapsed, closely monitor.
MECONIUM	• Meconium stained liquor (amniotic fluid) from vagina of the woman. • MAY be distress due to lack of oxygen • MAY be breech.	• Check FHR. • Check for breech. • If delivery not expected soon, REFER. • If transportation is delayed, continue to monitor labor, change woman's position, hydrate and be ready for delivery. • Be prepared for newborn having trouble breathing, to do resuscitation, and suction very thick meconium after delivery.

Fetal Distress		Action in Labor
ACTIVITY	• Fetus very active in the uterus • MAY have a problem • MAY be having fit (convulsion).	• If delivery not expected soon, REFER if at all possible. • Check the FHR every 5 minutes. • If the heart rate is not within normal limits, check for prolapsed of the cord. • Be prepared for a depressed newborn. • Hydrate woman, change position and monitor labor.

WOMAN DISTRESS IN LABOR

Woman Distress in Labor		Action in Labor
VITAL SIGNS	**BLOOD PRESSURE (BP)** above 140/90	Take every 30 minutes for 3 times, woman lie on left side, hydrate. See Blood Pressure Problems protocol. • If BP decreases, monitor every ½ hour during labor. • If BP is still high, REFER
	BP above 140/90 AND headache, OR blurred vision, OR brisk/quick reflex (hyper-reflexia).	• REFER. During referral prevent or control eclamptic fits. • See Blood Pressure Problems protocol.
	BP below 90/60 (or as appropriate for area)	Take every 30 minutes for 3 times, hydrate. LOOK for cause: illness, bleeding, infection, shock. If still less than 90/60 REFER. If pulse and temperature are normal continue to monitor labor, or if close to delivery, deliver.
	PULSE continuously above 90 or below 60 beats per minute	Take pulse every 30 minutes for 3 times between contractions, hydrate. If condition remains the same, look for cause, continue to monitor labor and deliver. REFER.
	TEMPERATURE 38°C (100.6°F) or above	LOOK for infection, malaria or dehydration. REFER if needed. Manage according to protocol.
BLADDER	Full or distended bladder	If unable to urinate, catheterize.

Woman Distress in Labor		Action In Labor
PRESENTATION & POSITION	Shoulder Presentation	Do vaginal exam: If shoulder, REFER.
	• Complete breech (thighs and legs flexed) or • Incomplete breech (frank/with extended legs) or • Footling breech -is rare.	• Starting at 36 weeks, not in labor, membranes intact: attempt cephalic version. See Module 2: Antenatal, External Cephalic Version • Explain to woman and family the importance of a hospital delivery if baby stays breech
	Term, breech, and not in labor	Refer to hospital **if at all possible.**
	Term, breech, and in labor	Refer to hospital **if at all possible.** Or continue with breech delivery procedure. Breech and no cord felt, see Mod 3: Labor - Breech.
	Occipitoposterior Position - POP	See Mod 3: Labor – Occipitoposterior Position
	Shoulder dystocia during second stage of labor	See Mod 3: Labor - Shoulder Dystocia
	Face, Brow, Shoulder Presentation, Transverse Lie or Multiple Pregnancy (twins, triplets)	Give intramuscular analgesic and IV. REFER as soon as possible to doctor or hospital. See Mod 3: Labor - Malposition and Malpresentation

Woman Distress in Labor		Action In Labor
MEMBRANES	Ruptured **less than 18 hours**, no contractions, term, clear or milky liquor, fetal heart rate in normal range	• If head floating, no cord prolapsed: hydrate, rest. • If head not engaged with cord prolapsed: hydrate, knee chest position. See Module 3: Labor – Cord Prolapse. • If head engaged: wait for labor, hydrate, encourage walking and resting, watch for signs of infection.
	Ruptured **18 hours or more**, no contractions, term, clear or milky liquor, fetal heart rate in normal range	• Give broad spectrum antibiotic • Hydrate • Monitor for cord prolapsed • REFER
	Ruptured before labor begins and pregnancy 28 to 36 weeks	• **Do not do a vaginal examination,** • Give broad spectrum antibiotics and REFER

Woman Distress in Labor		Action In Labor
PROLAPSED CORD (continued next page)	Cervix fully dilated, cord is beating	Deliver as soon as possible with the woman in a knee chest position. • Protect cord. • Ask the woman to push hard with each contraction. • If the woman is not successful delivering the baby, use vacuum extraction. See Mod 9: Vacuum Extraction Skill Checklist.
	Cervix is NOT fully dilated, cord is beating REFER - A cesarean section will save the baby.	While waiting for transportation, explain to the woman and family what you are doing. • Gently wrap the cord if outside vulva. Do not handle, do NOT attempt to replace the cord. • Position woman with hips higher than chest: knee chest position or left lateral position with pillows under the buttocks. • Do a vaginal exam to push fetal presenting part up, away from cord to reduce pressure on the cord. • Use other hand on the abdomen above the symphysis pubis to keep the presenting part out of the pelvis. Remove the vaginal examination hand. Continue this position until caesarean section.

Woman Distress in Labor		Action in Labor
PROLAPSED CORD (continued)	Cervix is NOT fully dilated, cord is beating **Not possible to get the woman to the hospital.**	• Position the woman so her hips are higher than her chest, changing her position often (left lateral position with pillows under the buttocks, hands and knees, knee arm, or knee chest positions) and monitor the labor. • Keep trying to get transportation; do not give up. Midwives report cases in which they kept pressure off the cord for 3 hours, and a live baby was delivered by cesarean section. • Keep the cord protected. Do not handle the cord. • Push up on presenting part with your gloved hand, especially during contractions. • Deliver baby as quickly as possible once full dilatation of the cervix. Use a vacuum extractor & be prepared for resuscitation. • Be prepared to help the woman and her family the best you can. Sadly, in this case baby may die.
	If the cord has no pulse and there is no fetal heart beat, the baby has already died.	• If cephalic or breech, wait for full dilatation and deliver the baby vaginally. • If transverse lie, REFER to doctor with surgical facilities. • Explain to the woman and family the baby has died. • Continue to monitor and support the woman. • Prepare the woman to deliver a stillborn baby. • Offer care and support to the woman and family.

Woman Distress in Labor		Action in Labor
UTERINE INERTIA	• Contractions not frequent, • Contractions weak & not painful • Slow cervical dilatation	• **Be prepared for PPH.** • Give fluids. Empty bladder frequently. Encourage to change positions frequently (walking, squatting, sitting in chair with legs open, lying on left side). Encourage labor exercises (pelvic rock, side rock). • Give enema (plain water) if head not floating. Nipple stimulation. Support and encourage woman and family. Continue monitoring. • **If after 4 hours no progress (at partograph action line), REFER**
CEPHALOPELVIC DISPROPORTION OR OBSTRUCTED LABOR	• Cervical dilatation and descent of fetus stopped with good contractions. • Molding, cervix poorly applied to presenting part, swollen cervix • Partograph action line reached or crossed.	• **REFER.** During referral to doctor or hospital: • Give IV fluids and empty bladder frequently. • Encourage change positions frequently (standing, squatting, sitting, lying on left side). • Assess woman's fear/ anxiety level. Counsel, support, encourage family to support woman. • Continue monitoring.

SLOW LABOR PROGRESS – FIRST STAGE

(Term pregnancy, 37 or more weeks gestation).

Monitor using Partograph Monitoring Frequency, page 203: cervical dilatation, descent of fetal head, uterine contractions, molding of fetal skull, vital signs, fetal heart rate

	FINDINGS	ACTIONS
FALSE LABOR	No contractions or infrequent contractions, OR Cervix not dilated or dilated 1-2 cm in multipara, infrequent contractions	• Examine for urinary tract or other infection or ruptured membranes. • Not in labor, no abnormal findings, woman can go home or to waiting house. Give date for 1 week ANC
PROLONGED LATENT PHASE	Contractions 2 or more in 10 minutes, each lasting 20 seconds or more, no cervical dilation or 1-2 cm	• Monitor contractions, descent and FHR hourly • Fluids: 250 cc/hour or more • Empty bladder • Latent labor care (Module 3: Labor - Skill Checklist)
	Early labor - contractions same or more in 4 hours, cervical effacement and dilatation changed	Continue to monitor labor progress, fluids, empty bladder, change positions
	Contractions same in 4 hours and no cervical changes	See false labor above
	Active labor- contractions same or more in 4 hours and cervix 4 cm	Active labor care (Module 3: Labor – Skill Checklists)
	Any abnormal findings.	REFER to doctor at hospital.

SLOW LABOR PROGRESS – FIRST STAGE
(CONTINUED)

FINDINGS		ACTIONS
BETWEEN ALERT AND ACTION LINES	Membranes not ruptured, cervix dilated 7+ cm, delivery expected soon, fetus not distressed.	**Not at hospital.** Artificial Rupture of Membranes (ARM) between contractions, fluids, empty bladder, change positions, deliver
	Cervix dilated less than 7 cm (delivery not expected soon), or fetus / woman distressed	**Not at hospital.** **REFER** to doctor. During referral: fluids, empty bladder, be prepared for delivery
	Cervical dilatation between alert & action line	**At hospital.** **REFER** to doctor. Continue according to partograph protocol on page 203, and doctor advise
AT AND BEYOND ACTION LINE	Active labor, slow cervical dilatation	**Not at hospital.** • **REFER** to doctor: during referral give IV, empty bladder, give IM analgesic, monitor according to protocol, page 203 • If unable to REFER: hydrate, ambulate, monitor hourly, give IM analgesic, try urgently to organize transport, advise family of danger
		At hospital. **REFER** to doctor, monitor according to protocol, page 203 and doctor advise

SECOND STAGE SLOW DESCENT

Problem / Cause	Action
Bladder too full?	Help woman urinate
Cervix not completely open?	Check the cervix. If cervix is not open, the woman should stop pushing. Continue labor care.
Membranes intact?	If cervix completely open and abdominal descent 1/ 5, rupture membranes, Mod 3, page 3.24.
Not pushing effectively?	Help woman push effectively, see Mod 3, page 3.54.
Afraid, upset or tense?	Talk with the women to ease her fears or help solve the problem. Give massage or apply a cloth to her body (cool or warm, let the woman decide).
In best pushing position?	Help the woman try standing or squatting for pushing.
Contractions becoming weak or further apart? Dehydrated or exhausted?	Give the woman oral or IV fluid replacement. Encourage her to relax between contractions. If contractions become weaker and farther apart, REFER.
Molding increasing? Fetus not descending?	Fetus may not be able to fit through woman's pelvis. REFER.
Fetus in difficult or impossible birth position / presentation (deep transverse arrest, brow, occipitoposterior, face, extended breech, shoulder)?	If the fetus is in an occipito-posterior position, see Mod 3, page 3.71. If the fetus is in an impossible birth position, REFER.
Contractions too weak, fetus or woman condition poor?	REFER. During referral give fluids, empty bladder, and be prepared for delivery.

If no sign of progress (the head moving down) after 30 minutes of effective pushing for a multipara, or 1 hour for a primipara, and you have considered everything mentioned above, REFER TO FACILITY WITH SURGERY. Encourage the woman to stop pushing and get in a position with her hips up, such as knee – chest, to take pressure off the cervix and the urge to push, see emergency referral page 2.

Woman Protocols

Abortion Related Problems
Abruptio Placenta
Anemia
Baby Died
Bacterial Vaginosis
Bladder Infection
Blood Pressure Problems
Breast Abscess
Breast Feeding
Breast Feeding Problems
Chlamydia Infection
Chorioamnionitis
Chronic Diarrhea
Common Complaints of Pregnancy
Counseling: Antenatal
Counseling Postpartum
Eclampsia
Genital Sores
Gonorrhea
Hemorrhage in Pregnancy
Hemorrhage, Postpartum
High Blood Pressure
HIV/AIDS
Incomplete Abortion
Infections
Kidney Infection
Malaria
Mastitis
Miscarriage
Pelvic Infection
Placenta Previa
Postpartum Hemorrhage
Postpartum Infection
Postpartum Laceration
Pre-eclampsia
Puerperal Sepsis
Retained Placenta
Ruptured Uterus
Sepsis
Skin Rash / Lesions
Syphilis
Tetanus
Thrombophlebitis
Trichomonas
URI – Upper Respiratory Infection
Uterine Atony
UTI – Urinary Tract Infection
Vaginal Infections
Weight Loss
Yeast Infection (candidiasis, thrush)

ABORTION RELATED PROBLEMS

The pregnant woman is bleeding with a nonviable pregnancy (baby is not big enough to live). WHO estimates that 1 in 8 pregnancy-related deaths are due to unsafe abortion. At least 15% of all pregnancies end in spontaneous abortion (miscarriage).

PROBLEM	ASK AND LISTEN	LOOK AND FEEL
Threatened Abortion	Cramping, light vaginal bleeding, uterine size equal to LNMP	Uterus soft, cervix closed, positive pregnancy test
Inevitable Abortion	Cramping, mod to heavy vaginal bleeding, uterine size smaller / equal to LNMP	Uterus tender, cervix open
Incomplete Abortion	Cramping, light to heavy vaginal bleeding, uterine size smaller / equal by LNMP	Uterus tender, cervix open, partial expulsion of products of conception
Complete Abortion (miscarriage)	Little / no cramping, light / no vaginal bleeding, uterine size smaller by LNMP	Uterus firm, cervix closed, expulsion of all products of conception
Septic Abortion	Severe cramping, light to heavy vaginal bleeding, chills, foul smelling vag discharge	Uterus very tender, fever, Pulse above 100, cervix open, closed, or torn

Threatened Abortion

IDENTIFY PROBLEM and TAKE ACTION

Medical Treatment:

- Rest in bed for 24 - 48 hours. Return if bleeding, fever, foul smelling vaginal discharge, or severe abdominal pain.

Education:

- Explain about anemia prevention, general health care, and the importance to use condoms to prevent HIV transmission during pregnancy.

Follow Up:

- Give date for ANC

Inevitable Abortion and Incomplete Abortion

IDENTIFY PROBLEM and TAKE ACTION

Medical Treatment:

- Perform manual vacuum aspiration. See skill checklist in Module 9: Vacuum Extraction and Other Procedures.

Education:

- Some uterine cramping is expected for a few days, you may take analgesic as needed.
- Some spotting or bleeding, not more than normal menstrual period may be seen.
- No sexual intercourse or anything in the vagina until 5-7 days after bleeding has stopped
- Normal menstrual period should happen within 4-8 weeks.
- Return immediately if too much cramping/pain, bleeding more than 2 weeks or bleeding too much, fever, chills, malaise, fainting or weakness.
- Return for post abortion family planning in one week. Give condoms to take home on discharge.

Follow Up:

- Examination for healing or other problems.
- Remember the woman lost a baby whether by choice or spontaneous. She needs time for grieving, see Protocol: Baby Died, page 36.
- Advise return to fertility as soon as 10 days after MVA
- Advise safe, modern family planning methods available, where and how to get these methods.

Complete Abortion

IDENTIFY PROBLEM and TAKE ACTION

Medical Treatment:

- Rest in bed for 24 - 48 hours. Return if bleeding, fever, foul smelling vaginal discharge, or severe abdominal pain.

Education:

- See Incomplete and Inevitable Abortion Education, as listed above.

Follow Up:

- See Counseling: Post Abortion, page 116.

Septic Abortion

IDENTIFY PROBLEM and TAKE ACTION

Medical Treatment:

- The woman is very sick. Ask someone to find emergency transport and go with her to the hospital or doctor. Surgery may be needed.
- While you are waiting: Give oxytocic and broad spectrum antibiotics. Lower the fever by giving fluids and a sponge bath. If there is malaria in your area, treat for malaria.
- Use sterile technique to remove any tissue in the cervix or uterus. The infection will not improve until the tissue is removed. Refer to Module 5: Hemorrhage Skill Checklist for Digital Evacuation, page 258.
- Prevent tetanus infection, see Formulary: Tetanus Toxoid and Antitoxin, page 166.
- During referral, check her vital signs and watch for shock and bleeding. You can also help the woman and family to stay calm during the trip.

Education:

- Teach women and their partners about planning for pregnancy to prevent an unplanned or unwanted pregnancy.
- Share child spacing and pregnancy prevention information with all women, even if you, personally, feel the woman should not have it (too young, not married). If this is difficult for you to do, find another midwife or person who is willing to do this.
- Teach people in the community about family planning and reproductive health.
- Give health education and counseling about how to prevent HIV transmission.
- Advise all women to come to you immediately if they see any unusual vaginal bleeding or discharge.
- Show and tell women about ways to protect themselves from infection and anemia.
- Teach women that it is important to keep their bodies, clothing, and surroundings clean to prevent sickness.

Follow Up:

- See Counseling: Post Abortion Care, page 116.

ANEMIA

Anemia is when the woman does not have enough red blood cells to carry enough oxygen to all parts of the body. Iron helps the blood carry oxygen. Many things cause anemia in pregnancy. Not eating enough foods with iron causes anemia. Some kinds of anemia are caused by sickness like hemorrhage, hookworm or malaria. Some kinds are inherited like sickle cell anemia and can not be cured by eating iron food or iron pills. Usually anemia is caused by poor nutrition and not eating enough foods with iron. Anemia in pregnancy is also caused by the needs of the fetus.

PROBLEM	ASK AND LISTEN	LOOK AND FEEL
Anemia, mild to moderate	Feels tired and weak, no energy, just wants to sleep	Hemoglobin 8.1 – 11. Pale nails, conjunctiva, mucous membranes
Anemia, severe	Increasing tiredness and weakness	Hemoglobin 8 or less. White nails & mucous membranes. Edema of the legs, distended neck veins, shortness of breath

IDENTIFY PROBLEM

1. Severe Anemia: REFER
2. Mild to Moderate Anemia

Mild to Moderate Anemia

TAKE ACTION

Medical Treatment:

- Give her iron and folate pills. (see formulary for dose).
- Treat for malaria and hookworm if indicated.
- Check urine for schistosomiasis if indicated.
- Advise her to rest.

Education:

- Advise her to drink nutritious drinks like fruit juices and eat foods high in iron: all types of meat, chicken, fish, organ meats, vegetables: tomatoes, peppers, pumpkin, fruits. Tea and coffee prevent the body from using the iron in food. Do not drink tea and coffee when you are eating.

- Tell her sometimes iron pills upset your stomach, cause heartburn, possibly diarrhoea or constipation. These feelings should stop with time. Take the pills with or after some food will help reduce the feelings. The pills may make your stools black in color. Keep these tablets out of the reach of children.
- Explain to her and her family she should not do all her daily activities until she returns for another visit.

Follow Up:

- If she gets very weak or has no appetite, she should come back to see you right away.
- If she starts to feel better, ask her to come back in 4 weeks. Recheck hemoglobin, it should rise 2 grams after 4 weeks. If it does not rise or is less REFER.
- If her hemoglobin rises, ask her to comeback in 4 weeks. Continue to check her hemoglobin every four weeks during the pregnancy.

BABY DIED

A baby may die at any time during pregnancy. The baby dies when a woman has an abortion. If the baby dies before 20- 24 weeks and remains in the uterus, it is a missed abortion. After 20-24 weeks it is an intrauterine death. There are many causes for a baby to die later in pregnancy: pre-eclampsia, malaria, syphilis, diabetes, severe illness, post-mature, congenital abnormality and others. In at least half the deaths, you may never know why the baby died.

A mother and her family grieving for a dead baby (abortion to full term) are depressed and feel sad. They may feel that their life has no purpose, and they may not want to meet other people. Grieving is normal. Women and families in all cultures need support, kindness, and listening to. There are many ways in which people in different cultures grieve. Think about how best to help families in your culture who has lost a child. All health workers need to help, so does everyone who knows the family.

IDENTIFY PROBLEM

Baby Died

TAKE ACTION

Medical Treatment:

- Try to give the family a cause for the death. Let them see and hold the baby. Treat their dead baby with the same care that you do if the baby was alive (handle gently, keep covered).
- Talk with the mother and family about the care, treatment, resuscitation (whatever the situation may be) and the baby's death. Answer any questions they may have.
- Give the mother and family care that is culturally acceptable. Be sensitive to their needs. Remember to express sorrow.
- Find out what they wish to do with the baby's body (give name, birth certificate, burial).

Education:

- The mother will need rest, support and a good diet at home.
- The mother should not return to a full workload too early.
- The mother's breasts become full around day 2 - 3. She may have fever for a day or two. To shorten the time breasts will be full she can bind the breasts with a tight bra or cloth until there is no milk in the breasts. Do not express breast milk.
- The mother may feel very emotional and cry a lot. The normal changes in a woman's hormones after pregnancy can make her feel very sad, worried or irritable. Because the baby died, feelings may be worse than usual. Encourage the mother and family to speak with a health worker if they wish to talk.
- Other children in the family may have problems: over-activity, naughtiness, bed-wetting, school problems. These will be less if they can show their feelings (cry, talk about the baby, other).

Follow Up:

- Ask the mother to return for a postpartum visit **within 2 weeks.** If possible, postpartum care should be done at the mother's home.

- ❖ Many women who do not breast feed ovulate by 3 weeks postpartum. The mother may not want sex. Her husband must understand this.
- ❖ Other women who have had a dead baby, a year or two before, and recovered from it, may be able to help her (self-help group).
- ❖ The mother needs at least 6 months to regain her iron stores and be ready in other ways for another pregnancy.

BLOOD PRESSURE PROBLEMS (Hypertensive Disorders)

Blood pressure problems during pregnancy are the cause of about 10% of all maternal deaths. It can lead to convulsions (eclampsia) and even death. Deaths from blood pressure problems during pregnancy, labor and the first few days after a woman has her baby can be prevented and managed.

A blood pressure taken before 20 weeks gestation is considered to be the woman's normal or baseline blood pressure. The blood pressure usually stays between 80/60 and 140/90. The blood pressure does not go up during pregnancy unless there is a problem. See Module 2: Antenatal Care - Skill Checklist for blood pressure and reflexes.

Findings	Diastolic BP At or Above	Protein in Urine	Headache, Vision Probs, Epigastric Pain	Reflexes
Chronic high BP	90	No	No	Normal
High BP in pregnancy (starts after 20 wks)	90	No	No	Normal
Mild pre-eclampsia	90	+	No	Normal
Severe pre-eclampsia	110	++, +++	Yes	Brisk
Eclampsia	90	+++	Yes and fits	Brisk

IDENTIFY PROBLEM

1. Chronic high BP: REFER
2. Severe pre-eclampsia and eclampsia, REFER with following treatment to prevent or control eclampsia.
3. High BP in pregnancy (after 20 weeks) and mild pre-eclampsia, REFER with following advise.

Severe Pre-eclampsia, and Eclampsia

TAKE ACTION

Medical Treatment to prevent or control eclampsia

- **Give FIRST DOSE IV**: 4 gm 20% solution (or dilute 8 ml of 50% with 12 ml injection water, the 20 ml equals 4 gm) give IV slowly over 10 minutes. If convulsions recur after 15 minutes, give 2 gm 50% solution IV over 5 min.
- **Give IM when IV not possible:** 15 gm 50% solution (7.5 gm deep IM in each buttock). If convulsion recurs after 15 minutes, give 10 gm 50% solution (5 gm IM in each buttock).
- Go with woman to doctor/hospital.
  - Give convulsion care.
  - MAINTENANCE DOSE: give every 4 hours 5 gm 50% $MgSO_4$ solution IM into alternate buttocks until reaching hospital unless respiration below 16 per minute, or no reflexes, or no urine output.
  - Closely monitor woman.
  - If respirations stop, give calcium gluconate 1 gm (10 ml of 10% solution) IV slowly and see Module 6: **Resuscitation**.

> **Note:** If no $MgSO_4$, give diazepam 10 mg IV slowly over 2 minutes or 20 mg IM. If convulsions recur, repeat diazepam. Do not give more than 100 mg in 24 hours. See formulary.

- **If referral is impossible and:**
  - **Close to delivery:** Manage as above, deliver quickly with vacuum extractor, active management third stage, be prepared for depressed newborn and PPH and convulsion in woman. REFER when possible.
  - **Early labor:** Give intramuscular anticonvulsant as above and hydrate. REFER if at all possible. Monitor labor, bed rest, and watch for signs of eclampsia.

High BP in Pregnancy (after 20 weeks), and Mild Pre-eclampsia

TAKE ACTION

Medical Treatment to prevent eclampsia

- ❖ Give diazepam three times a day, see formulary.
- ❖ REFER to hospital for evaluation / management and delivery.

Education:

- ❖ You have a condition which your blood pressure is too high.
- ❖ Rest as much as you can during the day with your feet up and lie on your left side as much as possible.
- ❖ When you return from seeing the doctor, send me a message so I can come and see you. I will give you care during and after your pregnancy.
- ❖ You must prepare to give birth to your baby at the hospital.

TIPS for midwife and others with midwifery skills:
Control of pre-eclampsia to prevent eclampsia is life-saving for woman and baby.

HEMORRHAGE

Hemorrhage is abnormal bleeding. Abnormal bleeding **may be seen** from the vagina in early pregnancy with miscarriage, late in pregnancy, or during the postpartum time. Abnormal bleeding **may not be seen** when there is abnormal bleeding into the abdominal cavity with a ruptured ectopic pregnancy. Women who are pregnant with **anemia** may become very sick or go into shock from a blood loss of even 100 cc.

HEMORRHAGE DURING PREGNANCY

PROBLEM	ASK AND LISTEN	LOOK AND FEEL
Early Pregnancy Bleeding (nonviable fetus)		
Abortion (miscarriage), incomplete	Missed menses, Cramping, Bleeding	Cervix may be dilated, may be odor or clots
Ectopic Pregnancy	LNMP 6 weeks ago, spotting (light bleeding), abd pain	Mod to severe abd tenderness, feels hard
Late Pregnancy Bleeding (viable fetus)		
Placenta Previa	Bleeding light to heavy, no abd pain	Bright red vaginal bleeding, no abd tenderness, high presenting part
Abruptio Placenta	Not always bleeding, always strong abd pain	Very tender abd & may feel very hard, dark red or no vaginal blood
Ruptured Uterus	Vaginal blood not always, abd pain, sharp back pain	Very tender abd, dark red or no vaginal blood, easy to feel fetal parts
Early Labor	Bleeding light, some contractions	Bloody show: dark brown with mucus, small amount

IDENTIFY PROBLEM OF HEMORRHAGE

1. Early Pregnancy Bleeding – abortion, incomplete, septic
2. Ectopic Pregnancy
3. Bleeding in Late Pregnancy – placenta previa, abruptio placenta, ruptured uterus, early labor

Early Pregnancy Bleeding

TAKE ACTION

Medical Treatment

- If woman is pregnant and bleeding, see Protocol: Abortion Related Problems, page 32.
- If woman is not pregnant and bleeding, think medicine effect of oral contraceptives or IUD problems, see Counseling: Family Planning. If none of the above, REFER.

Ectopic Pregnancy

TAKE ACTION

Medical Treatment

- If very sick, manage shock and as in Emergency Treatment, page 3. Ask someone to find transport **immediately** and go with her to the hospital.

While you are waiting or if transport is delayed,

- Make sure her airway is open. Do **not** give anything by mouth, as surgery may be necessary.
- Put her in shock position by raising her feet and legs. Cover her to keep her warm.
- If there is fever, lower the fever by giving sponge bath and fluids. Start IV fluids, if you have them. If you do not have IV fluids or if you can not start the IV fluids, give fluids in the rectum. See Formulary: IV Solutions and Fluid Therapy, and Skill Checklists Module 8 for Peripheral Vein and Rectal Fluids.
- Give Pethidine 50 -100 mg (or other locally available analgesic) IM for pain.
- Take vital signs and record every 10 minutes. This will help you follow the progress and recovery from shock.
- Go with the woman and her family to the doctor as soon as possible. During referral: give shock care, give fluids, pain medicine, and reassure/explain to woman and family. Keep the woman as comfortable as possible. Take her record so the doctor.

Bleeding in Late Pregnancy: Placenta Previa, Abruptio Placenta, Ruptured Uterus

TAKE ACTION

Medical Treatment

- If woman says the baby is coming or is trying to push, LOOK to see if delivery is very close (bulging of genitals or anus). DO NOT attempt to do a vaginal examination. You may make the bleeding more. DO NOT give oxytocic to stop the bleeding.
- If severe bleeding, give Emergency Treatment to prevent shock, page 3.
- Ask someone to find transport **immediately** and blood donors. Go with woman/family to the hospital where cesarean section and blood transfusion are possible.

While you are waiting or if transport is delayed,

- Start IV fluids, if you have them. If you do not have IV fluids or if you can not start the IV fluids, give fluids in the rectum. See Formulary for IV Fluids and Fluid Therapy, and Skill Checklists for Peripheral Vein and Rectal Fluids procedures.
- Give Pethidine 50 -100 mg (or other locally available analgesic) IM as needed for pain.
- Monitor vital signs and record.
- If fever or bad odor of vaginal drainage, give broad spectrum antibiotics. See Formulary: Antibiotics.
- Go with woman and family to doctor as soon as possible. During referral: give shock care, give fluids, and reassure/explain to woman and family. Keep the woman as comfortable as possible. Take her record.

Follow Up:

- Visit the woman at her home.
- The woman will need support, a good diet at home, rest, and not return to a full workload too early.
- Discuss the outcome of the condition. The woman may have had her uterus removed. The baby probably died. She may be very sad and depressed. Listen, support, and encourage the woman and her family. See Protocol: Baby Died, page 36.

Bleeding in Late Pregnancy: Early Labor

TAKE ACTION

Medical Treatment

- If term pregnancy (37+ weeks gestation), you feel contractions, do very careful vaginal exam, monitor labor using partograph, see Skill Checklist Module 3 Labor Admission and First Stage of Labor.
- If preterm pregnancy, you feel contractions, REFER.
- If preterm pregnancy without contractions, evaluate and treat for any problems. Advise the woman on rest, nutrition, and signs of labor.

POSTPARTUM HEMORRHAGE

PROBLEM	ASK & LISTEN	LOOK AND FEEL
Postpartum Bleeding (baby delivered)		
Uterine Atony	Bleeding, placenta delivered	Uterus soft, placenta complete, no lacerations
Retained Placenta & / or Membranes	Bleeding, placenta not delivered	Uterus soft/hard, no laceration, placenta retained or not complete
Lacerations: Vagina / Cervix	Bleeding, placenta delivered	Uterus firm & contracted, placenta complete, laceration seen
Postpartum Infection	Bleeding, bad odor, fever	Uterus tender, placenta complete, no lacerations, yellow / bloody discharge
Retained Placenta with Hidden Bleeding	Placenta not delivered, feels very weak	Shock, uterus increasing in size, placenta retained, **no or little bleeding**, no lacerations
Placenta Accreta	Placenta not delivered	Uterus contracts, **no bleeding**, no lacerations, no shock

IDENTIFY PROBLEM OF POSTPARTUM HEMORRHAGE

1. Uterine Atony
2. Retained Placenta &/or Membranes – With Bleeding, Hidden Bleeding, or No Bleeding
3. Lacerations of Vagina & Cervix
4. Postpartum Infection, see protocol for Infections.

Postpartum Bleeding: Uterine Atony

TAKE ACTION

Medical Treatment

- If severe bleeding and/or shock, see Emergency Treatment, page 3.
- Try to rub up contraction, give oxytocin see Formulary.
- Ask woman to pass urine (if bladder full and woman is not able to pass urine, catheterize)
- Manage as outlined in Skill Checklist Module 5 Bimanual Compression of the Uterus.

Postpartum Bleeding: Retained Placenta and/or Membranes

TAKE ACTION

Medical Treatment

- If severe bleeding and/or shock, see Emergency Treatment, page 3.
- If vaginal bleeding, try to rub up contraction, ask woman to pass urine, manage as outlined in Skill Checklist Module 5 Manual Removal of a Placenta.
- If NO VAGINAL BLEEDING, increase in uterine size, & shock. See Emergency Treatment, page 3, & REFER.
- If NO VAGINAL BLEEDING and no shock,
  - DO NOT try to manually remove the placenta
  - Watch for bleeding, shock, placental separation
  - Stay with the woman, explain what has happened.
  - REFER to doctor or hospital with family, blood donors, and a written report of the delivery.
  - Go with the woman, in case of bleeding or problems.
  - Give IV infusion, nothing to eat or drink to prevent choking during the surgery.
  - Reassure, keep woman as comfortable as possible.

Postpartum Bleeding: Lacerations of Vagina / Cervix

TAKE ACTION

Medical Treatment

- If severe bleeding and/or shock, see Emergency Treatment, page 3.
- Put pressure on laceration to slow bleeding
- Manage as outlined in Skill Checklist Module 4: Episiotomy – Repair Tears.

Education for all Postpartum Hemorrhage

- Explain the woman has lost blood. This may make her weak. Advise her to drink nutritious drinks like fruit juices and eat foods high in iron: all types of meat, chicken, fish, organ meats, vegetables: tomatoes, peppers, pumpkin, fruits.
- Advise her about her hemoglobin and how to take iron pills. See Protocol: Anemia.
- Explain to her and her family she should not do all her daily activities until she returns for another visit.

Follow Up:

- If she sees any bright red bleeding, she should tell her family and come to you right away.
- If she gets very weak or has no appetite to eat, she should come back to see you right away.
- If she sees any danger signs for herself or her newborn, she must get help right away. See Counseling: Postpartum.
- If she starts to feel better, ask her to comeback in 4 weeks. Recheck hemoglobin, it should rise 2 grams after 4 weeks. If it does not rise or is less REFER.
- If her hemoglobin rises, ask her to comeback in 4 weeks for a general examination and for Counseling: FP.
- Try to visit in the home. Discuss the outcome of the condition. The woman may have had her uterus removed. She may be very sad and depressed. Listen, encourage, and support the woman and her family.

INFECTIONS

Germs may get into a woman's body during pregnancy or after the baby is born causing fever, shock, failure of the kidneys, and death. If the woman does not die, she may suffer with chronic illness. Malaria and other sickness also cause problems for the pregnant woman and her newborn.

PROBLEM	ASK AND LISTEN	LOOK AND FEEL
Chorioamnionitis	Fever, ruptured membranes	FHR fast, fever, Pulse 90+, bad odor, tender uterus
HIV / AIDS. See Counseling: HIV / AIDS		
Malaria	Fever, chills, headache, flu	Sweating, looks sick, temp 40°C
Mastitis	Painful, swollen breast, chills	Hot, red, tender swelling in on breast
Postpartum Infection	Fever, chills, abd pain, bad odor vaginal discharge	Pulse 100+, very sick, abd tender, foul pus lochia
Thrombophlebitis	Fever, pain in leg	Fever, tender & warm area on leg
URI	Headache, fever, cough, sore throat	Fever, red throat without pus
UTI	Fever, low abd pain	Fever, low abd tenderness
Vaginal Infections and Genital Sores	Changed vaginal discharge: color, amount, smell	Color, amount, odor of vaginal discharge

IDENTIFY PROBLEM

1. Chorioamnionitis – intrauterine infection during pregnancy
2. Malaria
3. Mastitis
4. Postpartum Infection: perineal, puerperal sepsis
5. Thrombophlebitis
6. URI (upper respiratory infection)
7. UTI (urinary tract infection – bladder or kidney)
8. Vaginal Infections (STI and nonSTI) and Genital Sores

Infection: Chorioamnionitis

TAKE ACTION

Medical Treatment

- If severe bleeding and/or shock see Emergency Treatment, page 3.
- REFER to doctor or hospital as quickly as possible.
- Delivery should take place as soon as possible. Be prepared for delivery and resuscitation.
- Ask someone to get transportation immediately.

While you wait for transport, and on the way to doctor:

- Lower fever: hydrate (oral, IV or rectal fluids). Give sponge bath. If malaria in your area, treat for malaria.
- Give broad spectrum antibiotics. See Formulary: Antibiotics.
- Monitor labor and vital signs, be prepared for delivery and resuscitation of baby.

Education

- Advise all pregnant women to come to you for treatment as soon as they have any fluid (leaking or ruptured membranes) or discharge from their genital tract (birth canal).
- Help pregnant women understand they and their babies can get very sick if they delay getting help.

Follow Up

- Routine postpartum care with emphasis on outcomes and problems of condition.

TIPS for midwife and others with midwifery skills:
Intrauterine infection (chorioamnionitis) is very dangerous and must be prevented. The infection is more dangerous to the woman if the fetus is dead. Early rupture of the membranes, before regular contractions start, happens more often when the woman is HIV positive. Do only necessary vaginal examinations using sterile technique.

Infection: Malaria

TAKE ACTION

Medical Treatment

- Prompt management (treatment) of pregnant women with malaria. WHO recommended antimalarial: chloroquine in CQ sensitive areas, sulfadoxine-pyrimethamine (SP) in areas with CQ resistance, Quinine for severe or resistance. DO NOT use during pregnancy: halofantrine, tetracycline, doxycycline and primaquine. See formulary and use local protocol.
- If there is no improvement after 24 hours, help the woman to go to the doctor or hospital.

Education

- Teach all pregnant women and their families the importance of preventing malaria.
- Use **insecticide-treated bed nets** (ITNs) during pregnancy and with baby's.
- At ANC, take **intermittent preventive treatment** (IPT) two times during pregnancy after the first trimester.
- Use **inside residual spray** (IRS) in your home.

TIPS for midwife and others with midwifery skills: Malaria prevention is important during pregnancy, labor, and postpartum. Malaria causes anemia in the pregnant woman.

Infection: Mastitis

TAKE ACTION

Medical Treatment

- Prevent breast infection by removing all the breast milk – empty the breast with each feeding.
- Give broad spectrum antibiotic, see Formulary.
- Compresses. Apply wet, warm compresses to the painful breast 15 minutes before each feeding to help the milk flow.
- Manage pain. Give analgesic and put ice or cool cloths (fresh cabbage leaves are used in some places) on the area, 30 minutes 4 times a day to reduce pain for as long as needed.
- Support breasts with a loose fitting brassiere or sling.

- ❖ If breast feeding is too painful in the infected breast, wait 12-24 hours after beginning antibiotic treatment and try breast feeding again.
- ❖ If abscess. If she has a high fever for 48 hours and a soft yellow center area of the breast, drain out the pus. See Procedure: Incision and Drainage of Breast Abscess, page 194.

Education:

- ❖ Explain to the woman and family, the breast milk from the infected breast will not hurt the baby. The breast will get better once the breast milk is removed.
- ❖ Teach the woman to feed her baby when the baby wants to feed using proper positioning to prevent sore and cracked nipples.
- ❖ Teach the woman about good hand washing with soap and good breast care. See Counseling: Breast Feeding.

FOLLOW UP:

- ❖ Visit the woman daily to change her dressing and advance the drain. Watch her breast feed her baby. Help as needed.

TIPS for midwife and others with midwifery skills:
Prevention is best. Early treatment of mastitis can prevent breast abscess.

Infection: Postpartum Infection

TAKE ACTION

Medical Treatment

- ❖ If severe bleeding and/or shock see Emergency Treatment, page 3.
- ❖ Find someone to get transport and go with her and her family to the doctor as soon as possible.
- ❖ Give a broad spectrum antibiotic. See Formulary: Antibiotics.
- ❖ Lower fever: hydrate by giving at least one glass (8 ounces) of water or other liquid every hour. If she can not take this much fluid by mouth or if she is vomiting, start IV fluids. If you do not have IV fluids, give rectal fluids.

- ❖ Position. Keep her in a half-sitting position to help drain discharge from the uterus and vagina (if not in shock).
- ❖ Take vital signs and watch for shock during referral.

Education. Postpartum infection may start with premature (early) rupture of membranes, prolonged or traumatic delivery, lacerations, or after the delivery.

- ❖ Teach others about germs and infection. Explain why this is important.
- ❖ A pregnant or laboring woman must bathe when labor starts. Cleanliness and hand washing prevent infection.
- ❖ All persons caring for a woman in labor and after baby is born must be clean and wash their hands often.
- ❖ Equipment, materials and the delivery place must be very, very clean.
- ❖ Teach every woman to clean her genital area after using latrine. She should wipe (clean) the area from front to back after using the latrine, so germs from the anus are not wiped into the vagina and urethra. Daily wash the genitals during pregnancy, labor, postpartum to keep germs away from the urethra, vagina, & cervix.

TIPS for midwife and others with midwifery skills:
Postpartum fever is never normal. Untreated postpartum infection can cause septic shock and result in death.

Infection: Thrombophlebitis

TAKE ACTION

Medical Treatment

- ❖ Find someone to get transport and go with her and her family to the doctor.
- ❖ Give aspirin, 500 mg, to help with the pain and decrease the chances of clots. See Formulary: Analgesics.
- ❖ Wrap the entire leg with a bandage or cloth. Start wrapping around the foot and wrap all of the way to the groin using the same amount of pressure to give a little support to the veins. **Do not wrap too tightly as this may cause edema or stop circulation.**
- ❖ Hot compresses may help if referral is delayed.

Education

- Teach and encourage the woman to walk and move around during pregnancy, labor and postpartum.
- Advise her to put her feet up when sitting.
- Encourage the woman to get up and walk as soon as she can after the baby is born.

TIPS for midwife and others with midwifery skills:
Prevent exhaustion, dehydration, and hemorrhage of the woman in labor which may cause circulatory problems. If stirrups are necessary, prevent pressure and bruising on legs.

Infection: URI – Upper Respiratory Infection

TAKE ACTION

Medical Treatment

- An upper respiratory infection (common cold) is usually caused by a virus and is contagious. **Antibiotics will not help a common cold caused by a virus.**
- Treat headache, sore throat with an analgesic such as paracetamol or Tylenol, see Formulary: Analgesic.
- Give cough mixture, four times a day for 5 days.
- If cough becomes/is productive with purulent (yellow or green) sputum or otitis media is identified, treat with antibiotics.

Education

- Rest in bed.
- Drink one glass of water or other fluids every one to two hours when you are awake.
- If delivered, continue to breast feed your baby.
- Wash your hands with soap and water before holding your baby or touching anything in your house.
- If the midwife or anyone has a cold, sore throat, cough, fever, or flu try to get someone else to help the woman or help at the birth.
- Wash your hands before and after caring for anyone.

Follow Up

- If not improved in one week, come back for more care.

Infection: UTI – Urinary Tract Infection

Inflammation of the urinary tract is usually caused by bacteria moving up the urinary tract. The bacteria may infect the bladder and/or the kidneys. Look in Module 3 for UTI dangers for pregnant women, causing early labor if untreated.

PROBLEM	ASK AND LISTEN	LOOK AND FEEL
Bladder infection (lower UTI)	Frequency, pain when urinating, low abd pain	Fever, low abd tenderness
Kidney infection (upper UTI)	Fever and chills backache	Fever, CVA tenderness, low abd tenderness

TAKE ACTION FOR KIDNEY INFECTION PROBLEM

- ❖ REFER. Give first dose of broad spectrum antibiotic see Formulary: Antibiotics, fluids to drink every hour during referral.

TAKE ACTION FOR BLADDER INFECTION PROBLEM:

Medical Treatment.

- ❖ Give her broad spectrum antibiotic for 10 days see Formulary: Antibiotics.
- ❖ Advise woman to use 1 tsp baking soda (sodium bicarbonate) in a glass of water three times a day to reduce the painful urination.

Education:

- ❖ Advise: drink one cup of water or other fluid at least 8 times in 24 hours to wash the sickness out of bladder.
- ❖ Advise her to empty her bladder every 2 hours.
- ❖ Explain perineal care to her to prevent infection.

Follow Up:

- ❖ If much better in 2 days or if she becomes very ill, ask her to come back for REFERRAL.
- ❖ If she starts to feel better, ask her to come back for the next ANC or Postpartum Clinic.

TIPS for midwife and others with midwifery skills: Avoid catheterization unless very necessary. Catheterization may cause infections, especially unsterile technique.

Infection: Vaginal Infections and Genital Sores

Vaginal discharge changes during pregnancy. A major change in the amount, color, or smell can be an STI, or can be another type of infection. Most genital sores are STI.

IDENTIFY PROBLEM STI - CHLAMYDIA & GONORRHEA

- Profuse irritating vaginal discharge with dysuria
- May start weeks or months after unprotected sex with infected person.
- May have no signs.

TAKE ACTION FOR CHLAMYDIA & GONORRHEA

Medical Treatment

- ❖ Serious infections. If not treated early can lead to severe infection or infertility.
- ❖ Pregnant women should be tested, or if she or partner has signs of the infection, they both should be treated.
- ❖ Treat Chlamydia with erythromycin or ampicillin for 7 days, see Formulary: Antibiotic.
- ❖ Treat Gonorrhea with ceftriaxone or cefixime one time only, see Formulary: Antibiotic.

IDENTIFY PROBLEM - PELVIC INFECTION (PID)

- Fever, low abdominal pain, bad smelling yellow discharge, very sick
- May start from untreated STI, an abortion, or after birth. Germs get into uterus, tubes, ovaries.

TAKE ACTION: PELVIC INFECTION

Medical Treatment

- ❖ If pelvic infection not treated, it can cause long-term pain, tubal pregnancy, infertility, even death.
- ❖ Test for STI, or if partner has signs of STI, they both should be treated for identified STI.
- ❖ AND treat other germs that cause PID with metronidazole for 14 days, Formulary: Antibiotic.
- ❖ If no improvement in 48 hours or if high fever or vomiting, REFER.

IDENTIFY PROBLEM STI - TRICHOMONAS

- Itching+++, frothy foul smelling discharge, dysuria
- Not dangerous, irritates vagina, which makes it easier for a woman to get STIs / HIV if unprotected sex.

TAKE ACTION: TRICHOMONAS

Medical Treatment

- ❖ Sitz bath for 15 minutes as often as possible.
- ❖ Advise protected sex or to wait until she and her partner are finished w ith treatment and cured.
- ❖ Wait to treat pregnant woman until end of first trimester, treat partner at the same time.
- ❖ Treat with metronidazole by mouth for 7 days, partner one time dose by mouth, see Formulary.

IDENTIFY PROBLEM – YEAST (CANDIDA, THRUSH)

- Itching++ vagina or nipples, thick white cheesy discharge, bright red skin, dysuria, yeast smell.
- A common vaginal infection in pregnant women or when taking antibiotics or birth control pills.
- Nipple infection affects breast feeding.
- Not sexually transmitted.
- Not dangerous but baby can get thrush at birth.

TAKE ACTION FOR YEAST INFECTION

Medical Treatment

- ❖ Treat with gentian violet 1%: VAGINA - soak piece of cotton in gentian violet, insert in vagina every night for 3 nights. Remove cotton in the morning. NIPPLES – apply every night for 3 nights.
- ❖ Or treat with miconazole vaginal tablet every night for 3 nights.
- ❖ Or treat with nystatin vaginal tablet, insert high in the vagina each night for 14 nights.

Prevention: wear loose underclothes to let air around genitals & breasts. Do not put soap in vagina when bathing.

IDENTIFY PROBLEM FOR BACTERIAL VAGINOSIS

- Itching+, discharge+++ with fishy smell
- Not sexually transmitted
- May cause premature labor or postpartum infection.

TAKE ACTION FOR BACTERIAL VAGINOSIS

Medical Treatment

- ❖ Treat with metronidazole by mouth for 7 days
- ❖ Or treat with metronidazole vaginal tablet high in the vagina every night for 7 nights.

IDENTIFY PROBLEM STI - SORES ON GENITALS: Chancroid, Granuloma Inguinale, Herpes, Syphilis, Warts

- When a woman (pregnant or postpartum) has a sore on her genitals, it is easy to give her newborn infection at birth.
- It is easy to get other infections such as HIV/AIDS, through those sores.

TAKE ACTION FOR SORES ON GENITALS

Medical Treatment

- ❖ REFER.
- ❖ Advise to avoid sex until treated and sores are healed.
- ❖ Advise only sex with a condom while pregnant and for 6 weeks after the birth of the baby.

Note: See Formulary for medicines listed above.

TETANUS

Postpartum tetanus is an infection of the newborn (tetanus neonatorum) or the woman. **Tetanus immunizations prevent tetanus.** The tetanus germs get into the newborn usually through the umbilicus, circumcision, scarification, or ear piercing. The tetanus germs get into the postpartum woman most commonly through the genital tract at or soon after delivery.

PROBLEM	ASK AND LISTEN	LOOK AND FEEL
Newborn Tetanus	Not sucking	Fever, 5-10 days old, tetany spasms 36 hrs after no sucking
Woman Tetanus	Can not open mouth (lockjaw)	Muscle spasms of neck / jaw. Body stiffness

IDENTIFY PROBLEM

Postpartum Tetanus: Newborn and Woman

TAKE ACTION FOR TETANUS

Medical Treatment

- ❖ Prevent. The most important action is to prevent tetanus. Give every pregnant woman tetanus toxoid immunization. This protects the woman and the newborn from tetanus infection.
- ❖ Refer. Ask someone to find transport and go with the woman, baby and family to the doctor or hospital right away.
- ❖ Sedate. Give sedation to lower the chance of continuous spasms (tetany). Spasms may not stop they will just be fewer or not as strong.

  - First dose for newborn: diazepam 1 mg/kg body weight IV slowly over three minutes.
  - First dose for woman: diazepam 10 mg IV slowly over 2 minutes.
  - See Formulary for repeat doses of diazepam.

- Prevent more spasms - protect from light, touching, and moving of the person. The woman or newborn with tetanus must be in a dark, quiet place.
- Keep the airway open and keep the person turned to the side so fluids in the mouth will run out and not cause choking.
- Clean the source of infection (like an infected cord stump) with soap and water or chlorohexidine.
- Give broad spectrum antibiotics, see Formulary: Antibiotic.
- General care. Tetanus is a very time consuming sickness to treat but can be done.
    - Plan care at one time so the person will not be touched too often to prevent causing another tetanus spasm.
    - Feeding. Many people with tetanus die of aspiration during feeding. Never try to force feed with your hand or a spoon. Feeding can usually be done with a feeding tube. Give intravenous fluids for hydration and nutrition when a feeding tube is not possible or not available, see Module 8: Stabilize and Refer Skill Checklist for Nasogastric Feeding Tube procedure.
    - Take and manage temperature every 4-6 hours. Prevent injury by taking the temperature under the arm.
    - Bladder and bowels. Adults with tetanus usually are catheterized. Keep babies clean and dry after they urinate. Enemas may be needed for bowel movements.
    - Care. Bath daily and turn every 4-6 hours to prevent the skin from becoming sore and ulcerated.

Education

- Teach all who help with deliveries, do circumcisions, or scarification to wash their hands, wear gloves and to use very clean equipment.
- Do not use cow dung as medication on any open cut.
- A person does not get immunity by having tetanus. A full course of tetanus toxoid must be given to the tetanus victim after recovery. See immunization schedule in Formulary.
- Give DPT (diphtheria, pertussis, and tetanus) to all baby's.
- Give tetanus toxoid to adolescent girls and pregnant women. Tetanus immunization protects the woman and newborn. At least 2 doses are required for 80 per cent protection from tetanus (at least 3 doses are required for diphtheria and pertussis protection).

TIPS for midwife and others with midwifery skills: It is the responsibility of every health worker to make sure every girl and woman is immunized against tetanus. To prevent tetanus in the community, everyone should be immunized, even boys and men.

Newborn Protocols

Breathing Problems
Breast Feeding Problems (See Counseling: Breast Feeding)
Birth Asphyxia
Birth Injury
Bleeding: Circumcision
Bleeding: Cord Stump
Cord Stump Infection
Dehydration
Diarrhea
Eye Infection with Pus (Ophthalmia Neonatorum)
Eye Infection without Pus
Fontanel Bulging
Fontanel Depressed (sunken)
Impetigo
Infant Resuscitation Chart
Infections
Low Birth Weight
Malaria
Meningitis
Moniliasis
Mother Died
Not Able to Move One Arm or Leg
Not Able to Suck (See Counseling: Breast Feeding)
Not Able to Suck with Tetany or Spasms
Paronychia (fingernail infection)
Pyoderma (skin infection)
Pneumonia
Premature
Scalp with Swelling
Sepsis
Septicemia
Shock
Skin Color (jaundice, blue or pale)
Skin Infection (paronychia, pyoderma, thrush)
Skin Peeling
Skin Problems
Skin Rash
Skin with Birth Mark
Skin with Red Spots
Small for Gestational Age (SGA)
Temperature Not Normal: Too High, Too Low
Tetanus (See Protocols: WOMAN, Tetanus)
Thrush
Umbilical Cord Infection

BREATHING PROBLEM

Asphyxia is a condition when a newborn does not breathe at birth. It is estimated to cause 23% of the 4 million neonatal deaths that happen every year.

PROBLEM	ASK AND LISTEN	LOOK AND FEEL
Birth asphyxia	Trouble breathing at birth	No breathing, or breathing faster than 60 or less than 30 / min

IDENTIFY BREATHING PROBLEM

Birth Asphyxia
(trouble breathing at birth)

TAKE ACTION

Medical Treatment

- If you were not at the delivery, find out if there were any problems at birth or immediately after.
- Be ready: equipment, assistant, warm and flat surface.
- CALL FOR HELP. Dry, warm, delay cord clamping, see page 59.
- POSITION and KEEP WARM "sniffing" position, remove wet cloth and use dry cloth.
- SUCTION or wipe: mouth first, then nose. Check for Breathing.
- STIMULATE. Rub up and down newborn's spine. Check for Breathing.
- If newborn is gasping, or is not breathing, give breathing resuscitation (mouth-to-mouth or Ambu).
- TEST BREATH 1 time. Does chest rise? IF NO, check position, clear airway, seal.
- BREATHE 40 times (give 1 breath in about 1 second).
- CHECK breathing and heart rate after each 40 breaths. Count the heart rate for 6 seconds.
- If trouble breathing and heart rate more than 60 continue resuscitation.
- If heart rate 60 or below, do CPR, page 65.

- If newborn breathes spontaneously, monitor closely and support with warmth, stimulation, and oxygen

Education:

- Teach the woman how to watch for signs of breathing problems in her newborn.
- Teach the woman how to stimulate her newborn correctly.
- Teach the woman how to keep her newborn warm.

Follow Up:

- If Apgar is above 6, help the mother keep her newborn warm and stimulated. Breast feeding may begin when the newborn is interested. If the Apgar remains 6 or below refer to doctor.

TIPS for midwife and others with midwifery skills:
Careful monitoring of the fetus during labor can help you know if the newborn will need resuscitation. Sometimes there is no warning when a newborn will have trouble breathing. Be prepared to do resuscitation at all births.

Remember that the time from birth to start of breathing resuscitation should take *no longer than 30 seconds.* See Skill Checklist: Resuscitation.

Infant Resuscitation Chart

Findings	Normal Baby Care	**Baby Has Trouble Breathing Breathing Resuscitation**	**Heart Rate is 60 or Below Cardiopulmonary Resuscitation**
		Wipe baby's face before doing mouth to mouth / nose resuscitation	
Action	1. LOOK at breathing while doing steps 2. DRY with clean dry cloth, if trouble breathing, help baby breathe. 3. WARM by covering with second clean dry cloth 4. Delay cord clamping 5. Give to mother skin to skin 6. Apgar scoring.	1. CALL for help 2. POSITION and KEEP WARM 3. SUCTION or wipe: Breathing? 4. STIMULATE: Breathing? 5. Oxygen* 6. TEST BREATH 1 time. Does chest rise? IF NO, check position, airway, seal 7. BREATHE 40 times (give 1 breath in about 1 second) 8. CHECK breathing, heart rate. • If trouble breathing & heart rate more than 60, repeat steps 7- 8 • If heart rate 60 or below, do CPR • If spontaneous breathing: monitor, warm, stimulate, oxygen* 9. REFER if Apgar Score 6 or below	1. DO 15 CPR CYCLES (one cycle = 1 breath + 3 heart pushes in 2 seconds) 2. CHECK breathing, heart rate • If heart rate 60 or below, repeat steps 1 and 2 • If trouble breathing & heart rate more than 60, do breathing resuscitation • If spontaneous breath: monitor, warm, stimulate, oxygen* 3. APGAR SCORE • More than 6, give to mother • If 6 or below, REFER 4. STOP efforts after 10 mins if no spontaneous heart beat, after 20 mins if no spontaneous breath.

* WHEN OXYGEN IS AVAILABLE: If using mouth to mouth put oxygen tube into mouth, or if using bag and mask attach oxygen tube to bag. Give at 6 liters / minute. When baby starts breathing, move oxygen to nose. Give at 2 liters / minute.

INFECTIONS IN THE NEWBORN

Many of the newborn deaths during the 4 weeks following birth are caused by or related to infections. Bacterial germs enter a newborn's body and grow in number causing infection. Other germs cause tuberculosis or tetanus.

Most germs do not get to the fetus while he is protected by the bag of waters in the uterus. Germs may get in to the fetus if the membranes break many hours before birth or when unsafe vaginal exams are done when membranes are ruptured. Some germs such as malaria cross the placenta to the fetus. Germs get to the newbirb during and after birth.

After the germs get to the newborn, the germs need a day or two to grow. Localized infection may spread and become life-threatening. **Newborn infection is most common after the second day through the first month of life.**

When you first see a woman who says her baby is not well ASK and LISTEN as you LOOK and FEEL:

- What is wrong with your baby? When did the problem start?
- When was the baby born? Did he cry or breathe right away?
- Is he sucking breast?
- Did the woman have any problems at birth such as membranes ruptured for a long time, prolonged labor, infection or hemorrhage?
- Was the mother sick or have any problems during the pregnancy?

PROBLEM	ASK and LISTEN LOOK and FEEL	TAKE ACTION FOR INFECTION
SHOCK	• Eyes: Dull • Breathing: Fast (60+), slow (below 20), shallow, irregular • Heart Rate: Weak, fast (180+) • Skin: Cold or hot, pale • CNS (brain): Restless, sleepy, little/no response	• For any infection problem, if newborn in shock, manage the shock. Keep the newborn warm, put in sniffing position, and give fluids see Emergency Treatment, page 3. • Identify the cause of the shock. • Ask someone to find transport **immediately.** • Go with the mother and family to the hospital.
CORD STUMP INFECTION (omphalitis)	• Cord stump drains pus, smells bad. • Area around cord red, swollen. • (This is a serious infection for newborn and may lead to septicemia.)	Medical Treatment for Cord Stump Infection • Give Emergency Treatment as needed. • Give ampicillin and gentamicin IM X 7 days, see Formulary. • Wash hands before and after caring for the infection. • Wash cord stump with chlorhexidine. If no chlorhexidine, use soap and water. Apply genetian violet 0.5% solution. Repeat 3 times a day until no pus discharge. • REFER as soon as possible. Delay bath for 24 hours.

PROBLEM	ASK and LISTEN LOOK and FEEL	TAKE ACTION FOR INFECTION
EYE INFECTION WITH PUS (ophthalmia neonatorum)	• Red eyes 2-5 days after birth. • No eye care at birth. • Parent(s) history of Chlamydia, gonorrhea, vaginal discharge. • Thick green - yellow discharge usually in both eyes. • Eyelids swollen and red.	Medical Treatment for Eye Infection with Pus • Newborn less than 7 days old who has not received antibiotics: give single dose ceftriaxone IM, see Formulary: Antibiotics and REFER. **While waiting for transport and during referral:** • Wash hands and wear gloves. • Flush eyes with sterile normal saline from IV solution or boil 500 cc water & pinch of salt. Fill syringe with cooled solution to flush the eyes from the nose outward toward the ear: o Flush every 15 minutes x 1 hour, then every hour x 24 hours, then 3 times a day x 3 days or until clear. o Antibiotic eye drops or ointment in both eyes after each washing. **Never use eye medications that contain steroids as this can cause blindness in the baby.** • Refer mother for STI screening / treatment for her & partner. **Prevention:** Screen pregnant women for STI. Antibiotic eye ointment for every newborn after delivery.

PROBLEM	ASK and LISTEN LOOK and FEEL	TAKE ACTION FOR INFECTION
EYE INFECTION WITH NO PUS	• Redness and swelling of the eyes • 5-7 days after birth, • only in one eye, • usually not caused by Chlamydia or gonococcus.	Medical Treatment for Eye Infection with No Pus • Give erythromycin 0.5 ml/kg every 6 hours by mouth for 14 days, see Formulary: Antibiotics. • Wash hands and wear gloves. • Flush eyes with sterile normal saline from IV solution or boil 500 cc water & pinch of salt. Fill syringe with cooled solution to flush the eyes from the nose outward toward the ear: o Flush eyes 3 times a day x 3 days or until clear. o Antibiotic eye drops or ointment in affected eye(s) after each washing. **Never use eye medications that contain steroids as this can cause blindness in the baby.**
MALARIA	• Born premature or low birth weight (see low birth weight). • Ages 3 months - 5 years, many malaria attacks, anemia, and may die.	**Prevention** Treatment for Malaria • Where malaria always present: baby protected first 3 months of life natural passive immunity. • Where malaria not always present: baby not protected, sleep under insecticide treated bed net (ITN). • Give malarial drugs to mother according to most recent malaria treatment protocols in country.

PROBLEM	ASK and LISTEN LOOK and FEEL	TAKE ACTION FOR INFECTION
MENINGITIS	• Stiff neck, • lie with head bent back, • may vomit, • bulging fontanel.	Medical Treatment for Meningitis • Infection of the brain, rare in a baby, can quickly die. • Give Emergency Treatment as needed, URGENT REFER. • Give ampicillin and gentamicin IM see Formulary: Antibiotics. • Treat fever during referral. • If baby can not suck due to difficulty breathing, consider EBM with cup or nasogastric feeding or IV infusion.
PNEUMONIA	• Trouble breathing after first 24 hours of life, not sucking. • Respirations 60+ / minute, flaring nostrils, retractions, grunting, labored breathing. • Lips and skin color blue. • Serious newborn infection may lead to septicemia.	Medical Treatment for Pneumonia • Give Emergency Treatment as needed, REFER. • Position to maintain open airway. Give oxygen if lips/skin color pale/blue. • Give ampicillin and gentamicin IM see Formulary: Antibiotics. • Maintain temperature (skin to skin & breast feeding if below normal, cool compresses & prevent dehydration for fever) • If newborn can not suck due to difficulty breathing, consider EBM with cup or nasogastric feeding or IV infusion.

PROBLEM	ASK and LISTEN LOOK and FEEL	TAKE ACTION FOR INFECTION
SEPTICEMIA	• not sucking well, • vomiting or coughing. • temperature **above** or **below** normal. • looks sick, limp, sleepy, or irritable. • may have a specific infection, • jaundice, grayish skin color, or • convulsions.	Medical Treatment for Septicemia • An infection of the whole baby. Signs of infection in baby may not be specific – the baby is very sick. • Give Emergency Treatment as needed, REFER. • Give ampicillin and gentamicin IM see Formulary: Antibiotics. • Maintain temperature (skin to skin & breast feeding if below normal, cool compresses & prevent dehydration for fever) • Go with the family to the doctor or hospital.
SKIN INFECTION	• pus sores on the skin, • pyoderma or impetigo, • circumcision, or scarification • sores beside fingernails (paronychia).	Medical Treatment for Skin Infections and Problems • If signs of septicemia, see septicemia or treat source of infection with antibiotics. • Skin vesicles or pustules (infectious, very dangerous in newborns). Wash hands, wear gloves, wash skin with clean water & soap (or antiseptic), dry, apply gentian violet 0.5% to affected areas. Give cloxacillin or ampicillin & gentamicin, see Formulary: Antibiotics. REFER. • Infection at side of fingernail. Skin around fingernail red, swollen, tender, may be pus, can cause septicemia. Treat as skin vesicles or pustules.

PROBLEM	ASK and LISTEN LOOK and FEEL	TAKE ACTION FOR INFECTION
SKIN PROBLEMS	Peeling skin, red spots on skin, red-blue marks on skin, nappy rash.	• Peeling skin 2nd or 3rd day after birth (SGA or post term birth). Not serious. Wash with clean water & soap. • Red flat lesions (erythema neonatorum) 2nd to 4th day after birth. Small white spots in middle of the red lesions but NOT pus, goes away in 1-2 weeks. Keep skin clean. May be called 'milk rash', breast milk is not the cause. • Congenital birth marks (red-blue in color). May look like a bruise. Most go away in 1-2 years. • Nappy rash. Red rash on buttocks & genital organs. Keep nappy clean & dry: boil/sun dry. No plastic pants. Wash baby with clean water soiled nappy, NO nappies.
	Prevention for Skin Infection & Skin Problems: Skin infection is dangerous – treat immediately. Teach all who do circumcisions, or scarification to wash their hands, wear gloves and to use very clean equipment. Skin problems may cause skin infection – keep skin problems clean.	
THRUSH	• Baby is not sucking well. • Mother usually has yeast infection (candidiasis, moniliasis, thrush).	Medical Treatment for Thrush (mouth or buttocks) • White patches in mouth, stick to mucous membranes, red/bleed when wiped away. May be red rash on buttocks. • Give nystatin or gentian violet until 2 days after patches/rash disappear, see Formulary: Antibiotics. Evaluate mother for yeast infection, page 55

Follow Up for Infections in the Newborn: When a newborn is being treated for an infection and is not hospitalized, the baby will need to be visited daily. When the baby is breast feeding at least 10 times a day and is gaining weight, the mother can be given a date of 2 weeks to come to the clinic for a visit. If the baby is progressing well, mother can then be visited using the postpartum visit schedule: 2-3 days, 6-10 days, 4-6 weeks, and at 6 months.

If it is not possible for the midwife to see all baby's as often as needed, a helper (health worker, attendant or family member) may be asked to visit and report back to you. Teach the woman and her family newborn danger signs. Advise them to come to the health facility right away when they see a danger sign. Discuss the importance of infection prevention, see Counseling: Postpartum.

TIPS for midwife and others with midwifery skills: Prevention is best, early treatment of infection can prevent more serious illness or death. **If there is shock, manage the shock and then identify the cause of the shock.**

LOW BIRTH WEIGHT

A low birth weight baby is born too small, weighs less than 2500 grams at birth. Low birth weight (preterm or small for gestational age) accounts for about 27% of the 4 million neonatal deaths each year.

PROBLEM	ASK AND LISTEN	LOOK AND FEEL
Low Birth Weight	Baby is thin and cold to touch, may have trouble sucking.	• Head looks big in proportion to body • Skin very thin, red • Fine hair all over the baby's body • Creases in feet only part of the sole

IDENTIFY PROBLEM - LOW BIRTH WEIGHT

Low Birth Weight
(premature, preterm, SGA)

TAKE ACTION

Medical Treatment

- ❖ Weight should be checked if you have a scale.
- ❖ Keep baby warm with skin to skin method, cover the head.
- ❖ Feed baby every 2 hours.
- ❖ Look for and manage problems:
  - Breathing problems at birth and later as small babies forget to breathe. Resuscitate as needed. Advise mother / helpers to keep baby warm, rub back.
  - Hypothermia. Use continuous skin to skin method.
  - Low blood sugar (lethargic, jittery). Feed at least every 2 hours to prevent low blood sugar. If lethargic or jittery, treat during REFERRAL:
    - Is able to suck & swallow, suck breast and give glucose solution with cup, see recipe below.
    - Is not able to suck & swallow, give glucose by nasogastric feeding tube.
    - If no feeding tube and baby can not swallow and is dehydrated, give IV, see Formulary: IV Solutions and Fluid Therapy.

Making Glucose Solution

Mix 4 heaped teaspoons of glucose (use sugar if no glucose), in a cup of water for 5 -10% solution.

Give 25 ml/kg by cup, dropper or feeding tube.

Glucose stops low blood sugar signs in 15 mins.

Continue to feed the baby every two hours for three days with expressed breast milk and glucose solution.

- Feeding problems. The baby is too small, has little energy, a small stomach, or mouth too small to suck the nipple. May need to EBM, feed with cup first few days. Small babies usually feed vigorously once they get a little energy. Weight gain seen the 1st week of life.
- Infections. The immune system is not mature. Advise infection prevention practices and wash hands when caring for small babies. Keep sick people away.
- Jaundice. The liver is not mature. If jaundice in first 24 hours or after 2 weeks, REFER.
- Bleeding problems. Give vitamin K at birth, Formulary: Vitamins.

Education:

❖ Explain newborn danger signs on page 1.
❖ Explain to mother her small baby needs extra care and protection:

- Breast feed at least 10 times a day.
- How to keep her baby warm.
- How to keep her baby breathing
- Hand washing with soap to decrease risk for infection

Follow Up:

❖ Daily visits until the baby is feeding at least 10 times a day and is gaining weight
❖ Weigh baby at follow up visits to evaluate weight gain and if the baby is getting enough breast milk.
❖ Baby should gain weight every week. If weight gain is not adequate, REFER.

TIPS for midwife and others with midwifery skills: Baby survival depends upon being nourished at the breast.

OTHER PROBLEMS FOR BABY

PROBLEM	FINDINGS	ACTIONS
Bleeding: cord stump, circumcision	Bleeding from cord stump (first 1-2 days of life) or bleeding from circumcision, baby weak	• Pressure on bleeding site for 10 mins. • Retie the cord if bleeding. • If baby weak or not breast feeding well, REFER.
Diarrhea: 5 or more watery stools in a day, dehydration	**Mild dehydration**: restless, some irritable	Breast feed, ORS between feeds, treat signs of infection, if vomiting REFER
	Mod dehydration: dry lips & mouth, sunken anterior fontanel, breathing fast **Severe dehydration:** tenting skin, sunken eyes, sunken anterior fontanel	• ORS 10 ml/kg every hour until signs of dehydration disappear, • Breast feed when baby can suck, • If not able to take ORS by mouth or breast feed, REFER with nasogastric feeding.
Baby without a mother	Mother has died or baby has been abandoned.	• Find caretaker for the baby – preferably a family member. • Find HIV free wet nurse (another woman to breast feed the baby). • Use formula if acceptable, feasible, affordable, safe and sustainable.

PROBLEM	FINDINGS	ACTIONS
Not able to move one arm or leg	Loss of movement in one limb, may be weak or in a claw like position, difficult vaginal birth.	Splint arm close to body, handle gently to decrease pain. Reassure mother most improve by 3-6 months. REFER.
Scalp swelling	**Caput:** swelling anywhere on scalp, gone in a few days. **Cephla-hematoma:** Swelling not across suture lines, gone in 4-6 weeks. **Subgaleal hemorrhage:** rare, life threatening. Swelling can cross suture lines.	Caput and cephlahematoma need no treatment. Watch and REFER: increasing head size, shock, fast heart rate, fast breathing, seizures, irritability, or lethargy.
Depressed fontanel	Fontanel sunken	Treat dehydration
Bulging fontanel	Fontanel swollen	REFER immediately
Skin color Jaundice	**Physiological jaundice**: starts 3-4 days after birth	Yellowing disappear 10-14 days. Watch for signs of worsening jaundice.
	Serious Jaundice: starts in 24 hours after birth	If signs of serious jaundice present, yellowing eyes, soles, palms, lasts longer than 2 weeks. REFER

PROBLEM	FINDINGS	ACTIONS
Skin color Blue or pale	The skin color, and lips are blue or pale	Dry, warm, position, suction, stimulate the baby to breath, start breathing resuscitation if needed, keep the baby warm. If no improvement, REFER.
Temperature too low: Axillary below 36 C - hypothermia	Baby feels cold, limp, poor sucking or feeding, weak cry, slow and shallow breathing, heart rate below 100/min. Look for signs of infection	• Place baby skin to skin, cover head, cover mother and baby • Encourage breast feeding or EBM if baby too weak, REFER.
Temperature too high Axillary above 37 C - hyperthermia	Baby feels hot, breathing above 60/min, heart rate above 160/min, restless or lethargic, dehydrated. Look for signs of infection.	• Cool bath, frequent breast feed or EBM if baby too weak. • If temp abnormal after 2 hours REFER. • Give ampicillin and gentamicin before referral

Follow Up: See postpartum care. Discuss the importance of checking the baby and mother at 2-3 days, 6-10 days, 4-6 weeks, and at 6 months. The visits will need to be daily when the baby has received care for a problem until the baby is breast feeding at least 10 times a day and gaining weight.

6. COUNSELING

When you counsel, you talk person to person to help someone. Counseling helps a woman decide what to do and how to do it.

COUNSELING DO'S[2]

- Do make the woman feel welcome
- Use clear questions to help you decide woman and/or baby problems or needs.
- Give useful, correct information
- Help the woman and her family make their own choices based on clear information and their own feelings, situation and needs
- Help the woman remember what to do
- Praise the woman for coming and remind her of her next visit.

[2] Beck, D., et al. 2004. Care of the Newborn – Reference Manual. Saving Newborn Lives. Save the Children, Washington, D.C.

Antenatal Counseling.

A minimum of 4 antenatal visits is needed for a woman without problems (Visit 1 before 16 weeks, Visit 2 between 20 - 24 weeks, Visit 3 between 28 - 32 weeks, and Visit 4 at about 36 weeks). A woman with problems should be seen as often as needed. Use the Focused ANC Matrix below, to help you remember to get the information you need to monitor and care for a woman and her pregnancy.

Focused Antenatal Care Matrix				
Problem Solving Steps and Care	**Weeks of Gestation**			
	< 16 Weeks	**20 - 24 Weeks**	**28 - 32 Weeks**	**36 Weeks**
Registration	X			
Step 1: ASK and LISTEN (General History)				
Personal history	X			
Family history	X			
Social history	X			
Medical/surgical history, medications, allergies, immunizations	X			
Obstetric and gynecological history, family planning, breast feeding	X			
Current pregnancy history: monthly bleeding, LMP, EDD, diet	X			
Use of bed nets / residual spraying in malaria endemic areas	X			
General condition: appetite, energy, constipation	X	X	X	X
Fetal movements: first time and each visit	X	X	X	X
Complaints: urination (pain, burning, frequency), nausea, other	X	X	X	X
Danger signs: bleeding, headache, vision problems, discharge, pain	X	X	X	X

Focused Antenatal Care Matrix				
Problem Solving Steps and Care	**Weeks of Gestation**			
	< 16 Weeks	**20 - 24 Weeks**	**28 - 32 Weeks**	**36 Weeks**
Problems from previous visit: worse, same, improved		X	X	X
Step 2: LOOK and FEEL (Observe and Examine)				
General health (check gait first visit)	X	X	X	X
• Weight (compare to previous visits)	X	X	X	X
• Height	X			
• BP, compare to previous visits (check reflexes as indicated)	X	X	X	X
• Pallor (anemia screening)	X	X	X	X
• Edema of face and hands (related to anemia)	X	X	X	X
• Kidney tenderness (infection screening)	X			
Breast examination and self breast examination	X			
Abdomen examination				
• Abdominal inspection: skin, scars, shape	X			
• Inguinal/femoral swelling, lymph nodes, suprapubic tenderness	X			
• Fundal height (compare to weeks gestation)	X	X	X	X
• Fetal presentation, lie and descent			X	X
• Fetal heart rate		X	X	X
Genital inspection				
• Sores, ulcers, fistulas	X			
• Varicose veins, swellings	X			

Focused Antenatal Care Matrix				
Problem Solving Steps and Care	**Weeks of Gestation**			
	< 16 Weeks	**20 - 24 Weeks**	**28 - 32 Weeks**	**36 Weeks**
• Abnormal vaginal discharge, bleeding	X			
• Female circumcision or scarring	X			
Legs: Varicose veins, areas red / hot / swollen (deep vein thrombosis)	X	X	X	X
Laboratory tests				
Blood				
• Hemoglobin or hematocrit	X		X	
• Grouping and rhesus factor if available	X			
• HIV testing & counseling: offer without coercion	X	X	X	X
• Syphilis if available	X			
Urine				
• Protein	X	X	X	X
• Sugar, acetone, pregnancy test available / indicated	X	X	X	X
Step 3: IDENTIFY PROBLEMS / NEEDS				
Step 4: TAKE APPROPRIATE ACTION				
Manage any complications	X	X	X	X
Treat any common problems	X	X	X	X
Drugs and immunization				
• Iron	X	X	X	X
• Folic acid	X	X	X	X
• Antimalarial endemic area		X	X	
• Antiparasitic: endemic for hookworm,schistosomiasis		X		
• Tetanus toxoid	X	X		
• Others as needed: Vitamin,	X	X	X	X

Focused Antenatal Care Matrix				
Problem Solving Steps and Care	**Weeks of Gestation**			
	< 16 Weeks	**20 - 24 Weeks**	**28 - 32 Weeks**	**36 Weeks**
calcium, iodine supplements				
Client education / counseling				
▪ Process of pregnancy and its complications	X	X	X	X
• Diet and nutrition	X	X	X	X
• Rest and exercise in pregnancy	X	X	X	X
• Personal hygiene	X	X	X	X
• Use of treated bed net, residual spray (endemic)	X	X	X	X
• Use only prescribed medicines	X	X	X	X
• Avoid smoking, drug abuse, alcohol, strong fumes, ill people	X	X	X	X
• STIs and HIV: voluntary counseling / testing	X	X	X	X
• Prevent mother to child transmission	X	X	X	X
• Exclusive breast feeding	X	X	X	X
• Importance of colostrum and early initiation	X	X	X	X
▪ Labor symptoms and signs	X	X	X	X
• Birth preparation, planning	X	X	X	X
• Emergency prep, planning	X	X	X	X
• Danger signs	X	X	X	X
• Plans for postpartum care	X	X	X	X
• Family planning	X	X	X	X
Repeat antenatal visit	X	X	X	X
Document and record	X	X	X	X

Source: Malawi MOH 2006 adapted for LSS 4th Edition 2008.

Common Complaints in Pregnancy

Many women experience one or more of these complaints during pregnancy. Give prompt care to relieve the discomfort and to prevent more serious problems.

1. **Nausea and Vomiting** (morning sickness)
   - Small amounts of salty or sweet foods might help. Eat something before getting up in the morning
   - Eat small amounts of food frequently so that the stomach is never completely empty.
2. Some **sleepiness** in the first three to four months and again in the last weeks of pregnancy. Explain: Get enough sleep and try to rest at least an hour every day.
3. **Aches, pains and cramps**:
   - Abdominal pain
     - As the baby grows, the womb grows causing the abdomen muscles to stretch – causing some abdominal pain.
     - Come to the midwife if you have abdominal pain that gets worse over time, even with rest, as this may indicate preterm contractions or some other problem.
   - Round ligament pain
     - The round ligaments attach to each side of the womb. As the baby grows, the round ligaments get stretched which can cause pain, especially when changing position.
     - Change position slowly. Hold your belly as you change position to prevent the ligaments from pulling.
   - Leg cramps that go away with rest, massage, or exercise
     - Drink at least six glasses of water each day. Eating foods high in potassium such as bananas can help.
     - When a leg cramp happens, pull your toes up towards you to help stretch and relax the leg muscle.
     - Come to the midwife if your leg is swollen, red and painful as it may indicate a clot – do not massage the leg when it is swollen, red and painful.

Common Complaints in Pregnancy

- Backache (with fever and/or vaginal discharge see Complaint & Findings)
  - As the baby grows bigger, the mother's stomach muscles are holding more weight. This puts more stress on the mother's back which can cause backache.
  - Resting and putting a warm towel or hot water bottle on the back can help.
  - If possible, do not lift heavy things by yourself or twist the body when lifting. These actions can cause back injury.
  - Use a good body position when lifting things. Bend your knees when picking up something heavy. Do not bend over at the waist.

4. **Swelling** of feet, ankles, lower legs (leg swelling).
   - Rest with feet up to help this go away. If associated with weakness or paleness, see anemia. If one leg only, see Protocols: Infection for thrombophlebitis.
5. **Constipation and Hemorrhoids**
   - The gastrointestinal tract slows down in pregnancy. Your body also absorbs more water which can cause harder stools.
   - Eat more fiber in your diet such as bran, fruits and vegetables.
   - Drink at least six glasses of water each day.
   - Exercise on a regular basis.
   - If hemorrhoids become very swollen and painful, sit in a basin of warm water three times a day.
6. **Heart Burn**
   - This is the result of acid reflux into the lower end of the esophagus as the stomach is compressed by the growing uterus in the abdomen.
   - Treatment: Antacid 1 tablet or 1 tablespoon whenever the heart burn happens.

Common Complaints in Pregnancy

- Eat small frequent meals and drink some milk in between your meals.
- Eat some salty biscuits (crackers) before getting out of bed in the morning.
- Do not eat immediately before going to bed and use a pillow to sleep on.

7. **Shortness of Breath**

- The baby fills your entire abdomen and pushes on the diaphragm during the last 2-3 weeks of pregnancy causing shortness of breath.
- During this time walk slower and rest often.

Counseling During Pregnancy

Process of pregnancy and its complications

- It is important that you come see your midwife at least 4 times during your pregnancy. She will help you make sure that you and your growing baby are healthy.
- At each visit she will ask you how you are feeling, if you are feeling the baby moving, if you have had any bleeding or water come out of your vagina, pains in your stomach, or headaches.
- Later in your pregnancy she will talk with you about how to know you are starting labor, the stages of labor and the normal process of delivery.

Diet and nutrition

- A woman needs more food during pregnancy, because she shares the food with her baby. A well nourished woman has healthy babies and fewer problems.
- You should eat one extra serving of Group 1 each day during pregnancy. You must also eat foods from the other food groups (listed on the next page), at least three times a day and drink at least 6 glasses of water or juice each day.

Counseling During Pregnancy

Group 1 – In most of the world, people eat one main food at each meal. These foods give you **energy:** rice, maize, wheat, cornmeal, yam, bread, millet, cassava, taro, plantain, breadfruit.

Local foods:_____

Group 2 – These foods help you **grow** muscles, bones and strong blood: legumes (beans, peas, lentils), nuts & seeds, meat, fish, insects, eggs, cheese, milk & yogurt.

Local foods:_____

Group 3 – Foods that have vitamins and minerals help **protect** you from infection and keep your eyes, skin, & bones healthy and strong: a variety of fruits and vegetables.

Local foods:_____

Group 4 – Fats and sugars in moderation give you **energy** and make the food taste good too: fats (nuts, seeds, avocados, vegetable oil, butter, ghee, lard), and sugar (fruits, honey, molasses).

Local foods:_____

Rest and exercise

- Exercise helps the pregnant woman strengthen the muscles used to give birth, relieves constipation and helps with circulation.
- Continue to work & exercise, also rest one hour every day.

Personal hygiene

- Everyday wash your body and clean your teeth and gums
- Wash your hands before preparing food.
- Wash your hands after going to the latrine.

Prevent Malaria

- Sleeping under Insecticide Treated Nets (ITN) protects pregnant women from malaria carrying mosquitoes.

Counseling During Pregnancy

- Inside Residual Spray (IRS) in endemic area communities decreases malaria in pregnancy. During the spraying pregnant women should wait outside and stay outside for one hour after the spraying is finished.

Prevent Harm to the Fetus

- **Use only prescribed medicines.** Some medicines can harm the fetus. Use of drugs and non prescribed medicines, and herbs in pregnancy should be done with the permission of the midwife, see Formulary for medicines safe to use during pregnancy.
- **Avoid smoking, drug abuse, alcohol, strong fumes, ill people.** Habits (smoking, drug abuse, alcohol) are known to harm the unborn baby. Pregnant women should stay away from fumes, ill people, and people smoking.

Effects of STIs and HIV. Prevent STIs, primary HIV infection or re-infection. Offer voluntary counseling / testing.

- Advise if you think you have signs of STI or HIV go to your midwife / doctor for treatment and prevention.
- Advise pregnant women to use condoms to prevent STIs and HIV infection.
- Voluntary and Confidential Counseling and Testing (VCCT) is strongly recommended during pregnancy.
  - If a woman does not have HIV, she can be counseled in appropriate prevention methods.
  - If a woman knows she has HIV, early counseling and treatment can reduce the risk of MTCT, see HIV/AIDS Counseling.

Prevent mother to child transmission (PMTCT).

- Advise exclusive breast feeding. MTCT risk is greater when HIV-positive women do not exclusively breast feed for the first six months, or if complications develop from poor breast feeding techniques (such as mastitis, cracked and bloody nipples).

Counseling During Pregnancy

- Advise breast feeding women to use condoms to prevent STIs and HIV infection. MTCT risk increases if the mother becomes infected or reinfected with HIV while breast feeding.
- Encourage sexually active partners to use the appropriate use of male and female barrier methods during pregnancy.

Exclusive breast feeding and importance of colostrum and early initiation, see Breast Feeding Counseling.

Symptoms and signs of labor. There is no way to be sure labor is beginning without a vaginal examination. Some signs are:

- First pregnancies, babies often 'drop' lower in the belly about 2 weeks before birth.
- Show (blood tinged mucous) is seen for a few days before labor contractions start or are felt.
- Labor contractions get stronger, last longer and come more often.
- Bag of waters (membranes) break.

Birth preparation and planning.

- Where to deliver?
- Who is the birth attendant?
- Where will you go after you have your baby?
- Do you have someone to provide money for pregnancy needs, birth costs and supplies?
- Prepare supplies. You will need things like: clean birth things (clothes for baby, pads, waterproof container, razor blade, cord tie). You will need to bath and wear clean clothes. Your helpers will also need to be clean and bring food for you.

Counseling During Pregnancy

Emergency preparation for planning and referral planning.

- In case of an emergency, it is important to prevent delays. Is there someone that needs to give you permission to go to the clinic or hospital?
- Can you gather some money, decide on transportation, and support? Who will stay at your house?
- Who will decide there is a problem?
- Who can give a blood transfusion?

Danger signs in pregnancy and postpartum should be discussed, see Danger Signs on page 1.

Plans for postpartum care, see Postpartum Care Counseling. Decide early in the pregnancy who will help check the woman and baby 4-5 times after the baby is born. Discuss the importance of these visits.

Family planning see Family Planning Counseling. It is important to give the pregnant woman information about child spacing so that she has time to talk with her husband. Encourage her to plan at least 3 years between pregnancies. Provide her with information about the different methods she can use for safer sex during this pregnancy.

Breast Feeding Counseling

Breast milk is the perfect food for a baby. Help the mother understand the importance of giving the baby only breast milk (exclusive breast feeding) for the first 6 months. Help the mother and baby prevent MTCT. See additional counseling information when the mother has HIV in Counseling - HIV. See caring for low birth weight babies in Newborn Protocols.

Put baby together with mother after birth for the first hour. Keep the baby warm by laying skin to skin on the mother, covering both including the baby's head. The first hour after birth is the most important time for bonding. Bathe and weigh the baby later.

Help the mother with the first breast feeding. The average time for a baby to attach to the breast is 30 – 60 minutes. Do not hurry the baby to the breast.

- Give healthy newborns uninterrupted full skin to skin contact with the mother.
- Watch to make sure the baby is well attached and has plenty of the dark part of the mother's breast (areola) in his mouth. The mother's arms need to be well supported.

Give the colostrum (first milk)

- Colostrum is the special food the baby needs before the breast milk comes in.
- It boosts the baby's health and immunity to disease (like a first immunization).
- Helps the baby clear out meconium.
- Helps decrease jaundice, if it is present.

Give ONLY colostrum and breast milk.

- Other food, including water, can make the baby sick. If other food or water is given, the baby will not feel hungry and will not suck. That will decrease the mother's milk supply because her breasts produce milk according to how much the baby sucks.

- Avoid bottles and pacifiers. They confuse the baby and may cause the baby to refuse the mother's own nipple or to attach poorly.
- Exclusive breast feeding reduces exposure to infections and keeps the baby's stomach healthy. It also gives the baby resistance to infection.
- Feed the baby OFTEN. Usually babys want to feed every 2-3 hours (at least 10-12 times in 24 hours). If the baby is not demanding to feed (by crying, becoming alert and active), tell the mother to offer the breast to the baby.

Baby should sleep next to the mother on the same bed or mat. In endemic malaria areas, sleep under a treated bed net.

Signs a baby has latched on the breast in a good position, see **LATCH tool if a problem.**

- Whole body is close, turned toward mother.
- Mouth and chin are close to the breast.
- Mouth is wide open.
- Can not see much areola.
- Can see baby taking slow deep sucks.
- Can hear the baby swallow.
- Baby is relaxed and happy.
- Mother does not feel nipple pain

BREAST FEEDING PROBLEMS

Helping the mother to solve minor problems with breast feeding can prevent bigger problems later. Discourage mothers from giving other feeds to the baby such as sugar water, cereal, powdered milk even if they are encouraged by others to do so. Below are some common breast feeding problems with suggestions to help the mother:

- **Delay in breast feeding.** If the baby does not begin sucking the breast well within 6 hours after delivery, visit the next day to check the baby is breast feeding. Help mother with any breast feeding problems. If the baby cannot latch by the 2nd day, evaluate the baby and REFER.
- **Sore or cracked nipples.** If a mother has sore nipples, sit with her and watch the baby attach and feed**. The biggest reason for sore nipples is that the baby is not in a good breast feeding position and the attachment is poor.** Cracked nipples increase the risk of MTCT. Untreated cracked nipples may cause breast infection (mastitis). Help the woman with sore nipples. Teach her how to:
  - Hold the baby in the correct breast feeding position.
  - Help the baby attach well to the breast.
  - Use other positions: lying on side, sitting, semi-sitting
  - Keep nipples clean and dry. Do not use soap when cleaning nipples.
  - Rub colostrum or breast milk all over each nipple after each feeding and air dry.
  - Start a feed with the breast that is not sore or is least sore.
  - Use Paracetamol for pain, see Formulary, page 134.
  - Do not stop breast feeding. Only in very difficult cases can the mother “rest” the problem nipple for 24 hours. Help her continue to empty the breast that is being “rested” by expressing milk, and give that milk to baby. Show mother how to express milk and cup feed baby.
  - See the mother every day until you are certain the nipples are healing. You may ask the attendant or the helper in the home to visit daily and help the woman come to the clinic or send you a message if the nipples are not healing.

- **Engorged breasts.** Many mothers have very full and mildly painful breasts when their milk "comes in". If the baby nurses at least every two to three hours, the breasts will become softer. When the breasts are very full, shiny, and painful, the baby may have trouble attaching and these actions may help:
  - Prepare the very full breast before feeding by placing hot wet cloths on the breast for five minutes.
  - Massage the breasts from outside towards the nipple before starting and during feeding.
  - Express some breast milk by hand so the areola is softer before feeding. SHOW the mother how to do this.
  - Put cool cloths on breasts or follow local customs to cool and make breasts more comfortable after feeding.
  - Encourage the mother to breast feed often, at least every two to three hours. If the baby is sick or unable to suck, express the milk every two to three hours and cup feed the breast milk to the baby. (Avoid bottles). Engorged breasts that are not emptied can become infected and an abscess can develop.
  - See the mother every day until the breasts are no longer engorged and the baby is breast feeding well. You may ask someone in the home to help the woman come to the clinic or send you a message if the breasts are engorged and the baby is not able to breast feed.
- **Not enough breast milk.** Most mothers can produce enough breast milk for their babies. Mother and baby problems could be the reason for not enough breast milk.
  - If the mother is exhausted, is not drinking or eating enough, or not nursing frequently enough, she may not produce enough breast milk.
  - If the baby is allowed to sleep for more than three to four hours at a time, if other feeds are given, or if the breasts are not emptied well at each feeding, then the hormonal "message" to the mother's brain will be "make less breast milk." When this happens, a negative cycle is set up. The baby breast feeds less and the mother makes less breast milk. It is important to explain how the mother's body works to the mother and her family. It is called "supply and demand."

- Increase **breast milk supply, for mother:**
  - Nurse frequently.
  - Rest more, eat well, and drink more fluids especially water and juice.
  - Reassure mother that she can produce more milk. Express milk so mother can see that she is making milk.
  - Sit and watch mother breast feed her baby and correct any attachment or positioning problems.
- **Increase breast milk supply, for baby, mother should:**
  - Feed the baby every two hours, day and night, while trying to increase milk supply (nursing 10 -15 minutes per breast).
  - Wake a sleepy baby when it is time to feed.
  - Make sure baby is correctly attached and listen for active swallowing.
  - Feed baby in a quiet, comfortable place.
  - Sleep with the baby next to her in bed.
  - Give only breast milk, not other feedings.
  - See the mother every day or ask a helper to visit until you are sure the mother feels she has enough milk**. It will take two to four days to increase the breast milk, but it will increase.**
- **A baby is getting enough breast milk when:**
  - Baby wets at least six times in 24 hours, urine is clear to pale yellow in color.
  - Baby has frequent yellow 'seedy' stools.
  - Baby seems contented, with hungry times, quiet awake times, and sleepy times. It is NOT a good sign if a baby is sleeping all the time.
  - Baby feeds at least 10 times in 24 hours.
  - Mother's breasts feel soft or empty after a feeding.
  - Mother can feel the tingling "let-down" sensation when baby first feeds.
  - Mother can hear the quiet little swallowing sounds as baby eats.
  - Baby is gaining weight.

LATCH Breast Feeding Evaluation Tool

Directions. Watch and evaluate the mother/baby pair for each of the five LATCH steps (see next page). Give a score of 0 to 2 points for each step, write score in appropriate column. Add the total.

- **Score 8 – 10:** the mother does not need more help with breast feeding.

- **Score 5 – 7:** the mother needs more help with breast feeding. Help her the next time she puts baby to breast. Re-evaluate with LATCH tool and encourage her.

- **Score 0 – 4:** the mother needs a lot more help with breast feeding. Ask mother to call for help every time she wants to put the baby to breast until her LATCH score is 8 or higher.

Be patient when helping a mother learn to breast feed her baby. It may take a week or two for first mothers to become skilled at breast feeding.

LATCH Breast Feeding Evaluation Tool

Score Value		0 Points	1 Point	2 Points	Results		
					0	1	2
L	**L**ATCH	Too sleepy or reluctant, No attachment achieved	Repeated attempts, Hold nipple in mouth, Stimulate to suck	Grasps nipple & areola, Tongue down, Wide open mouth, Lips flanged, Rhythmic sucking			
A	**A**UDIBLE SWALLOWING	None	A few with stimulation	Spontaneous, intermittent <24 hrs old			
				Spontaneous, frequent >24 hrs old			
T	**T**YPE OF NIPPLE	Inverted	Flat	Everted			
C	**C**OMFORT (Breast/nipple)	Engorged, Cracked, Bleeding, Severe discomfort	Filling, Reddened, Moderate discomfort	Soft, Non-tender, not red, Mild or no discomfort			
H	**H**OLD (Positioning)	Uncomfortable with position, Full Assist (Staff holds)	Needs some assistance, Teach one side, Mother does other	Mother able to position/hold baby			
				TOTAL SCORE			
				MIDWIFE INITIALS			

Source: Jensen 1994

Family Planning Counseling

- **Offer family planning to women who are interested in family planning.** Give family planning help during antenatal care, immediate postpartum care, and at any other time postpartum, such as when the baby is immunized.

- **Counsel on return to sexuality.** Advise the woman not to have sex (intercourse) until all signs of vaginal bleeding spotting or brown staining have stopped, to give enough time for the vagina, perineum, and uterus (placental site) to heal. It is better to have complete healing before having sex. The woman and her husband should know that she could become pregnant again, if she is not exclusively breast feeding or using another family planning method.

- **Advise about return to fertility and chance of unintended pregnancy.** A postpartum woman ovulates and can become pregnant before her first monthly bleeding. Women who do not breast feed ovulate on average 45 days after delivery and some as early as 28 days. The return to fertility for breast feeding women is less predictable. Advise women that their return to fertility may happen before their monthly bleeding. Talk with the woman or couple so they fully understand the risks of unintended or poorly timed pregnancies to themselves and their baby. Talk with them about methods of contraception.

- **Encourage healthy timing and spacing of pregnancy.** When the time between the birth of a baby and the next pregnancy is less than 24 months, there is a higher risk the baby will have problems. The World Health Organization recommends that there should be at least 24 months from the last birth to next conception. This lowers the risk of woman or baby sickness or death, and supports the recommendation of breast feeding for at least two years. The recommended time to try to become pregnant after a miscarriage or abortion is at least 6 months, to reduce the risk of maternal or neonatal sickness or death.

- **Every couple must decide for themselves** how they want to plan their family. They need accurate information about family planning methods. No one can decide for them. **Midwives can help couples** make good, healthy choices as they plan their families by teaching them about ways to prevent unintended pregnancies. Most family planning methods can be started two weeks after delivery.

- **Dual protection.** Talk with women about how they can protect themselves from STIs (including HIV) and pregnancy. This is called dual protection. Dual protection may include:

  - Using a male or female condom correctly with every act of sex. Condoms help protect against pregnancy and STIs including HIV.
  - Using condoms always and correctly PLUS another family planning method. This adds extra protection from pregnancy in case a condom is not used or is used incorrectly.

Effectiveness of Methods. In the box below is information on the effectiveness of different methods and how to make the method most effective.

<table>
<tr><th colspan="6">Comparing Effectiveness of Methods</th></tr>
<tr><th colspan="5">Methods</th><th>How to Make the Method Most Effective</th></tr>
<tr><td>More Effective
Less than 1 pregnancy per100 women / year</td><td>Implants</td><td>Vasectomy</td><td>Female Sterilization</td><td>IUD</td><td>After procedure, little or nothing to do or remember
Vasectomy: Use another method for first 3 months</td></tr>
<tr><td rowspan="2">  </td><td>Injectables</td><td colspan="2">LAM</td><td>Pills</td><td>Injections: Get repeat injections on time
LAM: Breast feed often, day and night for 6 months
Pills: Take a pill each day</td></tr>
<tr><td>Male Condom</td><td>Female Condom</td><td>Diaphragm</td><td>Fertility Aware Based Methods</td><td>Condoms, diaphragm: Use correctly every time you have sex
Fertility-awareness based methods: Abstain (no sex), or use condoms when fertile.</td></tr>
<tr><td>Less Effective
About 30 pregnancies per 100 women/ year</td><td colspan="2">Withdrawal</td><td colspan="2">Spermicide</td><td>Withdrawal, spermicide: Use correctly every time you have sex</td></tr>
</table>

Earliest Time a Woman Can Start a Family Planning Method After the Baby Is Born

Method	Breast Feeding	Not Breast Feeding
Lactational Amenorrhea Method (LAM)	Immediately for 6 months only	Not applicable
Progestin-only Methods (Pills, Injectables, Implants)	6 weeks after baby is born	Immediately or within first few days
Combined Oral Contraception (Injections, Patch, Ring) ALL HAVE ESTROGEN AND PROGESTIN HORMONES	6 months after baby is born	3 weeks after the birth
Vasectomy	Immediately and any time. Couple will need to use another method for 3 months after vasectomy	
Male or Female Condoms	Begin immediately. Spermicide not recommended if at risk for HIV	
Spermicide		
Copper-bearing IUD	Within 48 hours, otherwise wait 4 weeks	
Female Sterilization	Within 7 days, otherwise wait 6 weeks	
Levonorgestrel IUD	4 weeks after baby is born	
Diaphragm	6 weeks after baby is born	
Fertility Awareness-based Methods	Start when normal secretions have returned or woman has had 3 regular menses. This is later for breast feeding women than for women who are not breast feeding.	

Family Planning Methods Chart

The following chart lists family planning methods. Use the information to give information about family planning methods. The smiley face **"☺"** means it is OK for a breast feeding woman to use the method.

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Lactation Amenorrhea Method (LAM) 98% effective ☺	• Free and easy for women who are exclusively breast feeding • Universally available and very effective • Improves breast feeding and weaning patterns	3 conditions: • Give *only* breast milk to baby whenever baby is hungry, at least 10 times in 24 hours, at least one feed during the night, feeds not further apart than six hours. • Monthly bleeding not returned • Baby less than six months old.	• If mother is HIV + and replacement feeding IS NOT acceptable, feasible, affordable, safe or sustainable THEN • EXCLUSIVE breast feeding is safer than mixed feeding during first 6 months	None	• LAM is very effective

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Condoms (male or female) 85 - 98% effective ☺	• Protects against pregnancy AND STIs, including HIV/AIDS • Must be used correctly every time to be highly effective • Is a responsible way to show concern for your own and your partner's health.	Must be used every time ejaculation occurs near or in the vagina	In HIV high risk area use condoms **without** nonoxynl-9	Occasionally causes skin rash	Condoms: • prevent STI and pregnancy. • are used by married and not married couples. • are high-quality, do not have holes. • do not contain or spread HIV. • fit men regardless of penis size. • use means, person is caring & responsible. • may change the sensation of sex but still enjoyable. • Most people who use condoms do not have HIV and are healthy.

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Intrauterine Device (IUD) 99.2 - 99.4% effective ☺	• Highly effective without doing anything • Available at health center level but requires sterile technique • Good option for HIV positive women • Quick return to fertility after removal	• Insert in health center, good for 12 – 13 years with copper T • May insert during first 48 hours postpartum by trained providers	• Should not be inserted if purulent cervicitis, chlamydia, gonorrhea, or PID present.	• NOT associated with higher PID or infertility rates • May cause heavier monthly bleeding	IUDs do NOT: • cause infertility, • travel inside the body, • cause abortions • increase a woman's chances of getting HIV or of her passing HIV to her sex partner. • cause pelvic inflammatory disease.

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Progestin-only pill (POP) 92 - 99.3% effective ☺	• Used while breast feeding after 6 weeks post partum, or by women who should not use estrogen • Can distribute at community level • Can be used with most medical conditions • Take at the same time every day to prevent irregular bleeding and pregnancy	• Take daily – **must** ***be taken at the same time every day*** or will not protect as effectively	• Breast cancer, liver tumors, • Less effective if on certain drugs (Rimfampin)	• Irregular monthly bleeding, • Vaginal spotting, or • Amenorrhea	• POP's are very effective

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Progestin-only injectables (DMPA, Noristerate) 97 - 99.7% effective ☺	• Effective • Doesn't need to be remembered daily • Discreet • Usually only available in facilities	• Injection every 3 months for DMPA • Every 2 months for Noristerate • Can start after 6 wks post partum • Available subcutaneous with lower dose and same effect as DMPA	DMPA is ok for women taking Rimfampin	Changes in monthly bleeding and amenorrhea, weight gain, headaches, dizziness. BUT symptoms decrease within 4-6 months so counseling essential • Delay in return to fertility • Temporary loss of bone density	• Will NOT have negative effects on breast feeding, or if pregnant, the development of baby. • Do not give to a woman if early pregnancy cannot be ruled out. "The effects of **DMPA** use and its effects on the fetus remain unclear" (WHO MEC 2004)

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Implants (Jadelle, Implanon) 99.95% effective ☺	• Highly effective • Can be withdrawn early with quick return to fertility • Safe during breast feeding, • Nursing mothers can start implants 6 weeks after childbirth • Can be difficult to insert or remove	• Norplant: 6 rods remain in 7yrs no longer available 2008 • Jadelle: 2 rods/5yrs • Implanon:1 rod/3yrs • Implanon is easier to insert and remove	Implants not recommended for women taking Rimfampin	• Irregular monthly bleeding • Vaginal spotting or amenorrhea	

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Combined oral contraceptives (COC) 92 - 99.3% effective	• Reliable, • Can distribute at community level, • Protects against certain cancers, anemia's and other conditions • Quick return to fertility	• 1 pill taken daily • Can start any time assuming woman is not pregnant • No known adverse outcome reported when taken inadvertently during pregnancy	• If postpartum and breast feeding, start after 6 months after delivery • Smoking • History of venous thrombosis, • Hypertension systolic >160 or diastolic >100	Estrogen related side effects	• These are NOT contraindications : varicose veins, previous depression, benign ovarian tumors, STIs, HIV positive, thyroid disorders, simple migraines headaches and iron deficiency
Combined injectable contraceptives 97 - 99.3% effective	• Doesn't need to be remembered daily • Discreet • More regular bleeding cycles	Monthly injection			

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Vasectomy / Tubal Ligation >99% effective ☺	• Very safe, effective, and cost-effective • People often lack adequate information to overcome rumors	• Surgery one time for permanent protection • Can be done with C-Section • Not difficult, but often not taught in medical school	Vasectomy does not provide immediate sterility, must use another method for 3 months after surgery	No scalpel technique (male) with less pain and bleeding.	• Vasectomy does NOT affect sexual function • Vasectomy not associated with prostate cancer, heart disease or testicular cancer. • Women still get their monthly bleeding after a tubal ligation
Spermicide ☺	Easily available	Must be used every time	Not very effective by themselves	Can cause vaginal itching	Current spermicide do NOT protect from HIV or any STI; may enhance HIV transmission

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Natural methods – withdrawal, calendar-based and observation – based (Basal Body Temperature, Cervical Mucous [Billings] Standard Days Method, Rhythm, Symptothermal)	• Acceptable, free and no side effects • Depend on couple negotiation, commitment • Depends on couple's ability to identify fertile days and abstain or use other protection • High failure rates • Difficult to practice in lactating women	• Requires daily monitoring of fertility status • Depends on cycles	• If both members of the couple are not committed • Breast feeding women need to wait until they have resumed normal monthly bleeding	None	None

Method / Effectiveness	Advantages / Disadvantages	Usage	Limitations	Side Effects	The Truth About Misconceptions
Emergency contraceptive pills (ECPs)	Can prevent pregnancy after unprotected intercourse has occurred.	• Use 1.5 mg of progestin-only (levonorgestrel) • Use COC of 100 of estrogen and 0.50 of progestin followed by the same dose 12 hours later • Take pills up to 120 hours after unprotected sex, but more effective if taken in first 72 hours	• No medical contraindication except do not use during pregnancy. • Emergency contraception pills (ECPs) are not thought to be harmful but they are not as effective as routine contraception • They are not effective for on going family planning protection.	May have nausea and vomiting especially with COCs due to higher dosage	The ECPs do NOT interrupt an established pregnancy (they act before implantation)

HIV / AIDS Counseling
(Human Immunodeficiency Virus,
Acquired Immunodeficiency Syndrome)

Parents with HIV are an urgent and growing problem. Each year more than 600,000 newborns are infected with HIV, at a rate of one baby every minute of every day. The majority of these infections are in developing countries. As the number of women of childbearing age with HIV rises, so also does the number of infected children. This increases child morbidity and mortality.

Most men and women living with HIV have no symptoms for a long time (even 10 years) and may be untested. And people with HIV who have no signs of AIDS can easily pass the virus to others. A woman can get HIV/AIDS from someone who looks and feels completely healthy. Early signs of AIDS are fever, diarrhea, weight loss, and skin rashes. If people know they have HIV they may not want to talk about it.

Prevention can have major impact on improving overall maternal and child health through improved antenatal, delivery, and postpartum care. Teach women, family members and communities to talk about HIV and learn how they can be involved in key intervention strategies:

Primary Prevention. Decrease exposure of girls, women, and men to HIV infection. Explain that:

- HIV is transmitted by unprotected sex with someone who is HIV positive. Prevent transmission by teaching women, men, girls and boys that barrier methods of contraception must be used to prevent HIV and other STIs (safe sex skills).
- Preventing unwanted pregnancy in women with HIV is also an important strategy to guard against preventing HIV transmission.
- HIV may be transmitted by a woman who is HIV positive to her unborn baby during pregnancy or delivery or breast feeding. Prevent transmission by voluntary testing (VCCT) during pregnancy.

- If a woman does not have HIV counsel her in appropriate prevention methods. If a woman knows she has HIV, early counseling and antiretroviral medications can reduce the risk of HIV transmission during pregnancy, labor and delivery, and the postpartum period. Education for the community reduces stigma and develops an attitude that supports women who face difficult decisions related to HIV transmission.
- Pregnant and breast feeding women should be counseled to use condoms to prevent primary HIV infection or re-infection, which increases viral load and the risk of HIV transmission.
- Family planning and newborn feeding options are important to discuss early in the pregnancy. **Promoting affordable, feasible, acceptable, safe, sustainable feeding for the baby is life saving. Breast feeding is one of the best ways** to ensure the health of babies in resource poor environments. Babies who are not breast fed are almost six times as likely as breast fed babies to die in the first two months of life. WHO, UNICEF, and UNAIDS have affirmed that breast feeding remains the best and safest choice for women who do not have HIV or who do not know their HIV status. There are also considerations of the stigma a woman may face with her family and community if she does not breast feed her baby. If an HIV-positive woman chooses to breast feed, she should do so exclusively for about the first six months. Giving the baby both breast and formula (mixed feeding) increases the risk of HIV transmission and diarrheal disease.
- Pregnant women with HIV infection should be advised to report any signs of malaria, tuberculosis, STIs and other infections to receive treatment reducing the risk of HIV transmission.
- Safer Delivery Practices: use good infection prevention practices for all patient care, do vaginal exams when absolutely necessary, avoid prolonged labor, avoid tears of perineum and vagina, and use AMTSL to reduce risk of postpartum hemorrhage. These practices can reduce the risk of HIV transmission during labor and birth, see Module 3: Labor.

- Counsel women to reduce the risk of HIV transmission with breast feeding by: (1) initiate breast feeding soon after delivery, (2) practice good breast feeding techniques, and (3) exclusively breast feed their babies for the first six months.

Postpartum care for women infected with HIV should be similar to that for women without HIV. Separate nursing facilities are not necessary because HIV does not easily spread from woman to woman. Actions and decisions made during pregnancy and labor make a difference during the postpartum time. Universal precautions and infection prevention used during pregnancy and labor may reduce the possibility of HIV exposure to the baby. A mother with HIV:

- May not take care of herself if she must care for other children and family members as well as her baby.
- Is more likely to get postpartum infection.
- May have problems managing ARV treatment for her baby and herself.
- May be at increased risk for postpartum depression.

Advise women and their families about the special care needed to prevent infections.

- Counsel the woman and her family about getting help as soon as there is a sign of infections such as perineal and bladder infections.
- Explain that her lochia can cause infection in other people: she should burn or bury blood stained pads and cloths or wash them herself.
- Connect the woman with medical and supportive care services, including HIV specialty care, postpartum care, family planning, and treatment services for mental health or substance abuse, if indicated.
- Help her get assistance with food, housing, transportation, and advocacy, if needed.
- Help her with continued support and attention.

Advise about the newborn exposed to HIV.

- The baby exposed to HIV should be followed in the first months of life and given appropriate care. The risk of HIV transmission through breast feeding can be reduced if the risk factors are understood.

Risk Factors for Postpartum Transmission of HIV

Mother	Newborn
• Low immune/health status • High viral load in blood • HIV in breast milk • Breast inflammation (mastitis, abscess, nipple lesions) • New HIV infection • Type of HIV	• Breast feeding duration • Non-exclusive breast feeding • Age (first months) • Lesions in mouth, intestine • Diarrhea • Prematurity • Poor newborn immune response

Source: Linkages 2004.

- If the woman with HIV chooses to breast feed (or where there is no other choice), help her to exclusively breast feed for 6 months, followed by rapid weaning. Exclusive breast feeding for up to six months showed a decreased risk of transmission of HIV compared to non-exclusive breast feeding in three large studies (WHO, 2006).
- Teach breast feeding mothers correct breast feeding technique, including prevention, recognition, and prompt management of breast problems (such as cracked nipples, mastitis, abscess), and oral thrush in the baby.
- Replacement feeding poses no risk of HIV transmission for a woman with HIV. Replacement feeding is recommended for the first 6 months **if and only if the replacement feeding is acceptable, feasible, affordable, sustainable, and safe**. If the mother chooses not to breast feed, she may need a private room and counseling on reducing the stigma of not breast feeding.

Postpartum Prevention. Uninfected mothers can protect themselves and their breast feeding babies from infection by practicing safer sex. The risk of transmission through breast feeding is higher if the mother is newly infected when breast feeding. For both the mother with HIV and the mother without HIV who choose not to breast feed, two types of protection (dual method use) must be used. Dual method means using condoms and another family planning method. When a mother does not breast feed, she loses the contraceptive protection from LAM.

Support and Encouragement. The mother with HIV may have many concerns. Listen to her fears and concerns. Talk with the mother about these concerns and invite her to bring a friend or family member to discuss the concerns with you. She may fear being abused in the community, by relatives, and neglected by health workers. Worrying about her new baby may be a constant concern. The smallest illness in the baby can give the mother a feeling of guilt that she may be responsible for infecting her baby. Help her think about her situation and decide the best option for her, her baby and her partner. Support her choice. Help her find places and people for support. Work with women and families to find and develop support groups, home care, and money making activities to support such groups in the community.

Lactational Amenorrhea Method (LAM) Counseling

- Encourage all women to start breast feeding immediately within the first hour after birth and to breast feed exclusively.
- Women with HIV/AIDS should be offered the choice to use replacement feeding ONLY if the replacement feeding is acceptable, feasible, affordable, safe and sustainable. Women who are HIV positive and exclusively breast feed their babies are more likely to have healthier babies than those who mix feeds or are unable to continue replacement feedings.
- When babys are offered colostrum and continue with breast feeding, the Lactational Amenorrhea Method (LAM) is started.
- LAM is more than 98% effective in preventing pregnancy during the first 6 months postpartum. It is a temporary method.
- **All of the following must be true for LAM to work:**
  - **Baby is less than six months old.**
  - **Mother fully breast feeding: gives only breast milk, not even water whenever baby is hungry, with at least one feed during the night.**
  - **Mother has not yet started her monthly bleeding.**
- LAM can introduce the woman to family planning. In one study women using LAM at 6 months were over 40% more likely to be using another modern method at 12 months. However, only 13% of women using any method at 6 months were using a modern method at 12 months.
- See Counseling: Breast Feeding for additional information on breast feeding.

Post Abortion Counseling

For uncomplicated Post Abortion care following a MVA, advise the woman and her family about the signs of normal recovery, medications, follow up and return of fertility.

Signs of a normal recovery are:

- Some mild uterine cramping over the next few days, which may be relieved by mild analgesics like ibuprofen or panadol.
- Some spotting or bleeding which should not be more than a normal menstrual period.
- A normal menstrual period should occur within 4 to 8 weeks.

Advice about medications, follow up, and fertility. Give the woman advice:

- She should not have sexual intercourse or put anything into the vagina (no douching, no tampons) until after the bleeding stops in 5 to 7 days.
- Her fertility can return in less than 2 weeks after the MVA procedure, give contraceptive counseling, offer family planning method if another pregnancy not wanted – see family planning counseling for family planning methods.
- Explain to the woman and her family the warning signs and symptoms of problems, what to do, and where to go for emergency care. Remind her of the warning signs and symptoms:
  - Prolonged cramping, more than a few days.
  - Prolonged bleeding, more than 2 weeks.
  - Bleeding more than normal menstrual bleeding.
  - Severe or increased pain.
  - Fever, chills, or malaise (tired all the time).
  - Fainting or weakness.

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Follow up care. If a woman wishes to prevent pregnancy, give her the contraceptive method of her choice **before** she leaves the facility or tell her where to get her desired method at a follow up appointment. If the woman does not choose a family planning method when leaving after the MVA, encourage her to return in one week so that you can check her:

- To see if she is healing or has other problems or may need to be referred.
- To be sure she understands about the return of fertility. Remind her that her **fertility returns almost immediately** after an abortion (miscarriage). If the pregnancy was less than 12 weeks, it can be as early as 10 days after the abortion.
- To give her more family planning information so she can make a decision. She will need to decide whether or not she wants to become pregnant. The counseling must be appropriate for the woman's emotional and physical condition. Encourage her to wait 6 months for another pregnancy to reduce the chances of low birth weight, premature birth, and maternal anemia.
- This may not be the best time for her to make decisions that are permanent or long term. Give her complete information for her choices in the selection of available contraceptive methods including intrauterine devices (IUDs), injectables, implants, and voluntary sterilization. Most contraceptive methods may be used and can be started immediately unless there are major post abortion complications, see next page for contraceptive method use after abortion.

Contraceptive Method Use After Abortion

Source: Ipas, 2004, adapted for LSS, 2008.

Woman's Clinical Situation	Contraceptive Method Issues
NO COMPLICATIONS	**Do not delay** starting method use within 10 days following uncomplicated abortion. Most methods can be given immediately. **Wait** until a normal menstrual pattern returns before using natural family planning (rhythm, periodic abstinence).
INFECTION (confirmed or presumptive) o signs of unsafe/ induced abortion, or o signs/symptoms of sepsis, or o unable to rule out infection	Provide a short-term method and make a follow up appointment/referral. Consider any other method**.** Delay female sterilization /IUD insertion until infection is resolved.
TRAUMA to genital tract o uterine perforation o serious vaginal or cervical trauma o chemical burns	Provide a short-term method. Make a follow up appointment or referral. Delay female sterilization/IUD insertion until trauma is healed. If abdominal surgery is done to repair trauma, sterilization may be done at same time. Female barriers/spermicides are not used with trauma, use other method.
HEMORRHAGE AND SEVERE ANEMIA Resolve hemorrhage before FP.	Provide short term method. Make a follow up appointment or referral. Delay female sterilization/copper IUD because of blood loss.

Postpartum Counseling

<table>
<tr><th colspan="6">Focused Postpartum Care</th></tr>
<tr><th>FIRST CHECK</th><th>SECOND CHECK</th><th>THIRD CHECK</th><th>FOURTH CHECK</th><th>FIFTH CHECK</th><th>SIXTH CHECK</th></tr>
<tr><td>Birth</td><td>Within first 24 hours after birth or if not attended by midwife as soon as possible</td><td>2 – 3 days after birth</td><td>7 – 10 days after birth</td><td>4 – 6 weeks after birth</td><td>6 months after birth</td></tr>
<tr><td colspan="6">WOMAN</td></tr>
<tr><td rowspan="2">See Mod 3</td><td>Blood Loss
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Blood Pressure
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o Rest
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<tr><td colspan="6">BABY</td></tr>
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Immunize
Stimulation: talking, singing</td><td>Growing & Developing

Weaning or encourage continued breast feeding</td></tr>
</table>

POSTPARTUM COUNSELING – WITHIN FIRST 24 HOURS
2nd visit if attended within 6 hours after the baby is born, or 1st & 2nd visits as soon as possible if not attended.

WOMAN

Use the **Skill Checklist** for the history and examination.

Blood Loss should be red but decreasing in amount, and no bad smell.

- Wash with soap and water, from front to back after passing urine and stool.
- Urinate often. Full bladder my make uterus soft causing too much bleeding.
- Wash her hands before eating and after toilet.
- Change her cloth/pad at least twice a day. Not normal: need to change pad hourly or fist-sized clots.
- Bathe daily

Pain in the Uterus – happens because the uterus is trying to get blood out. It is more painful when baby is breast feeding, also more painful with each additional pregnancy, should feel better each day.

- Uterus should feel hard, remind how to feel uterus and how to keep uterus hard.
- Take time to rest as this prevents too much blood loss and will lessen the pain. When your baby takes a nap, it is time to sit down and rest also.

Blood Pressure – should be normal. Remind mother to let you know if she has headache, visual changes, heart burn or convulsions. These are danger signs and need to be treated.

Danger Signs – Tell the mother and family to let you know right away if she has any danger signs, see page 1.

Give Treatment – Vitamin A (for breast feeding mothers during the first month of delivery, if used in your area). Complete Tetanus Toxoid immunization, as needed. See Formulary.

POSTPARTUM COUNSELING – WITHIN FIRST 24 HOURS
2nd visit if attended within 6 hours after the baby is born, or 1st & 2nd visits as soon as possible if not attended.

Other Advice

- **Nutrition.** Continue to take iron and folate pills for 40 days to keep your blood strong. Eat healthy food at least four times a day, or every time she breast feeds. Drink fluids every time she breast feeds.
- **LAM.** Remind the woman and her partner that they should wait until the woman stops bleeding before they have sex. See Counseling: Family Planning - LAM.
- **Emergency Referral Plan.** Review "Referral Plan" that she and her family have in place. If she does not have one, talk with mother and the family about being ready in case there is a problem with the mother or baby.
- **Postpartum Follow Up Visits.** Explain the importance of checking on the mother and baby at 2-3 days, 6-10 days, 4-6 weeks, and 6 months. If at all possible, try to make the visits in the home. Ask the woman if she can come to the clinic at 4-6 weeks so that you can weigh the baby and do an examination on the woman.

BABY

Breathing should be without difficulty, although it may be faster at first, then slower as the baby gets used to breathing.

Warmth. Keep the baby warm in the first days after birth, while the baby is adjusting to being in our world.

- Keep the newborn in skin to skin contact with her mother. Skin to skin is the safest and best way to warm a baby.
- Encourage all mothers to breast feed on demand keeping mother and baby together. Breast milk helps baby produce own body heat.
- Delay bathing the baby for 24 hours.
- Keep baby's head covered. Teach mother how to check for hypothermia (cold feet of baby) and how to warm baby.

POSTPARTUM COUNSELING – WITHIN FIRST 24 HOURS
2nd visit if attended within 6 hours after the baby is born, or 1st & 2nd visits as soon as possible if not attended.

Low Birth Weight needs special care. See Protocol: Low Birth Weight Baby, page 71.

Feeding. Not able to suck is a danger sign. Encourage the mother to sleep with her baby (under a mosquito net in malaria areas). This will make the baby feel safe, stay warm and protect against bites.

- Encourage the mother to feed her baby only colostrum or breast milk every 2-3 hours – at least 10-12 times in 24 hours. Other foods or liquids, including water, can make the baby sick. Also, if other foods or fluids are given, the baby will not feel hungry and will not suck and the mother's milk supply will decrease.
- Avoid bottles and pacifiers because they can confuse a baby and cause her to refuse the mother's breast.
- Baby should wet at least 6 times in 24 hours and the urine should be clear to pale yellow.
- First stools / bowel movements are black in color, will change to yellow during the first week of life.
- Encourage mother to breast feed exclusively for 6 months and continue up to 2 years or longer.
- If a baby is having trouble breast feeding, use the LATCH tool in Counseling: Breast Feeding.

Cord. Until the cord dries and falls off, it can be a place of infection. Retie the cord if leaking fresh blood.

- Keep the area around the cord clean and dry.
- Do not cover cord tightly. Clothing should be soft to cover cord. Keep the cord exposed to the air as much as possible.
- Clean around the cord stump with soap and water daily until the cord falls off (if it is tradition to do something to the cord stump), otherwise keep the area dry.
- Remind mother to wash her hands frequently, and before and after touching the cord.

POSTPARTUM COUNSELING – WITHIN FIRST 24 HOURS **2nd visit if attended within 6 hours after the baby is born, or 1st & 2nd visits as soon as possible if not attended.**
• Encourage mother to let you know if there is redness around the cord stump, discharge from the area, or if there is a bad smell, see Protocol: Infection - Cord Stump.
Immunizations. Counsel mother on importance of immunizing her baby and advise that even a small baby can be immunized without harm. • Immunize with BCG vaccine, the first dose of OPV, and in areas with high hepatitis rates, Hepatitis B vaccine. • Explain side effects that may occur. • Counsel the mother about the importance of completing the immunization schedule.
Danger Signs. Talk to the mother about danger signs and where to go for referral. See Danger Signs for baby, page 1.

Add other counseling information.

POSTPARTUM COUNSELING – FOLLOW UP VISITS
3rd visit (2-3 days) and 4th visit (7-10 days)

WOMAN

Use the Skill Checklist for the history and examination. As you talk with and examine the mother, watch her relationship with her baby. Usually the mother appears to enjoy physical contact with her baby. She touches, keeps the baby turned toward her and stimulates the baby with talking and singing.

Infection. Remind the mother to tell you if she has a fever, a bad smell to her discharge, her uterus hurts more each day, she has pain in one breast or pain when pass urine.

- A little fever is usually normal when the milk is coming in about 2-3 days after birth.
- Your uterus will continue to get smaller during the next weeks until it is almost as small as before you were pregnant. If there is more pain in the uterus each day, this is a danger sign.
- As your uterus gets smaller, it is squeezing any remaining blood out. This blood changes in color and amount: (1-3 days after birth) darker in color and moderate in amount, (7-10 days after birth) light pink in color and minimal in amount. If the blood smells bad or remains red, this is a danger sign and the mother should tell you.
- Remember to wash with soap and water, from front to back, each time you pass urine or stool. Change your pad/cloth at least twice a day even if there is not too much blood. Try to sit with your legs apart (without a pad), so air can get to the genital area to help with healing.

Mood / Abuse. Most women feel strong emotions after having a baby. It is important to give her emotional support. Ask the mother how she is feeling about the baby and if she has any questions about caring for the baby. Ask the mother if she is able to get any rest, if not why?

- Feeling sad or worried may take a few days, weeks or months. Listen to the woman, explain that these kind of feelings are common.

POSTPARTUM COUNSELING – FOLLOW UP VISITS
3rd visit (2-3 days) and 4th visit (7-10 days)

- When sad feelings are very strong, it is called depression. Someone should stay with the woman and help her.
- Women who do not have family support or have abusive partners may be depressed and/or need a safe place to go, help in caring for her baby, and even food and money. Look for places in your area where help may be given.
- There are traditional and modern treatments to help her feel better. Advise the family to look for treatment if the depression lasts a long time.

Danger Signs. Remind the mother to come to you if any danger signs, see page 1.

Postpartum Advice

Nutrition.

- Continue to take iron and folate pills for 40 days.
- Take at least one extra serving of main food, Group 1, each day.
- Increase daily intake of fruits and vegetables, Group 3, and Group 2.
- Drink fluids at least every time she breast feeds.

Group 1 – Main food at each meal for **energy**: rice, maize, wheat, cornmeal, yam, bread, millet, cassava, taro, plantain.
Local foods:_____

Group 2 – Food to help you **grow** muscles, bones and strong blood: legumes (beans, peas, lentils), nuts & seeds, meat, fish, insects, eggs, cheese, milk & yogurt.
Local foods:_____

Group 3 – Food to help **protect** you from infection and keep your body healthy and strong: fruits and vegetables.
Local foods:_____

Group 4 – Food to give you **energy**: fats (nuts, seeds, avocados, vegetable oil, butter, ghee, lard), and sugar (fruits, honey, molasses).
Local foods:_____

POSTPARTUM COUNSELING – FOLLOW UP VISITS
3rd visit (2-3 days) and 4th visit (7-10 days)

Hygiene.

- Wash your hands before touching your baby, preparing food and after going to toilet.
- Bathe daily if possible, always wash your genitals after going to the toilet.
- Have a latrine or dispose of feces (stool) by burying or burning and use footwear to prevent anemia from hookworm infections where endemic.
- Wash clothing and dry in the sunlight.

Breast Care. Wash only with water, let nipples air dry. See Counseling: Breast Feeding.

Rest. Remind woman and family, that rest prevents infection. Rest helps the woman heal, helps her and her baby to be closer, and keeps the woman away from germs outside of her home. If possible, she should not do heavy work for 6 weeks.

Exercise. Many women get all the exercise they need by carrying water, working in the fields, chasing children, and walking. If you work in an office or work sitting most of the day, walk home from work or do your regular work at home for exercise.

- The squeezing exercise (Kegels) strengthens muscles in the pelvis and vagina and can help prevent leaking urine and some women say it increases sexual pleasure.
- You can learn to do this while you are passing urine. As the urine comes out, squeeze the muscles to stop the urine. Once you learn to do this, do it when you are not passing urine. Practice at least 4 times a day, doing about 10 squeezes each time.

LAM on page 115 and **Family Planning** on page 96 for counseling information.

Emergency Referral Plan. Review the plan that she and her family have in place. Talk with mother and the family about being ready in case there is a problem with the mother or baby.

POSTPARTUM COUNSELING – FOLLOW UP VISITS
3rd visit (2-3 days) and 4th visit (7-10 days)

Postpartum Visits: Talk about the importance of checking on the mother and baby at 4-6 weeks, and 6 months. Plan for the 4-6 weeks visit at the clinic or health center. See the woman and baby before the next visit if there is a problem you treated or if the woman seems uncertain about the information you gave her.

Baby

Stimulation. Encourage mother to talk, and sing to her baby. Model this behavior when you are talking with the mother about the baby.

Warmth and Feeding.

- Encourage the mother to have her baby sleep with her under a mosquito net (malaria areas). Keep the baby close to her during the day. This makes it easy to breast feed the baby on demand while keeping the mother and baby together. Breast milk will help the baby produce her own body heat.
- Keep the baby's head covered for the first week and anytime when exposed to the sun and the air.
- See Counseling: Breast Feeding for more about feeding on demand, exclusive breast feeding, avoiding bottles / pacifiers, how to tell the baby is getting enough breast milk.

Cord. Until the cord dries and falls off, and the umbilicus is dry and healed, this is a place for infection.

- Keep the area around the cord clean and dry.
- Do not cover the cord with any bandage or cloth. Clothing should be soft to cover the cord. Keep the cord exposed to the air as much as possible.
- Clean around the cord stump with soap and water daily until the cord falls off (if it is tradition to do something to the cord stump), otherwise keep the area dry.
- Remind mother to wash her hands frequently, and before and after touching the cord.

POSTPARTUM COUNSELING – FOLLOW UP VISITS **3rd visit (2-3 days) and 4th visit (7-10 days)**
• Encourage mother to let you know if there is redness around the cord stump, discharge from the area, or if there is a bad smell, see Protocol: Infection - Umbilical Cord, page 65.
Immunizations. Counsel mother on importance of immunizing her baby and advise that even a small baby can be immunized without harm. • Immunize with BCG vaccine, the first dose of OPV, and in areas with high hepatitis rates, Hepatitis B vaccine. • Explain side effects that may occur and the importance of completing the immunization schedule.
Danger Signs. Talk to the mother about danger signs and where to go for referral. See Danger Signs for baby on page 1.

Add other counseling information.

Add other counseling information.

POSTPARTUM COUNSELING – FOLLOW UP VISIT
5th visit (4-6 weeks)

Woman

After you examine the woman to confirm uterus nonpregnant size, perineum is healed, no signs of infection or anemia, talk about: recovery, self-care and family planning. Ask if she has any questions or concerns.

Recovery. Remind the woman if she is using LAM, her menses will not start until close to 6 months after birth. Ask about pain, breast feeding, help from family, and any treatments given at earlier visits.

Self-Care. After birth, the mother's body needs time to heal. It is easy for her to get infected. Advise her and her family about:

- Rest. Be comfortable when feeding the baby and relax. Don't do any heavy work for at least 6 weeks.
- Nutritious Foods. Eat many kinds of available foods, see page 125.
- Fluids. Drink fluids every time you feed your baby.
- Hygiene. Remind her about washing her hands, breasts, and genitals.

Family Planning. Find out what she and her partner want in terms of spacing / limiting of pregnancies? Has she used LAM before? What is her previous FP practice? See Family Planning Counseling to provide information on available contraceptive methods. Remind her that choosing to space / limit pregnancies protects both the mother and the children.

Postpartum Visit. Ensure that mother is seen between six weeks and six months, before fertility returns. Give date and explain the need to see the mother and baby at 6 months.

Baby

As you examine the baby, confirm weight gain, growth, and adequate breast feeding and discuss continued breast feeding and care for the baby.

POSTPARTUM COUNSELING – FOLLOW UP VISIT **5th visit (4-6 weeks)**
Feeding. Encourage the mother to feed only breast milk on demand both day and night. No other foods or liquids are given until the baby is 6 months. Talk with the mother about continuing to breast feed up to 2 years or age or longer.
Immunizations. Talk with the mother about prevention of diseases and immunization schedule. Use the Under Five Weight and Immunization card to talk about immunizations using your local schedule for immunizations: • Diphtheria vaccine is given at 6, 10 and 14 weeks after birth • OPV (polio) is given at birth or as soon as possible after birth then at 6, 10 and 14 weeks after birth • Hepatitis B vaccine is given at birth or as soon as possible after birth then at 6 and 14 weeks after birth • Talk about that sometimes the baby will get fever, a little swelling, redness, and pain in the area where the injection was given. This will go away in a few days. • Counsel the mother about the importance of completing the immunization schedule so that the medicine does help to prevent diseases.
Danger Signs. Remind the mother about the danger signs, page 1. Talk with her about where to go for a referral.

Add other counseling information.

7. Formulary

The Formulary section contains the information that you will need to use and dispense medications (drugs) safely and effectively. There is information about how to take a medication history, how to calculate doses, the importance of giving instructions to the woman/family. There is information about specific medications essential for saving lives. The medications are listed according to categories of use, for example, infections (antibiotics) or bleeding (oxytocics). It is not an exhaustive list. There is room for you to add other medications you use. Each medication listed includes a description of the uses, dosages, warnings and patient instructions. Most medications are for women. When a medication is for a child or newborn it is always labeled – **newborn or child**.

Antihistamine / Allergic Reaction

Adrenaline (epinephrine)	
Use	Treats severe allergic reactions, severe septic shock and anaphylactic shock.
Dose	• Take pulse before injecting. • Inject IM in lateral thigh or back of upper arm SC, may give up to 3 doses 20 - 30 minutes a part. • Adults and children over 40 kg – 0.5 ml of 1:1000 solution IM or SC • Children o 20-40 kg – 0.3 ml of 1:1000 solution IM/SC o 10-20 kg – 0.2 ml of 1:1000 solution IM/SC o under 10 kg – 0.1 ml 1:1000 solution IM/SC
Warning	Do not repeat dose, if pulse increases more than 30 beats per minute.
Patient Instructions	May feel restless, nervous, tension, headaches, dizzy, fear.
Other Drugs that Work	Diphenhydramine

Diphenhydramine (benadryl)	
Use	Treats allergic reactions and allergic shock, used for chronic itching.
Dose	• **Mild to moderate** allergic reaction (no difficulty breathing): 25 mg by mouth every 6 hours until signs go away. • **Severe** allergic shock (difficulty breathing): 50 mg IM. Repeat in 4 hours if signs do not improve. • **Chronic itching:** cream or ointment 1%. Apply a little on affected area, (not eyes or mouth). Rub in lightly. Do not use longer than 2 weeks.
Warning	Only give IM for severe allergic reactions and shock. Use only for emergency during pregnancy or when breast feeding.
Patient Instructions	Do not take with alcohol or tranquilizers. Side effects include sleepiness and dryness of the mouth and nose. May cause nausea and vomiting in some people.
Other Drugs that Work	Promethazine

Promethazine	
Use	Treats allergic reactions and allergic shock.
Dose	• **Mild to moderate** allergic reaction: 25 mg by mouth. Repeat in 6 hours if needed. • **Severe** allergic shock: 50 mg IM. Repeat in 6 hours if needed.
Warning	Best taken by mouth. Only give IM for severe allergic reactions and shock. Do not use regularly during pregnancy or when breast feeding, but only for emergencies.
Patient Instructions	Side effects may include dry mouth and nose, and blurry vision. Rarely twitching of the body, face or eyes occur.
Other Drugs that Work	Diphenhydramine

Analgesic

Aspirin	
Use	Temporary relief of minor aches and pain, reduce fever.
Dose	• 325 – 650 mg by mouth every 4 hours • Not to exceed 12 tablets (3900 mg) in 24 hours.
Warning	Do not give to pregnant women during the last 3 months of pregnancy. It may cause problems in the baby or complications during delivery. Do not use if patient allergic to any pain reliever. May cause allergic reaction and stomach bleeding.
Patient Instructions	Take every 4 hours with milk or food for pain, aches, and fever. Drink a full glass of water each time you take the medicine.
Other Drugs that Work	Paracetamol

Paracetemol (acetaminophen, Tylenol)	
Use	To relieve pain and fever.
Dose	• 500 to 1000 mg by mouth every 4 to 6 hours
Warning	Paracetamol does not cure sickness; it only eases pain or fever. It is important to find the cause of the pain or fever and treat the problem. Paracetamol should not be used by anyone with liver or kidney damage.
Patient Instructions	Do not use with any other product containing acetaminophen. Do not take paracetamol while drinking alcohol or after drinking alcohol.
Other Drugs that Work	Aspirin

Pethidine or meperidine (Demerol, isonipecaine; lidol; pethanol; piridosal; Algil; Alodan; Centralgin; Dispadol; Dolantin; Petidin Dolargan (in Poland); Dolestine; Dolosal; Dolsin; Mefedina)	
Use	Reduction or relief of moderate to severe pain.
Dose	• Adults 50 to 100 mg IM every 4 to 6 hours
Warning	Pethidine has serious interactions and should not be used with: antidepressant drugs, muscle relaxants, benzodiazepines, alcohol. Side effects are nausea, vomiting, constipation, drowsiness and confusion. Do not give pethidine within 4 hours of delivery. It may cause respiratory depression in the newborn and baby will be slower to suck, less alert.
Patient Instructions	This medicine will reduce the pain you are feeling. The drug passes from you to the baby and may make your baby too sleepy. Tell us if you are taking any other medications.
Other Drugs that Work	Morphine

Morphine Sulfate	
Use	Relieve severe pain in ruptured ectopic pregnancy, ruptured uterus, and other causes of severe pain.
Dose	• Adults 10 mg IM every 4-6 hours for severe pain. • **Newborns**. Do not give to babies.
Warning	Use morphine only in an emergency. Do not give to anyone in shock, or to anyone with severe asthma, head injuries or respiratory distress. Morphine can cause nausea, loss of appetite, constipation, confusion, and sweating.
Patient Instructions	This drug is a powerful pain-killer. It will help you feel better. It can make you feel sick to your stomach. It can cause sweating and make you feel confused.
Other Drugs that Work	Pethidine

Anesthetic

Lidocaine (lignocaine) without epinephrine	
Use	To block pain in the body where it is injected. Can be used to repair an episiotomy or laceration or to prevent pain during manual vacuum aspiration.
Dose	• Inject: 5 – 20 ml 1% solution. • Maximum safe dosage: 20 ml of 1% solution, 10 ml of 2% solution.
Warning	Do not inject into vein. Only use lidocaine without epinephrine. Epinephrine can stop the flow of blood to the area injected and cause damage.
Other Drugs that Work	Xylocaine

Xylocaine without epinephrine	
Use	To block pain in the body where it is injected. Can be used to repair an episiotomy or laceration or to prevent pain during manual vacuum aspiration.
Dose	• Inject: 5 – 20 ml 1% solution. • Maximum safe dosage: 20 ml of 1% solution, 10 ml of 2% solution.
Warning	Do not inject into vein. Only use xylocaine without epinephrine. Epinephrine can stop the flow of blood to the area injected and cause damage.
Other Drugs that Work	Lidocaine

Antibiotics / Antibacterial

Suggested Medicines for Problems (Or Use Local Protocol)

PROBLEM	SUGGESTED MEDICINES
Bacterial vaginosis	metronidazole
Bladder or kidney infection	amoxicillin, co-trimoxazole
Breast infection	dicloxacillin, erythromycin
Chancroid	erythromycin, ceftriaxone
Chlamydia	erythromycin amoxicillin
Female genital cutting infection	erythromycin, amoxicillin
Gonorrhea	ceftriaxone, cefixime
Newborn infections	ampicillin, gentamicin, benzylpencillin
Pelvic infection	ampicillin, metronidazole
Post Abortion infection	ampicillin, gentamicin, metronidazole, doxycycline
Postpartum infection	gentamicin, ampicillin, metronidazole
Pregnancy infection	ampicillin, metronidazole
Ruptured membranes	benzylpencillin, amoxicillin
Sexually transmitted infections	erythromycin, amoxicillin, ceftriaxone, cefixime, metronidazole
Syphilis	benzathine benzylpenicillin, erythromycin
Trichomonas	metronidazole
Uterine infection in labor	ampicillin, benzylpenicillin G

Amoxicillin	
Use	Used to treat a broad range of bacteria including uterine infections, urinary tract infections, pneumonia, and other infections. May be used instead of ampicillin.
Dose	• **Kidney or Chlamydia infections**: 500 mg by mouth 3 times a day for 7 days. • **Mastitis, Pelvic infection, & Female Genital Cutting Infection**: 500 mg by mouth 3 times a day for 14 days. • **Prevent infection** after invasive procedure:1 gm by mouth 1 time AND metronidazole.
Warning	Do not give to someone allergic to drugs in the penicillin family. Penicillin's reduce the effectiveness of hormonal contraceptives.
Patient Instructions	Take with food. Side effects: diarrhea, nausea, vomiting, rash, yeast infection.
Other Drugs that Work	Ampicillin, erythromycin, co-trimoxazole.

Ampicillin	
Use	Effective against a broad range of bacterial infections of the reproductive system, throat, chest, skin and urinary system.
Dose	• **Uterine infection during labor**: 2 grams by mouth 4 times a day for 7 – 10 days AND give metronidazole. • **Post abortion or Postpartum uterine infection**: 2 grams by mouth 4 times a day until fever is gone for 48 hours AND give metronidazole. --- • **Newborn infections**: 50mg/kg IM 2 times a day for 7 days AND give gentamicin.
Warning	Do not give ampicillin to anyone allergic to drugs in the penicillin family. Use cautiously in anyone who has had allergic history such as asthma or eczema. Ampicillin can reduce the effectiveness of hormonal contraceptives.
Patient Instructions	Take this medicine 4 times a day, about 30 minutes before you eat, until all medicine is used. Take it also at bedtime. If you get an itchy skin rash, stop taking the medicine right away, and come back to clinic. If you get stomach upset or diarrhea or yeast infection in women or if diaper rash in babies come back to the health facility.
Other Drugs that Work	Amoxicillin. If allergic to penicillin's give erythromycin.

Benzylpenicillin G (crystalline, penicillin G, Aqueous, X-Pen)	
Use	Initial treatment in newborn tetanus. To treat serious bacterial infections and reduce the risk of uterine infection when the bag of waters is broken for over 18 hours.
Dose	• **Ruptured membranes 18+ hours** 2 million Units IV every 6 hours until delivery • **Sepsis**:1 million Units IM every 6 hours, severe sepsis give IM every 2 hours, REFER --- • **Tetanus in the newborn**: 100,000 Units IM in the front of the thigh 1 time only. • **Sepsis in newborn**: 50,000 Units per kg IM every 6 hours REFER
Warning	Do not give to someone allergic to drugs in the penicillin family. Be prepared to treat an allergic reaction.
Patient Instructions	May cause yeast infection in women or diaper rash in babies. If this happens come back to the health facility.
Other Drugs that Work	Ampicillin, procaine penicillin.

Benzathine Benzylpenicillin (penicillin G benzathine)	
Use	A long-acting antibiotic of the penicillin family used to treat syphilis, genital ulcers, and other infections. First choice treatment for syphilis.
Dose	• **Syphilis**: 2.4 million Units IM 1 time only. Give as 2 injections (1.2 million Units in each buttock). Always give as an IM injection. • **Syphilis for 2 years or more**: REFER. She needs different medicines. • **Newborn exposed to syphilis**: 50,000 Units per kg IM 1 time only, REFER.
Warning	Do not give to someone allergic to drugs in the penicillin family. Be prepared to treat an allergic reaction.
Patient Instructions	Bring your partner for treatment. May cause yeast infection in women or diaper rash in babies. If this happens come back to the health facility.
Other Drugs that Work	Erythromycin

Cefixime (suprax)	
Use	Used to treat many infections including gonorrhea, pelvic infection and others.
Dose	• **Gonorrhea**: 400 mg cefixime by mouth one time only. • **Pelvic infection**: 400 mg cefixime by mouth one time only AND metronidazole AND erythromycin.
Warning	Do not give cefixime to someone allergic to medicines in the cephalosporin family. Watch for allergic reactions if allergic to penicillin. Be ready to treat an allergic reaction. Refer anyone with kidney problems.
Patient Instructions	Side effects may include nausea, diarrhea and headache. May cause yeast infection in women or diaper rash in babies. If this happens come back to the health facility.
Other Drugs that Work	Cerftriaxone, erythromycin, amoxicillin

Ceftriaxone (rocephin)	
Use	A very strong antibiotic. Used for many infections including gonorrhea, pelvic infection, kidney infections, and serious infections after abortion, labor or miscarriage.
Dose	• **Gonorrhea infection**: 250 mg IM 1 time only. • **Chancroid infection**: 250 mg IM 1 time only. • **Newborn gonorrhea infection**: 125 mg IM in the thigh 1 time only.
Warning	Do not give ceftriaxone to someone allergic to medicines in the cephalosporin family. Be ready to treat an allergic reaction.
Patient Instructions	May cause yeast infection in women or diaper rash in babies. If this happens come back to the health facility.
Other Drugs that Work	Cefixime, erythromycin, amoxicillin

Co-trimoxazole (160 mg trimethoprime + 800 mg sulfamethoxazole)	
Use	Used to treat bladder, kidney and other infections. It also helps prevent diarrhea and pneumonia for people with HIV/AIDs.
Dose	• **Kidney and Bladder Infections**: 960 mg (1 tablet) by mouth 2 times a day for 7 days.
Warning	Do not give to women in the last 3 months of pregnancy. Do not give to someone allergic to medicines in the sulfa family.
Patient Instructions	Drink at least 8 large glasses or more of water a day. Stop taking co-trimaxazole if it causes allergic reactions like itching or rashes.
Other Drugs that Work	Amoxicillin, erythromycin

Dicloxacillin	
Use	An antibiotic of the penicillin family. Used to treat breast and skin infections.
Dose	• **Breast infection**: 500 mg by mouth 4 times a day for 7 days.
Warning	Do not give to someone allergic to drugs in the penicillin family. Be prepared to treat an allergic reaction.
Patient Instructions	May cause yeast infection in women or diaper rash in babies. If this happens come back to the health facility. Side effects may include nausea, vomiting and diarrhea.
Other Drugs that Work	Erythromycin

Doxycycline	
Use	Antibiotic of the tetracycline family. Used to treat post abortion infection and many other infections.
Dose	• **Post abortion infection**: 100 mg by mouth 2 times a day for 10 days AND ampicillin. • **Chlamydia**: 100 mg by mouth 2 times a day for 7 days.
Warning	Women who are pregnant or breast feeding should not take doxycycline.
Patient Instructions	Do not take with milk or other dairy products or with antacids. Take pills while sitting up and with lots of water. Stay out of the sun or you may get a rash.
Other Drugs that Work	Amoxicillin, metronidazole, gentamicin, ampicillin

Erythromycin	
Use	In the macrolide family it is used to treat many infections. It can be safely used during pregnancy, a good choice if the woman is allergic to penicillin's.
Dose	• **Breast infection**: 500 mg by mouth 4 times a day for 7 days (or use dicloxacillin). • **Chlamydia infection**: 500 mg by mouth 4 times a day for 7 days (or use amoxicillin) • **Chancroid infection**: 500 mg by mouth 4 times a day for 7 days (or use ceftriaxone). • **Pelvic infection**: 500 mg by mouth 4 times a day for 14 days. AND: 500 mg metronidazole AND ceftriaxone . • **Female genital cutting (circumcision) infection:** 500 mg by mouth 4 times a day for 10 days. • **Newborn eye care**: Put a line of 0.5% or 1% eye ointment in each eye within the first hour of birth one time only (or tetracycline 1% eye ointment) • **Newborn chlamydia infection**: 30 mg syrup by mouth 4 times a day for 14 days.
Warning	Do not give erythromycin to someone who is allergic to drugs in the macrolide family.
Instructions	Take 1 hour before or 2 hours after a meal or with a little food, may cause yeast infection.
Other Drugs That Work	Amoxicillin, ceftriaxone, dicloxacillin,

Gentamicin	
Use	A strong antibiotic of the aminoglycoside family used to treat serious infections.
Dose	• **Postpartum uterine infection**: 80 mg IM 3 times a day until fever is gone for 48 hours. • **Post abortion infection**: 300 mg IM 1 time a day OR use 5 mg per kg IM 1 time a day until fever is gone for 48 hours AND give ampicillin. • **Newborn sepsis (pneumonia, meningitis, other)**: Give 4 mg per kg IM 1 time a day for 7 days AND ampicillin.
Warning	Use only if the woman cannot take other drugs or if no other antibiotic is available. Give with plenty of water. Can cause damage to the kidneys and cause deafness. When given in pregnancy may cause birth defects in the baby. Do not give gentamicin to someone allergic to aminoglycoside drugs.
Patient Instructions	May cause diarrhea or yeast infection in women or diaper rash in babies. If this happens come back to the health facility. Drink at least 8 large glasses or more of water a day. If you do not drink enough water it can cause kidney damage.
Other Drugs that Work	Ampicillin, benzylpenicillin, doxycycline, metronidazole.

Metronidazole (flagyl)	
Use	Treat bacterial & amoebic dysentery, trichomonas, vaginal & uterine infections.
Dose	• **Uterine infection** during pregnancy and labor: 400 mg or 500 mg by mouth 3 times a day for 7 – 10 days AND ampicillin. • **Postpartum or Post Abortion infection**: 400 mg or 500 mg by mouth 3 times a day until fever is gone for 48 hours AND ampicillin. • **Preventing infection** after invasive procedure: 1 gram by mouth one time only AND amoxicillin. • **Bacterial vaginosis or trichomonas**: 400 mg or 500 mg by mouth 2 times a day for 7 days OR 500 mg vaginal insert every night for 7 nights. • **Pelvic infection**: 400 mg or 500 mg by mouth 3 times a day for 14 days AND ampicillin.
Warning	Do not use: during first 3 months of pregnancy, for people with liver problems.
Patient Instructions	Do not drink alcohol when taking metronidazole as it will cause nausea. Side effects: metallic taste in mouth, dark urine, nausea, vomiting or headache.
Other Drugs that Work	Amoxicillin, ampicillin, benzylpenicillin, gentamicin, doxycycline.

Procaine Penicillin or PAM (procaine penicillin aluminum monostearate 300 mg = 1 ml), PPF (procaine penicillin 300 mg plus benzyl penicillin 60 mg = 1 ml)	
Use	Antibiotic of the penicillin family. It stays in the body for about a day, so one daily injection is enough. Used to treat uterine and other infections.
Dose	• **Uterine infection**: PAM or PPF 2 ml IM daily for 5 days. • **Serious infection during labor**: PAM or PPF 4 ml IM. Repeat after 12 hours if condition is serious. REFER.
Warning	Do not give to someone allergic to drugs in the penicillin family. Be prepared to treat an allergic reaction. Procaine Penicillin can cause asthma attacks in people with asthma. Never use this drug with tetracycline or doxycycline. Does not cure colds, diarrhea, urinary infections, sprained ankles, backache.
Patient Instructions	May cause yeast infection in women or diaper rash in babies. If this happens come back to the health facility.
Other Drugs That Work	Ampicillin, benzylpenicillin, metronidazole.

Silver nitrate eye solution	
Use	To prevent eye infection at birth.
Dose	• **Newborn:** Put 1 drop of 1% solution into each eye within one hour after birth. Do not rinse out drops.
Warning	May cause eye irritation.
Other Drugs That Work	Erythromycin eye ointment, tetracycline eye ointment

Tetracycline eye ointment	
Use	To prevent eye infection for newborn at birth.
Dose	• **Newborn:** Put a line of 1% ointment in each eye 1 time only, within 1 hour of birth.
Warning	Eye ointment recommended at birth. Tetracycline by mouth can be dangerous during pregnancy and breast feeding.
Other Drugs That Work	Erythromycin eye ointment, silver nitrate solution

Anticonvulsants

Amobarbital Sodium (amylobarbitone sodium)	
Use	Used to control of continuous seizures related to grand mal epilepsy, rabies, tetanus.
Dose	• **Adults.** 300 to 1000 mg IV over 5-10 minutes as one time dose, or give IM. 1000 mg is maximum dose in 6 hour period. • **Newborn.** 3 -12 mg/kg IV body weight over 5-10 minutes as one time dose, or give IM. 12 mg/kg body weight is maximum dose in 6 hour period. **Note for adults and newborn.** Start with smaller dose. If seizures continue, give additional injections. Do not exceed the maximum dose within a six hour period.
Warning	Overdose leads to depressed respirations, low blood pressure, shock, coma, and death.
Other Drugs that Work	Diazepam.

Diazepam (valium)	
Use	Used to treat and prevent convulsions and seizures. Second choice treatment to prevent or control eclamptic fit.
Dose	• **Control seizure or tetany** – 20 mg IM every 4 hours during referral for other than eclamptic, do not give more than 100 mg in 24 hours. • **Control or prevent eclamptic fit when magnesium sulfate not available.** FIRST DOSE: 10 mg IV slowly over 2 minutes. If convulsions recur repeat 10 mg IV. DURING REFERRAL: 40 mg in 500 ml normal saline IV to keep the woman sedated but able to wake up. Do not give more than 100 mg in 24 hours. • **Rectal dose when IV not possible**: 20 mg (injectable, syrup or dissolve crushed tablets in water) in the rectum, repeat in 10 minutes if the eclamptic fit not controlled. Repeat as needed during referral, not to exceed maximum of 100 mg in 24 hours. • **Newborn tetanus** – 0.5 mg -1 mg/kg IM every 4 hours, not to exceed 10 mg/24 hours).
Warning	Frequent or large doses during pregnancy may cause birth defects. Medicine passes through breast milk however in an emergency the mother can be treated with this.
Patient Instructions	Medicine will make you or baby sleepy.
Other Drugs that Work	Magnesium sulfate, amobarbital sodium

Magnesium Sulfate	
Use	Used to control or prevent eclamptic fit, diastolic BP at or above 110, headache, blurred vision, or brisk/quick reflex.
Dose	• **Control or prevent eclamptic fit:** FIRST DOSE: Give IV slowly over 10 minutes - 4 gm of 20% solution (or dilute 8 ml of 50% with 12 ml injection water, give the 20 ml which is 4 gm). If convulsion recurs after 15 minutes, give 2 gm 50% solution IV over 5 min. DURING REFERRAL: Give IM in alternate buttocks every 4 hours - 5 gm 50% solution. • **IM first dose when IV not possible:** 15 gm 50% solution (7.5 gm deep IM in each buttock). If convulsion recurs after 15 minutes, give 10 gm 50% solution (5 gm IM in each buttock). During referral give 5 gm 50% solution IM in alternate buttocks every 4 hours.
Warning	Closely monitor woman's breathing, urine output, reflexes. If breathing is less than 16 breaths per minute, urine output less than 30 cc per hour or absent deep tendon reflex, **do not give repeat dose.** If respirations stop, give calcium gluconate 1 gm (10 ml of 10%) IV slowly.
Other Drugs that Work	Diazepam, only if magnesium sulfate not available.

Antifungal

Gentian Violet	
Use	A disinfectant used to treat fungus/yeast infections of the skin, mouth and vagina.
Dose	Gentian violet must have contact with thrush or infection to treat the infection. • **Vaginal yeast infection**: Make a vaginal insert by soaking clean cotton in 1% solution and place high in the vagina every night for 3 nights. Remove insert in the morning. • **Newborn thrush or localized infection (mouth, buttocks, skin, umbilicus).** Wipe or apply 1% solution to affected area 4 times a day for 3 days after the problem is gone.
Warning	Do not use in pregnancy.
Patient Instructions	Stop using if gentian violet irritates the skin. If being treated for a vaginal yeast infection, do not have sex until the yeast infection is gone. The yeast infection can be passed to the sexual partner. Gentian violet will stain skin and clothes purple.
Other Drugs That Work	Miconazole, nystatin

Miconazole	
Use	An antifungal used to treat infections in the vagina and on the skin.
Dose	• **Vaginal yeast infection.** Miconazole 200 mg insert or 2% cream high in the vagina each night for 3 nights. Cream may be applied to the skin three times a day for 3 days.
Warning	Do not use miconazole during the first 3 months of pregnancy.
Patient Instructions	Stop using if miconazole irritates the skin. If being treated for a vaginal yeast infection, do not have sex until the yeast infection is gone. The yeast infection can be passed to the sexual partner.
Other Drugs That Work	Nystatin, gentian violet solution

Nystatin	
Use	An antifungal used to treat infections in the mouth (thrush), the vagina and the skin.
Dose	• **Mouth and throat infections**: Put 1 ml of oral suspension in mouth, swish around both sides of mouth for 1 minute and swallow (may dissolve 1 lozenge in mouth). Do this 3 or 4 times a day for 5 days. • **Vaginal infections**: Nystatin 100,000 Units insert or cream high in the vagina each night for 14 nights. • **Nipples**: Apply cream to mothers nipples 2 times a day when newborn has thrush, do not need to wipe it off before breast feeding. --- • **Newborn thrush (mouth, buttocks).** Wipe or apply oral suspension to affected area 4 times a day until 2 days after problem is gone. May use cream on buttocks for rash.
Warning	Nystatin works only against yeast infections.
Patient Instructions	Stop using if nystatin irritates the skin. If being treated for a vaginal yeast infection, do not have sex until the yeast infection is gone. The yeast infection can be passed to the sexual partner. Side effects may include stomach upset and diarrhea when taken orally.
Other Drugs that Work	Miconazole, gentian violet

Antiparasitic

Mebendazole (Vermox, Antiox, Pripsen)	
Use	A benzimidazole drug that is used to treat worms including hookworms.
Dose	• Chew one 100 mg tablet 2 times a day for 3 days.
Warning	Do not use in first 3 months of pregnancy.
Patient Instructions	This medicine will kill hookworm in your body. Hookworm uses much of your blood and makes you very weak. To avoid getting hookworm, do not walk barefoot. Use a latrine and pickup any feces from children and animals. This medicine may cause some stomach upset, headache, or dizziness. Keep out of the reach of children.
Other Drugs that Work	Albendazole, levamisole, pyrantel

Antiretroviral

See local HIV/AID protocols and HIV/AIDS Counseling

Antiviral

Acyclovir	
Use	Used to treat viruses including herpes
Dose	• For **first outbreak for pregnant women**: 200 mg by mouth 5 times a day for 7 days. • For **prevention last month of pregnancy or during labor**: 400 mg by mouth 2 times a day last month of pregnancy or during labor.
Warning	May have some harmful effects in pregnancy.
Patient Instructions	If a woman gets herpes for the first time while pregnant, it can cause birth defects in the baby. Herpes is very dangerous for the eyes and can cause blindness. After touching a herpes sore, always wash your hands with soap and water. Side effects may include headache, dizziness, nausea and vomiting. If you have a herpes sore when labor begins, doctors will want to do a cesarean section to prevent the baby from contacting the sores or give medicines to the baby after birth.
Other Drugs That Work	-

Tricloroacetic acid (bichloroacetic acid)	
Use	Used to treat genital warts.
Dose	• **Genital warts**: First protect skin around the wart with petroleum jelly. Then put on the trichloroacetic acid (strength varies 10% - 90% solution). Use sparingly and ONLY on the wart. Stop if the woman feels pain. • Repeat after a week if necessary, but do not use more than 1 time each week.
Warning	Use very carefully. It can burn normal skin badly enough to cause a scar. If it spills onto healthy skin, wash off with soap and water.
Patient Instructions	This can be painful for 15 to 30 minutes after putting on wart. Return in 1 week as it may need to be repeated.
Other Drugs That Work	-

Immunizations & Tetanus Antitoxin

BCG Vaccine	
Use	Helps protect against tuberculosis (TB)
Dose	• Give BCG vaccine 0.05 ml or 0.1 ml in the skin (intradermal) usually on the right upper arm within the baby's first 2 months after birth.
Warning	The BCG vaccine is a live vaccine so it must be kept cold at all times or it will not work. Do not give BCG vaccine to a baby who may have HIV/AIDS
Patient Instructions	The vaccination usually makes a sore and leaves a scar.

<table>
<tr><th colspan="2">Tetanus Toxoid Vaccine</th></tr>
<tr><td>Use</td><td>To prevent tetanus infection.</td></tr>
<tr><td>Dose</td><td>

Give 0.5 cc ml IM or SC into the upper arm = injection 1 the first time you see the pregnant woman.
Give injection 2 in 4 weeks after the first injection and at least 4 weeks before the end of the pregnancy (may be given closer than 4 weeks if that is the only opportunity to give the second injection). Can be given during or after pregnancy, or after abortion, or after circumcision.
If a woman gets 2 injections when pregnant, it will prevent tetanus in her newborn baby for first the few weeks.

<table>
<tr><td>Injection 1:</td><td>Best to give to children, but can be given at any time in life.</td></tr>
<tr><td>Injection 2:</td><td>4 weeks after injection 1</td></tr>
<tr><td>Injection 3:</td><td>At least 6 months after injection 2</td></tr>
<tr><td>Injection 4:</td><td>1 – 3 years after injection 2</td></tr>
<tr><td>Injection 5:</td><td>1 – 5 years after injection 4</td></tr>
<tr><td>Booster:</td><td>Every 10 years</td></tr>
</table>
</td></tr>
<tr><td>Patient Instructions</td><td>Side effects may include pain, redness, warmth or slight swelling.

Tetanus vaccine should be given to everyone starting in childhood. It is often given to children as part of a combined immunization called DPT. Three (3) DPT immunizations are equal to the first 2 tetanus immunizations.</td></tr>
</table>

Tetanus antitoxin (tetanus immunoglobulin)	
Form(s)	Vials of 1500, 20000, 40000, 50000 Units.
Use	Prevent tetanus when someone has a wound that could cause tetanus (like unsafe abortion) and has not been vaccinated against tetanus.
Dose	• Give antihistamine 15 minutes before giving tetanus antitoxin. • Give 1,500 Units tetanus antitoxin IM if no signs of tetanus. • Give 50,000 Units tetanus antitoxin IM if there are signs of tetanus.
Warning	Allergy is common to tetanus antitoxin.
Patient Instructions	4 weeks after this injection, you must come for tetanus toxoid injections.
Other Drugs that Work	benzylpenicillin, tetanus toxoid vaccine.

IV Solutions & Fluid Therapy

For Woman: Normal Saline, Ringer's Lactate, Dextrose 5% in Normal Saline, Dextrose 5% in Water	
Use of IV Solutions for Woman	• NORMAL SALINE (sodium chloride 0.9%, Isotonic Saline). Use this solution when a woman is in **shock or severely dehydrated**. • RINGER'S LACTATE (Hartmann's Solution). Use this solution when a woman is in **shock or severely dehydrated**. • DEXTROSE 5% IN NORMAL SALINE. Use this solution to provide some **energy** for the body and to help **maintain** the body's water and salts balance. • DEXTROSE 5% IN WATER. Use this solution to provide the body with **energy and water after hypovolemia has been treated**. Use for shock if no other fluids available.
Dose	• **Rapid Replacement.** Give IV fluid into her vein as fast as it will go, use the largest needle (14-18 gauge) or catheter you have available. Give 1000 to 1500 ml, then (according to condition) give up to a maximum of 5000 ml in 6 hours OR until systolic BP above 80 and pulse below 140. Stay beside woman while IV is running fast. • **Maintenance.** 150 ml per hour.
Dangers of IV	**Local.** Avoid too many needle sticks into same vein, find large straight arm veins. Prevent infiltration of the IV fluid – tape well and check often for infiltration. **General.** Prevent infection – use sterile needles. Prevent heart failure and pulmonary edema – watch for swelling of eyelids. Prevent slow running drip, a common reason for a dead woman.
Other Fluids	ORS by mouth or in the rectum. See rectal fluid procedure in Skill Checklist

For Newborn: Oral Rehydration Solution (ORS)

Solution

- ORAL REHYDRATION SOLUTION. Give this solution by Nasogastric Feeding Tube (NG) when a baby is unable to suck or swallow and is in **shock or dehydrated**.

- **Rapid Replacement ORS by NG Tube,** see procedure in Skill Checklist.

Weight of Baby/Child	Total in 12 Hours	Amount Hourly	Amount every 3 Hours
2 kg (4.4 lb)	300 ml	25 ml	75 ml
3 kg (6.6 lb)	450 ml	40 ml	120 ml
6 kg (13.2 lb)	900 ml	75 ml	225 ml
9 kg (19.8 lb)	1200 ml	100 ml	300 ml
12 kg (26.4 lb)	1800 ml	150 ml	450 ml

- **If the baby is alert and moving after 12 hours**, give ORS by mouth. Stop the NG tube as soon as baby can drink or suck the breast.

- **If the baby is not alert or not responding** and unable to suck the breast or take ORS by mouth, continue giving the same amount through the tube and REFER.

Warning

Giving too little fluids too slowly is a problem in the sick baby receiving nasogastric fluids. A slow running NG drip overnight is a common reason for a dead baby in the morning.

Giving too much too fast may be a problem, watch for swelling of the eyelids.

If baby vomits, slow the amount given at a time and watch. If the dehydration gets worse, give fluids through an intravenous infusion, REFER.

Other Fluids

Expressed Breast Milk. See Procedures: Expressed Breast Milk.

For Newborn: Normal Saline, Ringer's Lactate

Use of IV Solutions for Baby

- NORMAL SALINE (sodium chloride 0.9%, Isotonic Saline). Give this solution IV when a baby is unable to suck or swallow and is in **shock or dehydrated**.
- RINGER'S LACTATE (Hartmann's Solution) when Normal Saline is not available. Give this solution when a baby is unable to suck or swallow and is in **shock or dehydrated**.

- **First 6 hours IV rapid replacement of fluids.** Give at a rate of 30 ml/kg in the first hour (then feel for wrist pulse. If pulse not strong repeat 30 ml/kg given at the same rate, this is rarely needed), followed by 70 ml/kg in the next 5 hours, for a total of 100 ml/kg in 6 hours. See Module 8: scalp vein procedure.

Weight	Fluid first hour	Fluid next 5 hours	Total fluid in 6 hours
2 kg / 4.4 lb	30 ml X 2 kg = 60 ml	70 ml X 2 kg = 140 ml (28 ml/hr)	100 ml X 2 kg = 200 ml
3 kg / 6.6 lb	30 ml X 3 kg = 90 ml	70 ml X 3 kg = 210 ml (42 ml/hr)	100 ml X 3 kg = 300 ml
6 kg / 13.2 lb	30 ml X 6 kg = 180 ml	70 ml X 6 kg = 420 ml (84 ml/hr)	100 ml X 6 kg = 600 ml
9 kg / 19.8 lb	30 ml X 9 kg = 270 ml	70 ml X 9 kg = 630 ml (126 ml/hr)	100 ml X 9 kg = 900 ml

- **Give ORS** in small amounts by cup (about 5 ml/kg/hour) as soon as the baby is interested to suck or drink from cup, this is usually possible after 3 - 4 hours of IV has been running.

Dangers of IV

Local. Avoid too many needle sticks into same vein, use (scalp veins in baby) and find large straight veins. Prevent infiltration of the IV fluid – tape well and check often for infiltration.

General. Prevent infection – use sterile needles. Prevent heart failure and pulmonary edema – watch for swelling of eyelids. Prevent a very slow running drip for shock, a common reason for a dead baby.

Other Fluids

ORS by mouth or in the rectum

Malaria

Overview of medicines and prevention. Talk to your health ministry to find out what works against malaria in your area. It is important to **follow your recommended national treatment guidelines.** Chloroquine resistant falciparum malaria is widespread. Resistance to other drugs (such as quinine, sulfadoxine-pyrimethamine, mefloquine) also happen.

Drugs not to use in pregnancy include primaquine, tetracycline, doxycycline and halofantrine. Insufficient data exists on the use of atovoquone/proguanil and artemether/lumefantrine in pregnancy to recommend use at this time.

- Prevent malaria by sleeping under treated bed nets (ITN)
- Prevent malaria with inside residual spray (IRS) in your home
- Prevent malaria with intermittent preventive treatment (IPT) of (recommended national treatment) two times after first trimester of pregnancy, see Module 7: Infections - malaria.

Amodiaquine. Use with extreme caution in pregnancy.	
Use	Treatment of malaria.
Dose	• Adult: 30 mg/kg of weight for three days, may be used in combination with Artesunate.
Warning	Associated with liver problems, use with extreme caution in pregnancy.
Patient Instructions	Prevent malaria: ITN, IRS, IPT
Other Drugs that Work	Artesunate, choloroquine, Quinine, Fansidar, Lariam

Artesunate (one of the family of artemisinin). May be used in second and third trimesters of pregnancy.	
Use	Treat malaria in areas of quinine resistance.
Dose	• Give 300 mg artesunate by mouth 1 time a day for 7 days AND Clindamycin
Warning	Artemisinin family of medicines is not safe first 3 months of pregnancy.
Patient Instructions	Prevent malaria: ITN, IRS in your home, IPT
Other Drugs that Work	Choloroquine, quinine, clindamycin

Chloroquine phosphate (aralen, avlochlor, nivaquine, resochin). May be used throughout pregnancy.	
Use	Treat malaria in chloroquine sensitive vivax areas.
Dose	• Give 600 mg tablets 1 time a day for 2 days, then 300 mg for 1 day. • Take with other malaria medicine depending on national policy. .
Warning	In many parts of the world, chloroquine no longer stops malaria. People with epilepsy should not use chloroquine.
Patient Instructions	Prevent malaria: ITN, IRS, IPT
Other Drugs that Work	Artesunate, chloroquine, quinine

Clindamycin. Passes through breast milk, use when the only choice.	
Use	Treatment of malaria when given with artesunate.
Dose	• Give 600 mg by mouth 2 times a day for 7 days AND artesunate.
Warning	Can cause serious colon problems. Passes through breast milk. Only use this drug when it is essential.
Patient Instructions	May cause yeast infection in women. If this happens come back to the health facility.
Other Drugs that Work	Artesunate, chloroquine, quinine, others.

Mefloquine Hydrochloride (lariam). Use in second and third trimester for treatment.	
Use	Prevention of malaria for short term use. Treatment of symptomatic P.falciparum in pregnancy if quinine or sulfadoxine - pyrimethamine can not be used.
Dose	• **Prevention**. Take one tablet with at least 8 oz of water once a week while in malarial area, continue for four weeks after leaving malarial area. • **Treatment.** Mefloquine sensitive areas 15mg/kg by mouth, single dose. Mefloquine resistance areas, give 15mg/kg by mouth followed by 10mg/kg 24 hours later.
Warning	Do take for prophylaxis if risk of pregnancy. Early pregnancy limited safety in first trimester. May cause serious mental problems in some people.
Patient Instructions	Prevent malaria: ITN, IRS, IPT
Other Drugs that Work	Artesunate, chloroquine, Quinine, Fansidar, Lariam, others.

Quinine (dihydrochloride, hydrochloride, sulphate). May be used anytime during pregnancy, recommended for severe/complicated malaria	
Use	Treatment of Plasmodium falciparum malaria in areas where there is chloroquine resistance, not recommended for prevention.
Dose	• **IV** - First dose: 20 mg/kg of quinine IV in 500 ml Dextrose 5% in normal saline over 4 hours (125 ml per hour). o Wait 4 hours. o Give maintenance dose: 10 mg/kg of quinine IV in 500 ml Dextrose % in normal saline at 125 ml per hour for 4 hours. o Wait 4 hours. o Repeat maintenance schedule until the woman is conscious and able to swallow. o Then give remaining dose by mouth for 7 days. • **Oral** -10 mg/kg every 8 hours for 7 days for **P. falciparum.** • **Oral** - 10 mg/kg two times a day for 7 for **P. vivax**
Warning	Hypoglycemia, pulmonary edema, anemia and coma more common in pregnancy when taking quinine. REFER if at all possible.
Patient Instructions	Prevent malaria: ITN, IRS, IPT
Other Drugs that Work	Artesunate, chloroquine, Fansidar, Lariam

Sulfadoxine 500 mg - Pyrimethamine 25mg (fansidar). Do not take if breast feeding.	
Use	Prevention and treatment of P. falciparum malaria. Not recommended for P. vivax as it acts slowly to kill vivax parasites. Safe treatment of malaria throughout pregnancy.
Dose	• **Prevention**. One tablet orally once a week, or two tablets once every two weeks. • **Treatment**. Three tablets by mouth as a single dose. • **Intermittent Preventive Treatment (IPT)**. 3 tablets second trimester, 3 tablets third trimester.
Warning	Do not take if risk of kidney or liver problems. Do not take the last month of the pregnancy or if breast feeding.
Patient Instructions	For use in Chloroquine resistant areas. Prevent malaria: ITN, IRS, IPT
Other Drugs that Work	Artesunate, chloroquine, Quinine, Lariam

Minerals

Ferrous Sulfate (iron)	
Use	Prevention and treatment of iron deficiency anemia.
Dose	• **Prevent**. 300 - 325 mg by mouth 1 time a day during pregnancy and 40 days postpartum • **Treat.** 300 - 325 mg by mouth 2 or 3 times a day until no longer anemic, then 1 time a day
Warning	High doses can be poisonous.
Patient Instructions	Eat fruits and vegetables high in vitamin C to help your body use the iron. Do not take with coffee, tea, or milk. Take with juice or water. Bowel movements will be dark. May cause nausea, diarrhea, constipation Take tablets with food to prevent nausea; drink more water if constipated
Other Drugs that Work	Combination iron and folic acid tablets, ferrous gluconate.

Folic Acid	
Use	Prevention of anemia; prevention of birth defects if taken prior to conception and during first 6 to 8 weeks of pregnancy
Dose	• 0.5 mg (500 mcg) to 0.8 mg (800 mcg) tablet by mouth daily
Warning	Do not use in patients with pernicious anemia or when taking dilantin
Patient Instructions	Take once a day with a glass of juice or water Stop taking this medication and see your midwife if the medicine makes you feel sick.
Other Drugs that Work	Combination iron and folic acid tablet

Iodine	
Use	Prevents goiter in the woman and mental retardation of the baby from iodine deficiency
Dose	• 200 micrograms every day during pregnancy and lactation where there is iodine deficiency
Warning	Some individuals are allergic / hypersensitive to iodide or to organic preparations containing iodine.
Patient Instructions	The easiest way to get enough iodine is to use iodized salt instead of regular salt. Stop taking iodine if you experience an allergic reaction
Other Drugs that Work	Iodized salt

Oxytocic & Uterotonic

Ergometrine (methergine, ergonovine, methylergonovine)	
Use	Causes contractions of the uterus and is used to control heavy bleeding after childbirth or an abortion. May be used for active management of third stage.
Dose	• **PPH due to Uterine Atony**, o 0.2 mg IV bolus slowly in 2-3 minutes, OR o 0.2 mg IM may repeat 4 times in 24 hours (OR 0.2 mg tablets by mouth every 8 hours when injection not available) until reaching referral site. o Maximum 5 doses (total 1.0 mg) • **Active Management of Third Stage Labor**, 0.2 mg IM after checking for second baby.
Warning	Do not use ergometrine to start or speed up labor or to cause an abortion. Do not give before baby has come out Do not give to a woman who has high blood pressure or heart disease Possible side effects include nausea, vomiting, dizziness, sweating.
Patient Instructions	This drug helps control bleeding. It causes the womb to get hard and prevent more blood loss. You will feel pain in your womb after getting the medicine.
Other Drugs that Work	Oxytocin, misoprostol

Misoprostol	
Use	Stop postpartum hemorrhage, empty the uterus after incomplete abortion.
Dose	• **Active Management of Third Stage Labor**, 600 micrograms (three 200 mcg tablets) by mouth or under the tongue after checking for second baby. • **Slow PPH due to Uterine Atony**, 200 mcg by mouth AND 400 mcg under the tongue or in the rectum (wet tablets before inserting). • **Incomplete Abortion**, put 800 micrograms high in the vagina. Use where you have access to MVA.
Warning	DO NOT USE TO INDUCE LABOR. It is best to use misoprostol for incomplete abortion when you have access to MVA because misoprostol does not always empty the uterus completely. Common side effects are shivering and elevated temperature; may cause nausea, vomiting, diarrhea, headache.
Patient Instructions	This medicine will make your uterus get hard, may give you some pain, will help stop the bleeding.
Other Drugs that Work	For AMTSL and management of PPH: Oxytocin, ergometrine, syntometrine. MVA for management of incomplete abortion.

Oxytocin. FIRST CHOICE MEDICINE FOR AMTSL.	
Use	Oxytocin causes contractions of the uterus and its blood vessels to control bleeding after abortion or childbirth. It is the drug of choice for AMTSL. It is also used to augment or induce labor.
Dose	• **Active Management of Third Stage of Labor,** 10 units IM within 1 minute after delivery of baby, if no other baby in the uterus. • **Manage PPH due to Uterine Atony**, o 10 units IM AND 20 units in 1000 cc intravenous solution at 60 drops per minute o When PPH controlled continue at 40 drops per minute, see Formulary: IV Solutions & Fluid Therapy. o May give 5 units IV bolus if PPH not controlled at 2 X 20 units in IV solutions. o Maximum total of 60 units. • **Augmentation / induction of labor**, is done only in a facility where a Cesarean section can be performed. Follow facility protocol.
Warning	When used to augment or induce labor, can cause contractions too long or too strong leading to distress of baby or rupture of uterus. DO NOT use oxytocin to attempt abortion, may cause death of the woman.
Patient Instructions	This medicine will make your uterus get hard, may give you some pain, will help stop the bleeding.
Other Drugs that Work	For prevention or management of PPH, syntometrine, ergometrine or misoprostol may be used.

Syntometrine (a combination of 5 units oxytocin and 0.5 mg ergometrine)	
Use	Active management of third stage labor; prevention and management of postpartum hemorrhage
Dose	• **Active Management of Third Stage of Labor,** 1 ml IM (oxytocin 5 units and ergometrine 0.5 mg) within 1 minute after the delivery of the baby, if no other baby in the uterus.
Warning	Syntometrine should not be used during first or second stage of labor, or if there is severe hypertension, pre-eclampsia, eclampsia. Side effects: nausea, vomiting, abdominal pain, headache, dizziness, skin rash.
Patient Instructions	This medicine will make your uterus get hard, may give you some pain, will help stop the bleeding.
Other Drugs that Work	Oxytocin, ergometrine, misoprostol

Vitamins

Vitamin A	
Use	Prevention of Vitamin A deficiency (night blindness and infections).
Dose	• **Woman.** 200,000 IU once only during the first 8 weeks after delivery. Mothers pass vitamin A to their babies in breast milk. • **Newborn.** Do not give to a baby younger than 6 months of age. They get vitamin A from breast milk.
Warning	Not to be given to women of childbearing age in general or to lactating women more than 2 months after delivery because high doses may be teratogenic in early pregnancy.
Patient Instructions	Eat regular foods of orange-colored fruits (papaya, pumpkin) and vegetables, and dark green leafy vegetables (cassava or papaya leaves). Keep medicine away from light
Other Drugs that Work	Cod liver oil 1 tsp = 4,500 IU of vitamin A

Vitamin K	
Use	Prevent or treat bleeding due to lack of vitamin K (hemorrhagic disease) in baby less than 2 kg
Dose	Give one dose. • **Newborn weight over 1.5 kg** – 1 mg IM • **Newborn weight 1.5 kg or under** – 0.5 mg IM
Warning	Don't use if injection fluid looks oily or if the fluid has separated (top part looks different from the bottom part).
Patient Instructions	This injection will help prevent bleeding or help your baby stop bleeding.
Other Drugs that Work	-

Other Medicines (add other medicines here from your national guidelines that you use):

8. PROCEDURES

Anaphylactic Shock Management

Module 8: Stabilize and Refer

1. Place person on her back, feet elevated (shock position). Make certain airway is open and clear. Observe breathing and feel/listen for heart beat.
2. Give injection of 1:1000 solution of epinephrine (Adrenalin) subcutaneously:
   - Adults and children over 40 kg 0.5 cc
   - Children 20-40 kg 0.3 cc
   - Children 10-20 kg 0.2 cc
   - Children under 10 kg 0.1 cc
3. Take and record pulse, respirations, and blood pressure (adults) every five minutes until normal.
4. If signs of shock continue for 5 minutes, repeat injection of epinephrine, using the appropriate dose.
5. If signs of shock continue for 30 minutes. REFER as quickly as possible. Go with person to hospital so you can continue to give care.

Apgar Scoring

Module 3: Labor – Monitor Progress and Give Care

Criteria	2 Points	1 Point	0 Points
Appearance (color)	Completely pink body and face	Pink body, blue arms and legs	Pale or blue body and face
Pulse (heart beat)	More than 100 beats per minute	100 or less beats per minute	No heart beat
Grimace (reflex to stimulation)	Crying, coughing, or sneezing	Grimace or puckering of face	No response
Activity (muscle tone)	Active movement, waving arms and legs, flexion	Some movement, some flexion	Limp arms and legs, no flexion, no movement
Respirations (breathing)	Strong cry, regular breathing	Slow, irregular breathing, retracting of chest wall, grunting or weak cry	No breathing, no cry

Artificial Rupture Membranes (ARM)

Module 3: Labor – Monitor Progress and Give Care

1. Do ARM between contractions.
2. Listen to fetal heart rate.
3. Ask the woman to lie on her back with her legs bent.
4. Wear HLD gloves, confirm full dilatation of cervix and position of baby. Use this hand to guide the instrument towards the membranes.
5. Use the other hand to insert instrument (sterile toothed forceps (Kocher) or amniotic hook) into the vagina.
6. Make a small opening in the membranes to prevent splashing of the fluid. If the opening is too small use your fingers to make it larger allowing the amniotic fluid to drain slowly around the fingers.
7. Feel for prolapsed umbilical cord.
8. Listen to fetal heart rate.

Compresses for Fever

1. Prepare a basin or pail with cool water.
2. Soak three or four cloths in the water.
3. Squeeze a little of the water out of a cloth.
4. Place a cool and wet cloth on the forehead, under each arm and use one to wipe the neck, chest, and legs.
5. When the cloths become dry or warm, soak them again in the water and replace.
6. When the temperature begins to do down, remove the cloths. Cover the person with a light sheet or cloth.
7. Offer the person cool drinks to help cool the body and replace fluids lost through perspiration.

Express Breast Milk (EBM) and Cup Feed

Module 10: Postpartum Care

1. Find a private place where the mother can relax close to her baby.
2. Wash your hands with soap and water. Dry. Ask the mother to do the same.
3. Ask the mother to sit comfortably. (Put on gloves if needed, mother need not use gloves).
4. Put warm wet cloths on the breasts for 5 minutes to help open the milk ducts (usually needed when first beginning to EBM).
5. Have a cup or container with a wide opening that was boiled.
6. Help the woman gently massage her breasts from outside towards the nipple to bring the milk down to the nipple.
7. Hold the breast in a “C-hold”. Position thumb on the upper edge of the areola and the first two fingers on the underside of the breast behind the areola.
8. Remove milk out:
   - Lean forward so milk will go into the container.
   - Press thumb & other fingers in toward body.
   - Squeeze thumb and other fingers together.
   - Move fingers toward areola, so the milk in the collecting areas behind the areola comes out.
   - Repeat actions to remove milk until milk flow slows.
   - Be patient, even if no milk comes in beginning.
   - Move hands around the breast so milk is removed from all areas of the breast.
   - It does not make any difference what hand is used, or use both hands.

Continued next page.

(expressed breast milk continued)

9. Express on breast for 3-5 minutes until the flow stops, then express the other breast, then back to first side, alternating breasts. Do not squeeze the breast, or pull out the nipple, or slide the finger along the skin.
10. Explain expressing breast milk can take 20 to 25 minutes or more.
11. To feed expressed breast milk by cup, the mother should:
    - Swaddle baby to prevent hands from hitting the cup, hold the baby close, supporting the head in a semi or upright position.
    - Hold the small cup with breast milk to the baby's lips. Baby might make sucking motions.
    - Hold the rim of the cup to the upper lip and tip it a little so the milk just reaches the mouth. The baby may lick the milk or suck the end of the cup to take the milk.
    - Keep the cup tilted so milk just reaches the baby's mouth; let the baby control how fast to take the milk. Do not pour milk into a baby's mouth – this can cause choking.
    - Try to estimate the amount of milk that has been run down the baby's chin or cheek, and give the baby that much more.

External Cephalic Version

Module 2: Antenatal Care

The procedure should **only be done** in a facility where emergency cesarean section is available. It is best if the doctor and the midwife do the version together. The woman should be awake and agree to the procedure. Refer to Module 2 for more details and illustrations.

1. Explain what you are going to do and that this might be uncomfortable. If it is too painful she should tell you and you will stop the procedure.
2. Ask her to empty her bladder.
3. Wash your hands.
4. Confirm presentation, listen to fetal heart rate every 5 minutes for 30 minutes to get baseline FHR. Find baby's head, back and breech. (Use an ultrasound if available to confirm presentation.)
5. Position the woman on her back, hips higher than her head. Try to have gravity help. Have the woman lie flat on her back. Put a cushion under her hips, or put something under the bottom of the bed, or put the cushion under one of the woman's hips, so that she turns toward the side you want to turn the baby.
6. Make sure the woman is comfortable and that your hands are warm. Talcum powder (glove powder) or vegetable oil may be put on the abdomen to help turn the baby.
7. Place one hand above the pubic bone on the breech and move (lift) the breech out of the pelvis.
8. Place your other hand on the back of the baby's head.
9. Turn the baby by guiding the head towards the breech and at the same time guiding the breech toward the fundus of the uterus.

Continued next page

(external cephalic version procedure continued)

10. **If the procedure is successful,** have the woman remain lying down for at least 30 minutes and recheck the fetal heart rate every 5 minutes during that time. Counsel her to return if she sees any bleeding, has any leaking of amniotic fluid or has too much pain.
11. **If the procedure is not successful,** try again. No more than three attempts should be made. Try turning the baby in a backward roll. Don't try to turn the baby for more than five minutes.
12. Listen to the FHR. If the rate is below 120 or above 160 beats per minute, have the woman turn on her left side. **Recheck every 5 minutes for 30 minutes.** If the FHR has not returned to a range of 120 – 160, take to surgery (theater) for cesarean section.

Incision and Drainage of Breast Abscess

Module 7: Infections – Prevent and Manage

A breast abscess is a collection of pus in a small area which begins as a painful, hard, red swelling in the breast. The swelling softens and forms a soft yellow center. The abscess is ready to be cut open, and the pus drained, to help healing and relieve the pressure and pain.

Procedure

1. Start the woman on a broad spectrum antibiotic.
2. Get all the equipment ready.
3. Tell the woman what you are going to do. Explain to her the pus must be taken out of her breast so that she will be able to breast feed her baby. Help her to understand that the pus in the breast can spread to other parts of her body and make her sicker than she is right now. Tell her that she will not get better until the pus is removed from her breast.
4. Help her sit on a chair with her breast resting on a table.
5. Very gently wash the breast with soap and water. LOOK and FEEL the pus area (soft, most painful, and tender to touch) on the breast.
6. Give analgesia intramuscular (IM) or spray ethyl chloride on the pus area or give oral analgesia and wait about 1 hour for the medicine to take effect. Continue with the incision and drainage. The woman may not be able to relax. She will have pain and be uncomfortable. Wash your hands. Put on sterile (HLD) gloves if you have them.
7. Cut the abscess with the point of the blade. Make the cut big enough to put your gloved finger into the opening. Make the cut all at one time. Cut in a straight line towards the nipple. Thick yellow, green, blood stained, foul smelling drainage (pus) will usually run from the opening.

Continued next page.

(incision and drainage of breast abscess continued)

8. Use your gloved finger (or a sterile hemostat / artery forceps) to gently break up the pockets (sections) of the abscess, the pus will drain out.
9. Do not press or squeeze the breast, this will be too painful for the woman.
10. Open a 4 x 4 sterile gauze square. Start with one corner and gently push gauze into the opening as far as it will go. Let a little of the gauze stick out of the opening to help drain the pus.
11. Cover the opening with gauze and wrap with a bandage. Help the woman put on a loose fitting brassiere. If she does not have a brassiere, use a sling, head tie, or other cloth to support the breast.
12. Change the dressing daily. Give oral analgesia as needed. Pull the gauze out a little each day to help the pus drain. Remove gauze in 4 days. Continue broad spectrum antibiotics for 10 full days, see Formulary. Encourage the woman to breast feed on both breasts as soon as she can tolerate it. Continue to see the woman until there is no pus drainage and the opening is closed.

Infection Prevention: Guidelines for Equipment

Module 7: Infections – Prevent and Manage

Item	Step 1 Decontamination[3]	Step 2 Cleaning[4]	Step 3		Dry Before Storage	Step 4 Storage	Disposal	
			HLD	Sterilization			Bury	Burn
Surgical / Examination Gloves Disposable	Rinse in solution while on hands, turn inside out, soak in solution						Yes	No if made of polyvinyl chloride
Surgical Gloves Reusable		Wash, test for holes, rinse both sides	Yes	Yes always for surgical procedures	Yes	Yes		
Instruments Metal	Open wide	Wash with brush and rinse	Yes Open wide	Yes. Dry then sterilize	Yes	Yes		
Needles, Disposable	Flush and soak						Yes	Yes

[3] Solution = 0.5% chlorine solution for flushing and soaking in Step 1 Decontamination, see Module 7 – Learning Aid 8.

[4] Wash = wash or flush with soap water solution AND rinse = rinse with clean water for Step 2 Cleaning, Module 7 – pages 7.8, 7.52

Item	Step 1 Decontamination	Step 2 Cleaning	Step 3		Dry Before Storage	Step 4 Storage	Disposal	
			HLD	Sterilization			Bury	Burn
Needles, Reusable	Flush with solution before soaking	Flush, Rinse many times	Yes	Yes	Yes	Yes		
Syringes, Disposable							Yes	No if polyvinyl chloride
Syringes, Reusable		Flush and rinse	Yes	Yes	Yes	Yes		
Catheters & Tubes – Rubber/Plastic	Flush with solution before soaking	Flush & rinse many times	Steam or boil	Rubber only Not plastic	Yes	Yes	Rubber and plastic	Rubber only
Ambu bags & face masks	Wipe with 60-90% alcohol or 0.5% chlorine solution	Wash & rinse			Air or towel dry	Yes		
Suction bulbs	Flush & fill bulb with solution. Soak bulb in solution	Flush &. rinse 3 times			Air dry	Yes		

Item	Step 1 Decontamination	Step 2 Cleaning	Step 3		Dry Before Storage	Step 4 Storage	Disposal	
			HLD	Sterilization			Bury	Burn
Aprons &other Plastic/Rubber	Wipe with 0.5 % chlorine solution	Wash & rinse			Air or towel dry	Yes		
Linens, Surgical caps, masks, cover gowns, cloth aprons	Soak and rinse with 0.5% chlorine solution	Wear protection when handling. Wash with soap water, then rinse.			In sun, or machine, or iron	Yes		

Source: JPHEIGO 2006, Engenderhealth 2001, 2007, IPAS 2004.

Infection Prevention: General Cleaning for a Health Facility

Module 7: Infections – Prevent and Manage

WHEN TO CLEAN	WHAT TO CLEAN
• Clean with Disinfectant Cleaning Solution (mix 0.5% Chlorine Solution with enough soap to make a soapy solution). • Start cleaning least soiled areas first and then go to most soiled areas. • Start cleaning at high surfaces first and then go to low surfaces. • Scrubbing is the best way to remove dirt and germs.	
After Discharge of a Patient	• Mattress, bed linen, bed frame, cot, incubator • Any other equipment used for patient care
Immediately	• Furniture, floors, bed, tables (after a procedure or delivery) • Spills of blood or other body fluid (Cover with a cloth soaked in decontamination solution for 10 minutes. Wipe up all spill and scrub with soap and water solution.)
Daily (More often if you can see dirt)	• Examination rooms • Furniture and equipment used daily (exam table, table tops, counters, weighing scales) • Sink, toilets, latrines, waste containers (Use a separate mop, cloth, brush to clean these.)
Clean with soap & water solution using a cloth or mop	
Daily	Floors, equipment (stethoscopes, BP cuff)
Weekly	Doors, door handles, windows, walls, ceilings, ceiling fixtures (more often if you can see dirt)

Inspection with Vaginal Speculum

Module 2: Antenatal Care

The pelvic exam is easier and more comfortable when a woman is relaxed and not afraid. Explain what you are doing and why you are doing it. Go slowly, and stop if you are hurting her. Tell the woman, if she feels afraid or upset and wants you to stop at anytime, she should just tell you and you will stop. A woman should never be forced to have a speculum exam if she does not want one. *Speculum exams must be done carefully, especially when a woman is bleeding to prevent more problems.*

Get Ready

- Make sure there is privacy. Have all equipment ready: clean or sterile speculum, gloves, light, clean cloths, lubricant, soap and water. Use a small speculum for young women, older women and women who have had a circumcision.
- Explain to the woman what you are going to do and why. Show her the speculum.
- Ask the woman to urinate before the exam.
- Ask the woman to remove her pants or pull up her skirt/cloths. Ask her to lie on her back with her knees up and her buttocks at the end of the table or bed (lithotomy position). Stirrups may be needed so you can see the cervix.
- Cover her legs and pelvic area with a sheet / cloth until you are ready to do the exam.
- Wash your hands with soap and water. Put on gloves.

Continued next page

Speculum Examination

1. Help the woman relax by asking her to breathe, and by being gentle and slow. Remind her to tell you if the speculum hurts. Tell her you will stop the exam if she tells you to stop.
2. Lubricate vaginal speculum to make it go into vagina more easily.
3. Hold the speculum with your gloved hand to warm it.
4. Tell the woman you are ready to start and ask if she is ready? Tell her you are going to touch her. Explain that you are going to **LOOK** to see if there is any problem.
5. Gently open the lips of her genitals (labia) with your thumb and index finger so you can see the opening of her vagina. Make sure to explain everything you are doing as you do it.
6. Ask the woman to take a few deep breaths.
7. Hold the speculum with your other hand, with the handle 30 to 45 degrees to the side and with the blades closed.
8. Gently slide the speculum downwards into the vagina, guiding it towards the woman's back. This should not hurt.
9. As you put the speculum in, turn it so the handle is down (midline). Take care not to pull her skin or hairs.
10. Gently push the speculum all the way in. The handle should rest against the skin between the vagina and the anus.
11. Slowly open the blades of the speculum by gently pushing the thumb-rest with your thumb to show the cervix.
12. Tighten the screw on the thumb-rest with your thumb to lock the blades open. Adjust the light so you see the cervix.
    a. If you do not see the cervix, close the speculum, remove it partway explaining what you are doing.
    b. Try again to push the speculum in and open the speculum. Sometimes the cervix is off to one side or very far to the back. Sometimes you can see the cervix if the woman coughs or pushes down a little.

Continued next page

(speculum examination continued)

13. **LOOK** at the cervix for color and smoothness of tissue, swelling, tears, discharge (clear, not clear, unusual odor, bleeding), and tissue, clots, or other products of conception.
14. When you finish, tell the woman you are going to remove the speculum.
    a. Loosen the screw to unlock the speculum, gently let the blades close as you turn the handle to the side.
    b. Pull the speculum out of the vagina, tell the woman you are finished
15. Give her a clean cloth or wipe her genitals, make her comfortable.
16. Explain your findings.
17. Record the findings and your actions.
18. Clean the equipment.

Labor Monitoring Frequency

Module 3: Labor – Monitor Progress and Give Care

<table>
<tr><th>What</th><th>If Normal & in First Stage of Labor</th><th>If Not Normal or in Second Stage of Labor</th></tr>
<tr><td>Dilatation</td><td>4 Hours</td><td>Variable</td></tr>
<tr><td>Pulse</td><td>4 Hours</td><td>30 Minutes</td></tr>
<tr><td>Blood Pressure</td><td>4 Hours</td><td>30 Minutes</td></tr>
<tr><td>Temperature</td><td>4 Hours</td><td>1 Hour</td></tr>
<tr><td>Urine Volume</td><td>2 Hours</td><td>2 Hours (or more often if needed)</td></tr>
<tr><td>Fetal Heart Rate</td><td>1 Hour</td><td>15 Minutes (or more often if needed)</td></tr>
<tr><td>Fluids (oral)</td><td>1 Hour</td><td>1 Hour (or more often if needed)</td></tr>
<tr><td>Descent</td><td>1 Hour</td><td>30 Minutes</td></tr>
<tr><td rowspan="4">Contractions</td><td rowspan="4">Latent Phase:
1 Hour
Active Phase:
30 Minutes</td><td>Latent Phase:
Every 30 Minutes</td></tr>
<tr><td>Active Phase:
Continuously</td></tr>
<tr><td>Second Stage Normal:
30+ Minutes
(Length of 2nd stage is not important if FHR & woman in good condition)</td></tr>
<tr><td>Second Stage Not Normal:
Continuously</td></tr>
</table>

Perineal Massage to Prevent Perineal Trauma

Source: reprinted with permission from the Journal of Midwifery & Women's Health 2005. See complete document in Module 2: Antenatal Care

Perineal massage in pregnancy helps reduce perineal trauma and episiotomy during birth, and pain afterwards. Several studies have found that perineal massage during the last weeks of pregnancy can reduce tearing at birth.

Are there any risks to perineal massage during pregnancy? Not that we know of. It is free. It doesn't hurt. It is easy to do. And most women don't mind doing it. Teach to women at ANC the last 6 weeks of pregnancy, *if culturally appropriate.*

INSTRUCTIONS FOR PERINEAL MASSAGE DURING PREGNANCY

Advise pregnant women to begin 6 weeks before their due date and follow these suggestions:

- Wash your hands (keep fingernails short) with soap and water. Relax in private place with knees bent. Some women like to use pillows for back support.
- Lubricate your thumbs and the perineal tissues with clean water or clean oil (cooking oil) or KY jelly. DO NOT use petroleum jelly or baby oil or mineral oil.
- Place your thumbs about 1 to 1.5 inches inside your vagina. Press down (toward the anus) and to the sides until you feel a slight burning, stretching sensation.
- Hold that position for 1 or 2 minutes.
- With your thumbs, slowly massage the lower half of the vagina using a "U" shaped movement. Try to relax.
- Massage your perineal area for 10 minutes each day. After 1 to 2 weeks, you should notice more stretchiness and less burning in your perineum.
- Use this massage once or twice daily, for the last 4 to 6 weeks of your pregnancy. If you think your bag of waters is leaking, check with the midwife before doing massage.

9. TESTS

Blood Tests

Sahli Method for Anemia Screening

1. Fill the Sahli tube with hydrochloric acid (HCL) 1% to the number 2 mark.
2. Puncture a finger with a stylet or needle, wiping away the first drop of blood with dry cotton ball. Squeeze the finger for more blood.
3. Use the pipette to suck the drop of blood up to the blue line or 20 mm.
4. Blow blood into the Sahli tube, then suck solution in and out of the pipette until all the blood is out of the pipette.
5. Stir HCL and blood until perfectly mixed.
6. Put distilled water, drop by drop, into the Sahli tube, stirring after each drop, until the color matches the *standard* color.
7. Look at the top of the mixture and read the number. That is the hemoglobin reading.

Talquist Method for Anemia Screening

This is less accurate than Sahli Method, but a convenient method using a small piece of white absorbent paper (sometimes called the paper test). These papers are usually made into a book (Talquist books).

1. Prick the woman's finger.
2. Squeeze the finger to place one drop of blood on the paper.
3. The color of the blood-stained paper is then compared with the color chart provided.
4. The lighter the color, the more severe the anemia.

Visual Method for Anemia Screening

Explain to the woman, you are checking her color to see how much blood she has. When her blood is good, she will feel well and strong during her pregnancy and delivery.

LOOK at Eyes, Mouth and Fingernails.

1. Ask the woman to show you her fingernails.
2. Pull down the bottom of her eyelid to look at the conjunctiva.
3. Look inside her lower lip.
4. Pink conjunctiva, inside lower lip and fingernails are healthy signs. If they are pale she is anemic.

Reflex Tests

Patellar Reflex Test

Do this test at the first visit and at other times if the blood pressure is high, if the woman has a headache, vision problems and/or epigastric pain. Testing of reflexes is part of an examination of the nervous system. Reflexes are graded by the level of response:

- no response (0),
- low to average normal response (1+ to 2+), or
- brisk to very brisk or hyperactive (3+ to 4+), can indicate diseases of the nervous system or edema of the brain in a pregnant woman. A woman with a brisk response to the reflex test is at very high risk for developing eclampsia (convulsions).

When you check the patellar reflexes, always check that the response is similar in both legs:

1. Ask the woman to sit on the examining table or bed. Her legs should hang freely. Her muscles need to be completely relaxed.
2. Tell her what you are going to do.
3. Feel for her tendon right below the kneecap (patella). If it is difficult to locate, move her lower leg a little while feeling at the same time.
4. Strike the tendon with a quick, firm tap and lift up immediately. You may use the side of your hand, your knuckle, or a reflex hammer to tap the tendon. Tapping the tendon contracts the quadriceps muscle, causing the lower leg to move.
5. The patellar reflex can also be tested with the woman lying in bed. Put one arm under her leg at the knee so you support the leg completely. The foot can not be touching the bed. Strike the tendon.
6. If the woman is tense and contracting her muscles, you will not get an accurate test of her reflexes. You may need to talk to her and keep her attention away from what you are doing.

Urine Tests

Urine Tests for Protein

The urine test for protein is a common test to use when looking for pre-eclampsia in pregnant women. Pre-eclampsia is the most common cause of protein in the urine when the woman is pregnant. Urine will also test positive for protein if the person has a UTI or if the urine is contaminated with amniotic fluid or blood.

Acetic Acid Method

1. Fill the test tube 2/3 full of urine.
2. Heat the urine over a spirit lamp (Bunsen burner) about 1 inch from the top of the tube until the urine boils.
3. Add 4 drops 5% acetic acid (vinegar) to the tube of urine.
4. Heat urine to boiling, again. If cloudiness disappears, there is no protein. If the urine remains cloudy, the protein is present.

Test Strips

Test strips are convenient but expensive. Cut each strip in half down its length to reduce the cost and make your supply last longer. Always keep the lid tightly closed on the test sticks. If they get damp they won't work. Read the instruction on the bottle carefully.

Sulphosalicylic Acid Method

Add a few drops of 30% sulphosalicylic acid to urine in the test tube. Compare it with another sample of urine. If cloudiness remains with the sulphosalicylic acid in the urine, there is protein.

10. SKILL CHECKLISTS

Why use the Skill Checklist?

Midwives and other learners use the checklist as a guide when doing a skill. Supervisors use the checklist when they evaluate how well the midwife performs a skill. The checklist may be used as a reminder and to review, when you have not done the skill for a while.

How to use the Skill Checklist.

While observing or after doing a skill, the learner and supervisor each write a rating:

- Write the date you are practicing the skill at the top of the first empty column.
- Put a √ if you did the step satisfactorily.
- Put an **X** if you need more practice or need improvement.
- Put an **O** if the step was not relevant at this time.
- There is a place to write comments at the end of the skill checklist. You may write how you actually feel about the skill or your performance. You are writing this information to help you learn, so write what is most helpful to you.

At the end of the checklists on page 310 there is a form for **Summary of Performance**. Each time you complete a checklist after doing a skill, please use this form. For the appropriate checklist, fill in the date you completed the skill and your result. If you did everything satisfactorily put in a √. If you still need more practice or improvement on **any** step, please put **X**.

When you have satisfactorily done **all** the steps in a checklist, you have achieved **competence**. When you have satisfactorily done all the steps in a checklist many times (depends on the skill), you feel **confident** performing the skill. When you teach the skill satisfactorily to others, you have achieved **mastery**.

Prepare Before All Skills and Procedures

1. Greet the woman and her family respectfully.
2. Provide privacy and make the woman comfortable.
3. Listen carefully to the woman.
4. Explain to the woman (and family) what you are going to do.
5. Answer any questions the woman or family may have.
6. Get equipment and supplies ready.
7. If using medication or local anesthesia, ask the woman if she has any allergies.
8. If needed, put on clean HLD/sterile gloves. If HLD/sterile gloves are not available, wash your gloves with soap and water.

MODULE 2: ANTENATAL CARE

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
ASK AND LISTEN					
1. Personal history.					
a. What is your name?					
b. Where do you live?					
c. How old are you?					
d. Do you work outside the home? If yes, what do you do?					
e. How many years did you study in school?					
f. Are you happy to be pregnant?					
2. Family history.					
a. Has anyone in your family had problems of high BP, heart disease, diabetes, epilepsy?					
b. Are there twins in your family?					
c. Is your husband healthy?					
3. Social history.					
a. Do you get enough rest? Is there someone to help you?					
b. Is there someone to help with money for AN care, meds?					
c. Are you afraid someone might hurt you?					
4. Medical and surgical history.					
a. Any health problems:					
• sickle cell disease					

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• feeling weak, tired (anemia)					
• shortness of breath					
• disease					
• fits					
• asthma					
• cough with blood, or cough lasting more than 2 weeks					
b. Teeth and gum problems?					
c. Abdominal surgery or circumcision?					
d. Blood transfusion?					
e. Vaginal bleeding, discharge, or abdominal pain (RTI)?					
f. Chronic fever, diarrhea or skin rashes (HIV/AIDs)?					
g. Taking any medicines now? Allergies to medicines?					
h. Tetanus injections? When was last one?					
5. Obstetric, gynecological and family planning history.					
a. Number of pregnancies, number of miscarriages?					
b. For each child, when born, born alive or not, alive and well now?					
c. Past pregnancy/birth problems					
• bleeding (anc, pph)					
• problems with placenta					
• pre-eclampsia / eclampsia					

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
d. Needed help to deliver before (VE, cesarean section, forceps, episiotomy)?					
e. Used family planning before? Method used? Liked method? How do you want to space your children after this baby is born?					
6. Breast feeding history.					
a. Breast fed last baby?					
b. How long breast fed?					
c. Problems breast feeding?					
7. Current pregnancy history.					
a. Decide LNMP and EDD: when do you think your baby is due?					
• How many weeks or months pregnant are you?					
• First day of your last normal menstrual period?					
• Felt your baby move? When was the first time?					
• When did you first feel nausea or breast tenderness?					
• Monthly bleeding regular, once every 4 weeks?					
• Last normal monthly bleeding?					
b. Diet: what & how much did you eat yesterday for each meal?					
• Do you get enough food?					
• Any worries about food?					

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Did you have any snacks, what type, how often?					
• What did you drink? How much?					
• Do you eat anything that is not food such as ashes, starch, clay, ice (pica)?					
• Any heart palpitations, loss of appetite, headache, sore tongue, nausea, vomiting?					
• Any foods you are not eating because you are pregnant? Food taboos?					
• Find out if she can afford to eat regularly and well.					
c. Medicines and substance abuse: do you take medicines, smoke, drink liquor?					
• Anyone giving you drugs, herbs or advice on them?					
d. Malaria (in endemic areas): do you own insecticide-treated bed net? If yes, do you use it?					
• Do you spray inside walls of your house with insecticide?					
e. Current pregnancy conditions and complaints: how are you?					
• Last time you felt your baby move? Is the baby moving as often as usual?					
• Any problems: vomiting, severe nausea, vaginal itching, burning on urination, shortness of breath, constipation, back or leg pain?					

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Have you had any danger signs, see page 1.					
• Do you have any other complaints or concerns about this pregnancy or other problems?					
LOOK AND FEEL					
1. Ask woman to empty her bladder.					
2. Explain procedure to woman before doing the examination.					
3. Wash hands.					
4. Look at general health.					
a. Energy level.					
b. Happy or sad.					
c. Skin condition.					
d. Skeletal deformity (gait).					
5. Check height and weight.					
6. Ask the woman to sit, and check blood pressure.					
7. If BP high, check reflexes: ask woman to hang legs freely.					
a. Feel for tendon right below knee cap.					
b. Quickly tap tendon with knuckles or side of hand.					
8. Look for anemia: pale conjunctiva, inside lower lip, or fingernails. Edema of face or hands.					
9. Kidney infection: gently tap over each kidney for sign of pain.					

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
10. Ask the woman to lie on the examining table. Keep areas of her body covered when not being examined.					
11. Breasts: look at breasts and nipples (flat or inverted).					
a. Feel for lumps.					
b. Teach self breast examination to the woman.					
12. Abdominal examination: look at the skin.					
a. Feel for inguinal / femoral swelling, lymph nodes.					
b. Feel for tenderness above the pubic bone.					
c. Measure fundal height and compare to expected gestation.					
d. If 32 weeks or greater check: fetal lie, presentation, descent.					
e. Check for fetal heart rate if 20 weeks or greater.					
13. Legs: varicose veins, any areas red, swollen or hot to touch.					
14. Genital inspection: wash hands and put on gloves.					
a. Look for: sores, genital ulcers, varicose veins, swelling, blood, vaginal discharge, fistula signs, circumcision or scarring.					
b. Take off gloves, wash hands.					
15. Laboratory tests as needed:					
a. Blood: hemoglobin, hematocrit.					
• Grouping and rhesus factor.					

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Syphilis.					
• HIV, according to protocol.					
b. Urine: protein (albumin), sugar, acetone, pregnancy test.					
IDENTIFY PROBLEMS/ NEEDS					
TAKE APPROPRIATE ACTION, *see protocols, counseling*					
1. Discuss with the woman problems and needs found.					
2. Manage any common problems, complications and needs found.					
a. Make a plan of care with the woman and family.					
b. Give care as needed: anemia, pre-eclampsia, bleeding, other.					
c. Give care for prevention or common problem as needed.					
• Prevention: Iron and folic acid, malaria, parasites, tetanus, other as needed vitamin, calcium, iodine					
• Common problems: nausea, sleepiness, pains, swelling of lower legs, shortness of breath in late pregnancy					
d. Provide education & counsel.					
• Process of pregnancy and delivery.					
• How family can help her.					
• Diet and nutrition.					
• Rest and exercise.					
• Personal hygiene.					

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Malaria.					
• Use of prescribed and not prescribed medicines in pregnancy.					
• Avoid sick people, smoking, drug abuse, alcohol, strong fumes or chemicals.					
• HIV and STIs: Offer voluntary testing and counseling.					
• Prevent mother to child transmission.					
• Breast feeding: early initiation, exclusive, colostrum.					
• Signs & symptoms of labor.					
• Birth prep and planning.					
• Emergency referral plan.					
• Review danger signs, ask woman to repeat, page 1.					
• Plans for postpartum care.					
• Future family planning.					
e. Do any other laboratory tests.					
f. Refer as necessary for care.					
g. Record all actions.					
EVALUATION AND REPEAT PROCESS					
a. Plans: repeat antenatal visits.					
• 2nd visit 20 - 24 weeks.					

SKILL CHECKLIST: First Antenatal Visit	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• 3rd visit 28 – 32 weeks.					
• 4th visit about 36 weeks.					
• Advise woman to visit with any danger sign or concern.					

COMMENTS:

MODULE 2: ANTENATAL CARE

SKILL CHECKLIST: Repeat Antenatal Visits Within 20-24 weeks, 28-32 weeks, 36 weeks	DATE				
PROBLEM SOLVING STEPS	RATING				
ASK AND LISTEN					
1. Review her antenatal record.					
2. Review expected weeks gestation at each visit.					
3. Ask about any problems discussed at the last visit.					
4. Have you felt your baby move? When was the first time? When was the last time? Is the baby moving as often as usual?					
5. How are you feeling? Any problems with sleeping (tiredness), eating (appetite), nausea, constipation, urination (pain, burning, frequency)?					
6. Any danger signs, page 1.					
7. Have you taken your iron & folic acid, how much, how often, when taken, any problems when taking the medicine?					
8. Do you want to talk about anything?					
LOOK AND FEEL					
1. Ask the woman to empty her bladder.					
2. Explain procedure to woman before doing the examination.					
3. Wash hands.					
4. Look at general health: energy, skin condition, happy or sad.					
5. Weigh, compare to previous weight					

SKILL CHECKLIST: Repeat Antenatal Visits Within 20-24 weeks, 28-32 weeks, 36 weeks	DATE				
PROBLEM SOLVING STEPS	**RATING**				
6. Check blood pressure and compare to last blood pressure.					
7. If BP high, check reflexes.					
8. Anemia: paleness of conjunctiva, inside lower lip & fingernails. Edema of face and hands.					
9. Abdominal examination.					
a. If problems with urination, feel for tenderness above the pubic bone and kidney tenderness.					
b. Measure fundal height, compare to expected gestation.					
c. If 32 weeks or greater, check fetal lie, presentation, descent.					
d. Fetal heart rate.					
10. Legs: Varicose veins or any areas red, swollen or hot to touch.					
11. Laboratory tests as appropriate, agreed upon, and available:					
a. Blood: hemoglobin or hematocrit. HIV status.					
b. Urine: protein (albumin), sugar, acetone					
IDENTIFY PROBLEMS / NEEDS					
TAKE APPROPRIATE ACTION, see *Guide for Caregivers*					
1. Discuss with the woman problems and needs found.					
2. Manage any common problems, complications and needs found.					
a. Make a plan of care with the woman and family.					
b. Give life-saving care as needed.					

SKILL CHECKLIST: Repeat Antenatal Visits Within 20-24 weeks, 28-32 weeks, 36 weeks	DATE				
PROBLEM SOLVING STEPS	RATING				
c. Give care for prevention or common problem as needed:					
• Prevention: iron. folic acid, antimalarial, antiparasitic, tetanus toxoid, others.					
• Common problems: nausea, sleepiness, constipation, aches, shortness of breath, feet & lower leg swelling. .					
d. Review education and counseling as needed.					
• Process of pregnancy, delivery, how the woman and her family can help her.					
• Diet and nutrition.					
• Rest and exercise.					
• Personal hygiene: bathing, teeth and gum care.					
• Malaria: Use bed nets, intermittent preventive treatment (IPT), residual spraying (IRS), treat as soon as malaria is identified.					
• Use of prescribed and nonprescribed medicines.					
• Avoid sick people, smoking, drug abuse, alcohol, strong fumes or chemicals.					
• HIV and STIs: Offer voluntary testing and counseling.					
• Prevent mother to child transmission.					
• Breast feeding: early initiation, exclusive, colostrum.					

SKILL CHECKLIST: Repeat Antenatal Visits Within 20-24 weeks, 28-32 weeks, 36 weeks	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Signs, symptoms of labor.					
• Birth prep and planning.					
• Emergency referral plan.					
• Danger signs see page 1.					
• Plans for postpartum care.					
• Future family planning.					
e. Do any other laboratory tests.					
f. Refer as necessary for care.					
g. Record all actions.					
EVALUATION AND REPEAT PROCESS					
a. Plans for repeat antenatal visits.					
• 3rd visit 28 – 32 weeks.					
• 4th visit about 36 weeks.					
• Advise woman to visit with any danger sign or concern.					

COMMENTS:

MODULE 3: LABOR – MONITOR PROGRESS & GIVE CARE

SKILL CHECKLIST: Labor Admission and 1st Stage	DATE				
PROBLEM SOLVING STEPS	**RATING**				
MAKE THE WOMAN AND FAMILY COMFORTABLE					
1. Encourage the woman to undress and bathe before or after the history, if there is time.					
2. **If the woman is almost ready to deliver do a short, fast history and physical examination (see shaded bold text below).**					
ASK AND LISTEN (HISTORY)					
1. Explain that you will ask questions.					
2. Listen carefully to answers.					
3. Review the antenatal record or ask: total visits, problems.					
4. Record admission information: name, age, time of arrival, other.					
5. **Labor pains: When began, how often, length, where felt.**					
6. **Baby moving.**					
7. How many weeks pregnant are you: last menses, due date.					
8. **Bag of waters: broken, when, what color.**					
9. **Have you had any bloody mucus (show) or bleeding.**					
10. **Pre-eclampsia: headache, epigastric pain, severe heart burn**					
11. Intake and output: last time to eat and drink, last stool and urine.					

SKILL CHECKLIST: Labor Admission and 1st Stage	DATE				
PROBLEM SOLVING STEPS	**RATING**				
12. **Medicine: taken any medicines or treatments to increase or decrease labor, any allergy.**					
13. Birth attendant or family: came with woman, name.					
14. HIV testing and counseling: according to country policy.					
LOOK AND FEEL (PHYSICAL EXAMINATION)					
1. Tell the woman and family that you will do the physical examination and explain why you are doing it and what you find.					
2. Ask the woman to empty her bladder. Test if signs of pre-eclampsia.					
3. Help the woman to get comfortable.					
4. Wash your hands.					
5. Check temperature, pulse and blood pressure.					
6. **LOOK at general condition: height (too short), hydrated, tired, worried, malnourished, signs of infection or anemia.**					
7. **Do an abdominal examination.**					
a. Ask the woman: lie down with pillow or cloth under head and shoulders, bend knees a little, do some slow deep breathing.					
b. Uncover her abdomen.					
c. LOOK at uterus: shape, scar, baby movements, contractions, unusual shapes or swelling.					

SKILL CHECKLIST: Labor Admission and 1st Stage	DATE				
PROBLEM SOLVING STEPS	**RATING**				
d. FEEL uterus: lie, presentation, position, engagement, attitude.					
• Step 1: What part of baby is in the top of the uterus?					
• Step 2: Where are the baby's back, arms and legs?					
• Step 3: What is in the lower uterus, how easily does it move?					
• Step 4: What is the baby's lie, presentation, position, engagement and attitude?					
e. FEEL descent, if baby vertex.					
f. Count FHR for 1 minute as contraction is ending.					
g. FEEL uterus for contraction frequency, duration, strength and for relaxation of the uterus.					
h. Cover the abdomen.					
8. **Do a vaginal examination.**					
a. Before vaginal examination, check baby's descent, position by abdominal examination.					
b. With the woman on her back, ask her to bend her knees more and to spread her legs apart.					
c. Provide privacy. Cover her.					
d. Wash and dry hands. Put on gloves.					
e. LOOK for discharge: blood, liquor, meconium.					
f. Clean the genital area.					

SKILL CHECKLIST: Labor Admission and 1st Stage	DATE				
PROBLEM SOLVING STEPS	**RATING**				
g. Put antiseptic lubricant onto gloved examining fingers.					
h. With other gloved hand, separate the woman's labia.					
i. LOOK at vaginal opening for discharge, blood, liquor, meconium, veins, sores, warts.					
j. Gently insert 2 fingers of examining hand into vagina. Do not remove fingers until the examination is done.					
• FEEL the vagina: moist or hot and dry, scarring.					
• FEEL the cervix: effacement, dilatation.					
• FEEL if umbilical cord is in cervix or vagina.					
k. Bag of waters: intact, ruptured, color, amount.					
l. Baby's head: presenting part, position, caput, molding.					
• FEEL anterior and posterior fontanel's if vertex.					
• Decide position.					
• FEEL molding and caput.					
m. When examination is finished, remove hand from vagina.					
• Smell for odor. LOOK for discharge, blood, meconium.					
• Remove & care for gloves using infection prevention guidelines. Wash, dry hands.					
• Help the woman get in a comfortable position.					

SKILL CHECKLIST: Labor Admission and 1st Stage	DATE				
PROBLEM SOLVING STEPS	**RATING**				
9. Explain findings to the woman and her family. Record information.					
IDENTIFY PROBLEMS / NEEDS					
1. Record information on Partograph.					
2. Decide condition & labor progress:					
• Latent stage.					
• Active stage.					
• Alert line.					
• Action line.					
• Fetal condition.					
• Maternal condition.					
TAKE APPROPRIATE ACTION					
1. Give care: life-saving, medical, labor					
2. Monitor labor, woman and baby according to partograph guidelines.					
3. Provide education, information, advice and support.					
a. Explain process of labor and what to expect.					
b. Encourage family & birth support person to help woman:					
• Drink at least 1 glass of fluid every hour.					

SKILL CHECKLIST: Labor Admission and 1st Stage	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Eat small amounts of light food if desired.					
• Urinate at least every 2 hours.					
• Use massage to relieve pain of contraction. Demonstrate to birth support person how to massage the woman's back, arms and legs.					
• Use comfortable positions: walking, sitting, side lying, squatting, rocking. Lying on back is not good for baby.					
• Keep body relaxed with first stage breathing during contractions. Demonstrate slow, deep breathing. Ask woman & birth support person to practice breathing.					
• Prevent tears with second stage breathing & blowing. Demonstrate & ask woman & birth support person to practice breathing & blowing.					
• Bathe, fan, or use wet cloth during labor: help stay cool, relaxed, prevent infection.					
4. Do laboratory tests as needed.					
5. Refer as needed.					
6. Record findings (partograph, labor record).					
EVALUATE AND REPEAT PROCESS					
1. Monitor labor, use Labor Monitoring Frequency Chart as appropriate.					

SKILL CHECKLIST: Labor Admission and 1st Stage	DATE				
PROBLEM SOLVING STEPS	**RATING**				
2. Decide if actions resolved problems.					
3. Counsel and advise woman, birth support person, family as needed.					

COMMENTS:

MODULE 3: LABOR – MONITOR PROGRESS & GIVE CARE

SKILL CHECKLIST: 2nd, 3rd, 4th Stage Labor Care	DATE				
PROBLEM SOLVING STEPS	**RATING**				
SECOND STAGE CARE					
1. Make preparations:					
a. Explain to woman, family what will happen in stages of labor.					
b. Remind about breathing for 2nd stage labor.					
c. Make sure everything is clean and ready for the birth.					
d. Use a bed, table, or clean pad on the floor, for the birth.					
2. Monitor the woman and baby:					
a. Woman's pulse & BP every 30 minutes as appropriate.					
b. FHR every 15 minutes or more often if needed.					
c. Encourage woman to urinate often.					
d. Encourage woman to drink often.					
3. Confirm full dilation of the cervix.					
4. Help the woman with her pushing.					
a. Good pushing position (semi-sitting, hand and knees, squatting, left side).					
b. Effective and correct pushing (mouth and legs relaxed and open, chin on chest, bottom down during pushes).					
c. Be patient and praise the woman for her efforts.					

SKILL CHECKLIST: 2nd, 3rd, 4th Stage Labor Care	DATE				
PROBLEM SOLVING STEPS	**RATING**				
d. Decide the progress of pushing (too fast, too slow).					
e. Identify and address factors preventing descent, if needed.					
5. Delivery care:					
a. Help the woman into a good birthing position when baby's head begins to crown.					
b. Work with the woman to push and not to push to allow for slow delivery of the baby.					
c. Check for cord around the baby's neck while encouraging the woman not to push.					
d. Wipe baby's face.					
e. Deliver baby's shoulders, body.					
• Cup hands parallel around the sides of the baby's head. Do not hold the neck.					
• Deliver anterior shoulder first and slowly moving the baby's head down toward the woman's coccyx.					
• Deliver posterior shoulder second and slowly moving the baby's head toward the woman's abdomen.					

SKILL CHECKLIST: 2nd, 3rd, 4th Stage Labor Care	DATE				
PROBLEM SOLVING STEPS	**RATING**				
THIRD STAGE CARE					
1. Lay baby on a cloth on the mother's abdomen or on the table or bed between the mother's legs.					
2. Dry and warm the baby while looking for breathing.					
3. Remove wet cloth. Place baby skin to skin on mother's abdomen.					
4. Cover baby and mother with a dry cloth, making sure baby's head is covered.					
5. Feel the uterus to make sure there is no other baby (AMTSL).					
6. Give 10 units oxytocin IM within 1 minute after the birth, if no other baby (AMTSL).					
7. Clamp and cut cord about 2- 3 minutes after birth (delay clamping increases baby's blood volume).					
a. First clamp closest to the baby.					
b. Milk cord toward placenta.					
c. Second clamp closer to placenta.					
d. Cut cord between the 2 clamps.					
8. Keep mother and baby together.					
9. Do Apgar score at 1 and 5 minutes.					
10. Deliver the placenta (AMTSL).					
a. Guard uterus (counter traction to prevent uterine inversion).					

SKILL CHECKLIST: 2nd, 3rd, 4th Stage Labor Care	DATE				
PROBLEM SOLVING STEPS	**RATING**				
b. Hold cord close to perineum.					
c. With uterine contraction gently pull cord with steady tension, following birth canal curve. Be patient.					
d. When you see the placenta, release cord &uterine pressure.					
e. Deliver the placenta and membranes with both hands.					
f. Rub the empty uterus until it is contracted.					
g. Inspect placenta and membranes for completeness.					
h. Estimate blood loss. Look at all blood clots, blood stained cloths for parts of placenta or membranes.					
FOURTH STAGE CARE					
1. Clean and check the woman for tears and other problems.					
2. Monitor baby: • every 15 minutes for 2 hours, then • every 30 minutes for 1 hour, then • every hour for 3 hours.					
a. Breathing.					
b. Warmth. Delay bathing 24 hrs.					
c. Sucking.					
d. Cord for bleeding.					

SKILL CHECKLIST: 2nd, 3rd, 4th Stage Labor Care	DATE				
PROBLEM SOLVING STEPS	**RATING**				
3. Monitor woman: • every 15 minutes for 2 hours, then • every 30 minutes for 1 hour, then • every hour for 3 hours.					
a. BP and pulse.					
b. Uterine firmness. Teach the mother how the uterus should feel and how to massage it.					
c. Vaginal bleeding.					
d. Bladder. Encourage woman to urinate at least every 2 hours.					
e. Mother-baby bonding.					
4. Other care for woman after birth.					
a. Help the woman clean herself of blood & fluids. Remove soiled cloths.					
b. Give perineal care. Teach woman perineal care.					
c. Give the woman something to drink. Ask the family to bring her something to eat.					
d. Give family some time alone.					
5. Record information.					

MODULE 4: EPISIOTOMY – PREVENT AND MANAGE

SKILL CHECKLIST: Give Local Anesthesia	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Give Local Anesthesia Before Cutting an Episiotomy					
1. Use 21 or 22 gauge, 1 ½ inch needle on a 10 cc syringe.					
2. Fill the syringe with 10 cc anesthetic, 1% without epinephrine.					
3. Place your two fingers between baby's head and the perineum.					
4. Inject 3 lines of anesthesia from 1 entry point:					
a. Insert whole length of needle from fourchette, just below skin, down direction of episiotomy.					
b. Pull back on the plunger of the syringe to check for blood.					
c. Inject about 3 cc evenly as you withdraw the needle.					
d. Do not remove the needle from fourchette tissue, angle and insert whole length of needle to each side of the line to be cut for the episiotomy.					
e. Repeat steps b, c, d for each side of the line to be cut.					
f. Remove the needle.					
5. Wait 1-2 minutes for the anesthesia to take effect before cutting.					
Give Local Anesthesia After the Episiotomy					
1. Use 21 or 22 gauge, 1 ½ inch needle on a 10 cc syringe.					
2. Fill the syringe with 10 cc anesthetic, 1% without epinephrine.					
3. Inject about 5 cc from one entry point into the open muscle in 3 directions on one side of the cut.					

SKILL CHECKLIST: Give Local Anesthesia	DATE				
PROBLEM SOLVING STEPS	RATING				
a. Insert the needle into muscle just under where the vaginal and perineal tissues meet.					
b. Insert the whole length of the needle through the muscle under the vaginal mucosa.					
c. Pull back on the plunger of the syringe to check for blood.					
d. Inject about 1.5 cc evenly as you withdraw the needle.					
e. Repeat steps b, c, d for: **direction 2** - in muscle just under perineal tissues, **direction 3** - in muscle between vaginal & perineal lines.					
4. Repeat the same steps for the other side of the cut.					
5. Wait 1-2 minutes for anesthesia to take effect.					
6. Touch the cut areas with the sharp point of a clean/sterile needle to make sure anesthetic is working.					
7. If the woman feels pain while you suture, inject up to 10 cc more anesthetic in area that is painful.					

COMMENTS:

MODULE 4: EPISIOTOMY – PREVENT AND MANAGE

SKILL CHECKLIST: Cutting a Mediolateral Episiotomy	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. **LOOK and FEEL**					
a. Is the perineum long or short?					
b. Thick or thin?					
c. Does perineum have varicose veins, genital warts, or other problems?					
2. Cut the episiotomy when perineum is thinned and pale or shiny.					
a. Place two fingers of one hand in the vagina between the scissors and baby's head.					
b. With the other hand open the scissors and put the rounded (blunt) blade inside the vagina.					
c. Start at the center of perineum and angle (slant) the scissors out at a 45 degree angle.					
d. If you are right handed, cut towards woman's right buttock. If you are left handed, cut towards woman's left buttock.					
e. Make the episiotomy with 1 or 2 large cuts.					
f. After cutting perineum, FEEL cut into the vagina for a band of tight or strong vaginal tissue.					
g. If a tight or strong vaginal band is felt cut up the vagina:					
• Turn scissors around. Position them facing up the vagina.					

SKILL CHECKLIST: Cutting a Mediolateral Episiotomy	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Place your two fingers in vagina between scissors and baby's head.					
• Cut up the center of the posterior vagina.					
3. Press gauze firmly over the cut area if waiting for another contraction.					

COMMENTS:

MODULE 4: EPISIOTOMY – PREVENT AND MANAGE

SKILL CHECKLIST: Cervical and Vaginal Inspection for Lacerations	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. Quickly and gently wash off the woman's genitals.					
2. Ask someone to adjust your light source so you can see well.					
3. Look at the perineum: labia majora, labia minora, periurethral area. Look from the fourchette to rectum to see where the episiotomy or tear ends.					
4. Look in the vagina for tears or hematomas:					
a. Put all 4 fingers of one hand into the vagina, pressing firmly on the back wall. Look deep into the vagina to see where the episiotomy or tear begins.					
b. Slowly pressing against the vaginal wall, move your fingers up the side walls of the vagina, one side at a time. Look for tears up vagina to the cervix.					
c. If you find a tear, look for where it starts and stops.					
5. Look at the cervix:					
a. Ask your assistant to press down on the woman's uterus.					
b. Press firmly on the back wall of the vagina with one hand.					
c. If you see bleeding or tears from cervix, look at the whole cervix.					
• Use sponge forceps (also called ring forceps).					

SKILL CHECKLIST: Cervical and Vaginal Inspection for Lacerations	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Clamp the rounded part of the forceps onto anterior lip (top lip) of the cervix and pull gently on the forceps.					
• Look carefully at all sides of the cervix.					
• When finished, check for any gauze/pad in vagina.					

COMMENTS:

MODULE 4: EPISIOTOMY – PREVENT AND MANAGE

SKILL CHECKLIST: Repair of a Mediolateral Episiotomy	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. Prepare for repair:					
a. Remove any soiled cloths from under her. Wash her genitals.					
b. Position the woman with her buttocks at the edge of the bed or table. Her legs are in stirrups or held by attendants / family.					
c. Place a tampon or gauze into the vagina. Place a sterile or clean cloth under her buttocks.					
d. Check or give anesthesia:					
• If you did not give anesthesia, give now.					
• If you gave local anesthesia before cutting episiotomy, check to see if you need to give more anesthesia now.					
e. Ask someone to adjust light source to see into the vagina.					
f. Sit down and make yourself comfortable.					
g. Open the suture and gently stretch it out until it is straight.					
h. Put needle in needle holder in the correct position. Clamp the teeth of the holder firmly shut.					
2. Do the repair:					
a. Put in the first suture.					
• Look clearly at beginning of the wound in the vagina.					

SKILL CHECKLIST: Repair of a Mediolateral Episiotomy	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Put first stitch about 1 cm above top of wound.					
• Pull the needle through with the needle holder.					
• Tie square knot. Cut the short thread about 1 cm.					
b. Suture vaginal mucosa with continuous stitches to the hymenal ring.					
c. Put needle through vaginal mucosa, behind the hymenal ring, and pull it out on the wound of the perineum.					
d. Suture perineal muscle layer using continuous suturing to the bottom of the wound.					
e. Suture the subcuticular layer towards the vagina, using continuous suturing *(see Module 4, page 4.18 for detail).*					
• Start first stitch at bottom of the wound.					
• Hold tissue with tissue forceps at the place your needle will come out.					
• Direct needle horizontally, curving it under the skin so needle tip comes out about 1 cm from where you put it in.					
• Steady or hold the needle with tissue forceps. .					
• Pull the needle through and out the tissue.					
• Reposition needle in needle holder, using tissue forceps..					
• Do not use your fingers.					

SKILL CHECKLIST: Repair of a Mediolateral Episiotomy	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Place stitches alternately on left & right sides directly across from where needle comes out until you reach the vagina.					
f. Move needle from the perineal part of the wound back into the vagina behind hymenal ring.					
g. Tie off the suture.					
• Make a final stitch near hymenal ring. Do not pull suture all the way through the tissue. Leave a loop of suture to use for tying.					
• Remove needle from suture.					
• Tie off suture with square knot.					
• Cut the two ends of suture off, leaving about 1 cm.					
h. Check that you did not leave gauze, tampon, or instruments in the woman's vagina.					
3. Use infection prevention guidelines for removal of gloves, hand washing, processing of instruments & supplies, and disposal of waste.					
4. Care for the woman after the repair.					
a. Wash her with soapy water, dry, make her comfortable.					
b. Explain to the woman:					
• Wash area with soapy water 3 - 4 times a day, dry after each washing.					
• Do not put anything into the					

SKILL CHECKLIST: Repair of a Mediolateral Episiotomy	DATE				
PROBLEM SOLVING STEPS	**RATING**				
vagina.					
• Visit the woman every day for 3- 4 days, or ask her to come back in one week. Look for bleeding, redness, pus, opening of the sutures, or a hematoma on perineum.					
5. Record findings (vital signs, fluids given, location & repair of laceration, care given, medications, and estimated blood loss).					

COMMENTS:

MODULE 4: EPISIOTOMY – PREVENT AND MANAGE

SKILL CHECKLIST: Repair of Tears	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Repair Periurethral and Labial Tears					
1. Prepare before procedure.					
2. If tear is very close to urethra, place a catheter in the bladder to help identify urethra and to prevent accidentally sewing it shut.					
3. Choose a very thin (fine) suture.					
4. LOOK and FEEL the tear, length and how much tissue is torn.					
5. Press tissue together so the tissue looks like it did before. Do not hurry this part.					
6. As you press the tissues together, plan where you will place the sutures so the tear will heal well.					
7. Place interrupted or continuous sutures to close the tear, spaced about 1 cm apart. Entry & exit points are directly across from each other.					
a. If blood continues to ooze from laceration, press gauze firmly over the wound for 2-3 minutes.					
b. Carefully take off the gauze.					
c. If bleeding stopped, clean & dry woman, make her comfortable.					
d. If bleeding continues, use steady continuous pressure for ten minutes. Do not look during that ten minutes.					
e. If she still continues to bleed, add one or more stitches.					

SKILL CHECKLIST: Repair of Tears	DATE				
PROBLEM SOLVING STEPS	**RATING**				
8. Use infection prevention guidelines for removal of gloves, hand washing, processing of instruments & supplies, and disposal of waste.					
9. Record findings (vital signs, fluids, location of laceration, repair done, medications, estimated blood loss).					
Repair a Cervical Tear					
1. Place your sponge forceps on one side of the laceration. If you have a second sponge forceps, place it on the other side of the laceration.					
2. Do not use toothed forceps or clamps.					
3. Hold handles from both forceps in one hand.					
4. Pull handles gently towards you.					
5. Place the first stitch about 1 cm above the apex of the laceration.					
6. Place sutures along the wound, space about 1 cm apart using interrupted or continuous stitches.					
7. If you do not have sponge forceps to grasp the cervix:					
a. Ask your assistant to put on a pair of gloves.					
b. Have her press on the posterior (back) wall of the vagina.					
c. Ask someone to press down firmly on the woman's uterus.					
8. If you are not able to repair the cervical laceration:					
a. And you have sponge forceps.					

SKILL CHECKLIST: Repair of Tears	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Put sponge forceps over cervical laceration to stop bleeding.					
• Wipe out vagina to see the bleeding has stopped. If the laceration is very large, prepare the woman and family to referral hospital.					
• Release forceps for a short time every 15 minutes. If forceps can not be safely released during referral of the woman, keep cervix clamped to stop bleeding and refer.					
b. And you do not have sponge forceps:					
• Put your gloved fingers with gauze over cervical tear.					
• Put pressure with your fingers.					
• Continue pressure while going to hospital.					
9. If the laceration is not large, you may prevent suturing the cervix:					
a. Clamp both sides of laceration for 15 minutes.					
b. Carefully release the forceps to see if bleeding has stopped.					
c. If bleeding stopped, remove the forceps and clean the woman.					
d. If bleeding continues, repair the laceration.					

SKILL CHECKLIST: Repair of Tears	DATE				
PROBLEM SOLVING STEPS	**RATING**				
10. Use infection prevention guidelines for removal of gloves, hand washing, processing of instruments & supplies, and disposal of waste.					
11. Record findings (vital signs, fluids, location of laceration, repair done, medications, estimated blood loss).					

COMMENTS:

MODULE 5: HEMORRHAGE – PREVENT AND MANAGE

SKILL CHECKLIST: Active Management of Third Stage	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Module 3: Labor. Once baby is born, lay baby on a cloth on the mother's abdomen or on the table or bed between the mothers' legs. Give newborn care: dry, warm, see baby is breathing.					
1. Give 10 units oxytocin IM within 1 minute after the birth, if no other baby felt.					
Module 3: Labor. Clamp and cut cord about 2 - 3 minutes after birth. Keep mother and baby together and covered. Give baby Apgar score at 1 and 5 minutes.					
2. Deliver the placenta and membranes.					
a. Guard uterus (counter traction to prevent uterine inversion).					
b. Hold cord close to perineum.					
c. With a uterine contraction gently pull on cord following curve of birth canal. Use steady tension to relax vaginal muscles, releasing the placenta. Be patient.					
d. Release cord and uterine pressure as placenta delivers.					
e. Hold placenta with both hands to deliver the membranes.					
3. Rub the empty uterus until it is hard. Expel blood and clots.					
4. Look at placenta & membranes to see that they are complete.					
5. Record information including estimated blood loss.					

SKILL CHECKLIST: Active Management of Third Stage	DATE				
PROBLEM SOLVING STEPS	RATING				

COMMENTS:

MODULE 5: HEMORRHAGE – PREVENT AND MANAGE

SKILL CHECKLIST: Bimanual Compression	DATE				
PROBLEM SOLVING STEPS	**RATING**				
External Bimanual Compression of the Uterus					
1. Call for help.					
2. Rub uterus to make it contract (help woman lay on her back, explain to her rubbing the uterus will stop the bleeding, it may hurt).					
3. Check to see if bladder is full:					
a. If bladder is full, rub uterus, express clots.					
b. Catheterize if woman can not pass urine.					
4. Rub uterus until it is contracted and bleeding slows.					
5. If bleeding does not slow, perform external bimanual compression:					
a. Give oxytocin or ask assistant to give oxytocin.					
b. Place one hand on abdomen behind the uterus.					
c. Place other hand low on abdominal wall just above symphysis.					
d. Press your hands together (squeezing the uterus) until bleeding slows (may take 20 minutes).					
6. If bleeding does not slow, repeat oxytocin. Start IV infusion.					
7. Put the baby to breast.					
8. If bleeding slows or stops:					

SKILL CHECKLIST: Bimanual Compression	DATE				
PROBLEM SOLVING STEPS	**RATING**				
a. Check for bleeding, contracted uterus, & full bladder every 15 minutes for 2 hours; then every 30 minutes for 2 hours.					
b. Take vital signs and estimate blood loss. Record information.					
c. Give broad spectrum antibiotics.					
d. Show woman how to keep her uterus hard.					
e. Encourage breast feeding, and watch for complications.					
f. Refer. If unable to refer, observe for 48 hours.					
9. **If bleeding does not slow or stop**, do internal bimanual compression.					
Internal Bimanual Compression of the Uterus					
1. Ask assistant to start IV infusion with oxytocin and take vital signs.					
2. Look for signs of shock.					
3. Rub uterus again to make uterus contract.					
4. **If uterus not contracting and if bleeding not slowed or stopped**:					
a. Insert your freshly gloved examining hand into vagina.					
b. Gently slide index and middle fingers into uterus through the cervix.					
c. Gather all clots & tissue, remove your hand from uterus.					
d. If bleeding continues, form your hand into a fist and press against lower portion of the					

SKILL CHECKLIST: Bimanual Compression	DATE				
PROBLEM SOLVING STEPS	**RATING**				
uterus. (Move any loose cervix away before pressing).					
e. Put constant downward and forward pressure with your abdominal hand.					
f. Press abdominal hand and your fist together for 5 -10 minutes. Look for bleeding.					
5. **If uterus contracts and bleeding slows or stops**:					
a. Remove your hand.					
b. Continue to monitor contracted uterus, vital signs, breast feeding during referral.					
6. **If bleeding does not slow or stop**:					
a. Remove your hand.					
b. Continue external bimanual compression during referral.					
c. Monitor IV infusion.					
d. Get family and blood donors.					
e. Do not stop external bimanual compression until you get to a doctor.					
7. Record information: vital signs, IV infusion, condition of placenta and membranes, estimated blood loss, amount of oxytocin given.					

MODULE 5: HEMORRHAGE – PREVENT AND MANAGE

SKILL CHECKLIST: Manual Removal of Placenta	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. Look for signs of shock.					
2. Do external bimanual compression to slow bleeding while preparing.					
3. Check to see if bladder is full:					
a. If bladder is full, rub uterus, express clots.					
b. Catheterize if the woman can not pass urine.					
4. Explain to woman that you must remove the placenta. Help her lie on her back with her knees bent.					
5. Clean genital area with soap and water.					
6. If you can see the placenta, ask the woman to push a little.					
7. If placenta does not deliver: support uterus, pull on cord with a firm steady pull during a contraction.					
8. If the placenta does not come out, repeat oxytocin in infusion.					
9. Tell the woman you are going to remove placenta with your hand.					
10. Place gloved examining hand (with thumb folded into the palm) into the vagina. **Do not remove your gloved hand until you are finished.**					
a. If you **can** feel placenta, gently remove with next contraction.					
b. If you **can not** feel placenta, hold tension on cord with one hand, follow cord to placental edge.					

SKILL CHECKLIST: Manual Removal of Placenta	DATE				
PROBLEM SOLVING STEPS	**RATING**				
c. Let go of cord & hold (steady) uterus through abdomen.					
• With examining hand, palm facing up, move your fingers between edge of placenta and uterine wall.					
• Separate placenta with slicing motion using side of your hand. Do not pull on a piece of the placenta.					
11. When all of the placenta is in the palm of your hand, rub the uterus.					
12. Hold the placenta in your hand and gently remove placenta and membranes during a contraction.					
13. Rub the uterus until it is firm and contracted. Ask a helper or the woman to keep the uterus hard.					
14. Repeat IM oxytocin or increase the flow of IV infusion with oxytocin. Put baby close to the breast, if the woman condition allows.					
15. Examine placenta and membranes for completeness.					
16. Examine woman and repair any tears or episiotomy.					
17. Give woman a broad spectrum antibiotic.					
18. Check for bleeding, contracted uterus, and full bladder: • every 15 minutes for two hours • then every 30 minutes for 2 hours • then every hour for two hours; • then 3 times a day for three days.					

SKILL CHECKLIST: Manual Removal of Placenta	DATE				
PROBLEM SOLVING STEPS	**RATING**				
19. Stop IV infusion after 24 hours, if the woman is eating, drinking, and passing urine.					
20. Encourage breast feeding.					
21. Give analgesia as needed.					
22. Refer if complications or in 5 days if the woman does not feel well.					
23. Advise weekly follow up visits for woman and baby for 6 weeks.					
24. Record information: vital signs, IV infusion, amount of oxytocin given, condition of placenta and membranes, estimated blood loss.					

COMMENTS:

MODULE 5: HEMORRHAGE – PREVENT AND MANAGE

SKILL CHECKLIST: Digital Evacuation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. Give analgesia and IV infusion.					
2. **If pregnant**, decide gestation, see Module 9: Post Abortion Care. **If placenta has delivered** and too much bleeding, do digital evacuation.					
3. Clean the genital area.					
4. Wash hands, use sterile/HLD gloves.					
5. Gently separate the labia.					
6. Insert your hand while holding the uterus with the other hand.					
7. Gently slide index & middle fingers, past clots you feel, through cervix.					
8. Gather clots or tissue and remove holding them in your hand.					
9. If some clots are stuck, use sterile gauze to loosen them and remove.					
10. Rub the uterus.					
11. Give oxytocic or prostaglandin.					
12. Give broad spectrum antibiotic.					
13. Look at the gauze, clots and blood for tissue or membranes.					
14. Refer if complications or if the woman does not feel well.					
15. Record information: vital signs, IV infusion, condition of tissue, estimated blood loss, medications.					

SKILL CHECKLIST: Digital Evacuation	DATE				
PROBLEM SOLVING STEPS	RATING				

COMMENTS:

MODULE 6: RESUSCITATION

SKILL CHECKLIST: Infant Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Be Prepared for Baby's Problems					
1. Ask about problems during labor and birth that may cause a baby to have trouble breathing (page 6.7).					
2. Monitor mother and baby carefully during labor, Module 3.					
3. Have all equipment ready in one place for every birth (page 6.6).					
FINDING: Baby has trouble breathing					
Help Baby Breathe at Birth					
1. Call for help.					
2. **WARM**					
a. Quickly remove first wet cloth.					
b. Cover baby including the head with another dry cloth.					
c. Keep face and upper chest uncovered.					
d. Delay cord clamping for 2 to 3 minutes if possible.					
3. Tell mother and family baby is having trouble breathing and you are trying to help the baby.					
4. If you are alone ask mother or family to tell you right away if the mother has vaginal bleeding.					

SKILL CHECKLIST: Infant Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
5. **POSITION**					
a. Put baby on her back with folded cloth under shoulders.					
b. Slightly extend head (sniffing position).					
6. **SUCTION**					
a. Wipe mouth and nose with gauze or your finger.					
b. If airway not clear, suction (mouth first then nose). Do not suction too deep in throat/nose.					
c. LOOK to see if baby starts breathing.					
7. **STIMULATE**					
a. Rub up and down baby's spine with the heel of your hand.					
b. Caution – Never slap feet/back, never handle roughly, never use hot or cold water on baby.					
c. LOOK to see if baby starts breathing.					
8. Time from birth to start of breathing resuscitation should take no more than 30 seconds.					

COMMENTS:

SKILL CHECKLIST: Infant Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
FINDING: Baby has trouble breathing, is gasping, or is not breathing.					
Breathing Resuscitation					
1. **If mouth-to-mouth**: wash baby's face with soapy water, rinse with clean water, cover mouth and nose with gauze. **If Ambu** bag, Mod 6: Learning Aid 5.					
2. Position baby.					
3. Do test breath.					
a. **If doing mouth to mouth**, cover baby's mouth and nose with your mouth for a good seal.					
b. **If using Ambu bag**, cover baby's chin, mouth and nose with mask making a good seal (see Ambu Learning Aid 5).					
c. Give oxygen, if available. Attach to Ambu bag or put tube in baby's mouth for mouth to mouth.					
d. Breathe for baby 1 time and see if chest rises.					
4. If chest does not rise, check:					
a. Baby's position.					
b. Airway clear (no fluid or mucus in mouth or nose).					
c. Seal over baby's mouth & nose.					

SKILL CHECKLIST: Infant Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
5. Breathe for baby about 40 times in a minute.					
a. Breathe only the air in your mouth and not too hard or according to bag and mask.					
b. LOOK for baby's chest to rise.					
6. Check baby after each 40 breaths.					
a. LOOK: is baby **breathing**. Continue to breathe for baby having trouble breathing or is not breathing.					
b. Count the **heart rate** for 6 seconds & add "0" to number. Start chest compression if heart rate 60 or below.					
FINDING: Heart rate is 60 or below.					
Cardiopulmonary Resuscitation (CPR)					
1. Do 15 cycles: Breathe and Push (1 cycle = 1 breath + 3 chest compressions).					
a. Breathe into baby 1 time (1/2 second for breath).					
b. Do 3 chest compressions (1/2 second for each compression).					
Two finger method. Put index and middle fingers at right angle to chest, on center of chest just below nipple line. **OR** **Two thumb method**. Place thumbs on the center of chest just below nipple line with rest of hands around the chest and fingers supporting baby's back.					

SKILL CHECKLIST: Infant Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
c. Compress chest front to back, about 1/3 chest diameter.					
2. Check baby after each 15 cycles (30 seconds):					
a. **If baby is not breathing and heart rate is 60 or below**, continue cardiopulmonary resuscitation.					
b. **If baby is not breathing and heart rate is above 60**, continue breathing for baby.					
c. **If baby is breathing and Apgar Score is above 6**, help mother keep baby stimulated and warm skin to skin. Module 3: Labor, page 3.57.					
d. **If baby is breathing and Apgar Score is 6 or below**, help mother keep baby stimulated and warm skin to skin, REFER.					
3. Stop resuscitation after 10 min if no spontaneous heart beat; after 20 minutes if baby not able to breathe on her own.					
Counsel the Mother / Family *Guide for Caregivers* – Protocol: Baby Died					
Record the Resuscitation Module 3 – Back of Partograph**.**					

COMMENTS:

SKILL CHECKLIST: Infant Resuscitation	DATE				
PROBLEM SOLVING STEPS	RATING				

COMMENTS:

MODULE 6: RESUSCITATION

SKILL CHECKLIST: Adult Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Be Prepared To Do Adult Resuscitation					
1. Monitor woman carefully during labor and early postpartum.					
2. Identify things that could cause trouble breathing or the heart to not beat (page 6.27).					
FINDING: Trouble breathing					
Airway					
1. Ask, “Are you alright?”					
2. If no response, call for help.					
3. If not on back, roll the woman onto her back.					
a. Roll the whole body at same time.					
b. Make sure she is on a hard surface.					
4. Look for breathing.					
5. Look into her mouth to make sure the airway is open.					
a. If you see the tongue blocking the airway, change the position of the head to move tongue.					
b. If you can see something that is blocking the airway try to remove it: turn the person on their side or take it out from the mouth with your fingers.					

SKILL CHECKLIST: Adult Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
6. Position the head to prevent the tongue from blocking the throat.					
a. Place one hand on the woman's forehead and press firmly backward.					
b. With other hand, press fingers under jaw near the chin.					
c. Lift the chin until the teeth are almost closed.					
7. LOOK for breathing					
FINDING: No breathing					
Breathing Resuscitation					
1. Wipe off woman's mouth and face.					
2. Place a something (mask, gauze, or cloth) over the woman's mouth before breathing into her.					
3. Pinch her nose closed with your fingers.					
4. Open your mouth and put it around the woman's mouth, so no air can get out when you blow.					
5. Do 2 test breaths.					
6. LOOK if chest rises.					
7. If chest does not rise.					
a. LOOK into mouth again and take anything you can see or feel out with your fingers.					
b. Change position of her head.					

SKILL CHECKLIST: Adult Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
c. Do 2 quick breaths.					
d. LOOK to see if air enters her chest easily.					
e. If air does not enter easily, do the Heimlich Maneuver (see skill checklist for Heimlich Maneuver).					
8. LOOK for breathing.					
9. If no breathing, FEEL the carotid pulse for 10 seconds.					
10. If the person has a pulse, but is not breathing, do ONLY breathing resuscitation.					
a. Breathe into woman's mouth about 10 times per minute for 2 minutes (about 20 breaths).					
b. Recheck breathing and pulse every 2 minutes.					
FINDING: No pulse and no breathing					
Cardiopulmonary Resuscitation (CPR)					
1. Place hands correctly to do cardiac compression (page 6.30).					
2. Keep arms straight and elbows locked.					
3. Do CPR cycles.					
a. Push FAST & hard on chest. Push down about 5 cm.					
b. After each push, let the chest rise completely. DO NOT lift your hands up off the chest.					

SKILL CHECKLIST: Adult Resuscitation	DATE				
PROBLEM SOLVING STEPS	**RATING**				
c. Speed of the compressions should be about 100 a minute.					
d. One cycle is 30 compressions and 2 breaths.					
e. Do 5 cycles.					
f. If a person trained in CPR is with you, ask the person to hold the woman's head in position for breathing resuscitation.					
4. Check carotid pulse and breathing.					
a. No heart beat, no breathing: continue to repeat 5 cycles of pushing and breathing, then recheck pulse and breathing.					
b. Heartbeat, no breathing: do only breathing resuscitation.					
5. Continue resuscitation until the woman's heart starts beating and she is breathing, OR until you are so tired you cannot do it any more.					
Shock					
6. Keep woman warm during resuscitation. Wrap in a blanket or cover with dry cloths. Module 8: Stabilize and Refer.					
Counsel the Family, see Protocol: Woman Died					
Record the Resuscitation on Woman's Record					

COMMENTS:

SKILL CHECKLIST: Adult Resuscitation	DATE				
PROBLEM SOLVING STEPS	RATING				

COMMENTS:

MODULE 6: RESUSCITATION

SKILL CHECKLIST: Heimlich Maneuver (Prevent Choking to Death)	DATE				
PROBLEM SOLVING STEPS	**RATING**				
ASK AND LISTEN					
1. If conscious, ask the person if she can speak.					
LOOK AND FEEL					
2. Check for:					
• Person grabs throat, is agitated or moves arms wildly.					
• Coughs or makes crowing sounds with breathing (partial blockage).					
• Unable to speak, face looks purple, gradually loses consciousness (complete blockage).					
3. If person is unconscious:					
a. Open the mouth and LOOK if you can see anything that is blocking the airway.					
b. Remove what you see with your fingers.					
c. FEEL pulse if not with person when she loss consciousness. CPR may be needed.					
IDENTIFY THE PROBLEM: Blocked Airway					
TAKE APPROPRIATE ACTION (see next page)					

SKILL CHECKLIST: Heimlich Maneuver (Prevent Choking to Death)	DATE				
PROBLEM SOLVING STEPS	**RATING**				
FINDING: Conscious Person Choking					
1. If conscious and able to speak or cough:					
a. Encourage her to cough out the object by herself.					
b. If fish bone or other small object ask her to eat some food.					
c. If partly blocked object does not clear – REFER.					
2. If conscious and not able to speak or cough:					
a. Stand behind person where she is sitting or standing.					
b. Tell person you are there to help her.					
c. Put your arms around the person, holding your hands together on her upper abdomen.					
d. Make your hand nearest to the abdomen into a fist.					
e. Hold your fist with your other hand.					
f. Press your fist into the person's abdomen with a quick inward and upward push (thrust) with your hands.					
g. Continue to make quick thrusting movements with your hands until the object is not stuck in the person's throat.					
h. If the person loses consciousness, help her to the floor and lay her on her back.					

SKILL CHECKLIST: Heimlich Maneuver (Prevent Choking to Death)	DATE				
PROBLEM SOLVING STEPS	**RATING**				
FINDING: Unconscious Person Choking					
1. Open mouth and remove what is blocking the airway with fingers.					
2. If unable to remove blockage, position her head (press forehead backward and lift chin until the teeth are almost closed).					
3. Kneel facing the person's head (at the feet of a small child or over the thighs of an adult).					
4. Put your hands, one on top of the other, in the middle of the person's abdomen a little higher than the umbilicus. In a pregnant woman, place your hands higher on the abdomen. .					
5. Press the heel (palm) of your hand quickly into the abdomen and toward the head.					
6. Thrust inward and upward 6 to 10 times, one after the other. Thrust more gently in an baby or child.					
7. You may roll an adult on her side and use palm of your hand to hit the center of her back.					
8. If the person is coughing or making a crowing sound, ask her to spit the object out if she can.					
9. If person can not spit the object out, look into her mouth again and see if you can help to remove the object.					
10. If the person continues to crow (a partly blocked airway) or gives no response, repeat the thrusts.					

SKILL CHECKLIST: Heimlich Maneuver (Prevent Choking to Death)	DATE				
PROBLEM SOLVING STEPS	RATING				

COMMENTS:

MODULE 7: INFECTIONS – PREVENT AND MANAGE

SKILL CHECKLIST: Infection Prevention	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Prevent Infection					
1. Wear Protective & Clean Clothing:					
a. If not wearing, put on apron for delivery.					
b. Protect your eyes with goggles / glasses.					
c. Cover shoes or feet before entering delivery area.					
d. Use gloves to protect hands.					
2. Wash Hands					
a. Prepare soap, clean water, and clean, dry towel.					
b. Remove all jewelry including watch.					
c. Wet hands and forearms with running water. (Antiseptic hand rub may be used when hands are not visibly soiled).					
d. Wash hands and forearms for 10 to 15 seconds.					
e. Rinse hands and arms with clean running water until all soap is gone.					
f. Dry hands with a clean towel or allow hands to air dry.					
3. Put on HDL or Sterile Gloves					
a. Open the glove container without touching the gloves.					
b. Pick up the first glove with the folded cuff.					

SKILL CHECKLIST: Infection Prevention	DATE				
PROBLEM SOLVING STEPS	**RATING**				
c. Slide hand part way into one glove, pull it up. (Do not unfold cuff or touch outside of glove.)					
d. Pick up the second glove by putting your gloved fingers into the fold of the cuff. Slide your ungloved hand into the glove.					
e. Wiggle your hand in while you roll back the cuff.					
f. Roll back the cuff of first hand.					
4. Clean Labor and Care Areas					
a. Wash all surfaces and floors when birth is finished.					
b. General cleaning: use soap solution.					
c. Clean with disinfectant solution (chlorine decontamination solution): spills of body fluids, surfaces, instruments.					
d. Clean with disinfectant solution beds, delivery room, theatre, and latrine.					
5. Safe Waste Disposal					
a. Body waste in latrine.					
b. Sharps in puncture – proof container.					
c. Plastic waste: soak in 0.5% chlorine solution for 10 minutes and bury in a pit.					
d. Other waste soaked with body fluids: soak in 0.5% chlorine solution for 10 minutes, and burn or bury.					

SKILL CHECKLIST: Infection Prevention	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Infection Prevention Steps					
1. Decontamination					
a. Correctly prepare 0.5% chlorine solution for decontamination.					
b. If not already wearing, put on gloves and apron.					
c. Flush catheters and tubing and fill with solution using a syringe before placing in solution.					
d. Open instruments and place in solution.					
e. With needle still attached, flush syringes 3 times and fill before placing in solution.					
f. If wearing contaminated gloves, rinse gloved hands in solution and remove gloves.					
• Pull cuff of first glove part way down using the other gloved hand.					
• Remove second glove by using gloved fingers from first hand to pull your second glove off as you turn glove inside out.					
• Completely remove first glove touching only the inside of the glove.					
g. Cover gloves and equipment with solution, soak 10 minutes.					
h. Wash and dry hands.					
2. Cleaning and Rinsing					

SKILL CHECKLIST: Infection Prevention	DATE				
PROBLEM SOLVING STEPS	**RATING**				
a. Put on apron & heavy cleaning gloves, (or double glove using clean surgical gloves).					
b. Wash articles with soap and water.					
c. Use a brush on instruments grooves, teeth and joints.					
d. Flush catheters and tubing with soapy solution.					
e. If not disposing of needles and syringes, flush well with soapy water. If disposing, place in sharps container.					
f. If reusing gloves, clean gloves on both sides by turning inside out.					
g. Test gloves for holes.					
• Grasp each side of the cuff of the glove.					
• Trap air in the glove by flipping the glove over once.					
• Hold the cuff so the air can't escape.					
• Hold the glove under water to see bubbles from holes.					
• Dispose of gloves that have holes.					
h. Rinse everything well with clean water. Use a syringe to flush catheters and tubing.					
i. Hang up gloves to dry. Put other things on a clean, dry towel.					

SKILL CHECKLIST: Infection Prevention	DATE				
PROBLEM SOLVING STEPS	**RATING**				
3. High Level Disinfection – Steaming Method					
a. Put water into a steamer pot.					
b. Put a tray with holes into the pot. Be sure the water in the pot does not touch the tray.					
c. Put everything on steamer tray. If using a stack steamer, repeat process up to 3 steamer pans have been filled with items. Take apart syringes, flush tubing, open scissors and other instruments with joints.					
d. If HLD gloves, place gloves in a steamer tray. Place gloves so cuffs face outward toward the edge of the pan.					
e. Put forceps on the top steamer tray, on top of all other equipment to be steamed.					
f. Cover steamer pot and bring water to a boil.					
g. When steam begins coming out, time for 20 minutes.					
h. Remove steamer tray from pot.					
i. Remove lid. Gently shake the tray to remove water from the items.					
j. Place the covered steamer tray on an empty pot to dry, and cool the equipment and gloves.					
• USE WET. Cool gloves & equipment for 5 -10 minutes before using them “wet.” Use gloves within 30 minutes.					

SKILL CHECKLIST: Infection Prevention	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• USE DRY. Allow gloves & equipment to air dry in the covered steamer pan 4 to 6 hours. Gloves may be hung on a line to air or sun dry. Turn gloves so they dry on both sides.					
k. Transfer equipment using the forceps to a dry, HLD container with a tight-fitting lid.					
l. Transfer the gloves. Lightly powder the gloves. Place the powdered gloves, into a HLD container with a tight-fitting lid. (When using, put on gloves, wash gloved hands with soap & water.)					
4. High Level Disinfection – Boiling Method					
a. Open instruments & take apart syringes, flush catheters & tubing & put into pot.					
b. If boiling gloves, put gloves in a bag made of netting.					
c. Tie a string on the forceps. Put forceps on top of all other equipment to be boiled. Hang string over edge of pot.					
d. Cover all items completely with enough water to boil for 20 min.					
e. Boil 20 minutes. (Begin timing when water is at a rolling boil).					
f. Remove items with HLD forceps, place in uncovered HLD container.					

SKILL CHECKLIST: Infection Prevention	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• USE WET. Allow gloves & equipment to cool for 5 -10 minutes before using them "wet." GLOVES SHOULD BE USED IN 30 MINUTES.					
• USE DRY. Allow gloves and equipment to air dry in the HLD container. Gloves may be hung on a line to air or sun dry. Turn gloves so they dry on both sides.					
5. Storage					
a. Lightly powder gloves when dry. Place powdered gloves, into a HLD container with a tight-fitting lid. When using, put on gloves. Wash gloved hands with soap and water.					
b. When other items are dry, store in a HLD, covered container.					

COMMENTS:

MODULE 8: STABILIZE AND REFER

SKILL CHECKLIST: Peripheral Vein (IV) Procedure – Woman	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. Collect equipment, cut tape, have IV stand ready to hand fluid.					
2. Wash hands and put on gloves.					
3. Explain to the woman what you are going to do and help her get comfortable.					
4. Connect the tubing to the IV fluid.					
5. Connect the covered sterile needle or catheter to the tubing.					
6. Fill the tubing and needle with IV fluid. Clamp the tubing.					
7. Lay the IV container of fluid at the same height as the woman (on the bed or on a table next to the bed).					
8. Look for a vein (back of hand, forearm).					
9. Tighten a tourniquet around arm.					
10. Clean the skin with soap and water or antiseptic solution. Allow time for the skin to dry.					
11. Open the tubing clamp (blood will flush back into the needle when the vein is punctured by the needle).					
12. Hold the needle with the hand you use for giving injections.					
13. Use the thumb of your other hand to gently pull the skin over the vein area and hold the arm/hand still. (Do not touch the area you want to insert the needle.)					

SKILL CHECKLIST: Peripheral Vein (IV) Procedure – Woman	DATE				
PROBLEM SOLVING STEPS	**RATING**				
14. Push the needle through the skin:					
a. About 1 cm below point where you want needle to go in vein.					
b. Position the needle along the side of the vein.					
c. Gently push needle into the vein (blood should come back into the needle. If blood does not come back, turn needle a little or push it in vein a little more).					
15. When you see the blood in the needle, loosen the tourniquet.					
16. Hang the IV bottle / bag of fluid.					
17. Check that the needle is in the vein by running the IV fluid:					
a. If the area around the needle swells, stop the flow of fluid and remove the needle. Apply pressure. Repeat procedure.					
b. If the area around the needle does not swell, use the 3 cm piece of tape to fasten the needle when it enters the skin.					
c. Loop the 8 cm piece of tape, with its adhesive side up, under the needle. Fold each end of the tap diagonally across the needle to hold needle in place.					
d. Check again to see that the needle is still in the vein.					
18. Tape or wrap the arm to an arm board splint so that the arm can not bend and move the needle.					

SKILL CHECKLIST: Peripheral Vein (IV) Procedure – Woman	DATE				
PROBLEM SOLVING STEPS	**RATING**				
19. Regulate the fluid rate. Put a piece of tape on the IV container and mark where the fluid should be each hour.					
20. Check the rate of the fluid and infiltration every hour by lowering the IV solution container below the woman's body. You will see blood come into the needle/tubing, if the needle is still in the vein.					
21. Make sure woman is comfortable and that someone is with her to help or call for help if needed.					
22. Clean up and record information.					

COMMENTS:

MODULE 8: STABILIZE AND REFER

SKILL CHECKLIST: Nasogastric Feeding Tube Procedure – Baby	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. Collect equipment, cut tape, have solution / fluids ready.					
2. Explain to the parents / swaddle baby firmly to prevent moving.					
3. Position the baby with head slightly bent forward – ask family to hold.					
4. Wash hands and put on gloves.					
5. Measure the length of the tube that is needed:					
a. Measure from the middle of the upper lip to the ear.					
b. Measure from ear to xiphoid process (end of the sternum).					
c. Mark the tubing with a piece of tape to know when you have put in enough tubing.					
6. Smooth the feeding tube with your hands to warm and soften.					
7. Put water on tube so it slides easily.					
8. Push tube slowly down one nostril until you reach the mark on tubing. If baby is having trouble breathing insert tube through the mouth.					
9. Tape the tube on the side of the face with a short piece of tape.					
10. Check to see tube is in stomach:					
a. Look in the back of the throat to make sure tube is not coiled in the back of throat (if coiled in back of throat take it out).					
b. If too much coughing, tube may be in trachea (if so take it out).					
c. Suck the top end of tube with a syringe. If fluid comes up tube,					

SKILL CHECKLIST: Nasogastric Feeding Tube Procedure – Baby	DATE				
PROBLEM SOLVING STEPS	**RATING**				
the tube is in the stomach.					
d. Use syringe to push air into the tubing. At the same time listen with a stethoscope for sounds of air in the stomach.					
11. When you are sure tube is in the stomach, tape tube from under nose to ear so it can not be pulled out. Do not cover the nostrils.					
12. Attach the top end of the tube to a drip set or syringe.					
13. Give fluids according to protocol.					
14. Watch for vomiting, swelling of the eyelids, dehydration getting worse.					
15. Record time and amount of fluid given.					

COMMENTS:

MODULE 8: STABILIZE AND REFER

SKILL CHECKLIST: Rectal Fluid Procedure – Woman	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. Gather the equipment.					
2. Tell the woman what you are going to do.					
3. Wash your hands and put on gloves.					
4. Ask the woman to lie on her left side. Place cloth pad under buttocks.					
5. Lubricate the end of the tubing with water.					
6. Run water to the end of the tube and clamp off.					
7. Ask the woman to take a deep breath and breathe slowly.					
8. Push the rectal tube about 10 cm into the rectum.					
9. Hold the container of fluid about the level of the woman's hips for the fluid to run in.					
10. Run 500 ml of fluid in about 20-30 minutes.					
11. Remove the rectal tube.					
12. Help the woman breathe and relax to try to hold the fluid in.					
13. Clean and dry the woman.					
14. Clean up the equipment.					
15. Remove gloves and wash your hands.					
16. Record fluid intake & time given.					

SKILL CHECKLIST: Rectal Fluid Procedure – Woman	DATE				
PROBLEM SOLVING STEPS	**RATING**				
17. May repeat in 1 hour, if referral delayed, impossible to start an IV, or the woman can not drink.					
18. Make every effort for referral.					

COMMENTS:

MODULE 9: VACUUM EXTRACTION & OTHER PROCEDURES

SKILL CHECKLIST: Vacuum Extraction	DATE				
PROBLEM SOLVING STEPS	**RATING**				
1. Explain about procedure, make woman (and family) comfortable.					
2. ASK and LISTEN if the woman is willing to push.					
3. LOOK and FEEL – Abdominal Exam for conditions for using VE					
• Contractions are enough (3 contractions, lasting 50 seconds, in 10 minutes).					
• Baby is more than 36 weeks gestation.					
• Presentation of baby is cephalic (head).					
• Bladder is empty.					
• Level of head is 1/5 or 0/5 on abdominal palpation.					
4. LOOK and FEEL – Vaginal Exam to confirm conditions for using VE					
• Membranes are ruptured.					
• Cervix is fully dilated.					
• Position of vertex is known.					
• No evidence of cephalopelvic disproportion (molding +2 or less, baby not too big, pelvis not too small).					
5. IDENTIFY PROBLEM – Maternal exhaustion and fetal distress are indications to use VE in second stage.					

SKILL CHECKLIST: Vacuum Extraction	DATE				
PROBLEM SOLVING STEPS	**RATING**				
6. Prepare for VE:					
a. Talk with back-up doctor according to protocols.					
b. Tell woman and family you need to help the woman deliver her baby.					
• There may be possible problems.					
• If the VE does not help the baby come out, a cesarean section may be needed.					
c. Find helpers: help with procedure and with baby (care / resuscitation).					
d. Prepare equipment: connect pump, tubing, & correct cup. Test vacuum.					
e. Ask woman to empty bladder or catheterize if bladder felt.					
f. Position: on back, legs bent. Buttocks to edge of bed. Feet supported.					
g. Repeat vaginal exam to confirm position, descent, flexion point.					
h. Lubricate cup.					
7. Insert the VE cup:					
a. Hold the VE cup. Compress soft cup, or hold rigid cup sideways.					
b. Separate labia with your fingers.					
c. Gently pull down on perineum to make a place for the cup.					

SKILL CHECKLIST: Vacuum Extraction	DATE				
PROBLEM SOLVING STEPS	**RATING**				
d. Put the cup in gently over the fourchette and into the vagina.					
e. Press the cup downward and inward into the vagina until cup touches scalp (remember the position of the flexion point).					
f. Move the cup is over the flexion point (center on the sagittal suture, just in front of the posterior fontanel.					
g. Feel for maternal tissue under the cup.					
8. Hold the cup in position with one hand with the thumb on the cup and your index finger on the baby's scalp. You will use the other hand to pull.					
9. Raise the pressure – refer to VE manual for additional instructions. **(Learning Aid 2 Malmstrom instructions.)**					
a. At the beginning of a contraction, ask your helper to raise pressure to 100 mm Hg or equivalent. **(MALMSTROM: Raise pressure to 200 mm Hg).**					
b. Check again for absence of maternal tissue under cup.					
c. Wait for next contraction. **(MALMSTROM: Raise pressure to 600 mm Hg. Wait two mins for caput to form. Check if tissue under cup).**					
d. When the next contraction begins, raise the pressure to 500-600 mm Hg. Do not use pressure above 600 mm Hg.					
10. With a contraction, the woman will push as you pull downward.					

SKILL CHECKLIST: Vacuum Extraction	DATE				
PROBLEM SOLVING STEPS	**RATING**				
a. Ask the woman to push long and steadily with a contraction.					
b. As the woman pushes, pull downward on VE handle. Pull firmly & straight. Baby's head rotates as in a vertex delivery.					
11. When a contraction stops, woman stops pushing, you **stop pulling.**					
a. Reduce the pressure to 100 mm Hg or equivalent. **(MALMSTROM: Continue the pressure at 600 mm Hg).**					
b. Do not pull when contraction stops.					
c. Encourage woman to breathe slowly and deeply to relax.					
d. Ask helper to check FHR between each contraction.					
12. Repeat steps 10 and 11 until the head clears the symphysis pubis. You must see progress with each contraction. **(MALMSTROM: do not keep pressure at 600 mm Hg more than 10 min).**					
13. If you have three pop-offs (cup detachments), you should stop the vacuum extraction procedure.					
14. When head is clearing symphysis pubis, guide head straight out.					
15. Deliver the baby:					
a. If episiotomy is needed to help the head deliver, do it now.					
b. When head crowns, pull upward at 45° angle with next contraction to help the woman					

SKILL CHECKLIST: Vacuum Extraction	DATE				
PROBLEM SOLVING STEPS	**RATING**				
push out the head of the baby. Do not twist or turn VE cup or the handle.					
c. After the jaw has delivered, release the pressure and continue with the delivery.					
16. After the delivery care for woman and baby, look for any problems, care for the equipment.					

COMMENTS:

MODULE 10: POSTPARTUM CARE

SKILL CHECKLIST: Woman Postpartum Care: First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Make woman comfortable: provide privacy, listen carefully, answer any questions, show her respect.					
ASK and LISTEN					
1. How are you feeling?					
a. Any pain, headache, fever or bleeding since delivery?					
b. Any problem passing urine?					
c. How do your breasts feel? Are you going to breast feed?					
d. Any other concerns?					
2. Birth information. May be found in delivery record. If no record, ask:					
a. When & where did you deliver? Who was with you?					
b. Any problems for woman or baby?					
c. Did placenta come out? Any bleeding? Any tears or sore places?					
d. Are you taking any medicines?					
2. Emergency prep and planning. Remind about transportation, money, referral site, helpers					
a. Danger signs, page 1.					
b. Ask woman to repeat danger signs for herself and baby.					
3. Family Planning. Have you heard about spacing pregnancies?					

SKILL CHECKLIST: Woman Postpartum Care: First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
a. When do you want to have your next baby?					
b. What methods of FP do you know about?					
c. Have you talked about waiting 2 years before your next pregnancy?					
d. Have you decided on FP? See Counseling: FP.					
LOOK and FEEL					
1. Ask the woman to empty her bladder.					
2. Explain procedure to woman before doing the examination.					
3. Wash you hands.					
4. General health. Does she look happy?					
5. Does she look weak? Is there paleness? Does she have signs of anemia?					
6. Are there any signs of infection, skin sores, diarrhea, tuberculosis, thrush, herpes?					
3. Take her BP, pulse, temperature.					
4. Ask the woman to loosen her clothing and lay down. Keep areas of her body covered when not being examined.					
5. Feel the uterus. Does it feel round and hard (contracted)?					
a. Teach: a soft uterus may cause too much bleeding.					

SKILL CHECKLIST: Woman Postpartum Care: First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
b. Show woman / helpers how to feel uterus, how to rub uterus to keep it hard.					
6. Wash hands and put on gloves.					
7. Check pad for color and amount of lochia. Any odor of lochia? Any bleeding or blood clots? Explain what you are looking for.					
8. Look for tears, fresh bleeding, blood clots, swelling, pus, and pain around the vaginal opening, the perineum and anus.					
a. Teach woman how to wash the genital area. Advise to change pad/cloth at least 2 times/day.					
b. Explain if uterus is not hard, or other danger signs she must call for help immediately.					
9. Remove gloves and wash hands.					
10. Bladder. Any problems urinating? Advise woman to urinate often as full bladder may make her uterus soft and she may bleed too much.					
11. Ask woman to feel her uterus and tell you if the uterus feels hard.					
IDENTIFY PROBLEMS / NEEDS					
1. After you have finished the exam and the woman dresses, ask if she has any questions or concerns.					
2. If you find complications, manage according to protocols.					
3. If you find no complications, plan her care with the woman / family.					

SKILL CHECKLIST: Woman Postpartum Care: First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
TAKE APPROPRIATE ACTION					
1. Manage complications. Refer as needed.					
2. Treat other postpartum problems, see protocols.					
3. Give drugs and immunizations.					
4. Offer client education and counseling.					
a. Danger signs see page 1.					
b. Counseling, advice and information according focused postpartum care visits: nutrition, hygiene, rest, LAM.					
c. Make or review referral plan.					
5. Schedule repeat postpartum follow up visit.					
6. Record information on the postpartum record.					

COMMENTS:

MODULE 10: POSTPARTUM CARE

SKILL CHECKLIST: Baby Care - First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
ASK and LISTEN					
1. How is the baby?					
a. Trying to suck the breast? How often?					
b. Passing urine and stool?					
c. Crying? Sleeping?					
2. Any concerns about the baby?					
3. Birth Information. Information can be found on the delivery record. If no delivery record, ask family.					
a. Any problems at the delivery?					
b. Weight?					
LOOK and FEEL					
1. Examine baby in a clean place where mother and family can watch. Explain what you are going to do.					
2. Keep baby warm and dry.					
3. Wash hands.					
4. General appearance.					
a. Color: body and around mouth blue or pink?					

SKILL CHECKLIST: Baby Care - First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
b. Tense, relaxed, active, still?					
c. Cry: normal, high pitched or different?					
5. Breathing: without difficulty, regular, (normal 30-60 breaths / minute).					
6. Heart rate: regular, (normal 120-160 beats / minute).					
7. Temperature: feels warm, not cold, (normal 36.5-37° C).					
a. Explain how to keep baby warm & cover the head.					
b. Keep baby skin to skin or wrapped close with mother or someone the first days of life.					
c. Delay bathing for 24 hours after birth.					
8. Weight: looks about average, (normal 2.5-4 kg). Small babies (less than 2.5 kg) are at risk of hypothermia, infection, breathing problems. Tell mother and family how much the baby weighs.					
9. Measure: most babies measure (45-53 cm) from top of head to bottom of feet with legs straight. Mothers like this information.					
10. The whole body. Use gloves if there is any discharge or bleeding.					
a. Head: fontanel's, sutures, molding, swelling, depressions.					
b. Eyes: swelling, discharge.					

SKILL CHECKLIST: Baby Care - First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• Give eye prophylaxis soon as possible after birth.					
• Advise to come for care if any eye swelling or sticky discharge.					
c. Nose & Mouth: check lips and feel inside mouth.					
• Look at sucking reflex while baby breast feeds. Look at breathing from nose.					
• Advise only breast milk, colostrum (first milk) protects baby from sickness, let baby suck often. If HIV positive and mother chooses not to breast feed see counseling section on HIV.					
d. Spine: look and feel for any swellings, depressions, openings.					
e. Limbs: look and feel hips, legs and feet for movement and legs same length.					
f. Reflexes: check startle reflex (Moro). Arms and hands open wide if baby is moved suddenly or hears loud noise like clapping hands.					
g. Skin: look at the color, any growths or birthmarks (stains).					
• Jaundice is normal 3rd or 4th day, is gone within a week.					
• Serious jaundice is seen 1st or 2nd day, refer baby.					

SKILL CHECKLIST: Baby Care - First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
h. Cord: look for oozing (leaking) of blood. Retie if you see fresh blood.					
• Advise to refer if any discharge or foul smell.					
• Keep cord clean & dry with chlorohexidine, soap & water, or nothing on cord stump until cord falls off.					
• May put baby in bath water after cord falls off.					
i. Genitalia: feel both testicles in the scrotum & normal appearance of penis in the boy. For a girl, look for normal appearance.					
j. Anus and urethra: check that baby has urinated and had a bowel movement.					
• Advise first stools blackish and sticky, change to yellow in 3-5 days.					
• Refer baby with watery, dark green, mucus or explosive stools.					
11. Wash hands. Make sure the mother and baby are comfortable.					
IDENTIFY PROBLEMS AND NEEDS					
1. Discuss and explain.					
a. Find out if there are any questions or concerns.					
b. Explain about your findings.					

SKILL CHECKLIST: Baby Care - First 24 Hours	DATE				
PROBLEM SOLVING STEPS	**RATING**				
2. If you find complications, manage according to protocols.					
3. If you find no complications, plan care with the woman / family.					
TAKE APPROPRIATE ACTION					
1. Manage complications, see protocols. Refer as needed.					
• Trouble breathing					
• Not able to suck					
• Temperature not normal					
• Low birth weight					
2. Treat other problems, see protocols.					
3. Give immunizations and medicines, see formulary.					
4. Offer education and counseling: warmth, feeding, delay bathing, cord care, danger signs on page 1.					
5. Record information on the baby record (under five chart, other).					

COMMENTS:

SKILL CHECKLIST: Baby Care - First 24 Hours	DATE				
PROBLEM SOLVING STEPS	RATING				

COMMENTS:

MODULE 10: POSTPARTUM CARE

SKILL CHECKLIST: Postpartum Follow Up Care at 2 - 3 Days, 7- 10 Days, 4- 6 Weeks	DATE				
PROBLEM SOLVING STEPS	**RATING**				
Before you begin each visit, read the information on the postpartum record from the last visit. Some of the information / responses might change from previous visits, you will need to ask the mother about most of these things each time you see her.					
ASK and LISTEN How does mother feel? How is baby?					
1. General. How are you feeling? Rest and sleep? If not, why not? Any concerns?					
2. Diet and fluids. What did you eat yesterday? Drinking fluids every time breast feeding and eating?					
3. Temperature. Have you felt chilled or very hot? Baby felt too hot or too cold?					
4. Bowel and bladder. When was last time you urinated? Do you urinate often, any pain or burning? Any leakage of urine or stool?					
• Advise squeezing exercise (Kegels).					
• When was your last bowel movement? Any problem with bowel movements?					
5. Pain. Have you felt any pain in your uterus, lower abdomen, or perineal area? When did pain start? Where is it? Describe it? Anything make it go away or get better?					
6. Lochia / discharge. How often do you need to change perineal pad / cloth? What color is discharge? Does it small bad?					

SKILL CHECKLIST: Postpartum Follow Up Care at 2 - 3 Days, 7- 10 Days, 4- 6 Weeks	DATE				
PROBLEM SOLVING STEPS	**RATING**				
7. Breast feeding. Is your baby sucking well? Any pain or discomfort in breasts?					
• Watch breast feeding position, attachment, suck. Ask: how often does baby feed? See Breast Feeding counseling for LATCH tool					
• Advise LAM: breast feed when baby is hungry, every 2-4 hours, even at night, not more than 6 hours between feeds.					
• How often does baby wet (urinate)? Advise, if feeding enough, will wet 6-8 times a day.					
• Is baby taking anything besides breast milk? Advise give only breast milk, no water, no other drinks, no pacifier.					
8. Baby sleep. How much does baby sleep at night? During the day?					
9. Baby bowel movements. What color is stool? How often does baby pass stool?					
10. Feelings about baby. How do you feel about caring for your baby? Do you have any questions/problems?					
11. Understands baby care. Do you feel comfortable holding, bathing, feeding the baby? Toilet (urine and stool) care?					
12. Signs of depression. Do you feel sad or worried about anything?					

SKILL CHECKLIST: Postpartum Follow Up Care at 2 - 3 Days, 7- 10 Days, 4- 6 Weeks	DATE				
PROBLEM SOLVING STEPS	**RATING**				
13. Taking medications. • Did you take Vitamin A capsule (if appropriate)?					
• Remember to take your iron and folate for 40 days.					
14. Family planning needs. What FP methods do you know about and what have you heard about FP?					
• What FP methods have you used before? Were you happy with the method? If not, why?					
• How many children would you like to have? If you want another child, how long do you want to wait?					
• Advise spacing 2-3 years between pregnancies helps keep her & babies healthy.					
15. Immunizations. • Give woman tetanus if needed. • Give baby BCG, oral polio, Hepatitis B, and return date for next immunizations, use country protocols.					
LOOK and FEEL – Mother					
Explain to the mother what you are going to do. Use procedure from 6-24 hours exam. Normal findings and advise at 2-3 days and 7-10 days (4-6 WEEKS NOTED) include:					
1. Relationship with baby.					
• Observe mother touching her baby, turns toward baby when feeding or holding, makes eye contact, stimulates baby.					

SKILL CHECKLIST: Postpartum Follow Up Care at 2 - 3 Days, 7- 10 Days, 4- 6 Weeks	DATE				
PROBLEM SOLVING STEPS	**RATING**				
2. Vital signs. Temperature, pulse, and BP are normal. Advise mother to report if she has a fever.					
3. Breasts. Soft & full, nipples not cracked or sore. Advise mother to encourage baby to suck and empty both breasts every 2-4 hours. (4-6 WEEKS LACTATION WELL ESTABLISHED.)					
4. Uterus. Firm & getting small, not tender. Ask if she checked her uterus today, if it has been hard since last visit. Advise her uterus will continue to get smaller. (4-6 WEEKS UTERUS TO NONPREGNANT SIZE.)					
5. Lochia. Red, decreasing in amount, no foul smell. (4-6 WEEKS NO DISCHARGE, NO FOUL SMELL.)					
• Advise woman / family discharge will change color becoming light red or pink, then yellow and white. Discharge should never have bad odor.					
• Refer if discharge red or smells bad.					
6. Perineal area – Area is clean with little swelling & little discomfort. (4-6 WEEKS CLEAN AND HEALED.)					
• Advise: wash with soap & water each time passing urine or stool, wash from front to back, wash hands.					
• Change perineal pad/cloth at least twice a day.					

SKILL CHECKLIST: Postpartum Follow Up Care at 2 - 3 Days, 7- 10 Days, 4- 6 Weeks	DATE				
PROBLEM SOLVING STEPS	**RATING**				
• When possible lie with legs apart so air can get to area to help perineal area heal.					
7. Remove gloves, wash hands.					
8. Write findings on postpartum record.					
9. Ask mother if she has questions.					
LOOK and FEEL – Baby					
1. General appearance. Active when awake.					
2. Breathing. Breathes easily.					
3. Temperature. Skin warm to touch, temperature normal.					
4. Weight. Explain weight gain tells us baby is getting enough breast milk. (baby will gain 1-2 kg by 6 weeks, double birth weight by 3-4 months. If weight gain not adequate, counsel on breast feeding, look for other problems.)					
5. Head. Fontanel's not depressed and not bulging.					
6. Eyes. No discharge, no redness.					
7. Mouth. Check sucking by watching baby breast feed, mucous membranes are moist.					
8. Skin. Not yellow (jaundice), not blue (cyanosis), not dry, no lesions, no rashes.					

SKILL CHECKLIST: Postpartum Follow Up Care at 2 - 3 Days, 7- 10 Days, 4- 6 Weeks	DATE				
PROBLEM SOLVING STEPS	**RATING**				
9. Cord. Clean and moist 2-3 days, dried by 5-7 days, off by 2 weeks or before after birth, no redness, no discharge, no bad odor.					
IDENTIFY PROBLEMS / NEEDS					
TAKE APPROPRIATE ACTION					
1. If complications for woman or baby, give care using protocols.					
2. If any other problems for woman or baby, plan care, laboratory tests, treatments, referral and plans for follow up.					
3. Advise of danger signs for postpartum woman and for baby, see page 1.					
4. Give medicines as discussed in postpartum counseling and formulary.					
5. Schedule next visit for woman's follow up and an under-five clinic visit for baby.					
6. Write findings and plans of care in a report for woman and baby records.					

COMMENTS:

Summary of Performance

Skill Checklists		Experience and Performance								
Module 2	First Antenatal Visit, page 211	DATE								
		RESULT								
	Repeat Antenatal Visit, page 221	DATE								
		RESULT								
Module 3	Labor Admission, 1st Stage, page 224	DATE								
		RESULT								
	Woman & Baby Care 2nd, 3rd, 4th Stage Labor, page 231	DATE								
		RESULT								
Module 4	Give Local Anesthesia, page 236	DATE								
		RESULT								
	Cutting a Mediolateral Episiotomy, page 238	DATE								
		RESULT								
	Cervical & Vaginal Inspection for Lacerations, page 240	DATE								
		RESULT								
	Repair of a Mediolateral Episiotomy, page 242	DATE								
		RESULT								
Module 5	Bimanual Compression of the Uterus External and Internal, page 252	DATE								
		RESULT								
	Manual Removal of Placenta, page 255	DATE								
		RESULT								
	Digital Evacuation, page 258	DATE								
		RESULT								

Module 6	Infant Resuscitation, page 260	DATE								
		RESULT								
	Adult Resuscitation, page 266	DATE								
		RESULT								
	Heimlich Maneuver, page 271	DATE								
		RESULT								
Module 7	Prevent Infection, page 275	DATE								
		RESULT								
	Infection Prevention Steps, page 277	DATE								
		RESULT								
Module 8	Peripheral Vein (IV) – Woman page 282	DATE								
		RESULT								
	Nasogastric Tube – Baby page 285	DATE								
		RESULT								
	Rectal Fluid – Woman page 287	DATE								
		RESULT								
Module 9	Vacuum Extraction page 289 (MVA and Symphysiotomy in Module 9)	DATE								
		RESULT								
Module 10	Woman Postpartum Care: First 24 Hours page 294	DATE								
		RESULT								
	Baby Care First 24 Hours After Birth page 298	DATE								
		RESULT								
	Postpartum Follow Up Care page 304	DATE								
		RESULT								

Notes

Notes

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