LIFE-SAVING OBSTETRIC CARE:
A SELF-DIRECTED LEARNING GUIDE

Self-Study Questions and Obstetric Job Aid

INTRODUCTION

Keeping up new skills is often hard for providers when they return to their workstations, especially in obstetric care because obstetric complications are relatively rare events, and many providers do not get regular practice managing these cases.

The **Life-Saving Obstetric Care Self-Directed Learning Guide** is designed to help trained providers remember and retain their new skills. By using this tool, providers trained in life-saving obstetric care skills can continuously improve their skills so that they can provide the highest possible quality of maternity care and save the lives of women and babies.

The **Learning Guide** covers all the topics of life-saving obstetric care training. For each topic, the Learning Guide includes:

1. Learning objectives
2. Self-study questions
3. Self assessment questions
4. Reflection and Self-Improvement Goals

An **Obstetric Care Job Aid** is available as a reference at the end of the Learning Guide. This Job Aid reviews key information from the training, including clinical definitions of various complications, signs and symptoms, and recommended management. It also includes several clinical management flow charts for easy reference.

It is recommended that maternity care providers review one topic every one to two weeks to keep up their knowledge and skills. To use this guide:

1. **Read the Learning Objectives** to become familiar with what you should know or be able to do at the end of each section.
2. **Complete the Self-Study questions** to quiz yourself on key information learnt during the training
3. **Answer the Self-Assessment questions** to reflect on your own practices and to identify areas where you could improve your practices.
4. Consider the **Questions for Reflection**, and **identify your individual goals for improvement**. Make a note of any issues you wish to discuss with a supervisor or trainer during a follow-up visit.

Remember, this tool is designed to help you keep up your own knowledge and skills. You are not required to use it, but doing so may help you save women's lives.

1. COMMUNICATION SKILLS/ CLIENT PROVIDER INTERACTION

A. LEARNING OBJECTIVES

1. To explain facilitative factors, verbal and non-verbal, that promote interpersonal relationships.
2. To identify at least five counselling/ feedback skills.
3. To identify effects of good and bad interpersonal relationships with colleagues, clients and community.
4. To describe the characteristics of an effective team.

B. SELF-ASSESSMENT QUESTIONS

Think about the interaction you recently had with a client. How well did you do with each of the following communication behaviours? Check the appropriate column.

Provider Behaviours	I could have done better	I did O.K.	I did very well	Not Applicable
1. Nodded to show client that you were listening				
2. Summarized what the client said before moving on to another topic				
If you did, what did you say?				
3. Waited for client to answer one question before asking another question				
4. Maintained eye contact with the client				
5. Repeated, in your own words, key ideas mentioned by the client				
If you did, what did you say?				
6. Allowed client to finish speaking before responding				
7. Found out reason for client's visit				
If you did, what did you say? If you did not, what the reason?				

C. REFLECTION AND SELF-IMPROVEMENT

Questions for Reflection:

1. Did you maintain privacy and confidentiality during history taking?
2. Did you maintain privacy and confidentiality during physical examination?
3. Why is it important to establish good rapport with clients?
4. Why is it important not only to listen carefully to the client, but also to show the client that you are listening?
5. Were the facilities you needed for effective communication available and where you needed them to be for easy use e.g., privacy?
6. What could you have done to encourage the client to speak more openly and at greater length?
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		**Skill goals**	**Results**
1.			
2.			

2. UNIVERSAL PRECAUTIONS AND INFECTION PREVENTION

A. LEARNING OBJECTIVES

1. To use universal precautions for infection prevention at all times.
2. To practice methods for disinfection and sterilisation

B. SELF-STUDY QUESTIONS

1. When should you wash your hands with plain soap and water (tick one)?
   a. Before any interaction with a patient
   b. When blood, body fluid, faeces contacts your skin
   c. After you remove gloves
   d. All of the above
   e. None of the above

2. True or False. You should dry the washed rubber gloves in the sunlight to kill all the germs.

3. True or False. Leaving a capped needle after you use it on the floor is acceptable universal precautions.

4. You should use sterile gloves when (tick all that are true):
   a. cutting an umbilical cord
   b. starting an IV infusion
   c. conducting a vaginal exam
   d. giving an injection

C. SELF-ASSESSMENT QUESTIONS

Think about the patients you treated this week. How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
I washed my hands with soap and water before all patient interactions.				
I did not recap any used (dirty) needles.				
I immediately disposed of any used (dirty) needles or blades in a safe container after using them.				
I used needles only one time before disposing of them.				
I washed my hands after removing my gloves every time.				
I made certain all instruments used were cleaned and sterilized properly after the instruments came in contact with broken skin or body fluids / blood.				
I made certain that no one could be exposed to contaminated waste by burning or burying the waste.				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Were you prepared for this situation? How could you prepare better for next time?

2. Was the equipment you needed available and where you needed it to be for easy use?

3. Did you practice universal precautions at all times?

4. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		Behavioural goals	Results
1.			
2.			

3. FOCUSED ANTENATAL CARE

A. LEARNING OBJECTIVES

1. To take a medical history in a way that allows the health provider to identify possible problems, especially anaemia and pre-eclampsia
2. To identify anaemia, pregnancy induced hypertension, and other problems by doing a physical examination, monitoring fundal height, testing reflexes, monitoring weight gain and vital signs, ordering laboratory tests and other procedures.
3. To provide appropriate health information and advice, give treatments, and refer to a higher level facility when appropriate.
4. To discuss and prepare a birth prepardness plan with the woman and her family.

B. SELF-STUDY QUESTIONS

1. Name 6 aspects of the antenatal visit physical examination.

2. Name 5 aspects you should assess about a woman's life circumstances during the initial antenatal visit.

3. True or False. You should offer family planning counselling during antenatal visits.
    a. Why or why not?

4. Name 6 aspects of birth preparedness you should discuss with every women during the initial antenatal visit

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who came for an antenatal care visit. How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
I assessed the social circumstances of the woman and assisted her to make a plan to meet her needs.				
I discussed with the woman (and family members if available) a plan for where she would like to deliver, and how she would get there.				
I discussed with the woman the costs for a normal delivery, and helped her identify financial resources in her community.				
I discussed with the woman and her family a plan for transportation in the event of emergency delivery.				
I discussed with the woman and her family about savings to pay for delivery costs and emergency transportation.				
Together, the woman and I made a schedule for antenatal care and I scheduled the next follow-up visit				
I maintained privacy and confidentiality during physical examination.				
I discussed the need to prepare in advance a compatible blood donor in case of emergency.				
I discussed with the woman and her family the signs and symptoms of serious obstetric complications.				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		**Behavioural goals**	**Results**
1.			
2.			

4. ANAEMIA

A. LEARNING OBJECTIVES

1. To define mild, moderate, and severe mild anaemia
2. To list risk factors associated with anaemia
3. To describe the management of anaemia

B. SELF-STUDY QUESTIONS

Read the case study and answer questions below.

A 17-year old girl comes into the clinic. She is assessed to be 32 weeks pregnant and this is her second antenatal visit. Her baby measures correctly for dates and her blood pressure is 126/78. She states she is tired more than usual, and she wakes up in the night with shortness of breath. Her mucous membranes appear pale and she seems weak in general.

1. True of False. This girl's case should be considered an obstetric emergency.

2. What is the most likely cause of severe anaemia (tick one)?
   a. Poor nutrition before and during pregnancy
   b. A parasite infestation, like malaria or hookworm
   c. Pre-existing anaemia
   d. Adolescence

3. What could be done to manage this case?

4. What should be done to prepare for labour?

5. How would labour be managed for a woman who has severe anaemia?

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who had anaemia (or use the case study above). How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	**I did this**	**I did not do this**	**Why not?**	**I practiced counselling skills**
I assessed for causes of mild anaemia and anaemia itself.				
I discussed the causes and consequences of anaemia with the woman.				
I discussed malaria prevention and treatment with the woman.				
I assessed for severe anaemia (lung sounds, liver enlargement, neck veins, oedema)				
When a woman was in active labour, I took all precautions for PPH in management decisions of labour and delivery.				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		Behavioural goals	Results
1.			
2.			

5. PRE-ECLAMPSIA

A. LEARNING OBJECTIVES

1. To define pre-eclampsia and eclampsia
2. To list the risk factors of pre-eclampsia
3. To identify signs and symptoms of pre-eclampsia
4. To list the complications of pre-eclampsia
5. To outline management of pre-eclampsia

B. SELF-STUDY QUESTIONS

Read the case study and answer questions below.

A 44-year old woman who is 38 weeks pregnant and gravida 11 presented with complains of abdominal pains similar to those she experienced when she gave birth, as well as headache and severe palpitation. On physical exam, the attending midwife found that the woman was in active labour. Cervical dilation was 5cm with cephalic presentation at 3/5 above the pelvic brim. Her BP was 180/100 and pulse was 90 bpm. She had mild ankle oedema and her reflexes were in the normal range.

1. How would you have managed this case?

2. What kind of history would you obtain on which specific symptoms to help you stage her illness?
   a. Severe headaches
   b. Epigastric pain
   c. Dizziness
   d. Visual disturbance
   e. Swelling of the hands, face, or feet

3. Why is it important to always elicit the complete history of a pregnant woman who has an elevated blood pressure?

4. Why must one always follow a certain set of standards when a pregnant woman presents with an elevated blood pressure?

5. List 6 predisposing factors for pre-eclampsia.

6. Specify the two major signs of pre-eclampsia.

7. List 5 complications of pre-eclampsia.

8. How should the care of a pregnant woman with mild pre-eclampsia be managed (tick one)?
   a. Bed rest, high protein diet, regular BP check
   b. Lasix (or phenobab, valium or hydralazine), high protein diet, potassium citrate, bed rest
   c. Lasix (or phenobab, valium or hydralazine), regular BP/checks, potassium citrate, bed rest

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who had pre-eclampsia or eclampsia (or use the case study above). How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
I measured and recorded the patient's blood pressure on her chart				
I checked and graded the patient's reflexes				
I examined the patient for ankle oedema, as well as for swelling of the face, and hands.				
I took a sample of the patient's mid-stream urine to check for proteinuria.				
I knew the correct dosage and had the drugs needed for sedation.				
I knew the correct dosage and had the drugs needed for controlling her hypertension.				
I was aware of 3 signs of severe pre-eclampsia that demand urgent referral				
I had access to means to refer my patient if her condition warranted referral				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		Behavioural goals	Results
1.			
2.			

6. ANTEPARTUM HAEMORRHAGE

A. LEARNING OBJECTIVES

1. To describe antepartum haemorrhage.
2. To list risk factors associated with antepartum haemorrhage.
3. To describe the management of antepartum haemorrhage.

B. SELF-STUDY QUESTIONS

1. List the two major causes of APH

2. Tick the symptoms associated with each condition.

Symptoms	Placenta Praevia	Abruptio Placentae
a. Foetal heart rate normally present		
b. Size of uterus larger than dates		
c. Abdomen soft.		
d. Bleeding does not correspond to poor condition of patient		

3. What is happening here? (Match the corresponding condition with the appropriate statement below)
   a. Ectopic Pregnancy
   b. Ruptured Ectopic Pregnancy
   c. Hydatidiform Mole
   d. Abortion

____ 1. Moderate to severe abdominal pain, tender abdomen, palpable mass in lower abdomen, cervix closed.

____ 2. Bright red bleeding with clots and tissue pieces, low back pain, mild abdominal pain, cervix open.

____ 3. No abdominal pain, uterine size greater than dates, boggy uterus, symptoms of pregnancy pronounced

____ 4. Small amount abdominal pain, spotting, stable condition, missed periods

____ 5. Generalized abdominal pain, dark red vaginal bleeding, patient is very pale, signs of shock, rebound tenderness

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who had antepartum haemorrhage. How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
I completed a history of problems, illnesses, surgeries				
I conducted a general physical assessment				
I assessed for possible emergent conditions (ectopic pregnancy, abortion, abruptio placentae, etc.)				
I informed the woman of my findings based on assessment and history				

I informed the woman's family of my findings (if appropriate) with the woman's permission				
I first conducted a gentle speculum examination when I suspected placenta previa				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		**Behavioural goals**	**Results**
1.			
2.			

7. NORMAL VAGINAL DELIVERY: ACTIVE MANAGEMENT OF 3RD STAGE OF LABOUR

A. LEARNING OBJECTIVES

1. To define common terms related to third stage of labour
2. To describe active management of the third stage of labour
3. To deliver the placenta, using active management of the third stage.

B. SELF-STUDY QUESTIONS

1. When should the midwife give oxytocin (tick one)?
   a. Once the baby is placed on the mother's abdomen
   b. Once the placenta is delivered
   c. When the baby is crowning
   d. When the anterior shoulder is born

2. Signs of placental separation include (tick all that apply):
   a. Lengthening of the cord
   b. Gush of blood
   c. Uterine contractions
   d. Steady flow of blood
   e. Soft uterus

3. List the two major causes of haemorrhage in the first hours after birth?

4. What are the four components of active management of the third stage of labour?

5. True or False. The midwife should massage the uterus to help the placenta deliver.

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who had a normal vaginal delivery. How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	**I did this**	**I did not do this**	**Why not?**	**I practiced counselling skills**
I prepared the oxytocic in a syringe before the second stage of labour				
I assessed the bladder to be certain it is empty				
I asked the pregnant woman in what position was she most comfortable in when giving birth				
I supported the uterus while delivering the placenta				
I encouraged putting the baby to breast as soon as possible after delivery				
I practiced gently turning the placenta while delivering it slowly				
I taught the mother what a firm uterus should feel like and how to massage her uterus				
I asked the mother if she had any preferences or requirements for disposal of the placenta				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		**Behavioural goals**	**Results**
1.			
2.			

8. PROLONGED LABOUR AND OBSTRUCTED LABOUR

A. LEARNING OBJECTIVES

1. To demonstrate ability to manage problems that may occur to a woman in the first stage of labour.
2. To identify abnormal labour patterns associated with malpresentation, malposition, cephalopelvic disproportion and abnormal uterine action.
3. To describe and demonstrate pre-referral management.

B. SELF-STUDY QUESTIONS

1. Labour is considered normal when (tick all that apply)
   a. it begins on its own at 38-42 weeks gestation
   b. the foetus is presenting vertex
   c. it is completed within 18 hours on its own with no complications to the mother or foetus.
   d. the latent phase (less than 3 cm dilated) lasts less than 8 hours after admission

2. List the four major actions of pre-referral management of obstructed or prolonged labour.

3. For each of the observations below, use a tick to indicate whether it is a sign of normal or abnormal labour.

Observations	Normal Labour	Abnormal Labour
Cervical dilation of 1cm every hour		
Occiput posterior position		
Strong contractions upon palpation lasting 5 minutes each		
When delivering, the top of the baby's head appears and then retracts into the vagina when the contraction ends.		

4. True or False? When conducting a breech delivery you should allow the baby to hang by its own weight until you see the hairline, then you can deliver the head.

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who prolonged or obstructed labour. How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
I used the partograph to help me with decision making while looking after my patient				
I assessed the position and size of the baby				
I assessed the well-being of the woman for delivery				
I assessed the size of the pelvis for adequacy				
I assessed the power of the contractions for adequacy				
I explained findings to the woman and her family				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		Behavioural goals	Results
1.			
2.			

9. THE PARTOGRAPH

A. LEARNING OBJECTIVES

1. To define and discuss the partograph and its importance.
2. To demonstrate ability to record (plot) information on the partograph.
3. To demonstrate ability to make decisions for maternal care using the partograph.

B. SELF-STUDY QUESTIONS

1. List the three components of a partograph

2. The widest part of the foetal head passes the pelvic brim when descent is (tick one)
   a. 2/5 above the brim
   b. 3/5 above the brim
   c. 4/5 above the brim
   d. 5/5 above the brim

3. Read the case study below and use the information provided in the table to plot a partograph and answer the following questions:
   a. What action should be taken at 12 noon at a health centre?
   b. What action should be taken at 12 noon at a hospital?

A woman who was gravida 2 para 1 was admitted in labour at 4 am with membranes ruptured at 12 midnight. The following observations were made:				
Observations and Time Taken				
Time Taken	4am	8am	12 noon	2pm
Foetal heart rate (beats per min.)	140	140	170	120
Cervical dilatation	2 cm	3 cm	4cm	4cm
Contractions	2-10	3-10	5-10	5-10
Duration of Contractions	20 sec	45 sec	50 sec	55 sec
Descent of head	4/5	3/5	3/5	3/5
Blood pressure (mmHg)	110/70	120/80	130/90	130/98
Pulse rate (beats per min.)	80	84	110	120

4. What problems or difficulties do you face when using the partograph? (i.e. plotting of the partograph, interpretation, and making decision)

5. What are the reasons for not using the partograph in a hospital?

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient whose labour you monitored using the partograph. How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	**I did this**	**I did not do this**	**Why not?**	**I practiced counselling skills**
I initiated use of the partograph when the woman was admitted				
I recorded all aspects required on the partograph				
I made decisions using the partograph				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		**Behavioural goals**	**Results**
1.			
2.			

10. POSTPARTUM HAEMORRHAGE

A. LEARNING OBJECTIVES

1. To describe postpartum haemorrhage
2. To describe prevention and management of postpartum haemorrhage

B. SELF-STUDY QUESTIONS

1. Immediately following delivery (tick all correct answers)
   a. A woman should be observed closely and continuously for 24 hours
   b. A woman should be discharged immediately after 4th stage of labour.
   c. There is no need to observe a woman for more than 6 hours.
   d. Baby should be put to breast within ½ an hour of birth.

2. List the risk factors associated with postpartum haemorrhage.

3. What are the main causes of postpartum haemorrhage?

4. Describe active management of third stage of labour.

5. What are the difficulties you have encountered when pregnant women come in with vaginal bleeding?

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who had postpartum haemorrhage. How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	**I did this**	**I did not do this**	**Why not?**	**I practiced counselling skills**
I practiced active management of the third stage of labour				
I assessed the bladder to be certain it was empty				
I massaged the uterus after delivery of the placenta				
I inspected the placenta after delivery for completeness				
I inspected the perineum for lacerations				
I inspected the cervix for lacerations				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		**Behavioural goals**	**Results**
1.			
2.			

11. POSTABORTION CARE

A. LEARNING OBJECTIVES

1. To define different types of abortion
2. To identify causes of various types of abortion
3. To describe different types of abortion complications
4. To define the elements of post abortion care
5. To identify key elements in post abortion care counselling

B. SELF-STUDY QUESTIONS

Please read the case study below and answer the following questions:

> A 38-year-old woman who is the mother of 5 children is married to a man who also keeps a girlfriend. She has had 7 pregnancies, one of which was a stillbirth and one that was a miscarriage. She works hard to feed her children, but it seems there is never enough to feed them all. At this point in her life, she does not wish to have any more children, but she has never used any modern family planning method. When she became pregnant with her sixth child, she consulted her husband for advice. He recommended that she obtain an abortion from the local healer. The local healer gave her some herbs to drink and placed some sticks inside her vaginal. She was in a lot of pain, and when she began to bleed heavily, her husband decided to take her to the hospital. The doctors and nurses chastised her for what she had done and threatened to report her to the local authorities. No one ever talked to her about how to avoid becoming pregnant again in the future.

1. True or False. Providing compassionate skilled care for a woman experiencing complications after an unsafe abortion is not the same as providing an abortion.

2. True or False. All health care providers have an obligation to help woman who are in danger after an unsafe abortion, even providers who believe abortion is wrong.

3. True of False. A woman can become pregnant within two weeks after an abortion.

4. What is the woman in the case study at risk for?

5. Name four things a health care provider can do to manage this case.

6. Name three ways a health care provider can help this woman with emotional pain.

7. What are the signs of infection? (name at least 4)

8. Normal bleeding after a miscarriage can best be described as (tick one):
   a. Bright red bleeding
   b. Bleeding with clots
   c. Similar to a monthly period for 2 weeks
   d. Similar to a monthly period for a few days

9. What can you do if the bleeding is more than normal (tick one)?
   a. Give ergometrine
   b. Rub the uterus
   c. Inspect and repair any trauma/ lacerations

10. In the case study above, the doctors and nurses neglected to provide adequate care for this woman. What was one of the most important things that should have been provided to this woman, and perhaps her husband?

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who needed postabortion care (or use the case study above). How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
I upheld confidentiality and privacy about the woman's situation and condition				
I provided comfort and reassurance				
I gave pain medication when the woman was obviously in pain or asked for pain medicine.				
I examined the perineum, vagina, cervix and uterus for any trauma if an unsafe abortion was suspected.				
I explained every treatment before and during provision.				
I scheduled a follow-up visit for the woman.				
I assessed for other health and social risks and made referrals when indicated.				
I provided family planning counselling and information regarding return to fertility.				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		Behavioural goals	Results
1.			
2.			

12. SHOCK

A. LEARNING OBJECTIVES

1. To define obstetric shock
2. To be able to recognise the common causes of shock in labour and delivery.
3. To describe the life-saving steps that must be taken when managing a patient in shock.

B. SELF-STUDY QUESTIONS

Please read this case study and answer the questions below.

A 30-year-old woman who is the mother of 4 children has delivered in the clinic a healthy neonate. After the baby was born, the midwife put the baby to breast and the mother began to nurse without any problem. As she was nursing her uterus continued to cramp and a stream of bleeding was noted indicating the placenta was ready to deliver. With steady traction on the umbilical cord while supporting the uterus, the midwife delivered the placenta. The midwife then massaged the uterus until the bleeding was minimal. She washed off the woman's perineum, inspected for any lacerations or tears, cleaned up the room and took the equipment to be sterilized. When she returned to the mothers room, she found the mother asleep on her bed with the baby well bundled. The midwife then left. One hour later she returned to check on the mother and baby and found the mother lying a pool of blood, her pulse 130 bpm, she was sweaty and cold and her eyes were dull, and she was unresponsive.

1. What could be the cause of the bleeding? What could you do to resolve the problem?

2. How should you position this woman? Why?

3. What equipment will you need to help this woman?

4. Please select the proper sequence of life saving steps (tick one). Then, explain why you chose that answer.
   a. Lay the woman on her side, cover her, provide CPR if she is not breathing, identify the cause of bleeding
   b. Assess for airway, breathing, and circulation, assess for cause of bleeding, cover her to keep her warm, prepare for transport
   c. Assess airway, breathing and circulation, cover the woman and position her, start an IV and give fluids IV, take blood pressure and pulse, transport
   d. Cover the woman and position her, assess blood pressure and pulse, start and IV and give fluids.

   WHY?

5. What did this midwife neglect to do after delivery of the placenta?

C. SELF-ASSESSMENT QUESTIONS

Think about a recent patient who had shock (or use the case study above). How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
The clinic environment was prepared to manage someone in shock				
I responded in a calm and efficient manner				
I was able to identify the cause of shock.				
I provided words of support to the woman as I was acting to help her.				
I was gentle in moving the woman and providing any treatment				
While waiting for transportation, I wrapped the lower limbs and elevated them.				
I knew what actions (ABCs) to take to help this woman.				
I was able to set up an IV infusion and give medicine to help the woman.				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		Behavioural goals	Results
1.			
2.			

13. SEPSIS

A. LEARNING OBJECTIVES

1. To define sepsis in mother and baby
2. To recognise causes and risk factors of sepsis in mother and baby
3. To recognise signs and symptoms of chorioamnionitis, postpartum infections, and abortion infections
4. To recognise causes, risk factors, signs, symptoms, and prevention and management of tetanus in the baby
5. To use universal precautions for prevention of infection at all times

B. SELF-STUDY QUESTIONS

Please read this case study and answer the questions below.

> A 30-year-old woman who is gravida 4, para 3 is 32 weeks pregnant and complains of foul smelling discharge from her vagina. Her husband tells you her bag of water broke 2 days ago and she is having mild contractions. She appears pale, has a rapid pulse and respiratory rate of 28 breaths per minute and a 38.1 degrees temperature.

1. Describe what is happening in the case of this woman.

2. What are the appropriate steps that should be completed to care for this woman (tick one)?
   a. Start IV fluids, give antibiotics, prepare for transfer
   b. Open the airway, check her breathing, check her heartbeat and perform resuscitation if there is not heart beat.
   c. Monitor vital signs, start IV fluids, give antibiotics, conduct manual examination
   d. Check for signs of shock, conduct manual examination, prepare for transfer

3. True of False. This is an obstetric emergency

4. True or False. Because this woman is likely in shock, other findings you would expect are low urine output, low blood pressure, cold and clammy skin.

5. Name 2 possible complications of sepsis.

C. SELF-ASSESSMENT QUESTIONS

Think about a patient where you took actions to prevent sepsis and also a woman who became septic (or use the case study above). How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
I used clean or sterile procedures during vaginal exams				
I advise all women to seek medical attention as soon as their membranes rupture				
When caring for a woman in labour, I avoided excessive vaginal exams, or placing anything in the vagina.				
I kept the perineal area clean during labour, delivery and repair of the perineum after delivery				
I taught clean umbilical cord care and asked the mother to demonstrate				
I assessed for signs and symptoms of shock				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?
2. Was the equipment I needed available and where I needed it to be for easy use?
3. Was the equipment I needed sterilized or cleaned when I needed it?
4. I maintained privacy and confidentiality during history taking.
5. I maintained privacy and confidentiality during physical examination.
6. I practiced universal precautions at all times.
7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to this topic.

Behaviour that needs improvement		Behavioural goals	Results
1.			
2.			

14. NEWBORN RESUSCITATION

A. LEARNING OBJECTIVES

1. To describe the care of the baby at birth
2. To list signs and symptoms of a baby who is having difficulty breathing and/ or is experiencing cardiac arrest
3. To describe and demonstrate how to resuscitate a baby
4. To list emergencies in the newborn that must be referred to the hospital.

B. SELF-STUDY QUESTIONS

Read the case study on newborn resuscitation and answer the questions below.

> A baby was born to a woman who is gravida 4, para 3 with this delivery with no significant history. The baby was taken to a table immediately after delivery for assessment. The baby was dusky in colour with floppy muscle tone and a pulse rate of 90 beats per minute.

1. What should the healthcare provider have done differently?

2. What could the healthcare provider have anticipated knowing this woman's history? What could she have prepared before the delivery to be best able to attend to the needs of the newborn?

3. Select the most appropriate sequence of steps to take to care for this baby after the umbilical cord is cut:

   a. Dry off, position, suck the nose and mouth, begin ambu
   b. Dry off, position, and begin chest compression
   c. Suck the nose and mouth, position, check the heart rate
   d. Dry off, position, suck the nose and mouth, and check the heart rate.

Fill in the blanks for the following statements.

4. A CPR Cycle is ____ heart compressions and ____ blow (ventilation).

5. You should repeat the CPR Cycle ____ times and then recheck the baby's breathing and heart rate.

6. You should begin giving breaths if the heart rate is below ____ beats per minute.

7. You should begin CPR if the heart rate is below _____ beats per minute.

C. SELF-ASSESSMENT QUESTIONS

Think about your experience with newborn resuscitation (use the case study above). How well did you do with each of the following skilled behaviours? Check the appropriate column.

Provider Behaviours	I did this	I did not do this	Why not?	I practiced counselling skills
I was gentle with the newborn at all times				
I placed the newborn on the mother's abdomen when first born.				
I remained calm when I assessed the newborn needed help				
I followed the ABCs of newborn resuscitation				
I made sure the newborn maintained warmth				
I positioned the baby first				
I stimulated the baby first, before starting to use the ambu bag, to see if the baby would breathe.				
I used universal precautions at all times				
I kept the mother and her support person informed when appropriate during the resuscitation efforts.				

D. REFLECTION AND SELF-IMPROVEMENT GOALS

Questions for Reflection:

1. Was I prepared for this situation? How could I prepare better for next time?

2. Was the equipment I needed available and where I needed it to be for easy use?

3. Was the equipment I needed sterilized or cleaned when I needed it?

4. I maintained privacy and confidentiality during history taking.

5. I maintained privacy and confidentiality during physical examination.

6. I practiced universal precautions at all times.

7. What issues regarding this topic would you like to discuss during your next meeting with your supervisor?

Self-Improvement: List two specific behaviours that you would like to change this week to improve your skills related to selected topic.

Behaviour that needs improvement		Behavioural goals	Results
1.			
2.			

OBSTETRIC JOB AID

A REFERENCE FOR MATERNITY CARE PROVIDERS

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COMMUNICATION SKILLS/ CLIENT PROVIDER INTERACTION

Definition	Health care providers have a responsibility to provide quality health care. Quality of care, among other things, includes good client-provider interaction that is based on respect, is responsive to client needs, and is non-judgmental. The purpose is to provide accurate information so that the client is able to make informed decisions about her health care. By using counselling skills, for example the GATHER technique, and open communication, the provider will be able to understand the needs of the client fully and be able to provide appropriate information. Privacy and confidentiality are essential to establish a trusting relationship between the client and provider. Compassionate interaction is an important aspect of quality of care making sure that the client is satisfied with the care received and will return for follow-up visits.
Non- Verbal Communication Skills	**ROLES** is the acronym used to remember behaviour that facilitates communication R Relax O Open and approachable L Lean toward client and nod E Eye contact S Sit squarely and smile
Verbal Communication Skills	**CLEAR** is the acronym used to remember these verbal skills that facilitate communication C Clarify L Listen actively E Encourage A Acknowledge R Repeat and reflect
Counselling Process	The **GATHER** technique is used as a guide for a counselling session. G Greet the client, welcome her and ask how you can help her. A Ask about how she is doing and how her family is doing T Tell her what is going to happen during her visit to the clinic/ hospital H Help her to be comfortable and relaxed to understand her condition and make a decision E Explain any pre and post procedure care or instructions including the use and effects of drugs R Return visit, referral and/ or follow-up visits
The Caring Aspects of Communication	Caring behaviours are simple actions that maternity health care providers can take to show women kindness and respect, to give them privacy, and to make them feel comfortable. Additionally, women receive compassionate care when providers respond to their needs promptly, provide reassurance and information on ways to help themselves, and what to expect during labour and birth.

COMMUNICATION SKILLS / CLIENT PROVIDER INTERACTION (CONTINUED)

<table>
<tr><td>Providing Information</td><td>When examining, conducting a procedure, or providing instructions or treatment:
Explain BEFORE what will be done and why it is being done
Explain DURING the procedure or examination what you are doing
Explain that the treatment will not harm her or her baby and that not taking the treatment could be dangerous for her/ her baby
Give clear and helpful advice on how to take the medicine regularly, for example, take one tablet in the morning, one at noontime, and then one before sleep.
Demonstrate the procedure BEFORE starting
Explain how a treatment is given and then ask her to demonstrate
Explain any side effects, that they are not serious, and tell her how to manage them
Advise her to return if she is having any problems
Explore any barriers she or her family may have about using the treatment. Has anyone she knows used this treatment before? Were there problems? Reinforce correct information and try to clarify incorrect information.
Discuss the importance of buying and taking the prescribed drug/ treatment. Help her to think about how she will be able to purchase this.</td><td>Always explain what you are doing before and during examinations/ treatments/ procedures.</td></tr>
<tr><td>Privacy and Confidentiality</td><td colspan="2">Private Examination Place: Ensure a private place for examination. Organize the area so the woman is protected from the view of others.
Private Counseling Place: Ensure a private place for counseling. When discussing necessary messages, be sure the messages cannot be overheard.
Consent: Obtain consent from the woman before discussing her situation with her partner or family.
Records: Ensure all medical and counseling records are locked someplace and confidential
Logbooks and Registers: Limit to responsible providers only.</td></tr>
<tr><td>Counselling Adolescent clients</td><td colspan="2">Recognize that pregnant adolescents have special needs.

Adolescents may need extra teaching about self-care during pregnancy, what to expect during labour and delivery, breast-feeding, and have special needs for counseling for post partum family planning. They may also have special needs when they leave the hospital due to their socio-economic situation.</td></tr>
<tr><td>Post procedure tasks</td><td colspan="2">Record all the pertinent information in the woman’s records, and the ANC/PPC or procedure register</td></tr>
</table>

CARING BEHAVIORS

<table>
<tr><td>Definition</td><td>Caring behaviors are those behaviors performed by maternity care providers that treat women with kindness and respect, give them privacy, and make them comfortable in a safe environment. Additionally, women receive caring behaviors when providers respond to their needs promptly, provide information to them on ways to help themselves and what to expect during labour and birth. Women in labour have better birth outcomes and a decrease in the length of labor when allowed to have a support person of their choice, with them. Encouraging a family member or friend to be with the woman is a caring behavior.</td></tr>
<tr><td>Examples of Caring Behaviors</td><td>

I Treat Patients and Families in the Way I Would Like to be Treated

1. By Using Communication Techniques That Show Respect and Care
    - I introduce myself and address the patient by her name
    - I smile
    - I look into the patient's eyes when speaking
    - I use understandable language
    - I use a calm, respectful tone of voice
    - I keep body height at the same level when talking together (if patient is lying down, I sit in chair beside the bed)
    - I pay attention when the patient talks
    - I include the patient and family in discussions about the patient's situation when doing bedside rounds… a good way to educate and show respect at same time

2. By Assuring Privacy / Confidentiality
    - I do not discuss personal details about the patient in public
    - During examinations:
        - I draw curtains between beds if possible
        - I do appropriate exposure during examinations:
            - Carefully expose part of body to be examined
            - Cover parts of body not being examined
            - Ask family to help provide privacy by holding up cloth during examination

3. By Supporting Patient's Physical & Emotional Needs
    - I allow a support person of the patient's choice to be with her while in labour
    - I observe for signs of pain, fear, anger, stress, and fatigue
    - I assist the patient to relieve her pain and be comfortable
        - I observe the patient frequently for signs of discomfort or pain. I rub her back, assist her to change her position, offer her a drink, help her walk around or encourage her to breath with contractions
    - I show empathy to the patient by being kind
    - I PRAISE and REASSURE patient efforts!

4. By Respecting A Patient's Dignity
    - I always explain what I am doing before touching… such as for vaginal or breast exam, injection, or abdominal exam (I avoid touching sensitive areas e.g. clitoris)
    - I tell the patient my findings during an examination

5. By Providing Guidance
    - I explain what to expect during labour and birth, etc.
    - I explain what the patient and family can do to help the patient and her labour (positions for labour and birth, drink lots of fluids, empty bladder often, exercises for labour, how to stay cool during birth)

</td></tr>
</table>

CARING BEHAVIORS (CONTINUED)

Quality Care	• There is growing evidence that patient-perceived quality of maternal health services, particularly provider attitudes and behaviors, was a significant influence on their willingness to use skilled maternity care. • Core competencies or essential skills for skilled care providers have been expanded to include courteous, respectful, individualized care during birth and awareness of cultural differences – caring behaviors.
Barriers	• Many studies indicate that problems related to maternal provider behaviors and attitudes are a major barrier to utilization of skilled childbirth care. • For a number or years, research has documented increasing neglect, verbal abuse, and intentional humiliation of women during childbirth. • Research in Bangladesh shows that inattentive, discourteous staff behavior, lack of cooperation and lack of privacy are widely considered to explain the underutilization of rural health facilities.
Ways to Overcome Barriers	• Individual commitment to increasing caring behaviors • Team effort to make changes and promote use of “caring” behaviors • Support and role modeling from leadership • Promote ways to increase motivation and provide incentive for “caring” behaviors

UNIVERSAL PRECAUTIONS AND PREVENTING INFECTION

<table>
<tr><td>Definition</td><td>Every person is considered a possible infection carrier. Health care providers should be very strict about practicing Universal Precautions with every interaction. Universal Precautions are infection prevention methods that protect health care workers from contracting any infection as well as prevent spreading any infection to people to whom they provide care. Bacteria and viruses that are always or sometimes on the skin, in the mouth, in the intestines, and the genitals cause infection. Infection prevention methods include good hand washing, wearing gloves, using barriers, and safe work practices.</td><td>Consider everyone a possible infection carrier. TAKE PRECAUTION to protect yourself and those for whom you provide care.</td></tr>
<tr><td>Hand Washing</td><td colspan="2">Wash hands with plain soap and water for at least 30 seconds:
• Before any patient interaction
• When any blood or body fluid is present on the skin
• When gloves are removed since gloves may have holes
• After changing soiled linen or clothing

Wash hands with anti-microbial soap for 3-5 minutes or for 20 seconds with an alcohol preparation before any surgical procedure.</td></tr>
<tr><td>Using Barriers</td><td colspan="2">Use sterile gloves before performing the following:
• Vaginal examination
• Delivery
• Cord cutting
• Repair of perineum

Use disinfected / clean gloves under the following circumstances:
• Blood drawing
• Touching anything wet: broken skin, mucous membranes, blood or other body fluids, linens
• Handling and cleaning instruments and blood and body fluid spills
• Handling contaminated waste
• Covering cuts, abrasions, broken skin
• When splashes or spills of blood or body fluids are expected, use protective goggles, use a facemask, and wear an apron.</td></tr>
<tr><td>Needle and Blade Disposal</td><td>• Use each needle/ blade only once
• Do not recap needles
• Dispose of needles/ blades immediately after use in a container that cannot be punctured
• Do not hand needles/ blades to another person to dispose
• When container is ¾ full empty container dispose of properly or incinerate</td><td>DO NOT recap used needles, dispose of them directly in a sharps container</td></tr>
<tr><td>Waste Disposal</td><td colspan="2">• Burn or bury contaminated waste
• Wash hands, gloves and containers after disposal of infectious waste
• Pour liquid waste in a toilet that is flushable or pit toilet that is properly protected from insects</td></tr>
</table>

UNIVERSAL PRECAUTIONS AND PREVENTING INFECTION (CONTINUED)

Linen and Laundry	• Use gloves when collecting linen • Separate linen soiled with blood or body fluids • Handle and transport soiled linen in a way that prevents contamination of yourself and the immediate environment • Wash hands immediately after removing gloves that were used to handle soiled linen
Sterilization and Cleaning	Instruments that penetrate the skin must be adequately sterilized Single use instruments should be disposed of after use Clean and disinfect any equipment that comes in contact with unbroken skin Use bleach for cleaning bowls, buckets, furniture and floors after blood or body fluid To *disinfect* gloves: • Wash in soap and water, blow gloves full of air and submerge in clean water to look for air leaks, discard if damaged, soak overnight in bleach solution (0.5% solution), dry away from sunlight, dust inside with starch or powder. A pair of gloves can endure this process 5 or more times. To *sterilize* gloves: • Autoclave or high-level disinfection (boil already soap and water washed [gloves] for 20 minutes with lid on) **Note:** Gloves are always difficult to properly clean and reprocess. Where resources allow, always use disposable gloves (gloves that are used once and thrown away), instead of reusable gloves.

FOCUSED ANTENATAL CARE

<table>
<tr><td>Definition</td><td colspan="2">Antenatal care is health care of the pregnant woman from conception to the onset of labour. Focused antenatal care refers the minimum number of clinic visits, each of which has specific items of assessments, education, and care to ensure prevention or early detection and prompt managements of complications. The focus is on birth preparedness and readiness to handle complications. WHO recommends a minimum of four visits. Antenatal care visits should include respect for dignity, privacy, and confidentiality and full and accurate information for women. The outcome of pregnancy may be dependent on quality of antenatal care received.</td></tr>
<tr><td>Visit Schedule</td><td>Less than 16 weeks gestation
20-24 weeks gestation
28-32 weeks gestation
36 weeks gestation</td><td>Some women may require extra visits, depending on their condition</td></tr>
<tr><td>First Visit</td><td>Identity
Name, age, parity, address
• Social support, marital status

History and Circumstances
• Date of last menstruation (LMP), menstrual history, and pregnancy symptoms
• Contraceptive history
• Past obstetric history
o Ante/ post-partum haemorrhage
o Multiple gestation
o Eclampsia
o Sepsis
o Stillbirth or neonatal death
o Operative delivery (c-section, vacuum, forceps)
o Small neonate-premature or small for gestational age
o Planned or unplanned pregnancy
o Wanted or unwanted pregnancy
o History of general medical problems
o History of surgery
• Nutritional assessment

Physical Examination
• Overall appearance
• Height
• Blood pressure measurement
• Clinical signs of anaemia
• Breast examination
• Scars from previous surgery, including Caesarean
• Fundal height
• Foetal well-being, movements and heart sounds in second trimester
• Signs of physical abuse

Laboratory
• Blood group type and Rh test
• Haemoglobin level
• Syphilis test
• Urine analysis
• HIV screening (VCT) offer all women</td><td>Be certain to:

Book date for follow-up visit
• Discuss anti-malaria medicine schedule
Discuss
• Tetanus toxoid schedule.</td></tr>
</table>

FOCUSED ANTENATAL CARE (CONTINUED)

<table>
<tr><td>Birth Preparedness Planning</td><td>1. Expected place of birth and where skilled care is available
2. Discuss danger signs of complications during labour and delivery
3. Discuss specific costs and saving money for delivery
4. Discuss planning for transportation of ahead of time. Include distance and time to referral facility
5. Discuss what resources are available in her home community in terms of transport options, or loans
6. Discuss making prior arrangements in case of a serious complication for transport, a person to accompany her, child care, and potential blood donors</td><td>Discuss with patient. Include her family in this conversation.</td></tr>
<tr><td>Subsequent Visits</td><td colspan="2">Follow-up assessment
• Social support
• Any complaints or problems
• Follow-up on pending issues

Physical Examination
• Overall appearance
• Blood pressure measurement
• Clinical signs of anaemia
• Foetal well-being
• Signs of physical abuse
• Lie and presentation in the third trimester
• Examination of any complaints or problems

Counselling
• Birth preparedness
• Nutritional
• Safer sex
• Newborn care and exclusive breast feeding
• Hygiene
• Family planning and child spacing</td></tr>
<tr><td>Adolescent care</td><td colspan="2">Focused ANC provides a special opportunity to explore in depth the social circumstance and physical health of a pregnant adolescent. Because of their stage in life special attention needs to be paid in gaining social support from a trusted relative, birth preparedness planning, linking with social services, and a discussion about what to expect in labour and delivery.</td></tr>
<tr><td>Post procedure tasks</td><td>Record all the pertinent information in the woman's records, and the ANC register</td><td>Maintain complete records</td></tr>
</table>

ANAEMIA

Definition	When the red blood cells are low in number, even the slightest amount of bleeding can be fatal. Anaemia is defined as haemoglobin that is less than 11 g/dl. Mild anaemia is below 11.0g/dl – 8.6g/dl. Moderate anaemia is 8.5g/dl – 7.1g/dl, severe anaemia is 7.0g/dl – 4.0g/dl and is an obstetric emergency. Very severe anaemia is below 4 g/dl. Anaemia is best identified in the antepartum period and managed early in the pregnancy.	**SEVERE anaemia is an obstetric emergency.**
Risk Factors for anaemia in pregnancy	• Malaria • Obstetric: abortion, frequent child births, APH, PPH • Worm infestation and infections • Sickle cell disease • Malnutrition • Multiple pregnancy • Primigravida • A history of menorrhagia (heavy menstrual blood loss)	
Signs and Symptoms	• Tiredness and easy fatigue • Palpitations • Dizziness • Pale conjunctiva, tongue, palms, nail beds	
SEVERE Anaemia Signs and Symptoms	• Oedema • Severe pallor • Cough • Crepitations • Enlarged liver • Prominent neck veins	
Complications	• Congestive heart failure • Reduced resistance to infection • Premature labour • Haemorrhage leading to shock • Maternal or Foetal death • Low birth weight (LBW) baby • Foetal distress • Meconium aspiration • Foetal brain damage	
Pregnancy Management	1. Give iron and folic acid 2. Give malaria treatment at various times during pregnancy (as per national standard) 3. Treat hookworm infestations and other parasites 4. Treat infections/ diseases 5. Discuss diet 6. Discuss prevention of malaria and hookworm 7. Advise on the value of family planning **For Severe Anaemia:** 1. Transfuse blood: give 1 unit of blood for each 1g/dl below 7 g/dl. (example: if result is 5 g/dl, then give 2 units of blood since 5 + 2 = 7) 2. Use packed cells. If blood cannot be centrifuged let it hang until cells have settled.	For **SEVERE** anaemia, **REFER** to hospital since transfusion may be necessary **no matter how many weeks gestation** and when in labour.

ANAEMIA (CONTINUED)

Labour Management	1. Give Frusemide 40 mg IV with each unit of packed cells 2. Nurse propped up 3. Give oxygen by mask 4. Prevent prolonged 2nd stage by elective vacuum extraction 5. Do not allow patient to bear down with contractions 6. Do not give Ergometrine 7. Deliver the placenta by active management of third the stage Elective vacuum extraction 8. Examine placenta for completeness 9. Monitor for closely for signs of heart failure post-partum in acute room until anaemia is corrected	
Post procedure tasks	Record all the pertinent information in the woman's records, and the delivery register	Maintain complete records

MALARIA

Definition	Malaria is cause by a blood parasite that is transmitted by female anopheles mosquito. The mosquito bites a person and passes on the parasite into the blood stream. Malaria varies from mild to serious disease and **for pregnant women can cause severe anaemia,** and increase risk for premature labour, miscarriage, low birth weight babies, and foetal death. The malaria parasite in the blood of the mother accumulates in the placenta and therefore malaria may not be detectable with a finger blood sample. The malaria parasite usually does not pass to the blood of the foetus. In the placenta, the parasite blocks the blood flow to the foetus and therefore oxygen is also blocked. Pregnant women are especially at risk because they have reduced ability to fight infection.	**Pregnant women with severe malaria are particularly prone to hypoglycaemia, pulmonary oedema, anaemia and coma**
Prevention	1. Intermittent presumptive treatment with Sulfadoxine/ Pyrimethamine (SP) (Fansidar®) is recommended 2. Sleeping under an insecticide treated bed net 3. Wearing protective clothing 4. Maintaining proper sanitation around the house to reduce mosquito breeding (eliminate standing water, cut the bush low, cover potted water, etc.)	
Signs and Symptoms	Most but not all people will have symptoms such as; • Fever or history of fever lasting a few days • Headache • Feeling cold/ shivering • Body and joint pain • Loss of appetite • Abdominal pains, diarrhoea, nausea, vomiting • Malaise • Convulsions • Loss of consciousness	If a pregnant woman living in a malarial area has fever, headaches, or convulsions and malaria cannot be excluded, it is essential to treat the woman for both malaria and eclampsia
Complications	• Anaemia • Maternal death • Low birth weight baby • Foetal death • Acute renal failure • Respiratory distress syndrome • Shock • Hypoglycaemia • Jaundice from severe breakdown of red blood cells or liver cell damage • Acidosis • Pulmonary oedema	
Management during pregnancy	1. Reduce high temperature by tepid sponging, giving antipyretics 2. Check for malaria parasites in blood 3. Treat with anti-malaria medication 4. Investigate for cause of fever by ruling out other diseases/ infections known to cause febrile illness.	**SEVERE** malaria must **always** be treated with **IV Quinine 10mg/kg body wt in 5% Dextrose** solution.
Post procedure tasks	Record all the pertinent information in the woman's records	Maintain complete records

PRE-ECLAMPSIA

Definition	Pre-eclampsia is acute hypertension in pregnancy that often presents after 20 weeks of pregnancy, during labour, or up to 2 days after delivery. Severe pre-eclampsia is accompanied by proteinuria and generalized oedema, including the face and hands. Other presenting symptoms of severe pre-eclampsia are headache, upper abdominal pain, visual changes (blurred vision, spots of light before the eyes), and decreased urine output. The condition may develop before 20 weeks in gestational trophoblastic disease (Hydatidform Mole). Pre-eclampsia is characterized by a blood pressure equal to or greater than 140/90 mmHg or an increase of 30 mmHg systolic or 15 mmHg diastolic above the patient's normal baseline value. The cause of pre-eclampsia is not known but generally believed to be due to peripheral vasospasms. Pre-eclampsia is one major cause of maternal mortality that can be identified by good antenatal care.	**Severe pre eclampsia, eclampsia are obstetric emergencies.**
Risk Factors	Primigravida (especially teenagers and women over 35 years) Obesity Essential hypertension Renal Disease Multiple Pregnancy Polyhydramnios Diabetes mellitus Hydatidform Mole History of pre-eclampsia or eclampsia in a previous pregnancy • Family history of eclampsia	
Signs and Symptoms	The patient may have none, some, or all of the following symptoms: • Generalized oedema, including face and hands • Severe headache • Proteinuria • Elevated blood pressure • Upper abdominal pain • Significantly decreased urine output • Visual disturbances (flashes of light before the eyes, blurred vision) • Brisk reflexes • Confusion	**ALERT:** Impending eclampsia presents as increased proteinuria, marked increase in blood pressure, confusion, visual changes, and brisk reflexes.
Complications	• Eclampsia • Abruptio Placenta • Intrauterine growth retardation • Prematurity • Intra-uterine foetal death • Cerebrovascular Accident (CVA) • Heart failure and pulmonary oedema • Kidney failure • Rupture of liver capsule • Disseminated Intravascular Coagulation (DIC) • HELLP syndrome (**H**aemolysis **E**levated **L**iver Enzymes and **L**ow **P**latelet Count)	

PRE-ECLAMPSIA (CONTINUED)

<table>
<tr><td>Management</td><td colspan="2">1. Admit to a quiet room of hospital for bed rest, consider safety since an eclamptic episode can occur at any time
2. Blood pressure chart
3. Check urine for protein
4. Monitor fluid intake and output
5. Check weight daily
6. Monitor reflexes
7. Monitor foetal well-being (foetal kick chart)
8. Do not give diuretics unless in pulmonary oedema or cardiac failure
9. Control the blood pressure with anti-hypertensives, e.g. Nifedipine or Hydralazine or Aldomet
10. Prevent the occurrence of convulsions with Magnesium Sulphate or Diazepam
11. Deliver in the interest of the mother through the quickest and safest route</td></tr>
<tr><td>Post procedure tasks</td><td>Record all the pertinent information in the woman's records, and the procedure register</td><td>Maintain complete records</td></tr>
</table>

ANTEPARTUM HAEMORRHAGE

<table>
<tr><td>Definition</td><td>ALL bleeding in pregnancy is potentially serious and must be treated as an obstetric emergency until cause is ruled out or defined.
Bleeding in late pregnancy (28wks and above) is known as antepartum haemorrhage (APH) and is mainly due to placenta praevia or abruptio placenta.
Placenta praevia: painless bright red bleeding as a result of a placenta that is completely or partially situated in the lower uterine segment covers all or part of the cervix.
▪ Abruptio placenta: painful, may be mixed type of old and new bleeding as a result of a normally situated placenta (upper uterine segment) that is separating from the uterine wall.
Bleeding may also be a result of ruptured uterus where pain, abdominal distension, absent foetal heart sounds, and high maternal heart rate are presenting signs. Proper identification and management of haemorrhage during pregnancy and labour can minimize morbidity and mortality to a large extent. Haemorrhage is the leading direct cause of all maternal deaths.</td><td>NEVER perform a vaginal exam if active bleeding is present until placenta praevia has been ruled out.

Haemorrhage is the leading direct cause of all maternal deaths.</td></tr>
<tr><td>Risk Factors</td><td colspan="2">• Grand multiparity
• Abnormal uterus
• Trauma
• Hypertension
• Disseminated Intravascular Coagulation (DIC)
• Prolonged retention of dead foetus
• Severe pre-eclampsia/ eclampsia</td></tr>
<tr><td>Signs and Symptoms of APH associated with various complications</td><td colspan="2">Abruptio Placenta
• Foetal distress or no foetal heart sounds
• Maternal distress
• Uterus hard, tense and very tender
• Amount of blood loss does not correspond to poor condition of patient
• Shock
Placenta Praevia
• Normal foetal heart sounds
• Foetal presentation high or abnormal
• Bleeding may be a result of recent intercourse, or spontaneous
• Soft uterus
• Shock
Ruptured Uterus
• Abdominal distension
• Cessation of uterine contractions
• No foetal heart sounds
• Tender abdomen
• Foetal parts may be easily palpable on abdomen
• Shock</td></tr>
<tr><td>Complications</td><td colspan="2">• Severe anaemia
• Prone to infection due to low resistance
• Shock
• Maternal death
• Foetal death</td></tr>
</table>

ANTEPARTUM HAEMORRHAGE (CONTINUED)

Management	1. Set an IV infusion of Ringer's Lactate or Normal Saline, infuse rapidly by cannula 2. Deliver oxygen by face mask 3. Assess for cause of bleeding 4. Sedate if in severe pain 5. Stabilize patient 6. Treat for shock 7. **REFER** to hospital, send family member in the event a blood donor is needed	**REFER** all patients with bleeding to the hospital**.** **Send** family member in case transfusion is necessary
Post procedure tasks	Record all the pertinent information in the woman's records, and the procedure register.	Maintain complete records

NORMAL VAGINAL DELIVERY: SECOND STAGE

Definition Second Stage Conduct of a clean, safe delivery	***Many of the following steps or task will be performed simultaneously*** Second stage is from full cervical dilatation 10cm to the delivery of the baby Preparation 1. Prepare your delivery set and a clean, warm dry area for newborn resuscitation with all required equipment 2. Allow the woman to push spontaneously 3. Allow the woman to adopt a position of her choice 4. Tell the woman and her support person what is going to be done, listen to her questions 5. Provide continual emotional support and reassurance Conducting the delivery 1. Put on a clean plastic or rubber apron 2. Wash hands thoroughly with soap and water, and dry with a sterile cloth or air dry 3. Put on sterile gloves on both hands 4. Clean the perineum with antiseptic solution 5. Place one sterile drape under the woman's buttocks, the second over her abdomen and use the third to receive the newborn Delivery of the head 1. Use one hand to cover the anus with a sterile gauze pad 2. Place the fingers of the other hand on the advancing head 3. As the perineum distends, decide if an episiotomy is needed (e.g., if the perineum is very tight) 4. Maintain light pressure on the head to encourage flexion 5. Ask the woman to gently blow out each breath in order to avoid pushing 6. After crowning, allow the head to gradually extend under your hand 7. Gently feel around the newborns neck for the cord: ▪ If found slacken the cord to form a loop through which the baby can pass ▪ If the cord is wound tightly around the neck, clamp the cord with two artery forceps, placed 3cm apart, and cut the cord between the two clamps 8. Allow for restitution and external rotation to occur Delivery of the shoulders 1. Place one hand on either side of the newborn's head, over the ears 2. Apply gentle downward traction to allow the anterior shoulder to slip beneath the symphysis pubis 3. Ask an assistant to give 10 IU of oxytocin intramuscularly with the delivery of the anterior shoulder 4. When the axillary crease is seen, guide the head and trunk in an upward curve to allow the posterior shoulder to escape over the perineum 5. Grasp the newborn around the chest to aid the birth of the trunk and lift the newborn towards the woman's abdomen 6. Note the time of birth

NORMAL VAGINAL DELIVERY: SECOND STAGE (CONTINUED)

	Immediate care of the newborn 1. Dry the newborn immediately and thoroughly with a clean, dry towel/cloth immediately after birth 2. Wipe the newborn's eyes with a clean piece of cloth 3. Place the newborn on skin-to-skin contact on the mothers abdomen, and cover with a clean dry cloth/towel 4. Observe the newborn's breathing when completing steps 1 and 2 and perform the one minute APGAR score: ▪ If the newborn is not breathing, begin resuscitation measures ▪ If the newborn is breathing normally and is stable, continue with the following care **Clamping the cord** 1. Place two clamps on the cord with enough room between them to allow for easy cutting of the cord 2. Cut the cord, using sterile scissors under the cover of a gauze swab to avoid blood spurting 3. Tie the cord tightly 2.5 cm from the newborns abdomen 4. Cut off excess cord 5. Place newborn on mother's breast **6.** Palpate the mother's abdomen to exclude a second newborn

NEWBORN RESUSCITATION

Caring Behaviour/ Getting ready	***Many of the following steps or task will be performed simultaneously*** 1. Quickly wrap or cover the newborn and place on a clean warm surface 2. Tell the woman (and her support person) what is going to be done and encourage them to ask questions 3. Provide continual emotional support and reassurance as feasible	
Resuscitation and using the bag and mask	1. Position the head in a slightly extended position to open the airway 2. Clear the airway by suctioning the mouth and nose 3. Position the newborn's neck and place the mask on the newborn's face so that it covers the chin, mouth and nose. Form a seal between mask and the newborn's face 4. Ventilate at the rate of 40 breaths/minute for 1 minute and then stop and quickly assess if the newborn is breathing spontaneously 5. A CPR cycle consists of 5 chest compressions to 1 blow. Check response after 4 cycles. 6. If breathing is normal, and there is no indrawing of the chest and no grunting, put in skin-to-skin contact with the mother 7. If newborn is not breathing, or the breathing rate is less than 30 breaths/minute, or severe chest indrawing is present, ventilate with oxygen if available. Arrange for immediate transfer for special care 8. If there is no gasping or breathing after 20 minutes of ventilation, stop ventilating	
Post-procedure infection prevention tasks	1. Place disposable suction catheters and mucus extractors in a leak proof container or plastic bag. Place reusable catheters and mucus extractors in 0.5% chlorine solution (jik) for decontamination. Then, clean and process 2. Clean and decontaminate the valve and check for damage 3. Wash hands thoroughly 4. Record all the pertinent information in the mother's and newborn's records, and the delivery register	Maintain complete records

NORMAL VAGINAL DELIVERY: ACTIVE MANAGEMENT

<table>
<tr><td>Definition

Third Stage of Labour</td><td colspan="2">The third stage of labour is from the birth of the baby to the delivery of the placenta. It normally lasts 5-30 minutes, although it can last up to one hour.

Active management of third stage is a routine designed to decrease the chance of post-partum haemorrhage. It involves giving ergometrine or oxytocin with the delivery of the anterior shoulder or the whole baby, early clamping and cutting of cord, and assisted delivery of the placenta through controlled cord traction with the application of counter traction by supporting or stabilizing the uterus, through the anterior abdominal wall.</td></tr>
<tr><td>Third Stage: Active Management</td><td>1. Draw medication up into syringe before delivery:
2. Administer an oxytocic with the delivery of the anterior shoulder or as soon as the baby is delivered (e.g. syntocinon, syntometrine 1ml or ergometrine 0.5mg IM):
3. Do NOT give ergometrine or syntometrine to women with hypertension, cardiac disease or severe anaemia
4. Clamp the cord in two places (close to the infant’s navel and about one finger-length away) and cut between clamps
5. Feel for contractions
6. Place side of one hand against lower half of uterus above the symphysis pubis
7. With the index and middle finger of the other hand make a coil on cord
8. Pull with firm, steady traction on the cord downwards outward, then upward when the placenta appears in front of the vulva and is delivered (controlled cord traction)
9. If this does not work, place the hand on the uterus and push backward and upward. This helps to lift up on the big, floppy, anterior cervical lip often found in multigravidas. The placenta is then able to slide under the lip of the cervix into the vagina
10. Examine placenta immediately for completeness and measure blood loss
11. Examine cervix, vaginal walls, and perineum</td><td>DO NOT forcefully push the placenta out of the uterus by squeezing and putting pressure on the fundus of the uterus.

This procedure can cause tearing of the placenta and bruising, rupture, or inversion of the uterus.

If oxytocic is not available, suckling the infant at the breast causes the release of oxytocin that helps the uterus to contract and expel the placenta.</td></tr>
<tr><td>Fourth Stage of Labour</td><td colspan="2">The fourth stage is the first hour following the birth of the placenta.</td></tr>
<tr><td>Fourth Stage: Management</td><td colspan="2">1. The baby should be put to the breast within half hour after delivery (i.e., practice rooming in)
2. Keep the patient in the delivery room for one hour post-partum under close observation
3. Feel the uterus through the abdomen half hourly to be sure it is firm and not with blood
4. Look at the introitus to see that there is no active bleeding
5. Monitor the mother’s vital signs half hourly and ensure that she is in good condition
6. Examine the baby to be certain that he/she is breathing well and that the colour and tones are normal, and keep the baby warm (especially the head)
7. Administer Vitamin K, 1 mg IM to baby to prevent hemorrhagic disease (0.5mg if infant weighs less than 2,500gm)
8. Instil antibiotic drops in baby’s eyes</td></tr>
</table>

PROLONGED LABOUR AND OBSTRUCTED LABOUR

Definition	The active first stage of labour is prolonged when it exceeds 12 hours while regular contractions are present in both nulliparas and multiparas. An important sign that labour is not progressing well, is when the rate of cervical dilatation is less than 1cm per hour, or no change in cervical dilatation in 3 hours during the active phase of labour (i.e., during 3-10 cm cervical dilatation). (WHO, 1998). An important tool used to record labour progress and foetal tolerance of labour is the Partograph, which tracks labour in order to recognize prolonged labour and possible cephalopelvic disproportion long before labour becomes obstructed.	**Obstructed labour is considered an obstetric emergency.**
Risk Factors	• Poor contractions • Malpresentation or position of foetus • Abnormalities of the reproductive tract • Poor management of labour • Cephalopelvic Disproportion (CPD) • Malnutrition, short height • Previous caesarean section/ prolonged labour • Age 17 or younger • Any abnormalities in the 4 Ps - Powers (uterine contraction) - Passage (pelvis) - Passenger (Foetus) - Porter (Maternal condition)	
Signs and Symptoms	• Latent phase of labour lasts > 8 hours • Cervical dilation does not progress for > 4 hours when in active labour • Maternal distress • Meconium stained liquor drainage • Oedematous cervix • Secondary arrest of cervical dialatation • Large caput (foetal scalp swelling)formation • Foetal distress • Prolonged second stages of labour • Signs of late obstruction - Bandl's ring - Tonic uterus - Poor or no descent of presenting part - Severe moulding	When a mother who has been calm suddenly becomes agitated and restless, **THINK obstruction** and be sure to rule out obstructed labour.
Complications	• Prolonged rupture of membranes • Abnormal dilatation and/or swelling of the cervix • Uterine rupture • Fistula formation (VVF, or RVF, or both) • Puerperal sepsis • Caput succedaneum (foetal scalp swelling) • Birth asphyxia → cerebral palsy • Foetal death • Maternal death	

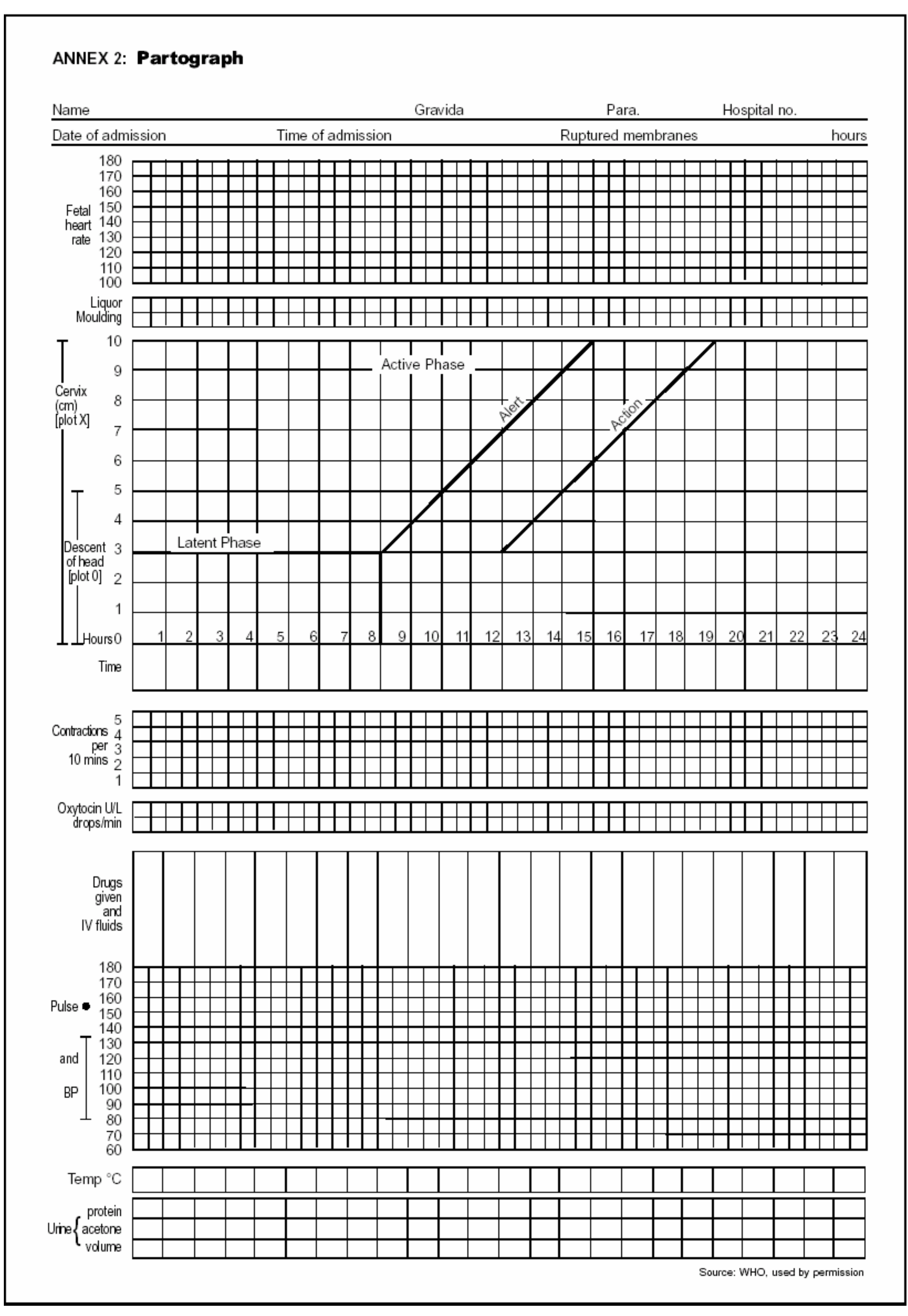
PROLONGED LABOUR AND OBSTRUCTED LABOUR (CONTINUED)

Management	1. Use Partograph 2. Monitor vital signs - Pulse every 30 minutes - Temperature every 2 hourly - BP every 4 hourly - Monitor foetal heart rate every 30 minutes - Measure urine volume every 2-4 hourly, encourage patient to void 3. Start IV fluid of 5% Dextrose Saline or Ringers lactate 4. Start broad spectrum antibiotics (Metronidazole, Gentamycin, Chloromphenical etc)	**REFER** to hospital
Post procedure tasks	Record all the pertinent information in the woman's records, and the delivery register. Remember to note the complication	Maintain complete records

THE PARTOGRAPH

Patient information	Fill out name, gravida, parity, hospital number, date and time of admission and time of ruptured membranes.	**Recording Interval**
Foetal heart rate	Record every half hour	Every 30 minutes
Vaginal exam (VE)	1. Record every 4 hours 2. Any drainage noted at the external genitalia e.g., blood, state of liquor, and meconium. 3. Assess for pelvic adequacy 4. Stage cervical dilatation and thickness 5. Presenting part, any moulding or caput formation 6. Any other unusual findings e.g., prolapsed cord pulsating/not-plusating	Done every 4 hours in a normal labour
Amniotic fluid	Record the colour of amniotic fluid at every vaginal examination I: membranes intact C: membranes ruptured, clear fluid M: meconium-stained fluid B: blood-stained fluid	Every vaginal examination. Vaginal exams (VE) are done after every 4 hours in normal labour
Moulding	1: sutures apposed 2: sutures overlapped but reducible 3: sutures overlapped and not reducible	Moulding is assessed each time you do a VE
Cervical dilatation	Assessed at every vaginal examination and marked with a cross (X). Begin plotting on the partograph from latent phase when contractions are rhythmic and regular	Every vaginal examination
Alert line	**The alert line** is a graphical representation of the rate of cervical dilatation in a normal labour at the rate of 1cm/hour. The line starts at 3 cm of cervical dilatation and rises to full dilatation. Most normal labours will fall to the left of the alert line; once your patient's chart of labour crosses the alert line you MUST review your patient for abnormal progress in labour.	
Action line	**The action line** is a graphical representation of the urgent need to take action. This line is plotted parralel to and 4 hours to the right of the action line. Any plot of labour that crosses the action line is progressing very poorly and requires URGENT skilled intervention.	
Descent	Assessed by abdominal palpation. Refers to the part of the head (divided into 5 parts) palpable above the symphysis pubis Recorded as a circle (O) at every vaginal examination. At 0/5, the sinciput (S) is at the level of the symphysis pubis.	Every vaginal examination
Hours	Refers to the time elapsed since onset of active phase of labour (observed or extrapolated).	
Time	Record actual time	
Contractions	Chart every half hour. Palpate the number of contractions in 10 minutes and their duration in seconds. Less than 20 seconds: Between 20 and 40 seconds: More than 40 seconds:	Every 30 minutes
Oxytocin	Record the amount of oxytocin per volume IV fluids in drops per minute every 30 minutes when used	Every 30 minutes
Drugs given	Record any additional drugs given	Every time used
Pulse	Record every 30 minutes and mark with a dot (●)	Every 30 minutes
Blood pressure	Record every 4 hours and mark with arrows.	Every 4 hours
Temperature	Record every 2 hours	Every 2 hours
Protein, acetone and volume	Record every time urine is passed	

THE PARTOGRAPH (CONTINUED) [1]



[1] This information and example partograph is adapted from *Managing Complications in Pregnancy and Childbirth: A guide for midwives and doctors.* World Health Organization http://www.who.int/reproductive-ealth/impac/Clinical_Principles/Normal_labour_C57_C76.html

POST PARTUM HAEMORRHAGE

Definition	Post-partum haemorrhage (PPH) is referred to as severe bleeding from the genital tract of 500ml or more after the birth of a baby, whether or not the placenta has been delivered, until the end of puerperiumi.e., 6 weeks after labour. Note that any blood loss that causes a patient's condition to deteriorate is also considered PPH. ▪ Primary PPH: bleeding that occurs within 24hrs after delivery. ▪ Secondary PPH: bleeding that occurs after 24hrs of delivery until the end of puerperium. Haemorrhage is the major cause of maternal morbidity and mortality around the world.	**ALWAYS** consider that the uterus could be ruptured
Risk Factors	• Uterine atony • Trauma • Full bladder • Lacerations • Retained placenta or membranes • Uterine rupture • Prolonged or obstructed labour • Chorioamnionitis • Previous history of PPH • Overdistended uterus • Mismanaged labour	
Signs and Symptoms	• Severe haemorrhage is characterized by signs of shock, which include: - Pallor - Cold and clammy skin - Decreased blood pressure (below 90/60 mmHg) - Increase pulse rate (above 110 beats per m) • 2. Increase respiratory rate (above 30 per minute) • 3. Impaired consciousness • 4. Decreased urinary output (below 30mls per hour)	
Complications	• Anaemia • Prone to infection due to low resistance • Shock • Maternal death	
Prevention	1. Proper monitoring and management of labour progress using a partograph 2. Routine active management of third and fourth stage of labour	
Management	1. Rub the uterus to stimulate contraction 2. Empty the bladder 3. Start and IV line, give Ringer's Lactate or Normal Saline and ergometrine 4. Deliver placenta with gentle cord traction if it is in the cervix or vagina 5. Expel clots from vagina 6. Identify cause of bleeding by inspecting for completeness of placenta 7. Inspect for any vaginal or cervical tears and lacerations, using a speculum.	

POST ABORTION CARE

Definition	Unsafe abortions are a significant cause of maternal mortality Abortion is the termination of a pregnancy before 28 weeks of gestation. Postabortion care (PAC) is an approach for reducing injuries and deaths from incomplete and unsafe abortions and their resulting complications, and for improving women's sexual and reproductive health and lives. Timely, clinically competent PAC can save women's lives and thus is an important part in saving women's lives. PAC refers to a package of critical reproductive health care services. The expanded PAC model to include five essential elements: • **Community and service provider partnerships —** For prevention of unwanted pregnancies and unsafe abortions, mobilization of resources (to help women receive appropriate and timely care for complications from abortion), and to ensure that health services reflect and meet community expectations and needs. • **Counselling —** To identify and respond to women's emotional and physical health needs and other concerns. • **Treatment —** Of incomplete and unsafe abortion and complications that are potentially life-threatening. • **Contraceptive and family planning services** — To help women prevent an unwanted pregnancy or practice birth spacing. • **Reproductive and other health services —** That are preferably provided on-site or via referrals to other accessible facilities in providers' networks.
Risk Factors	A multitude of risk factors exists which could lead women to needing post abortion care, including biological, cultural, and individual life circumstances.
Signs and Symptoms	• History of delayed menses • Vaginal bleeding • Cramping or lower back pain • Abdominal pain • Tender uterus • Rebound tenderness • Foul smelling vaginal discharge • Cervical motion tenderness • Rapid, weak pulse • Low blood pressure • Pale and sweaty • Rapid breathing • Confusion • Unconsciousness
Complications	• Haemorrhage • Sepsis, Peritonitis, Pelvic abscess etc • Trauma to uterus, bladder, intestines, vaginal canal • Ectopic pregnancy • Chronic PID • Menstrual irregularities • Infertility • Shock • Death

POST ABORTION CARE (CONTINUED)

MANAGEMENT PROCEDURES		
Management in all cases	Provide **comfort** and reassurance. Provide family planning counselling and contraceptives if desired. Be sure to inform her that she could become pregnant, even before her next menstrual period.	
Threatened Abortion	1. Bed rest 2. Mild sedation 3. Tocolytics, for example salbutamol 4. Follow-up 5. Treat any underlying cause	
Inevitable Abortion	Expedite expulsion with oxytocin drip if gestation > 14 weeks Evacuate if < 14 weeks or products of conception remain	
Incomplete Abortion	1. Evacuate uterus, preferably with Manual Vacuum Aspiration (MVA) if gestation age is below 12 weeks otherwise in the operating theatre 2. Antibiotic Therapy 3. Possible blood transfusion 4. Pain medications	Incomplete abortion with complications is life threatening for a woman.
Complete Abortion	1. Observe 2. Reassure 3. Discharge	
Missed Abortion	1. Expedite expulsion with oxytocin drip if gestation > 14 weeks 2. Evacuate if < 14 weeks or products of conception remain	
Septic Abortion	1. If septic abortion is suspected, examine for infection and trauma to the uterus, vagina, and bowel. Thoroughly irrigate the vagina to remove any herbs, local medicines, or caustic substances. 2. Blood grouping and cross match, may need blood transfusion 3. Parenteral broad spectrum antibiotics 4. Evacuate the uterus immediately after starting antibiotics 5. Manage as Incomplete Abortion.	
Counselling and Referral	1. After an abortion, a woman can become pregnant before her next menstrual period. Because of this she will need to decide if she wants to become pregnant again soon. She should receive family planning counselling BEFORE leaving the hospital. 2. A woman may have ended up with a septic abortion for many different reasons. She may need to talk with someone about her situation. Perhaps she may need legal advice or help in coping with what has happened. 3. If she has had many miscarriages, a woman may want to talk with an infertility doctor. 4. A woman may have also just learned she has a sexually transmitted infection or is HIV positive. Refer her to counselling so she may protect herself and her partner in the future.	Women have a right to **PRIVACY**. The health care provider should not discuss her condition with other people without her consent.
Post procedure tasks	Record all the pertinent information in the woman's records, and the procedure register. Remember to note the complication.	Maintain complete records

SHOCK

Definition	Shock occurs when the circulatory system collapses and therefore there is little oxygen being supplied to the body's vital organs, usually in obstetrics this is a result of significant blood loss.	
Causes	• Severe haemorrhage • Trauma to the reproductive tract • Prolonged labour • Fluid loss • Sepsis • Severe pre-eclampsia and Eclampsia In unusual cases: • Anaesthesia • Pulmonary embolism	
Signs and Symptoms	• Pallor • Cold clammy skin and extremities • Low blood pressure (below 90/60) • Increased pulse rate (above 110/min) • Increased respiratory rate (>30/min) • Decreased urinary output (<30ml/ hr)	
Complications	• Organ damage • Brain damage • Death	
Management of obstetric shock (The ABC's of resuscitation)	The first steps to care can be lifesaving 1. Open the airway (A) 2. Check breathing (B) 3. Check heartbeat, perform resuscitation if no heart beat © 4. Place oxygen by face mask 5. Start an IV line (2 if possible), give isotonic solution 1 litre/ 20 minutes, or fluids per rectum 6. Draw blood for - Hb - Group and cross-matching - Biochemistry and Microbiology - Do bedside clotting test 7. Examine again, do a more thorough secondary survey to identify cause of shock 8. Move her gently, body movement can worsen shock 9. Check vital signs every 10 minutes 10. DO NOT give fluid by mouth 11. Perform a vaginal exam to remove any visible signs of conception in the cervical os 12. Begin antibiotics if signs of sepsis are present or if unsafe abortion is suspected 13. Keep her warm, there is a danger of hypothermia 14. Turn the woman's head to the side 15. Elevate feet 10cm above head 16. Measure urine output 17. May need blood transfusion 18. Remain calm 19. Reassure her and her family	Prepare for **TRANSPORT** The first steps to care can be lifesaving Open the airway Check breathing Check heartbeat, perform resuscitation if no heart beat

SEPSIS

<table>
<tr><td>Definition</td><td>Sepsis is a severe infection. The most common sites of puerperal infection are the uterus, abdomen, cervix, vagina, and episiotomy site.</td><td>Sepsis is life threatening.</td></tr>
<tr><td>Signs and Symptoms</td><td colspan="2">• Chills, fever, sweat
• Foul smelling vaginal discharge
• Abdominal pain
• Tachycardia
• Fever
• Tender abdomen
• Laceration infections noted on perineum or cervix
• Vomiting and headache in severe cases
• Prolonged vaginal bleeding, especially after delivery or abortion
• Delay in reduction of the size of the uterus after birth.</td></tr>
<tr><td>Complications</td><td colspan="2">• Shock
• Peritonitis
• Pelvic abscess
• Phrenic abscess (as in septic abortion)
• Maternal death</td></tr>
<tr><td>Management</td><td colspan="2">1. Ensure airway is open
2. Monitor vital signs
3. Give oxygen per face mask
4. Give IV Ringer’s Lactate or Normal Saline
5. Give transfusion if necessary
6. Catheterize and keep input/ output charts
7. Evacuate uterus if necessary or REFER for evacuation
8. NO FLUIDS by mouth
9. Immediately give IV antibiotics (IM if IV not available)
10. Give tetanus toxoid
11. Give pain medications
12. If bleeding, rule out DIC
13. Be prepared for management of SHOCK.</td></tr>
<tr><td>Post procedure tasks</td><td>Record all the pertinent information in the woman’s records, and the ANC/PPC or procedure register. Remember to note the complication.</td><td>Maintain complete records</td></tr>
</table>

FLOW CHARTS

ECLAMPSIA MANAGEMENT FLOW CHART... **62**
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PROLONGED LABOUR MANAGEMENT FLOW CHART... **64**
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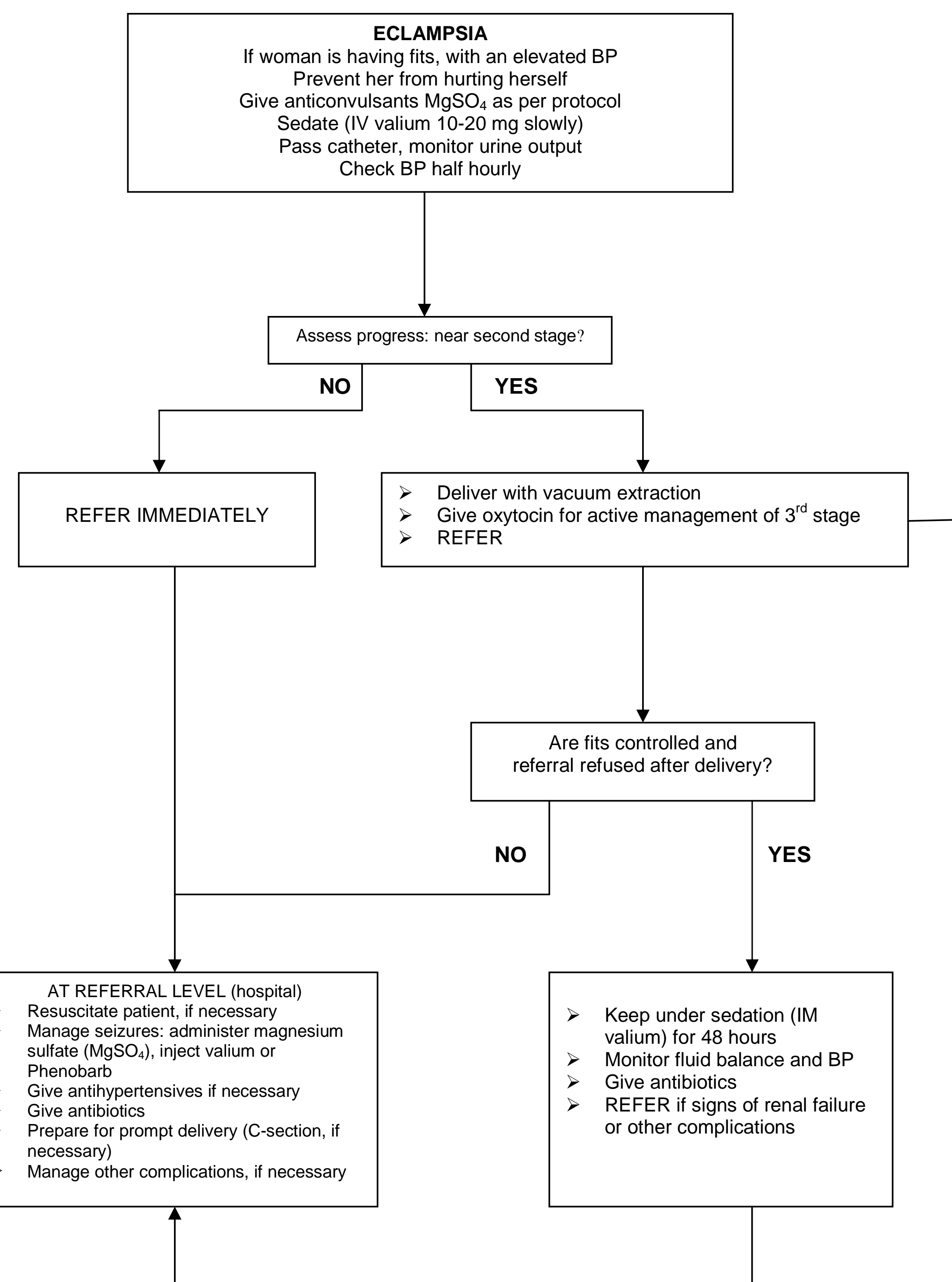
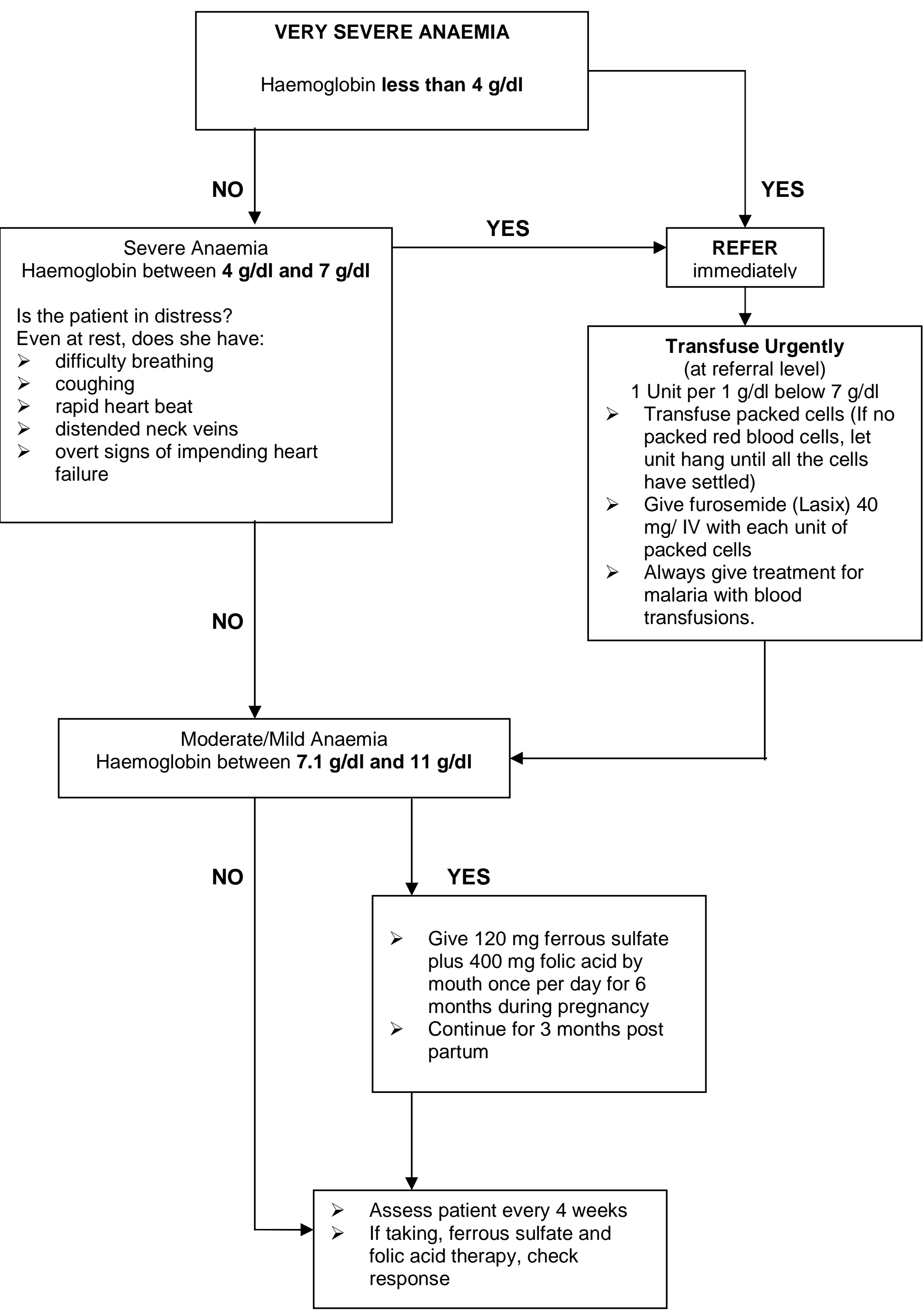
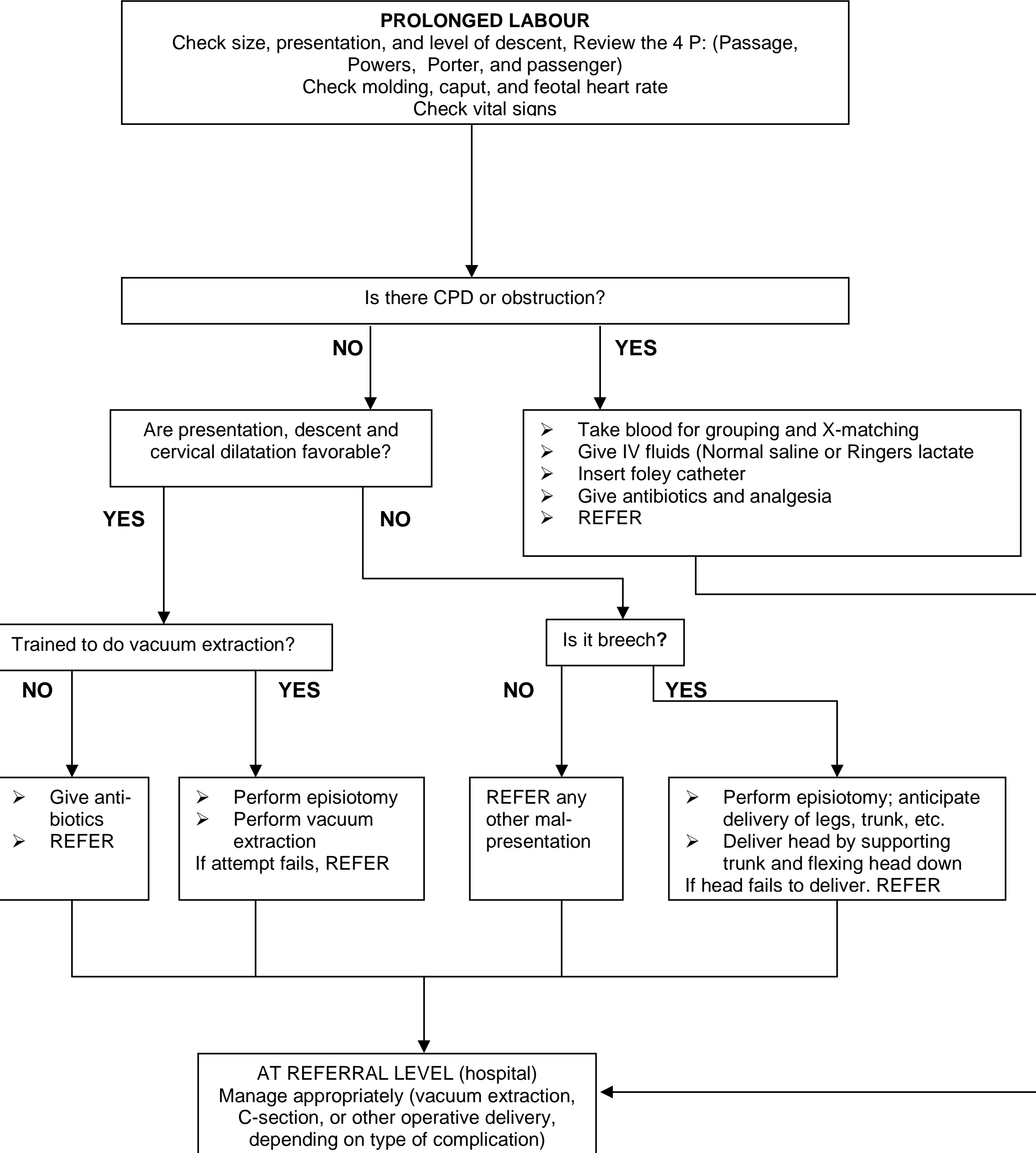
ECLAMPSIA MANAGEMENT FLOW CHART



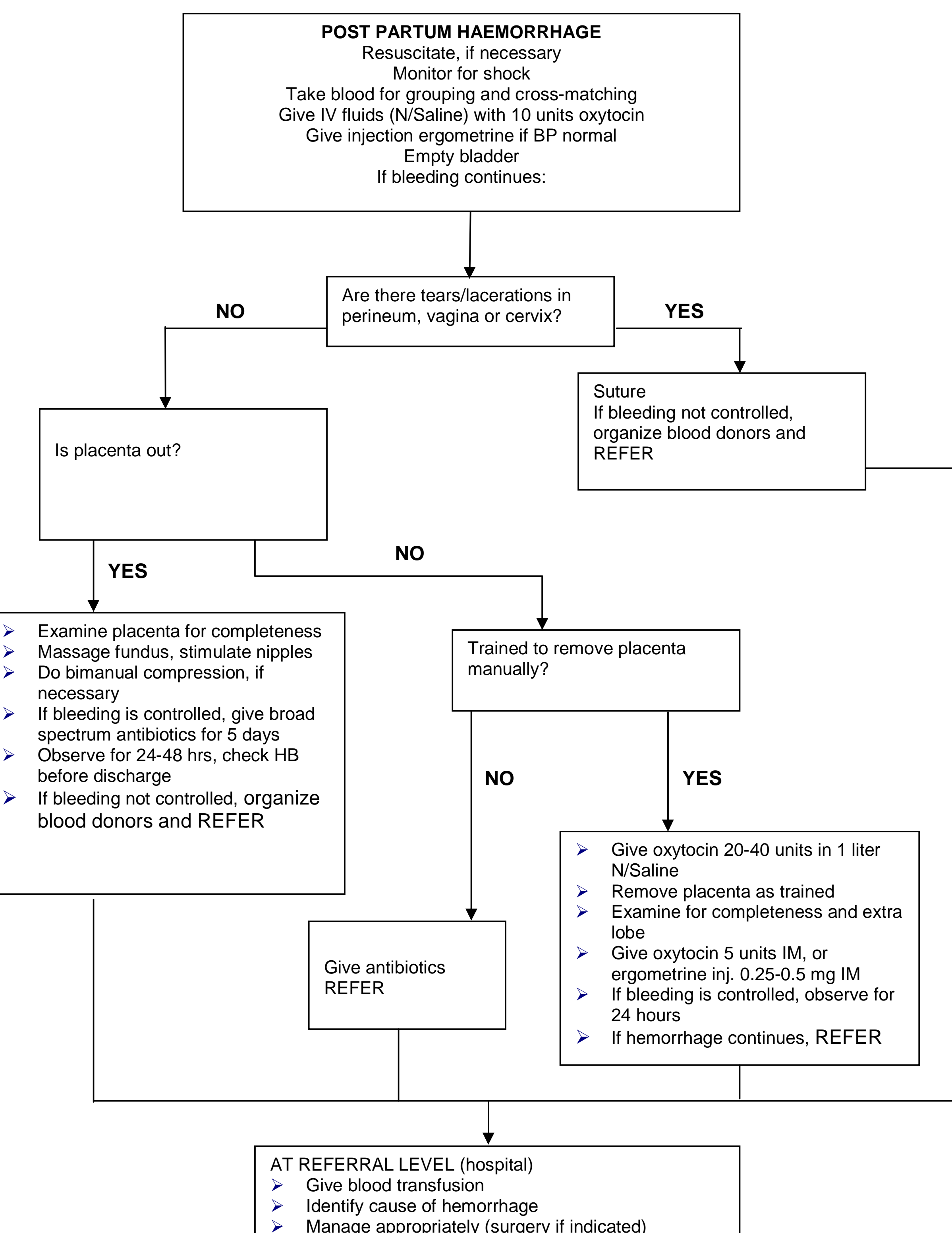
ANAEMIA MANAGEMENT FLOW CHART



PROLONGED LABOUR MANAGEMENT FLOW CHART



POST-PARTUM HAEMORRHAGE MANAGEMENT FLOW CHART



OBSTETRIC SHOCK MANAGEMENT FLOW CHART

SHOCK

Monitor vital signs (BP, pulse, respiration)

- Resuscitate following the **ABCs** (Airways. Breathing, Circulation) protocol
- Give oxygen (6-8 liters/min)
- Give IV fluids (Ringer's lactate), 1 litre/20 min.
- Measure urine output
- Take blood for grouping and x-matching biochemistry and microbiology tests
- Elevate feet
- Evaluate for APH, PPH, Ruptured Uterus, Septic shock

Are there signs of stabilization after 20-30 minutes?

YES

NO

- Continue IV and oxygen
- Complete clinical assessment
- Begin treatment of underlying cause of shock

Are there signs of stabilization after 2 hours?

YES

NO

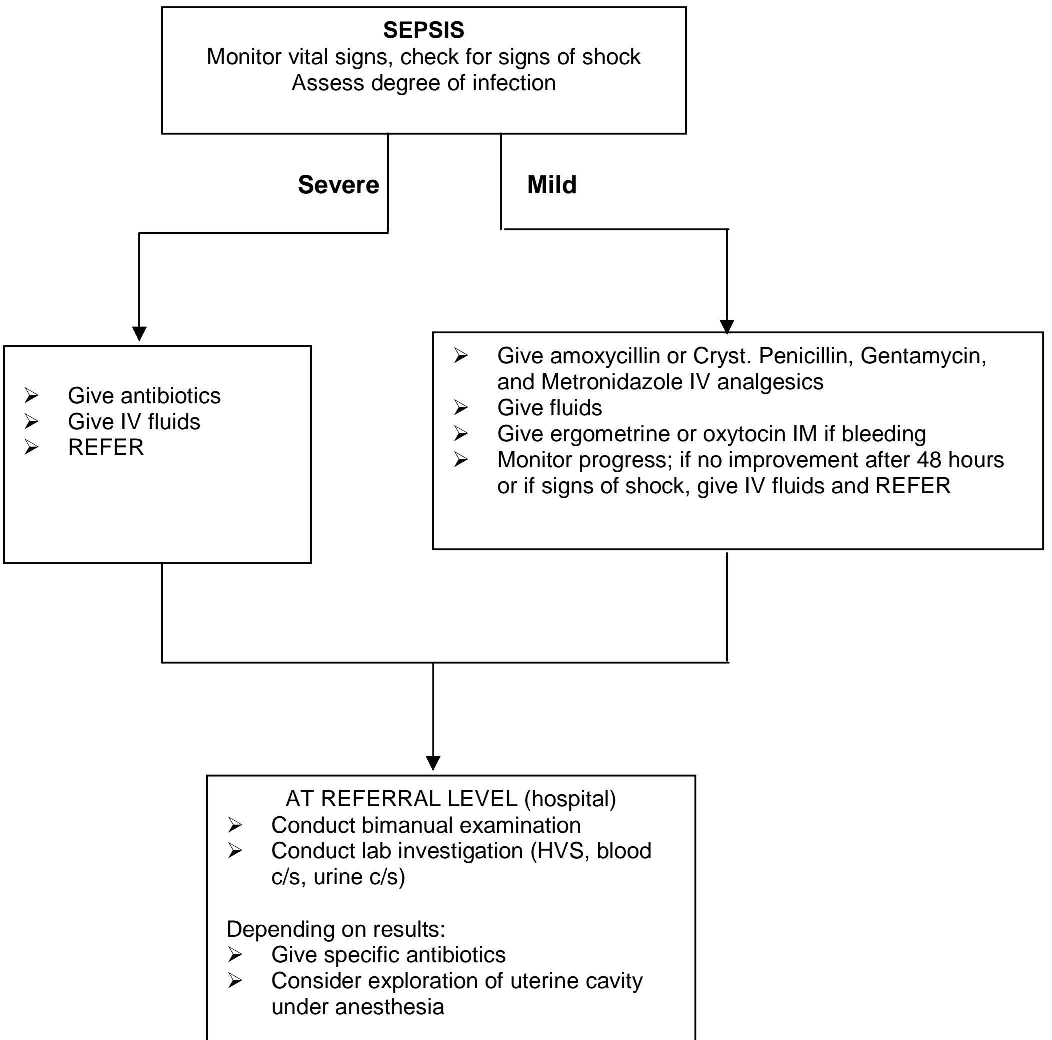
- Adjust IV and oxygen
- Identify and treat underlying cause of shock
- Observe
- REFER as necessary (depends on cause of shock)

- REFER

AT REFERRAL LEVEL (hospital)

- Blood transfusion
- Treat underlying cause of shock (sepsis, haemorrhage, uterine rupture)

SEPSIS MANAGEMENT FLOW CHART



INFANT RESUSCITATION

1. WHEN A BABY IS BORN, THE BABY SHOULD ALWAYS BE:

1. DRIED 2. WARMED 3. POSITIONED 4. SUCTIONED

2. WHILE YOU ARE DOING THE 4 THINGS ABOVE, ALSO: