Module 5:
Prevention of Prolonged and Obstructed Labor
Prolonged and obstructed labor

- One of the five major causes of maternal death (responsible for 8% of all maternal deaths)
- **Prolonged and obstructed labor is the MOST common reason for obstetric fistula**
- An estimated 6.5 million women in the world have obstructed labor each year (2-15 cases/1000 births)
- Approximately 2-5% of women who experience a prolonged or obstructed labor will develop obstetric fistula
- Many cases of obstructed labor and obstetric fistula are not reported because women do not seek care
Obstructed labor injury complex

- Nerve compression (predominantly to the peroneal and lumbosacral nerves) which can result in foot drop and sometimes loss of feeling in the lower extremities
- Avascular necrosis (i.e., disruption of blood supply causing break down of the bone) of the symphysis pubis leading to pelvic bone pain and abnormal gait
- Scarring in the vagina leading to vaginal stenosis, chronic pain with intercourse, amenorrhea (no menses), and secondary infertility
- Chronic skin changes because of contact with urine and feces – irritation, wound development, chronic dermatitis
Preventing obstructed labor

• During antenatal care, confirmation of fetal position as CEPHALIC by 36 weeks gestation. All women who are not cephalic should be referred to a CEmOC site.

• Recognizing and referring women who are at increased risk of obstructed labor:
  – Women who are pregnant very young
  – Women who have undergone FGM, particularly infibulation or the total excision of vulva and restriction of vaginal opening
  – Women who previously had a prolonged or obstructed labor or caesarian section
Partograph

- Objective tool to assess the progress of normal labor at timely intervals in order to recognize and prevent prolonged or obstructed labor
- WHO recommends that ALL health care workers use the partograph for ALL births
- When the partograph is routinely used, prolonged and obstructed labor can be recognized before there are complications.
- Timely transfer to emergency obstetric care, including caesarian section if indicated, is possible
WHO Partograph
Step one

Begin using the partograph when a woman begins or is in active labor

• Active phase of first stage of labor: The cervix is at least 4 cm dilated, and the woman has 3 contractions in 10 minutes lasting at least 45–60 seconds

• Latent phase of first stage of labor: The cervix is not dilating or is dilating very slowly, and there are fewer than 3 contractions in 10 minutes
  – Do not begin the partograph when the woman is in the latent phase of labor
Step two

Record information about the woman

- Record name and age on the top of the partograph
- Record gravida, para, medical record number, date and time of admission
- If her membranes ruptured before she presented to the health center, record what time this happened
Step three

Record the time

• Each small block on the partograph represents 30 minutes, and each large block represents one hour

• Record actual clock time in the blocks marked “Time”

• Record hours since start of active labor to the right of each line in the “Hours” section
Step four

Record other vital components of labor assessment

- Record the woman’s temperature, pulse and blood pressure in the appropriate squares at the bottom of the partograph.
- Check the color of amniotic fluid at each vaginal exam and when changing pads, and mark on the middle of the graph:
  - Mark I if membranes are intact, C if fluid is clear, and M if there is meconium.
Record other vital components of labor assessment

- During the vaginal exam, check the fetus’ head for moulding. Record fetal scalp moulding:
  
  0 = no moulding/skull bones easily felt
  
  + = skull bones touching each other
  
  ++ = skull bones overlapping but reducible
  
  +++ = skull bones overlapping but not reducible
Step four (cont’d)

Record other vital components of labor assessment

• Every time the woman passes urine, write the volume of urine in the appropriate box at the bottom of the partograph

• If possible, check the volume and whether there is protein (assessing for pre-eclampsia) and/or acetone (assessing for dehydration) present in the urine
Step five

Record the fetal heart rate every 30 minutes during active phase of first stage of labor

- Count fetal heart tones for a full minute (bpm)
- Record the fetal heart rate (FHR) with a dot “●” at the appropriate place on the top section of the partograph
- If FHR is less than 100 bpm or more than 180 bpm, or if there are decelerations after every contraction, this may indicate fetal hypoxia or distress, and the woman should be referred to a place where comprehensive emergency obstetric care is available.
Step six

Record the strength, duration and frequency of contractions in the appropriate squares in the middle of the graph

• Check contractions for 10 minutes every 30 minutes during active phase of the first stage

• Note the number, duration and strength of contractions in 10 minutes. Each small box represents one contraction.
  – Less than 20 seconds – few dots in box
  – Between 20 and 40 seconds – dashes in box
  – More than 40 seconds – completely filled in box

• EXAMPLE: If a woman has four strong contractions in 10 minutes, four boxes should be completely filled in
Step seven

Measure cervical dilation and descent of the baby's head every four hours, and record in the center portion of the partograph

• This is the most important section of the partograph
  – Record dilation of the cervix with an “X” in the box to the right of the corresponding dilation amount (4–10 cm)
  – Record descent of the baby's head with an “O” to the right of the corresponding descent values (from 5 to 0 fingers above the pubic symphysis of the mother)
Descent: Measured in finger breadths above the pelvic bone on abdominal exam
Cervical dilation: Measured in centimeters on vaginal exam (4-10 cm)
Step eight

Monitor the progress of labor charted on the center of the partograph

• The first diagonal line on the chart is the "Alert" line. If the cervical dilation or fetal head descent cross this line, consider referral for prolonged labor if emergency obstetric care is not available
  – If the membranes are still intact, may assess the strength of contractions and take action based on the level of facility
  – If there is no progress after 1-2 hours, REFER the woman immediately. She may need oxytocin to strengthen contractions or an operative delivery

• The second diagonal line on the chart is the "Action" line. If cervical dilation or fetal head descent cross this line, take IMMEDIATE action and refer the patient. Send the partograph WITH the woman when she is transferred.
Step nine

When the woman delivers, record all the other important information about the delivery and the baby on the partograph.
Example of completed partograph

WHO PARTOGRAPH

Name: *Amra - Case 1*  Age: 28 G: 3 P: 0  Hospital No.
Date of Admission: 19.2.2009  Time of Admission: 05.00
Ruptured membrane: ON  II yes. Date (9.2.2009) Time (04.00) True Labour Pain Started Date (time)

- Fetal Heart Rate per minute
- Amniotic fluid Moulding
- Cervix (cm) (Plot X)
- Descent of head (Plot Y)
- Contraction per 10 minutes
- Oxytocin UI, drop/min
- Drugs given and IV fluids
- Poles
- BP
- Temperature °C
- Protein
- Acetone
- Urine Output

SVD at 13.32
Five female infant
Weight: 2820 g

FistulaCare