

Labour



Definition

Labour is the process by which the fetus; the placenta; and the amniotic membranes {ie the products of conceptions} are expelled out of the uterus.

Stages of labour

First stage

it's the longest , begins with the onset of uterine contractions and is complete when the cervix is fully dilated(10cm) and fully effaced(100%)

8 – 20 hrs in primigravida

5 -14 hrs in multigravida

- **Second stage** :begins when the cx is completely dilated and ends with the birth of the baby .
(5mins_2hrs)
- **Third stage**:(placental separation stage),begins with the delivery of the baby and ends with the delivery of the placenta
(5_10 minutes).

Fourth stage

(stage of recovery)

- begins with the delivery of the placenta and lasts for the next few hours until the vital signs and the general condition of the mother are stable.

Major factors affecting birth process

- 1) passageway ie the pelvis: the size and the shape of the pelvis must be adequate otherwise it will be contracted and the CPD* occurred.

* CPD means cephalopelvic disproportion

2) Passenger ie the fetus ↓

lie , presentation, position, attitude

3) power: effectiveness of uterine contraction

The ideal ut. Contraction is 2-3 times/10mins
and every contraction lasts for 45 seconds
which lead to cx dilatation and affacement

- 4) psyche of the mother: her cooperation and her ability to push

- **Fetal lie:**

it is the relation of longitudinal axis of the fetus to the longitudinal axis of the mother

the ideal is parallel ie

Longitudinal lie



Fetal presentation:

its that part of the fetus which is the most lowest in the mother's pelvis.

head=cephalic(95%)



■

buttock=breach

Variations of the breech presentation



Complete
breech

Incomplete
breech

Frank
breech

Shoulder presentation (in transverse lie)

Fetus in transverse lie presentation



- **Fetal position:** it's the relation of some designated point on the presenting part to the 4 quadrants of the maternal pelvis...
- anterior, posterior, left and right sides.
- E.g ...if the back of the head (occiput) is toward the left of woman's body and anteriorly toward the pelvis so it called LOA.



1

- **Fetal attitude:**
it's the relation of fetal parts to each other inside the uterus.

Normal attitude is flexion

Normal attitude is flexion



- So you are in the labour room and receive a patient with labour pain what will you do
- 1) history.....from which you can discover if there are any risk factors that need more attention like DM,HT, chronic illness, history of primary infertility, previous delivery by c/s etc....

- 2) examination..
- Vital signs
- General examination
- Abdominal examination.. From which you asses the presentation of the fetus and the duration,intensity and frequency of the uterine contraction

mild, moderate, sever

also assess for the relaxation period which is very important for the rest of the mother because if there is no rest this will lead to maternal exhaustion and fetal distress.

- 3) fetal heart examination by..sonic aid and cardiotochography (CTG)
- Normal fetal heart= 120_160b/min
- <120 bradycardia
- >160 tachycardia
- And that's what we mean by fetal distress

- Vaginal examination
- 1- cx diltation
- 2- membranes(intact or rupture)
- 3-presenting part
- 4- station of the presenting part
- Station is the relation of presenting parts of the fetus to an immaginary line drawn between ischeal spine and maternal pelvis.

Nursing care during labour

- **The primary goal of nursing care** is to ensure the best possible outcome for the mother and the newborn.
- Nursing care focused on establishing a meaningful open relationship, determining fetal status, encouraging the woman self direction and ability to cope and supporting her and her family throughout labour and delivery.

Nursing care in 1st stage

- 1-vital sign
- 2-input of fluid and output
- 3-drugs intake
- 4-monitor ut.contraction
- 5-aseptic technique
- 6-emotional support
- 7-monitor progress of labour

N.care during second stage

- 1-prepare delivery table
- 2-lithotomy position of the mother
- 3-prepare the equipment (delivery equipment, cord clamping, resuscitation eq.)
- 4-aseptic technique
- 5-emptying the bladder

N.care during 3rd stage

- 2phases ...
- 1-separation phase
- 2-expulsion phase
- Signs of placental separation
- 1-uterus rise upward in the abdomen
- 2-ut.become hard and globular
- 3-lengthening of umbilical cord
- 4-sudden gush of blood

Abnormalities occurred during 3rd stage

bleeding

- Causes:
- 1- Ut. Inertia: inability of the uterus to contract
- Causes:
- 1- prolong labour
- 2-over distension of uterus. Eg. Twin pregnancy

- 3- placenta previa
- 2-RPOG
- 3- tear in vagina, cx and uterus
- 4- full bladder

N. care during 4th stage

- 1_ B.p
- 2_ Pulse
- 3_ Urine output
- 4_ Ut. Contraction (involution)
- 5_ Lochia = loss from vagina, in first few days is shedding of decidua start red with fresh blood but within few days (14 d) become yellow_white

- 6_ Hb %
- 7_ bowel
- 8_ starting breast feeding

- Drugs given during and after delivery
- Oxytocin given in drips during labour and can be given directly postpartum
- Act within 2 - 3 minutes
- 2_ Ergometrin ... 6 - 7 minutes
-

- Episiotomy
- It is a surgical incision made in the perineum area to widen it and facilitate labour and prevent tears and lacerations .

Assisted delivery

- There are two types of assisted delivery
- 1_ Forceps delivery
- 2_ ventouse delivery

THE PARTOGRAMME

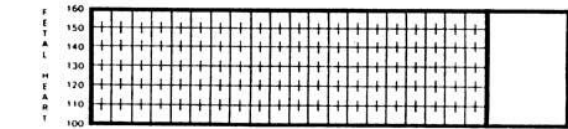
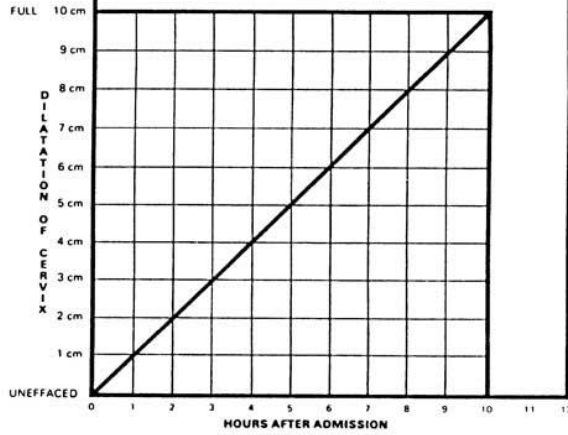
PRIMIGRAVID LABOUR RECORD

Name

Time of Admission Date

Pains Show Ruptured Membranes

DELIVERED



LIGUOR												
OXYTOCIN												
ANALGESIA												

Time of Delivery Method Duration

What is a partogram

is a graphic representation of the progress of labour

is used to document progress of labour and facilitates demonstration of problems that are likely to occur or have already occurred which may go unnoticed in written notes. It should be used for all women that are admitted in labour at all levels of health care.

The top part provides space for documentation of name, age, parity and date when the partogram is started.

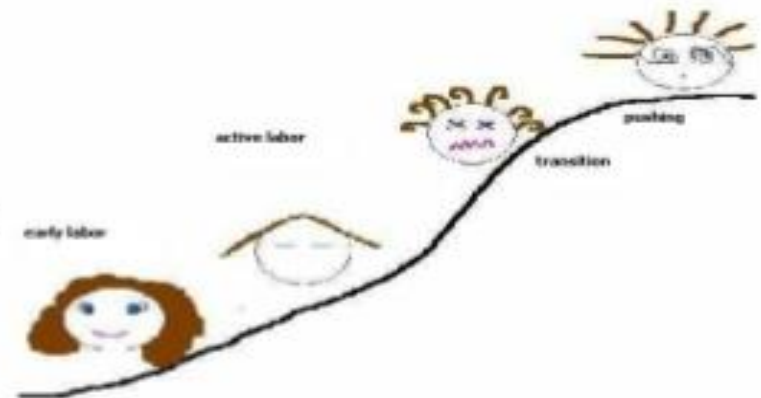
. It is also important to document duration of labour and that of rupture of membranes when the partogram is started. Risk factors identified in the antenatal period and on admission in labour should be listed in the space provided. The idea is to have all the relevant information that will inform management of the patient on one page without having to refer to the ANC card, previous pages and other notes.

Objectives

- early detection of abnormal progress of a labour
- prevention of prolonged labour
- recognize cephalopelvic disproportion long before obstructed labour
- assist in early decision on transfer , augmentation , or termination of labour
- increase the quality and regularity of all observations of mother and fetus
- early recognition of maternal or fetal problems
- the partograph can be highly effective in reducing complications from prolonged labor for the mother (postpartum hemorrhage, sepsis, uterine rupture and its sequelae) and for the newborn (death, anoxia, infections, etc.).

Active phase :

- Contractions at least 3 / 10 min
- Each lasting < 40 seconds
- The cervix should dilate at a rate of 1 cm / hour or faster





Alert line (health facility line)

- The alert line drawn from 3 cm dilatation Represents the rate of dilation of 1 cm / hour
- Moving to the right or the alert line means referral to hospital for extra vigilance



Action line (hospital line)

- The action line is drawn 4 hour to the right of the alert line and parallel to it
- This is the critical line at which specific management decisions must be made at the hospital

THANK YOU

