Use of partograph in management of first stage of labor.

The partograph is a tool for monitoring maternal and foetal wellbeing during the active phase of labour, and a decision-making aid when abnormalities are detected. It is designed to be used at any level of care.

Its central feature is a graph used to record the progress of cervical dilation, as determined by vaginal examination. Start the graph at 5 cm of dilation, and 3 contractions every 10 minutes. In certain situations, e.g. induction of labour, it is started at 4 cm of dilation.

Indicators are plotted on the graph each time they are checked:

– Maternal indicators:

 • Vital signs (heart rate, blood pressure and temperature)

 • Time of spontaneous or artificial rupture of the membranes

 • Uterine contractions (number per 10 minutes and duration)

 • Urine output

 • Drugs administered (oxytocin, antibiotics, etc.)

– Foetal indicators:

 • Foetal heart rate

 • Amniotic fluid (colour, odour and quantity)

 • Descent of the foetal head and head moulding

3 Specific aspects of care in the second stage

This is the stage in labor where the contribution of a qualified and skilled attendant with midwifery skills is the most critical in ensuring a safe outcome.

While attending a delivery, the timing and process of active pushing should be guided so that this is encouraged only when the cervix is fully dilated and when the presenting part has engaged in the pelvis and the woman feels the urge to push. The skilled attendant also has the role of encouraging the mother to adopt positions for active pushing that are culturally appropriate, comfortable, and mechanically beneficial; for example, squatting or sitting up as opposed to lying flat on a bed. Unfortunately, in many hospitals in low‐resource countries, lying supine while in labor has become the norm—a tendency exacerbated by a lack of available cushions or the use of nonflexible delivery beds where the upper part cannot be elevated—and the use of stirrups is common.

Assuring safety also requires the presence of a second person trained to assist [3]. In order to provide the 8 key aspects of care listed above, the presence of a second person is essential; for example, to maintain auscultation of the fetal heart and support for the mother while the midwife or doctor puts on sterile gloves in preparation for the delivery. To achieve this, health facilities providing maternity care need to structure their staff allocation and skill mix to recognize the extra care needs of mothers in the second stage. While this is very challenging in settings where budgets or shortages of skilled staff are major constraints, serious efforts to provide full and effective care at this critical stage will reduce the burden of need for “rescue” emergency interventions for asphyxiated babies and mothers with complications that could have been prevented.

The presence of a second person assisting the skilled attendant allows continuity of intermittent auscultation of the fetal heart once the attendant has donned sterile gloves. It also allows additional reassurance and support. Finally, if complications occur, the second birth attendant is able to summon help and initiate emergency care as specified in obstetric emergency skills drills, while not detracting from continuous care provided to the mother by the skilled attendant.

Special consideration is needed in delivery settings where only one skilled attendant is available, such as home births or small health centers. Here, birth planning needs to involve relatives, traditional birth attendants (TBAs), or nonclinical staff to assist in the role of “second birth attendant.” Such assistants need to be briefed about their role and arrangements made for them to be accessible and present for the birth.

The third stage of labour begins with the birth of the baby and ends with the delivery of the placenta and fetal membranes. Normally, it should last less than 30 minutes.

In a complication-free labor, the third stage is when natural physiological processes spontaneously deliver the placenta and fetal membranes. For this to happen unproblematically, the cervix must remain open and there needs to be good uterine contraction. In the majority of cases, the processes occur in the following order:

0. Separation of the placenta: The placenta separates from the wall of uterus. As it detaches, blood from the tiny vessels in the placental bed begins to clot between the placenta and the muscular wall of the uterus (the myometrium).

0. Descent of the placenta: After separation, the placenta moves down the birth canal and through the dilated cervix.

0. Expulsion of the placenta: The placenta is completely expelled from the birth canal.

This expulsion marks the end of the third stage of labour. Thereafter, the muscles of the uterus continue to contract powerfully and thus compress the torn blood vessels. This, (together with blood clotting) quickly reduces and stops the postpartum bleeding.