

# Best practices for *intrapartum* care in Zimbabwean health facilities

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## Abstract

Evidence-based interventions to ensure a good outcome during childbirth are widely available. Their applicability in various settings depends on local conditions and the resources available. Best practices during normal labour and delivery are described for Zimbabwean health facilities. Practices that have proved value are encouraged and those without benefit are discouraged.

## Introduction

The period of childbirth and the following few days is the time of greatest threat to the pregnant woman and the newborn. In Zimbabwe, as in the rest of sub-Saharan Africa, most maternal mortality and morbidity, occurs around childbirth, and is due to haemorrhage, sepsis, obstructed labour and eclampsia. Similarly, most infant mortality and morbidity occurs in the first seven days due to prematurity, asphyxia and neonatal sepsis. Interventions to avert or alleviate these conditions are well known, and their application is one of the reasons for the good pregnancy outcomes in developed countries. The information on these evidence-based interventions is now widely available,<sup>1-3</sup> and this paper is based on these publications. The 'best practices' for the management of normal labour have been formulated by applying the evidence based interventions to the local Zimbabwe conditions. These practices are intended for use at all levels of the health services in Zimbabwe, including the private sector. Where local variations are introduced, it should be with the aim of improving the 'best practices'

## Place of Labour

All women should be physically close to the intended facility for delivery from 37 weeks onwards. For those living further than comfortable walking distance (five km) specific transport arrangements must be made and these should be known by several members of the family. If consent to travel is needed from the husband or in-laws, this should be given well before 37 weeks.

Those women living more than five km from a facility, who are unable to make transport arrangements, should be admitted to the nearest clinic hosting a maternity waiting shelter (MWS) or the district hospital. Labour and delivery at home are associated with high risks, and there is no role for the traditional birth attendant apart from motivating and assisting the woman to get to a facility.

## Admission

The woman and her family should be given a friendly welcome by the staff, and during examination, she should

be accorded sensitivity, privacy and dignity. She should be allowed to have a companion throughout her labour, provided this does not interfere with the privacy of other patients. The presence of a companion is associated with a more efficient labour, and needing less analgesia.

## Procedures

There is no need for pubic shaving or enema, and these should only be done at the request of the woman. Similarly, there is no need to catheterise the bladder except where it is clinically indicated (obstructed labour, haemorrhage etc).

## Nutrition and Hydration

A labouring woman should remain well hydrated, and this should be achieved by oral intake. Light snacks should also be allowed. Fasting and dehydration are associated with ketoacidosis and poor maternal effort in the second stage of labour. The risk of aspiration, should the woman need general anaesthesia can be completely reduced by good anaesthetic technique, and giving antacids every two hours.

If intravenous fluids are used, pure salt-free glucose solutions should not be used, as they can be harmful to the mother and foetus. Ringers lactate or solutions containing glucose, sodium and potassium are the most appropriate fluids.

## Positions in Labour

During the first stage of labour, women should be allowed a choice of walking, sitting or lying down. When lying down, the supine position is discouraged as this reduces the blood supply to the uterus and results in less efficient uterine contractions and/or foetal hypoxia. Lying on the side prevents these problems developing.

## Monitoring of Labour

### Maternal condition

Maternal pulse and blood pressure should be measured every hour, and temperature every four hours. Hydration

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can be assessed by asking about thirst and checking the mucous membranes of the mouth for dryness.

### **Foetal condition**

The foetal condition is assessed by intermittent auscultation (every half hour) before, during and after a contraction using the foetal stethoscope or hand held monitor. Electronic foetal heart rate monitoring, where available, should be reserved for foetuses at high risk. Where membranes have ruptured, the presence or absence of meconium or blood, the temperature and whether there is a foul odour or not, contribute to the overall assessment of the foetal condition.

## **Progress of Labour**

The partogram is now the standard method of monitoring the progress of labour. The frequency and duration of contractions, descent of the presenting part and dilation of the cervix are as recorded on the partogram. In Zimbabwe, the partogram has 'alert' and 'action' lines which indicate to the staff the need to take decisions when progress is slow. If the patient is referred, the current partogram must be used or its details should be transferred onto a new sheet. It is inappropriate to start a 'new' partogram, disregarding previous recordings.

## **Analgesia**

Allowing women to have a companion in labour and freedom of movement will reduce the need for analgesia. Pethidine remains the analgesic of choice in most facilities but where available, nitrous oxide and epidural anaesthesia are useful techniques to reduce pain. Anti-emetics such as phenergan, or maxolon should be available for the side effects of pethidine, and a narcotic antagonist (such as naloxone) should be available for the neonate if required.

## **Second Stage of Labour**

### **Duration**

Primigravidae should be allowed to push for up to one hour and multigravidae for up to half an hour. The recommended durations used to be shorter but were based on the fear of foetal hypoxia, now known to have been unfounded.

### **Position**

Because of the lack of birthing chairs and other equipment, most women in Zimbabwe will have the second stage conducted in beds in the supine position. However, the more upright the position, the shorter the second stage. If it is not feasible to use other positions, women should push whilst in a tilted supine position. This can be achieved by inserting a support under the right side of the abdomen.

### **Perineal massage and guarding.**

Perineal massage has no proven benefit and can be discontinued. Guarding or supporting the perineum has some advantage over not guarding and should be continued.

### **Episiotomy**

Selective rather than routine episiotomy should be practiced, and the medio-lateral incision is to be preferred since it is less likely to become extended into a third degree tear. Only absorbable suture material should now be used.

## **Third Stage of Labour**

The third stage of labour should be managed actively. The three interventions in the 'active management' of the third stage are use of an intramuscular oxytocic with the delivery of the anterior shoulder; early clamping of the umbilical cord; and controlled cord traction. The oxytocics available are oxytocin 10 IU, syntometrine and ergometrine (one ampoule). Availability, reliability of potency and lower risk of side effects dictate that oxytocin should be preferred over ergometrine derivatives. If all three are unavailable, misopristol 400 mcg may be inserted into the rectum immediately after delivery. As compared to the expectant option, active management results in less blood loss, shorter third stage, less postpartum anaemia and lower need for blood transfusion.

## **Conclusion**

This paper has described the best practices expected from skilled attendants during normal labour and delivery at health facilities in Zimbabwe. The practices described have taken local conditions into account and can, therefore, be implemented.

## **References**

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