# CLINICAL AUDIT REPORT LABOUR WARD LOWER UMFOLOZI DISTRICT WAR MEMORIAL HOSPITAL

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Perinatal mortality rate is a sensitive indicator used Nationally and Internationally to measure and compare the health and, development status of the population. Fresh stillbirth and early neonatal death rates are associated with maternal health and access to care around the time of delivery, preventative and curative health services accessible to communities.

More than one third of all perinatal deaths are neonatal deaths in this institution. Care given at intrapartum period is likely to be associated as high neonatal death rates. Clinical care (medical and nursing) practices at labour ward are an important tool to identify the gaps/strength in this regard. Clinical audit thus initiated to describe the care pattern during intrapartum period in Labour Ward at this Hospital.

This report objectively assesses the management of different phases of labour namely:

Normal labour

Induction of labour - Reason for induction of labour

Labour history

Recording of physical examination of patient in labour

Use of analgesia during labour

#### METHODS AND MATERIALS

Retrospective record review of 105 post delivery patients were selected randomly for this review over a four month period (February to May 2004). The Medical officers identified the selected patients, collected demographic data during daily routine ward rounds (name, age, referral status) on a standard questionnaire and kept the partly filled questionnaire in the patients file. After the discharge of the patient, the patient's file was brought to a senior consultant for further data collection on labour ward practices. The offices at the patient registry were instructed to bring the selected patients file to the consultant. The consultant examined the patient's clinical record, extracted the relevant information and completed the questionnaire for the audit. Data from the questionnaire were captured on EpiInfo and exported to SPSS for analysis.

#### VARIABLES MEASURED

- Demographics of attendance: Age, booking status
- Referral pattern (clinic, hospital or self)
- Types of labour: Spontaneous, induced
- History taken or not
- Record of physical examination on admission by a midwife or/and Medical Officer (important examination of a patient in labour 8 items) were considered such as;

o Fundal height

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- o Presentation of fetus
- o Level of presenting part
- EFW (estimated fetal weight)
- o Cervical length and dilation
- Membrane (Intact/ruptured)
- o Liquor colour and volume
- Foetal monitoring by CTG
- Monitoring the progress of labour using partogram
- Use of analysis during labour (latent and active phases)
- Episiotomy practices at 2<sup>nd</sup> stage of labour

## TYPE OF DELIVERY

Normal vaginal delivery

Assisted delivery: Caesarean Section, Forceps or vacuum

## 3rd STAGE OF DELIVERY

Recorded placental delivery: Intact or not intact and signs of PPH within one hour of placental delivery.

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## **RESULTS**

Table 1: Age distribution

Age Category	%
<20	23.89
20 - 24	33.3
25 - 29	26.7
30 - 34	9.5
35 - 39	5.7
>40	1.0

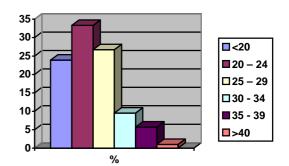


Table 2: Antenatal booking status

Booking status		%
Booked with Clinics		47.6
Booked	with	9.5
Hospitals		
Unbooked		42.9

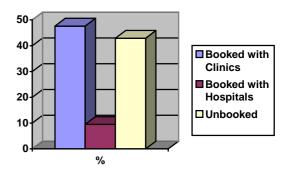
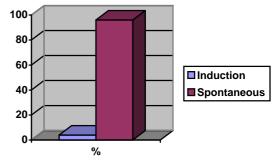


Table 3: Type of labour at the time for Labour Ward admission

Туре	%
Induction	4
Spontaneous	96



#### HISTORY TAKING

97% were found with recorded history and only 3% without.

## MEDICAL EXAMINATION

Medical examination was recorded in 96% of cases and the rest (4%) were found without. Among the important eight items (fundal, height, presentation of the fetus, level of presenting part, EFW, cervical length and dilation, membrane, liquor (colour and volume) and CTG monitoring) four items were recorded on 32% cases, 5 items on 40% and 6 items on 23.3% cases. Episiotomy was given to 41.7%. Labour monitoring with partogram were found in 91.4% cases. 2% had completed placental delivery, 3% had congenital abnormality, and 10% received analgesia during latent phase of labour whereas 16% received analgesia during active phase of labour.

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## AGE DISTRIBUTION

Over half of these patients were below the age of 25 years. One third of the total attendees were between the age strata of 20-24 years. The second commonest group was between 25 - 29 years (27%).

The majority of these pregnant women (47.6%) were booked with clinics.

#### **DISCUSSION**

This is the 1<sup>st</sup> clinical audit at this institution thus is not without limitation.

The aim of this clinical audit was to describe the common clinical practices and identify gaps to improve clinical care at this hospital. Developing clinical audit programs is seen to yield cost savings, improve data quality, make business processes more efficient and help an organization better measure it's results.

Although this was not an in depth clinical audit, the findings are still useful to improve service delivery at this institution. Almost one quarter of the pregnant mothers were below the age of 20 years, similar to a trend observed in KZN.

The high percentages (42%) were found without booking during the antenatal period. This situation is unlikely as maternal and childcare is free in South Africa. This could be an error in data collection. Further community based study thus important to identify the actual trend in antenatal care practices in the population and causes of such practices.

Since this is a referral centre for maternal health care, a higher proportion of induced labour was expected than observed (4%) for active management of labour and relief of pain. Pregnancy complications often require early induction for the benefit of the mother as well as the fetus.

It is much appreciated that almost all the attendees were found with recorded history taking (97%). Only 3% were found without. This is not an unlikely situation. Often it is found that fully dilated mothers attend labour ward due to delays in arriving hospital from home or referring health institution. This relates to transport and communication problems in this area.

Almost every patient record found with medical examination finding (96%). Among the important eight items of medical examination, six items were common to only 40% and five items were common to 32% attendees. All these items are necessary for better management of labour.

Episiotomy was given to 41.7% cases. As a labour ward protocol, primi gravida are often considered for Episiotomy, multigravida's are not, thus these findings are not unlikely. Protocols are to be developed in this regard as Episiotomy is a known factor for fasten or enhance better delivery outcome and reduce delay.

Monitoring of labour (progress) with partogram is compulsory for all patients in labour. 91.4% were found with partogram monitoring of progress of labour. When a patient arrives in

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labour ward with full cervical dilation, partogram monitoring is not possible or done. But the practices of using partogram for all patients in labour are well monitored. The most important gap was found with the use of analgesia in labour. The recent practices to minimize labour pain using different analgesia (epidural, narcotics) are considered. Due to the lack of optimal aneastetic support at this hospital, epidural anaestesia is not practiced at all. Only 10% mothers received narcotic analgesia during latent phase and 16% during active phase of labour.

The narcotic analgesia is not recommended in cases of signs of fetal compromise. The use of antanox is encouraged in many cases although the availability of such agent has been ensured but the use of such agent is not encouraged or practiced at this institution.

#### CONCLUSION

Pregnancy in earlier age is a risk factor for negative outcome. The basic obstetric practices (history taking, physical examination and recording thereof) are good at this institution. Areas found short are examination of important measurements (such as EFW, pelvic assessment) use of analysis (of any kind) would require further attention.

#### RECOMMENDATION

- 1. Labour Ward staffs are to be encouraged to improve pelvic assessment of mothers.
- 2. Encouragement of use of any form of analgesia would help mothers to alleviate labour pain.
- 3. Ensure adequate anesthetic support for epidural analgesia at this maternal and neonatal hospital.
- 4. Further studies to be conducted to estimate antenatal care practices and the reasons for non-attendance status during pregnancy at the community level.
- 5. Further audit be conducted in 6 months time.

#### **ACKNOWLEDGEMENT**

The authors acknowledge the contribution made by Medical Officers, Drs' Moodley and Theron and others in collecting data (Mrs. Mpanza, Social worker) and Mrs  $\mathcal C$  Fourie for capturing the data and for typing the report.

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