THE PARTOGRAPH: A BIBLIOGRAPHIC REVIEW OF EVIDENCE OF EFFICACY, PERCEPTIONS AND IMPLEMENTATIONS BY HEALTH CARE PROVIDERS

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Maternal mortality in developing countries is about 550/100,000 live births.

It is 100 times higher than in developed countries.

Prolonged/obstructed labour and uterine rupture.

Partographs were developed to differentiate normal from abnormal labour.

In 1998, the WHO informal working group in Geneva:
  - Recommends research into all aspects of the partogram
OBJECTIVES

- Review evidence of efficacy of the partograph in reducing maternal and perinatal morbidity and mortality
- Evaluate the perception and implementation by health care providers
Causes of maternal mortality (WHO)

- Haemorrhage: 24%
- Sepsis: 15%
- Obstructed labor: 8%
- Hypertensive disorders: 12%
- Unsafe abortion: 13%
- Other direct causes: 8%
- Indirect causes: 20%

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Maternal mortality ratios by country in Africa, Asia and Latin America (WHO, 1990)
The higher the proportion of deliveries attended by skilled attendant in a country, the lower the country’s maternal mortality ratio (WHO)
- **PARTOGRAPH: DESIGN**

- WHO model, with alert and action lines
- Other partographs do not include these lines, or are designed with different delays
- Even a round partograph has been developed!
NORMAL AND ABNORMAL LABOUR

- Cervical dilatation and effacement
- Diagnosis and duration of normal labour
- Progress of labour multigravides vs ordinary parturients
- Progress of labour → the role of age
- Progress of labour in different ethnic groups
- Prolonged/obstructed labour
EFFICIENCY OF THE PARTOGRAPH

Tanzania: 1986-1987 compared to 1989

(van Roosmalen, Br J Obstet Gynaecol, 1989)

- Total births: 7523
- Maternal death: 39
- Maternal mortality: 520/100 000 livebirths
- Major causes of death:
  - sepsis following CS
  - 44% of deaths were referrals for prolonged labour
- in 1989, perinatal mortality dropped from 71 to 39/1000 births after adoption of the partograph
DETECTION AND REDUCTION OF PROLONGED LABOUR

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>BEFORE PARTOGRAPH</th>
<th>AFTER PARTOGRAPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prolonged labour</td>
<td>6.4%</td>
<td>3.4%</td>
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<tr>
<td>Augmentation of labour</td>
<td>20.7%</td>
<td>9.1%</td>
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<tr>
<td>Emergency caesarean section</td>
<td>9.9%</td>
<td>8.3%</td>
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PERCEPTIONS OF THE PARTOGRAPH BY HCPs

- A useful tool in the labour ward
- Influences obstetric decision-making
- A useful training tool
- Improves quality of maternity services
SOME LIMITATIONS OF THE PARTOGRAPH

- Cervical dilatation assessment is imprecise
- No accurate timing of cervical dilatation assessment
- Frequency of examination varies
- Deviations from the 1cm/hour dilatation rate may be normal
- Plotting of curves
Evidence of efficacy of the partograph exists when used correctly it improves maternal and perinatal mortality rates. Reinforcement of proper usage is encouraged.
The partograph should become an essential part of the documentation of labour in all women

Its proper usage should be encouraged
‘THANK YOU VERY MUCH FOR YOUR KIND ATTENTION’