

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

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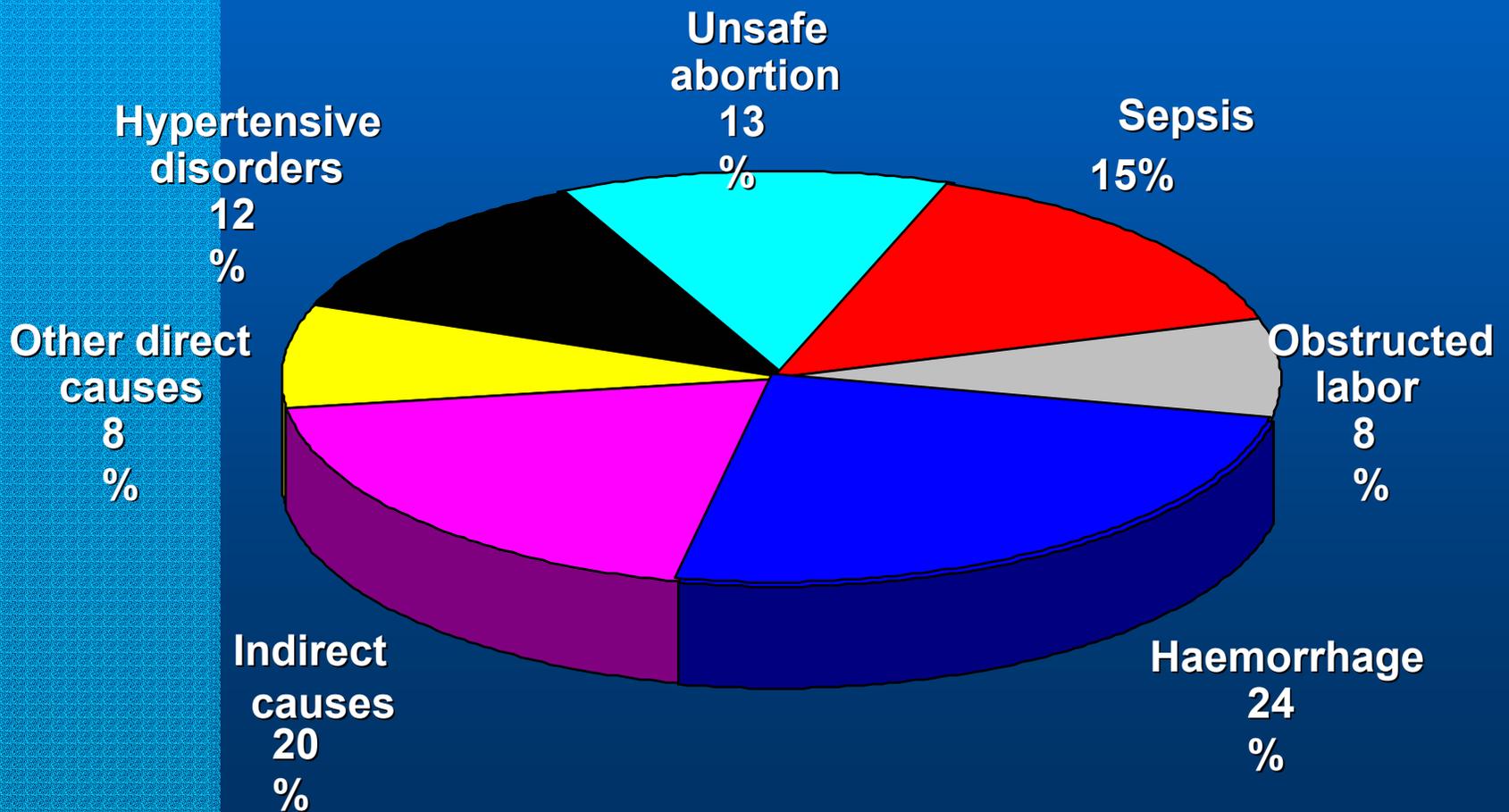
INTRODUCTION

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

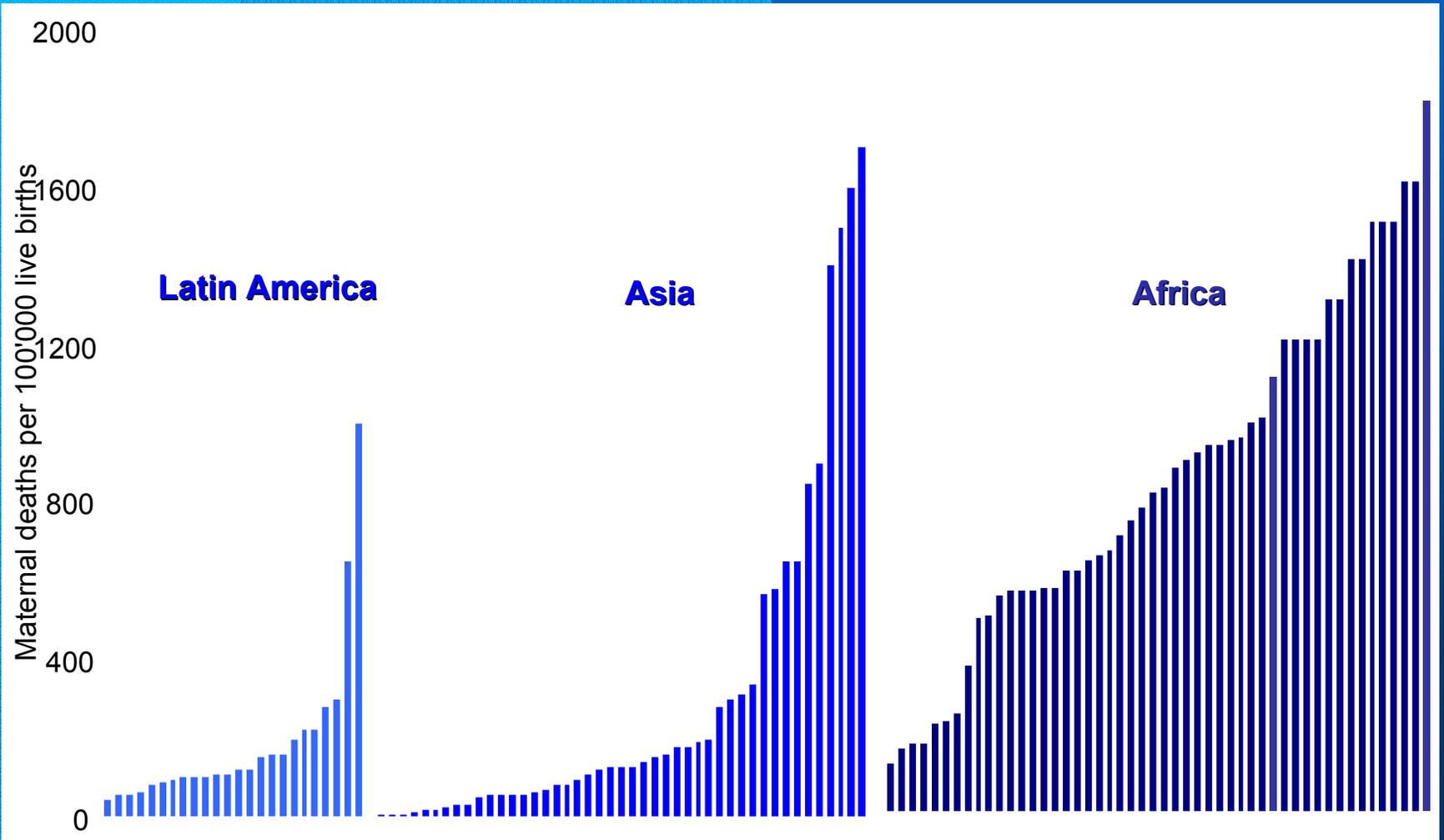
OBJECTIVES

- 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)



Maternal mortality ratios by country in Africa, Asia and Latin America (WHO, 1990)



PARTOGRAPH: DESIGN

PARTOGRAPH

Name _____ Gravida _____ Para _____ Hospital No. _____

Date of admission _____ Time of admission _____ Ruptured membranes _____ hrs.

FETAL HEART RATE

180
170
160
150
140
130
120
110
100
90
80

LUCKY
MOURNING

(cm) CERVIX Plus X

9
8
7
6
5
4
3
2
1
0

Latent Phase Active Phase

Alert Action

Descent of Head Plus O

HOURS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

TIME

CONTRACTIONS PER 10 MINS

Oxytocin LVL drops/min

DRUGS GIVEN AND I.V. FLUIDS

160
150
140
130
120
110
100
90
80
70
60

PULSE AND B.P.

TEMP °C

URINE { PROS
ACET
VCL

23

- 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

VARIABLE	BEFORE PARTOGRAPH	AFTER PARTOGRAPH
Prolonged labour	6.4%	3.4%
Augmentation of labour	20.7%	9.1%
Emergency caesarean section	9.9%	8.3%

(Urrio, East Afr Med J, 1991)

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 assessement is imprecise
- No accurate timing of cervical dilatation assessement
- Frequency of examination varies
- Deviations from the 1cm/hour dilatation rate may be normal
- Plotting of curves

CONCLUSIONS

- Evidence of efficacy of the partograph exists
- When used correctly it improves maternal and perinatal mortality rates
- Reinforcement of proper usage is encouraged

RECOMMENDATIONS

- 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’