Safety versus Access: The maternity care dilemma in South Africa

Bob Pattinson
MRC Maternal and Infant Health Care Strategies Unit, University of Pretoria,
Safety

• Ability of the health system to provide a safe maternity care service
  – Ability of facility to provide appropriate life saving services; i.e. key emergency obstetric care signal functions
  – Sufficient knowledgeable and skilled staff to perform necessary activities
  – Ability to rapidly transport women with complications quickly to appropriate level of care
Access

- Ability of a pregnant woman to be seen and treated by appropriate health care providers in facilities with the appropriate resources when entering the health care system close to her home
  - Appropriately resourced facilities in appropriate geographical locations
  - Knowledgeable and skilled staff in those facilities
  - Rapid appropriate transport for women with complications to the appropriate level of care
Two sides of the same coin
Data

• Briefing prior to visit and distribution of survey forms
• Team
  – 2-3 from MRC
  – 2-3 from district and MCWH of province
• Emergency-drill workshop
• Training in National Birth Register and Monthly data sheets
• Walk through to verify data in baseline data sheets
• Follow-up telephone call to clarify any points
Sites

• 53 CHC’s
• 63 District Hospitals
• 13 Regional Hospitals
• 4 Provincial tertiary hospitals
Human resources and maternity units
Not enough staff?

• Not enough staff to manage births in district?
• Not enough staff on-site to have **critical mass** of staff needed to provide key functions?
Staffing of labour ward/maternity unit

• WHO criteria: 1 Midwife should perform 175 deliveries/year
  – WHO Annual Report, Human Resources 2005
  – 40% women in labour referred from CHC to DH

• Greenfield criteria: 1 midwife should perform 75 deliveries/year
  – SA developed norms
Comparison between districts of births per midwife per year:

WHO and Greenfield

[Bar chart showing the number of births per year per midwife for various districts.]
Sufficient midwives per district

Is their distribution correct?
Ekurhuleni
Staff per facility

Above/below theoretical staffing

- ESANYWENI MOU
- J DUMANE
- KWA-THEMA MOU
- NOKUTHELA NGWENYA
- PHILIP MOYO
- Ramakonopi
- PHOLA PARK
- BERTHA GXOWA -GERMISTON HOSPITAL
- FAR EAST RAND
- NATALSPRUIT
- O R TAMBO
- PHOLOSONG HOSPITAL
Above/below theoretical staffing

Gert Sibande
Staffing/facility

- Amsterdam CHC
- Badplaas CHC
- Paulinah Morapedi CHC
- Siyathemba
- Embalenhle
- Amajuba Memorial Hospital
- Bethal Hospital
- Carolina Hospital
- Embhuleni Hospital
- Evander Hospital
- Piet Retief Hospital
- Standerton Hospital
- Elsie Ballot
- Ermelo
Distribution variable

Is there a **critical mass** of staff essential for a safe maternity unit?
Maternal Care Guidelines for Observations in labour

Half hourly FH and contraction monitoring
  Hourly BP, pulse and respiration
  2 hourly vaginal examination

Labour ward is a high care setting:
  One PN for maximum 2 women in labour
**Critical mass** of midwives for a safe unit

- Need 5 midwives to have 1 midwife in a facility 24 hours a day 365 days a year
  - LW is a high care setting;
- Need 2 midwives in an facility at any time
- Therefore; for a **critical mass** there must be a minimum of 10 midwives per maternity unit/labour ward
- One midwife should be an advanced midwife to do assisted deliveries
- Theoretically a unit should do a between 500 del./year Greenfield & 1200 del./year WHO
Births in CHCs/BEmOC sites

![Graph showing number and percent of deliveries by CHCs/BEmOC sites.](image)
Births in CEmOCs 2011

![Births distribution graph](image)
Staffing at CHCs and DHs allocated to maternity units
Figure 1. Comparison of midwives in a CHC maternity unit and births per year

- Ideal critical mass
- Minimum critical mass
- Ideal minimum births (WHO)
- Ideal minimum births (Greenfield)

Births per year 2011

Midwives in maternity unit
Figure 2. Comparison of midwives in District hospital maternity unit and births per year

- Ideal minimum births (WHO)
- Ideal minimum births (Greenfield)
- Minimum critical mass
Problem of staff allocation and number of deliveries &
Problem number of deliveries and cost effectiveness

Many units are unsafe for pregnant women in labour
Or
not cost effective
Not enough facilities?
Facilities and UN recommendations for EmOC (For every 500,000 population: 1 DH & 4 CHCs)

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Midwives and staffing

• There are too many facilities for the staff available
• However, there are sufficient midwives per district
• Few CHCs and DHs reach the critical mass of staff to provide a safe service and/or have sufficient deliveries to be cost effective
• Some facilities are overstaffed for workload but understaffed for a safe service
• There are too many facilities to provide emergency obstetric care effectively
However, if sites are decreased, accessibility of care for women is compromised.
Loeriesfontein (Northern Cape)

- Population – 3000 people
- CHC with 5 staff members
- Births 20-30 per year
- Distance to nearest District Hospital – 150 km

Should Loeriesfontein provide care for women in labour?
Thank you