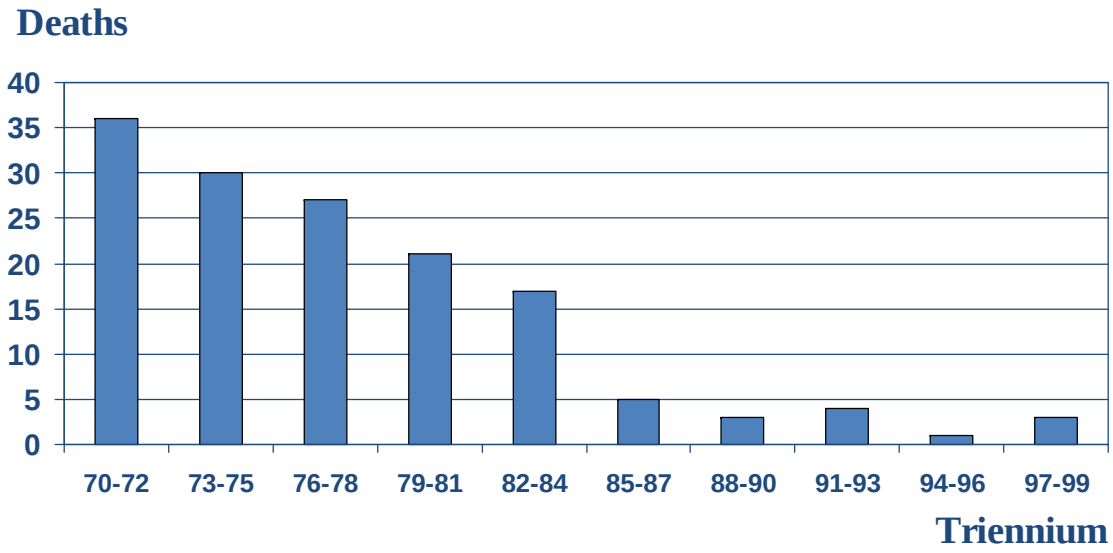
Saving mothers' lives

Lars Irestedt

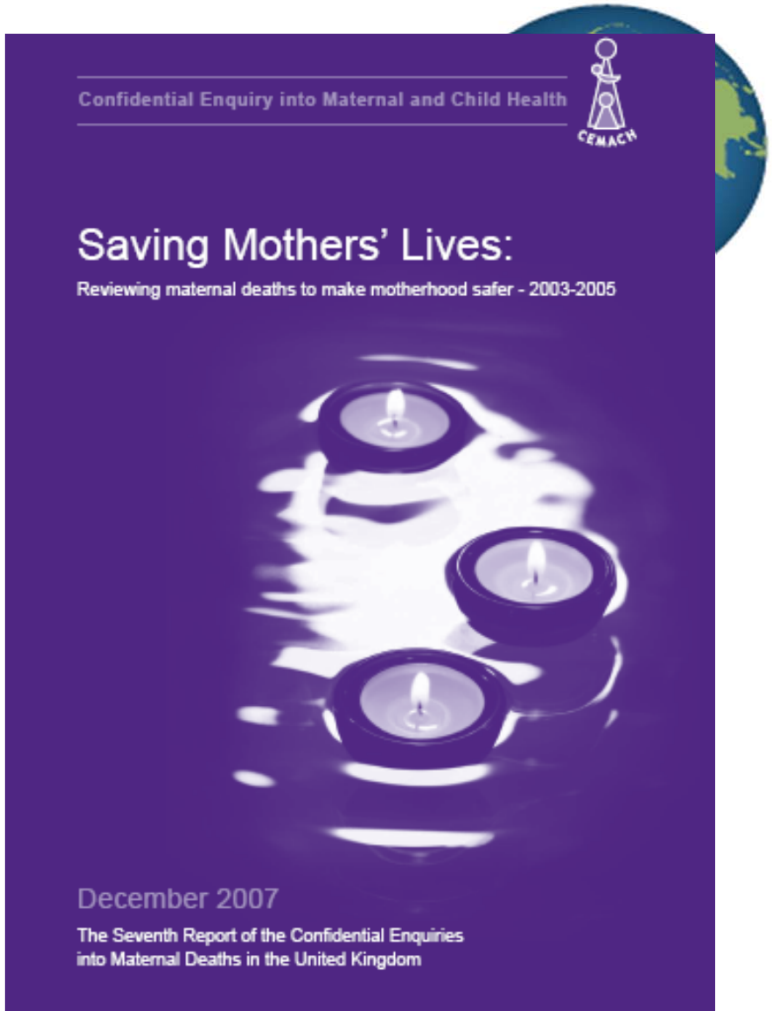
MD, PhD, Associate Professor

Direct anaesthetic maternal mortality



- Regional Anaesthesia
- Improved Training
- More Senior Interest
- Better Co-operation

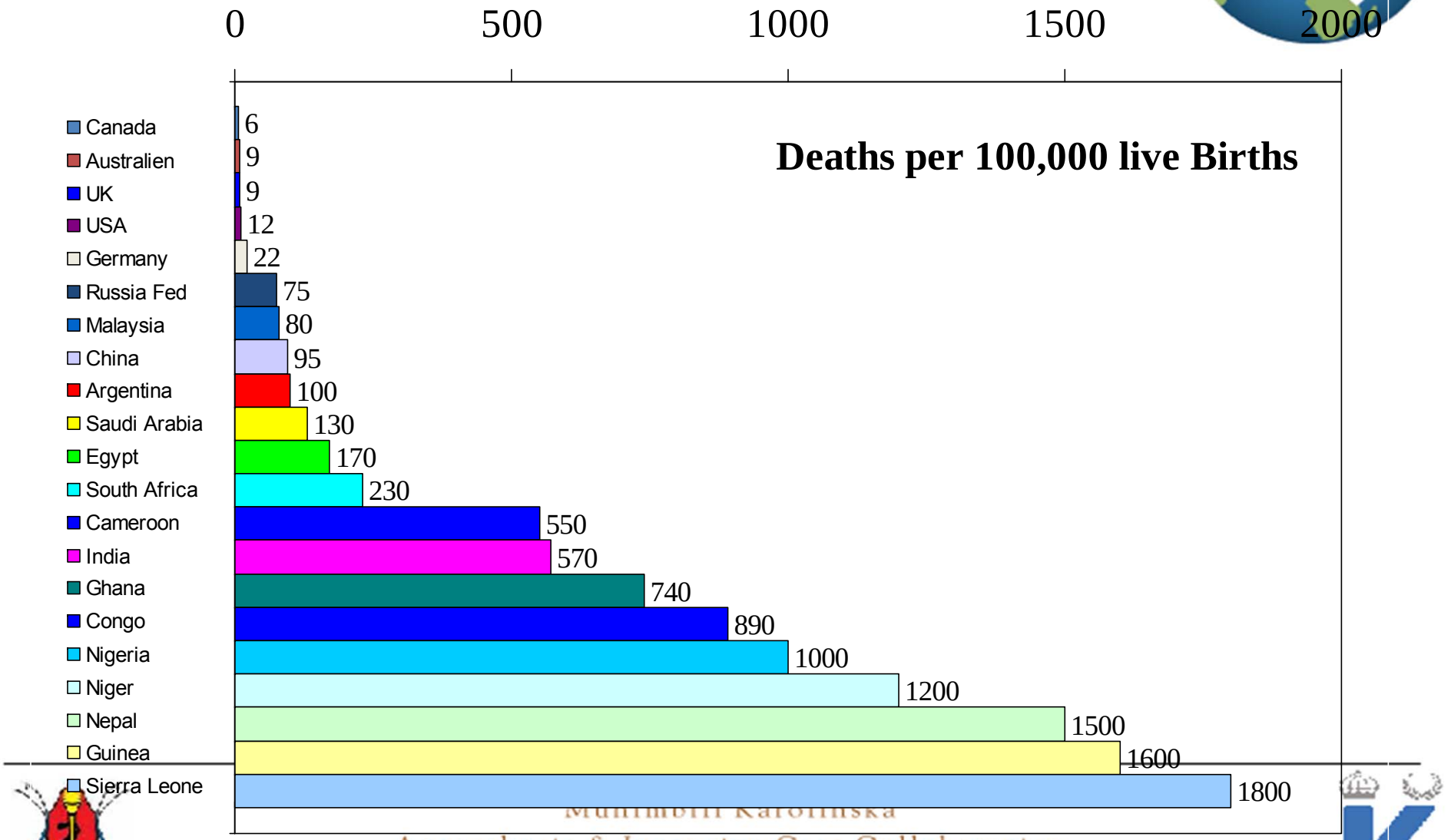
Saving mothers´ lives



Confidential enquiry into maternal and child health 2003-2005

Maternal Mortality

The Global View:



Karolinska Institutet
Anaesthesia & Intensive Care Collaboration
www.mkaic.org · info@mkaic.org

Data from UNICEF 1996

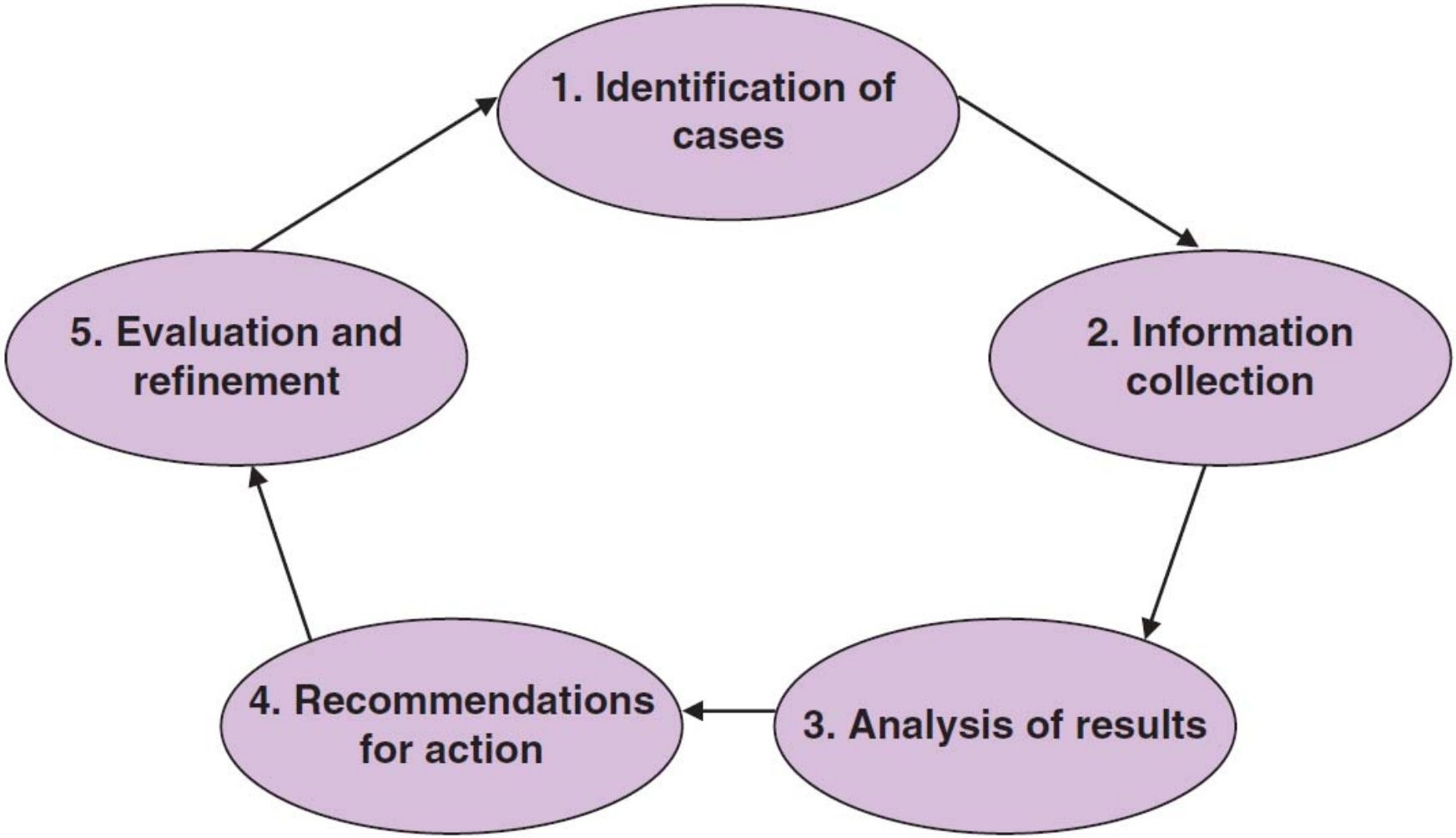

BJOG
Volume 118, Supplement 1, March 2011
Saving Mothers' Lives
Reviewing maternal deaths to make motherhood safer: 2006–2008
March 2011
The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom
CMACE
Centre for Maternal and Child Enquiries
WILEY-BLACKWELL

History of CEMD

- Series of triennial reports 1952-present

- 1952-1984 England & Wales
- 1985-present UK

- 1 April 2003 CEMD ?CEMACH/CEMACE
- (January 2009 Ireland (2009-11))?

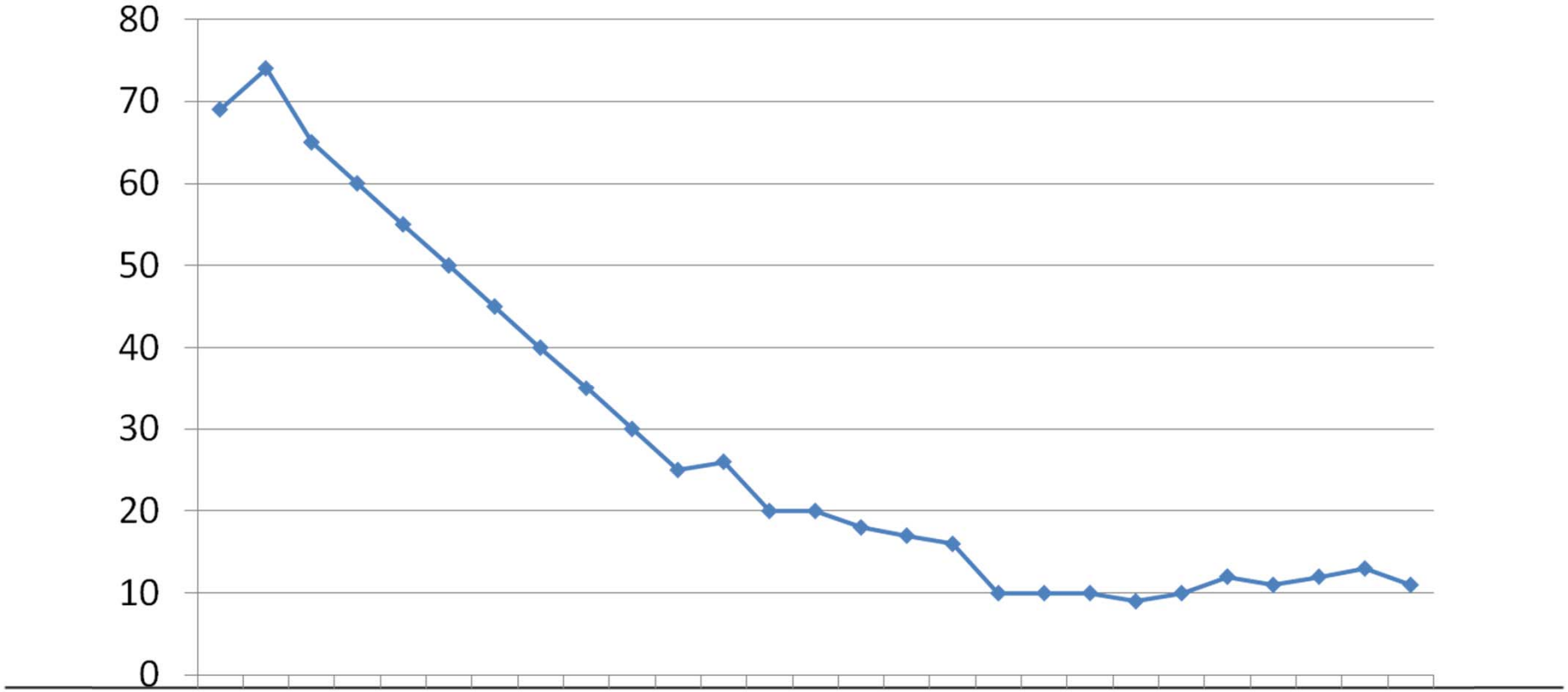

1. Identification of cases
2. Information collection
3. Analysis of results
4. Recommendations for action
5. Evaluation and refinement

Causes of death: definitions

‘Maternal death’	Pregnancy □ 42 days post
‘Direct’	Obstetric diseases
‘Indirect’	Pre-existing diseases
‘Coincidental’ (fortuitous)	
‘Late’	42 □ I year

UK Maternal mortality rates 1952-2008

per 100,000 maternities

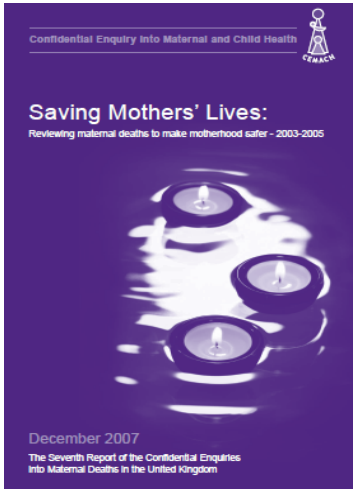


International comparisons 2010

		lower & upper estimates
Sweden	6	(3-8)
UK	7	
Germany	7	(6-9)
France	8	(5-14)
Canada	12	(7-20)
USA	24	(20-27)
Afghanistan	1400	(750-2600)

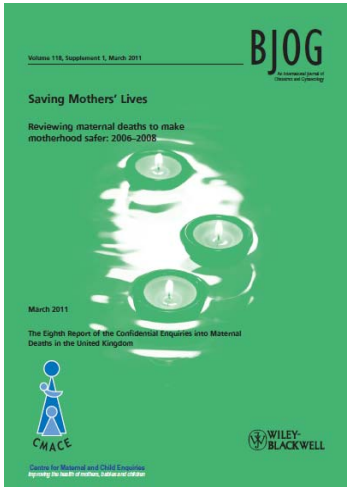
Top 10 Recommendations 2003-5

1. Pre-conception care
2. Easy access
3. Seen within 2 weeks
4. Immigrant women
5. Treat systolic HT
6. Risks of CS & placenta praevia
7. Critical incident reporting & learning
8. Training for recognising serious illness
9. MOEWS
10. Guidelines – obesity, sepsis, early pregnancy



Top 10 Recommendations 2006-8

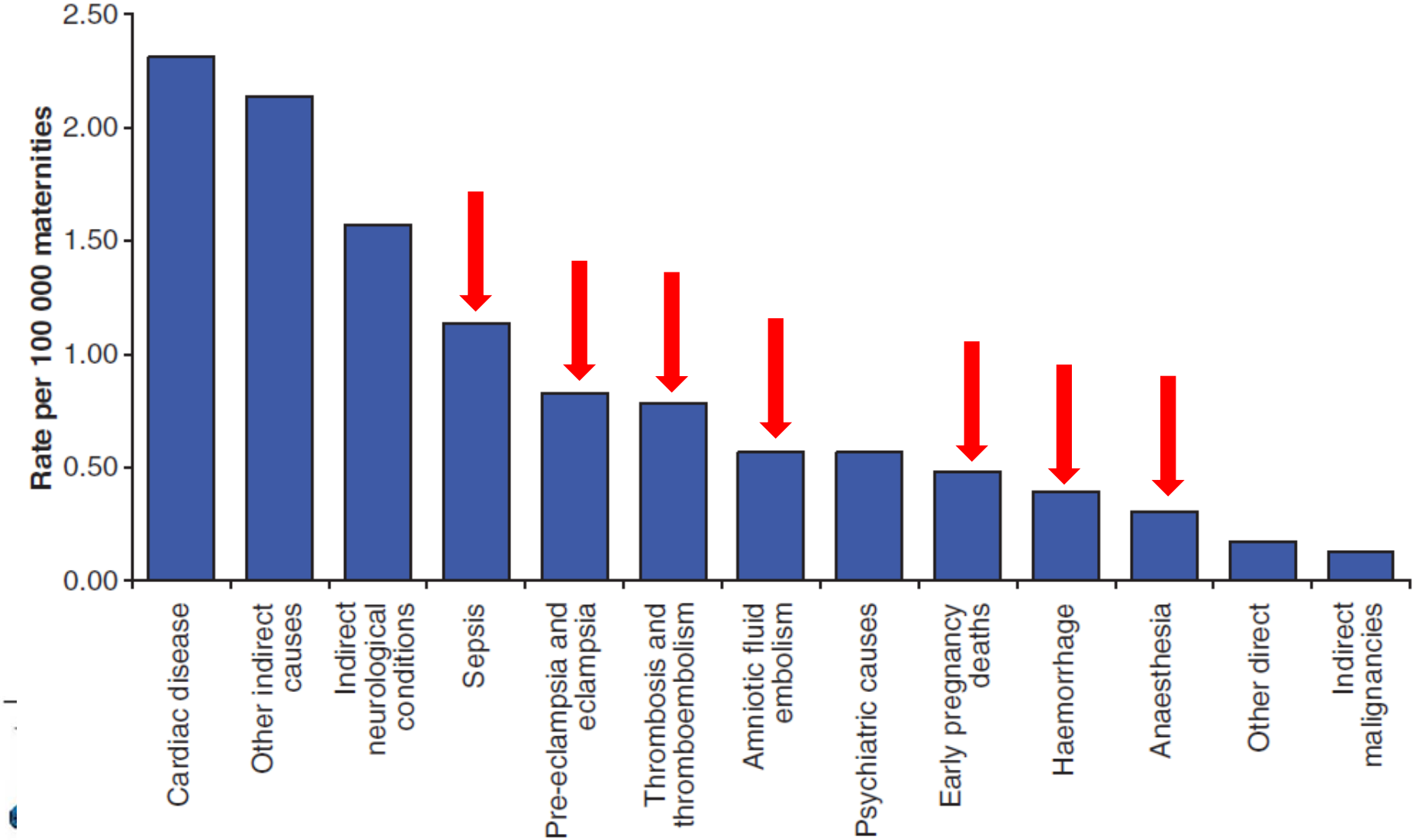
1. Pre-conception counselling
2. Interpretation services
3. Communication & referral
4. Multidisciplinary specialist care
5. BACK TO BASICS: Clinical skills and training
6. Recognising and managing sick women
7. Treat systolic HT
8. Sepsis
9. Incident reporting
10. Pathology



The bad news: 2006-8

- Indirect deaths unchanged
- Sepsis worse
- Substandard care remains
- Back to basics & teamworking
- Communication, referral & involvement

Causes of death: 2006-8



Pre-eclampsia: Hypertension

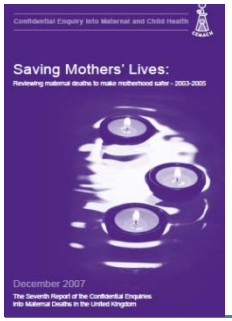
CEMACE 2006-8

Treat at systolic ≥ 150

CEMACH 2003-5

Treat at systolic ≥ 160

(Martin et al, Obstet Gynecol 2005)



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Pre-eclampsia: Hypertension

CEMACH 2003-5

Treat at systolic ≥ 160

(Martin et al, Obstet Gynecol 2005)

Consider pressor response to intubation

Confidential Enquiries

Recurrent themes:

- Failure to recognise problems
- Failure to take action
- Failure to refer
- Inappropriate delegation to junior staff
- Poor or non-existent teamworking

CEMACH, CESDI & NCEPOD

Anaesthetic Related Deaths

- 127 cases (49%) had anaesthetic involvement
- 7 deaths – directly related to the anaesthetic
- 18 deaths – anaesthetic managemtent contributed to death
- 12 deaths – anaesthetic involvement too late

Case 1

- Failed intubation
- Oxygenation via iLMA
- Unrecognised oesophageal intubation – increasing hypoxia and no $ETCO_2$
- 2nd dose thiopentone and NDMR given despite coughing
- No cricothyroid access attempted
- Patient had working epidural – not topped up

Case 2

- Aspirated on emergence from GA for section
  - Cat 1 section for APH – placenta praevia
  - Bleeding settled and CVS stable
  - Not starved
  - No documentation whether cat 1 required
- Full stomach learning point
  - Fully awake and protecting airway prior to extubation
  - Consider nasogastric tube

Substandard Care

- 6 out of 7 cases
  - Not necessarily the cause of death

Deaths in which Anaesthetic Contributed

- 18 deaths
  - 10 failure to recognise serious illness
  - 8 poor management of pre-eclampsia/eclampsia
  - 6 poor management of sepsis
  - 5 poor management of PPH
  - 5 poor management of haemorrhage in early pregnancy
  - 12 failure to consult with anaes or critical care early
  - 9 obesity
  - 1 anaphylaxis
  - 1 thromboprophylaxis

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