



DISEASE CONTROL
PRIORITIES PROJECT



Maternal and Perinatal Conditions

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INVESTING IN GLOBAL HEALTH "BEST BUYS" AND PRIORITIES FOR ACTION IN DEVELOPING COUNTRIES

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Areas of Discussion

- ❖ Describing the extent of the problem
- ❖ Interventions to address the problem
- ❖ Evaluation of interventions
- ❖ Policy and implementation issues
- ❖ Issues of information and research
- ❖ Conclusions

Maternal and Perinatal Focus Conditions - the major burden

❖ Maternal conditions

- Obstetric haemorrhage
- Sepsis
- Hypertensive disorders of pregnancy
- Obstructed labour
- Abortion

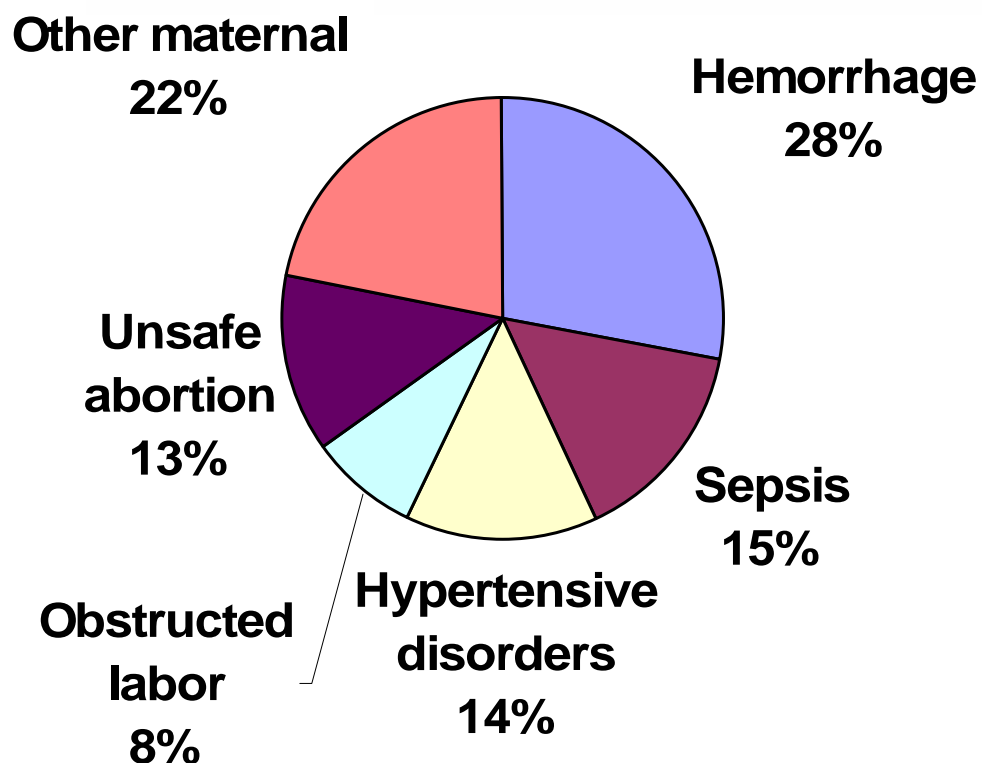
❖ Perinatal conditions

- Low birth weight
- Birth asphyxia
- Infections (including HIV/AIDS)

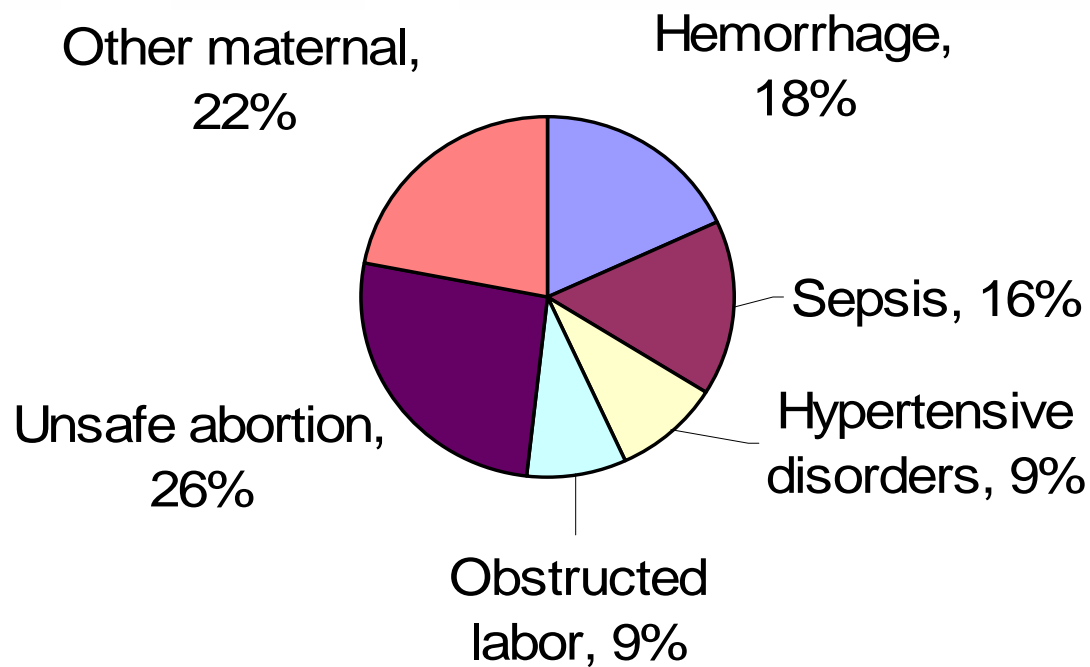
Estimates of Maternal Mortality by Region, 2000-2001

| Region | MMR (maternal deaths per 100,000 live births), 2000 | No. of maternal deaths as modelled by WHO, 2000 |
|--------------------------------|---|---|
| 1. Eastern and Southern Africa | 980 | 123,000 |
| 2. Sub-Saharan Africa | 940 | 240,000 |
| 3. Western and Central Africa | 900 | 118,000 |
| 4. High-income countries | 13 | 1,300 |
| 5. Low-income countries | 890 | 236,000 |
| 6. World | 400 | 529,000 |

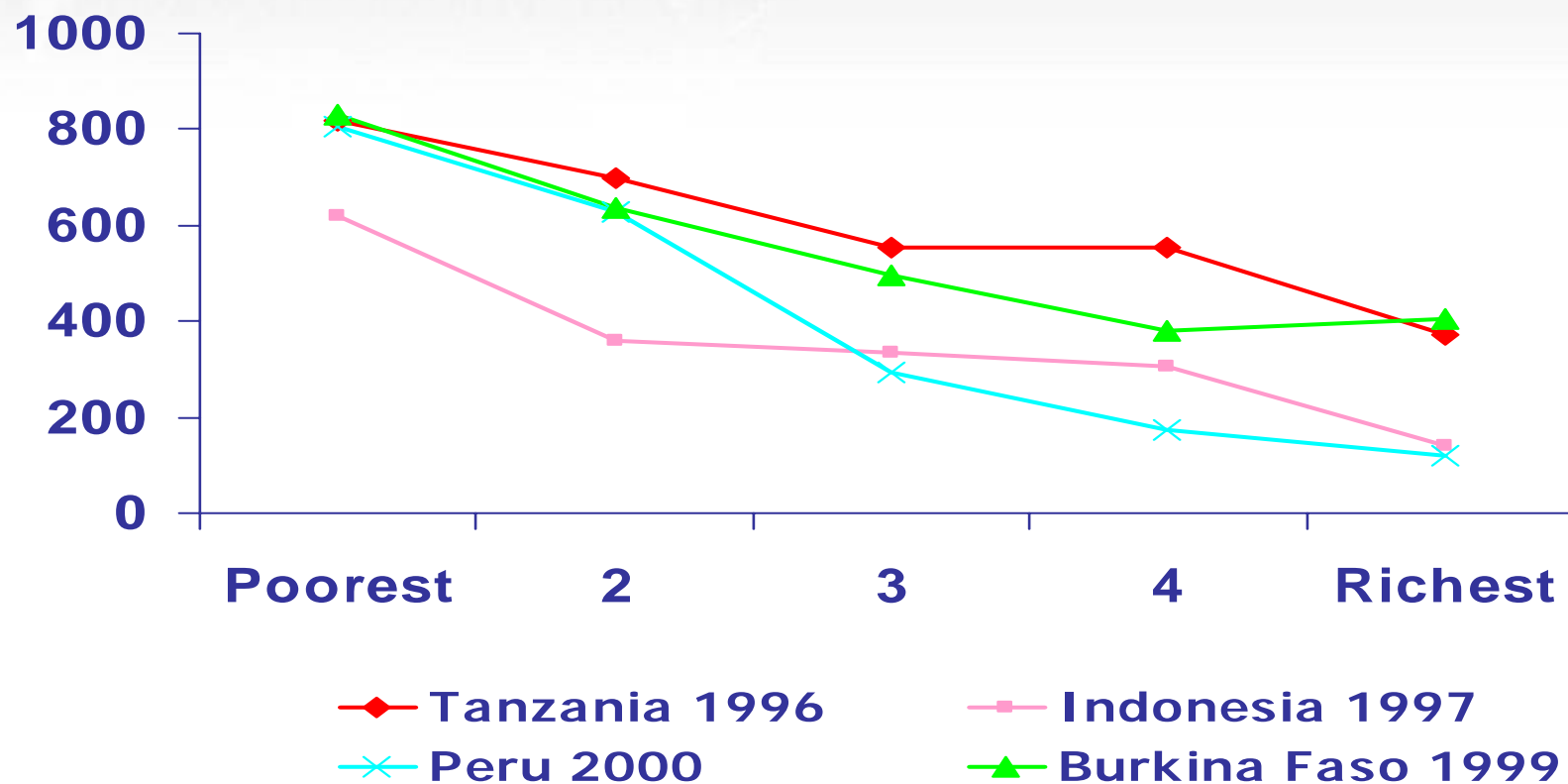
Maternal Mortality: Proportions of conditions



Maternal Morbidity: Proportion of conditions

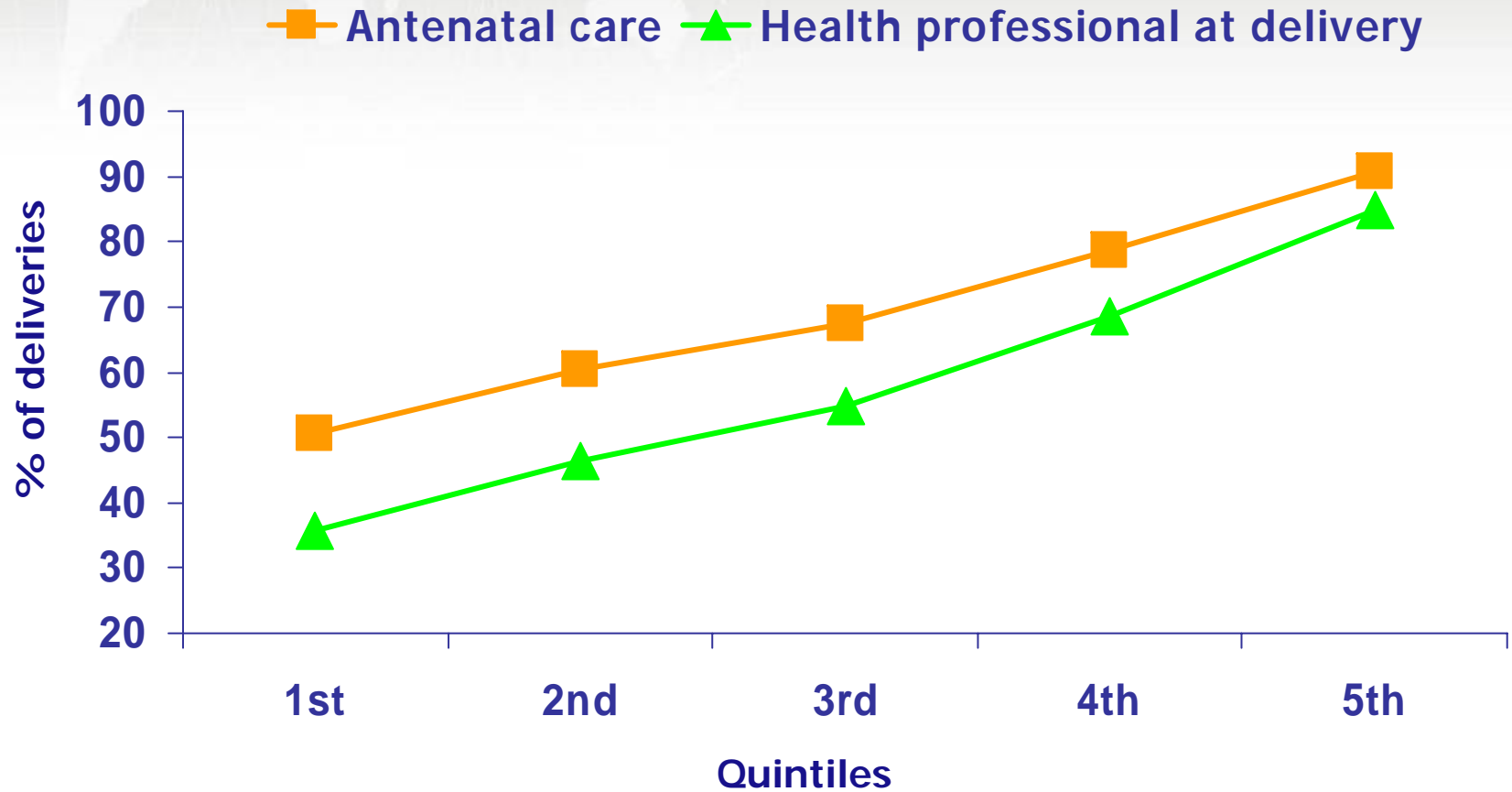


Maternal Mortality Ratios* by Poverty Quintiles



*Maternal deaths per 100,000 live births

Uptake of Care and Poverty Status



(Source: World Bank/DHS 1999 Summary of data for 10 countries)



Early Neonatal Deaths by Gender and Cause, 2001

| Cause | WORLD | | | Sub-Saharan Africa ^a | | |
|---|-------|-------|--------|---------------------------------|------|--------|
| | All | Male | Female | All | Male | Female |
| Perinatal Conditions ^b | 2,522 | 1,400 | 1,123 | 573 | 332 | 241 |
| Low birth weight ^c | 1,301 | 710 | 591 | 243 | 141 | 102 |
| Birth asphyxia (including birth trauma) | 739 | 432 | 307 | 240 | 139 | 101 |
| Other perinatal conditions ^d | 482 | 258 | 225 | 90 | 52 | 38 |

SOURCE: WHO 2004d.

- a. Excludes the island of Mayotte
- b. Excludes still births, congenital malformations, neonatal tetanus, congenital syphilis, acquired infections (respiratory and sepsis), and diarrhoea
- c. Includes preterm deliveries and small for gestational age
- d. Includes all conditions originating in the perinatal period (P00 – P96 codes in perinatal chapter of WHO 1992a), apart from low birth weight and asphyxia

Safe Motherhood Interventions

- Community education
- Evidence-based prenatal care and counselling
- Skilled assistance at delivery
- Obstetric complications and emergencies care
- Postpartum care
- Safe abortion and post-abortion services
- Family planning information and services
- Adolescent reproductive health

Source: Dayaratna and others 2000.

Evidence based prenatal care

- ❖ Nutritional advice
- ❖ Iron and folate + Vit A supplementation
- ❖ Iodization of soluble salt
- ❖ BP screening
- ❖ Screening and treating syphilis
- ❖ Antiretrovirals
- ❖ Tetanus toxoid immunisation
- ❖ Treatment of infections including UTI and malaria
- ❖ Use of bednets

Strategies for delivery of interventions

- ❖ Pathway for averting adverse outcome
 - Preventing pregnancy
 - Preventing complications
 - Preventing death and disability (EmOC)
- ❖ Pathway for clustering interventions
 - Level of care - home, primary, secondary
 - Time period - pregnancy, labour, delivery
 - Strategic approach - population vs. personal

Evaluating interventions options

- ❖ Uses CEA and ICER methods
- ❖ Compares alternate interventions
 - Base and enhanced interventions
 - Levels of care - primary and secondary
 - Technical content (quality) and coverage
- ❖ Measures contributors to cost
- ❖ Measures output (DALYs)
- ❖ Recommends selection of interventions
 - Increased coverage at primary level
 - Improved quality of care of BEmOC

Policy issues

- ❖ ICPD's rights approach goes beyond health sector
- ❖ Policy consensus not backed by action
- ❖ MDG provides strategic opportunity
- ❖ Need to use SWAP and PRSP to advance interventions
- ❖ Global health partners increasingly crucial

Implementation issues

- ❖ Willingness of policy makers to act on evidence
- ❖ A strong health system is essential
- ❖ Role of community based providers and advocates
- ❖ Health professional bodies are not supportive
- ❖ Referral system between levels are crucial
- ❖ Financing barrier to the poor must be addressed
- ❖ Population-based information is crucial

Issues of information and research

- ❖ Knowledge gaps exist requiring research
 - Ascertaining burden and levels of conditions
 - Strategies for implementing need changes
 - More robust economic evaluation
- ❖ Weaknesses exist in health information systems
 - Data quality, coverage, analysis
- ❖ Poor utilisation of existing evidence

Addressing the information problems

- ❖ Health Metrics Network as a global effort
 - Assessment, strategic planning to a framework
- ❖ Initiative on Maternal Mortality Assessment (IMMPACT)
 - Enhanced method and tools
 - New evidence generated
 - Stronger evidence-based decisions

Conclusion

- ❖ Single contributor to DALYs at 6%
- ❖ Limited progress in addressing problem
- ❖ Improvements must be across health systems
- ❖ Entry point can be achieved at primary level and through prenatal care
- ❖ Improved quality of care is cost-effective
- ❖ The MDGs provides our greatest opportunity

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