

# Maternal Mortality – WHO's Perspective

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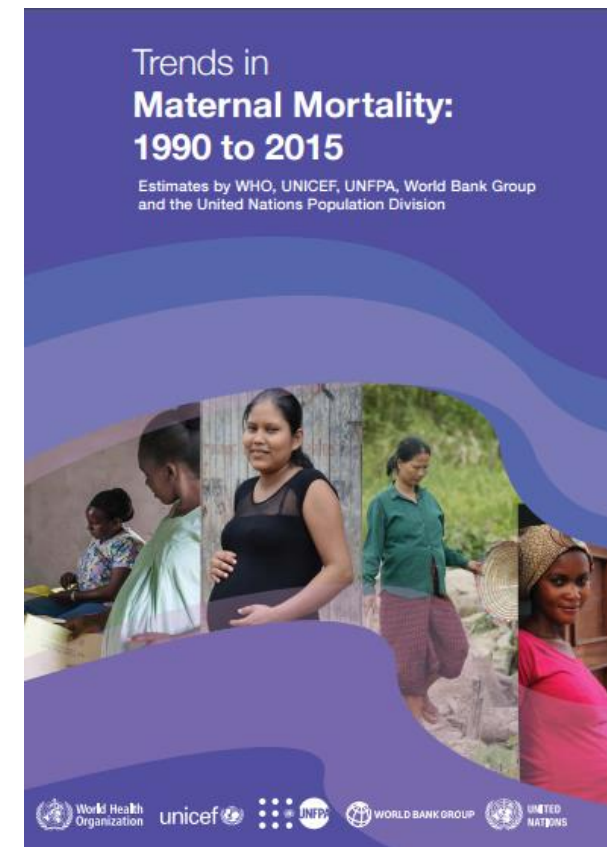
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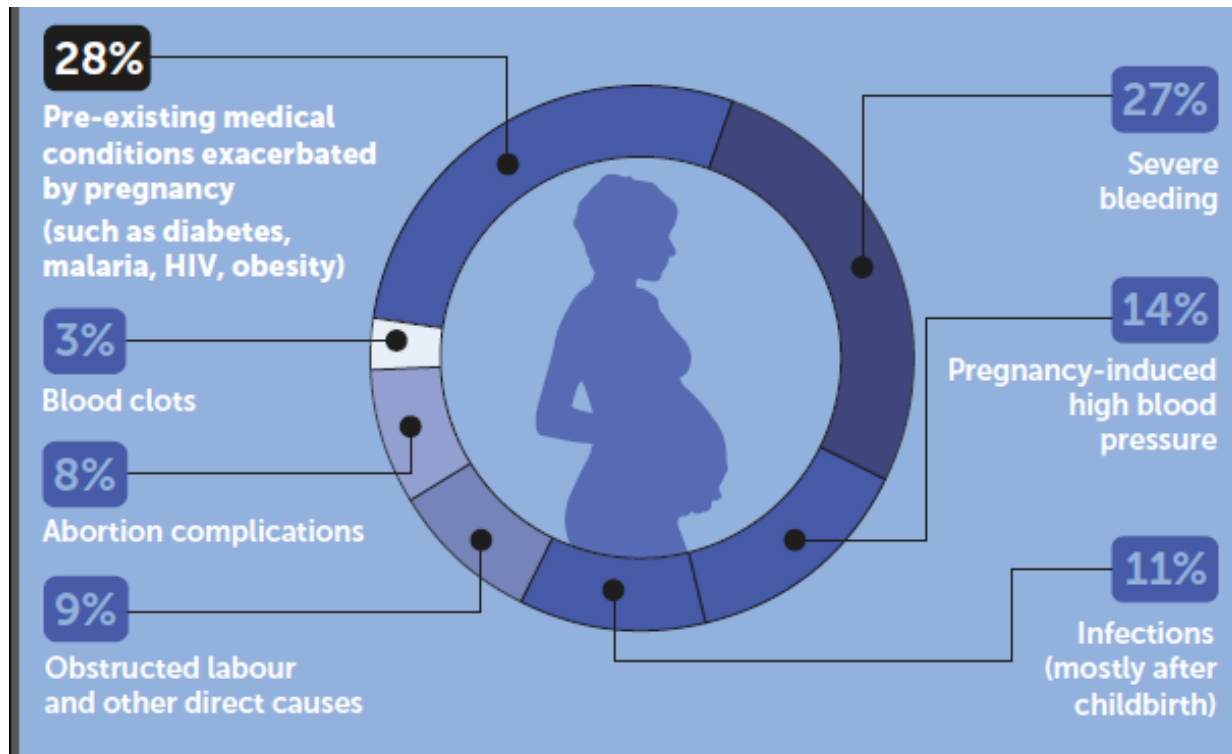
# Trends in Maternal Mortality: 1990-2015

- ❑ Millennium Development Goal Era
- ❑ Last round of estimates released November, 2015
  - Feature improve methods for incorporating country data
- ❑ An estimated 303,000 women died in 2015, a 44% reduction from the 532,000 that died in 1990
- ❑ Maternal mortality ratios
  - 216 per 100,000 LB in the world
  - 546 per 100,000 LB in sub-Saharan Africa
  - 1360 per 100,000 LB in Sierra Leone.



# What are women dying from?

- ❑ WHO 2014 Study on Causes of Maternal Death
- ❑ Assessed causes of death of more than 60,000 maternal deaths from 115 countries



**At end of 2015: progress in reducing MMR and addressing causes of maternal death had not been uniform globally – needed a plan for accelerated action post-2015**

# Maternal Mortality in the SDGs



# Goals

Maternal mortality ratio (MMR) is key indicator of maternal health in SDG framework.



# Global commitment to *ending preventable maternal mortality*



# HOW do we end preventable maternal mortality?

- ❑ **Address inequities** in access to and quality of sexual, reproductive, maternal and newborn health care.
- ❑ **Ensure universal health coverage** for comprehensive sexual, reproductive, maternal and newborn health care.
- ❑ **Address all causes of maternal mortality, reproductive and maternal morbidities, and related disabilities.**
- ❑ **Strengthen health systems** to respond to the needs and priorities of women and girls.
- ❑ **Ensure accountability to improve quality of care and equity.**



# WHO's role

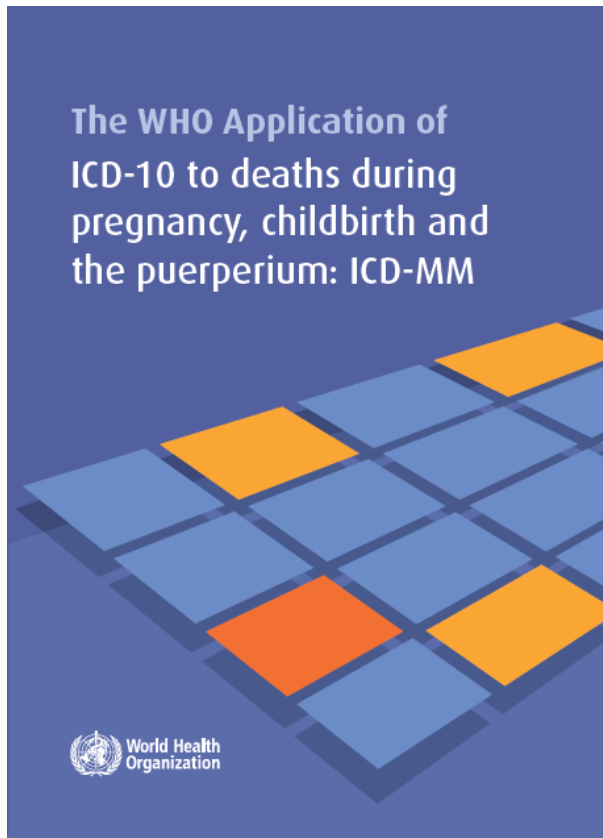
- ❑ Country collaboration to improve measurement of maternal mortality
- ❑ Develop better understanding of *why* maternal mortality occurs
- ❑ Address known causes of maternal mortality
  - Global guidelines on major conditions leading to mortality
- ❑ Strengthen preventative measures
  - New ANC Guidelines
  - Quality of care

# Improving measurements of maternal mortality

- What are we measuring?
  - *the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.” -ICD-10*
- Measuring maternal mortality is very challenging...
  - Relatively rare event
  - Undercounting, misclassification
  - Changing data sources and data quality over time

*...yet policy makers expect precise estimates*

# The WHO Application of ICD-10 to deaths during pregnancy, childbirth, and puerperium: ICD-MM

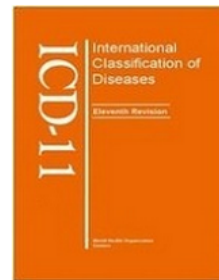


- Intended to simplify and standardize the capture of maternal deaths from various sources of data
- Current version based upon ICD 10 codes

# Preparation for ICD-11

- ❑ The new maternal death classification system should be adopted by all countries
- ❑ Will allow comparisons to be made within and between countries and regions

## The International Classification of Diseases 11th Revision is due by 2017



### Participate in the ICD Revision

- Beta phase participants will have the opportunity to:
- Make **Comments**
  - Make **Proposals**
  - Propose **definitions** of diseases in a structured way
  - Participate in **Field Trials**
  - Assist in **translating** ICD into other languages

[Video invitation to participate](#)

[Frequently Asked Questions About ICD-11](#)

[ICD Information Sheet](#)

[ICD Revision Information Notes](#)

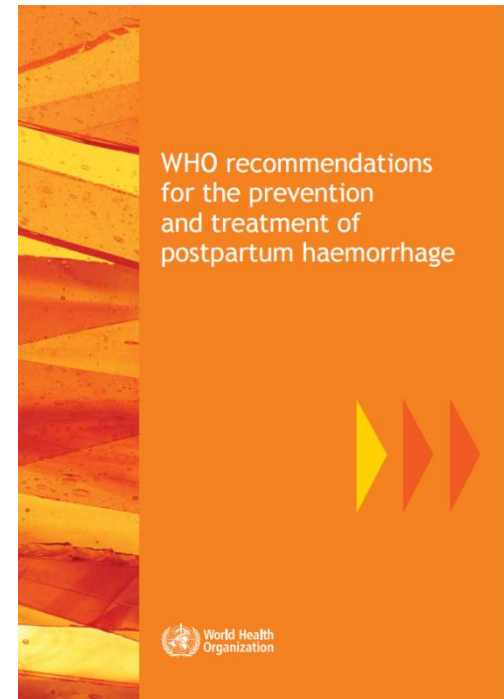
[ICD-11 Browser for browsing the classification and participating the development](#)

# Understanding *why* maternal mortality occurs

- ❑ (1) **Maternal death reviews**, (2) local committees for **quality of care (QoC) improvement**, and (3) targeted actions to **strengthen the skills of health providers** (e.g. emergency drills) can reduce maternal mortality at health facilities
- ❑ **Reviews of near miss cases** can be used as an entry point for discussing bottlenecks and other QOC issues.
- ❑ Important: look beyond tallying numbers, to **generate information for action** at local and health system level

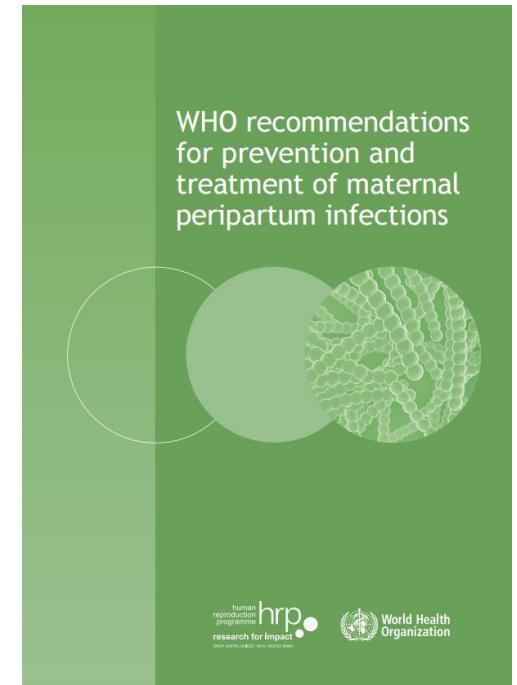
# Addressing direct causes of maternal mortality

- ❑ For **PPH**, emphasis remains on the use of prophylactic uterotonics (Oxytocin, 10 IU IV/IM as the first line drug).
  - Treatment centered around the use of uterotonics, but encompassing the use of IV fluids and access to surgery if necessary
- ❑ For **PE/Eclampsia**, the use of **magnesium sulfate** is recommended for both prevention and treatment of eclampsia.
  - Women with low intake of dairy products recommended to receive calcium supplementation during pregnancy
  - High risk women recommended to receive low-dose aspirin



# Addressing direct causes of maternal mortality

- ❑ 2015 **WHO Guidelines** for prevention and treatment of **maternal peripartum infections**
- ❑ New **WHO definition for maternal sepsis** has, in line with the current understanding of sepsis in the adult population.
  - WHO understands maternal sepsis as an infection during pregnancy, childbirth and postpartum/postabortion period that evolves with an organ dysfunction.
- ❑ Guidance centered on use of *Fluids, Antibiotics, Source Control, Transfer and Monitoring* is under development.



# Strengthening preventative measures: 2016 ANC guideline (coming 7 November, 2016)

- ❑ Essential core package of ANC that all pregnant women and adolescent girls should receive
- ❑ With the flexibility to employ different options based on the context of different countries
- ❑ Complement existing WHO guidance on complications during pregnancy

## Overarching questions

- ❑ **What** are the evidence-based practices during ANC that improved outcomes and **lead to positive pregnancy experience?**
- ❑ **How** should these practices be delivered?



# Recommendations on ANC

Total of **49** recommendations

- A. Nutritional interventions (**14**)
- B. Maternal and fetal assessment (**8**)
- C. Preventative measures (**5**)
- D. Interventions for common physiological symptoms (**6**)
- E. Health system interventions to improve the utilization and quality of ANC (**6**)

ANC recommendations from  
other WHO guidelines (**10**)

**Of note: 8 antenatal care contacts, recommendation on early ultrasound scan.**



# Moving beyond essential interventions

Articles

## Moving beyond essential interventions for reduction of maternal mortality (the WHO Multicountry Survey on Maternal and Newborn Health): a cross-sectional study



*João Paulo Souza, Ahmet Metin Gülmezoglu, Joshua Vogel, Guillermo Carroli, Pisake Lumbiganon, Zahida Qureshi, Maria José Costa, Bukola Fawole, Yvonne Mugerwa, Idi Nafiu, Isilda Neves, Jean-José Wolomby-Molondo, Hoang Thi Bang, Kannitha Cheang, Kang Chuyun, Kapila Jayaratne, Chandani Anoma Jayathilaka, Syeda Batool Mazhar, Rintaro Mori, Mir Lais Mustafa, Laxmi Raj Pathak, Deepthi Perera, Tung Rathavy, Zenaida Recidoro, Malabika Roy, Pang Ruyan, Naveen Shrestha, Surasak Taneepanichsku, Nguyen Viet Tien, Togoobaatar Ganchimeg, Mira Wehbe, Buyanjargal Yadamsuren, Wang Yan, Khalid Yunis, Vicente Bataglia, José Guilherme Cecatti, Bernardo Hernandez-Prado, Juan Manuel Nardin, Alberto Narváez, Eduardo Ortiz-Panozo, Ricardo Pérez-Cuevas, Eliette Valladares, Nelly Zavaleta, Anthony Armson, Caroline Crowther, Carol Hogue, Gunilla Lindmark, Suneeta Mittal, Robert Pattinson, Mary Ellen Stanton, Liana Campodonico, Cristina Cuesta, Daniel Giordano, Nirun Intarut, Malinee Laopaiboon, Rajiv Bahl, Jose Martinez, Matthews Mathai, Mario Merialdi, Lale Say*

### Summary

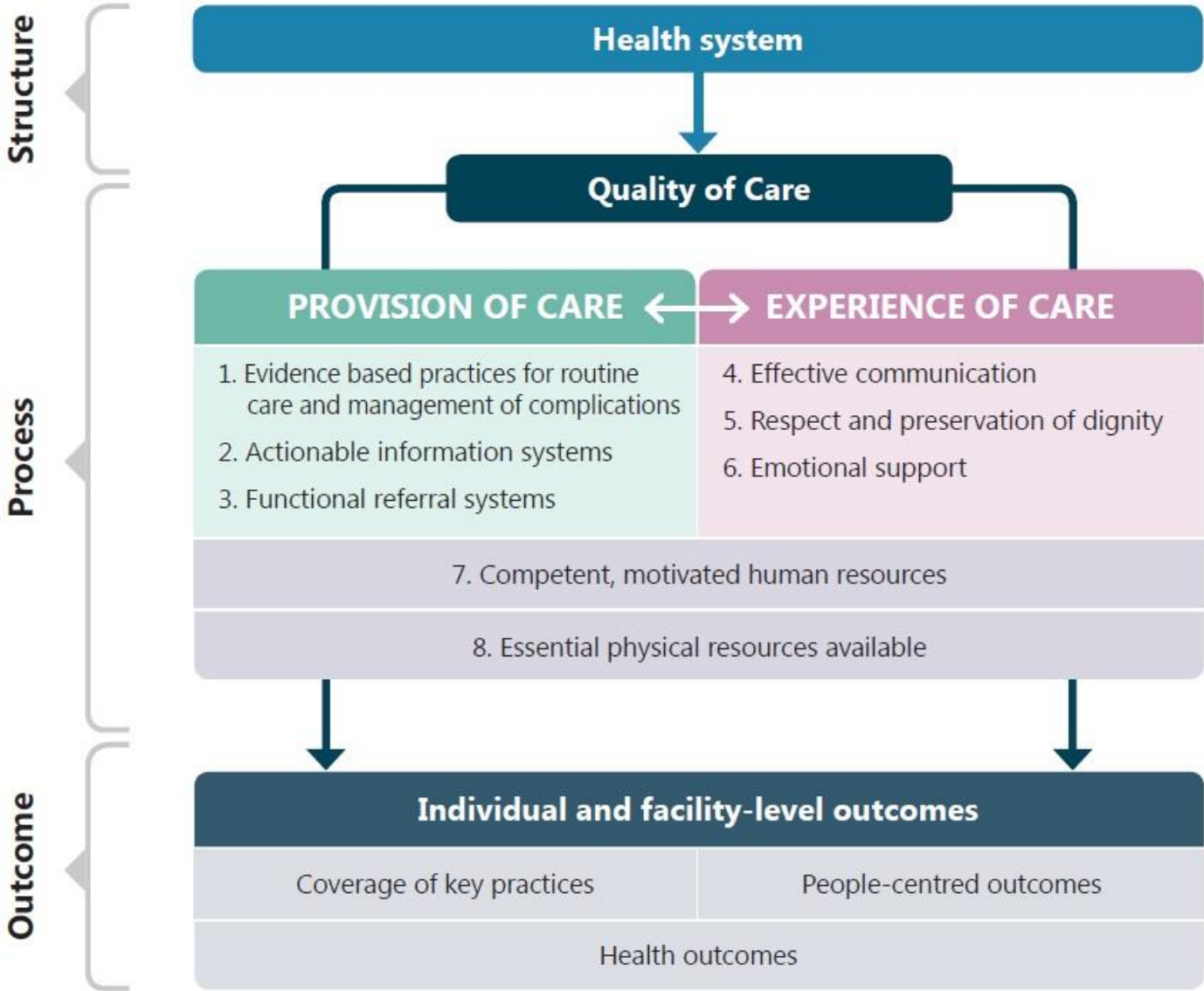
**Background** We report the main findings of the WHO Multicountry Survey on Maternal and Newborn Health (WHOMCS), which aimed to assess the burden of complications related to pregnancy, the coverage of key maternal health interventions, and use of the maternal severity index (MSI) in a global network of health facilities.

*Lancet* 2013; 381: 1747-55

See [Comment](#) page 1695

UNDP/UNFPA/UNICEF/WHO

Fig. 1. WHO framework for the quality of maternal and newborn health care



# Conclusion

- ❑ Maternal mortality is still a key global development goal
- ❑ Accurate recording of clinical causes of maternal deaths important for actions
- ❑ Clinical interventions/guidelines based on current evidence crucial for improving provision of care
- ❑ Should be provided as part of an improved organization and quality of care

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