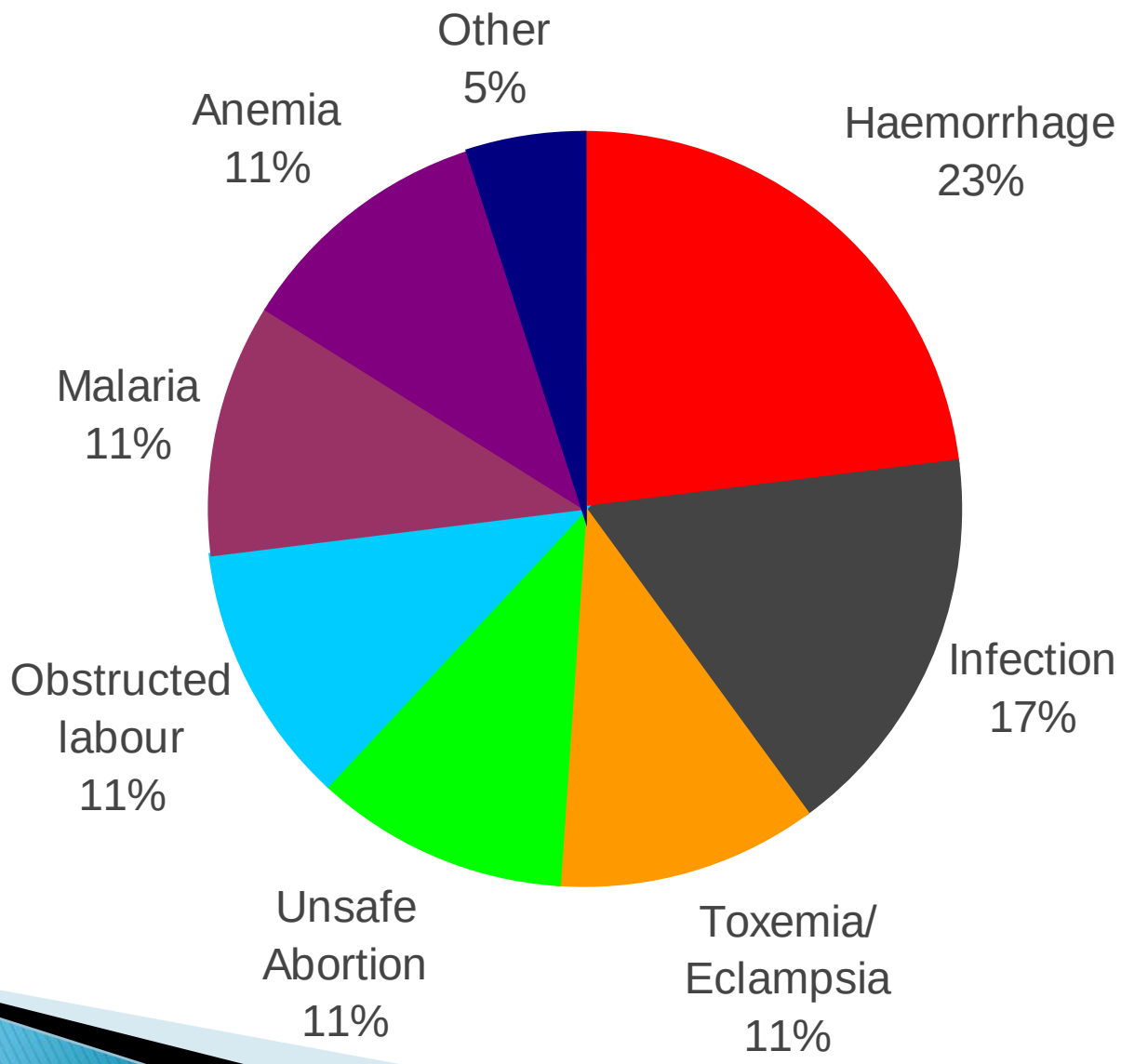
A Model to Reduce Maternal and Fetal Mortality by Quality Assurance

By
Dr Hadiza S. Galadanci
(MBBS, DLSTM&H, MSc, FWACS, MRCOG, FICS)
Consultant Obstetrician and Gynaecologist

Introduction – Statistics

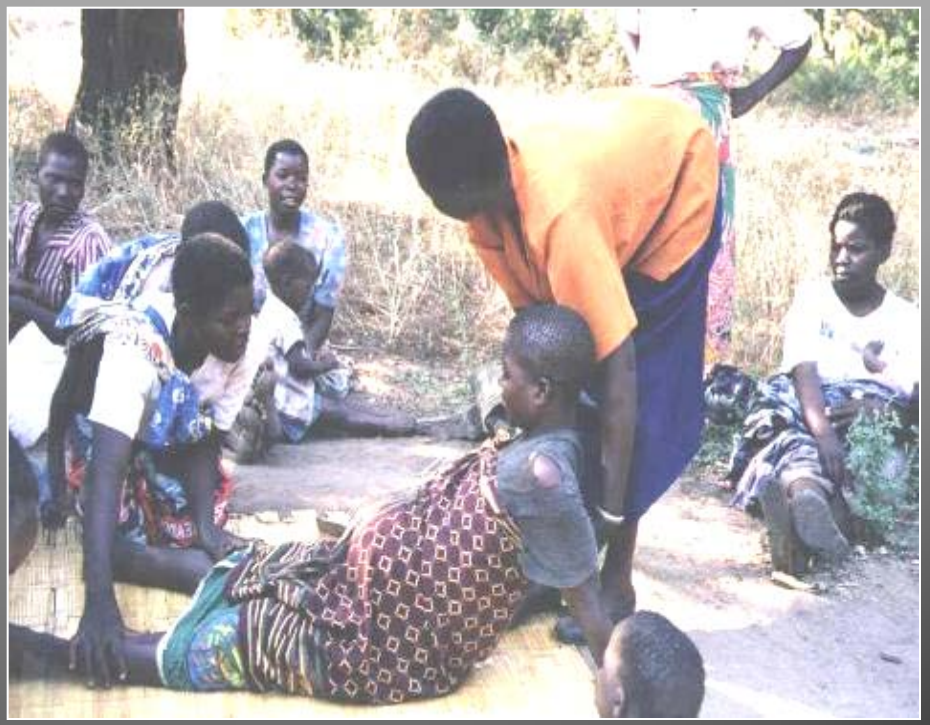
- 99% of the 585,000 women who die of pregnancy related complications occur in the developing countries.
- Nigeria has one of the highest rates of maternal mortality in the developing world.
- 339 – 1,716/100,000 *(FMOH)*
- 55,000 maternal deaths annually in Nigeria
- lifetime risk of dying from pregnancy related cause is 1 in 1750 *(developed countries)*,1 in 870 *(East Asia)*, 1 in 90 *(Latin America)*, 1 in 24 *(Africa)*

WHY DO MOTHERS DIE ?



1st DELAY
SOCIO-ECONOMIC FACTORS:

- Lack of knowledge of danger signs
- Delay in decision making
- Lack of decision-making power



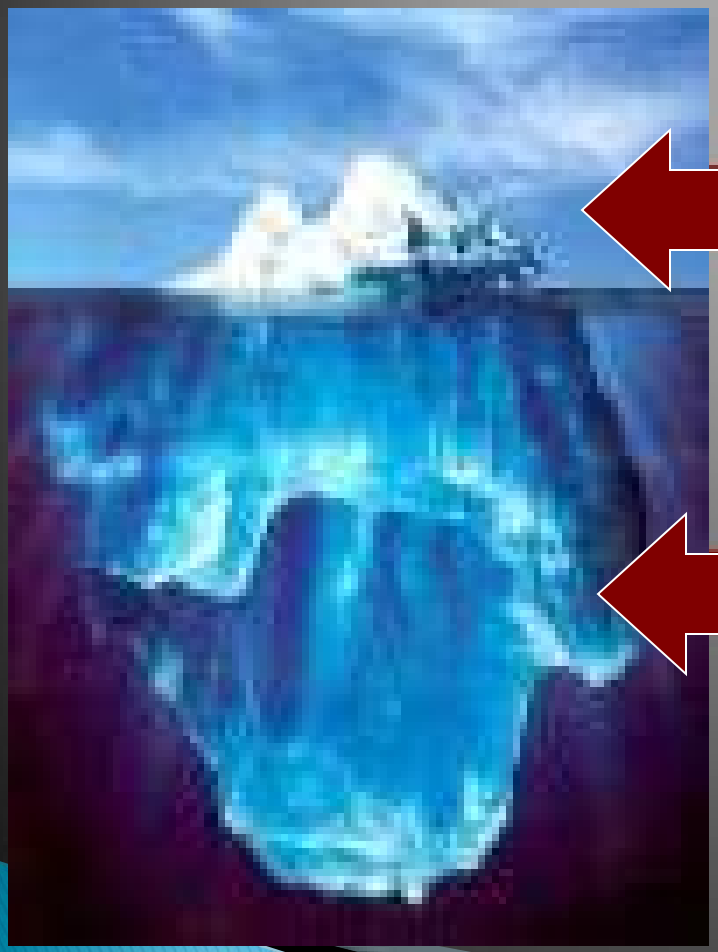
2nd DELAY

- Long distances
- Poor state of roads
- Inadequate referral and feedback systems
- Households with low income

3rd DELAY

- Inadequate skilled personnel
- Inadequate equipment and supplies
- Lack of blood
- Lack of motivation of staff
- Lack of light, water

MATERNAL MORBIDITY



1 maternal death

20-30 maternal morbidities

Morbidities- Vesico-Vaginal Fistula

To meet only one of these mothers is to be profoundly moved. Mourning the stillbirth of their only baby, incontinent of urine, ashamed of their offensiveness, often abandoned by their husbands, homeless, unemployable except in the fields, they endure, they exist, without friends, without hope. No world charities have ever heard of them. They bear their sorrows in silent shame. Their miseries, untreated, are utterly lonely and lifelong."

A Model to Reduce Maternal and Fetal Mortality by Quality Assurance

Key issue

How to reduce Maternal and Fetal Mortality

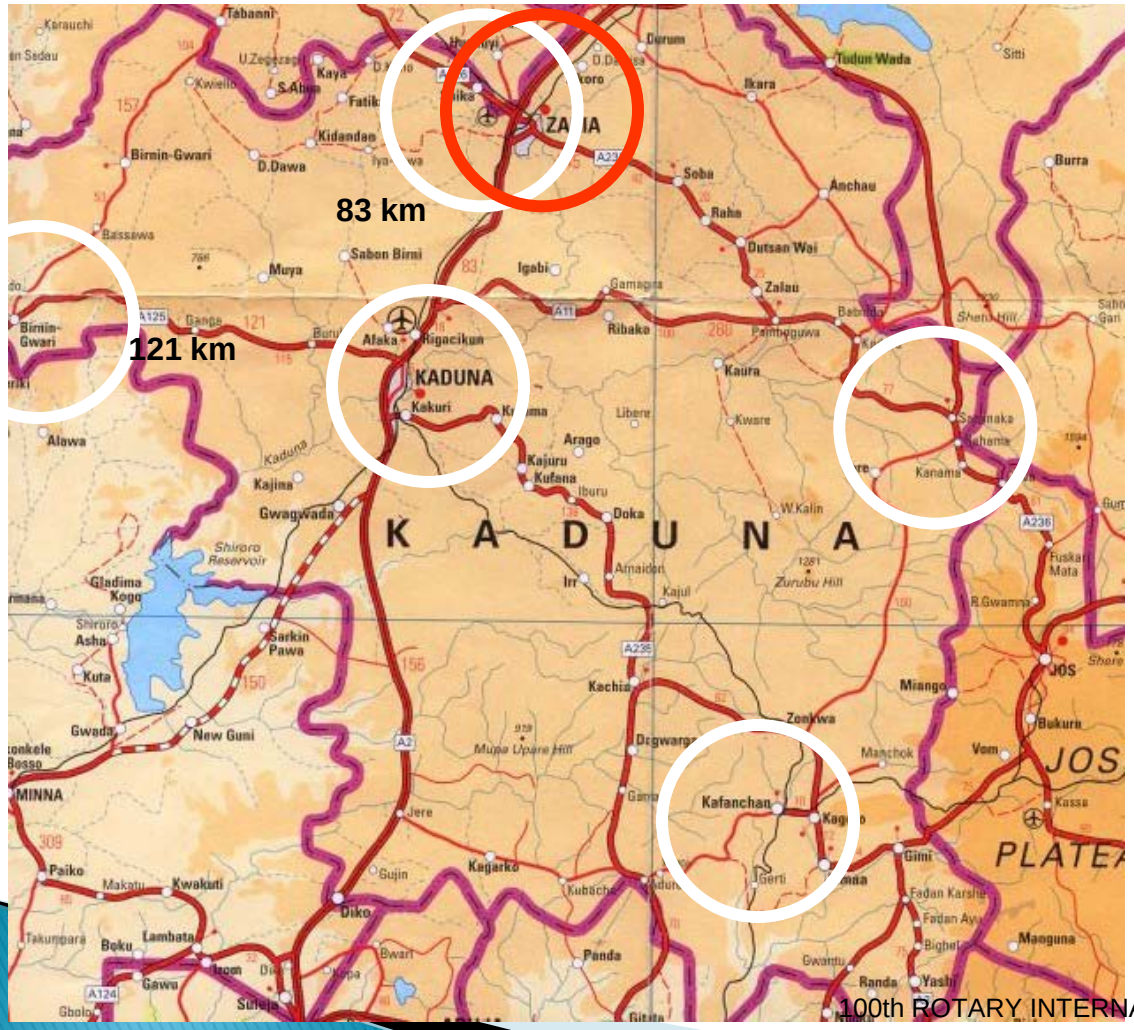
?

Quality assurance in obstetrical service

Principles of Quality assurance

- Quality of structure
- Quality of process
- Quality of outcome

Kaduna State



Amadu Bello University Teaching Hospital Zaria, Kaduna

Yusuf Dantosho General Hospital, Kaduna

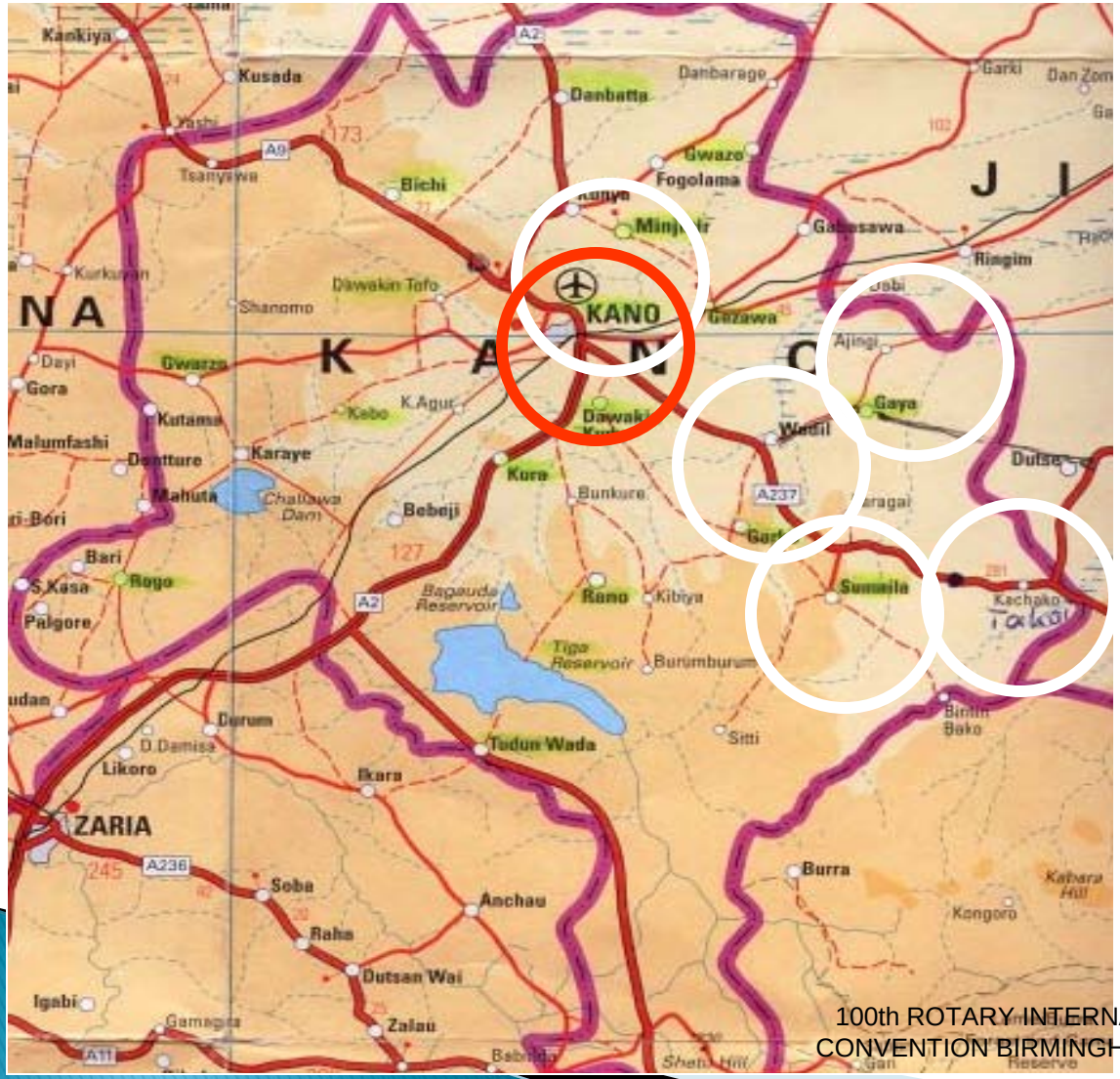
General Hospital, Kafanchan

General Hospital, Birni Gwari

Gambo Sawaba Hospital Kofan Gaya Zaria

General Hospital, Saminaka

Kano State



Aminu Kano Teaching Hospital, Kano

GeneralHospital, Sumaila

General Hospital, Gaya

General Hospital, Wudil

General Hospital, Takai

General Hospital, Sheik Jiddah, Kano

1. Quality of Structure

- Condition of the delivery room
- Number of delivery beds
- Resuscitation unit for newborns
- Infusion systems
- Provision of caesarean section (distance)
- Operating theatre
- Etc.

Quality of Structure: Some examples

Quality of Structure:
Some examples of facility audit

- Improvement of Structure of Hospitals by Donations of Rotary International:
  - 3 Ultrasound machines and training
  - 10 Vacuumextractors
  - 3 Operating tables
  - 10 Delivery beds
  - 10 Maternity record books
  - Instruments for operating theatre
  - Instruments for delivery rooms
  - Mosquito nets for malaria prevention

2. Quality of Process

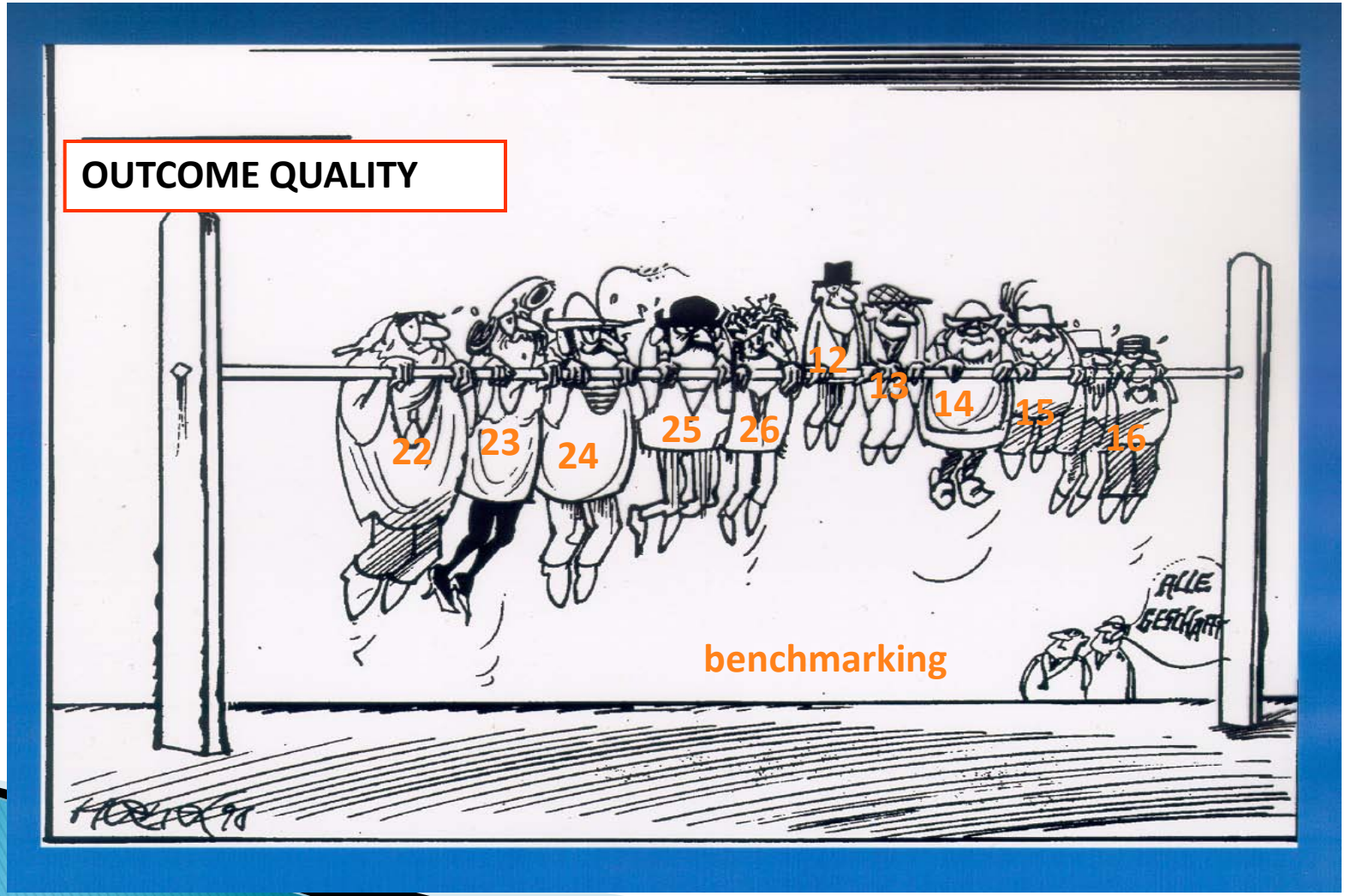
- Antenatal care and diagnostic measures
- Management of delivery
  - Data recording: Maternity record book
  - FHR observation
  - Premature rupture of membrance
  - Mode of delivery: VE, Forceps, CS
  - Post date pregnancy
  - Duration of labor
  - Counselling after delivery

Quality of process – Maternity record book

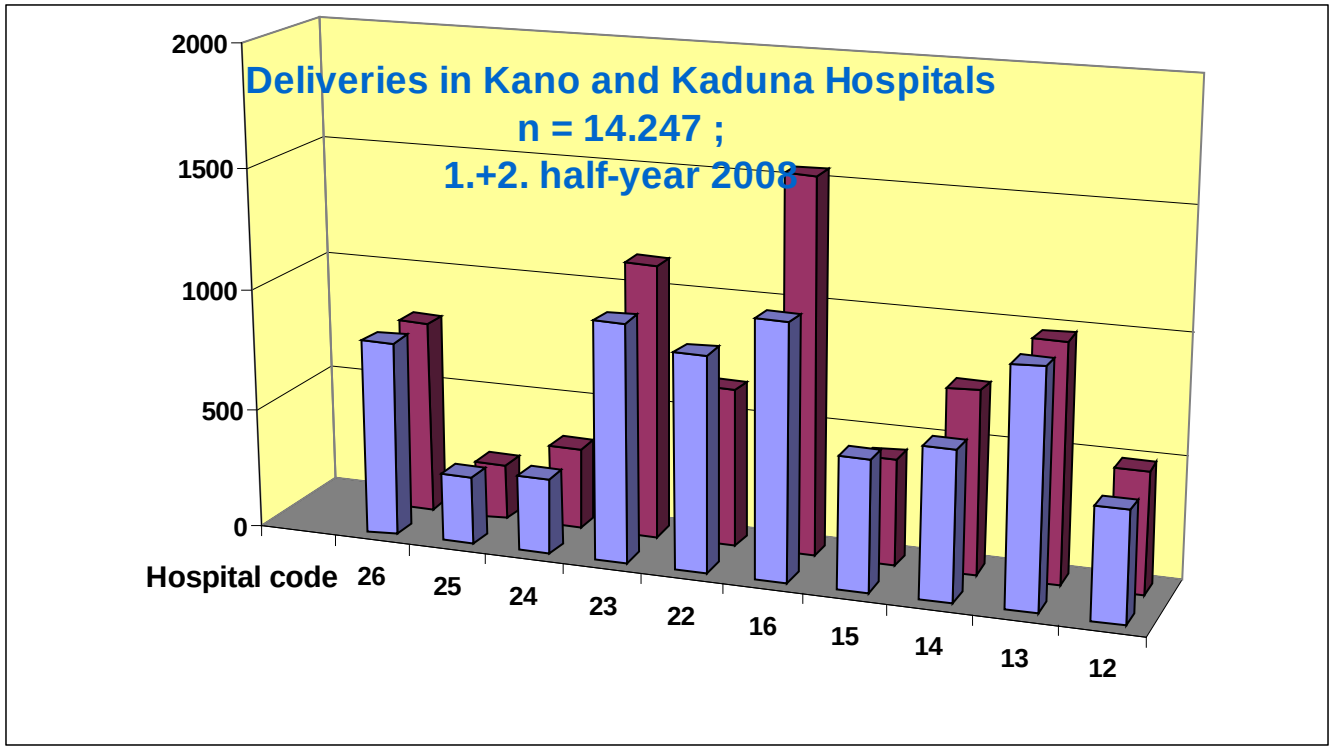
3. Quality of outcome by benchmarking

- Maternal Mortality
- Fetal Mortality
- Caesarean section rate
- Post partum haemorrhage
- Eclampsia

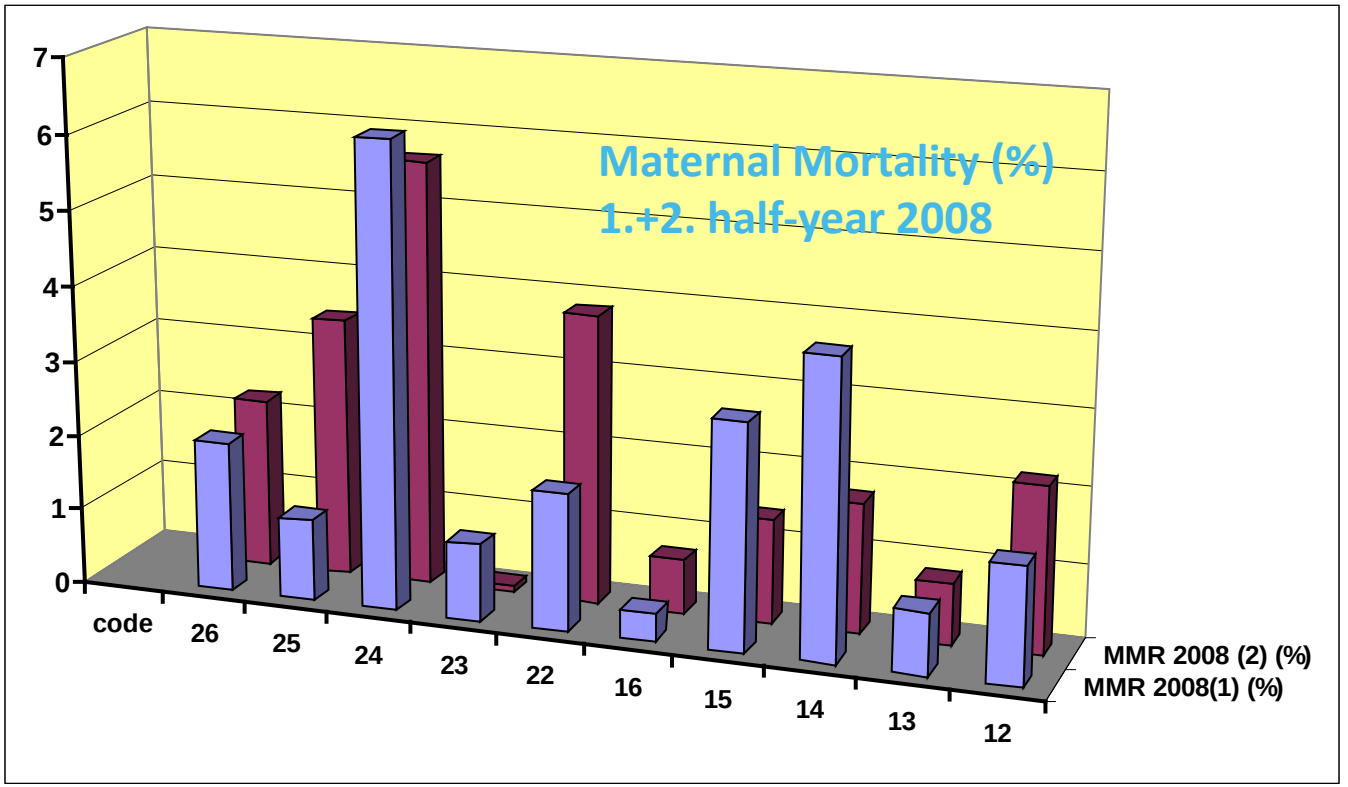
Principles of quality assurance: Quality of outcome by benchmarking



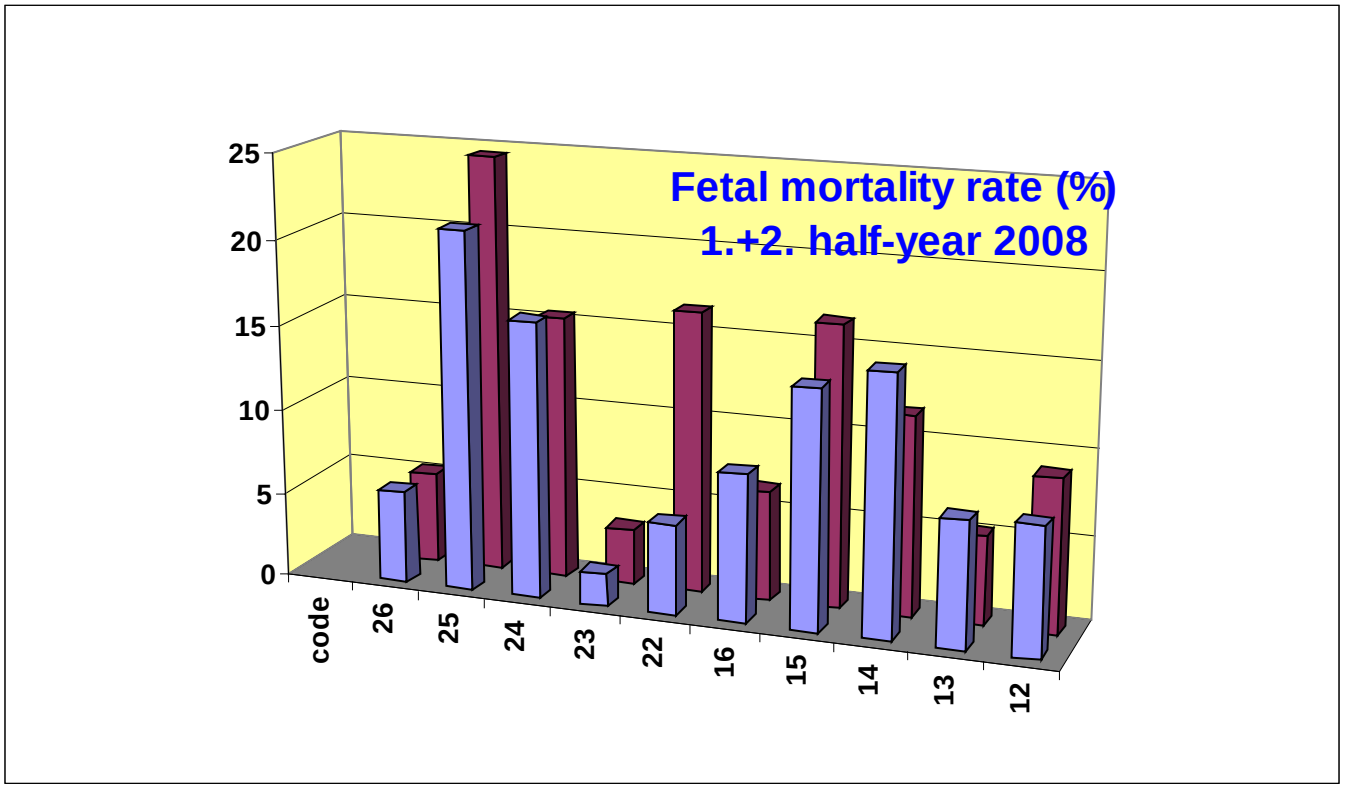
Obstetrical Service at 10 Hospitals in Kano and Kaduna in 2008



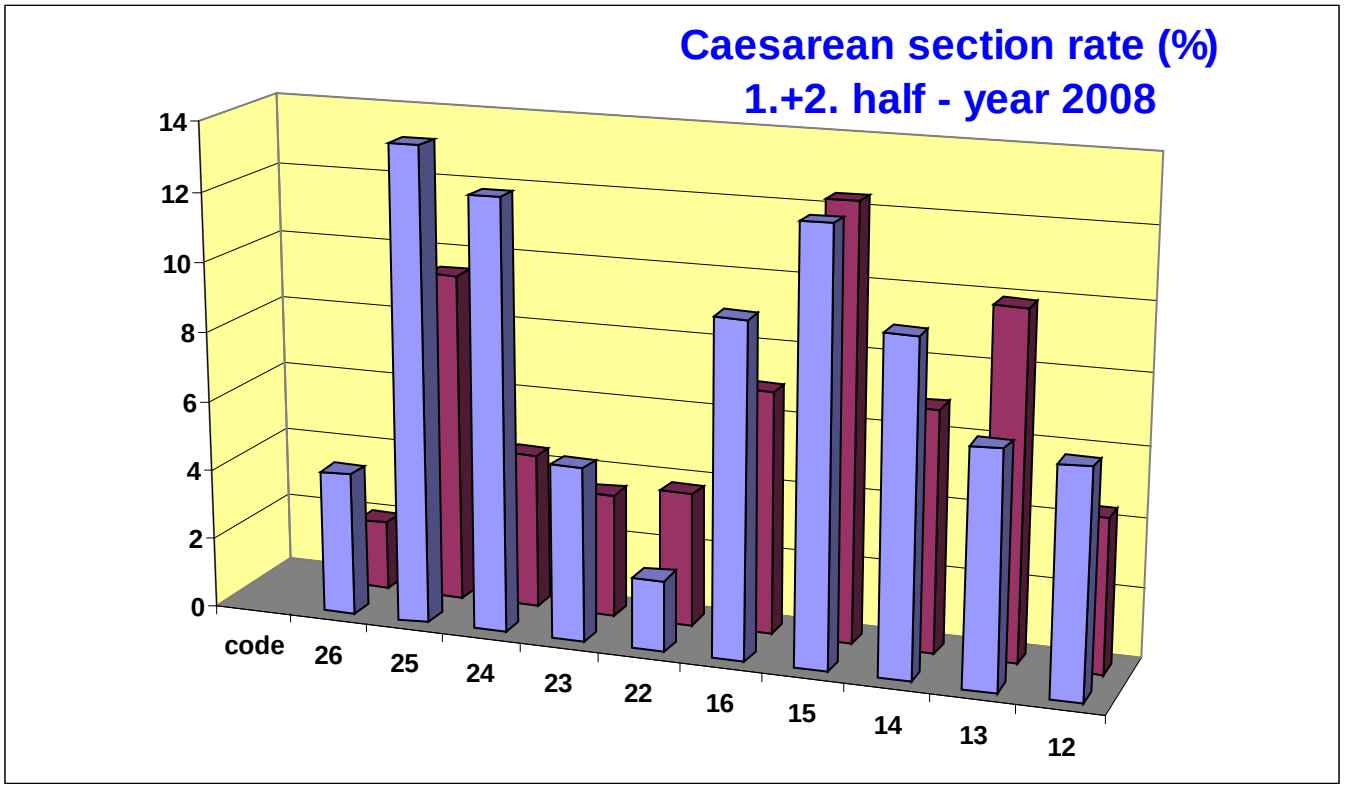
Obstetrical Service at 10 Hospitals in Kano and Kaduna in 2008



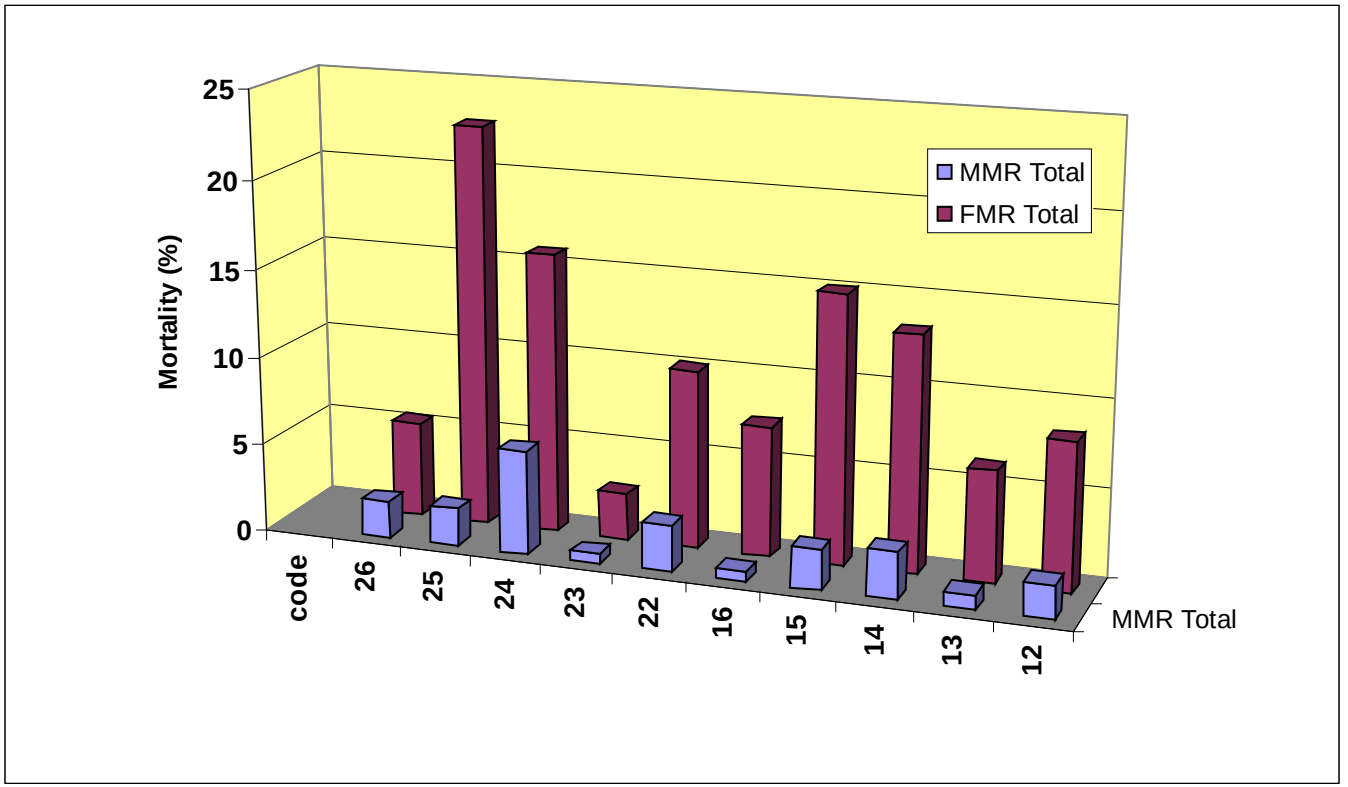
Obstetrical Service at 10 Hospitals in Kano and Kaduna in 2008



Obstetrical Service at 10 Hospitals in Kano and Kaduna in 2008



Obstetrical Service at 10 Hospitals in Kano and Kaduna in 2008



Discussion (1)

- The MMR in these hospitals is still unacceptable
- The CS rate of 6.12% is low and this indirectly assesses the quality of obstetric care offered
- Eclampsia is still the leading cause of death in these hospitals accounting for between 20% to 85.7% of maternal deaths
- In total eclampsia accounts for 43.7% of maternal deaths

Discussion (2)

- Obstetric Haemorrhage including APH, PPH, ruptured uterus and retained placenta accounts for 20.8% of maternal deaths
- Obstetric haemorrhage is the second commonest cause of maternal death
- The third commonest cause of maternal death is Anaemia

(1) What do we do?

- We train health care workers in these hospitals on the management of eclampsia using Magnesium sulphate
- We urge the Hospital Management Board to make Magnesium sulphate available in all these hospitals
- We made protocols on management of eclampsia available in the hospitals

(2) What do we do?

- We make interventions available for management and prevention of obstetric haemorrhage in these hospitals through capacity building and collaboration with other projects
- We train doctors and midwifes in interventions like ASG, Active management of third stage, use of misoprostol etc

(3) What do we do?

- We intensify our community interventions especially as it regards to increase access to ANC and EMONC services by community dialogues
- Interventions focusing on prevention of anaemia in pregnancy are needed to reduce the maternal death contributed by severe anaemia

(4) What do we do?

- We introduced Quality assurance in ten hospitals to
  - Investigate and improve the quality of structure of the hospitals,
  - Analyse and evaluate the obstetrical service (quality of process)
  - Discuss in a benchmark approach at regular meetings among the hospitals (quality of outcome)
  - Improvement of maternal and fetal health care

Conclusion

- Implementation of quality assurance in our health facilities might be the answer to the unacceptable maternal health statistics
- It may be the answer to the achievement of MDGs 4 and 5

I KNOW YES WE CAN

Thanks for Financial support

- The Rotary foundation
- Rotary clubs from Germany and Austria
- Rotary Nigeria
- Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung
- Aventis Foundation
- Rotary Team Germany and Nigeria

Thank you