



# **Maternal health in the context of poor urban settlements: Nairobi case study**

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**APHRC**

# Outline

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- Country Context – Kenya
- Magnitude of maternal ill health at different levels
  - Contraceptive use
  - Teenage fertility
  - ANC and delivery care
  - Maternal mortality
- Beyond the numbers – Quality of care



What can be done?

# Country Context - Kenya

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- MMR: 488 (2008) up from 414 (2003) according to KDHS
- Urbanisation:
  - Current urban population in Kenya: 22 to 35%
  - Annual urbanisation rate: 4.0%
  - Population growth rate: 2.6%
  - About 60% of urban residents in Kenya live in slums or slum-like conditions [*UN Habitat 2008*]
  - By 2050, half of the population in the region will live in urban areas



# Context and Data Sources

- The Nairobi Urban Health and Demographic Surveillance System (NUHDSS)
  - Since January 2003
  - Population under observation - ~ 60,000
  - Demographic events (Deaths, Birth, Migratory movements) recorded three times a year
  - Verbal autopsy
- Health Facility Survey for maternal health services
- Kenya Demographic and Health Surveys



# Maternal Health Outcomes

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## *More Proximal Outcomes*

- Contraceptive use
- Teenage pregnancy

## *Intermediate outcomes*

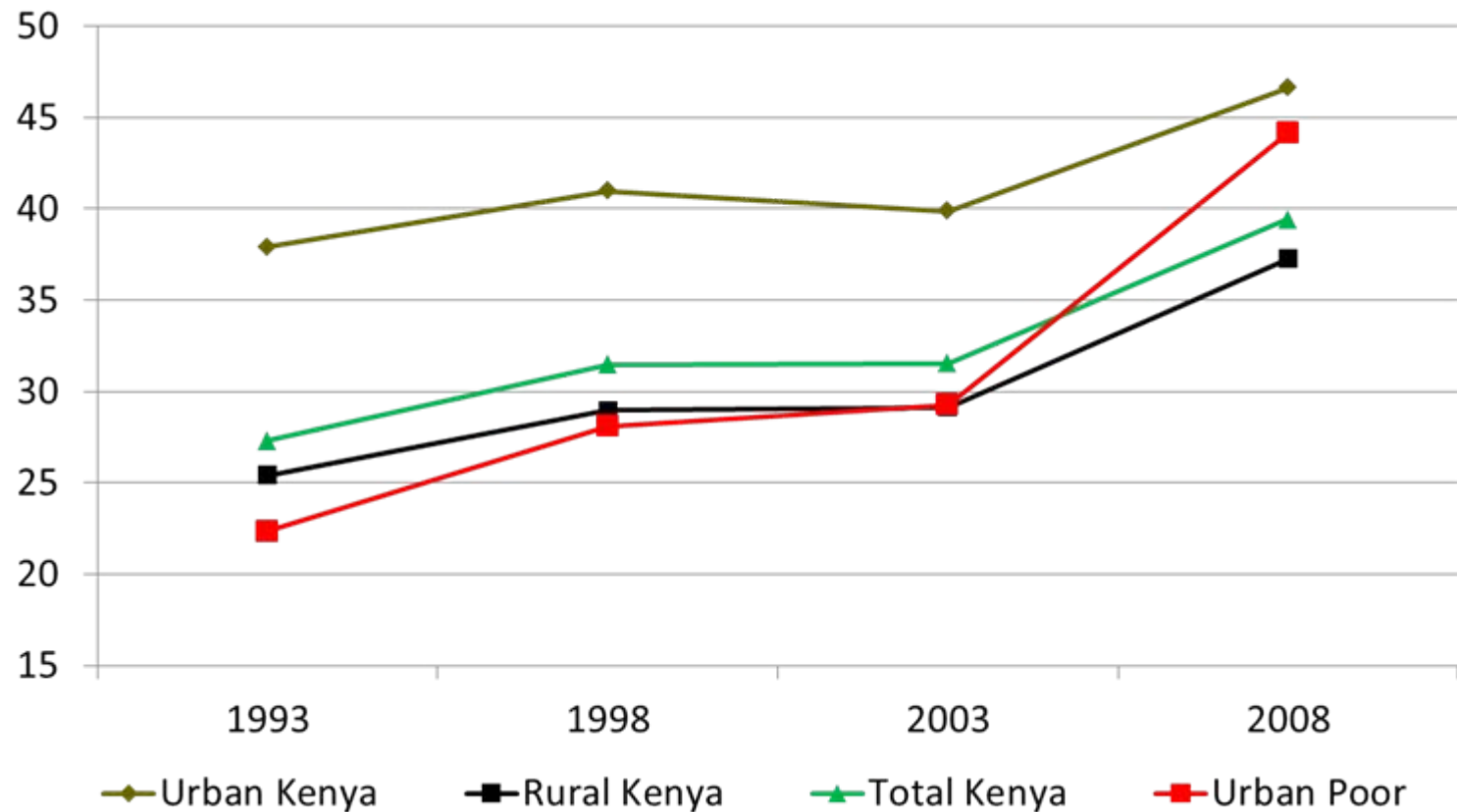
- Timing and frequency of antenatal care
- Use of skilled attendant during delivery

*Ultimate outcome* – maternal mortality

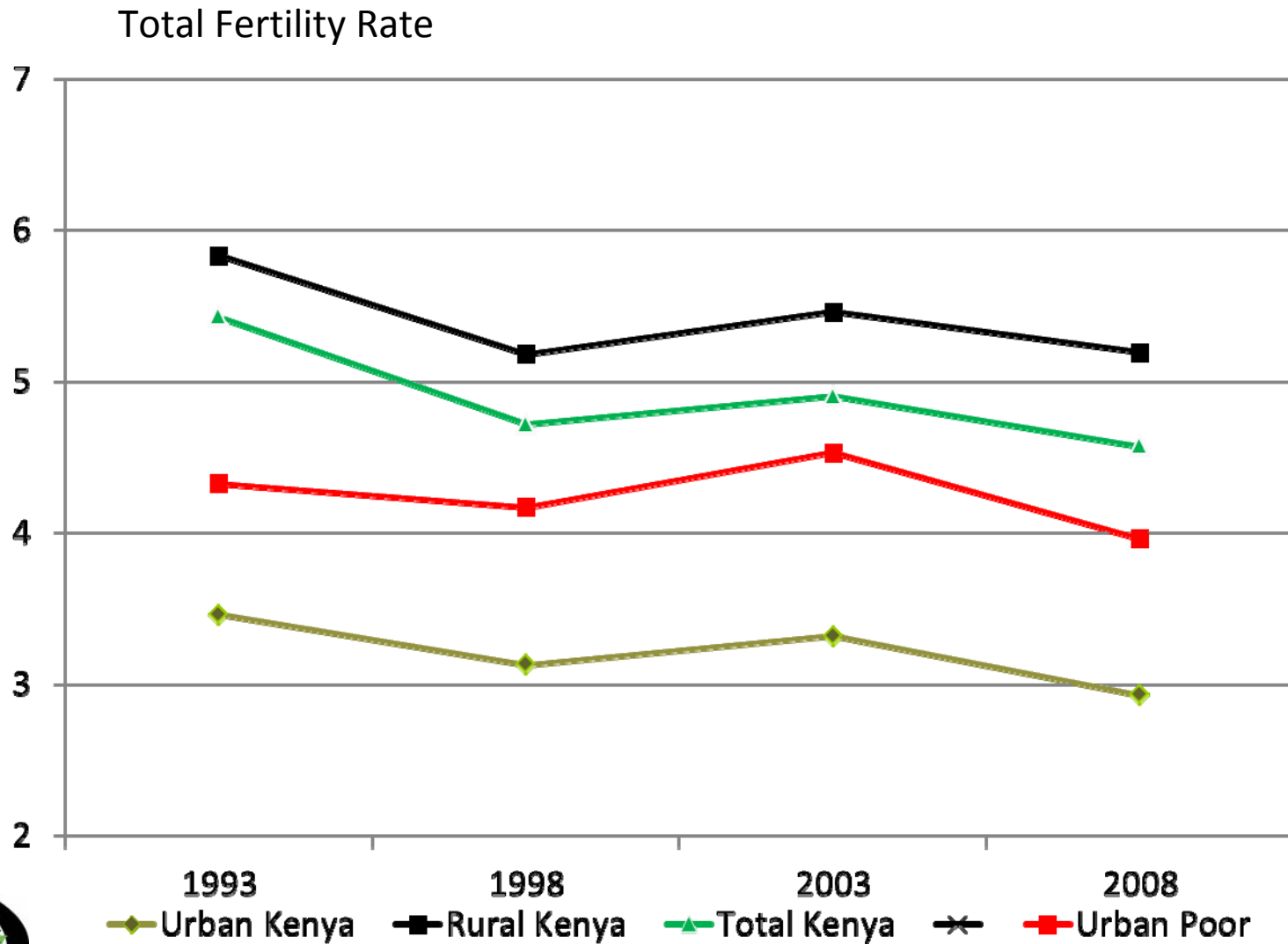


# Maternal Health Outcomes

Contraceptive Prevalence Rate, 1993-2008

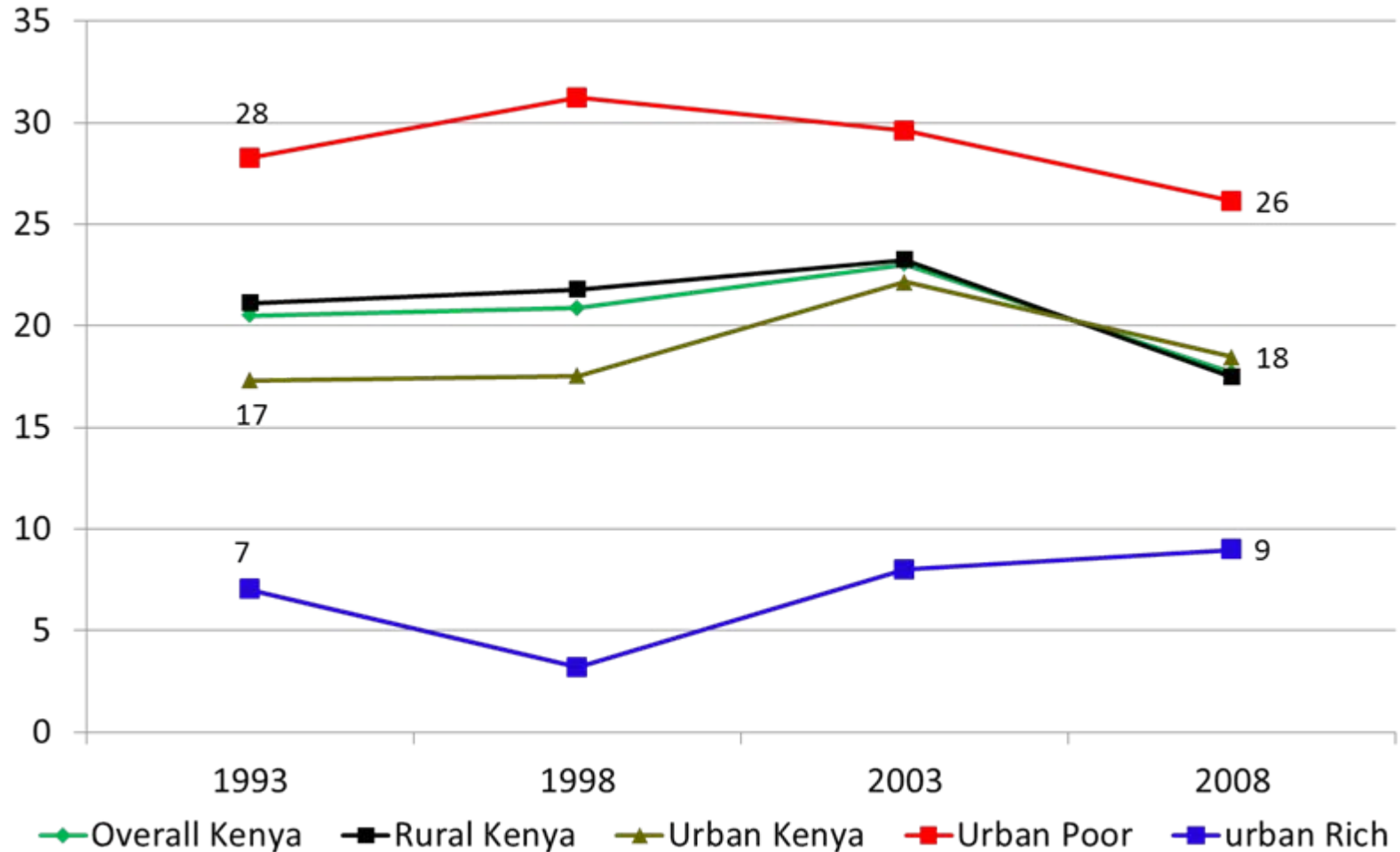


# Maternal Health Outcomes



# Maternal Health Outcomes

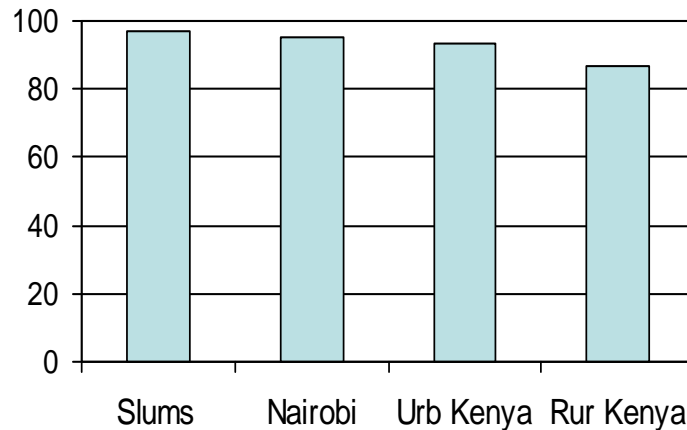
Teenage pregnancy/motherhood by place of residence 1993 to 2008





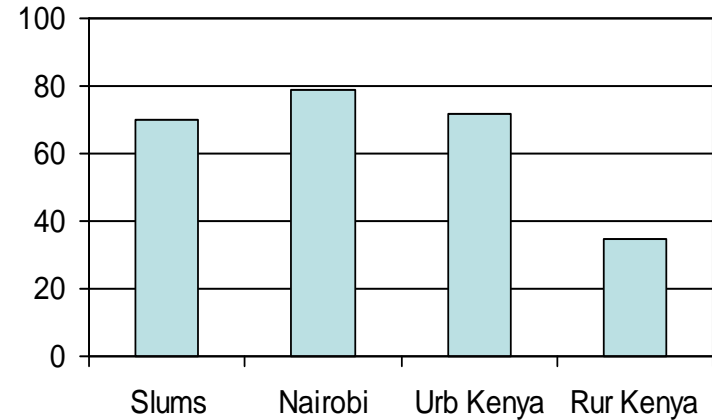
# Maternal Health Outcomes

ANC with skilled attendant



Antenatal Care with HP

Delivery with skilled attendant

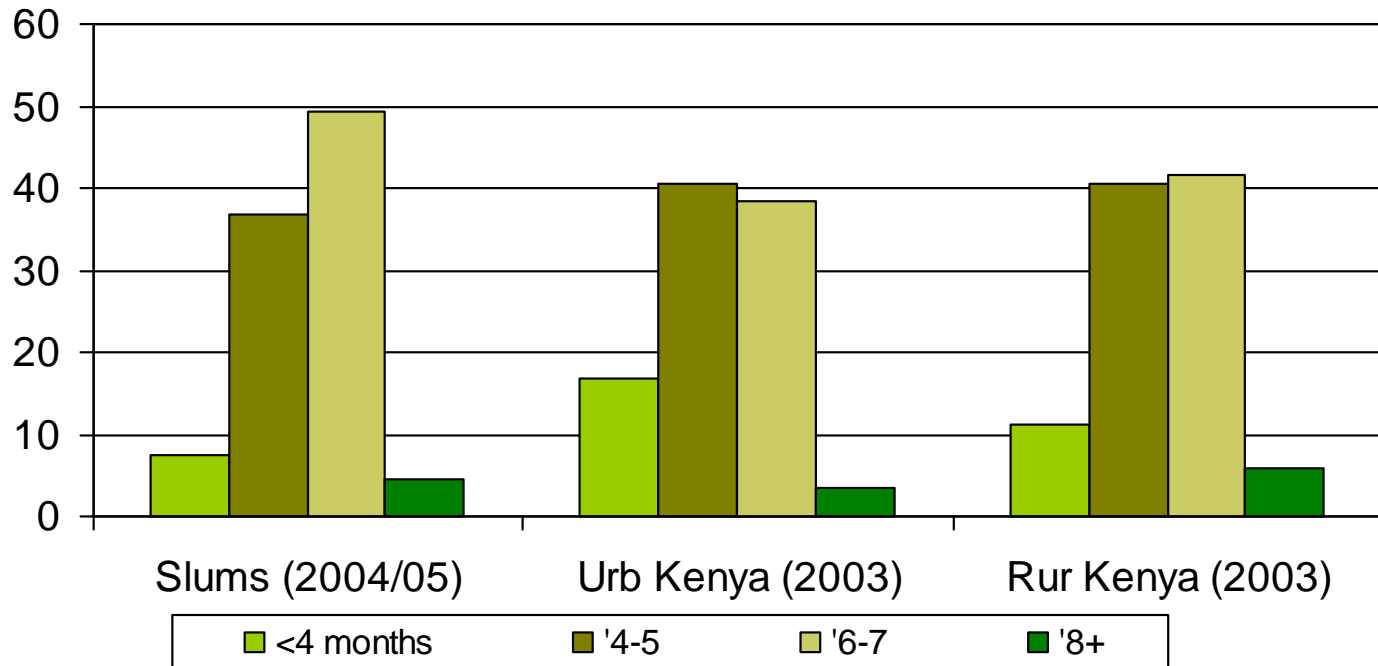


Delivery with HP

- Percentage of women who sought antenatal care with health professional (HP) quite high
- 70% delivered with the assistance of HP, compared with ~80% in Nairobi as a whole

# Maternal Health Outcomes

## Timing of antenatal care

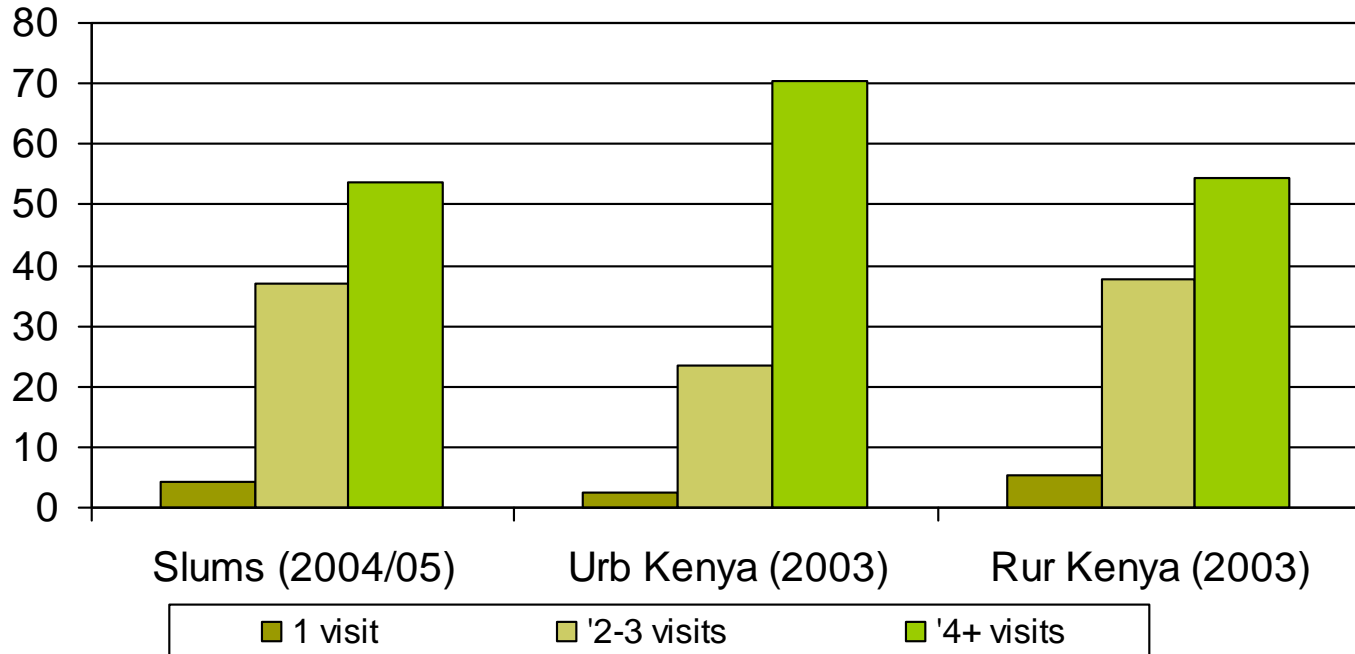


- Only 7.5% of slum women had their first ANC visit during the first trimester of pregnancy (17% in urban Kenya and 11% in rural Kenya)



# Maternal Health Outcomes

Frequency of antenatal care

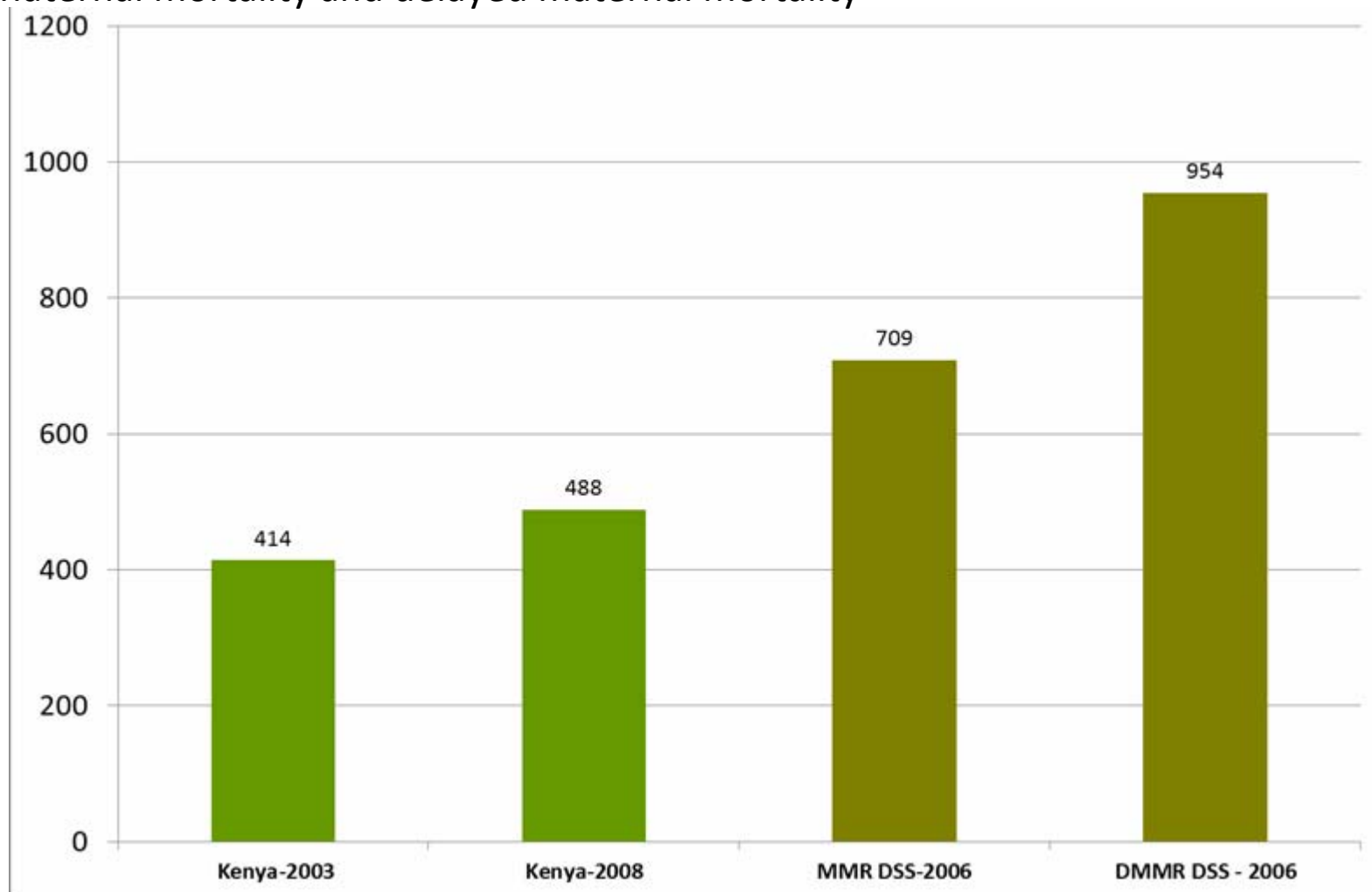


- Only 54% of slum women had 4+ ANC visits (71% in urban Kenya and 54% in rural Kenya)



# Maternal Health Outcomes

Maternal mortality and delayed maternal mortality



# Maternal Health Outcomes

Maternal deaths, health care utilisation and causes

	Maternal death	Late MD	Other pregnancy outcome
<b>Delivered by health professional</b>			
No	79.3	68.2	33.1
Yes	20.7	31.8	66.9
<b>Place of delivery</b>			
Outside of health care facility	86.2	90.9	35.3
Health care facility	13.8	9.1	64.7
<b>Outcome of pregnancy</b>			
Abortion/still birth	69.0	13.6	1.3
Live birth	31.0	86.4	98.7
<b>Place of death</b>			
Outside health care facility	37.9	68.2 -	
Health care facility	62.1	31.8 -	
<b>Sought care before death</b>			
No	13.8	4.6 -	
Yes	86.2	95.5 -	



# Beyond utilisation numbers

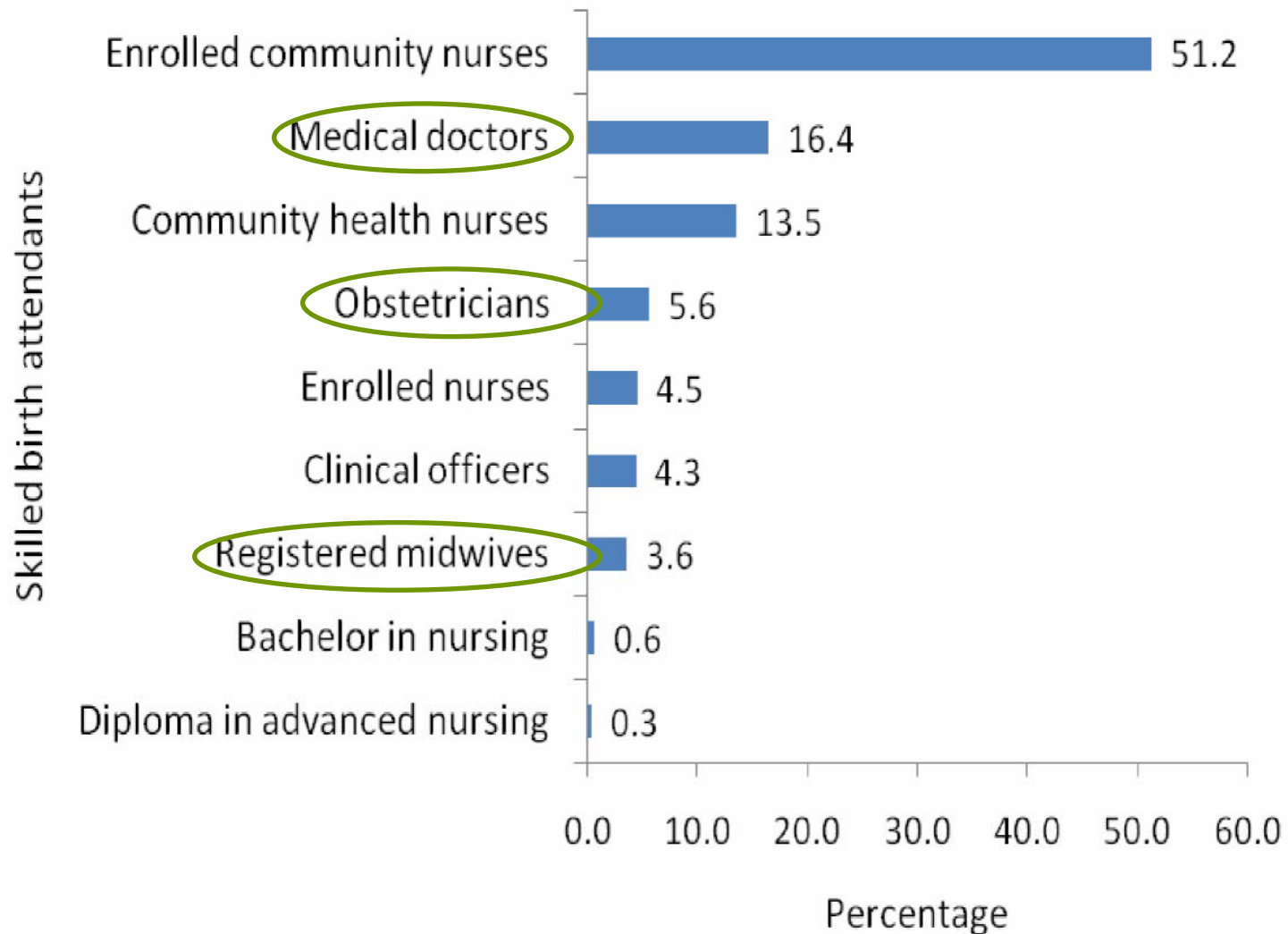
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- Evident high use of skilled health care workers for ANC
- Very high use of skilled attendants at delivery
- ..However.....definition of “ skilled” questionable
- Quality of easily accessible health facilities poor
  - Near absent public sector
  - Prolific private sector



Other barriers

# Skilled Birth Attendants



# The State of MHS



*Based on survey of mothers who delivered in 2005 to 2006*

- 25 MHFs (including 4 hospitals: KNH; Pumwani, St Mary, Kiambu DH)
- Among the 21 non-hospital facilities:
  - Only 4 had an obstetrician
  - Only 8 had a doctor
  - Some did not have qualified nurse or midwives
  - Some did not have printed referral form
  - 7 did not have piped water in the facility/compound
  - 7 did not have infection control guidelines



# The State of MHS



*Size and quality of services in private sector vary widely*



# Other Barriers

- Cost – very high uptake of output-based Aid voucher scheme
- Transport – poor road infrastructure

*From here one has to go to Kenyatta or Pumwani and we really do not have the money to take us there. If you get complications late in the night traveling from here to Pumwani is far and risky. There are many thugs on the way. The road is bad and there is no way you can get a vehicle to come this far in the community to carry your patient. If only there would be some good facilities at Makadara, at least is a bit nearer but still not near enough. The facilities there are not enough and after two hours without delivering they will still take you to Pumwani and that is the expense of the family or friends” (Viwandani FGD, Female Opinion Leaders).*

- Insecurity –

*“We have thugs at night along the way. Both women and men fear and it is hard for them to come out and assist. Most night deliveries happen in the homes instead because of these reasons” (Korogocho FGD, Females 20-29 years )*

- Poor attitudes of health care providers



# Some Thoughts on What can be Done

- Support to the private sector
  - Training
  - Equipment and infrastructure
  - Supplies
  - Supervision and **regulation**
- Improve health service regulatory environment
- Strengthen local health service governance structures
- Address issues of insecurity





Thank You!

