# Engaging men in reproductive health:
## video-drama stimulated dialogue in universal home visits in northern Nigeria

McGill, Family Medicine

Research Seminar, 7 December 2017

# Male involvement in reproductive health

Attending antenatal care and delivery

Providing money for health care

Undertaking “female” work to help pregnant spouse

# Officially recommended

- WHO “strongly recommends” interventions to promote the involvement of men during pregnancy, childbirth and after birth, to facilitate and support:
  - improved **self-care of women**,
  - improved **home care practices** for women and newborns,
  - improved **use of skilled care** during pregnancy, childbirth and the postnatal period for women and newborns, and
  - increase the timely use of **facility care for** obstetric and newborn **complications**

- Provided that:
  - they are implemented in a way that respects, promotes and facilitates **women’s choices and their autonomy** in decision-making and
  - supports **women** in **taking care of themselves** and their newborns

WHO recommendations on health promotion interventions for maternal and newborn health, 2015

# Evidence behind the recommendation

- Systematic review of 13 studies in Bangladesh, Eritrea, India, Indonesia, Nepal, Pakistan, South Africa, Tanzania and Turkey
- one RCT, three cluster RCTs,
- one cohort analytic study,
- four pre-post designs,
- three repeat cross-sectional and
- one programme evaluation using data from the HMIS
- **Outcomes were use of services and access to skilled care**
- **Quality of evidence “very low”**

WHO recommendations on health promotion interventions for maternal and newborn health, 2015

# Male involvement and maternal health outcomes: systematic review and meta-analysis

- 14 studies in developing countries*
- Male involvement associated with:
  - Reduced risk of post-partum depression
  - Improved use of maternal care services
  - Reduced risk of childbirth complications (not significant)

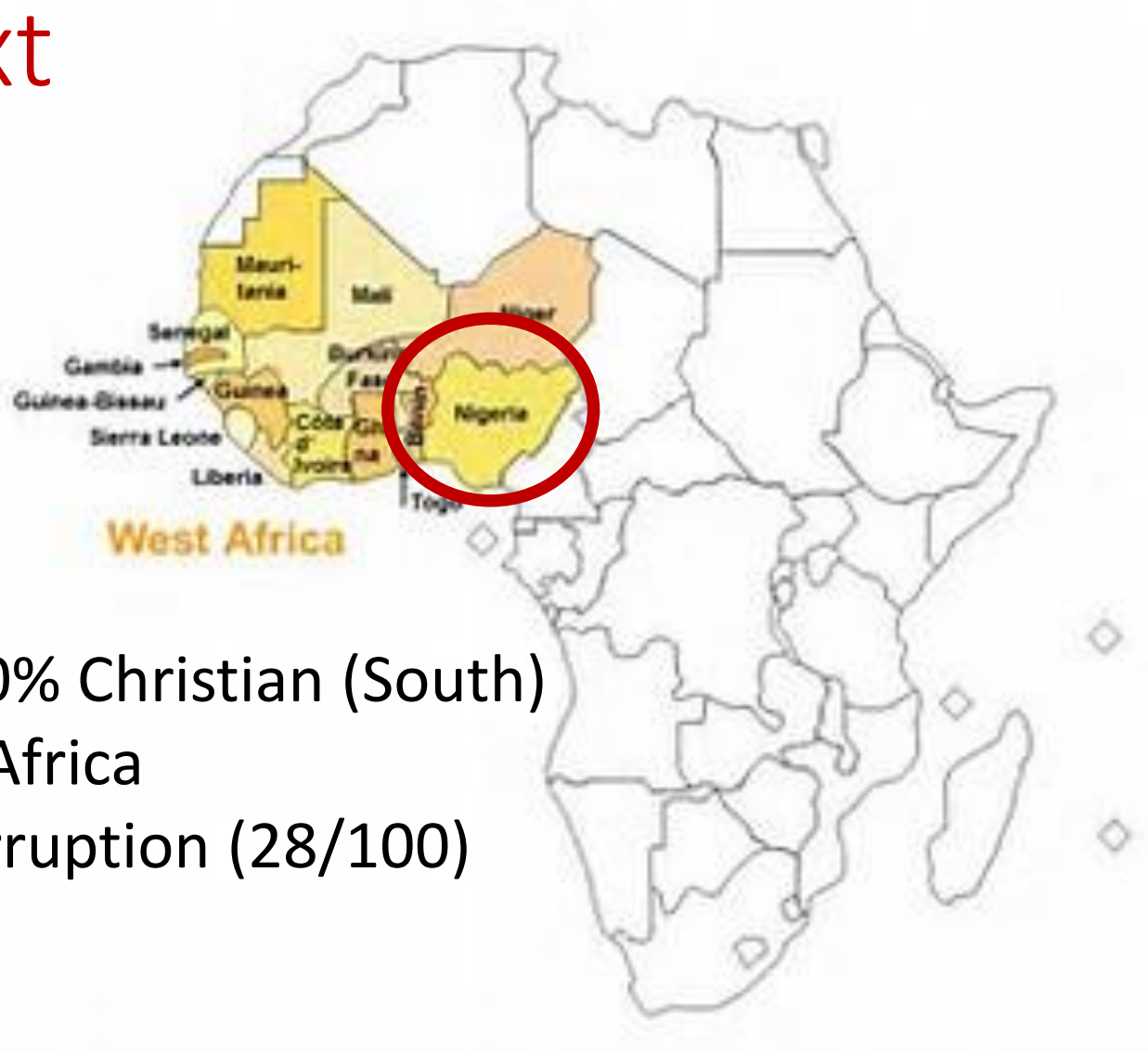
* 10/14 in Asia, 1 in sub-Saharan Africa, 0 in Latin America

Yargawa J, Leonardi-Bee J. J Epidemiol Community Health 2015;69:604–612.

# Concern

- Gender transformative?
- Gender neutral?
- Worse…

# Nigeria context



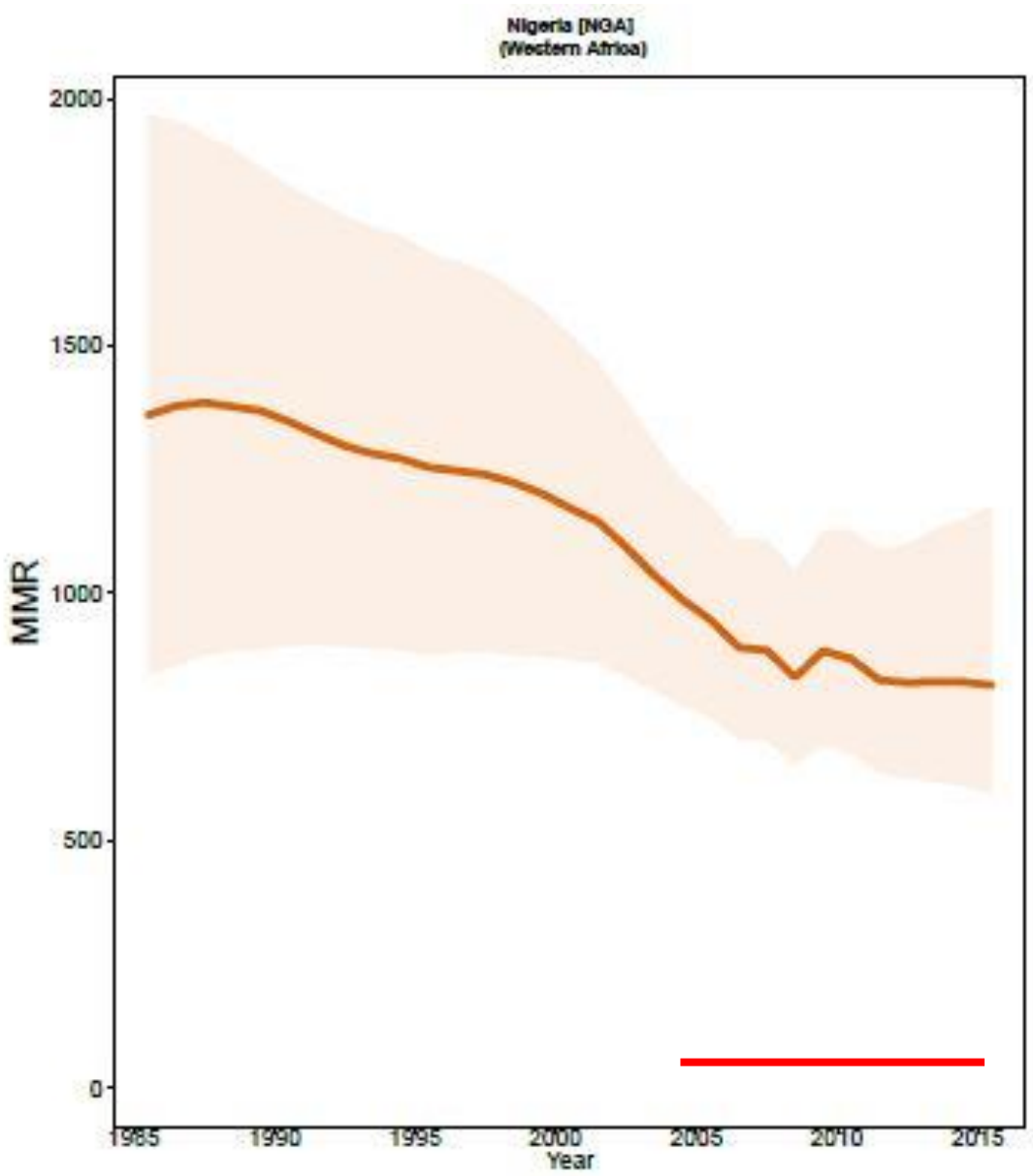

- Population 189 million
- 50% Muslim (North), 50% Christian (South)
- Largest oil producer in Africa
- Ranked 136/176 for corruption (28/100)

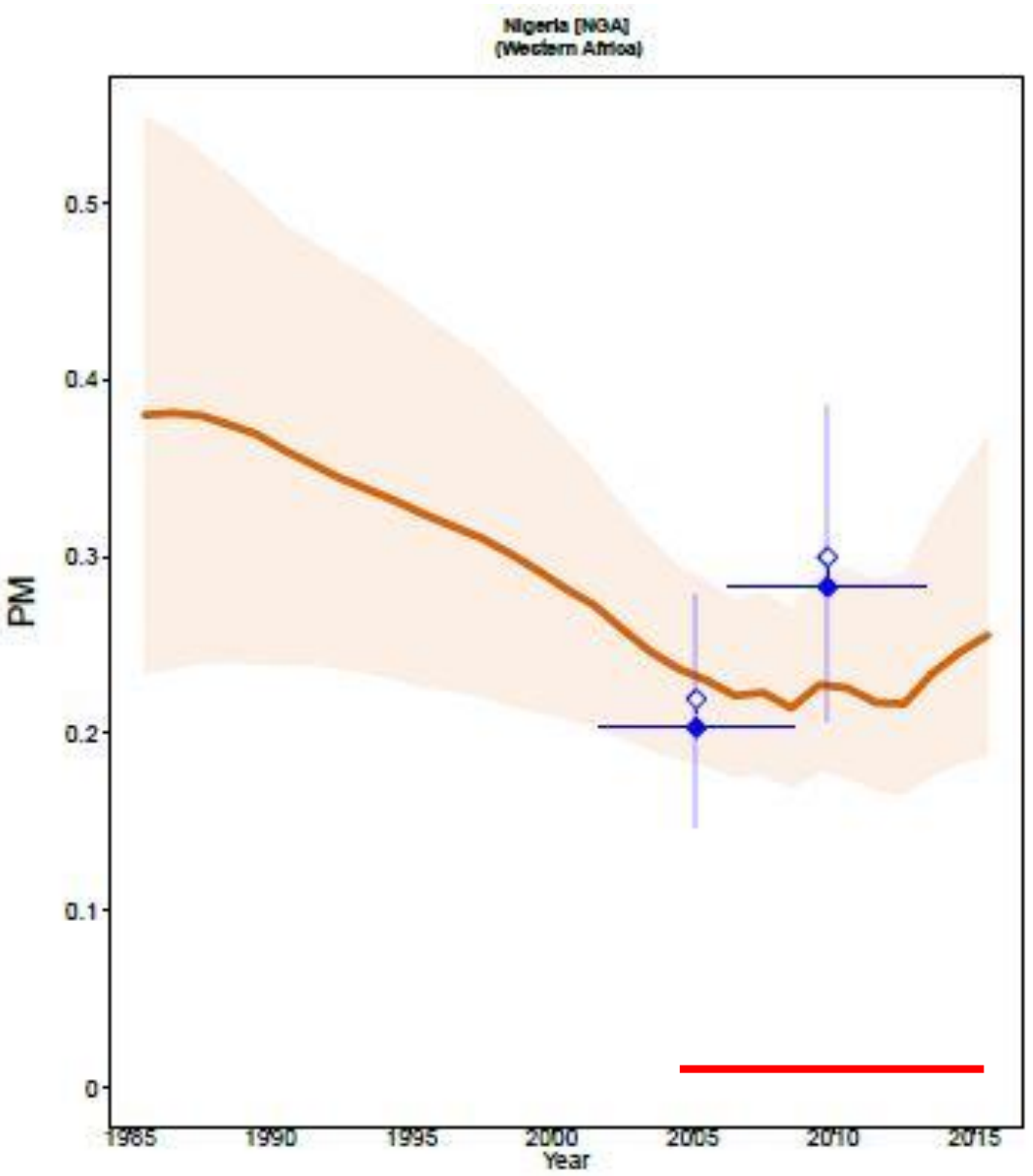
# Ten countries with highest MMR, 2015 (WHO)

| | MMR | No. deaths | Lifetime risk ( 1 in ) | PM |
|---|---|---|---|---|
| Sierre Leone | 1,360 | 3,100 | 17 | 21% |
| Central African Republic | 882 | 1,400 | 27 | 15% |
| Chad | 856 | 5,400 | 18 | 28.3% |
| **Nigeria** | **814** | **58,000** | **22** | **25.6%** |
| South Sudan | 789 | 3,500 | 26 | 22.7% |
| Somalia | 732 | 3,400 | 22 | 27.6% |
| Liberia | 725 | 1,100 | 28 | 31.5% |
| Burundi | 712 | 3,500 | 23 | 27% |
| Gambia | 706 | 590 | 24 | 31.1% |
| Democratic Rep Congo | 693 | 22,000 | 24 | 22.3% |

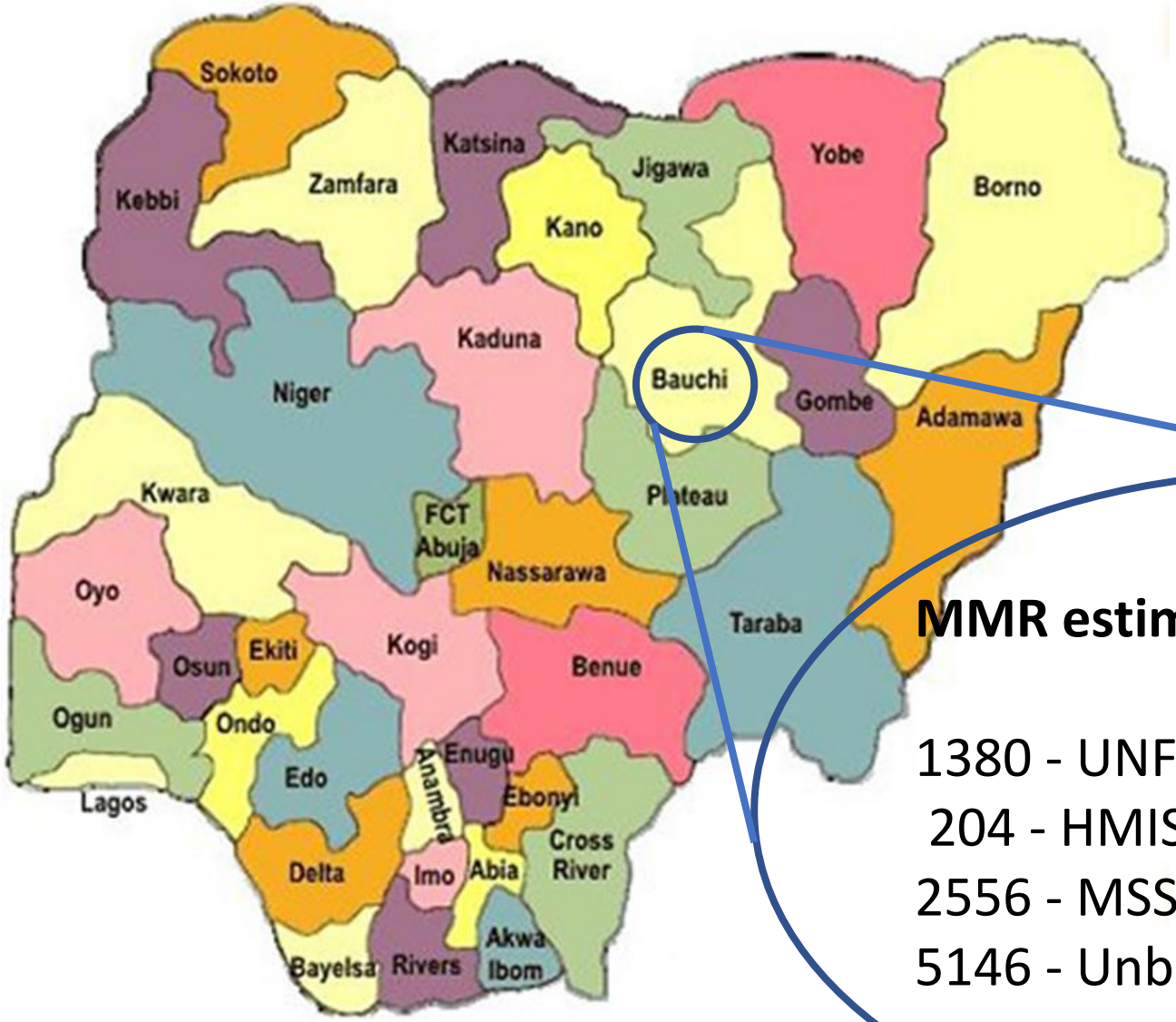
Trends in maternal mortality, 1990-2015. WHO, UNICEF, UNFPA, WB Group, UN Population Division, 2015

# Nigeria maternal mortality 1985 – 2015 (WHO)




Trends in maternal mortality, 1990-2015. WHO, UNICEF, UNFPA, WB Group, UN Population Division, 2015




**Nigeria MMR estimates**

545 - Nigeria DHS 2008

867 - WHO 2010

**MMR estimates in Bauchi State**

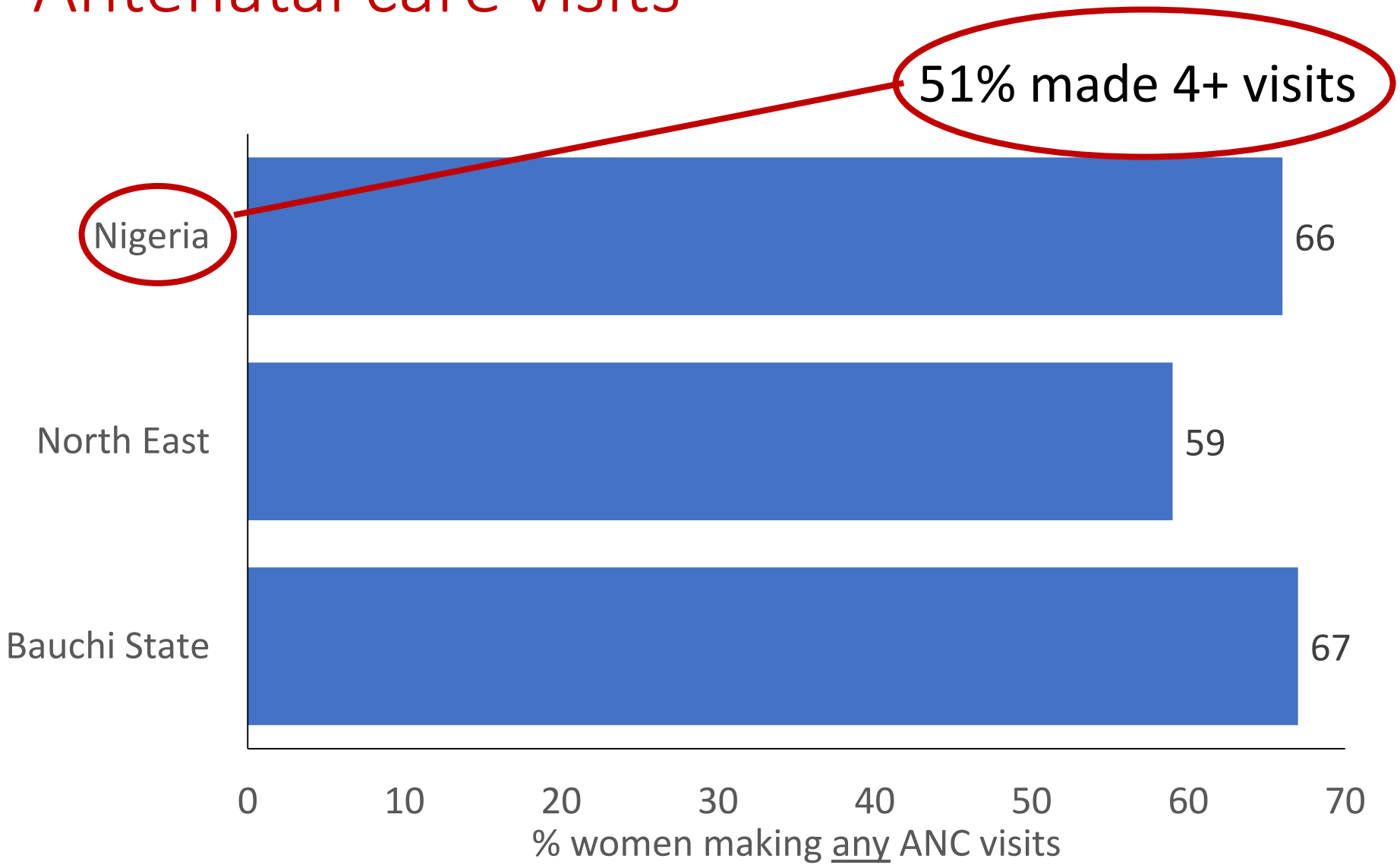
1380 - UNFPA 2006

204 - HMIS 2009

2556 - MSS 2009

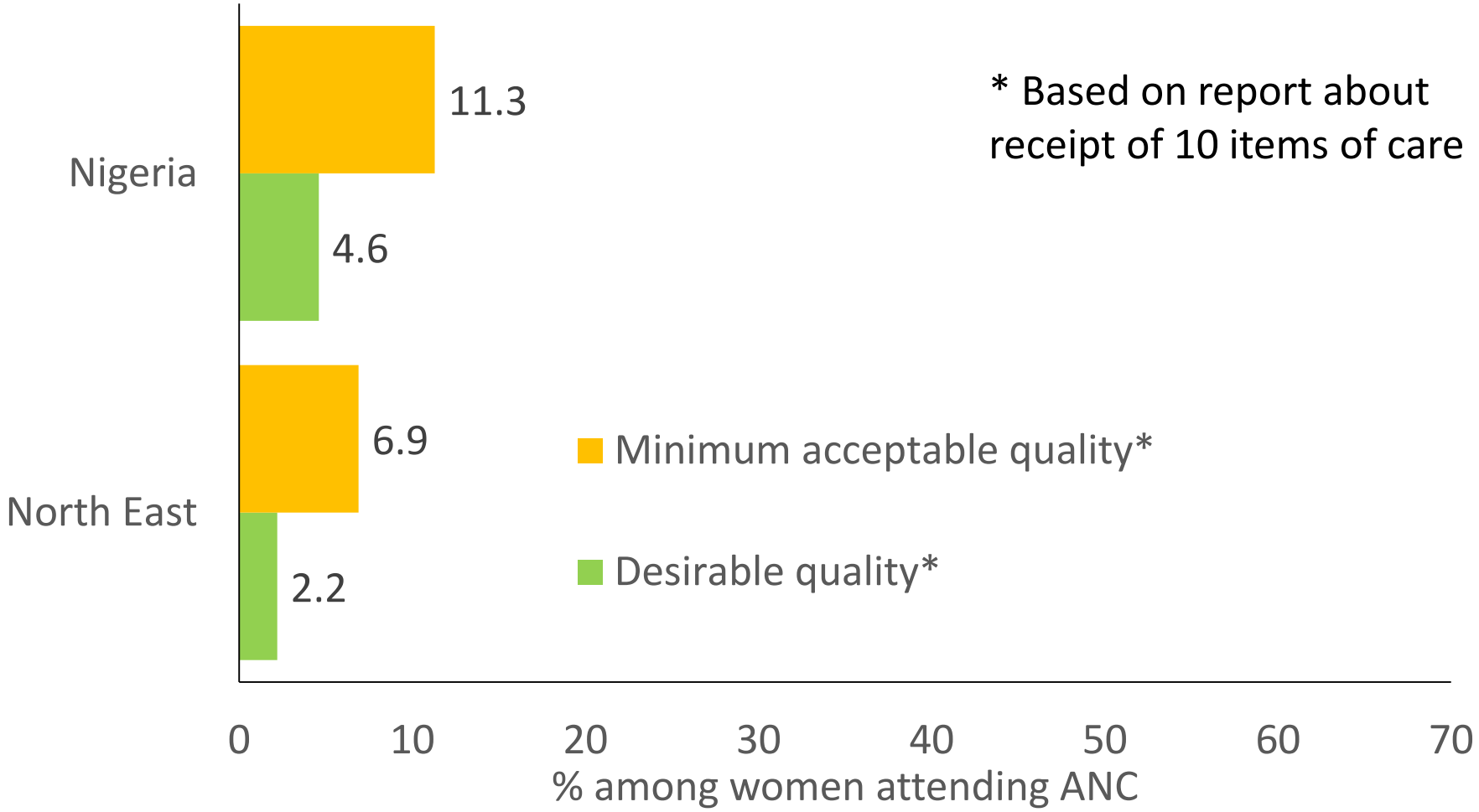
5146 - Unbooked deliveries 2009

# Antenatal care visits




Nigeria DHS, 2013

# Quality of antenatal care




* Based on report about receipt of 10 items of care

Fagbamigbe and Idemudia, Reproductive Health, 2015, 12:88 (Analysis of data from Nigeria DHS, 2013)

# Nigerian Evidence-based Health Systems Initiative (NEHSI)

IDRC-supported programme 2008-2014

Linked cross-sectional studies in two states

CIET, Multi-Stakeholder Information and Monitoring System (MSS), part of NEHSI

NEHSI
Interviews with women and men in households

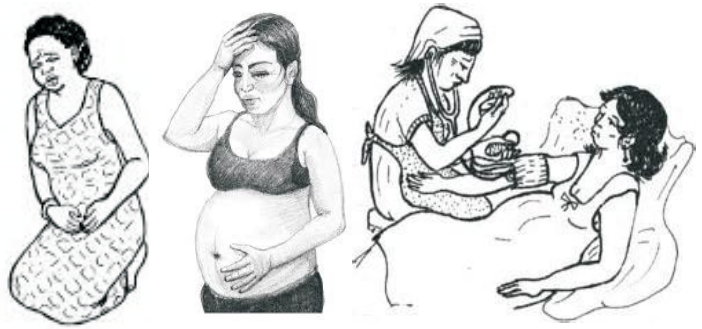
NEHSI
Focus groups of men and women

# Four factors associated with maternal morbidity

Intimate partner violence

No communication with spouse

Heavy work during pregnancy



Lack of knowledge of danger signs

**All these factors involve men**

Andersson et al, BMC Health Services Research 2011, 11(suppl 2):57

# Bauchi State

Pilot of universal home visits in Giade LGA

- Established feasibility
- Suggested impact on maternal mortality

CIET, Community Surveillance System (CSS), part of NEHSI

# Video edutainment: Impact on infant and maternal outcomes in Toro, Nigeria

- Cluster randomised controlled trial 2015-2020
- Toro LGA, Bauchi State, Nigeria
- Part of IMCHA program, funded by IDRC, CIHR, GAC

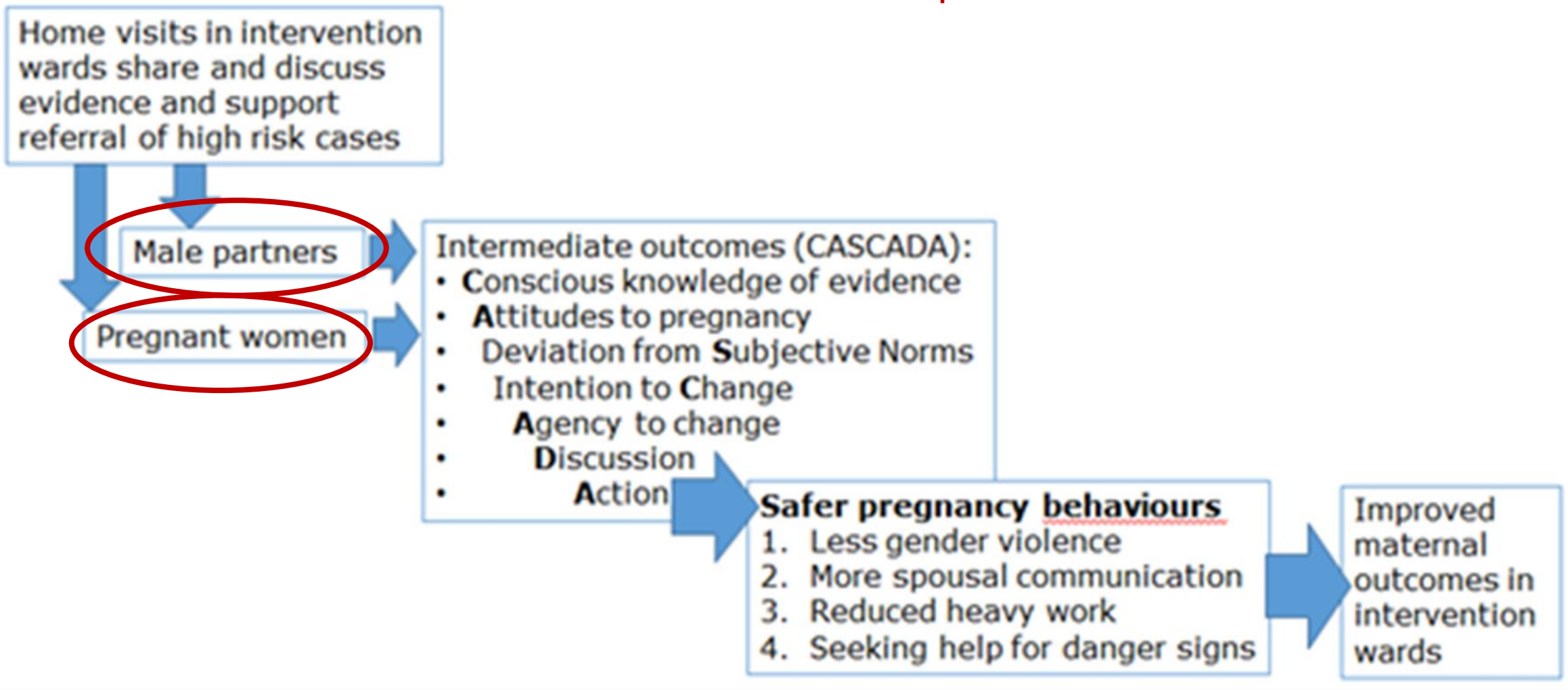
Sokoto
Zamfara
Katsina
Jigawa
Yobe
Borno
Kebbi
Kano
Kaduna
Bauchi
Gombe
Adamawa
Niger
Kwara
FCT
Abuja
Plateau
Nassarawa
Taraba
Oyo
Osun
Ekiti
Kogi
Benue
Ogun
Ondo
Edo
Enugu
Anambra
Ebonyi
Lagos
Delta
Imo
Abia
Cross
River
Akwa
Ibom
Bayelsa
Rivers
Zaki
Gamawa
Itas Gadau
NORTH
Jama'are
Katagum
Dambam
Shira
Giade
Misau
Darazo
Warji
Ningi
CENTRAL
Ganjuwa
Toro
Kari
SOUTH
Bauchi
Dass
Alkaleri
Tawafa-Balewa
Bogoro
0
25
50
100 Km

# Bauchi State

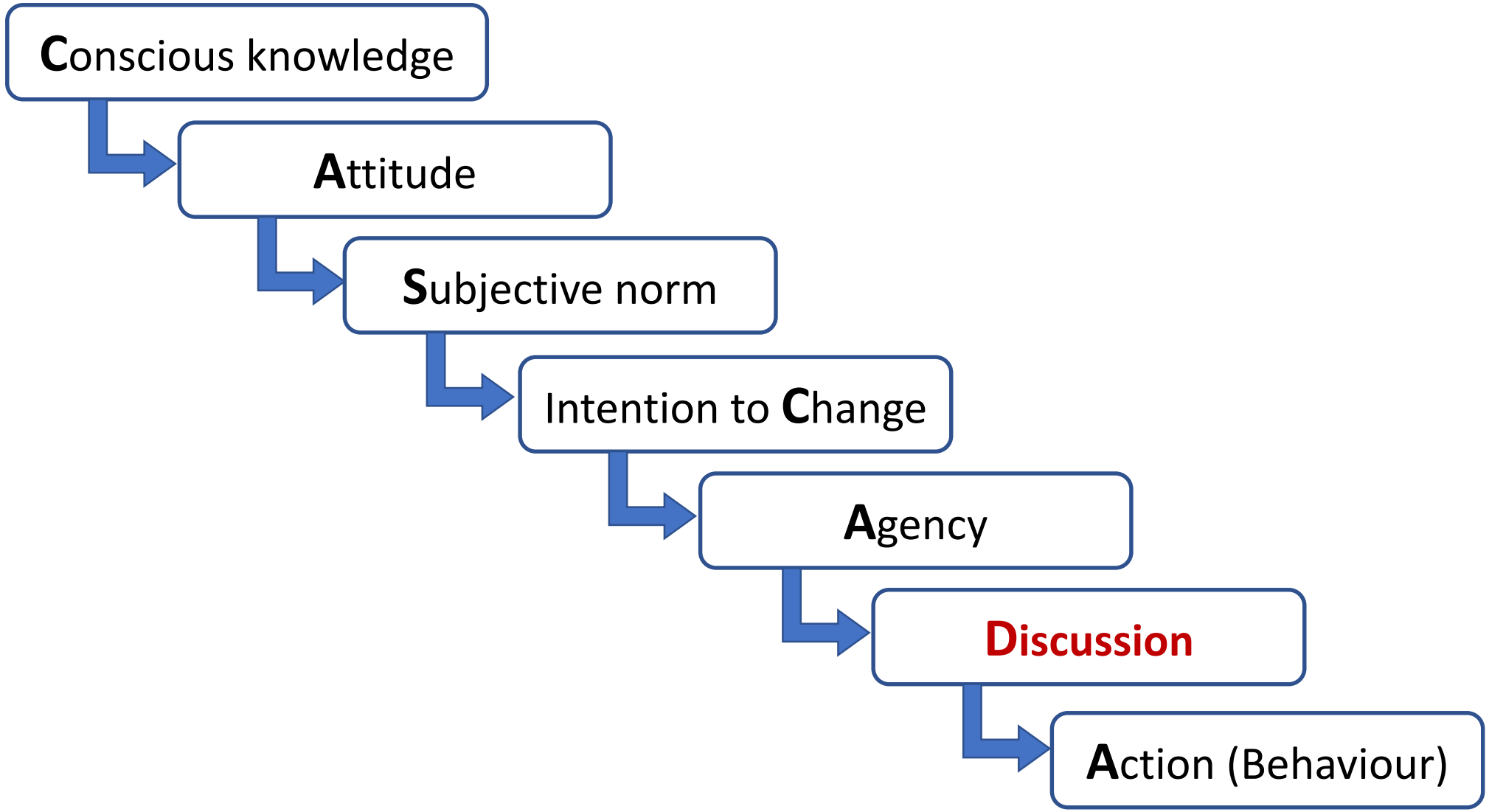
## Toro LGA

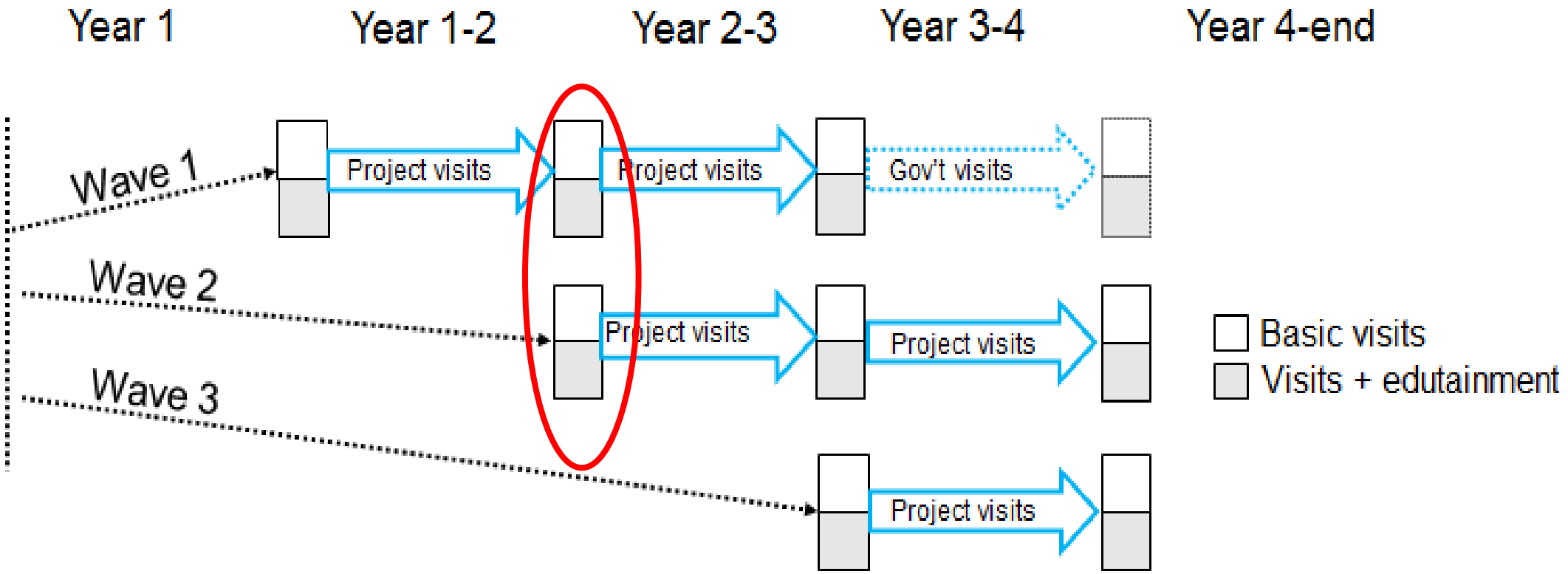
- Largest LGA in Nigeria
- Many remote communities
- Some areas insecure

# CASCADA conceptual framework



# CASCADA model






Planning and training

Implementation and measurement

Institutionalization dissemination

Randomise wards into 3 waves

Compare wave 1 with wave 2 (control)

Compare wave 2 with wave 3 (control)

Compare basic visits with visits + edutainment

# Stakeholder involvement

Ward stakeholders discussing implementation

State steering group  discussing the design

- Design meetings for instruments, sample, videos
- With state and LGA government counterparts
- Working with leaders in Toro LGA wards

# Video edutainment

Measures added value of using video edutainment

The next slide is a shortened version of one of the evidence-based video clips used in the edutainment

# Quality control and monitoring

Server in Botswana
ODK Aggregate

Dataset downloaded
alternate days

Spread across community

115301
115303
115305
115315
102082
102087
102093
113303
101013
113302
113297
101012
101018
113323
101332
101355
101319
101004
101027
101342
101367
101369
101356
101003
104040
104241
104043
104001
104012
104026
104022
104033
104036
104029
104011
104038
104047
© 2016 Google
Image © 2016 DigitalGlobe
Google Earth
2009
Imagery Date: 6/22/2016 10°14'55.98" N 9°00'55.74" E elev 2757 ft eye alt 3346 ft

Clustered

Extreme clustering

208115
208117
208119
208120
Image © 2016 DigitalGlobe
Google Earth
Imagery Date: 1/24/2011 10°12'29.24" N 9°33'41.81" E elev 2182 ft eye alt 2692 ft

On the road

## Forged visits and data

- Created at home/single place
- On the road
- Inadequate interaction time

## Solution

- GPS data monitoring
- Time tracking
- Feedback with evidence and warnings

## It works!

Wave 1: up to 16% invalid records (re-visited)

Wave 2: 0.2% invalid records

Universal home visits trial, Toro LGA, Bauchi

**Remote communities**

- Difficult recruitment
- Transport logistics & costs
- Security
- Less quality time in communities

**Solution**

- Local workers identified by communities
- Adapt training accordingly

Universal home visits trial, Toro LGA, Bauchi

# Coverage (to October 2017)

| Coverage | Wave 1 | Wave 2 |
|---|---|---|
| Wards | 2 | 2 |
| Households | 7,832 | 6,462 |
| Women 14-49 years | 11,875 | 11,071 |
| Pregnant women (& spouses) | 5,950 | 2,497 |
| Completed pregnancies | 3,488 | 706 |
| Pregnancy surveillance visits | 10,498 | 3,579 |

# Preliminary impact findings

- Four risk factors - all improved markedly
- Pregnancy & childbirth complications – big reduction
- Use of health services – very little change

Impact related to change in family dynamics

# Narratives of change

I came to understand it's very wrong of me to behave the way I had been doing. I was forced to change my attitude. I started listening to my wife. My wife feels happy and excited. She feels free to come and sit with me whenever she wants to. She shares ideas with me. There is greater understanding between us now. The discussion between me and her brings more health and sanity between us.

*Man aged 58 years. Graduated from Islamiyya school. Farmer with 12 children.*

# What can we conclude?

- Male involvement is not just about use of services
- Implementation not perfect but still there is impact
- Impact without (much) increased use of health services
- What does this imply about investment?