Can investment in quality drive use? A cluster-randomised controlled study in rural Tanzania

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Maternal Survival 2

Strategies for reducing maternal mortality: getting on with what works

*Oona M R Campbell, Wendy J Graham, on behalf of The Lancet Maternal Survival Series steering group**

Lancet 2006; 368: 1284–99

Published Online September 28, 2006 DOI:10.1016/S0140-6736(06)69381-1

*Group members listed at end of report

This is the second in a Series of five articles about maternal survival

Department of Epidemiology

The concept of knowing what works in terms of reducing maternal mortality is complicated by a huge diversity of country contexts and of determinants of maternal health. Here we aim to show that, despite this complexity, only a few strategic choices need to be made to reduce maternal mortality. We begin by presenting the logic that informs our strategic choices. This logic suggests that implementation of an effective intrapartum-care strategy is an overwhelming priority. We also discuss the alternative configurations of such a strategy and, using the best available evidence, prioritise one strategy based on delivery in primary-level institutions (health centres), backed up by access to referral-level facilities. We then go on to discuss strategies that complement intrapartum care. We conclude by discussing the inexplicable hesitation in decision-making after nearly 20 years of safe motherhood programming: if the fifth Millennium Development Goal is to be achieved, then what needs to be prioritised is obvious. Further delays in getting on with what works begs questions about the commitment of decision-makers to this goal.

Maternal Survival 2

Strategies for reducing maternal mortality: getting on with

To reduce maternal mortality: need high effective coverage of facility births

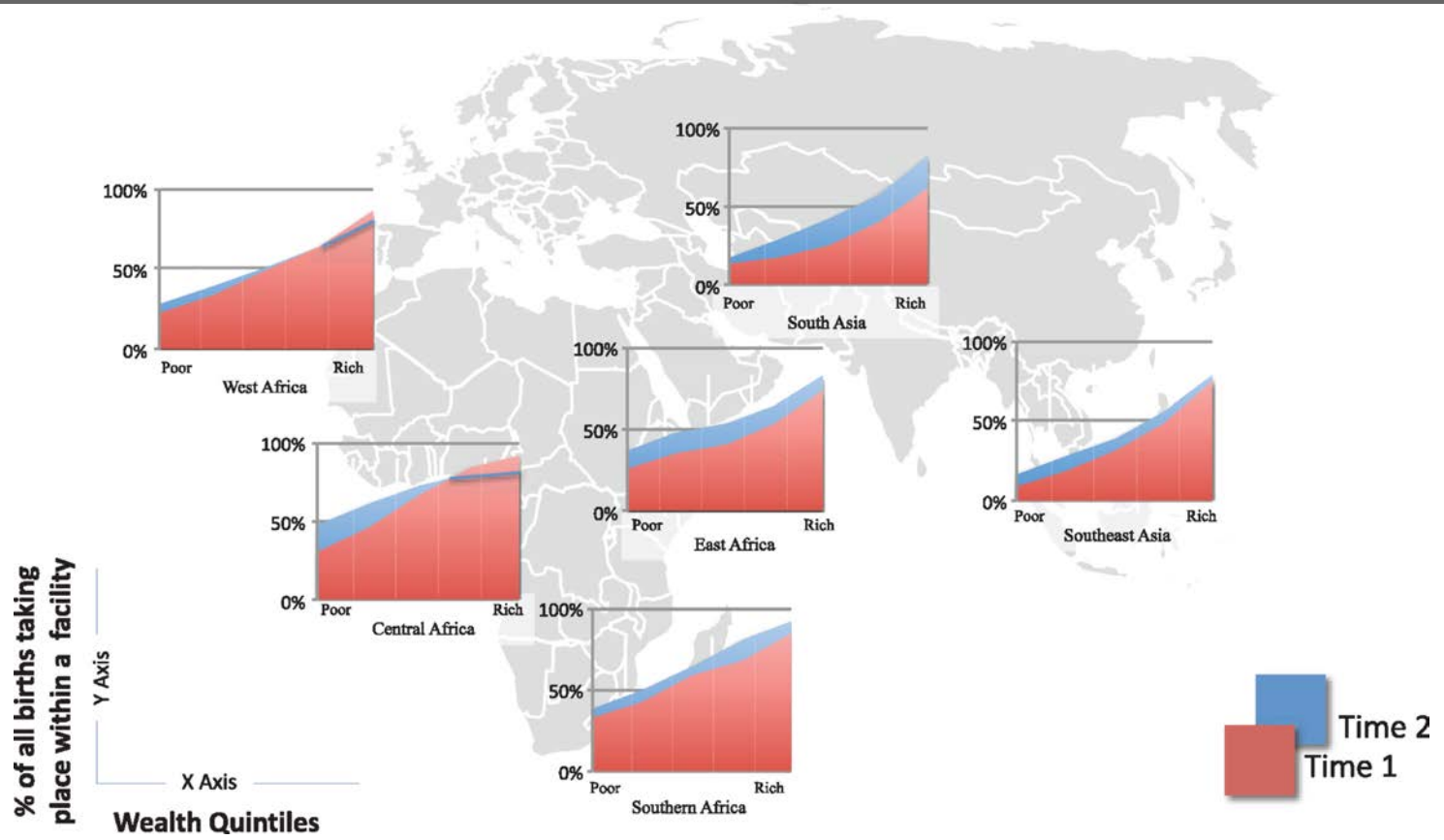
Recommended prioritizing a strategy based on **delivery in primary-level institutions**...backed up by access to referral-level facilities

five articles about maternal survival

Department of Epidemiology

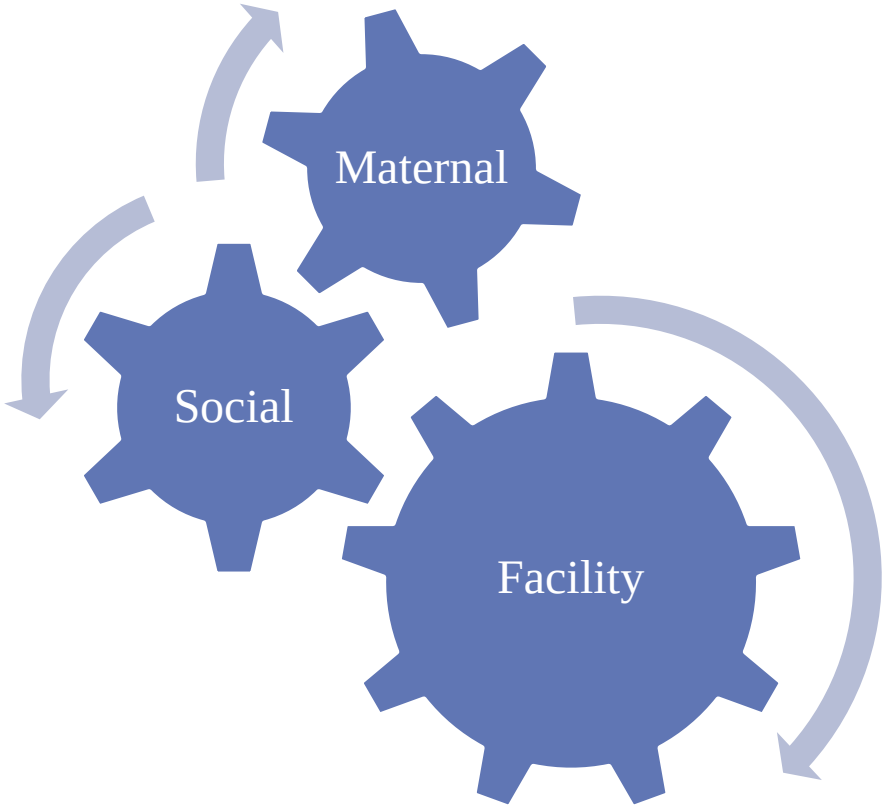
discussing the inexplicable hesitation in decision-making after nearly 20 years of safe motherhood programming: if the fifth Millennium Development Goal is to be achieved, then what needs to be prioritised is obvious. Further delays in getting on with what works begs questions about the commitment of decision-makers to this goal.

Proportion of all births in facilities



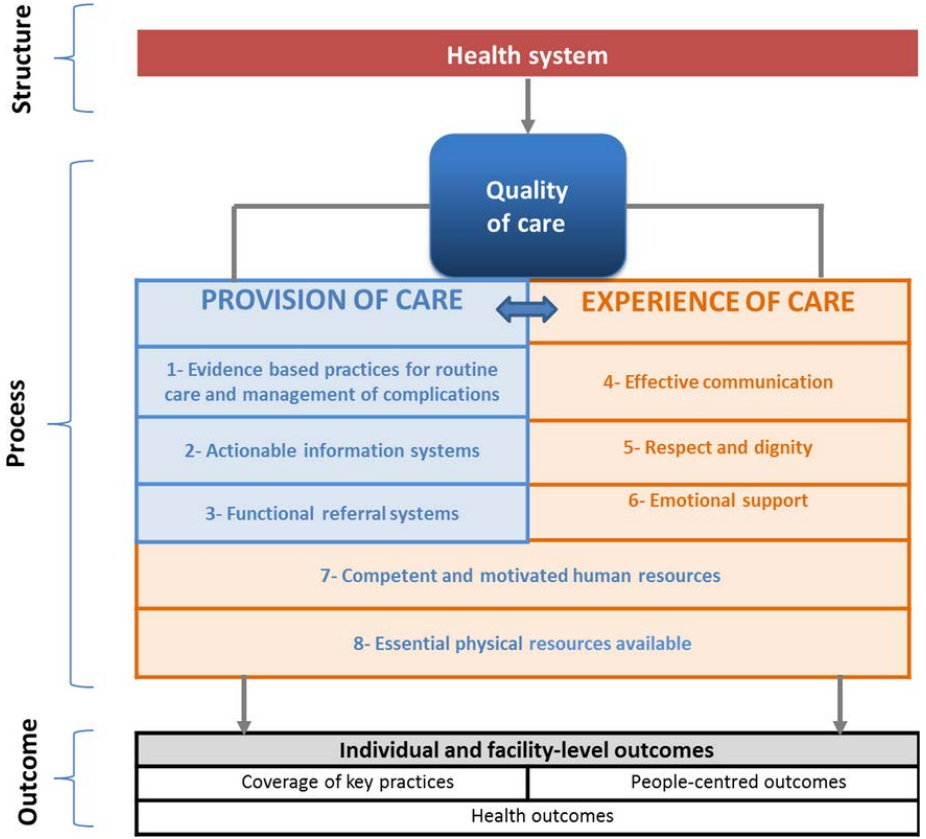
Montagu et al. Where women go to deliver: understanding the changing landscape of childbirth in Africa and Asia Health Policy Plan. 2017;32(8):1146-1152.

Why is use of facilities for childbirth low?



Moyer and Mustafa 2013

Quality: optimizes health & valued by all



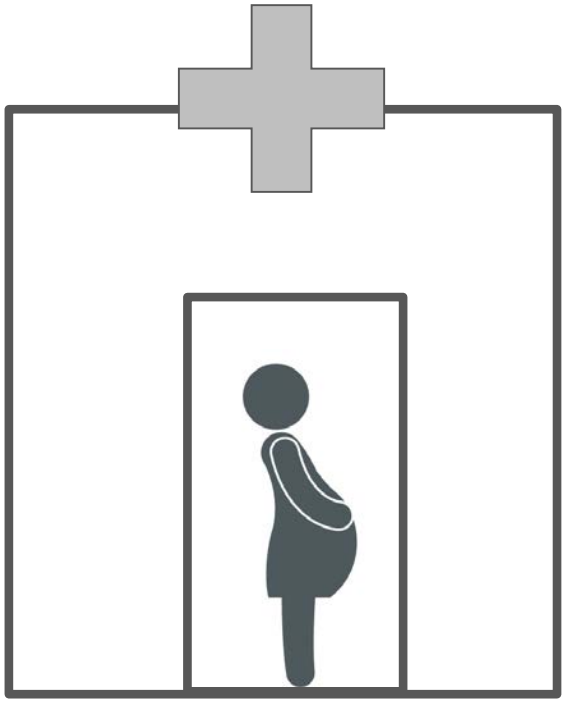
Donabedian 1988; Tuncalp et al.2015; Kruk et al. 2017

Women prefer, but do not get high quality care

- Stated preference for both competent care and positive patient experience
- When women access maternal healthcare, they are not guaranteed high quality

Larson et al. 2014 & 2015; Kruk et al. 2014; Leslie et al. 2017

Can investment in quality drive use?



Cluster-randomized controlled study

Eligibility:

1. Government-managed primary health facilities (dispensaries)
2. At least one skilled provider (nurse or clinical officer)
3. Supported by implementing partner
4. Six busiest facilities in each district (average 7 deliveries/month)

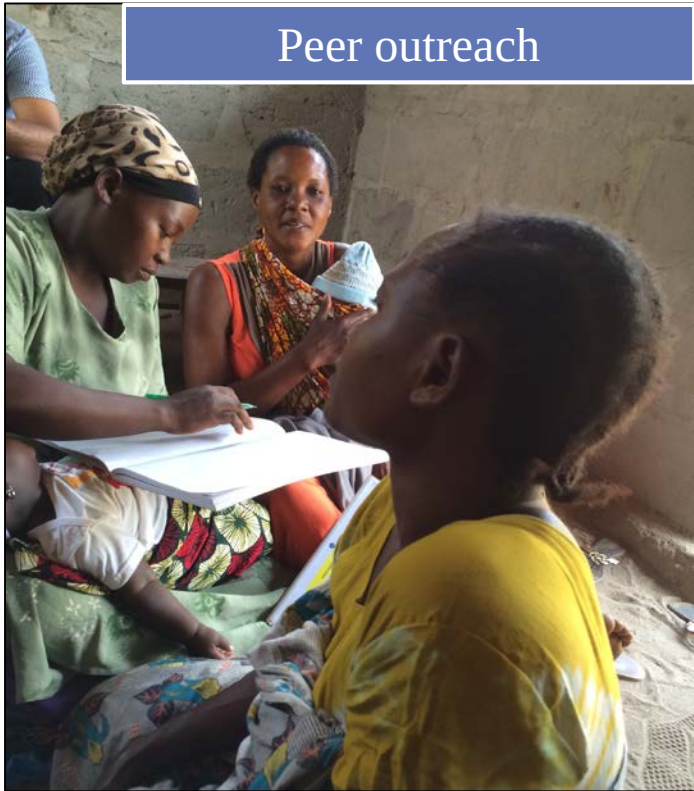
Randomized 12 intervention 12 control

Intervention

Training

Supportive supervision

Infrastructure



Peer outreach

Three waves of household surveys

- Household surveys with women in 2012 (census), 2014 (sample), & 2016 (census)
- Eligible: delivered six weeks to one year ago; 15+ years old; live in facility catchment area
- Collected: Socio-demographic, birth history, experience of care

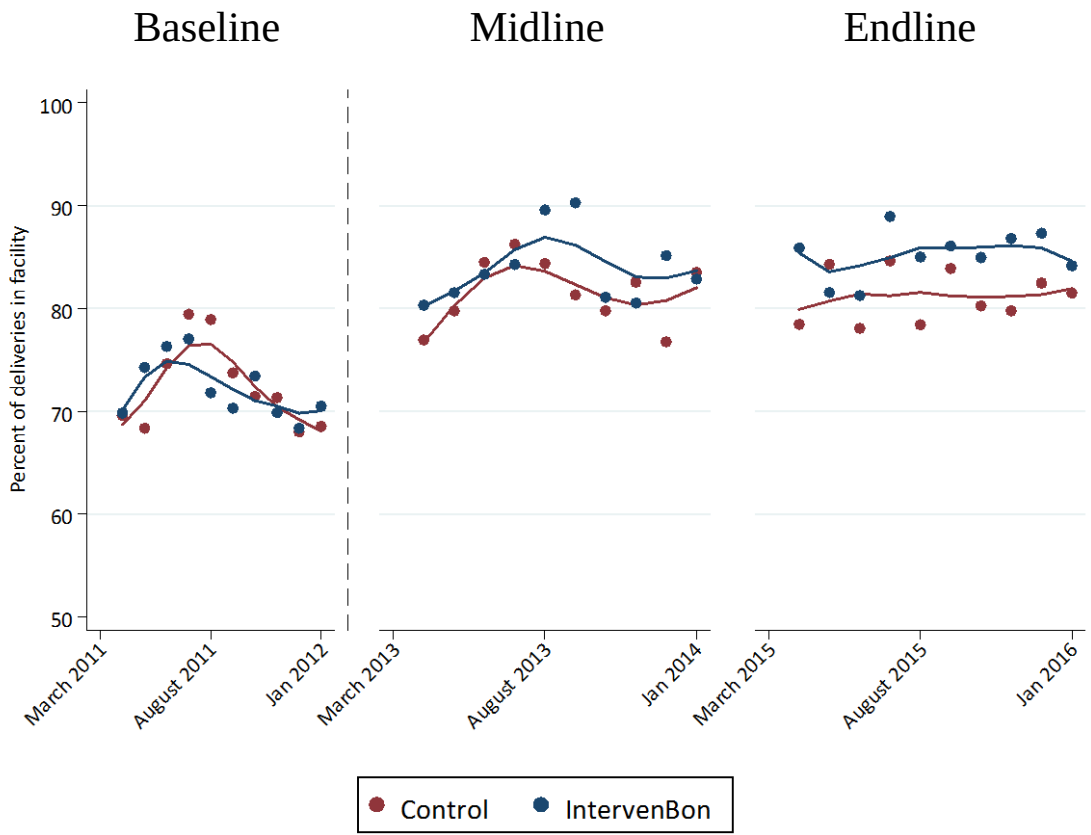
Study aims

1. Determine the effect of the intervention on the use of facilities for childbirth
2. Determine the effect of the intervention among women with last birth at home
3. Investigate three pathways between the intervention and increased use

Difference-in-differences

Benova L, Macleod D, Radovich E, Lynch CA, Campbell OMR. Should I stay or should I go?: consistency and switching of delivery locations among new mothers in 39 Sub-Saharan African and South/Southeast Asian countries. *Health policy and planning* 2017; **32**(9): 1294-308.

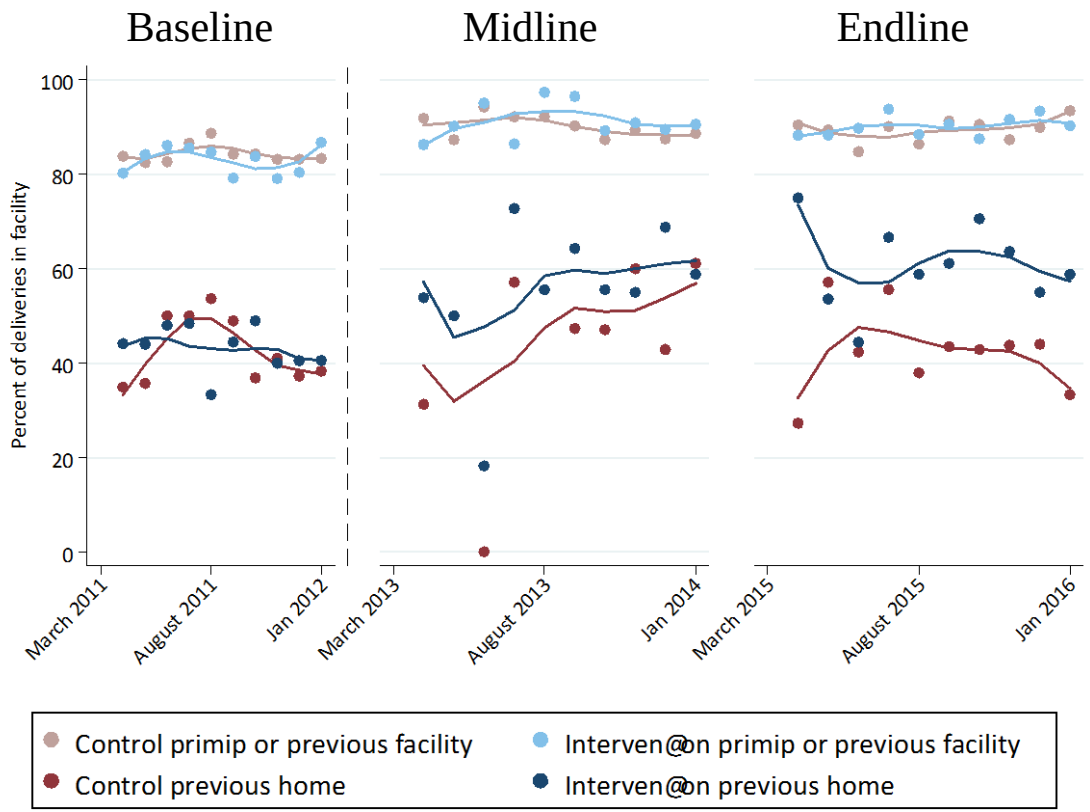
Aim 1: Effect on utilization for all women



DID: 6.7 ppt increase over control group (95% CI: 0.6, 12.8)

IntervenBon began July 2012

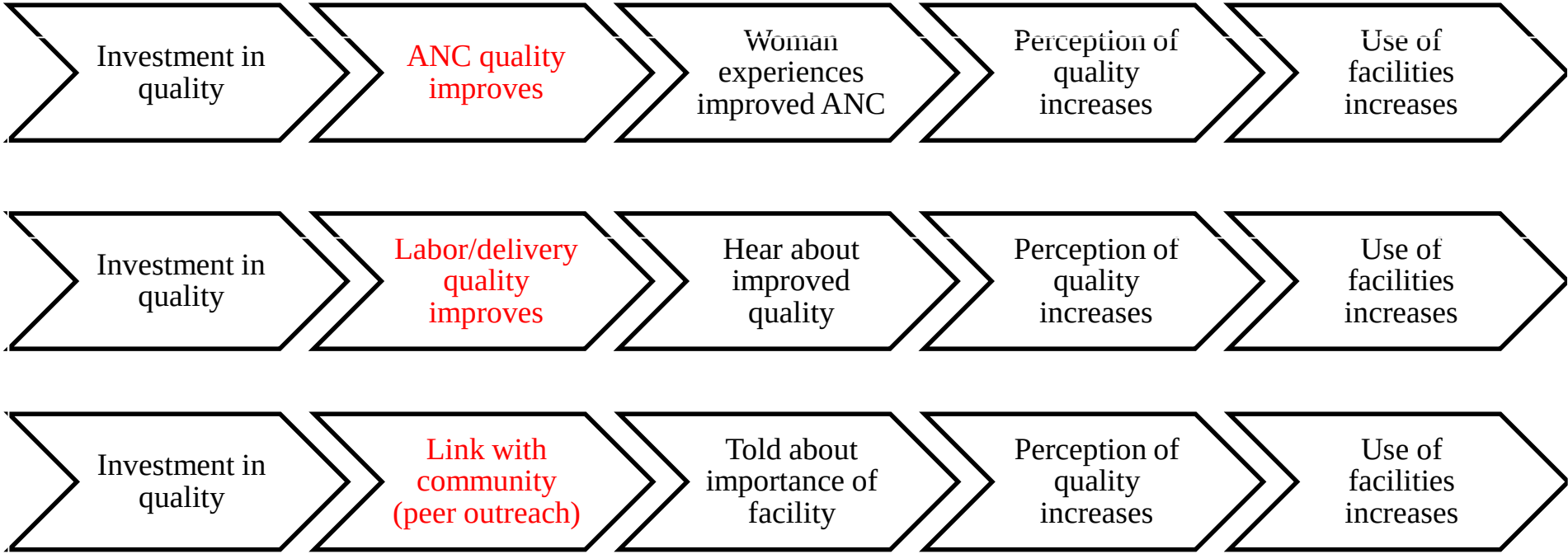
Aim 2: Effect on women with prior home birth



Interven@on began July 2012

DID: 18.3 ppt increase over control group (95% CI: 10.1, 26.6)

Aim 3: Pathways from quality to utilization



Aim 3: Pathways from quality to utilization

Additional 0.5 actions during ANC in intervention group

Discussion

- We found that investment in quality:
  1. Lead to 6.7 percentage point increase in utilization among full population
  2. Lead to 18.3 percentage point increase among previous non-users
  3. Likely pathway through improved antenatal care
- So what?
  1. Quality investment may serve a dual purpose
  2. Quality may be a mechanism for encouraging remaining non-system users to engage in the health system
  3. ANC may advertise the importance of services

Thank you

Women and healthcare providers of Pwani Region, Tanzania

The district and regional medical officers of Pwani Region, Tanzania

Study team: Margaret E. Kruk (PI), Godfrey Mbaruku (Tanzania co-PI), Redempta Mbatia (Tanzania co-PI), Sebastien Haneuse, Ramadhani Abdul, Anna Gage, Sabrina Hermosilla, Mkambu Kasanga, Angela Kimweri, Emilia Ling, Irene Mashasi, Festo Mazugani, Ua Ramadhani, Martin Zuakulu, Daniel Vail

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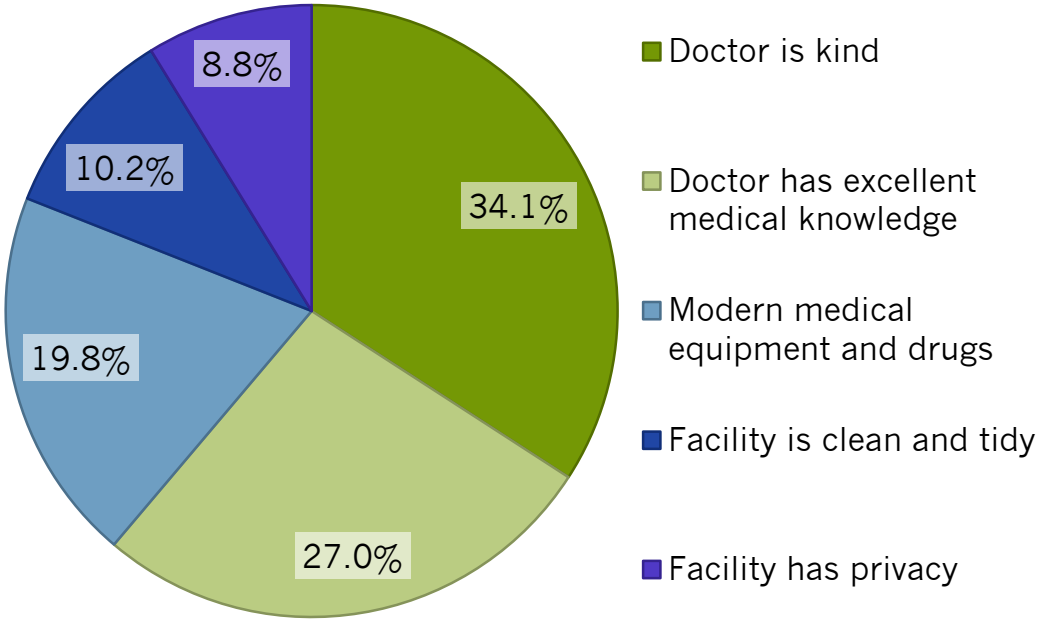
Larson E et al. Moving toward patient-centered care in Africa: a discrete choice experiment of preferences for delivery care among 3,003 Tanzanian Women. PLOS ONE 2015;10(8):e0135621.

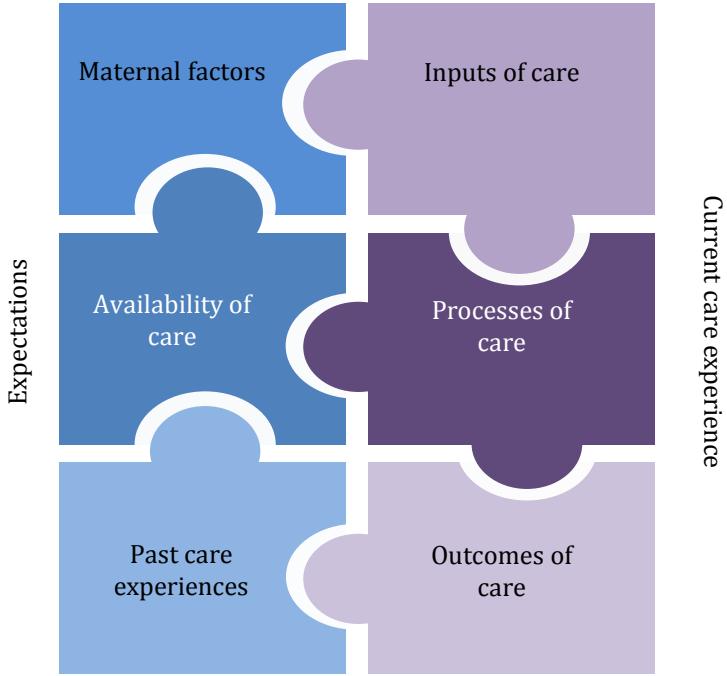
Leslie et al. Effective coverage of primary care services in eight high-mortality countries. BMJ Global Health 2017; doi: 10.1136/bmjgh-2017-000424

Montagu et al. Where women go to deliver: understanding the changing landscape of childbirth in Africa and Asia Health Policy Plan. 2017;32(8):1146-1152.

ADDITIONAL SLIDES

Stated preferences



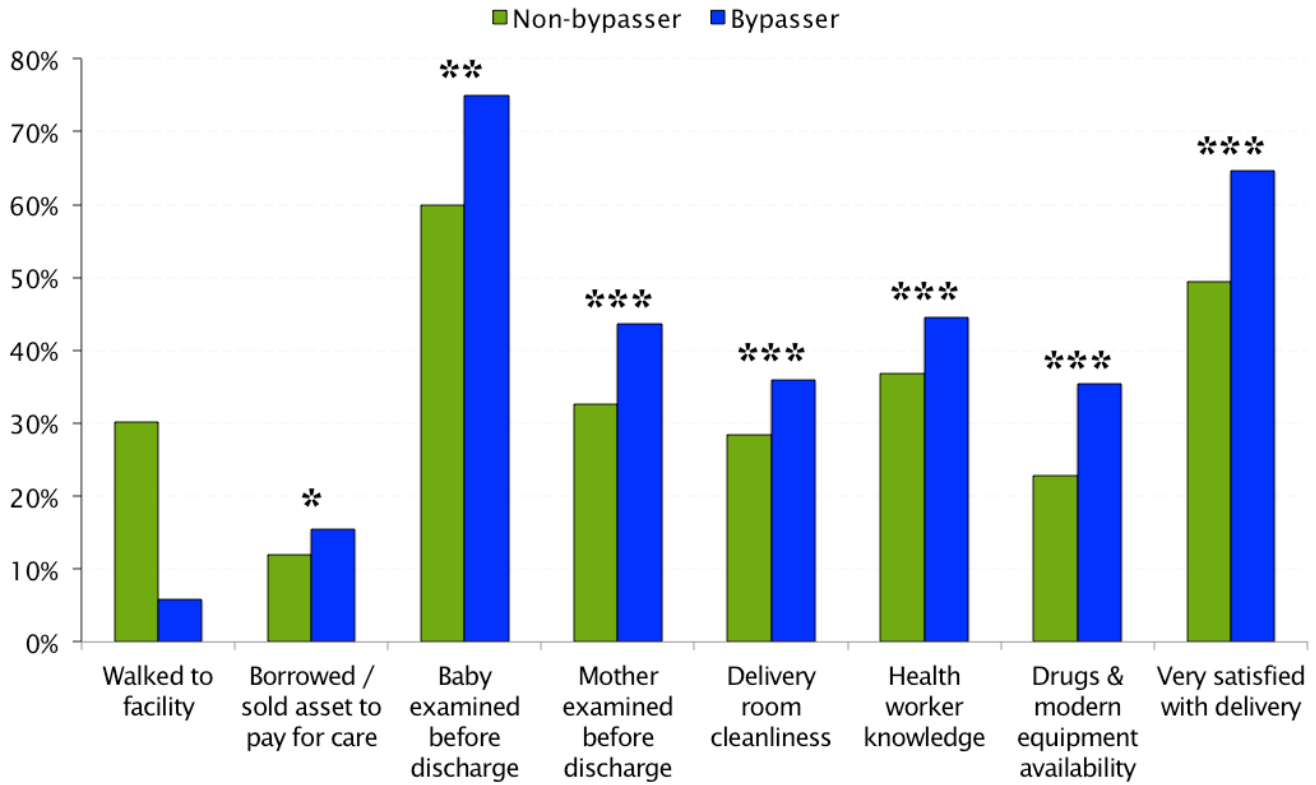


Women prefer high quality care

Revealed preferences

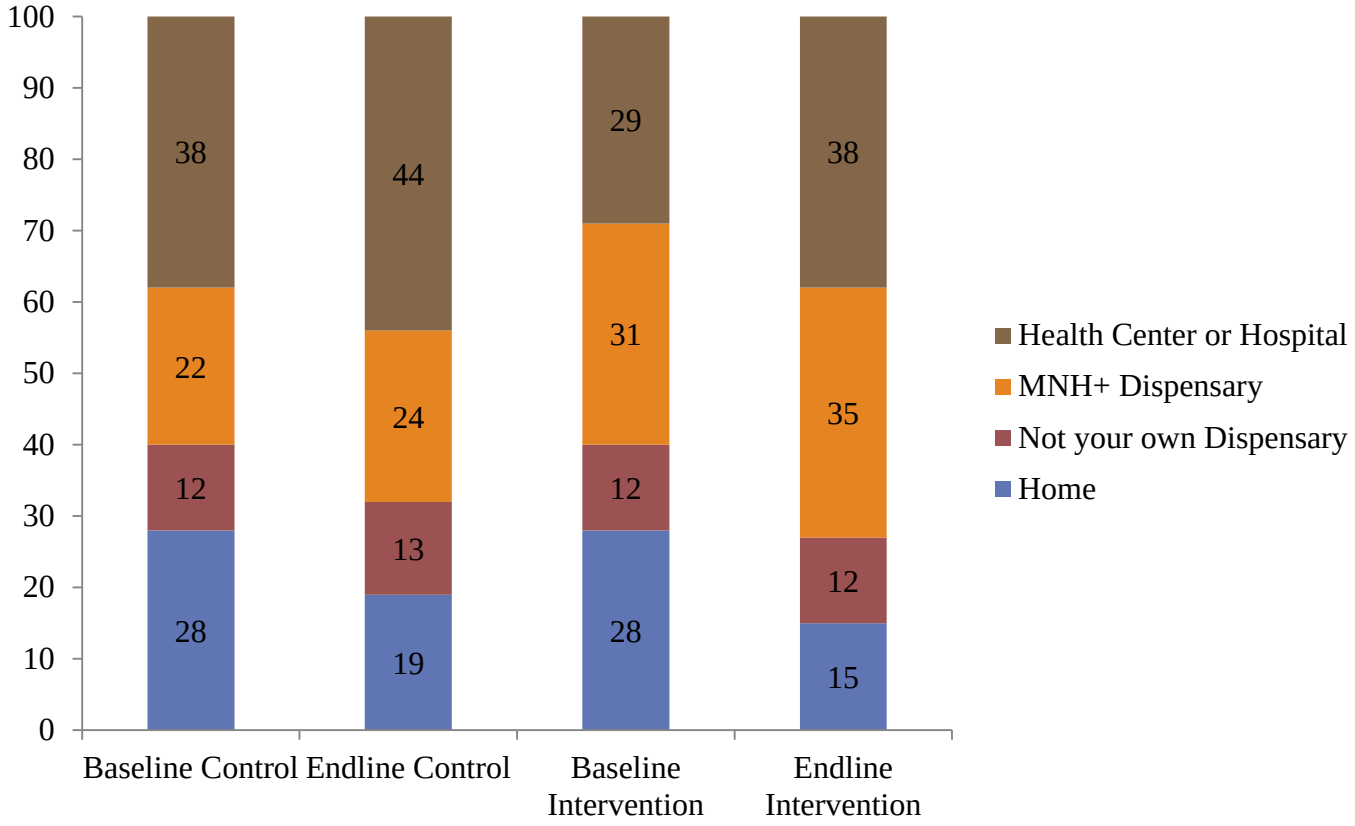
42% of women bypassed

Those who did, reported better quality of care



* p = 0.05; ** p = 0.01; *** p < 0.001

Results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Baseline Control
Endline Control
Baseline Intervention
Endline Intervention
Health Center or Hospital
MNH+ Dispensary
Not your own Dispensary
Home