GLOBAL FINANCING FACILITY

Counting 2 million stillbirths : seizing missed opportunities for impact and investment

July 29, 2021

GLOBAL FINANCING FACILITY

STILLBIRTH
Fake news & Facts

Professor Joy Lawn,
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Director of MARCH Centre, London School of Hygiene & Tropical Medicine
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July 29, 2021

STILLBIRTHS:
Fake news & *Facts*

GFF Stillbirths Count Webinar

Professor Joy Lawn BM BS, MPH, PhD, FRCPCH FMedci
London School of Hygiene & Tropical Medicine

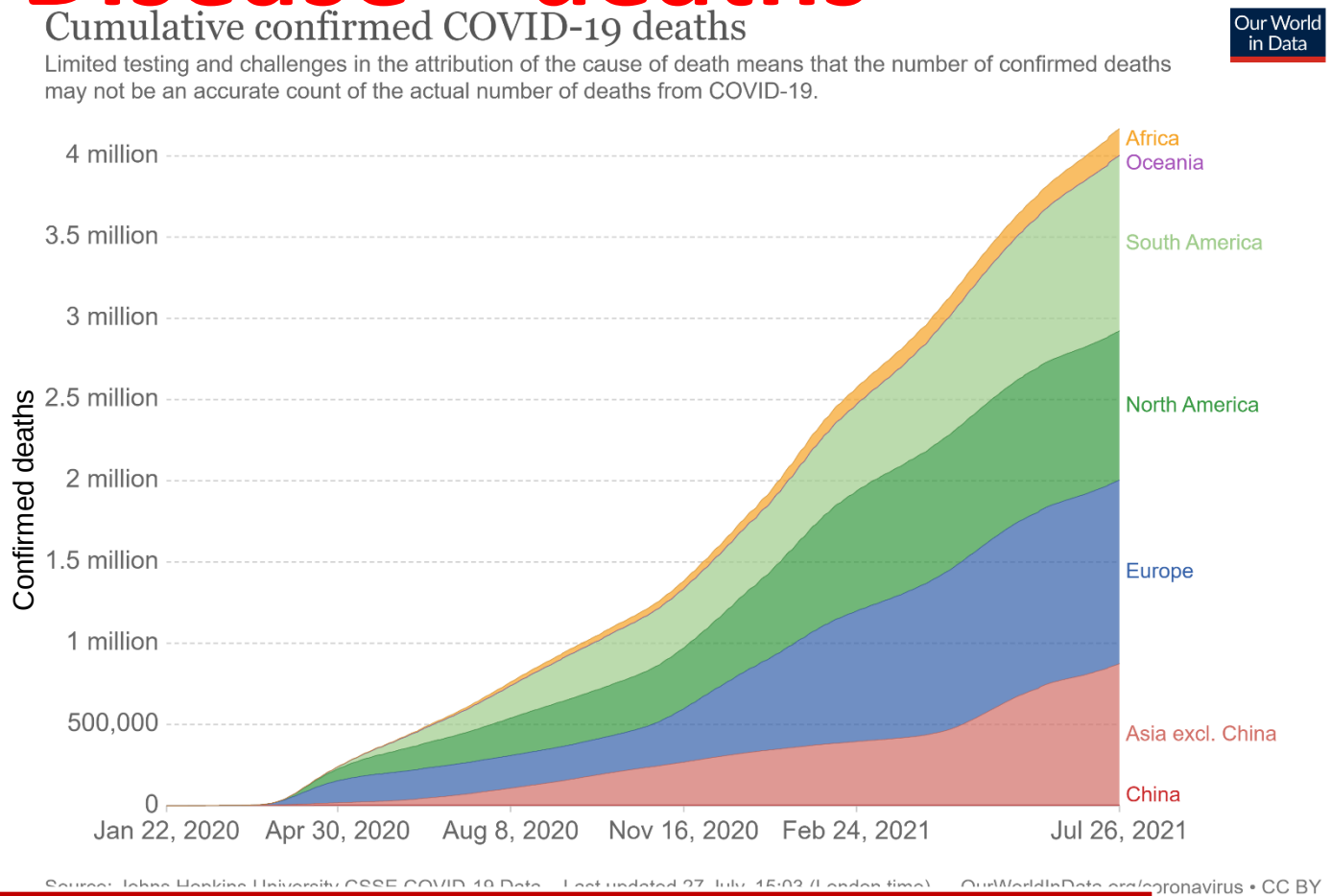
With Dr Hannah Blencowe

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

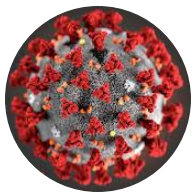
MARCH MATERNAL ADOLESCENT REPRODUCTIVE & CHILD HEALTH

17 months of COVID-19 pandemic

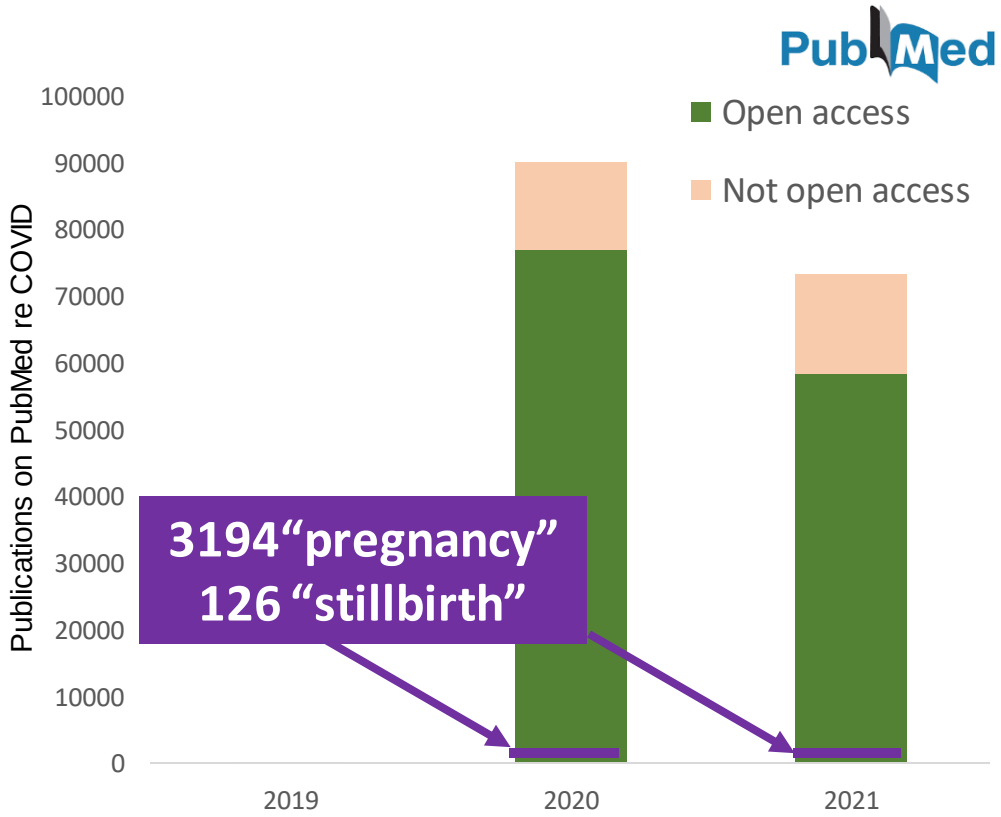
Disease + deaths



>193.3 million confirmed cases
>4.14 million known deaths



Data + science



>157,600 publications,
77% open access (4% in 2019)
>100 vaccines developed/in process

9 years to meet Sustainable Development Goals …

MARCH
MATERNAL
ADOLESCENT
REPRODUCTIVE
& CHILD HEALTH

No woman should die giving life

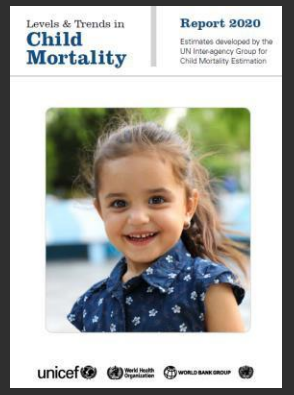
0.3 mill die

No baby stillborn

>2 mill die

No newborn born to die

2.5 mill die



Every child surviving and thriving to age of 20 years

5.1 mill die

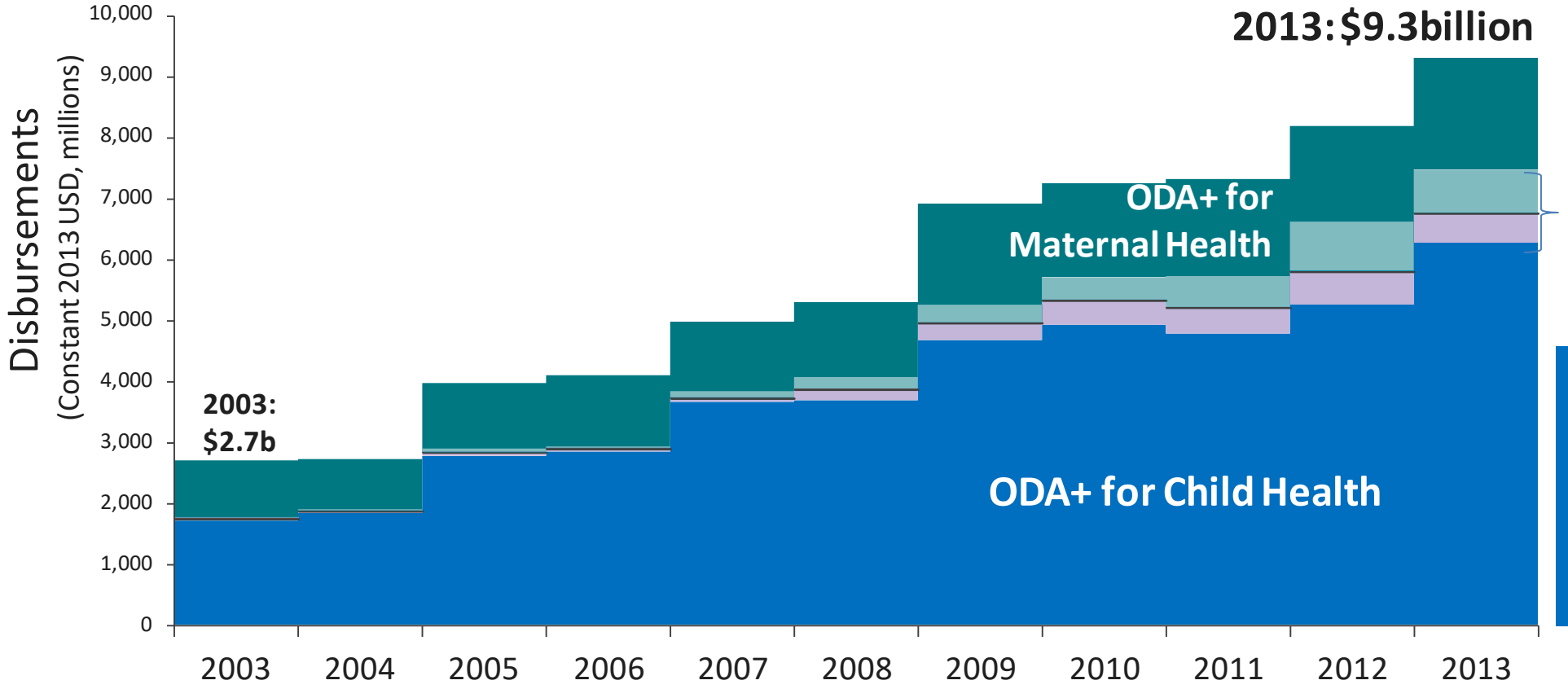
TIME: > 50% related to birth, slower progress

PLACE: Africa 13% of global population, yet by 2030 Africa predicted >66% of these deaths

~10 million deaths of women & children per year, progress threatened by pandemic

Does data influence donor funding?

RMNCH funding Tracked by Countdown to 2030 (note national funding more important but harder to track)



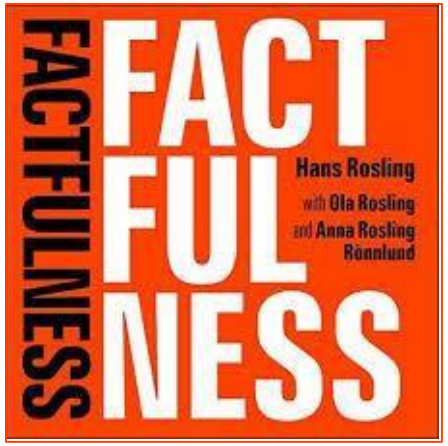
2013:
13% of MNCH funding mentions prenatal/neonatal
0.000000001% mentions stillbirths

Over 2/3rds for immunisation, HIV and malaria

Pitt C, et al. *Countdown to 2015: an analysis of donor funding for prenatal and neonatal health*, 2003–2013. BMJ Global Health 2017

Despite almost 300 million stillbirths in 10yrs (2003-2013) the words "stillbirth", "miscarriage", "fetus" occurred only 9 times amongst >2 million donor disbursements …
new analyses in progress on stillbirth/newborn in GFF investment cases

MIND THE GAP



Fake news = deliberate disinformation or hoaxes spread via news media or online social media.

Fake news is published with the intent to mislead in order to damage an agency, entity, or person, and/or gain financially or politically, often using sensationalist, dishonest, or outright fabricated headlines.

Fake news differs from satire or parody, intended to amuse not mislead.

Science moves on and "facts" you learnt may be proven false
Most crucial learning is critical thinking skills, and how to fact check

Fake news about stillbirths

4 Stillbirth FACTS

1. Women forget they had a stillbirth
2. No target for stillbirths, countries not interested
3. Not preventable, “meant to happen”
4. Unclear definitions, no data, all based on “estimates”, untrackable

THE LANCET

1 Stillbirths do count for women

THE LANCET

Stillbirth FACT

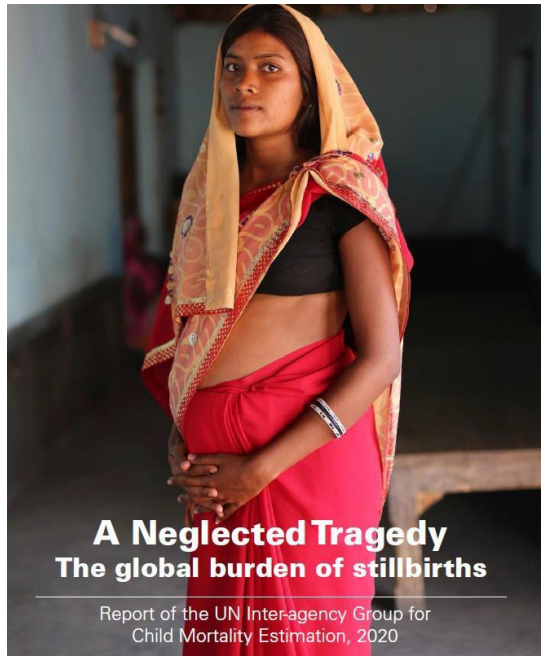
Credit: © Photo Tagaza Djibo/UNFPA/Niger

"No fetal heartbeat. These three words began the surreal journey of inducing labour and finally my daughter's stillbirth...
For weeks I waded through each day trying to keep my head above an ocean of sorrow.

I just wanted to stop breathing, to stop time moving me forward..."

Malika Ndlovu, South African artist

A Neglected Tragedy: The global burden of stillbirths October 2020



IGME

unicef World Health Organization WORLD BANK GROUP United Nations

Unnecessary

Unseen

Unrecognised

Underprioritised

Underfinanced

Taboo

Stigma

Misconception

2

Stillbirth FACT

TARGET for ending preventable stillbirths

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Global Strategy and Every Newborn Action Plan

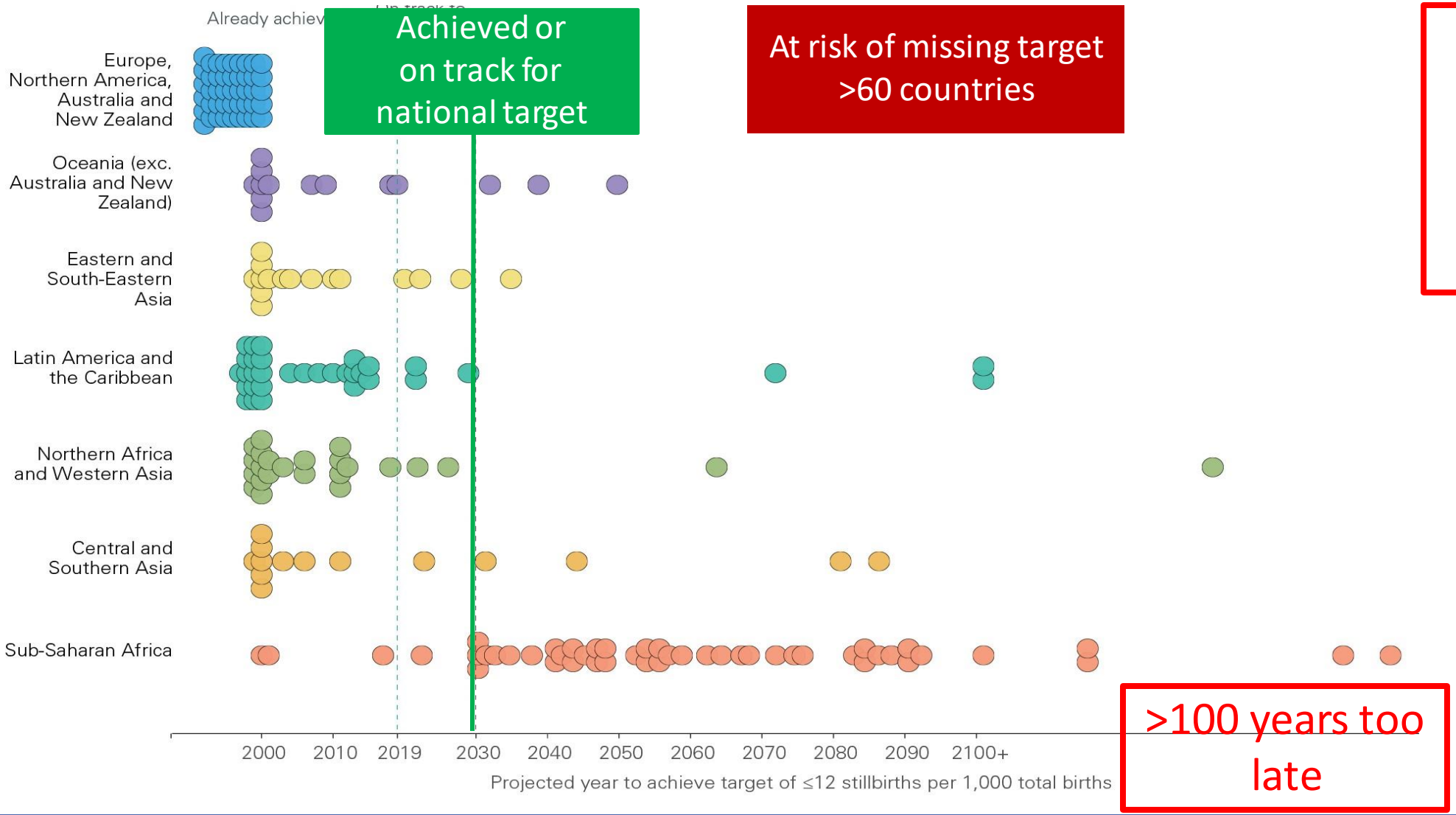
EVERY NEWBORN TARGET BY 203 0

National stillbirth rate of 12 or less

Source: Lawn et al. *Lancet* 2016.

Need to at least double the average annual rate of progress…
So far 30/93 high burden countries have set stillbirth targets (78/93 for newborns)

Projected year to achieve ENAP stillbirth target if current trends continue



Also large inequities within many countries

>100 years too late

Source: UN-IGME 'A Neglected Tragedy. The global burden of stillbirths 2020

3

Stillbirth FACT

Most stillbirths are preventable

THE LANCET

Estimates are impeded by >35 classification systems

The “big five” causes:

1. Childbirth complications (>1 million)
2. Maternal infections in pregnancy eg syphilis, malaria, Group B Strep
3. Maternal chronic conditions, eg hypertension and diabetes
4. Fetal growth restriction
5. Congenital abnormalities (few)

Source: Lawn JE, Blencowe H, Pattinson R, et al, Stillbirths: Where? When? Why? How to make the data count? *Lancet* 2011.

Perinatal Audit data from high income countries

Sub-optimal care contributes to around 30% of stillbirths

Unexplained stillbirth often due to poor investigation

Majority of stillbirths are preventable NOW

Universal coverage of high quality care including:

ANTENATAL CARE

- Detection and management of maternal conditions in pregnancy

e.g. infections (esp. syphilis & malaria), hypertension, diabetes etc..

- Detection and management of fetal growth restriction

CARE AT BIRTH

- Fetal monitoring and response
- Induction of labour for pregnancies > 41 weeks

PRE and INTER-CONCEPTION CARE

- Family Planning
- Folic acid fortification

Stillbirths are a sensitive and measureable outcome indicator of equity, quality of care and COVID-19 pandemic disruptions

Meta analyses 28% increased risk in stillbirth rate 1·28 (1·07–1·54)

B Chmielewska, et al Lancet GH 2021, Effects of the COVID-19 pandemic on maternal and perinatal outcomes: a systematic review and meta-analysis

An additional 200,000 babies could be stillborn in 2020 due to health service disruptions (around 50% closures), in 117 LMICs
(Lives Saved Tool Analysis).

News

2 million stillbirths every year, pandemic might worsen toll

The World Health Organization and partners say there are about 2 million stillbirths every year, according to its first-ever global estimates

Via AP news wire | Wednesday 07 October 2020 23:47

4

Stillbirth FACT

Definition clear and data now

THE LANCET

- WHO definition for international comparison **is clear**:

  Baby born with no signs of life & gestational age of ≥28 weeks (birthweight of ≥1000g)
  Also each country to track all fetal deaths from >22 weeks gestation (birthweight ≥ 500g)

- Stillbirth rate data available from most countries:
  - NEWs!! WHO/UNICEF working with >100 countries to routinely report stillbirth data every year and UN IGME doing stillbirth estimates every ~2 years
  - Data availability more than doubled compared to our first estimates for WHO in 2011
  - For 2019 estimates more than 132 of 195 countries have stillbirth data
  - High income countries – 87% have national data, mostly CRVS
  - LMIC - ~two thirds have national data
    - many still reliant on surveys
    - scope for HMIS especially once national facility birth >80%

Clear definition – issue is application, high-income country variability
Data quantity is high and increasing, data quality needs work

Data to inform stillbirth rate estimates

Too much data from LMICs did not meet inclusion criteria – CAN and MUST improve!!

Not just moan about bad data! Improve it!
Two important Every Newborn studies funded by CIFF

Administrative
Survey
HMIS
Population-based study

EVERY NEWBORN
INDEPTH STUDY

Improving measurement of stillbirths in household survey

#everynewborn #endstillbirths

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Projecto de Saúde BANDIM

icddr,b

KINTAMPO HEALTH RESEARCH CENTRE GHS-MOH

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Stillbirth measurement in surveys

- Randomised comparison in 5 countries showed Full Pregnancy History (FPH) potential to better capture stillbirth rates (SBR 21% higher in FPH vs FBH+)
- DHS-8 standard questionnaire in 2020 has replaced FBH+ with FPH

Akuze et al, Lancet GH, 2020

Measurement of stillbirth care

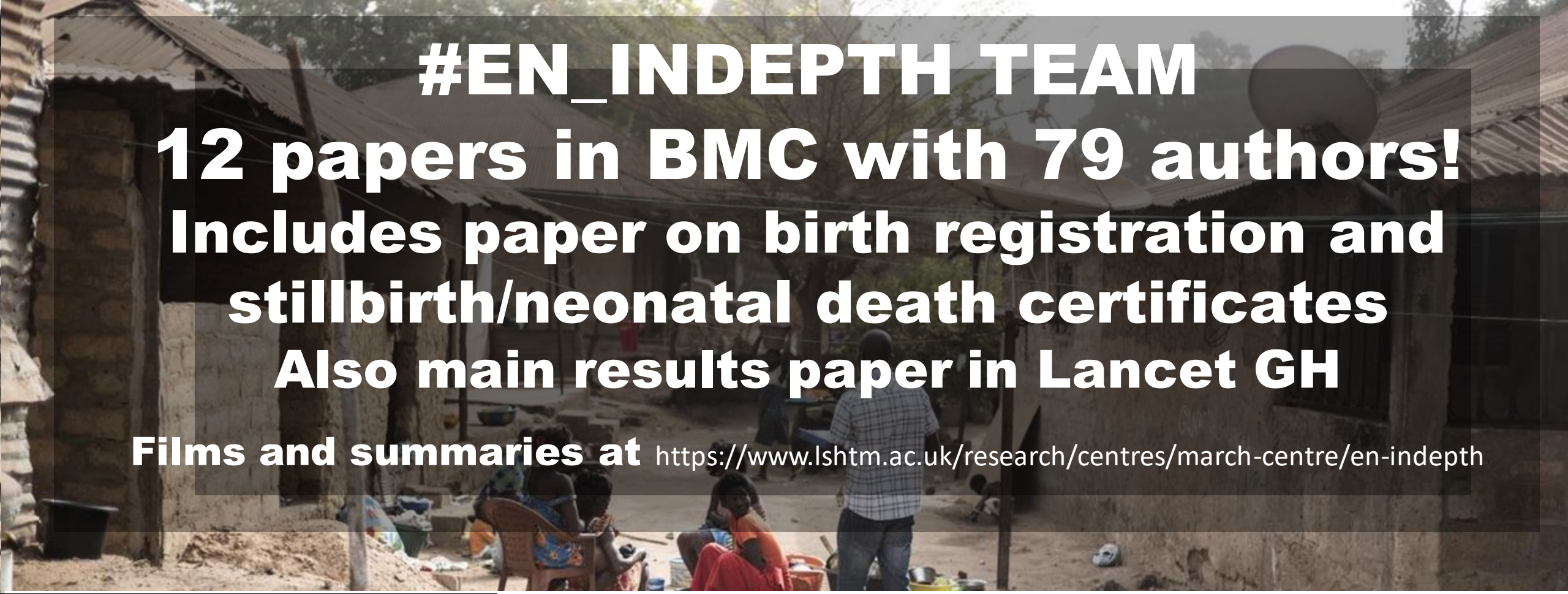
- Women with stillbirths previously excluded from survey questions on maternity care – INDEPTH study found women do report care
- DHS-8 removed previous skip patterns – stillbirth affected women included
- Health cards have potential to improve survey data, e.g. birthweight & GA but need to be completed, legible & available at time of survey

Blencowe et al:Stillbirth outcome capture and classification in population-based surveys

Di Stefano et al: Stillbirth maternity care measurement and associated factors in population-based surveys

- **Use in surveys now: need to address** barriers to reporting especially if more stigma

Miscarriage or termination > Stillbirth > Neonatal death > Child deaths



#EN_INDEPTH TEAM

12 papers in BMC with 79 authors!

Includes paper on birth registration and stillbirth/neonatal death certificates

Also main results paper in Lancet GH

Films and summaries at https://www.lshtm.ac.uk/research/centres/march-centre/en-indepth

#EN-INDEPTH
#everynewborn #endstillbirths

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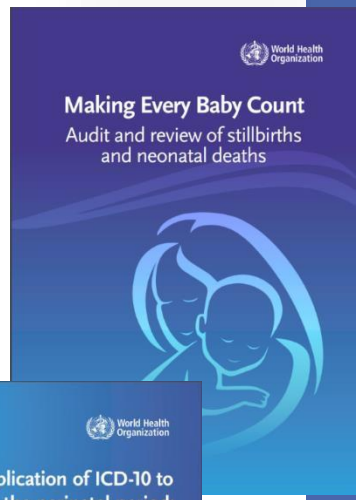
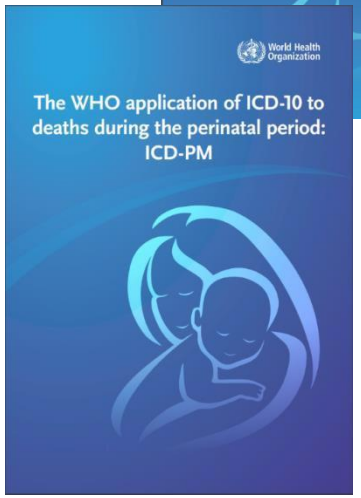
Population Health Metrics

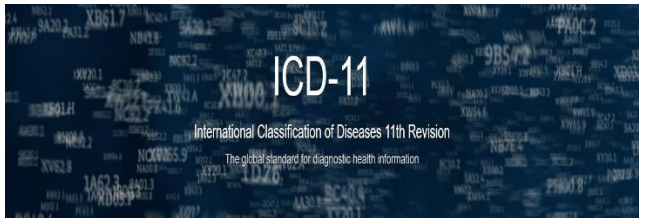
BMC

Data to inform stillbirth cause of death

- **Civil Registration and Vital Statistics (CRVS):** from Medical Certificate of Cause of death (2016 version includes stillbirths and neonatal deaths)
    - New UN guidance on how to – countries advancing birth registration can also advance deaths registration for stillbirths and neonatal deaths
- **Perinatal Audit/ Review:** important role at a local level and for quality improvement
- **ICD-PM (2016):** classification system suitable for classifying deaths: by timing, but revisions planned for the fetal or neonatal cause of death and/ or contributing maternal conditions
- **Verbal autopsy:** Commonly used in surveys to attribute probable cause of death but many tools omit stillbirth and the IP/AP classification has low accuracy







Our generation has potential to transform health of next generation

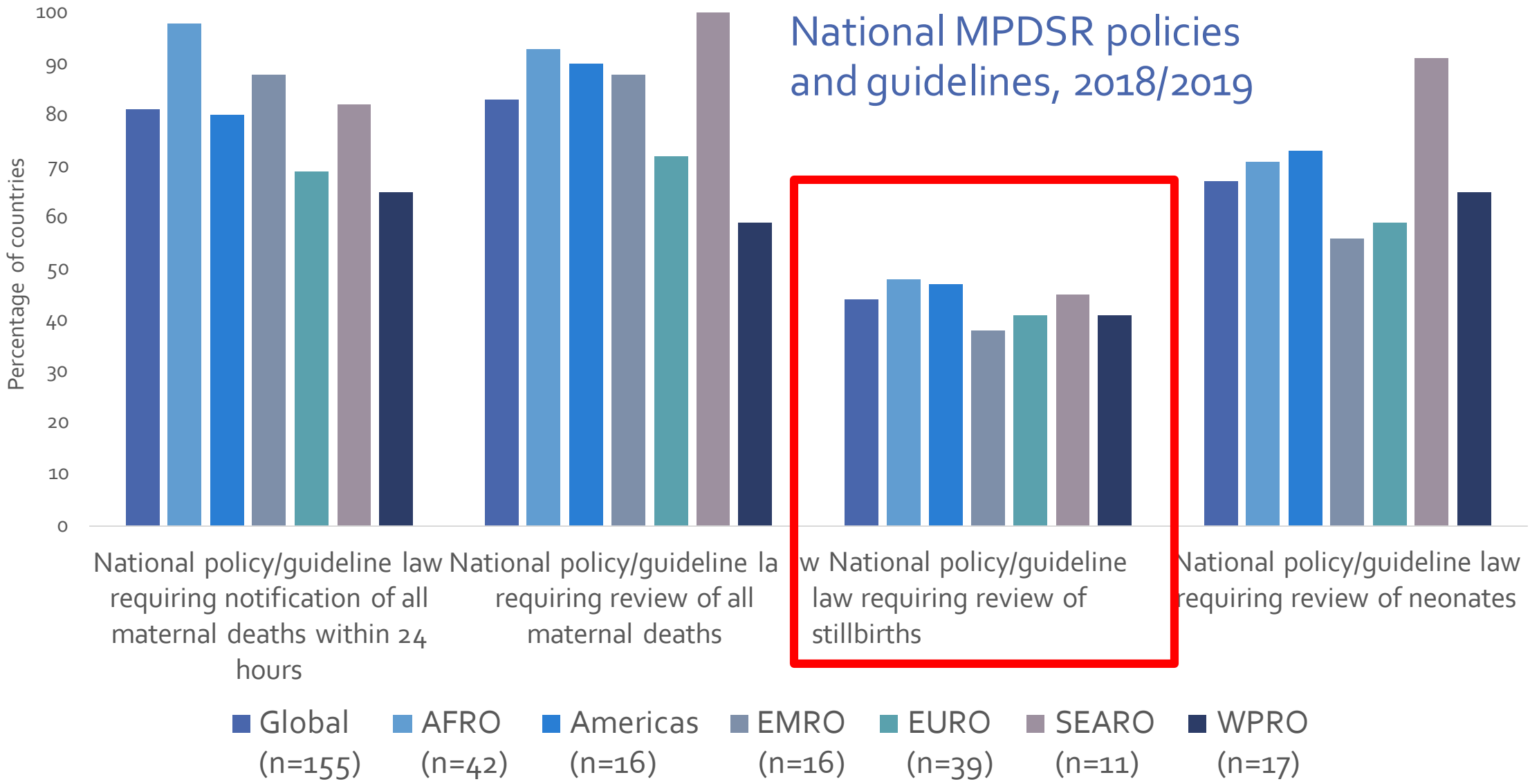
Will we deliver?

Actionable facts on stillbirths

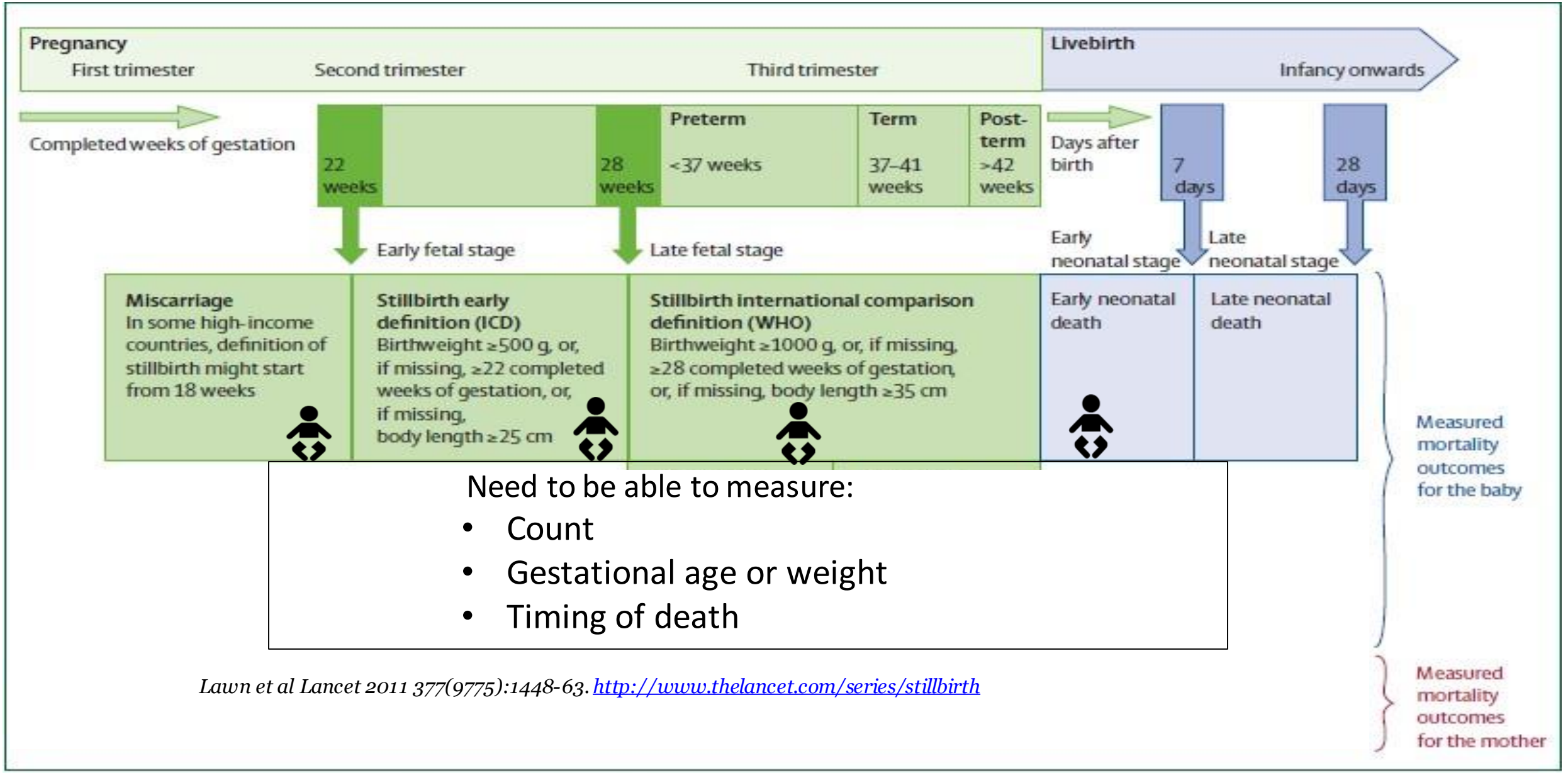
1. Stillbirths count to families and society
2. 2030 target is **URGENT!** 9 years to national target of SBR of 12, need to double progress
3. Stillbirths are preventable, especially with high quality Antenatal and Intrapartum care (major return on investment)
4. Stillbirths can be counted
   - Surveys
   - CRVS
   - Routine data

Improve and use the data – including in GFF investment cases

Stillbirth audit/review: lagging behind maternal & newborn deaths



Source: SRMNCAH Policy Survey 2018-2019, https://www.who.int/data/maternal-newborn-child-adolescent



Need to be able to measure:

- Count
- Gestational age or weight
- Timing of death

Lawn et al Lancet 2011 377(9775):1448-63. http://www.thelancet.com/series/stillbirth

Figure 1: **Defining stillbirths and associated pregnancy outcomes for international comparison**
Definitions from ICD, tenth revision. ICD–International Classification of Diseases.

GLOBAL FINANCING FACILITY

EVERY NEWBORN *birth study*

Dr Louise-Tina Day
EN-BIRTH Research Manager at London School of Hygiene and Tropical Medicine
@LouiseTinaDay

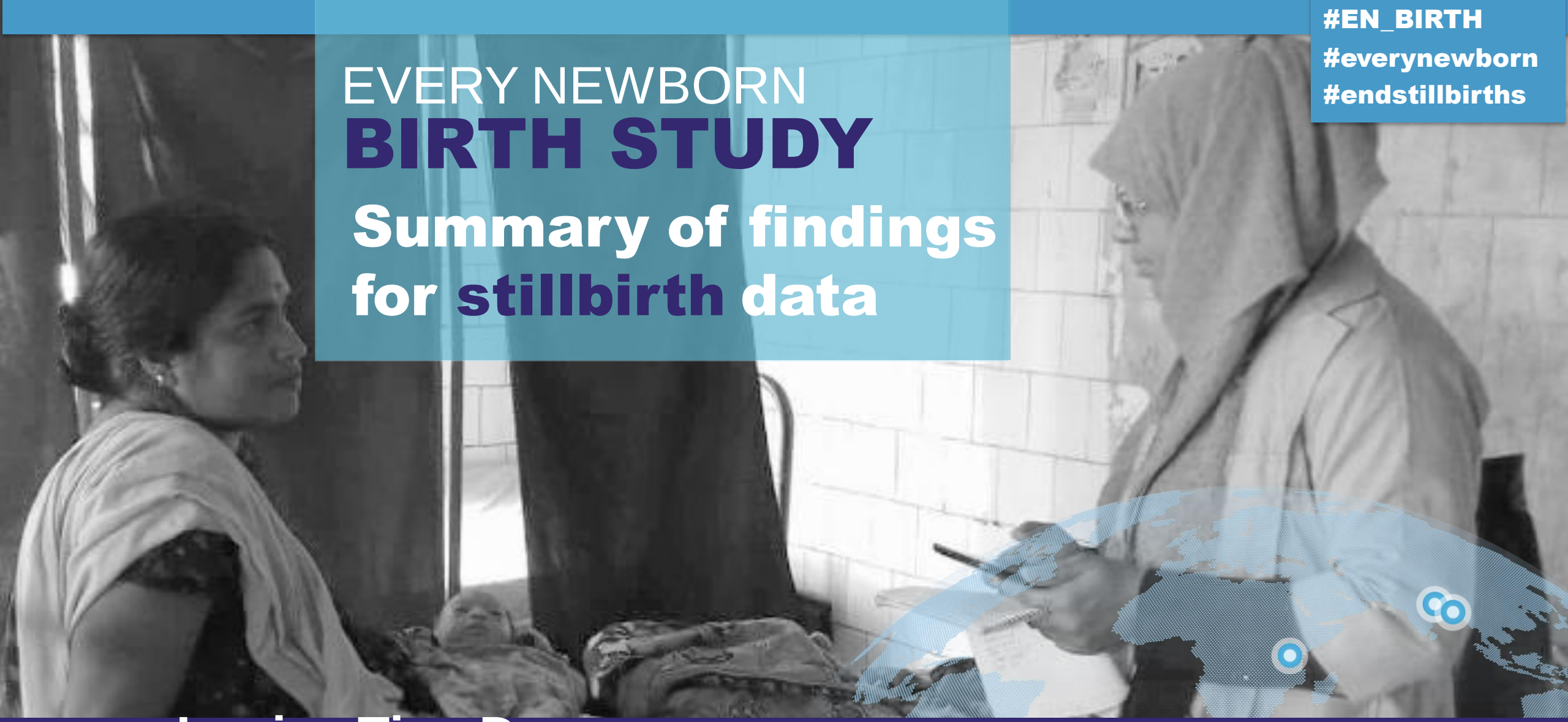
July 29, 2021

#EN_BIRTH
#everynewborn
#endstillbirths

EVERY NEWBORN

BIRTH STUDY

Summary of findings for stillbirth data



Presenter: **Louise Tina Day**

LSHTM on behalf of the EN-BIRTH study group, Kimberly Peven lead author

Stillbirth paper

BMC Pregnancy & Childbirth

London School of Hygiene & Tropical Medicine

MARCH Maternal Adolescent Reproductive & Child Health

icddr,b

ihi IFAKARA HEALTH INSTITUT

MUHAS

Golden Community

Uppsala Universitet

Funded by

CIFF Children's Investment Fund Foundation

EN-BIRTH team

Country team leads & organisations

Bangladesh:
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Nepal:
Dr Ashish KC,
(Uppsala University, with implementing partner Golden Community)

Tanzania:
Dr Honorati Masanja and the late Dr Mbaruku Godfrey, (Ifakara Health Institute)

London School of Hygiene & Tropical Medicine (LSHTM):
Joy E. Lawn

EN-BIRTH Study Group

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Nepal: Omkar Basnet, Avinash K Sunny, Nishant Thakur, Rejina Gurung, Anjani Kumar Jha, Bijay Jha, Ram Chandra Bastola, Rajendra Paudel, Asmita Paudel, Ashish KC.

Tanzania: Nahya Salim, Donat Shamba, Josephine Shabani, Kizito Shirima, Menna Narcis Tarimo, Godfrey Mbaruku (deceased), Honorati Masanja.

LSHTM: Louise T Day, Harriet Ruysen, Kimberly Peven, Vladimir S Gordeev, Georgia R Gore-Langton, Dorothy Boggs, Stefanie Kong, Angela Baschieri, Simon Cousens, Joy E Lawn.

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Tanzania: Evelyne Assenga, Claudia Hanson, Edward Kija, Rodrick Kisenge, Karim Manji, Fatuma Manzi, Namala Mkopi, Mwifadhi Mrisho, Andrea Pembe

Nepal: Jagat Jeevan Ghimire, Regina Gurung, Elisha Joshi, Avinash K Sunny, Naresh P. KC, Nisha Rana, Shree Krishna Shrestha, Dela Singh, Parashu Ram Shrestha, Nishant Thakur,

LSHTM: Hannah Blencowe, Sarah G Moxon

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National Advisory Groups:

Bangladesh: Mohammod Shahidullah, Khaleda Islam, Md Jahurul Islam.

Nepal: Naresh P KC, Parashu Ram Shrestha.

Tanzania: Muhammad Kambi, Georgina Msemo, Asia Hussein, Talhiya Yahya, Claud Kumalija, Eliudi Eliakimu, Mary Azayo, Mary Drake, Honest Kimaro.

Finally, and most importantly, we thank the women, their families, the health workers and data collectors

Funded by CHILDREN'S INVESTMENT FUND FOUNDATION

EN-BIRTH study

1. Why?
2. What was done?
3. What was found?
4. What next in measurement and research?

EN-BIRTH study

1. Why?
2. What was done?
3. What was found?
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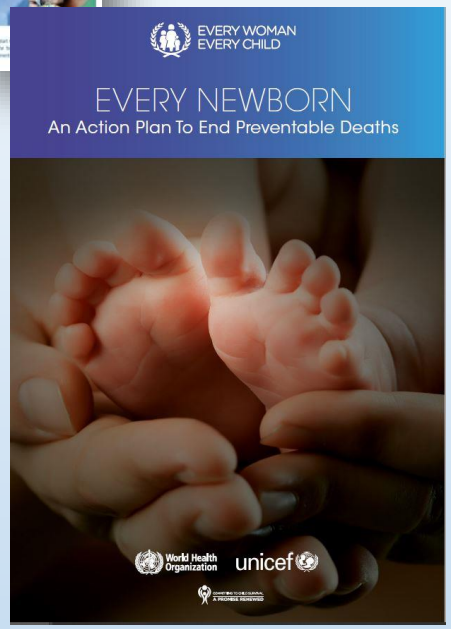
Every Newborn Action Plan

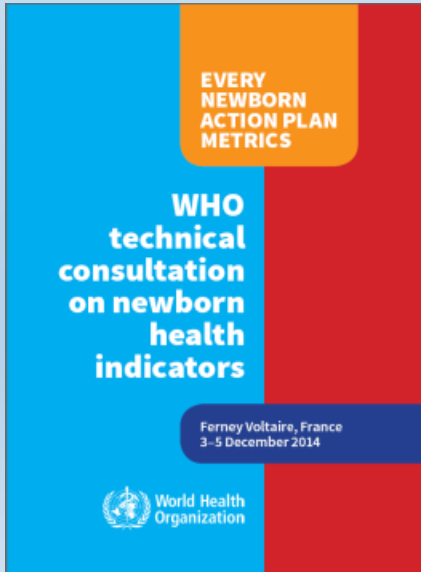


Ending preventable deaths for 2.4 million newborns and >2 million stillbirths each year

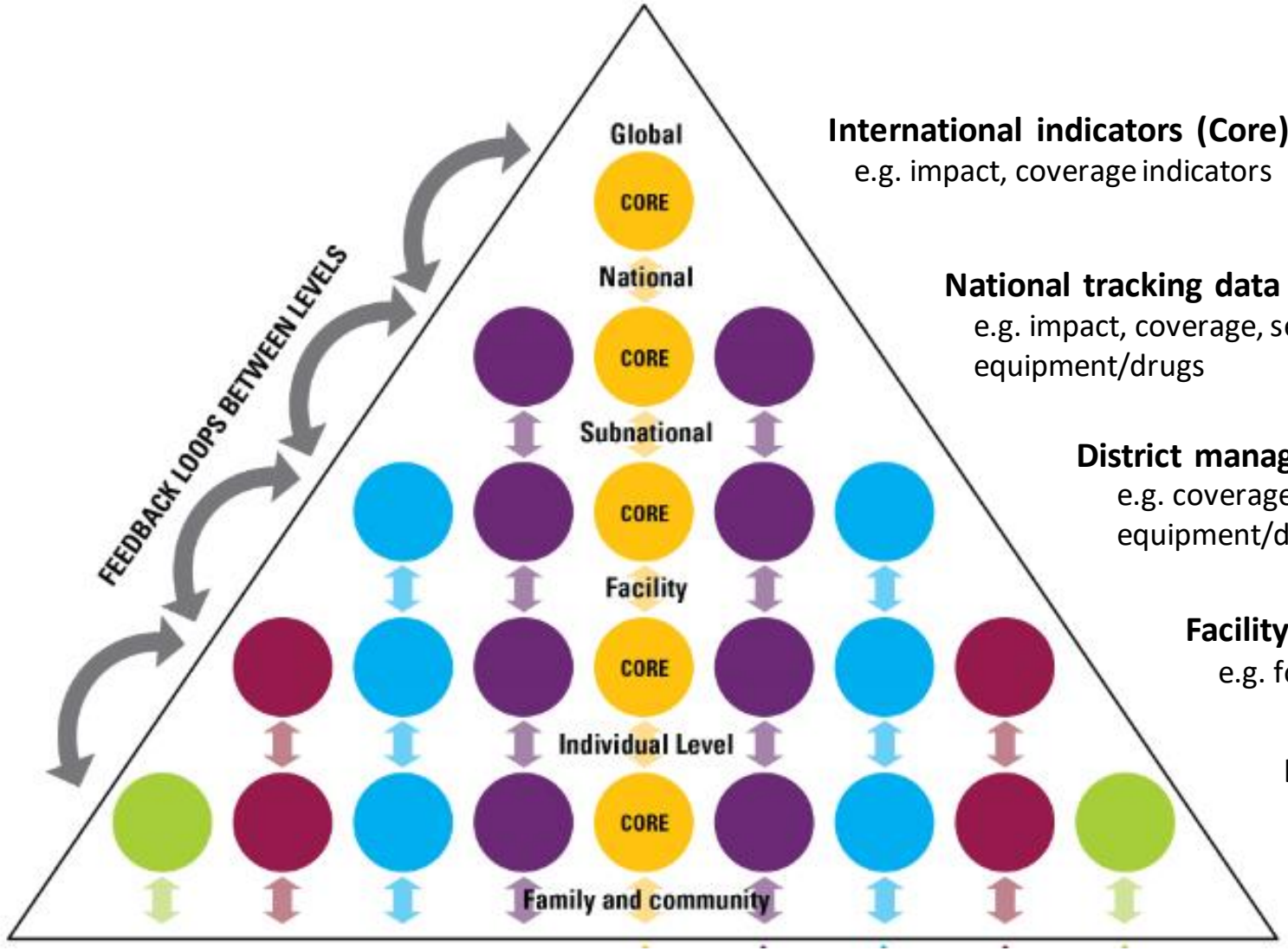
Strategic objective 5:
Count every newborn through measurement, programme-tracking and accountability

Ambitious WHO measurement improvement roadmap 2015-2020
based on evidence for selected priority gaps.....

- *Improve metrics* nationally and globally
- Drive change towards Sustainable Development Goal



Core indicators



International indicators (Core) to track SDGs and UHC
e.g. impact, coverage indicators

National tracking data
e.g. impact, coverage, service readiness indicators, human resources, equipment/drugs

District management
e.g. coverage, more detailed service readiness indicators, equipment/drugs

Facility management
e.g. for quality improvement

Individual client care data
e.g. details for clinical decision, client experience of care

What was known already?

MEASUREMENT

- In low- and middle-income countries aggregated routine register data are usual source for health management information systems
- Lack of trust in register data quality impedes use

Labour ward register data has potential to close gap for data around the time of birth

EN-BIRTH Study

Every
Newborn
Birth
Indicators
Research
Tracking
in **H**ospitals”

Aimed to
assess validity of measurement
of selected newborn and maternal
health indicators
in hospitals
to inform prioritisation
and selection for use
in routine health information systems
and population-based surveys
for national and global tracking

Day LT, Ruysen H, Gordeev VS, et al: “Every Newborn-BIRTH” protocol: observational study validating indicators for coverage and quality of maternal and newborn health care in Bangladesh, Nepal and Tanzania. Journal of Global Health 2019, 9(1).

EN-BIRTH study

1. Why?
2. What was done?
3. What was found?
4. What next in measurement and research?

Day LT, Ruysen H, Gordeev VS, et al: “Every Newborn-BIRTH” protocol: observational study validating indicators for coverage and quality of maternal and newborn health care in Bangladesh, Nepal and Tanzania. Journal of Global Health 2019, 9(1).

EN-BIRTH = Every Newborn-Birth Indicators Research for Tracking in Hospitals

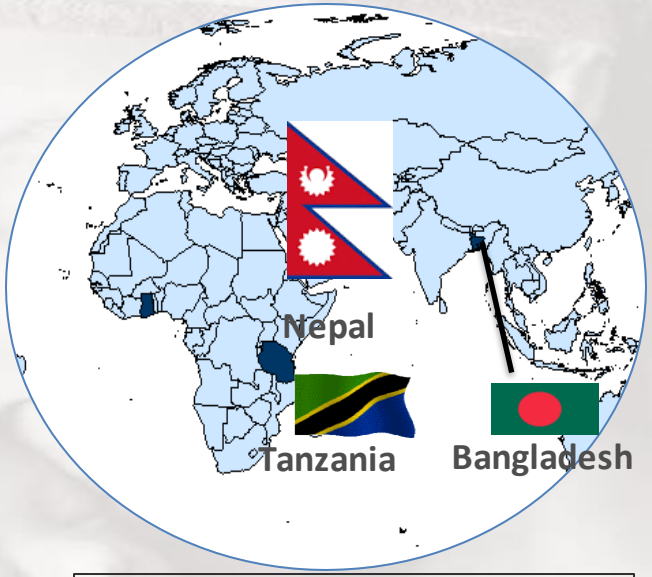
To test validity of coverage metrics for high impact care for <u>every mother, every newborn</u>

WHERE?

Bangladesh – icddr,b sites in Kushtia District and Dhaka

Tanzania – Ifakara Health Institute, sites at Muhimbili and Temeke

Nepal – UNICEF/Golden Community in Pokhara



Total of ~20,000 births

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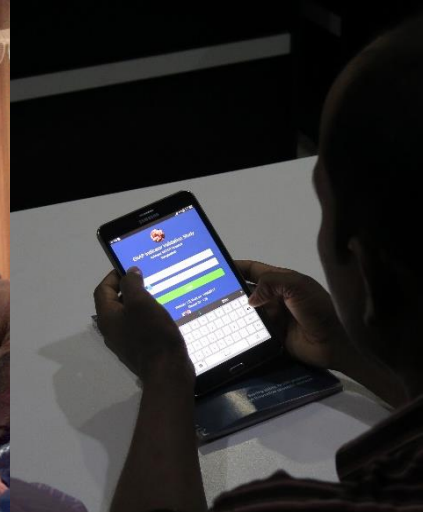
EN-BIRTH Objectives

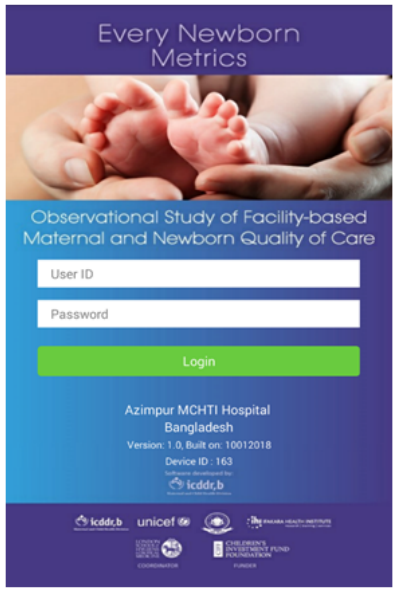
1	**NUMERATOR** To determine validity for selected facility-based interventions for mothers and newborns (numerator) in terms of accuracy for recording in routine registers and for women's report in maternal survey
2	**DENOMINATORS** To compare different denominator options for each of the interventions
3	**CONTENT & QUALITY OF CARE** To evaluate priority questions for each intervention with respect to coverage (e.g. content, timing, etc.)
4	**BARRIERS AND ENABLERS** To assess barriers and enablers to routine register documentation

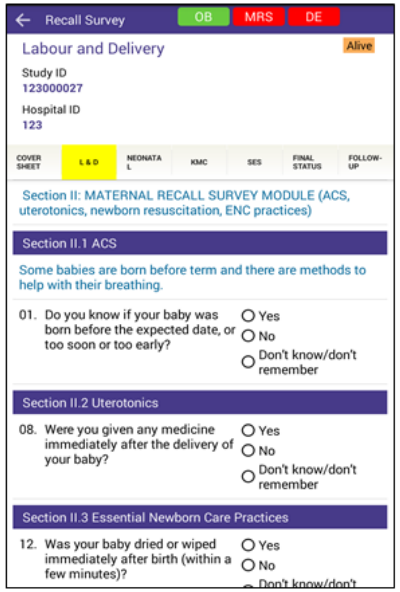
Rigorous science to validate, not just adding multiple new indicators

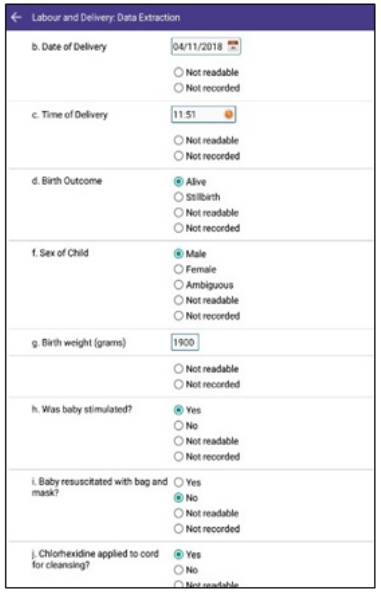
Keeping end in mind, focus on use in HMIS and digital systems such as

Bangladesh









EN-BIRTH Tablet Application

Customised Android based Time stamped entries

icddr,b

Qualitative work – Barriers and enablers to routine register recording Kangaroo Mother Care lead

IFAKARA HEALTH INSTITUTE

MUHAS

Nepal

Neonatal Resuscitation lead
Experience of care - Respectful Maternal and Newborn Care lead

GOLDEN COMMUNITY

UPPSALA UNIVERSITET

EN-BIRTH Objectives

1	**NUMERATOR** To determine validity for selected facility-based interventions for mothers and newborns (numerator) in terms of accuracy for recording in routine registers and for women's report in maternal survey
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Rigorous science to validate, not just adding multiple new indicators

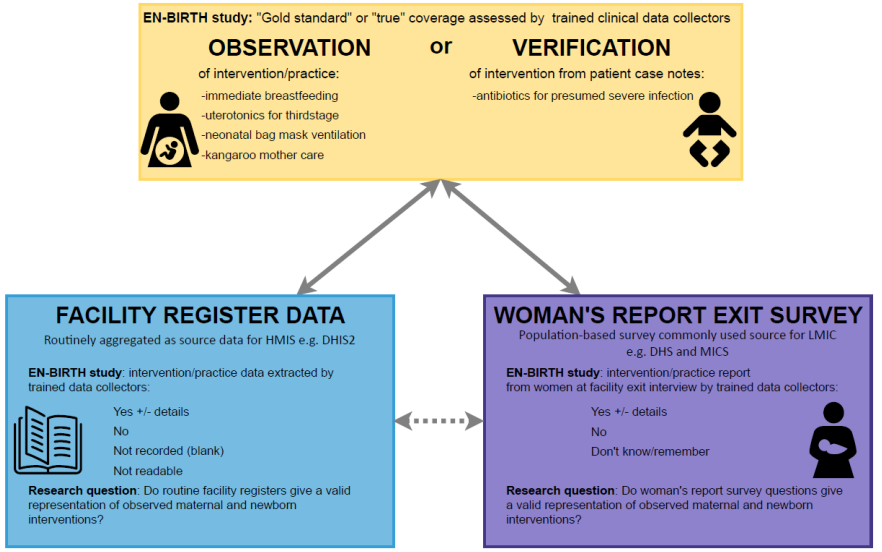
Keeping end in mind, focus on use in HMIS and digital systems such as

What was done?

Gold standard

Survey reported coverage

Register recorded coverage



EN-BIRTH study

1. Why?
2. What was done?
3. What was found?
4. What next in measurement and research?

Day LT, Ruysen H, Gordeev VS, et al: “Every Newborn-BIRTH” protocol: observational study validating indicators for coverage and quality of maternal and newborn health care in Bangladesh, Nepal and Tanzania. Journal of Global Health 2019, 9(1).

#everynewborn #endstillbirths

MARCH
MATERNAL
ADOLESCENT
REPRODUCTIVE
& CHILD HEALTH

Every Newborn - BIRTH

About EN-BIRTH

The Every Newborn Action Plan

Each year,

- 2.5 million newborns die in first 28 days accounting for 47% of under-5 child deaths.
- More than 2 million are stillborn, 50% during labour.

99% of these deaths happen in low & middle income countries, especially for the poorest families. are preventable.

In response to this, the Every Newborn Action Plan was developed with the aim to end preventable setting the first ever national mortality targets:.

- ≤ 12 neonatal deaths per 1000 live births
- ≤ 12 stillbirths per 1000 total births

EN-BIRTH

EN-BIRTH study involved observing >23,000 births using an innovative tablet-based system to valid from routine facility registers and women's survey report.

The study was conducted in five hospitals in Bangladesh, Nepal and Tanzania, coordinated by a tea and funded by the Children's Investment Fund Foundation (CIFF).

EN-BIRTH key links

Study protocol	Baseline analysis	Lancet GH paper	BMC supplement papers
→	→	→	→

Meet the teams involved

At the end of the study, we asked all teams to reflect on highlights, collaborative learning, and significance of the results. Hear what they had to say below.

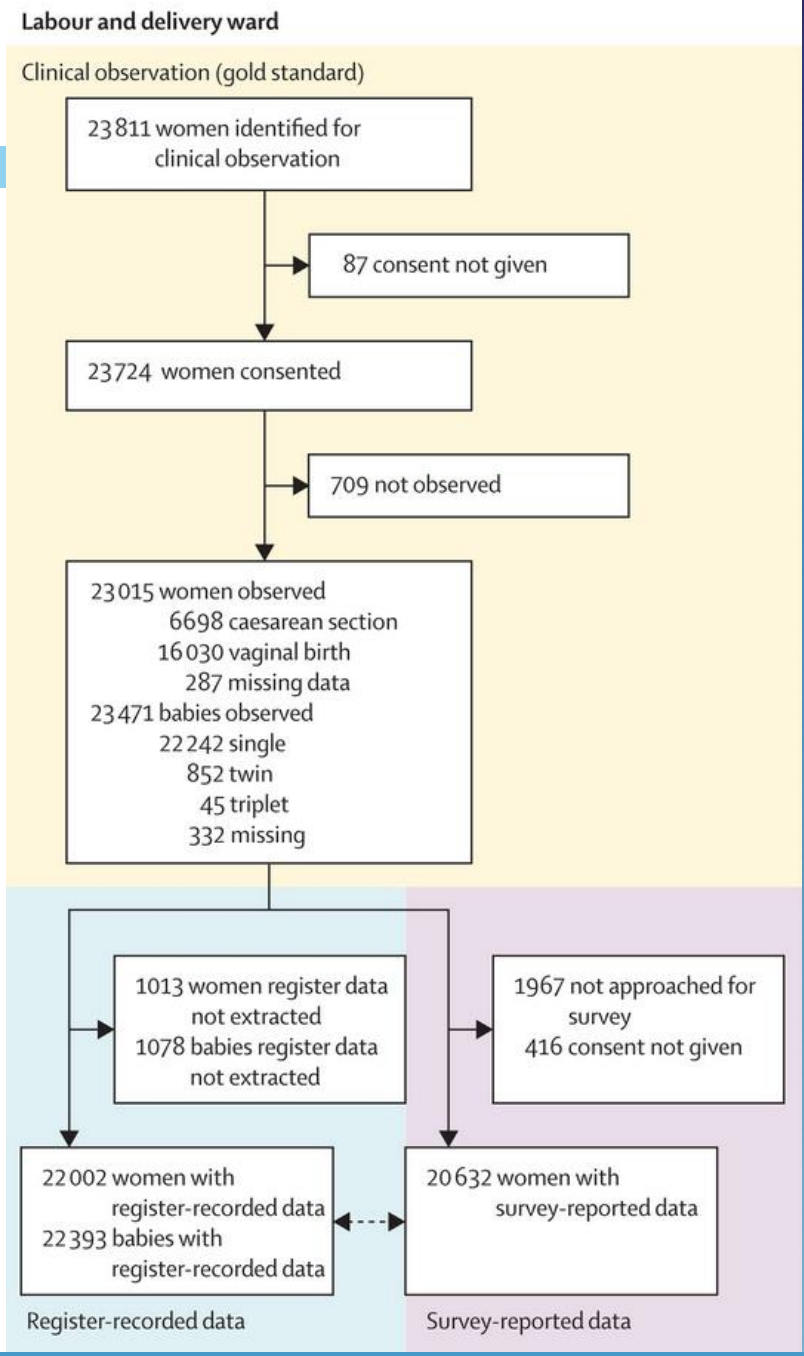
Labour Ward

5 public district/ tertiary hospitals: 2 in Bangladesh, 1 in Nepal, 2 in Tanzania

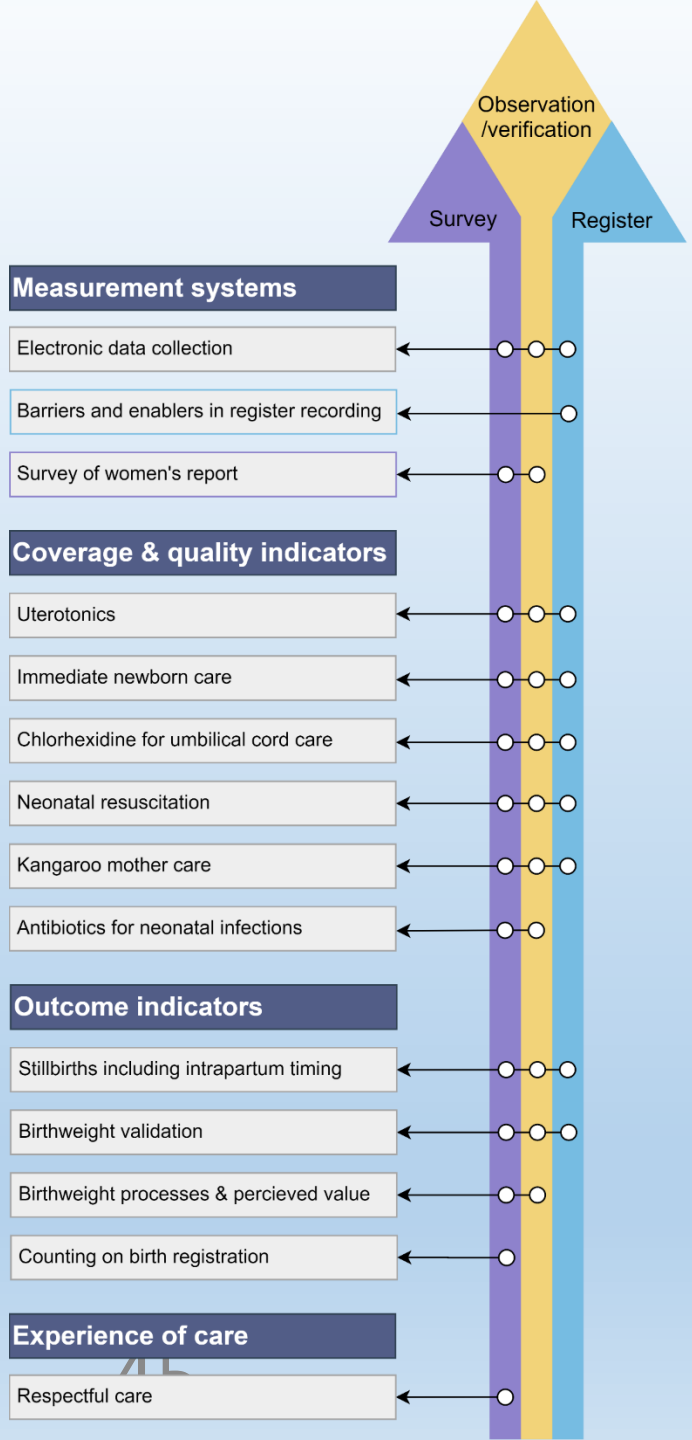
23,015 births observed

6,698 Caesarean sections

550 Stillbirths

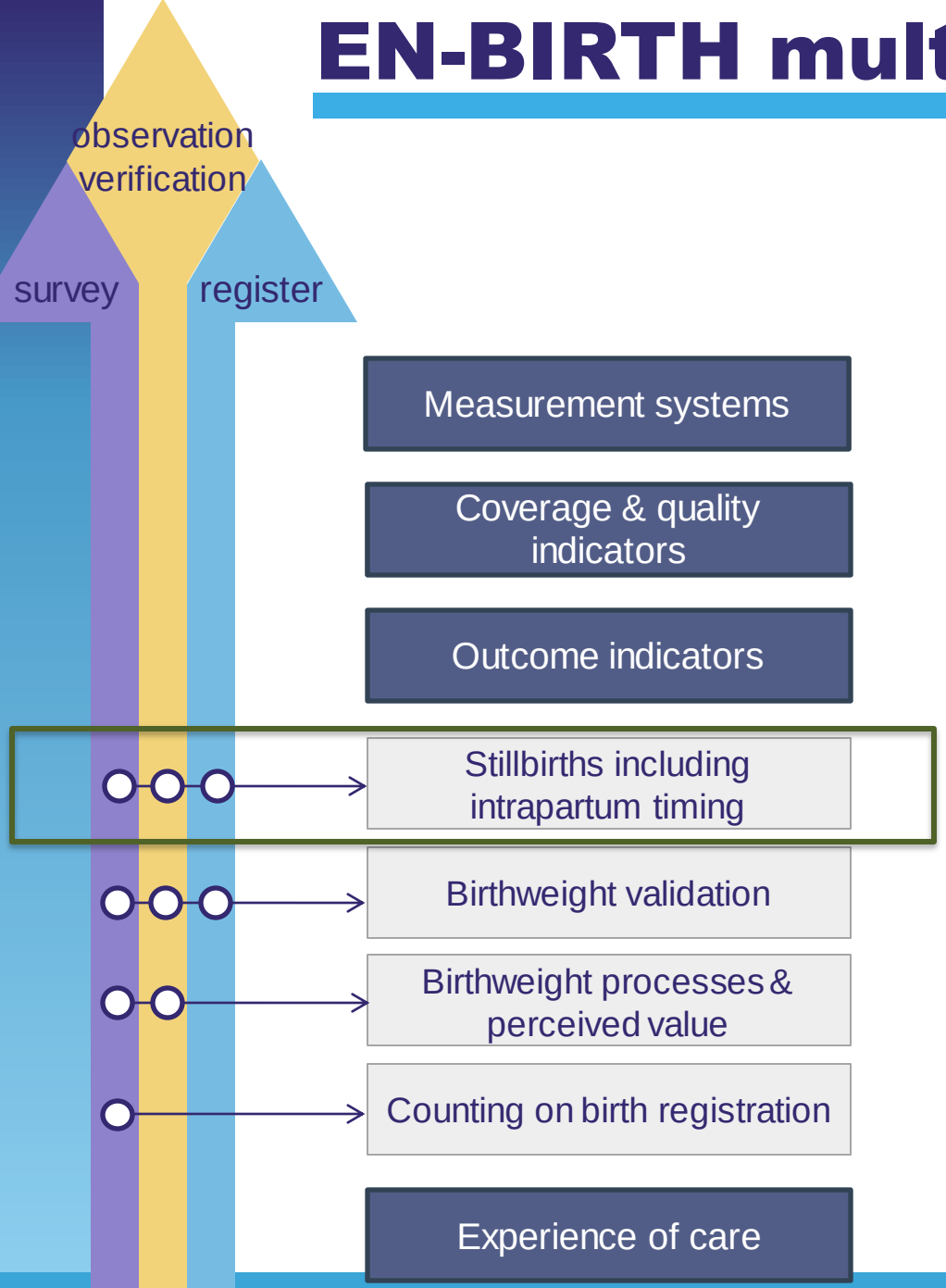


EN-BIRTH Analysis



PhD linkage

EN-BIRTH multi-country validation study



Peven et al. BMC Pregnancy and Childbirth 2021, 21(Suppl 1):226
https://doi.org/10.1186/s12884-020-03238-7

BMC Pregnancy and Childbirth

From Every Newborn BIRTH multi-country validation study: informing measurement of coverage and quality of maternal and newborn care

RESEARCH Open Access

Stillbirths including intrapartum timing: EN-BIRTH multi-country validation study

Kimberly Peven[1,2], Louise T. Day[1], Harriet Ruysen[1], Tazeen Tahsina[3], Ashish KC[4], Josephine Shabani[5], Stefanie Kong[1], Shafiqul Ameen[3], Omkar Basnet[6], Rajib Haider[3], Qazi Sadeq-ur Rahman[3], Hannah Blencowe[1†], Joy E. Lawn[1*†] and EN-BIRTH Study Group

Abstract

Background: An estimated >2 million babies stillborn around the world each year lack visibility. Low- and middle-income countries carry 84% of the burden yet have the least data. Most births are now in facilities, hence routine register-recording presents an opportunity to improve counting of stillbirths, but research is limited, particularly regarding accuracy. This paper evaluates register-recorded measurement of hospital stillbirths, classification accuracy, and barriers and enablers to routine recording.

Methods: The EN-BIRTH mixed-methods, observational study took place in five hospitals in Bangladesh, Nepal and Tanzania (2017–2018). Clinical observers collected time-stamped data on perinatal care and birth outcomes as gold standard. To assess accuracy of routine register-recorded stillbirth rates, we compared birth outcomes recorded in labour ward registers to observation data. We calculated absolute rate differences and individual-level validation metrics (sensitivity, specificity, percent agreement). We assessed misclassification of stillbirths with neonatal deaths. To examine stillbirth appearance (fresh/macerated) as a proxy for timing of death, we compared appearance to observed timing of intrauterine death based on heart rate at admission.

Results: 23,072 births were observed including 550 stillbirths. Register-recorded completeness of birth outcomes was > 90%. The observed study stillbirth rate ranged from 3.8 (95%CI = 2.0,7.0) to 50.3 (95%CI = 43.6, 58.0)/1000 total births and was under-estimated in routine registers by 1.1 to 7.3 /1000 total births (register: observed ratio 0.9–0.7). Specificity of register-recorded birth outcomes was > 99% and sensitivity varied between hospitals, ranging from 77.7–86.1%. Percent agreement between observer-assessed birth outcome and register-recorded birth outcome was very high across all hospitals and all modes of birth (> 98%). Fresh or macerated stillbirth appearance was a poor proxy for timing of stillbirth. While there were similar numbers of stillbirths misclassified as neonatal deaths (17/430) and neonatal deaths misclassified as stillbirths (21/36), neonatal deaths were proportionately more likely to be misclassified as stillbirths (58.3% vs 4.0%). Enablers to more accurate register-recording of birth outcome included supervision and data use.

(Continued on next page)

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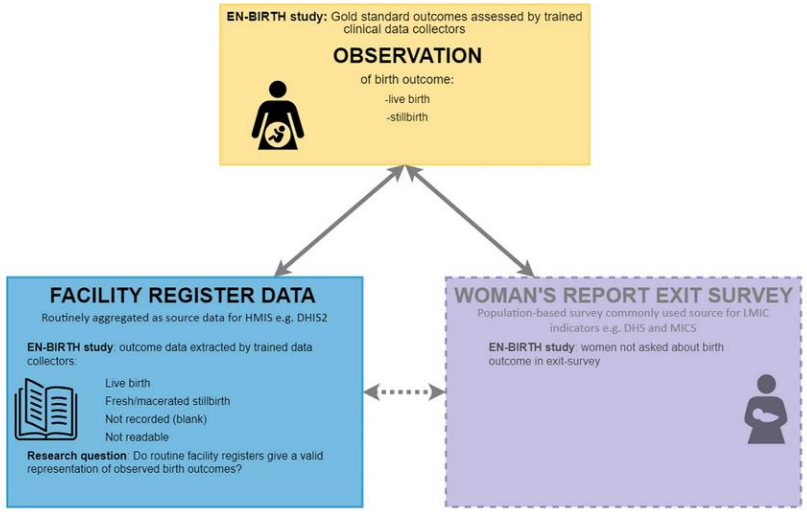
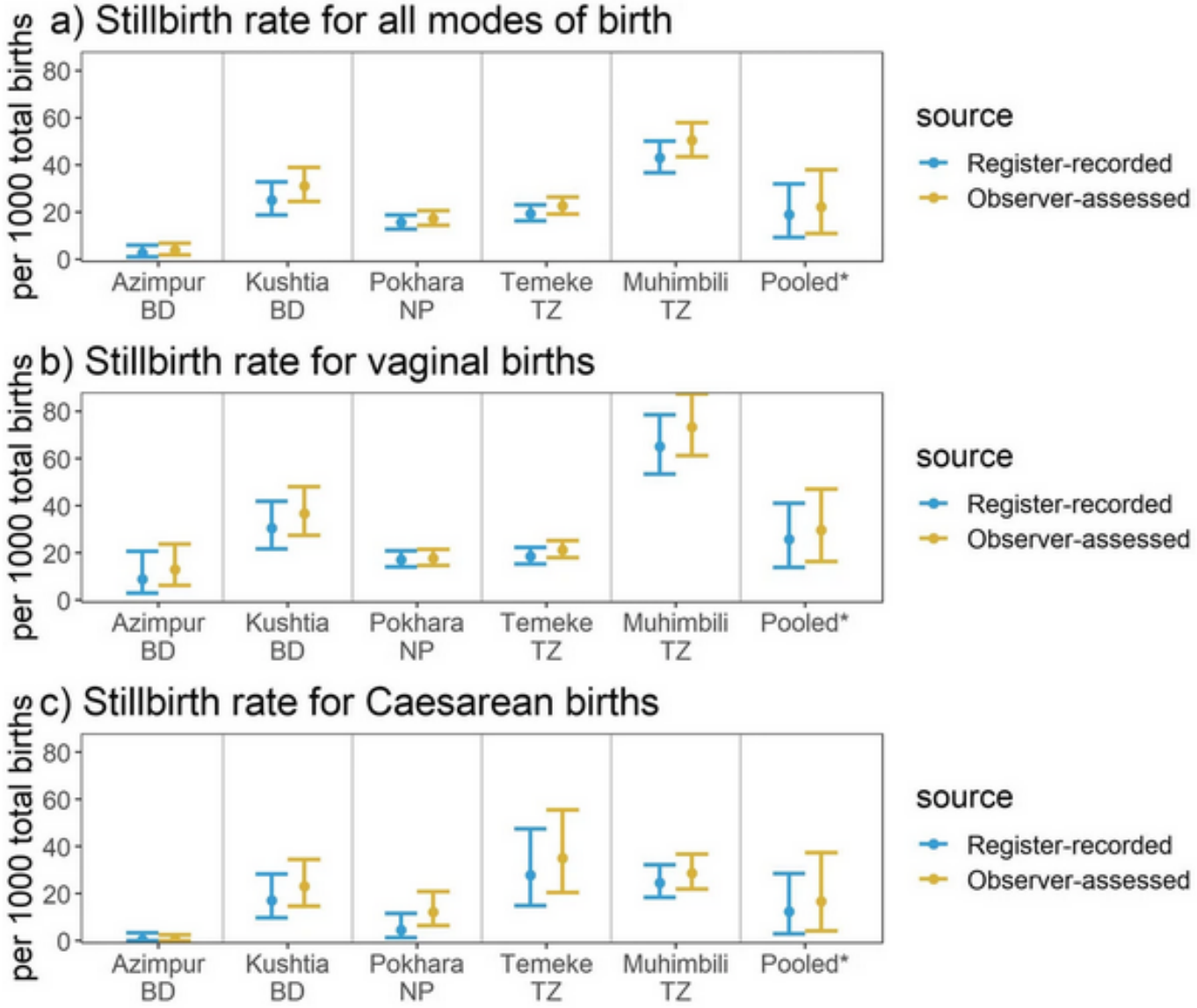
Stillbirth



Hospital Stillbirth rate:
5.8 – 50.3/ 1000 total births



Peven K, Day LT, Ruysen H, et al. Stillbirths including intrapartum timing: EN-BIRTH multi-country validation study. BMC Pregnancy Childbirth. 2021. https://bmcpregnancychildbirth.biomedcentral.com/track/pdf/10.1186/s12884-020-03238-7.pdf

Routine labour ward register data on stillbirths

- Data completeness high in all five hospitals, >90%
- Registers under-estimated the observed stillbirth rate by 1.1 to 7.4 per 1000 total births.
- High percent agreement (> 98%) and specificity (> 99%) with variable sensitivity (77.7–86.1%)

EN-BIRTH Objectives

1	**NUMERATOR** To determine validity for selected facility-based interventions for mothers and newborns (numerator) in terms of accuracy for recording in routine registers and for women's report in maternal survey
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Rigorous science to validate, not just adding multiple new indicators

Keeping end in mind, focus on use in HMIS and digital systems such as

Misclassification in the register?

Neonatal Death or Stillbirth?

- Only 38 misclassified register record
  - 17 of 430 stillbirths (4.0%) recorded as neonatal deaths
  - 21 of 36 neonatal deaths recorded as stillbirths.

Intrapartum/ Antepartum stillbirths?

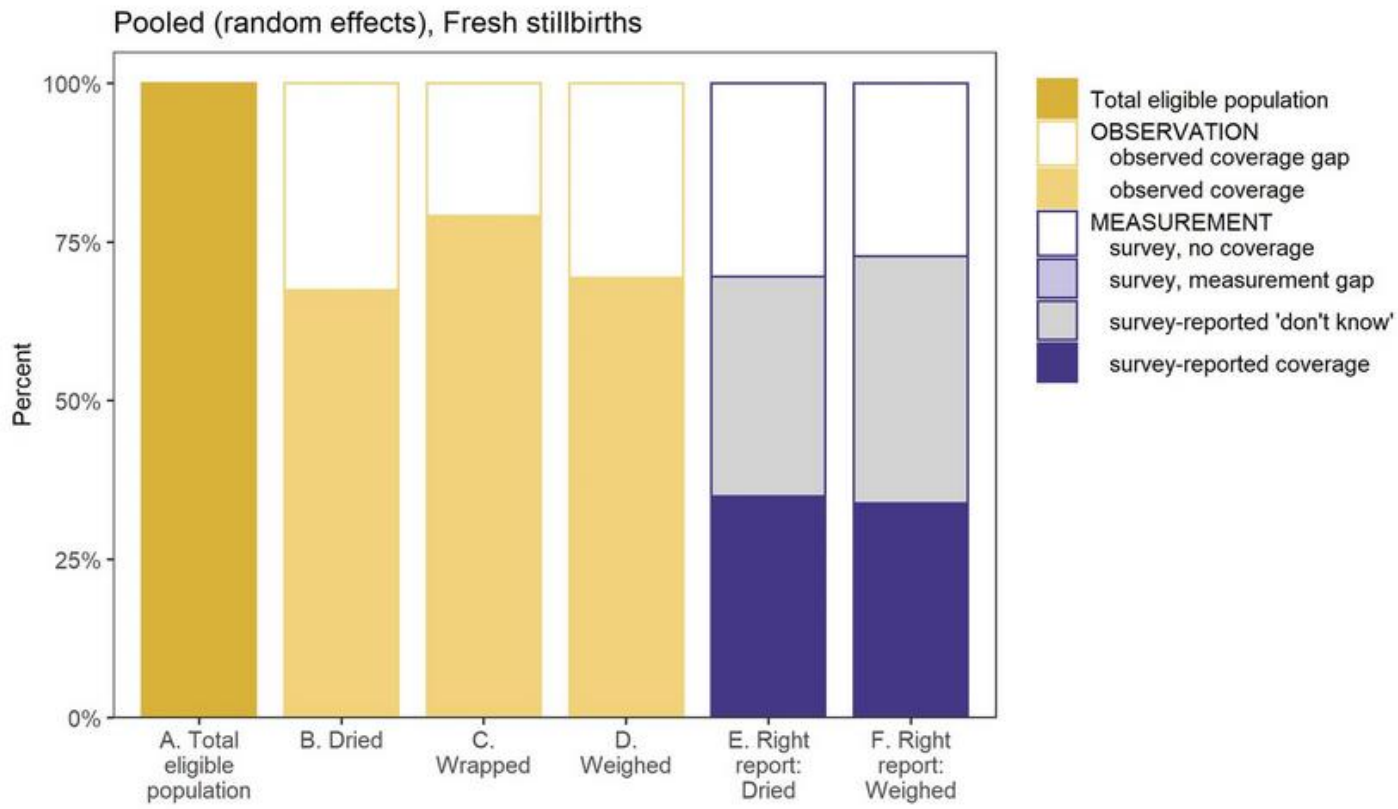
- Intrapartum - fetal heart heard on admission – 5 - 41% were recorded as macerated stillbirths

Fresh / macerated stillbirths inaccurate for intrapartum/ antepartum

Respectful care

- Livebirths all hospitals
  dried (>98%)
  wrapped (>98%)
  weighed (>98%)

- Stillbirths in Bangladesh
  dried (31.3–42.9%)
  wrapped (28.6–35.5%)
  weighed (21.9–28.6%)



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2	**DENOMINATORS** To compare different denominator options for each of the interventions
3	**CONTENT & QUALITY OF CARE** To evaluate priority questions for each intervention with respect to effective coverage (e.g. content, timing, completion rates, etc.)
4	**BARRIERS AND ENABLERS** To assess barriers and enablers to routine register documentation

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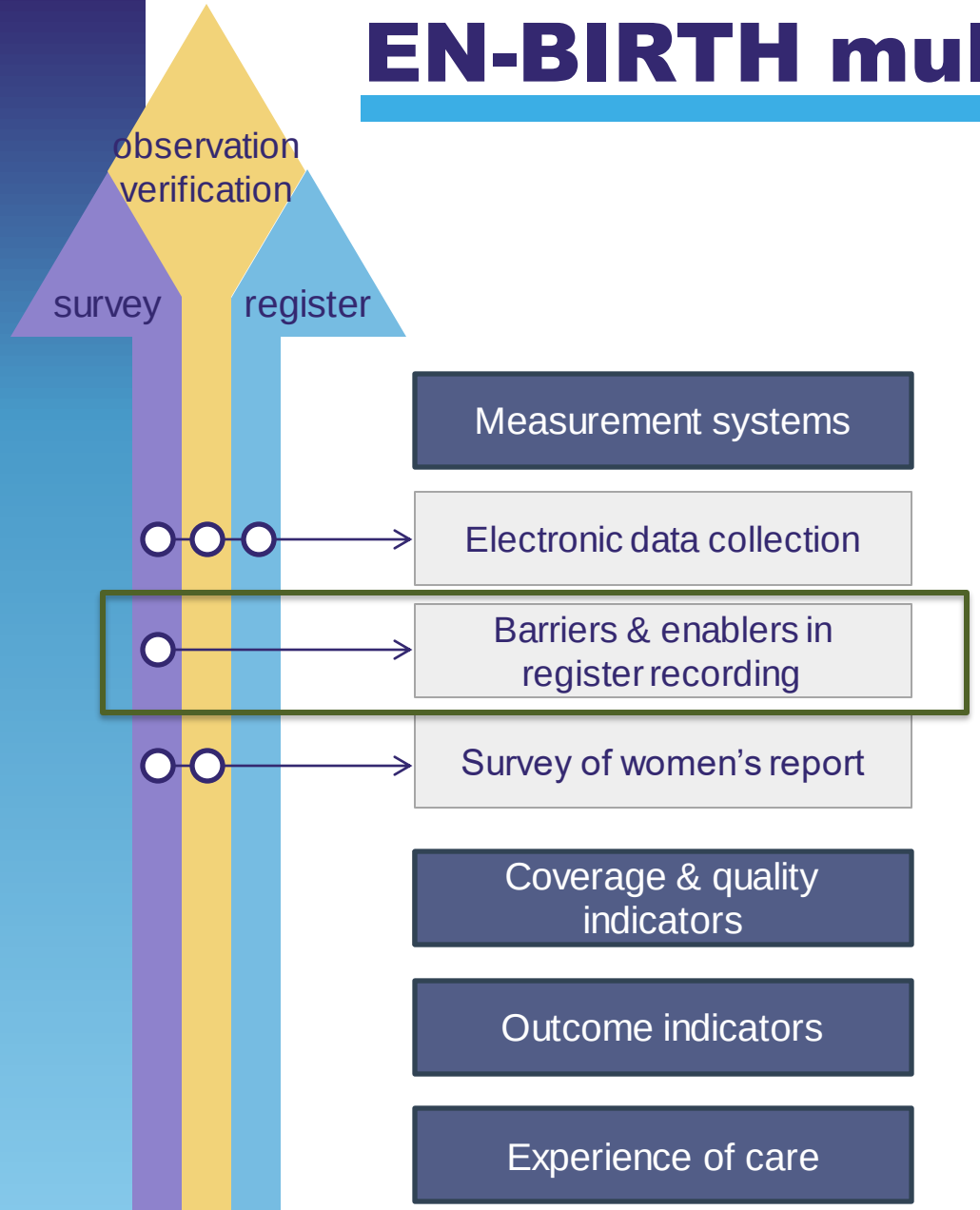
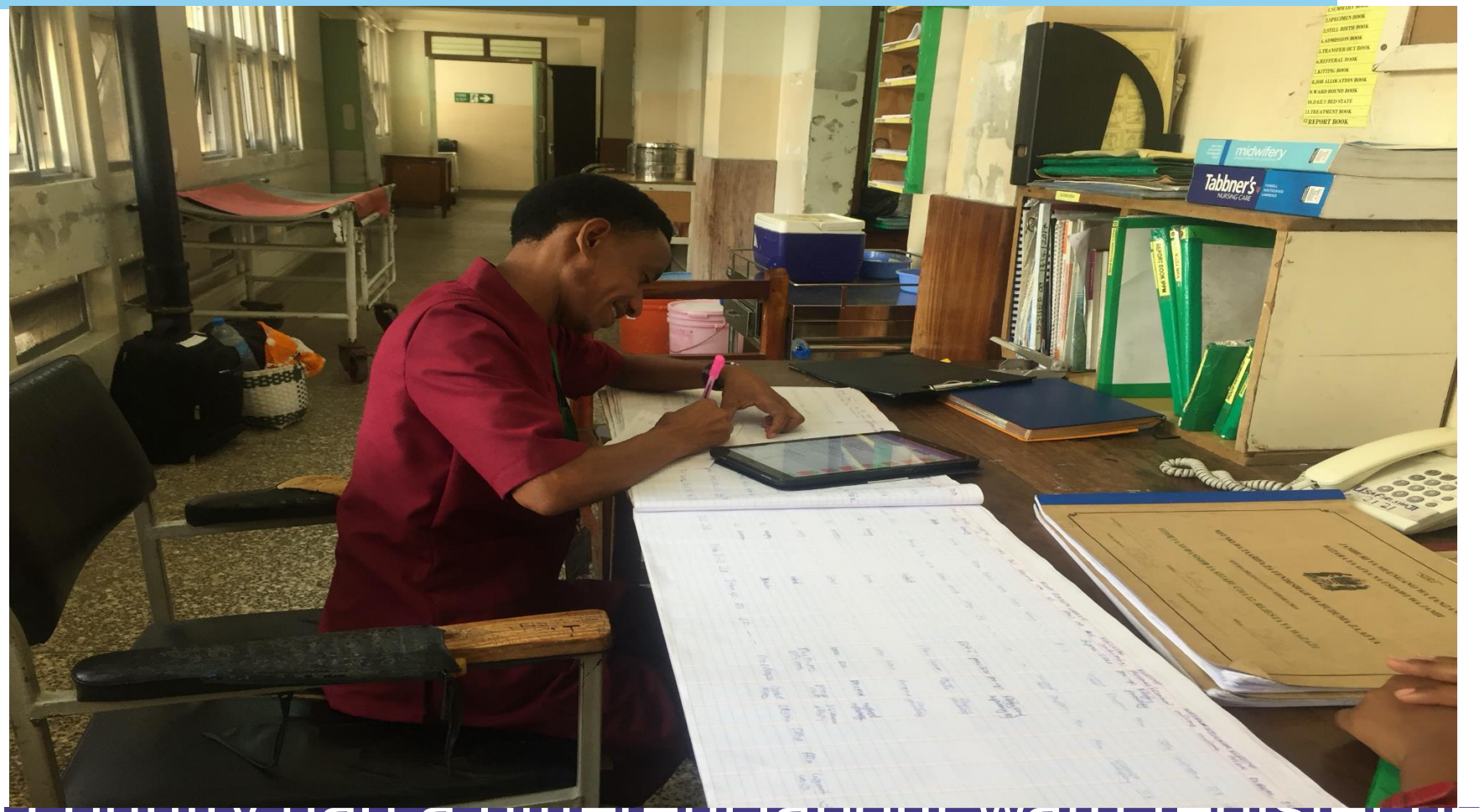
EN-BIRTH multi-country validation study



Informing measurement of coverage and quality of maternal and newborn care

What was found?



Each country had a different labour ward register design.
Coverage indicator data elements captured in 2 of the 3 countries

Register design

- Specific columns
- Non-specific columns
- No column
- Instructions/conventions

Recording burden

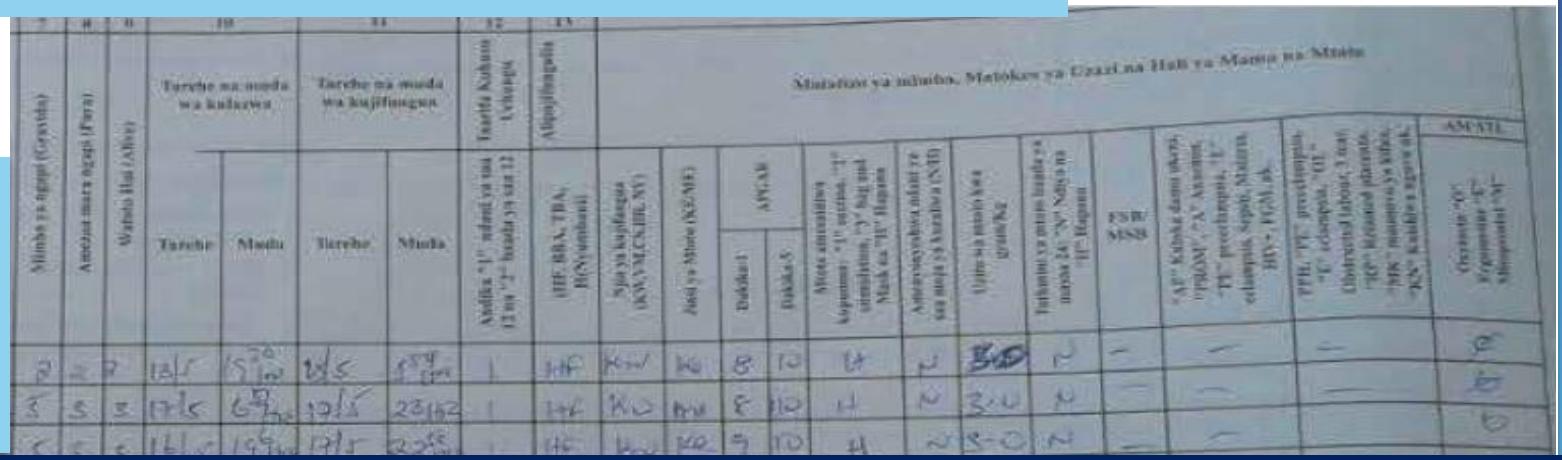
- Multiple documents in which care is documented

Register structure

Printed formal

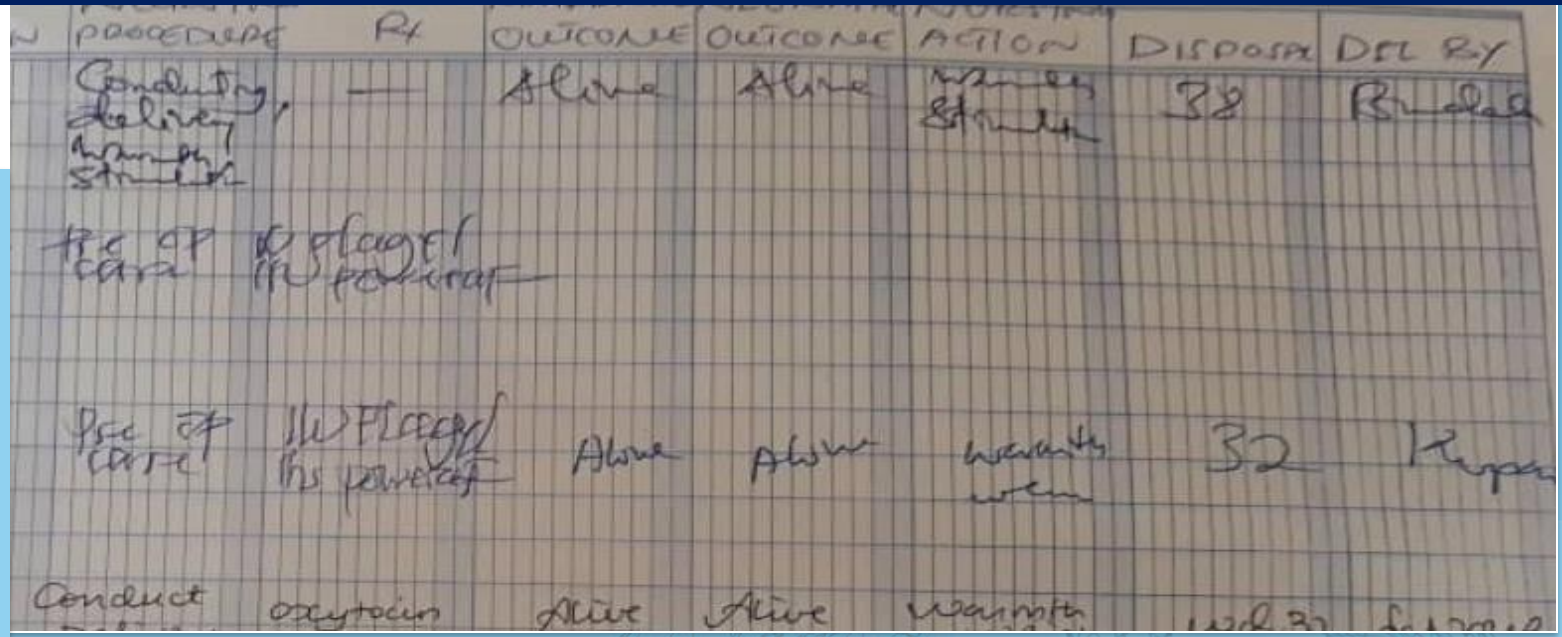
Many columns:

- Nepal = 35
- Tanzania = 48
- Bangladesh = 58



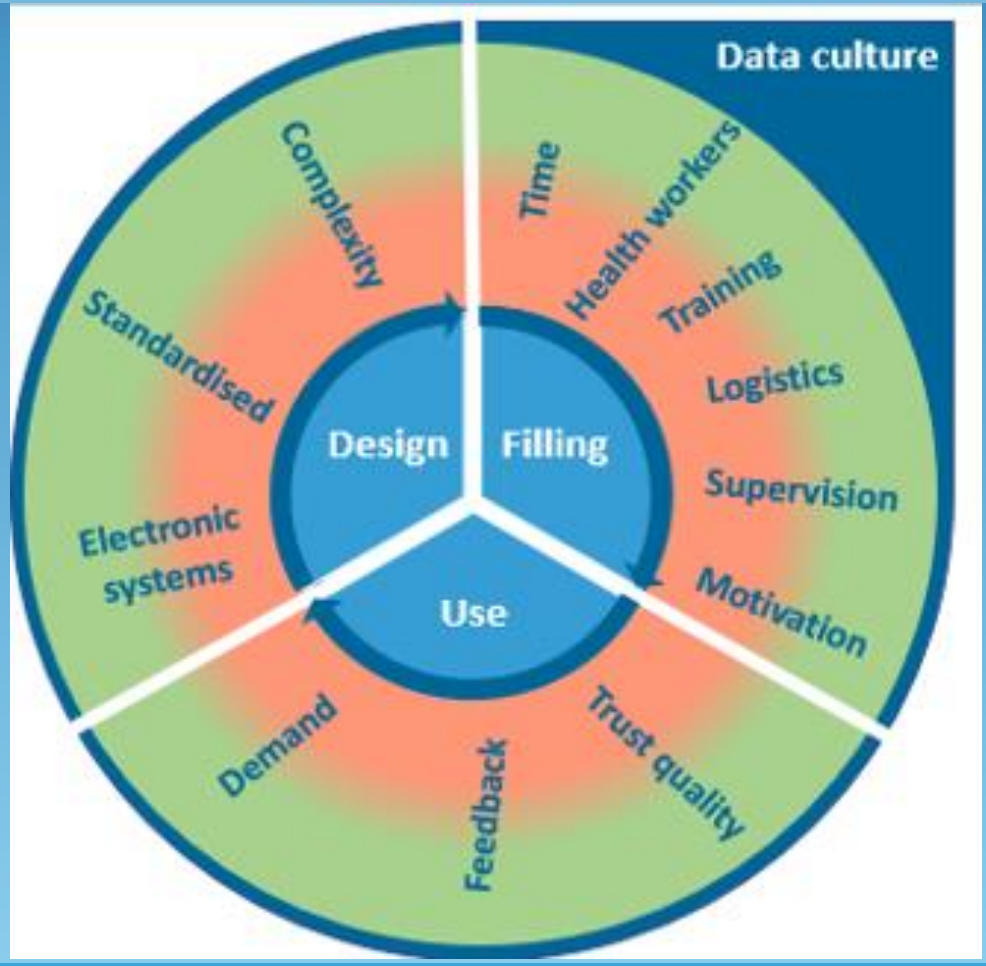
Hand-written informal

Many registers



Barriers and Enablers

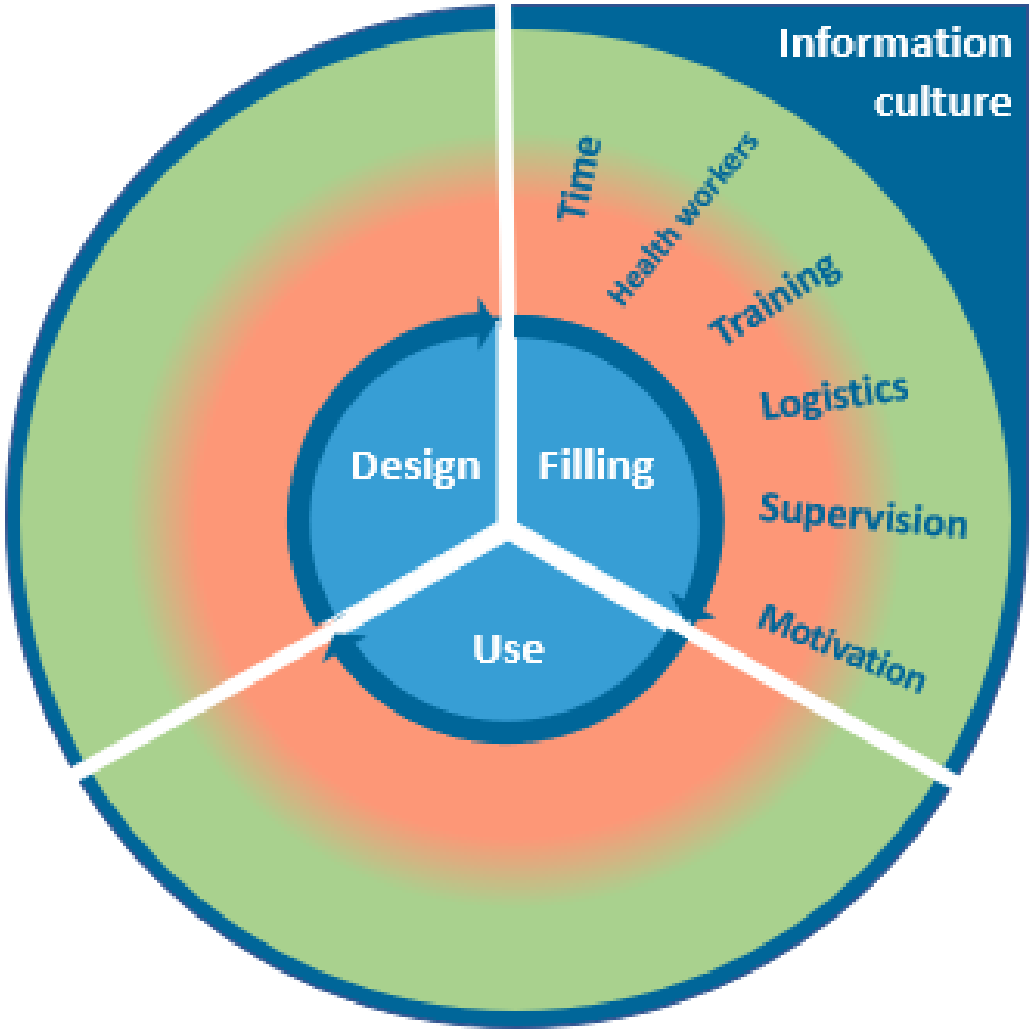
- Hospitals with identical register design differed in completeness and accuracy.
- Stillbirth qualitative findings suggest supervision, perceived usefulness of data and feedback contribute to improved quality of register data.



Register filling

Time

"In an eight hour shift, if I have a large number of patients, I may spend more time in documentation than the time I spend in attending the patients"
[IDI_L&D_Nurse, MNH, TZ]

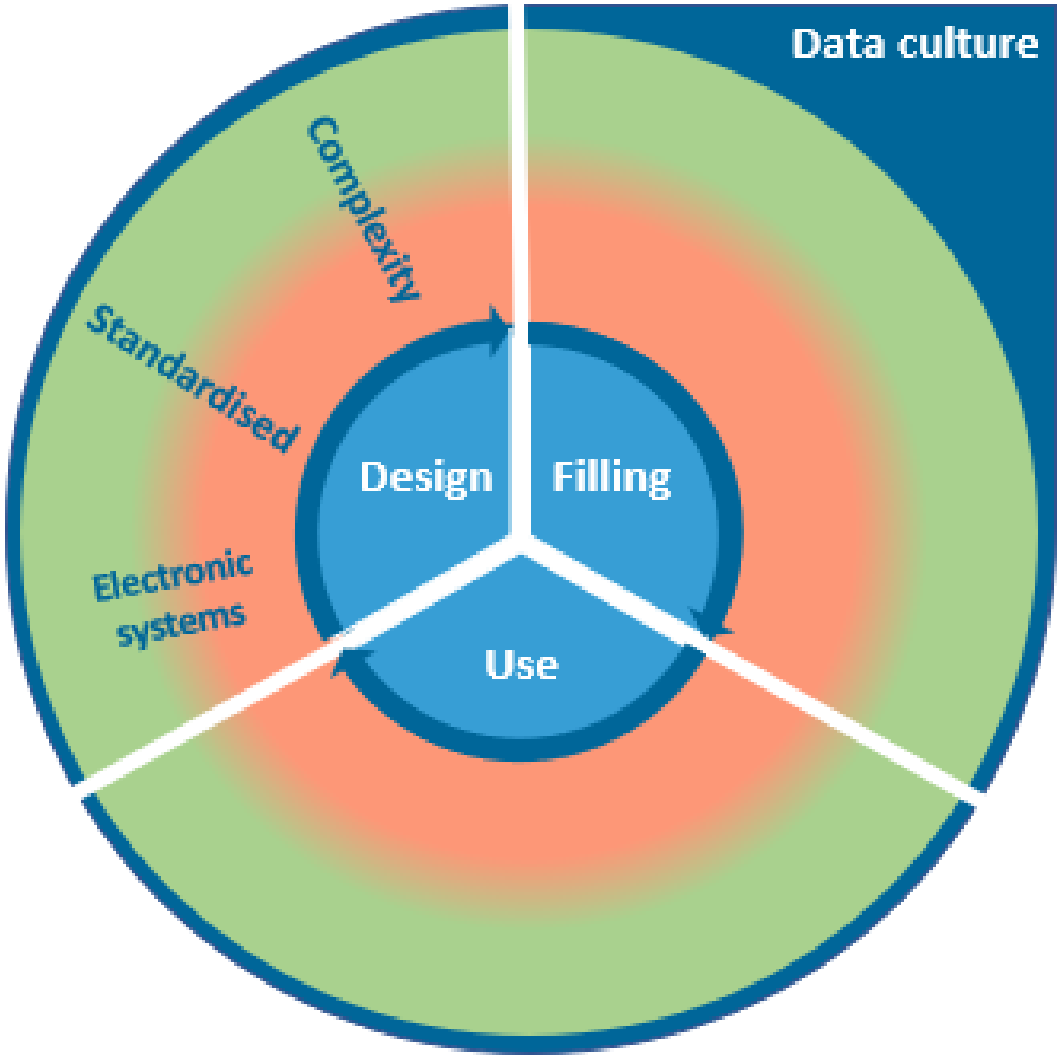


Register Design

Standardisation

"I enter entire patient's information….sometimes I have to add some columns where I can include some data that I know is important…..to help me with my end of the month report. So if I were to just follow the register it means some data could be missed and that's the challenge that I encounter"

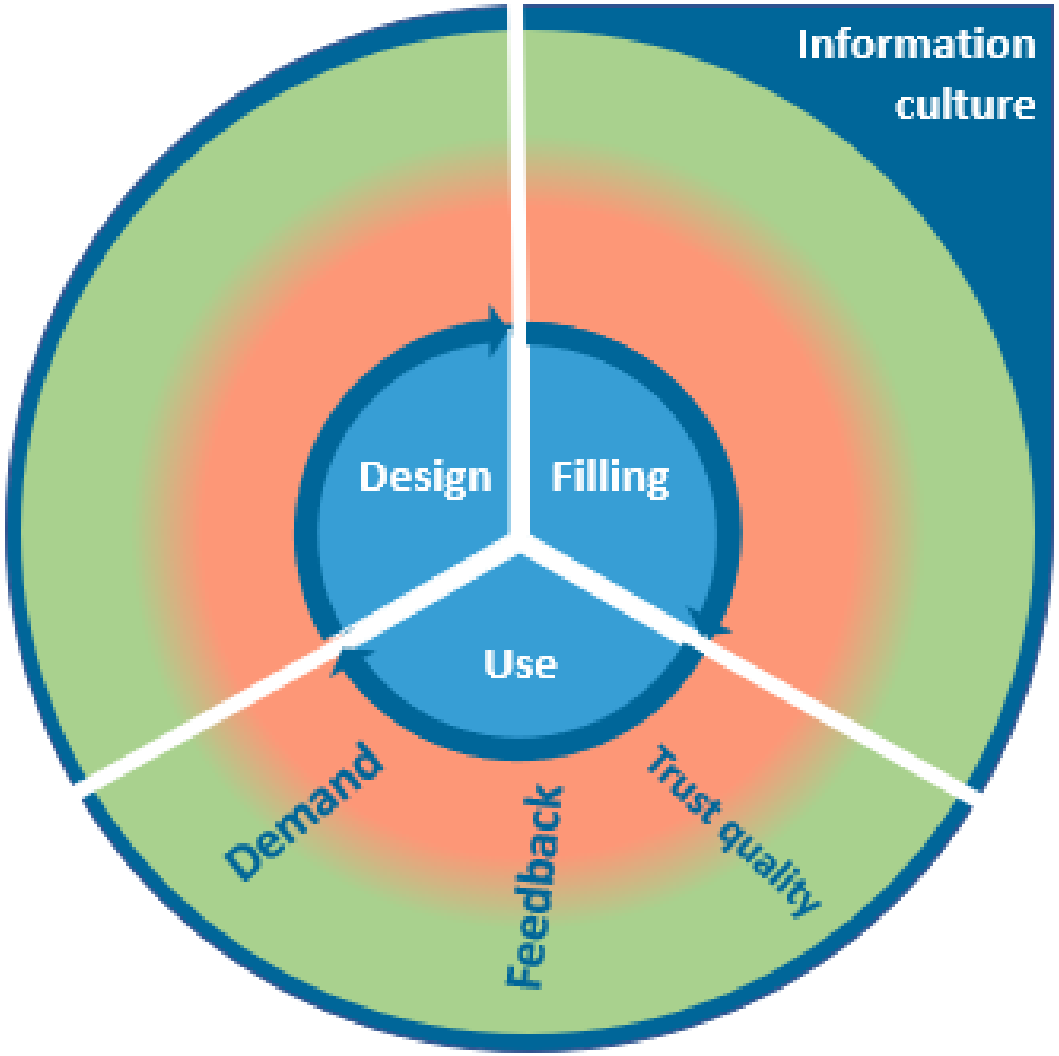
[FGD_Nurse_MNH_TZ]



Register Use

Feedback

"I haven't got any feedback from them (HMIS) about documentation. There sits monthly meeting in hospital with data people. We don't usually participate in that meeting."
[IDI_L&D_Nurse, BD]



EN-BIRTH study

1. Why?
2. What was done?
3. What was found?
   - Survey
   - Register
4. What next in measurement and research?

Day LT, Ruysen H, Gordeev VS, et al: “Every Newborn-BIRTH” protocol: observational study validating indicators for coverage and quality of maternal and newborn health care in Bangladesh, Nepal and Tanzania. Journal of Global Health 2019, 9(1).

What next register data?

What next register data?

Now

Start using register data with feedback loops

What next register data?

Now

Start using register data with feedback loops

Next in research

Improve data quality

What next register data

Now

Start using register data with feedback loops

Next in research

Improve data quality

- Register standardised design, optimising results
- Implementation research to improve data quality and use

What next register data

Now

Start using register data with feedback loops

Next in research

Improve data quality

- Register standardised design, optimising results
- Implementation research to improve data quality and use

Not useful

Blanks

Too much burden on health workers

Non standardized

Stillbirth - What next and research gaps?

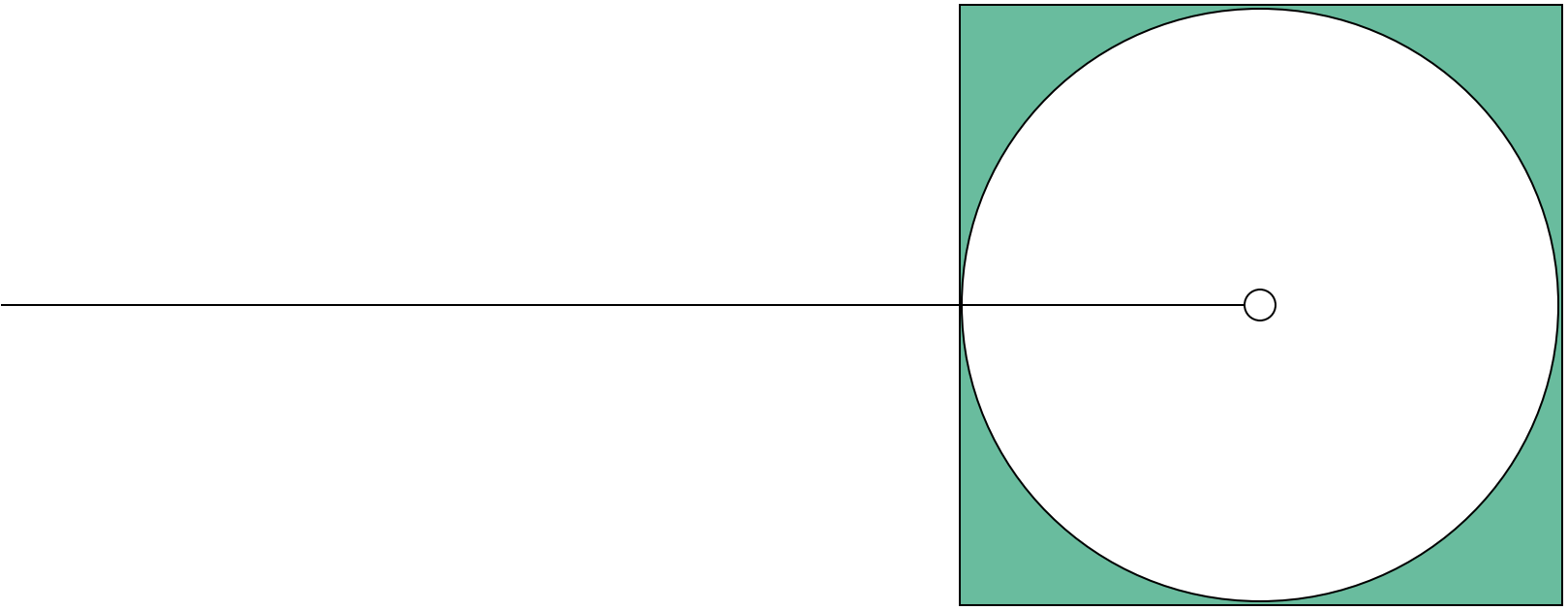
- Linkages to:
  - Civil and vital registration systems (CRVS) (birth/death certificates)
  - Maternal and Perinatal Death Surveillance and Response (MPDSR)
- Bereavement support is understudied in LMIC, but important to care for affected families, communities, and caregivers.

Stillbirth - What next and research gaps?

- Reducing stillbirth/neonatal death misclassification requires:
  - devices and systems to easily measure and record heart rate
  - training in timely newborn care, recognising signs of life, and resuscitation
- Recording fetal heart rate on admission is crucial for every woman and her baby
  - Fresh/macerated inaccurate

Stillbirth - What next and research gaps?

- Facility-stillbirths were accurately captured, but under-used for national and global accountability.
- Register design, staff training, supervision and data culture could further improve data quality
- Implementation research is required including flow in Health Management Information Systems (HMIS).



Advancing Routine Health Management Information Systems (HMIS) to Deliver for Every Newborn

Data for Impact
With LSHTM
With icddr,b

Every Newborn BIRTH Indicators Research Tracking in Hospitals (EN-BIRTH) Phase 2

LSHTM, icddrb, IHI July 2021

EN-BIRTH Phase 2

Data for Impact
With LSHTM
With icddr,b

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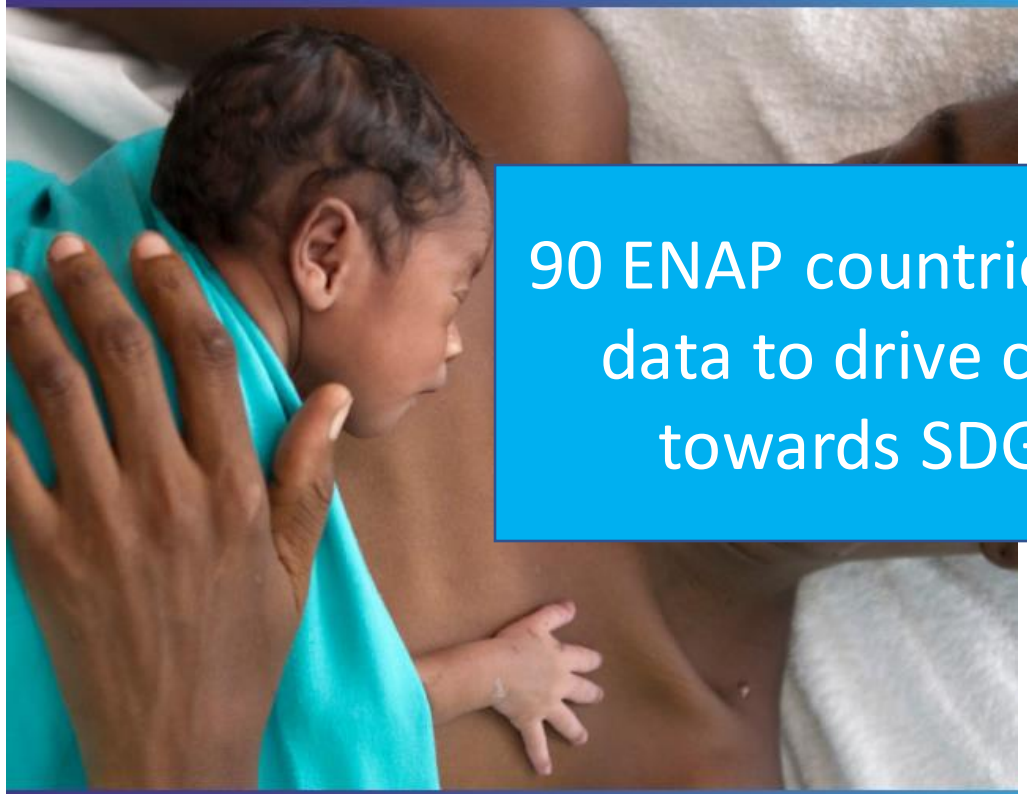
EN-BIRTH Phase 2 purpose

- EN-BIRTH Phase 2 study will assess whether the validated indicators are feasible to implement as the next step to promote broad HMIS uptake in low- and middle- income countries (LMIC).

- The main output of this work will be a toolkit to enable other high-burden countries to implement and use selected newborn indicators in national HMIS/DHIS2.

EVERY NEWBORN PROGRESS REPORT



2019

World Health Organization unicef

90 ENAP countries to use data to drive change towards SDG 3.2

For those 34 countries with the highest burden of newborn mortality and stillbirths, only two countries report having all four indicators in HMIS; the Democratic Republic of the Congo and Togo. Ethiopia, India and Nigeria report that work is underway to include all four indicators.

Table 13 shows the status of HMIS indicators in high burden countries.

Table 13. Status of HMIS research in the 34 highest burden countries

Highest burden countries	Indicator for newborns that benefited from KMC	Indicator for use of antenatal corticosteroids for fetal lung maturation	Indicator for newborn resuscitation performed	Indicator for treatment of neonatal sepsis
India	In process	Yes	Yes	Yes
Nigeria	Yes	In process	In process	In process
Pakistan	No	Yes	No	Yes
Democratic Republic of the Congo	Yes	Yes	Yes	Yes
Ethiopia	Yes	In process	Yes	Yes
China	No	No	No	No
Indonesia	No	No	No	No
Bangladesh	Yes	No	Yes	No
United Republic of Tanzania	No	No	Yes	Yes
Afghanistan	No	No	No	Yes
Sudan	In process	No	In process	Yes
Uganda	In process	In process	Yes	In process
Angola	No	No	No	No
Philippines	No	No	No	No
Kenya	In process	No	In process	In process
Mozambique	No	No	Yes	No
Côte d'Ivoire	No	No	Yes	No
Egypt	No	No	No	No
Mali	Yes	No	Yes	Yes
Niger	No	No	No	Yes
Somalia	No	No	No	No
Central African Republic	No	No	No	No
South Sudan	In process	No	Yes	Yes
Lesotho	No	No	No	Yes
Guinea-Bissau	No	No	No	No
Chad	No	No	No	No
Mauritania	No	No	No	No
Sierra Leone	Yes	No	No	No
Benin	No	No	Yes	No
Djibouti	No	No	Yes	Yes
Comoros	No	No	No	No
Equatorial Guinea	No	No	No	No
Togo	Yes	Yes	Yes	Yes
Yemen	In process	In process	In process	In process

KMC: kangaroo mother care; HMIS: health management information systems

What next and research gaps?

Routine labour ward register data can be used now to contribute vital data around the time of birth.

Overcoming barriers to register recording would enable frontline health workers, especially midwives, be valued for the register data they collect, to improve data quality and importantly also use those data to improve quality of care for the women and babies they care for.

Caesarean section negatively affected accuracy of both survey-reported and register-recorded coverage.

Further research is required regarding the measurement implications of increasing caesarean section rates.

Paper : Donat Shamba*, Louise T Day*, Sojib Bin Zaman, Avinash K Sunny et al. Barriers and enablers to labour ward register data collection and use: EN-BIRTH multi-country validation study [IN PRESS]

What next and research gaps?

Valid data alone will not save lives.

Data need to be used by health-care professional caring for women and their babies and by policy makers and governments to invest and transform care, enabling universal health coverage as a reality that can be measured and improved.

Two-way feedback between HMIS levels is critical to improve performance and accurately track progress towards agreed health goals.

Implementation research is required on interventions to standardise labour ward register designs, and the processes for filling them with regular data quality review.

EN-BIRTH team

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Tanzania:
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Finally, and most importantly, we thank the women, their families, the health workers and data collectors

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www.data4impactproject.org

Thank you

Thanks to

#EN_BIRTH

collaborative group

Find the papers and other materials at

Bit.ly/EN_BIRTH

BMC Pregnancy & Childbirth

Funded by CHILDREN'S INVESTMENT FUND FOUNDATION

#everynewborn
#endstillbirths

GLOBAL FINANCING FACILITY

Improving monitoring and data systems to count and account for stillbirths

Maletela Tuoane
Senior Health Specialist, Civil Registration and Vital Statistics
Global Financing Facility, World Bank
@MaletelaTuoane

July 29, 2021

Importance of counting stillbirths

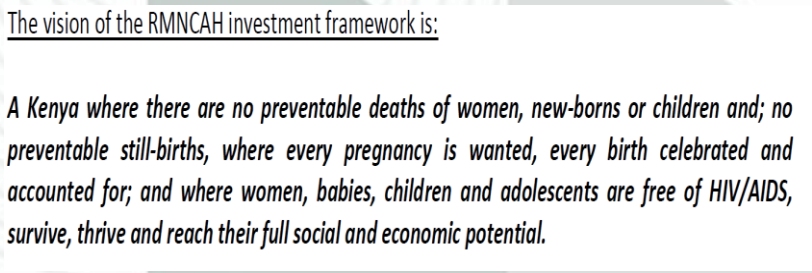
- 56 countries are not on track to reach the stillbirth target (≤12 per 1,000 total births)
- Recommended as a high priority vital event, as are live births & deaths
  - Recognized as a preventable public health problem
  - Assists in determining health conditions and risk factors that may affect pregnancy outcomes
  - Recommended that both stillbirth and perinatal death rates are tracked alongside neonatal mortality rates
  - Important to collect data that will enable the burden of stillbirths to be more accurately estimated
- Considerations on definitions: country, sources

Stillbirths can be counted

- Country systems
  - Population-based surveys
  - Routine systems:
    - (Maternal and) Perinatal Death Surveillance and Review systems (health facility & community events)
    - Health Management Information System, Stillbirth Registers
    - Civil Registration and Vital Statistics, Sample Registration System, including Health and Demographic Surveillance Systems
- Other sources
  - Report of the UN Inter-agency Group for Child Mortality Estimation
- Determination of causes of death (more challenging)
  - Medical certification of causes of death
  - Verbal autopsy, social autopsy

Stillbirths in the GFF agenda

- 30 GFF-supported countries are off track to reach the stillbirth targets
- Reducing preventable stillbirths included in some RMNCAH-N Investment Cases (e.g., Kenya)


The vision of the RMNCAH investment framework is:

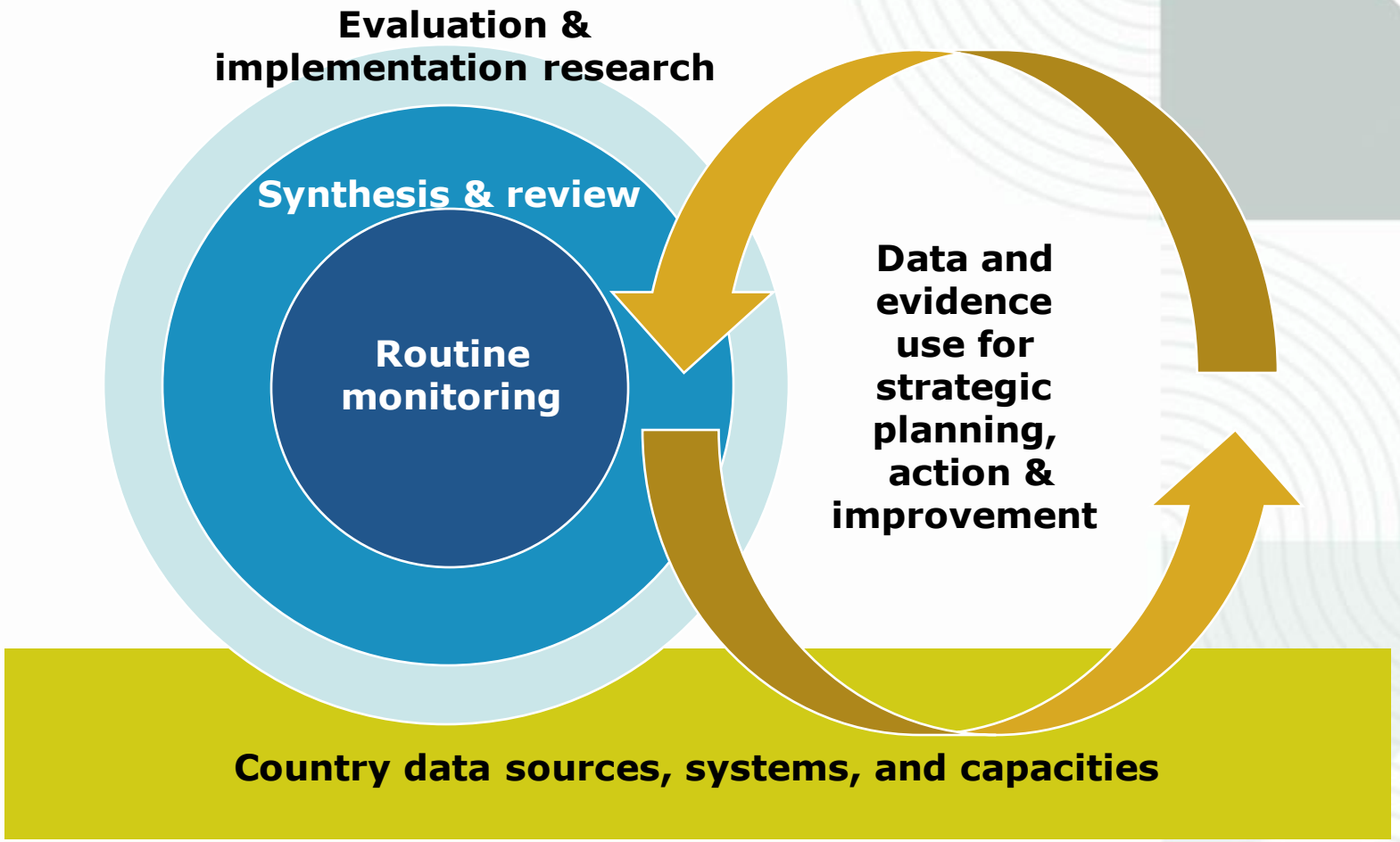
A Kenya where there are no preventable deaths of women, new-borns or children and; no preventable still-births, where every pregnancy is wanted, every birth celebrated and accounted for; and where women, babies, children and adolescents are free of HIV/AIDS, survive, thrive and reach their full social and economic potential.

- Currently not a prioritized vital event in the CRVS agenda, and no GFF supported country reports data on stillbirths from the CRVS system)
  - Nigeria: compulsory to register stillbirths; Sierra Leone: stillbirths must be notified to the civil registration authority; Rwanda: stillbirths not to be declared to civil registrar; Uganda: stillbirths not covered in civil registration laws
- GFF has initiated activities to revitalize and highlight the importance of stillbirths

GFF results strategy

Vision: Help strengthen country systems, sharpen focus on measurable outcomes, generate learning, inform improvements and strengthen accountability

GFF activities build upon country systems and aim to contribute to strengthening them



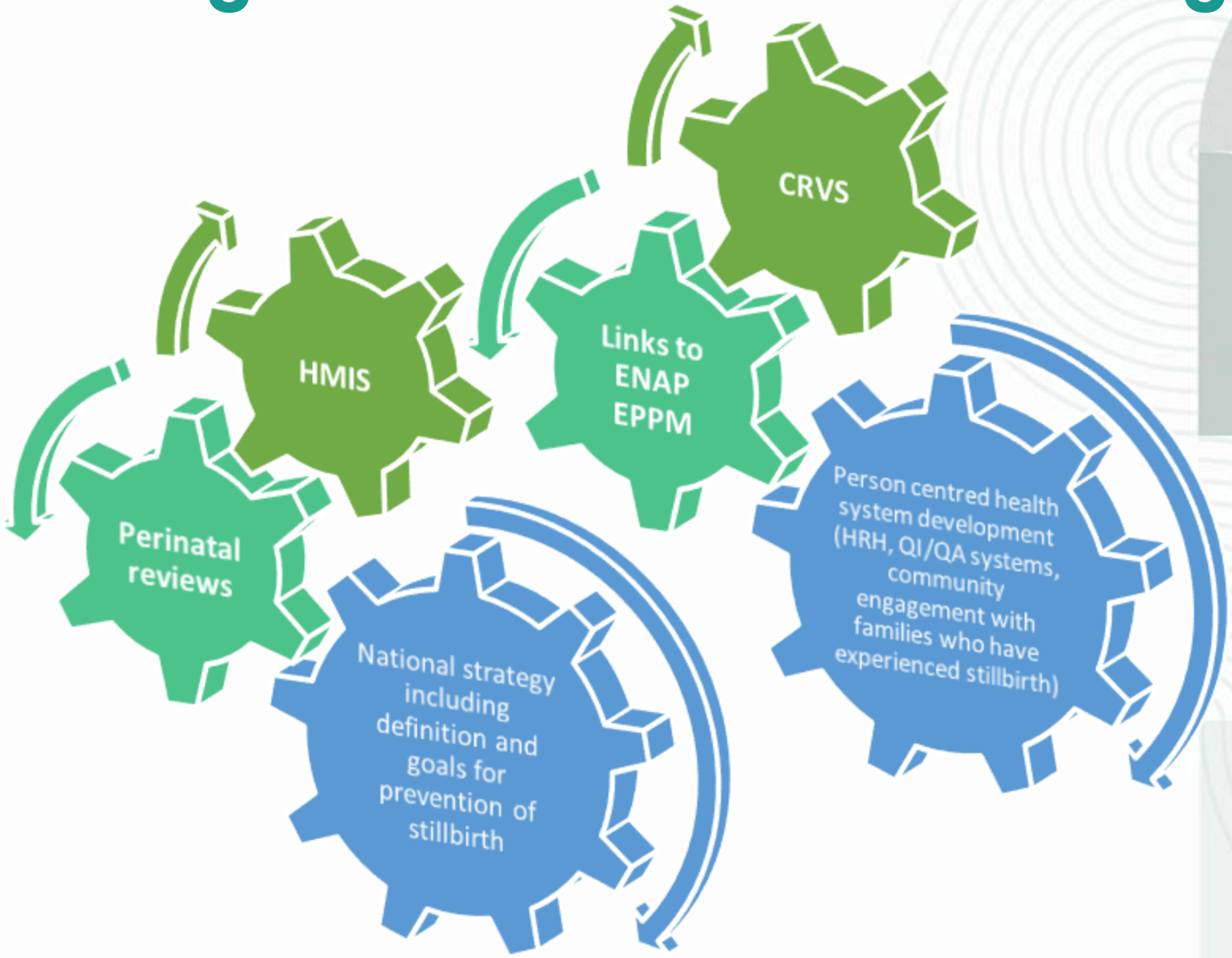
Roadmap for stillbirth reporting

- Through the Country Platform, undertake dialogue and stakeholder mobilization on the importance of prioritizing:
  - Reducing preventable stillbirths;
  - Improvements in data systems for reporting and monitoring stillbirths
- Including stillbirths in RMNCAH-N Investment Cases and other country-specific priorities
  - Situational analysis of the status of stillbirths, perinatal and neonatal mortality (trends, subnational data, gender)
  - Assessment of data sources on stillbirth
  - Prioritization of activities to improve availability, quality and use of data quality on stillbirths in national reporting systems

Roadmap for stillbirth reporting and responding

- Country context specific:
  - *Where no reporting is happening*:
    - Support national guidelines for stillbirth inclusion,
    - amend laws to incorporate stillbirths in the CRVS system,
    - look for opportunities to integrate stillbirth reporting in existing systems (e.g., MPDSR, HMIS,)
  - *Where stillbirth reporting is routine*:
    - Strengthen quality, completeness, analysis and use of the data
- All settings
  - Data use to determine causes of stillbirths, monitor and prevent future stillbirths (MPDSR, health service quality, supporting families who have experienced stillbirth

Interlinking actions – from measuring to managing



Want more resources?

1. *UN IGME stillbirth estimates 2020*
2. *Lancet Ending preventable stillbirth series*
3. *EN BIRTH study*
4. *WHO health sector contributions to civil registration (June 2021 and includes a chapter on stillbirth*
5. *CRVS toolkit with chapter on stillbirth*

GLOBAL FINANCING FACILITY

Counting 2 million stillbirths annually: seizing missed opportunities for impact and investment

July 29, 2021

We welcome your feedback, please take a few minutes to fill in the survey form https://forms.office.com/r/hBnRzSaZKW

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