

Maternal, Newborn and Child Health in Africa

*‘The test of a civilization is in the way it cares for
its helpless members’ Pearl S Buck*

Aine s/o Mbabazi

- 3 years old (Year 2000)
- Mbarara District, South Western Uganda
- Rushere District hospital

+++++

Halima

- 15 year old-PG (2017)
- North Eastern Kenya (Kenyan Somali)

????????

*With great power comes
great responsibility*

- Spider Man

*With great privilege comes great
responsibility...?*

MATERNAL, NEWBORN AND CHILD HEALTH IN AFRICA

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Outline

- We will give a global and then Africa perspective
- Major focus on maternal and newborn

GLOBALLY in the Sustainable Development Goal era



**No woman
should die
while giving
life**

303,000 die



**No
baby
stillborn**

2.6 million die



**No
newborn
born to die**

2.6 million die



**No child
dying or
stunted**

3.0 million die



**Healthy
Adolescents**

1.2 million die

Slower than for child or maternal mortality

**~10 million deaths of women and children, > 50% related to pregnancy and birth
Requires all types of research and also much more visibility**

Africa is 13% of the global population but carries the greatest burden



**No woman
should die
while giving
life**

201,000 die



66% of global total



**No
baby
stillborn**

1.05 million die



41% of global total



**No
newborn
born to die**

1.04 million die



40% of global total

**2.3 million
> 50% global
total**



**Unless trajectories change, by 2030 Africa will have
>75% of global maternal deaths plus >66% of newborn deaths & stillbirths**

Where?

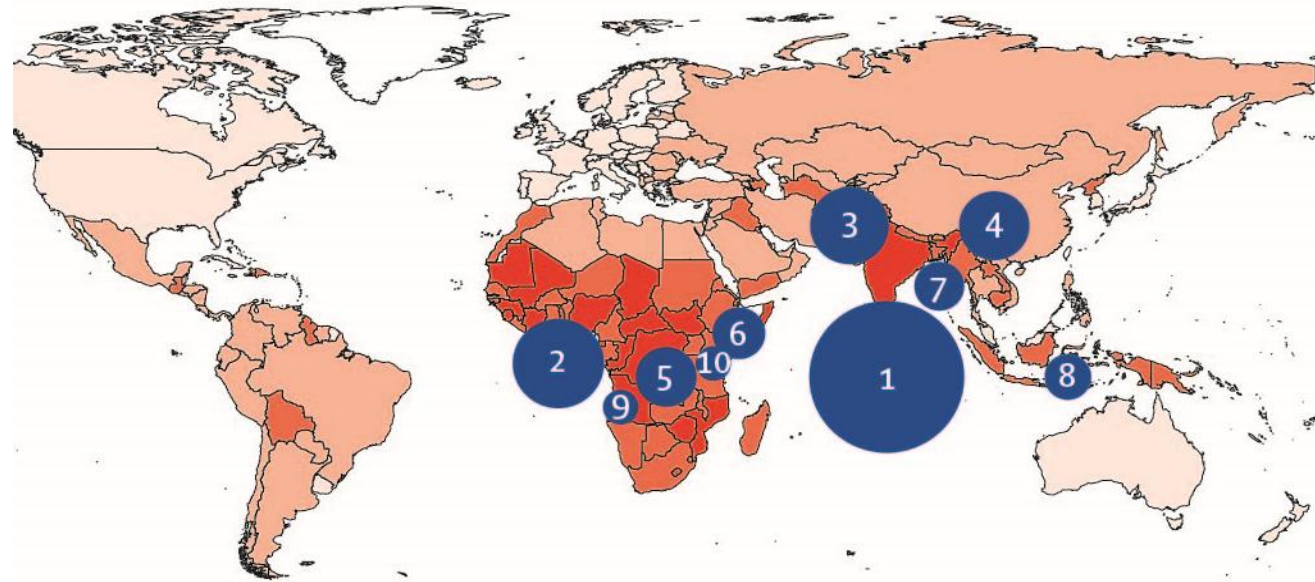
Countries with highest neonatal mortality rates & those with biggest numbers

Countries with biggest numbers of neonatal deaths

1. **India** (779,000)
2. **Nigeria** (267,000)
3. **Pakistan** (202,400)
4. **China** (157,400)
5. **DR Congo** (118,100)
6. **Ethiopia** (87,800)
7. **Bangladesh** (75,900)
8. **Indonesia** (72,400)
9. **Angola** (41,200)
10. **Kenya** (40,000)

Neonatal mortality per 1000 livebirths

0-5 5-15 15-30 30-50 No data

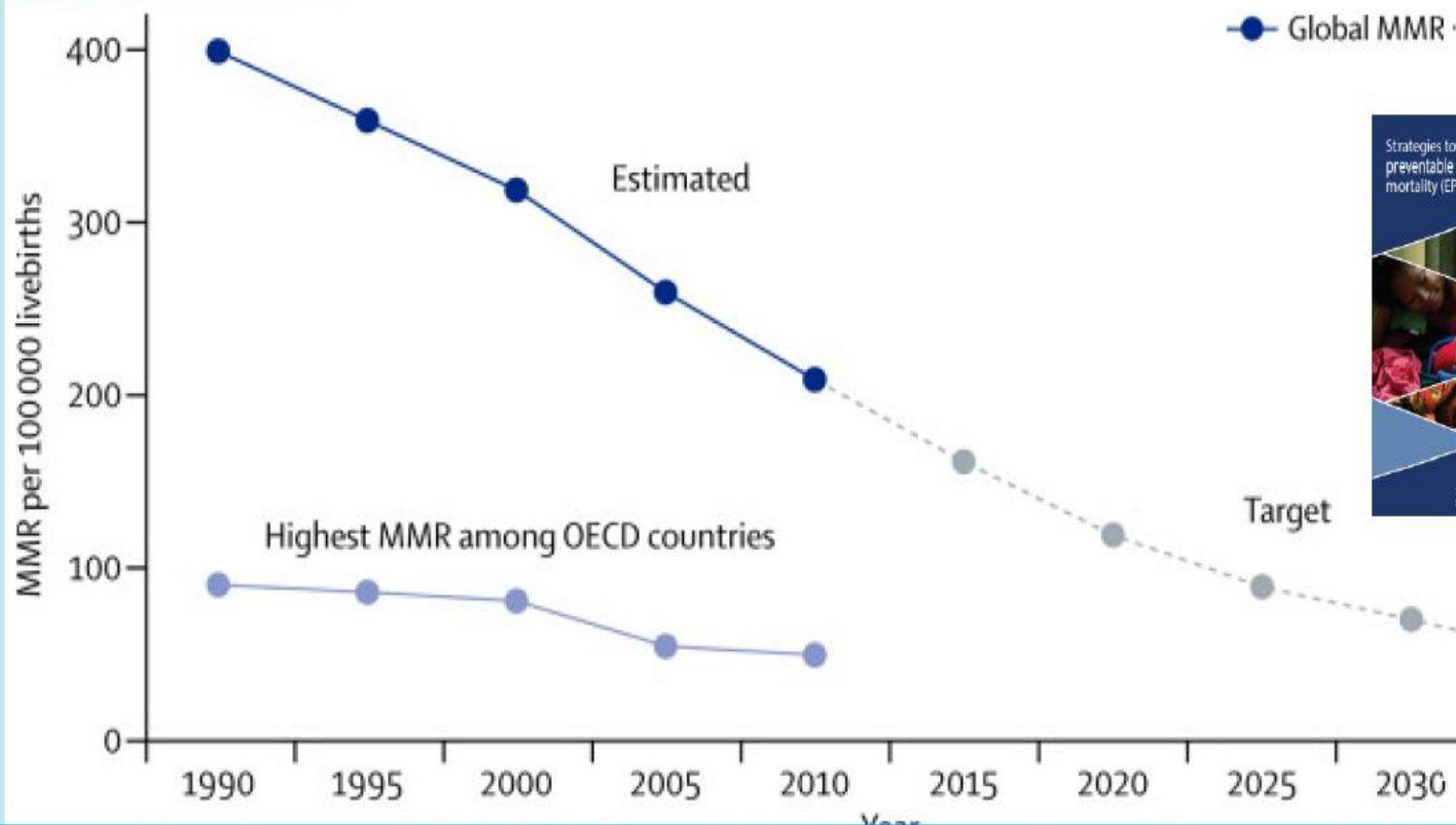


Source: Lancet Every Newborn series, paper 2



Target 3.1: Ending preventable maternal deaths

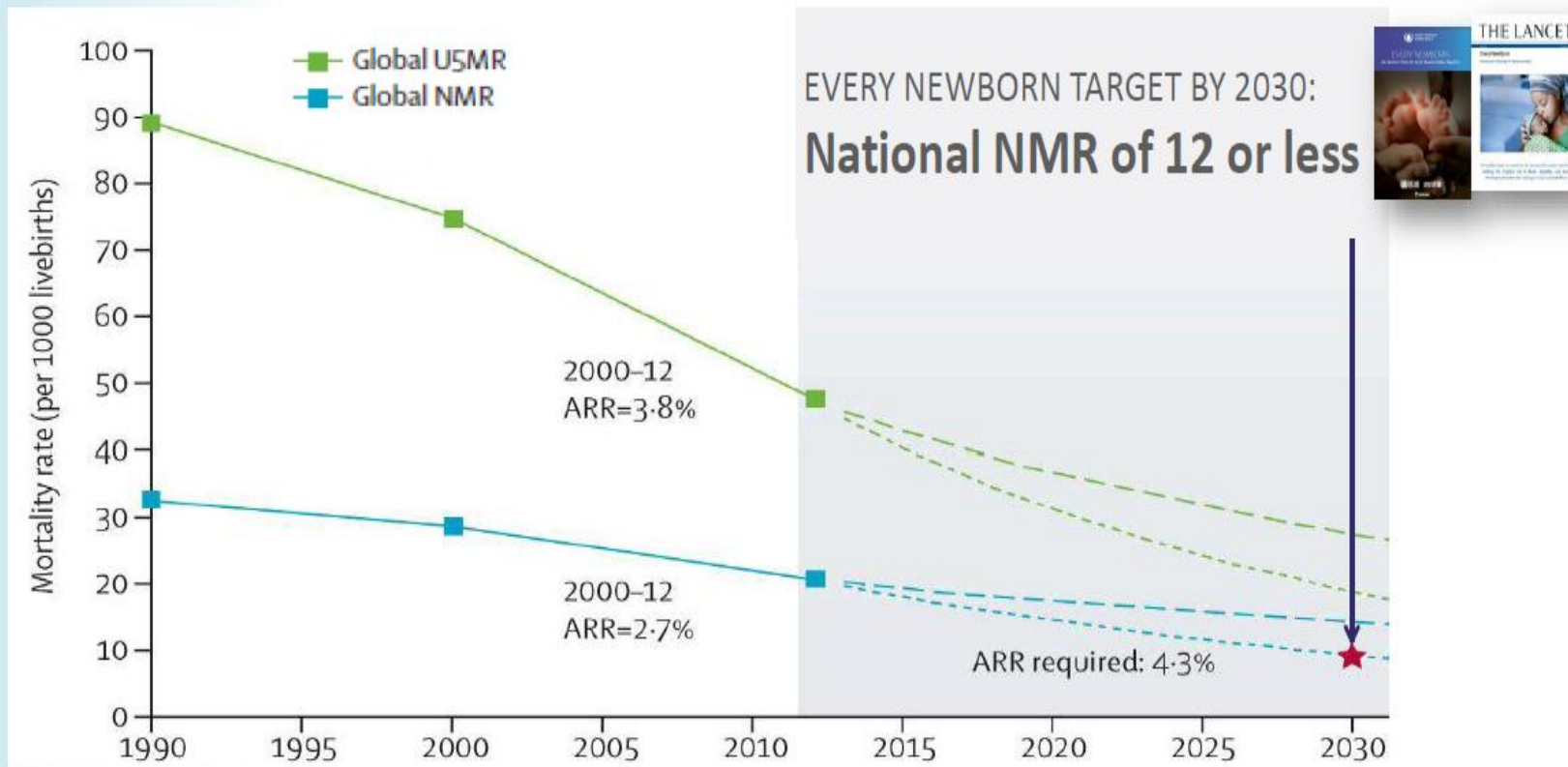
Target also in Global Strategy, Ending Preventable Maternal Mortality, & Every Newborn Action Plan



Global average MMR of 70 per 100,000, no country >140 per 100,000 births
61 countries with MMR >above 140, of which 43 are in Africa
WHO finalising toolkit to guide national target setting

Target 3.2 Ending preventable child and newborn deaths

Targets also in Global Strategy, Every Newborn Action Plan, and A Promise Renewed



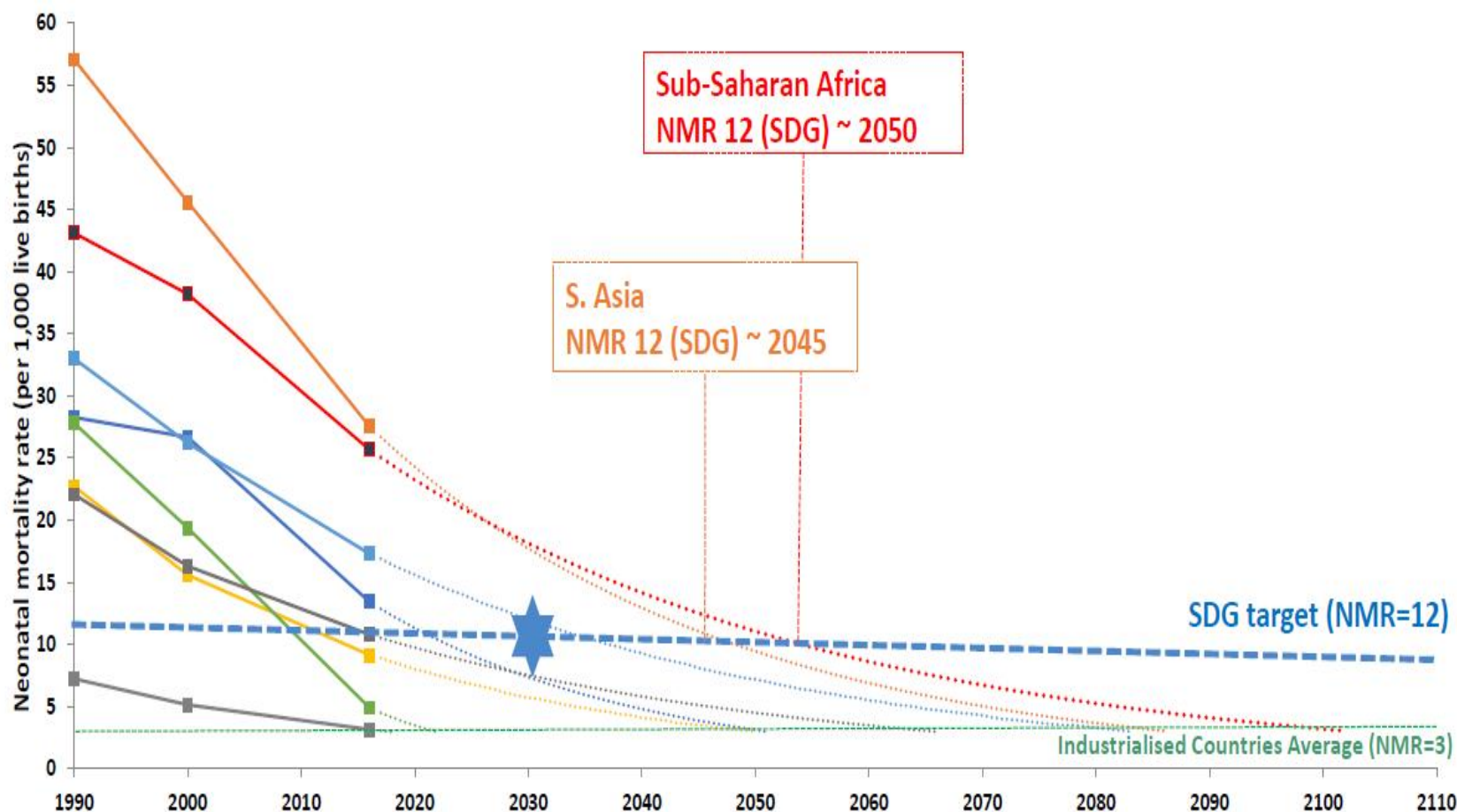
~100 countries already below 12 per 1000 – focus on equity gaps

~40 countries will have to more than double their rates of progress, almost all in Africa

So far 26/46 sub Saharan African countries have set Neonatal targets

Gap for Newborn Survival by region

Projected time by region to reach SDG national target (NMR = 12) & average for high-income countries (NMR = 3)

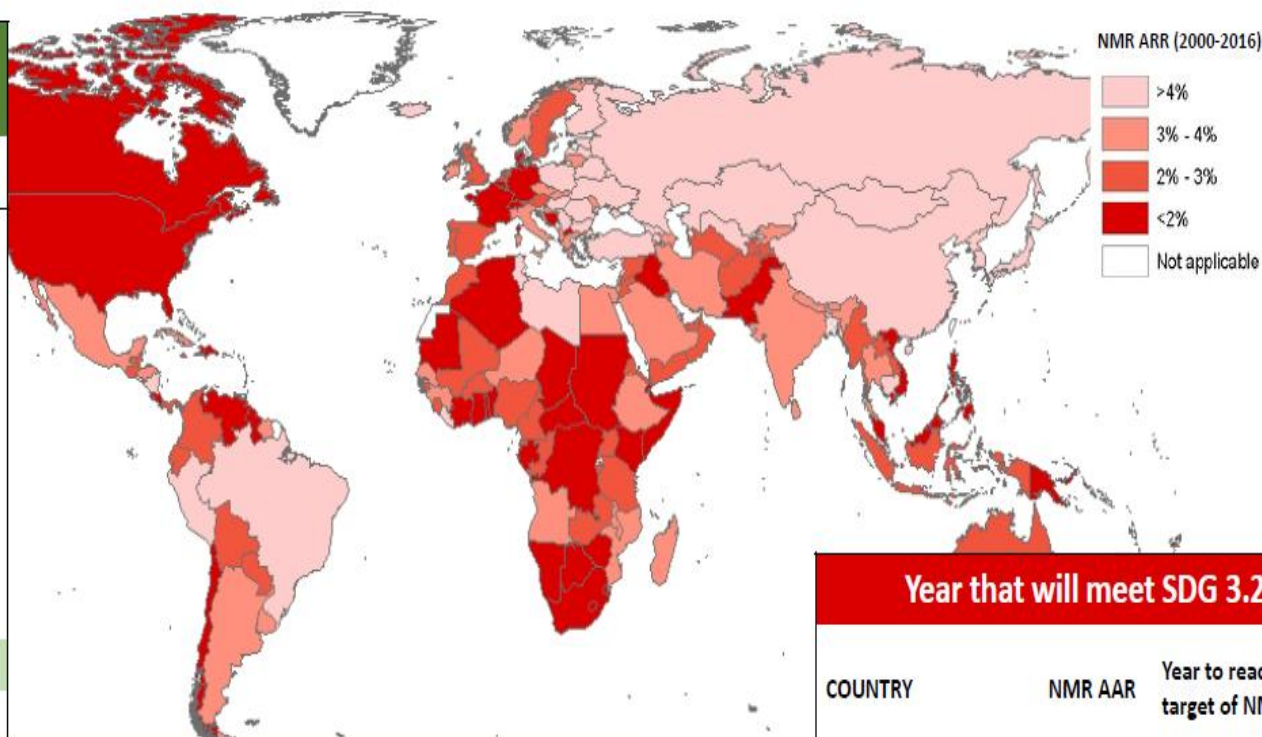


Unless we act now, Africa will reach the SDG for newborns 20 years too late
Almost 100 years before African newborns have same survival chance as high-income countries

Gap for newborn survival SDG progress by country

Variation between countries for Average Annual Rate of Reduction(AARR) for NMR: 2000-2016

10 fastest progressing	
COUNTRY	NMR AAR
1 China	8.5%
2 Estonia	8.5%
3 Belarus	8.4%
4 Kazakhstan	7.3%
5 Georgia	6.8%
6 Latvia	6.5%
7 Turkey	6.5%
8 Russia	6.2%
9 Rwanda	5.7%
10 Lebanon	5.7%



Year that will meet SDG 3.2		
COUNTRY	NMR AAR	Year to reach SDG target of NMR=12
Somalia	0.85%	2153
Cent African Rep	0.93%	2150

BUT in every region has countries with rapid progress, all of which are scaling up hospital care of small and sick newborns

Especially countries with humanitarian crises

Unpublished analysis update from Lancet Every Newborn, Joy Lawn. Data from UN-IGME 2017. Thanks to Shefali Oza

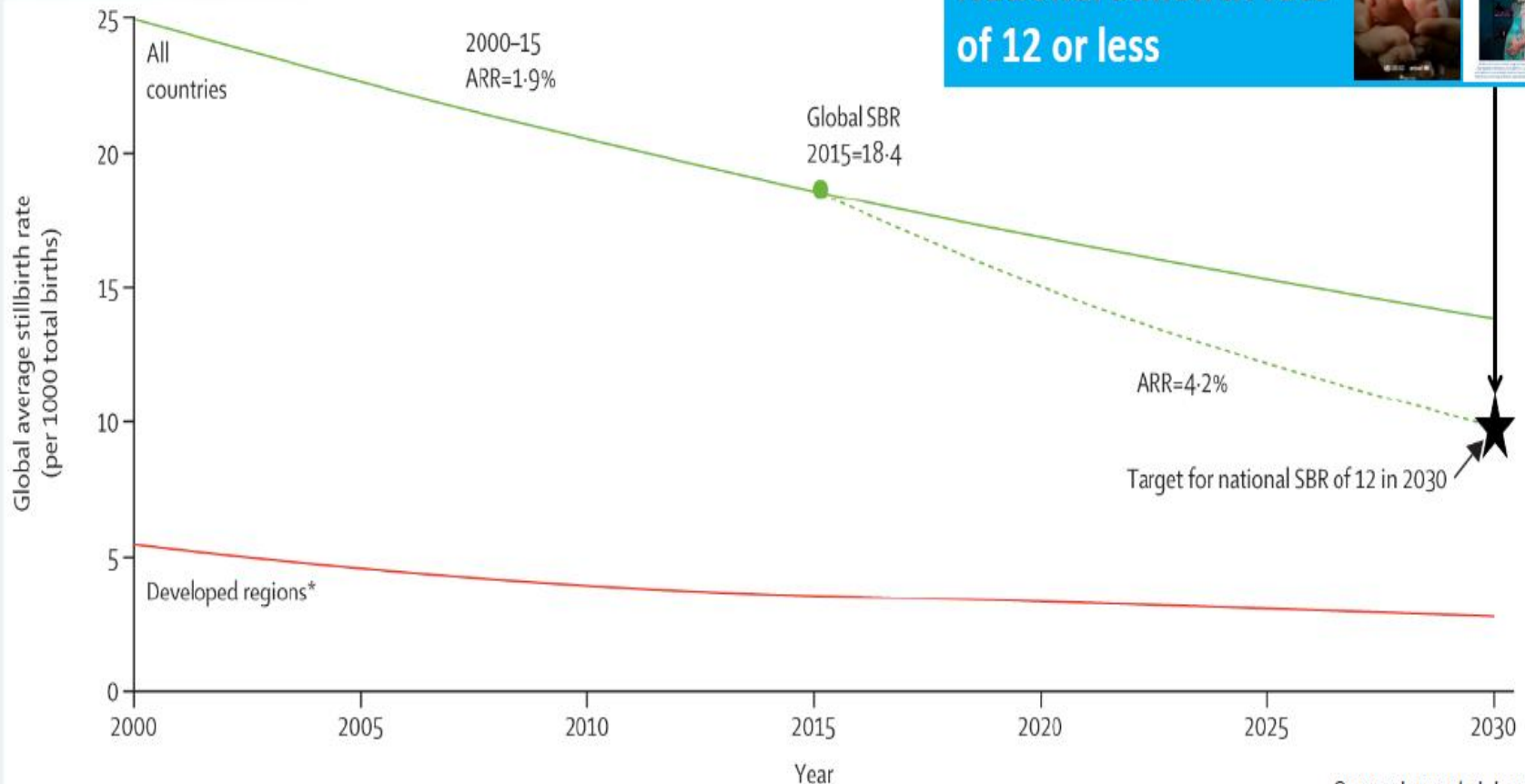
Ending preventable stillbirths

Target in Global Strategy and Every Newborn Action Plan

THE LANCET

EVERY NEWBORN TARGET BY 2030:

**National stillbirth rate
of 12 or less**

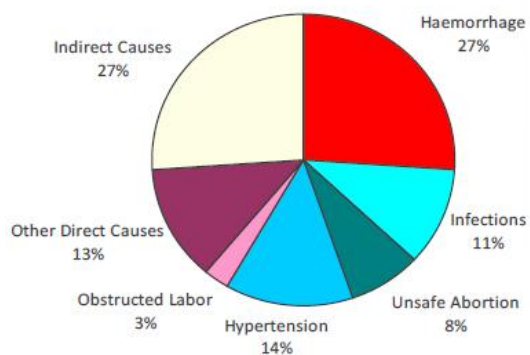


Source: Lawn et al. *Lancet* 2011

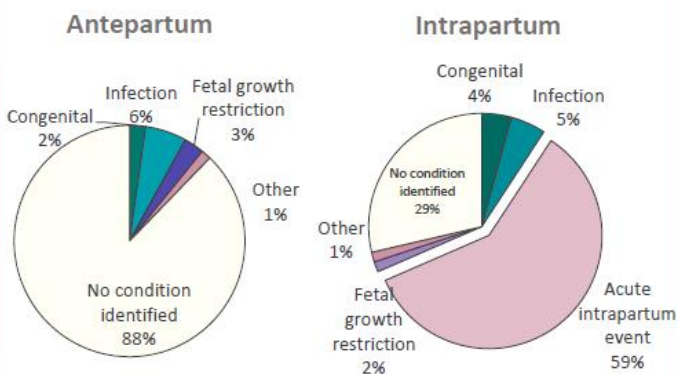
~60 countries need to at least double their rate of progress... BUT still not in SDGs
So far 11/46 sub-Saharan African countries have set targets

Causes of death

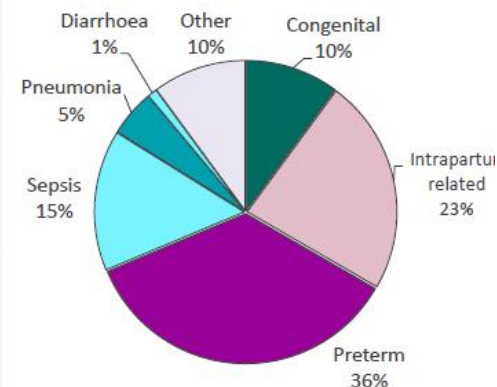
Maternal deaths (0.3 m)



Stillbirths (2.6 m)



Neonatal deaths (2.6 m)



Noah's Ark !

Maternal: Say et al 2014
Stillbirths: Lawn et al 2016
Neonatal: Liu et al, 2016

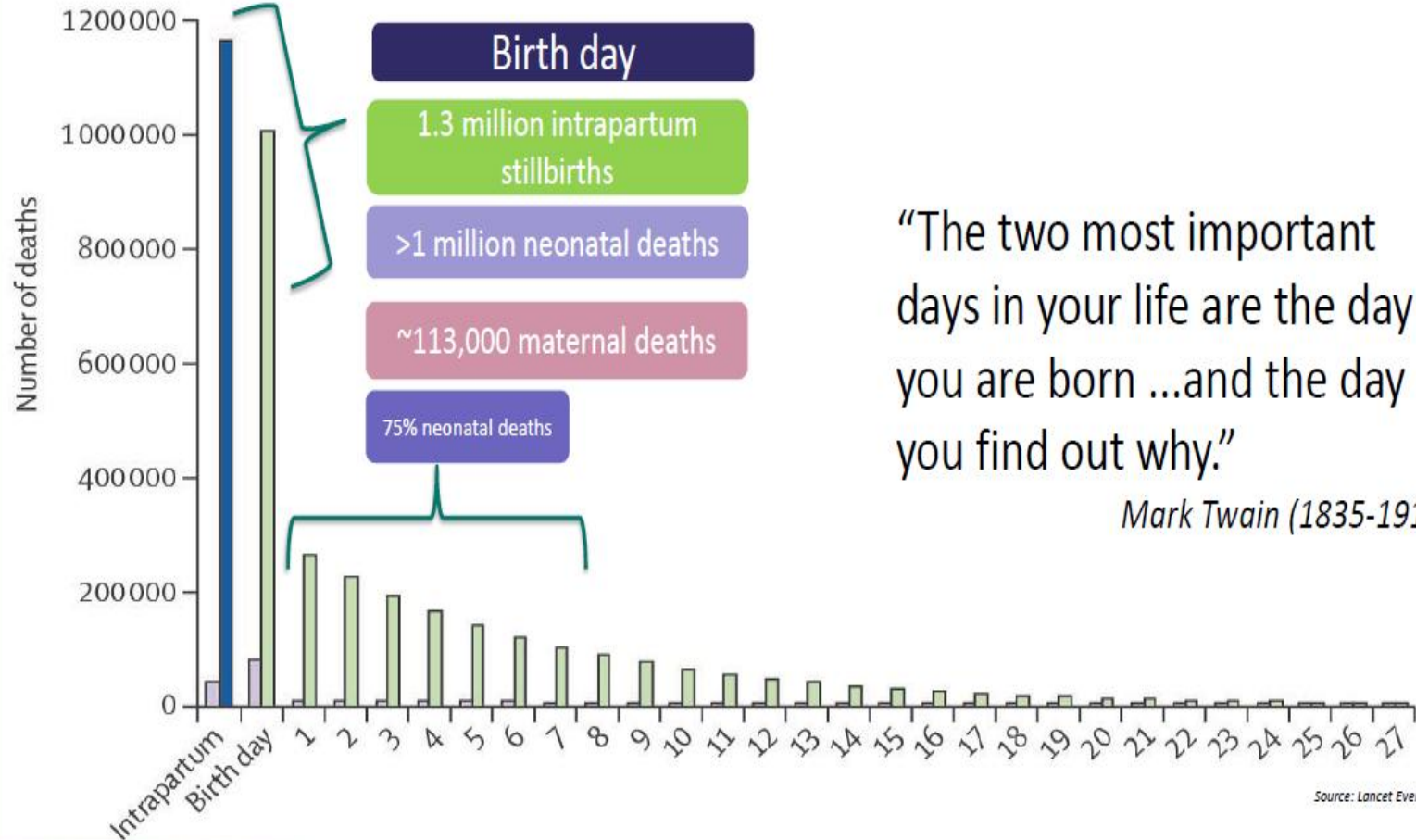
The “Big Five” underlying conditions and pathways to target

	Global number of maternal, neonatal deaths and stillbirths (approx)
1. Childbirth complications e.g. haemorrhage, obstructed labour	~ 2.1 million
2. Preterm birth complications	~1.1 million
3. Infections Mother - HIV, syphilis, malaria, maternal sepsis, Baby - sepsis, pneumonia, diarrhoea, tetanus	~1 million
4. Maternal chronic conditions (NCDs) e.g. hypertension, diabetes, (linked to preterm, small for gest age, congenital abnormalities)	~1 million (and also risk factor in many deaths)
5. Nutrition (undernutrition and obesity)	Underlying risk factor in many deaths



**Beyond the “one at
time syndrome”
Multiple outcomes
Often multiple
exposures**

Birth: the highest risk is at the same time for women, stillbirths, and newborns



“The two most important days in your life are the day you are born ...and the day you find out why.”

Mark Twain (1835-1910)

Birth is the time of greatest risk of death and disability

TRIPLE return on investment – quadruple if count child development outcomes

Intrapartum stillbirth is the most sensitive outcome indicator of quality of care at birth

5 things to do differently

Integrated Plans

Integrated service delivery, continuum of care, coordination

Intentional leadership development

Especially in countries with highest burden

Investment for impact

Governance, community participation, partner alignment

Implementation with Innovation

Address health system bottlenecks, *especially healthworkers*



Indicators & metrics

Targets in post 2015
Measurement of progress and impact



- Acknowledgement: Prof. Joy Lawn and the MARCH Centre, LSHTM
- The Maternal Newborn and Child Health centre of Excellence, Makerere University

Take risks. Ask big questions. Don't be afraid to make mistakes; if you don't make mistakes, you're not reaching far enough.

DAVID PACKARD

With great privilege comes great responsibility
#FAMSA@50+