# DELIVERING FOR WOMEN:



Improving maternal health services to save lives



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#### **DELIVERING FOR WOMEN:**

# Improving maternal health services to save lives

The birth of a child is a moment to celebrate. However, childbirth can be a risky event, and unexpected complications can arise. Although the number of maternal deaths occurring each year declined by 35 per cent between 2000 and 2017, from 451,000 to 295,000, over 800 women are still dying every day from pregnancy or childbirth complications. Most of these deaths occur in sub-Saharan Africa and can be prevented through high quality maternal health services.

Sub-Saharan Africa and South Asia are the two regions with the highest levels of maternal and neonatal mortality and stillbirths (1,2). These two regions accounted for 86 per cent of maternal deaths worldwide in 2017, 75 per cent of stillbirths in 2019, and 45 per cent of neonatal deaths in 2020 (2). Sub-Saharan Africa and South Asia also have, on average, the lowest levels of coverage for key maternal health interventions such as skilled delivery care.

World Health Organization, UNICEF, United Nations Population Fund and The World Bank, Trends in Maternal Mortality: 2000 to 2017 WHO, Geneva, 2019.

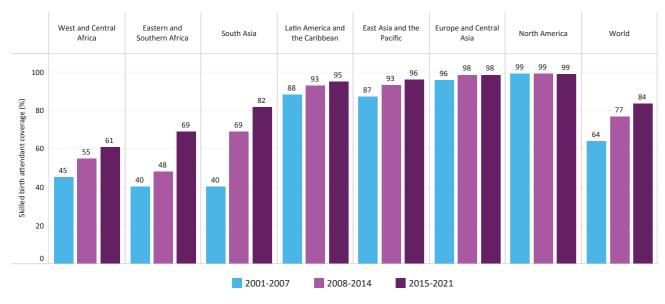
<sup>(2)</sup> UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO UNPD, WB), 2021.

Skilled health personnel attending childbirth are trained to identify and manage complications to give mothers and their babies the best chance of a safe delivery and positive birth experience. Every woman deserves skilled care during childbirth, yet millions of women around the world still give birth without a skilled attendant.

Globally, the proportion of births attended by skilled health personnel increased 20 percentage points from 64 per cent on average during 2001-2007 to 84 per cent during 2015-2021 (Figure 1). However, progress in increasing coverage has been uneven around the world. Figure 2 shows how coverage of births attended by skilled health personnel vary by region and country. All regions except sub-Saharan Africa and South Asia have achieved universal coverage levels (95 per cent or higher).

Figure 1.

Percentage of births attended by a skilled health personnel, by UNICEF regions, historical trends (2001-2021)



Source: Joint UNICEF/WHO database 2022 of skilled health personnel, based on population based national household survey data and routine health systems Note: Data not shown for regions where population coverage is below 50%.

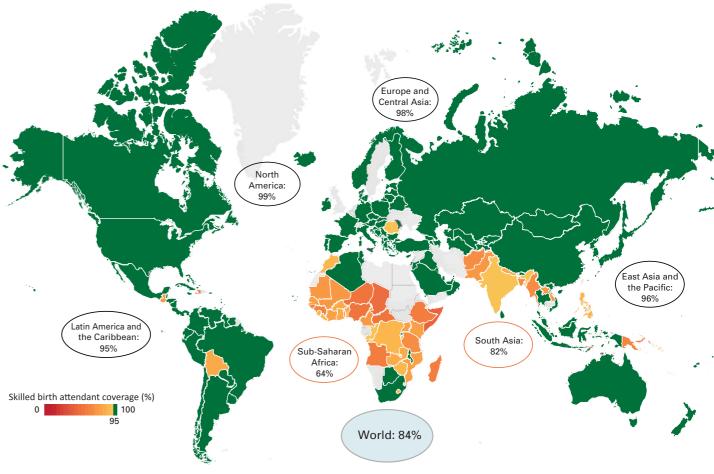
Although sub-Saharan Africa and South Asia are lagging the furthest behind, they experienced the fastest progress in the past two decades compared to other regions. Continued acceleration in progress is required in these regions, and particularly in West and Central African countries, to meet universal coverage by 2030.



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Figure 2.

Coverage of births attended by skilled health personnel, by country and UNICEF regions (2015-2021)



SDG indicator 3.1.2: Proportion of births attended by skilled health personnel

Source: Joint UNICEF/WHO Global Database 2022: Births attended by skilled health personnel

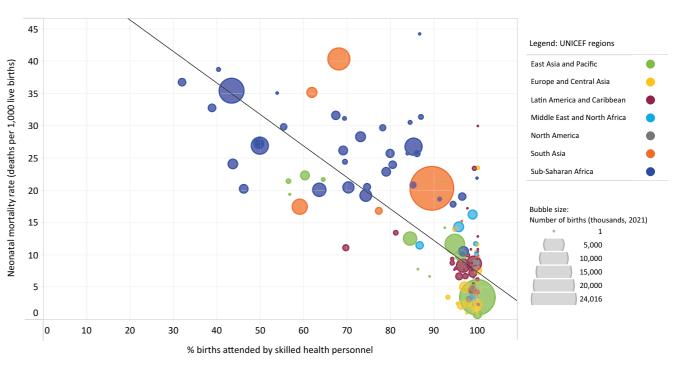
Note: This map does not reflect a position by UNICEF or WHO on the legal status of any country or territory or the delimitation of any frontiers.



#### Saving the lives of mothers and babies

Having skilled health personnel attending childbirth is a critical intervention that saves the lives of women and their babies. Figure 3 shows the relationship between births attended by skilled health personnel and neonatal mortality. Countries experiencing high neonatal mortality have, on average, lower coverage of births attended by skilled health personnel than countries with lower levels of neonatal mortality.

Figure 3.
Relationship between births attended by skilled health personnel and neonatal mortality rate, countries with available data (2015-2021)



Sources

Skilled birth attendant: Joint UNICEF/WHO Global Database 2022: Births attended by skilled health personnel; Data from 2015-2021.

Neonatal mortality rate: UN Inter-agency Group for Child Mortality Estimation 2021; Data for 2020.

Number of births: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, Online Edition.

Note: Bubbles represent countries, with colour corresponding to UNICEF regions and bubble size representing the number of births in that country in 2021.



# **Sub-Saharan Africa** – the region with the highest burden of maternal mortality and lowest coverage of skilled birth attendant

Sub-Saharan African countries with high levels of maternal mortality tend to have low coverage levels of skilled delivery care. These countries are also characterized by large inequities in coverage, with wealthier women consistently more likely to be attended by a skilled provider during childbirth than their poorer counterparts. This is similarly to women living in urban areas than women living in rural areas.

The average MMR for countries in the region that have very high or extremely high maternal mortality is 776 maternal deaths per 100,000 live births. In these countries, on average 52 per cent of births are attended by skilled health professionals, and the gap in coverage by household wealth between the poorest and the richest is 62 percentage points (Figure 4).

Patterns in the mortality and intervention coverage levels across sub-Saharan African countries show that as access to skilled delivery care improves, maternal mortality levels and coverage inequities between different groups of women tend to decrease.

These findings suggest that countries and their partners should prioritize programs that specifically target poor women and women living in rural areas to reduce glaring disparities in access to live saving interventions like having all births attended by skilled health personnel and to improve maternal and newborn health outcomes in the region.

Figure 4.

Maternal mortality ratio (2017) and proportion of births attended by skilled health personnel (2010-2021) in sub-Saharan Africa



National Wealth quintile Residence Mother's age at birth
National Poorest Richest Urban Rural 15-19 20-49

Equity gap

Sources:

Maternal mortality ratio (MMR) - WHO, UNICEF, UNFPA, World Bank Group and UNPD (MMEIG), 2019.

Skilled birth attendant (national) - Joint UNICEF/WHO database 2022 of skilled health personnel, based on population based national household survey data and routine health systems.

Skilled birth attendant (wealth and residence) - UNICEF global databases 2022 based on DHS, MICS and other national household surveys.

Skilled birth attendant (mother's age at birth) - Analysis of DHS, MICS and other national household survey data carried out by the International Center for Health Equity of the Federal University of Pelotas, Brazil, 2021.

Note: n is the number of countries in each MMR classification group.  $MMR \ classification: Low/moderate \ (<300), \ high \ (300-499), \ very/extremely \ high \ (\geq500)$ 

#### Adolescent pregnancy in sub-Saharan Africa

Globally, maternal conditions are among the top causes of disability-adjusted life years (DALYs) and death among girls aged 15-19 (3). Obstetric fistula, eclampsia, puerperal endometritis, and systemic infections are some of the serious conditions that pregnant adolescent girls are at higher risk of experiencing compared to women aged 20 and over (4).

Early childbearing can derail an adolescent girl's healthy development. Many adolescent girls who are pregnant are pressured or forced to drop out of school, which can negatively impact their educational trajectories and economic prospects. They also may experience serious social consequences and problems at home.

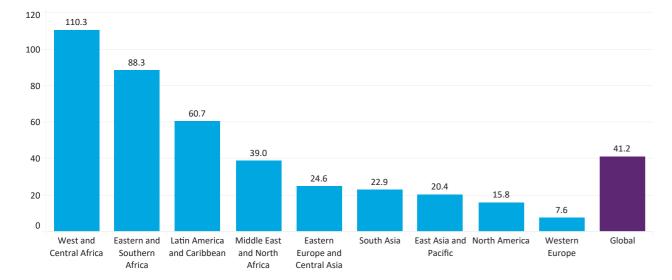
Indicators used to measure and monitor adolescent pregnancy include the adolescent birth rate (annual number of births per 1000 girls age 15-19) and early childbearing (percentage of young women age 20-24 giving birth before age 18).

Sub-Saharan Africa has the highest level of adolescent pregnancy.

In 2020, the adolescent birth rate in sub-Saharan Africa was 100.5 per 1,000 girls age 15-19 – nearly three times higher than the global average (41.2 per 1,000 girls age 15-19) and fifteen times higher than Western Europe (7.6 per 1,000 girls age 15-19). Within the region, West and Central Africa had the highest adolescent birth rate of 110.3 per 1,000 girls age 15-19, followed by Eastern and Southern Africa at 88.3 (Figure 5).

Figure 5.

Adolescent birth rate, by UNICEF region (annual number of births per 1000 girls age 15-19, 2020)



Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019 - Special Aggregates, Online Edition. Rev. 1.

Note: Data calculated as the average of the estimated adolescent birth rate in 2015-2020 and projected adolescent birth rate in 2020-2025.

Sub-Saharan Africa has the highest levels of early childbearing, with over one in four (26 per cent) young women age 20-24 giving birth before age 18, based on countries with available data in 2015-2021. This level is 12 percentage points higher than the global average of 14 per cent (data not shown) (5).

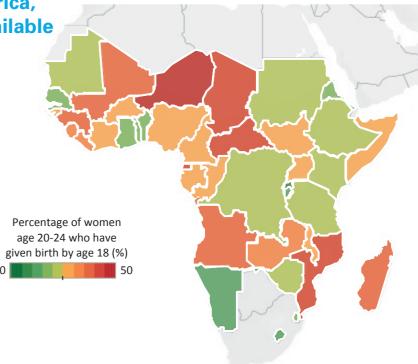
There is wide variation in early childbearing levels between sub-Saharan African countries, ranging from 6 per cent of young women age 20-24 giving birth before age 18 in Rwanda to 48 per cent in Niger (Figure 6).

women age 20-24 giving birth before age
in Rwanda to 48 per cent in Niger (Figure

Figure 6.
Early childbearing
in sub-Saharan Africa,
countries with available
data, 2010-2020



The high adolescent birth rate and early childbearing levels in sub-Saharan Africa call for greater prioritization and investment in strategies for addressing the sexual and reproductive health needs of adolescent girls in the region.



Source: UNICEF global databases 2022 based on DHS, MICS and other national household surveys. Note: This map does not reflect a position by UNICEF or WHO on the legal status of any country or territory or the delimitation of any frontiers.

(5) UNICEF MNCAH Global Databases; 2022. https://data.unicef.org/topic/maternal-health/delivery-care

<sup>(3)</sup> Global Health Estimates 2020: Deaths by Cause, Age, Sex, by Country and by Region, 2000-2019. Geneva, World Health Organization; 2020.

<sup>(4)</sup> Say L et al., 'Global causes of maternal death: a WHO systematic analysis' Lancet Global Health. http://dx.doi.org/10.1016/S2214-109X(14)70227-X, May 6, 2014.



#### Projected increase in number of births in sub-Saharan Africa poses a challenge to meet demand for maternal and newborn services

Based on projected number of births, sub-Saharan Africa will experience a 15 percent increase in births between 2020 and 2050, which is a stark contrast to the decreasing birth rates in the rest of the world (-8%) (Figure 7). In cumulative terms, if current levels of intervention coverage persist, about 141 million births will not be attended by skilled health personnel between 2022 and 2030 (Figure 8). With the projected increase in births, additional investment in skilled health personnel will be needed, even to maintain current level of coverage. To meet the needs of pregnant women, African countries should invest in training skilled birth attendants and in adequately equipping health facilities for childbirth services. Without such efforts, many more lives will be lost and there will be many more missed opportunities to improving the health of women and their babies.

Figure 7. Estimated and projected number of births, by region (1950-2050)

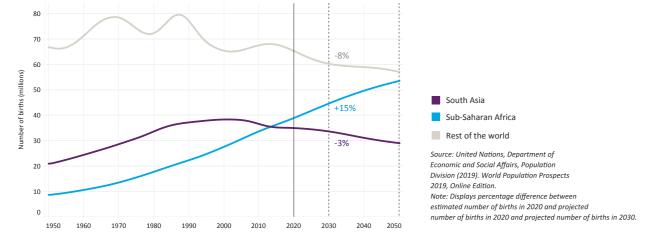
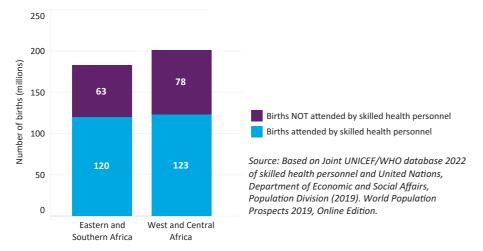


Figure 8.

Cumulative births in millions by skilled birth attendance in sub-Saharan

African regions (2022-2030) based on current levels of coverage



## Call for action – in alignment with UNICEF's Every Child ALIVE agenda:

#### **Increase investment in health systems including:**

- Strengthen community level services to expand availability of essential maternal and newborn health services
- Establish clean, functional health centers close to where women and children live
- Equip health facilities with the drugs, supplies and equipment needed to save maternal, newborn and child lives
- Ensure a strong, functional referral system is in place so that women have access to emergency obstetric care when needed

#### Strengthen health workforce

 Recruit, train, and monitor health personnel to ensure every woman receives quality care during pregnancy, delivery, and in the postnatal period to improve maternal and newborn health and nutrition

#### Birth and death registration

- Register all births, newborn deaths, and stillbirths so that every child is counted
- Register all maternal deaths and implement policies on maternal mortality and perinatal audits to improve the quality of care

#### Adolescent health

- Empower adolescent girls and women to demand access to quality health services and their right to health
- Coordinate efforts across sectors to reduce adolescent childbearing and increase the availability of adolescent friendly health services.



## Key maternal health related indicators in the Sustainable Development Goals (SDG) Framework

### SDG indicator 3.1.1 Maternal mortality ratio

The maternal mortality ratio (MMR) is defined as the number of maternal deaths during a given time period per 100,000 live births during the same time period. It depicts the risk of maternal death relative to the number of live births and essentially captures the risk of death in a single pregnancy (proxied by a single live birth).

**Target**: In the SDG framework, the global MMR target is to reduce the global maternal mortality ratio to less than 70 per 100,000 live births by 2030.

#### SDG indicator 3.1.2

## Proportion of births attended by skilled health personnel (%)

The proportion of births attended by skilled health personnel is defined as the proportion of childbirths attended by professional health personnel, generally doctors, nurses or midwives, but can refer to other health professionals who are trained to handle normal deliveries safely.

Target: Although this indicator does not have an explicit SDG global target, it is expected that it reaches a 'universal' coverage level, meaning that every woman gets this support at the time of birth.

### SDG indicator 3.2.2 Neonatal mortality rate

The neonatal mortality rate is the probability that a child born in a specific year or period will die during the first 28 completed days of life, if subject to age-specific mortality rates of that period, expressed per 1000 live births.

**Target:** The SDG target for neonatal mortality is that all countries aim at reducing neonatal mortality to at least as low as 12 deaths per 1,000 live births.

#### SDG indicator 3.7.2

# Adolescent birth rate (aged 15-19 years) per 1000 women in that age group

Adolescent birth rate (aged 15-19 years) is defined as the annual number of births to females aged 15-19 years per 1000 females in the respective age group. The adolescent birth rate is a measure of fertility and represents the level of childbearing among females in the particular age group. It is also referred to as the age-specific fertility rate for women aged 15-19.





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