Goal 3: Ensure healthy lives and promote well-being for all at all ages
Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
Indicator 3.1.2: Proportion of births attended by skilled health personnel

Institutional information

Organization(s):
United Nations Children's Fund (UNICEF)

Concepts and definitions

Definition:
Percentage of births attended by skilled health personnel (generally doctors, nurses or midwives) is the percentage of deliveries attended by health personnel trained in providing lifesaving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, labour and the post-partum period, conducting deliveries on their own, and caring for newborns. Traditional birth attendants, even if they receive a short training course, are not included.

Rationale:
Having a skilled attendant at the time of delivery is an important lifesaving intervention for both mothers and babies. Not having access to this key assistance is detrimental to women's health and gender empowerment because it could cause the death of the mother or long lasting disability, especially in marginalized settings.

Methodology

Computation Method:
The number of women aged 15-49 with a live birth attended by a skilled health personnel (doctors, nurses or midwives) during delivery is expressed as a percentage of women aged 15-49 with a live birth in the same period.

Disaggregation:
For this indicator, when data are reported from household surveys, disaggregation is available for residence (urban/rural), household wealth (quintiles) and maternal age, geographic regions. When data are reported from administrative sources, disaggregation is more limited and tend to include only residence.

Treatment of missing values:

- At country level

There is no treatment of missing values at country level. If value is missing for a given year, then there is no reporting of that value.

- At regional and global levels

Missing values are not imputed for regional and global levels. The latest available year within each period is used for the calculation of regional and global average.

Regional aggregates:
Regional and global estimates are calculated using weighed averages. Annual number of births from UNPD World Population Prospects is used is as a weighing indicator. Regional values are calculated for a reference year, including a range of 4-5 years for each reference year. For example, for 2016, the latest year available for the period 2013-2016 was used for the estimate for reference year 2016.

Sources of discrepancies:
Discrepancies are possible if there are national figures compiled at the health facility level. These would differ from the global figures, which are typically based on survey data collected at the household level. In terms of survey data, some survey reports may present a total percentage of births attended by a skilled health professional that does not conform to the MDG definition (e.g., total includes provider that is not considered skilled, such as a community health worker). In that case, the percentage delivered by a physician, nurse, or a midwife are totalled and entered into the global database as the MDG estimate. In some countries where skilled attendant at birth is not available, birth in a health facility (institutional births) is used instead. This is frequent among Latin American countries, where the proportion of institutional births is very high. Nonetheless, it should be noted that institutional births may underestimate the percentage of births with skilled attendant.

Methods and guidance available to countries for the compilation of the data at the national level:
UNICEF and WHO maintain joint databases on skilled attendance at delivery (doctor, nurse or midwife) and both collaborate to ensure the consistency of data sources. National-level household surveys are the main data sources used to collect data for the antenatal care indicators. These surveys include Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), Reproductive Health Surveys (RHS) and national surveys based on similar methodologies. The surveys are undertaken every 3 to 5 years. For mainly industrialized countries (where the coverage is high), data sources include routine service statistics.

Before acceptance into the joint global databases, UNICEF and WHO undergo a verification process that includes correspondence with field offices to clarify any questions regarding estimates. During this process, the national categories of skilled health personnel are verified, and so the estimates for some countries may include additional categories of trained personnel beyond doctors, nurses, and midwives.

Quality assurance
Data are reported to UNICEF on an annual basis. Values are reviewed and assess to make sure that reported indicator complies with standard definition and methodology. Additional data, mainly on high-income countries are compiled from primary sources and provided by World Health Organization

Data are reported by UNICEF country office to UNICEF-HQ for global compilation. At the national levels, country offices are in touch with national authorities to compile and provide requested data, and therefore, values reported in global database are validated by national authorities.

Data Sources

Description:
National-level household surveys are the main data sources used to collect data for the antenatal care indicators. These surveys include Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), Reproductive Health Surveys (RHS) and national surveys based on similar methodologies. The surveys are undertaken every 3 to 5 years. For mainly industrialized countries (where the coverage is high), data sources include routine service statistics.

Collection process:
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Data Availability

Description:
Data are available for over 170 countries.
The lag between the reference year and actual production of data series depends on the availability of the household survey for each country. In developing countries they typically take place every three to five years, with results published within a year of field data collection.

Time series:
1990-2016

Calendar

Data collection:
As the main source of data is household surveys which are conducted every 3-5 years, the collection of data are under this schedule. When data comes from administrative source, data can be available on an annual basis.

Data release:
Estimates are published annually, in May by WHO in World Health Statistics (http://www.who.int/whosis/whostat/en/) and by UNICEF in State of the World's Children, and are available at www.data.unicef.org.

Data providers

Ministries of Health and National Statistical Offices, either through household surveys or routine sources.

Data compilers

United Nations Children's Fund (UNICEF), World Health Organization (WHO)

References

URL: https://data.unicef.org/topic/maternal-health/delivery-care/#

References:

Joint UNICEF/WHO database 2016 of skilled health personnel, based on population-based national household survey data and routine health systems.