

INDICATOR ANALYSIS

PROPORTION OF BIRTHS ATTENDED BY SKILLED HEALTH PERSONNEL (%)

ANALYSIS CONDUCTED BY FRANCOIS DAUDELIN & VAL PERCIVAL
FOR THE LANCET-SIGHT COMMISSION ON PEACEFUL SOCIETIES THROUGH HEALTH AND GENDER EQUALITY

How is this indicator calculated?	Births attended by skilled health personnel = (Number of births attended by skilled health personnel / Total number of live births) x 100 (expressed as a percentage) (1).
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GLOBAL TRENDS	
What are the global patterns for this indicator?	The proportion of births attended by skilled professionals has been increasing in all regions and has increased globally from 64% in the 2000-2006 period to 81% in the 2014-2019 period. However, coverage and the rate of progress varies across regions. Particularly in most central and eastern African countries that still fall below 70%, with some falling substantially lower (1,2).

RELEVANCE TO UNDERSTANDING RELATIONSHIPS AMONG GENDER, HEALTH, FRAGILITY/PEACE	
How could this indicator contribute to our understanding of how gender, health and fragility and peace influence one another?	<p>This indicator provides one measure of women aged 15 years and older's subjection to sexual violence by persons other than an intimate partner. Thus, it indicates the level of non-intimate-partner sexual violence against women in a given area. Because high levels of sexual violence against women are associated with perverse outcomes such as (but not limited to) higher rates of depression, unwanted pregnancy, and HIV prevalence, this indicator is closely related to women's overall mental and physical health (2). Because women and girls are especially vulnerable in the face of sexual violence, analysis of this indicator can be of value to reach those who experience the greatest fragility.</p> <p>According to the United Nations, having data on this indicator can aid in understanding the extent and nature of this form of violence, and could potentially help develop appropriate policies and programs to reduce gender-based sexual violence and promote stable, peaceful societies (1).</p>

UTILITY	
What does the indicator measure?	This indicator is a proxy measure of a health system's ability to provide adequate care for pregnant women during birth (1).
What does it NOT measure - what does it miss?	The indicator does not measure the level of training the skilled birth attendant has and whether a pregnant woman has access to emergency services, should complications arise (1).

If and how does the indicator relate to interface/relationship among health, gender and fragility/stability	This indicator provides information about women's access to care during delivery. Women delivering without skilled health personnel are at increased risk of maternal and child mortality. Values as low as 20% are found in settings where health care is very poor and maternal mortality is a major public health problem. Social and cultural norms may influence whether a woman goes to a health professional to deliver, while others may not have the choice in fragile settings.
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AVAILABILITY

Sources for indicator (CRVS, DHS etc - include links)	<p>Data collection:</p> <ol style="list-style-type: none"> 1. Multiple Indicator Cluster Surveys (MICS) 2. Demographic Health Surveys (DHS) 3. Other national-level household surveys 4. Health facilities (when other data is not available) (2) <p>Reporting:</p> <ol style="list-style-type: none"> 1. UNICEF Data (country level 2000-2019) data.unicef.org 2. WHO's Global Health Observatory (country level 2000-2019) https://www.who.int/data/gho 3. World Bank Data bank (country and regional level 1980-2019) https://databank.worldbank.org/home.aspx
Dates available;	Expected to be disseminated annually. Data available from 1980 in some countries and between 2000 and 2019 in most countries on the World Bank's Databank.
Availability across geographic areas;	Data available from most countries between 2000 and 2019 on the World Bank's Databank.
Availability in conflict affected settings;	Data in conflict affected settings varies by country (World Bank Databank): Yemen (1992, 1997, 2003, 2006, 2012, 2013); South Sudan (2006, 2010); Libya (1995, 1999, 2007, 2008, 2010-2013); Somalia (1999, 2000, 2002, 2006), DRC (2001, 2007, 2010, 2014), Afghanistan (2000, 2003, 2006, 2008, 2010-2012, 2014, 2015, 2017, 2018) (3).

GRANULARITY

Disaggregation at national level

Data disaggregated by sex;	N/A.
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Data disaggregated by identity group (race, ethnicity);	No.
Data disaggregated by income	No.
Data disaggregated by citizenship;	No.
Data disaggregated by migration background;	No.
<i>Disaggregation at sub-national level</i>	
Data disaggregated by geographic region;	No.
Data disaggregated by identity group (race, ethnicity);	No.
Data disaggregated by income.	No.

SOURCES OF BIAS	
What bias can exist with this data?	<p>Standardization of the definition of skilled health personnel can be difficult (variation in training).</p> <p>Recall error could be a concern when surveys are conducted once every 3-5 years due to the time laps between the event and date of data collection.</p> <p>Facility data, if used, would exclude women who give birth at home and thus would lead to an under-estimation (1).</p>

VALIDITY	
Clear and accepted international standards for indicator;	This indicator is widely accepted and is one of the two indicators for SDG target 3.1. The definition of skilled health personnel providing care during childbirth was revised in 2018 in a joint statement by WHO, UNFPA, UNICEF, ICM, ICN, FIGO and IPA (4).
Validity of measurement of indicator generally accepted;	Standardized surveys are believed to accurately measure number of births attended by skilled health professionals, however the validity of facility data is questionable. Moreover, this indicator is significantly correlated with decreasing maternal mortality ratios, making it a strong indicator for SDG target 3.1 (5).

RELIABILITY	
Reliability of indicator generally accepted;	Using a standardized definition of skilled health personnel, the indicator is reliable but is subject to recall bias as discussed above.

COMPLEXITY	
Enables analysis across time and location.	Comparison across time and location will depend on frequency of data collection and consistency in the definition of skilled health personnel.

OTHER REFLECTIONS	
Is the Indicator modelled? Other reflections on debate, accuracy, etc.	<p>For UNICEF, WHO and World Bank data: National level data is not imputed or modelled.</p> <p>For UNICEF data: A regional average is applied to those countries within the region with missing values for the purposes of calculating regional aggregates only but are not published as country-level estimates (6). Regional and global aggregates are not currently available on the UNICEF data warehouse.</p>

References

1. WHO. Global Health Observatory [Internet]. [cited 2020 Feb 8]. Available from: <https://www.who.int/data/gho>
2. UNICEF. Delivery care [Internet]. UNICEF DATA. [cited 2020 Feb 8]. Available from: <https://data.unicef.org/topic/maternal-health/delivery-care/>
3. World Bank. DataBank | The World Bank [Internet]. [cited 2021 Sep 9]. Available from: <https://databank.worldbank.org/home.aspx>
4. UNICEF. Definition of skilled health personnel providing care during childbirth [Internet]. UNICEF DATA. 2018 [cited 2020 Feb 8]. Available from: <https://data.unicef.org/resources/definition-of-skilled-health-personnel-providing-care-during-childbirth/>
5. Berhan Y, Berhan A. Skilled health personnel attended delivery as a proxy indicator for maternal and perinatal mortality: a systematic review. *Ethiopian journal of health sciences*. 2014;24:69–80.
6. UNICEF. Skilled birth attendant - percentage of deliveries attended by skilled health personnel [Internet]. UNICEF DATA. [cited 2021 Apr 7]. Available from: https://data.unicef.org/indicator-profile/mnch_sab/