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# Reproductive, maternal, newborn and child health

**BPS-Statistics Indonesia**

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# RMNCH

- In the area of reproductive, maternal, newborn and child health (RMNCH), data from a large number of population-based health surveys exist, for example from the Demographic and Health Surveys (**DHS**) and the Multiple Indicator Cluster Surveys (**MICS**).
- The selected indicators are therefore well-measured in many countries.



# RMNCH indicators :

1. family planning (demand satisfied with a modern method),
2. pregnancy care (the average coverage of 4 or more antenatal care visits and skilled birth attendance/institutional delivery rates),
3. full immunization for infants (for now measured with DTP3 coverage as a proxy), and
4. child treatment (care seeking for suspected pneumonia).



# 1. Family planning

- **Indicator name** : Demand for family planning satisfied with modern methods
- **Indicator definition** : Percentage of women of reproductive age (15–49 years) who are married or in-union who have their need for family planning satisfied with modern methods.
- **Numerator** : Number of women aged 15-49 who are married or in-union who use modern methods
- **Denominator** : Total number of women aged 15-49 who are married or in-union in need of family planning
- **Main data sources** : Population-based health surveys



# Method of measurement (1)

Household surveys include a series of questions to measure modern contraceptive prevalence rate and demand for family planning.

Total demand for family planning is defined as the sum of the number of women of reproductive age (15–49 years) who are married or in a union and who are currently using, or whose sexual partner is currently using, at least one contraceptive method.



# Method of measurement (2)

## The unmet need for family planning.

Unmet need for family planning is the proportion of women of reproductive age (15–49 years) either married or in a consensual union, who are fecund and sexually active but who are not using any method of contraception (modern or traditional), and report not wanting any more children or wanting to delay the birth of their next child for at least two years.



# Method of measurement (3)

Included are:

1. all pregnant women (married or in a consensual union) whose pregnancies were unwanted or mistimed at the time of conception;
2. all postpartum amenorrhoeic women (married or in consensual union) who are not using family planning and whose last birth was unwanted or mistimed;
3. all fecund women (married or in consensual union) who are neither pregnant nor postpartum amenorrhoeic, and who either do not want any more children (want to limit family size), or who wish to postpone the birth of a child for at least two years or do not know when or if they want another child (want to space births), but are not using any contraceptive method.



# Method of estimation

- The United Nations Population Division produces a systematic and comprehensive series of annual estimates and projections of the percentage of demand for family planning that is satisfied among married or in-union women.
- A Bayesian hierarchical model combined with country-specific data are used to generate the estimates, projections and uncertainty assessments from survey data.
- The model accounts for differences by data source, sample population, and contraceptive methods.



## 2. Pregnancy care

- **Indicator definition** : Percentage of women aged 15-49 years with a live birth in a given time period who received antenatal care four or more times and who had skilled health personnel attending the birth
- **Numerator** : Number of women aged 15–49 years with a live birth in a given time period who (1) received antenatal care four or more times as well as (2) had skilled health personnel attending the birth
- **Denominator** : Total number of women aged 15–49 years with a live birth in the same period.
- **Main data sources** : Household surveys and routine facility information systems.



# Method of measurement

- Data on four or more antenatal care visits is based on questions that ask **if and how many times the health of the woman was checked during pregnancy.**
- Data on skilled birth attendance come from questions that ask respondents about who helped during delivery.
- **Note that the definition of skilled birth attendant varies between countries,** but should include doctors, nurses or midwives, who are trained in providing live-saving obstetric care giving the necessary supervision, care and advice for women during pregnancy, childbirth and postpartum, to conduct deliveries on their own, and to care for newborns.



# Method of measurement

- Household surveys that can generate this indicator include DHS, MICS, RHS and other surveys based on similar methodologies.
- Service/facility reporting systems can be used where the coverage is high, usually in industrialized countries.



# Method of estimation

- WHO and UNICEF maintain data bases on coverage of antenatal care and births attended by skilled health personnel.
- Considerable effort is spent on **verifying skilled birth attendant definitions from survey data**; in many cases survey reports will present coverage of “skilled birth attendance” but use cadres that are not considered skilled.
- These figures must be adjusted to ensure comparability for global monitoring purposes.
- During 2016, WHO and UNICEF are collaborating to conduct a full review and country consultation on this issue to obtain a final set of data sources and estimates.



# Noted

- This indicator is intended to provide a more comprehensive measure of pregnancy care as compared to monitoring antenatal care and skill birth attendance coverage separately.



## 3. Full child immunization

- **Indicator definition** : Percentage of infants receiving three doses of diphtheria-tetanus-pertussis containing vaccine
- **Numerator** : Children 1 year of age who have received three doses of diphtheria-tetanus-pertussis containing vaccine
- **Denominator** : All children 1 year of age
- **Main data sources** : Household surveys and facility information systems



# Method of measurement

- For survey data, the vaccination status of children aged 12–23 months is collected from child health cards or, if there is no card, from recall by the care-taker.
- For administrative data, the total number of doses administered to the target population is extracted.



# Method of estimation

- Together, WHO and UNICEF derive estimates of DTP3 coverage based on data officially reported to WHO and UNICEF by Member States, as well as data reported in the published and grey literature.
- Based on the available data, consideration of potential biases, and contributions from local experts, WHO/UNICEF determine the most likely true level of immunization coverage.



# Noted

- There is variability in national **vaccine schedules across countries**.
- Given this, one option for monitoring full child immunization is to monitor the fraction of **children receiving vaccines included in their country's national schedule**.
- A second option, which may be more comparable across countries and time, is to monitor **DTP3** coverage as a proxy for full child immunization.
- Diphtheria-tetanus-pertussis containing vaccine often includes other vaccines, e.g., against Hepatitis B and Haemophilus influenza type B, and is a reasonable measure of the extent to which there is a robust vaccine delivery platform within a country.



## 4. Child treatment

- **Indicator definition** : Percentage of children under 5 years of age with suspected pneumonia (cough and difficult breathing NOT due to a problem in the chest and a blocked nose) in the two weeks preceding the survey taken to an appropriate health facility or provider.
- **Numerator** : Number of children with suspected pneumonia in the two weeks preceding the survey taken to an appropriate health provider.
- **Denominator** : Number of children with suspected pneumonia in the two weeks preceding the survey.
- **Main data sources** : Household surveys



# Method of estimation

- There are currently no internationally comparable estimates for this indicator
- This indicator is not typically measured in higher income countries with well-established health systems.
- For countries without observed data, coverage was **estimated from a regression that predicts coverage of care-seeking for symptoms of pneumonia (on the logit scale)**, obtained from the WHO data base described above, as a function of the log of the under-five pneumonia mortality rate



*Thank you*

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*Terima Kasih*



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Practicing*