Births registration completeness

Data analysis and Report writing workshop for Civil registration and vital statistics data.

Importance of birth registration

- Convention on the Rights of the Child states that every child has a right to a name and nationality

- Around 25% of children under age 5 have never had their births recorded, which can mean a child is unable to obtain a birth certificate.

- Without a birth certificate a child may be denied health care and education.

- The lack of official identification documents can mean that a child may enter into marriage or the labour market, or be conscripted into the armed forces, before the legal age.

Importance of birth registration (cont...)

- Birth certificates may be required to:
  - obtain social assistance
  - a job in the formal sector
  - to buy or prove the right to inherit property
  - to vote
  - to obtain a passport.

- Registering children at birth is the first step in securing their recognition before the law, safeguarding their rights, and ensuring that any violation of these rights does not go unnoticed.

Why do we care about birth registration completeness?

- Measuring completeness is done to evaluate:
  - Overall performance of the CRVS system
  - Robustness of vital statistics
  - Is there potential adjustments to the data required?

Birth registration completeness has become a key reporting indicator

- SDG Target 16.9: By 2030, provide legal identity for all, including birth registration
  - Indicator 16.9.1: Proportion of children under 5 years of age whose births have been registered with a civil authority, by age
  - Indicator 17.19.2: Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration

- ESCAP CRVS Regional Action Framework Goal 1: Universal civil registration of births, deaths and other vital events

Methods of measurement

◆ Direct calculation with a births "gold standard" – a source that is considered to be "true"

$$\text{Completeness of birth registration (\%)} = \frac{\text{Number of registered births}}{\text{Actual number of births}} * 100$$

Methods of measurement (cont…)

- Direct calculation using questions on a census or survey of registration completeness – MICS or DHS

- Indirect demographic methods to estimate births (P/F ratio, Relational Gompertz Model, Reverse survival etc.)

- Capture re-capture methods

Goal 1 of the Regional Action Framework: Universal civil registration

- 1.A By 2024, at least … per cent of births in the territory and jurisdiction in the given year are registered.

- 1.B By 2024, at least … per cent of children under 5 years old in the territory and jurisdiction have had their birth registered.

Goal 1A: %births registered

$$\text{Completeness of birth registration (\%)} = \frac{\text{Number of registered births in a year}}{\text{Actual number of births in a year}} * 100$$

- Numerator: from civil registration data
  - Number of children under age 1 with their birth registered that calendar year
- Denominator (# of births in that year) should come from the "best" source:
  - Census data
  - Estimates derived from census data
  - Estimates derived from surveys or sample registration systems
  - Hospital records if nearly all births occur in hospital
  - If no other data, use CBR from UN Statistical yearbook

Using the crude birth rate to estimate births

- This method is commonly used for countries that do not have good current data on births
- Sources for the CBR may include a national census or UN Demographic Yearbook

$$\text{Completeness of birth registration (\%)} = \frac{\text{Number of registered births}}{(\text{Crude birth rate } * \text{ population})} * 100$$

- Crude birth rate * population = number of births

- Potential problems:
  - The time period for the CBR estimate may not be the same as the period being examined. It is often older and may be not reflect current fertility patterns.

Goal 1B: % children under age 5 registered

Completeness of birth registration in children under age 5 (%):

$$= \frac{\text{Number of children under age of five whose births are registered}}{\text{Total number of children under the age of five in the population}} * 100$$

- Numerator: from civil registration data
  - Number of children under age 5 with their birth registered
  - Note that registration did not need to occur that year, but must be registered by the end of the calendar year

- Denominator (# of children under age 5) usually comes from census data or estimates derived from census data

Disaggregation

- Completeness of birth registration should be disaggregated by:
  - **Sex** – differences in registration of baby boys vs. girls may point to gender issues that require targeted education or services.
  - **Location** – geographic location, are remote areas underserved?
  - **Mothers' age** – young mothers may be less likely to registrar their child. This information will affect the calculation of fertility rates.

- Disaggregation as per SDG 16.9 and 17.19.2:
  - Sex, age, income, place of residence, geographic location

Checking completeness by age of the mother

- If your data are less than 90% complete it is important to see if the completeness of your birth data varies by age of the mother.

- Censuses may provide number of birth by age of the mother. If census data is within 5 year or less of the years your data covers, you should check to see how your data compare to the distribution of the census.
    - You can either compare a percent distribution of births by age of the mother, or you can compare the average number of births per year by age of the mother to the number of births by age of the mother reported in the census.

- If you see large variation in one or more age groups between the two data sources, reach out to CRVS experts to determine the most appropriate course of action.

Exercise

- Using test data, determine completeness of birth registration for:
  - Births (under age 1)
  - Children aged 1-4
  - Children under age 5
  - Disaggregate these results by sex
- Determine the best source of birth data and population data for children under age 5 for your country
- If you have the data, calculate birth registration completeness for your country