DIRECT SISTERHOOD METHOD

The direct sisterhood method is a variant of the indirect Sisterhood Method, and is currently used by Demographic and Health Surveys (DHS). While it requires larger sample sizes than its predecessor, the advantage of the direct method is the targeting of a more limited reference period for sister deaths. Using a more detailed set of questions, in particular to ascertain deaths among all siblings and then those that are pregnancy-related as well as when the death occurred, point estimates for maternal mortality are obtainable, usually relating to 0-6 years and >6 years prior to the survey. A retrospective maternal mortality ratio (MMR) can be calculated for the reference period in question. The method is not recommended for duplication at short time intervals due to large confidence intervals.

Identification of death:

Adult respondent reports deaths (and sex and age at death) among all his/her brothers and sisters born to the same mother in response to sibling survivorship questions and direct sisterhood method questions.

It is not possible to obtain sub-causes of maternal death, as respondent may not know the signs and symptoms that preceded the death.

Advantages:

- yields a more recent estimate than the indirect sisterhood (generally with one reference period 0-6 years prior to the survey and one 7-13 years prior to the survey versus 10-12 years for indirect sisterhood method)\(^1\)
- provides data that represents the population
- can be added to multipurpose surveys

Limitations:

- requires larger samples than the original indirect sisterhood method
- should not be replicated at short intervals owing to overlapping reference periods
- more complex data collection (more questions including age at death, the year in which the death occurred and the years since the death) and data analysis
- less appropriate in settings with substantial migration
- difficult to get additional information on deaths (causes, risk factors, timing, etc as the sibling may not have such details)
- no established demographic techniques to permit evaluation and adjustment, if necessary, of survey-based data

Measurement requirements:

Involves conducting a sibling history, with dates of births and deaths, and for sisters dying of reproductive age the 4th question of the indirect sisterhood method is also asked. Data on births are also needed to derive the maternal mortality ratio.

Direct sisterhood questions:

1. How many children did your mother give birth to?
2. How many of these births did your mother have before you were born?
3. What was the name given to your oldest (next oldest) brother or sister?
4. Is (NAME) male or female?
5. Is (NAME) still alive?
6. How old is (NAME)?
7. In what year did (NAME) die?

OR

7. How many years ago did (NAME) die?
8. How old was (NAME) when she died?

For dead sisters aged 15-49 only:

9. Was (NAME) pregnant when she died?
10. Did (NAME) die during childbirth?
11. Did (NAME) die within two months after the end of pregnancy or childbirth?

Guidelines


Scientific articles


**Additional resources**


DHS Questionnaires and Modules: [http://www.measuredhs.com/aboutsurveys/dhs/questionnaire_topics.cfm#2](http://www.measuredhs.com/aboutsurveys/dhs/questionnaire_topics.cfm#2)