Subject: Cross-country comparisons in maternal and child health, esp. provider types

Posted by Ibenova on Wed, 02 Apr 2014 08:21:35 GMT

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As part of research looking at maternal health and family planning across several countries, we have identified some issues with the response codes for questions 315 (where did you get your current method of family planning), 409 (who did you see for antenatal care for last pregnancy), 410 (where did you receive antenatal care for last pregnancy), 433 (who assisted with delivery of last birth) and 434 (where did you give birth). These issues create challenges for cross-country comparisons of sources of care.

- 1) There are a number of different response options used. Across the 57 countries that have had a DHS survey conducted since 2000, there are 141 response codes describing the location where family planning is obtained, 91 codes for delivery care, and 79 codes for ANC. Often these response codes make up a very small proportion of responses: 58 family planning provider types were used by less than 1% of respondents in any country.
- 2) Response options mean different things in different contexts. For example, the same response code is used for providers with very different levels of training and responsibilities. In some cases, it seems these codes are not the terms used in the survey itself, but have been re-coded during data processing; for example 'MCH Aides' in the Sierra Leone survey, and 'Parteras' in the Nicaragua survey, seem to have both been recoded as 'auxiliary midwife' in the datasets, though they are very different types of provider in terms of skill level and capacity.
- 3) Different types of provider with different levels of skill/capacity have been conflated within response options. In some cases this is due to the response options in the survey, though in other cases the response options have been grouped at the data processing stage. Nurse/midwife is a response code that appears in 43 of the countries. In some countries, the category 'nurse/midwife' has been created by grouping the individual response codes of 'nurse' and 'midwife' (two providers that are likely to have different levels of skill in terms of attending deliveries), while in other countries nurse-midwife is the title of a formally recognised profession. Nurses and midwifes are also grouped with less skilled providers in other countries, e.g nurse/medical assistant; auxiliary nurse-midwife/nurse/midwife/lady health visitor; community health officer/nurse. This makes it difficult to categorise providers across countries according to skill level, or by whether they can safely attend births.
- 4) There is a category error in the response options for "where respondents received delivery and antenatal care". Response codes for this question allow for 'private nurse', 'private doctor' and 'public health professional' which seems odd since this question asks respondents where they received care and not who provided care, and options that describe a health professional should not be included in the response options. It would be preferable for instance to have a response saying the person was a doctor and the place was a private clinic or private hospital rather than the person being a doctor and the place a private doctor.
- 5) For source of family planning, the response option 'relative/friend' requires clarification. This response should lead into a prompt to ask where the relative/friend got the family planning

method, as unless the relative/friend is a family planning provider/seller, this response code is really an unknown provider. We appreciate that women may not be able to say where their relative or friend got the methods.

6) The current categorisation of responses options within the surveys is inconsistent between countries, and often lacks detail. Taking the example of family planning providers, 31 of the 57 countries studied divide responses only into public, private medical and other, while 7 countries label their groupings as public and private and do not distinguish between the medical and non-medical. A few countries provide more detail, for example distinguishing between the public sector, private sector and the non-governmental sector. The groupings of professionals in the DHS survey are less detailed; 43 of the 57 countries group delivery professional response codes only into health professional or health personnel, and other person. Additionally, groupings are not always provided; 7 of the 57 countries do not provide any grouping of health professionals in the survey.

Some clarification and rationalisation of survey response options could strengthen the comparability of data collected on sources of care. For example when response codes exist in very few countries and have zero or few users, these response options seem to be irrelevant and could potentially be excluded from the surveys. Conflation of response options should be avoided if it means grouping together providers or professionals that have different skills or capacities.

Surveys need to meet host-country needs and countries should therefore define their own response options to meet local context. However, to make data comparable, a metadata could be developed to describe the characteristics of providers on a cross-country basis for users of data that may not be familiar with each country context. Country teams could be asked to classify each provider response option according to certain dimensions, for example whether they are considered a skilled birth attendant or whether they are formal medical providers. A metadata could also be useful for other variables not included in this analysis that have country-specific response options.

Cost of maternal health services (especially from public sector):

- In surveys which ask for out of pocket cost of services, there is a large proportion of missing data (Egypt 2008). It would be useful to at least get a sense of whether the woman paid at all (binary yes/no) and if yes, the amount. This could be the amount paid for last visit (ANC) or delivery care (combined amount for all service).
- This suggestion applies equally to the cost of child health services (diarrhoea/fever/cough) it would be useful to know firstly whether any cost was incurred by respondent and secondarily, the amount. This would hopefully lead to a reduction in missing data.

## SPA:

Finally, it would be helpful if SPAs ascertained numbers of delivery beds AND numbers of deliveries. Currently this is not done in the core and seems to be done in some surveys but not others. Having this information would be useful for some analyses we have been doing on characterizing birth environments.

Currently, questions on the ability of a facility to provide Vacuum Aspiration (as part of the emergency obstetric care signal functions) only appear to be asked of facilities that do deliveries. While some aspects of emergency obstetric care would only be expected of facilities that do deliveries (e.g. caesarean section or use of uterotonics to stop /reduce bleeding); it is possible to

imagine that facilities that were not open for delivery could manage post abortion complications with medical abortion or vacuum aspiration.

It may also be worth considering adding signal functions that capture those proposed by Gabrysch et al http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fj ournal.pmed.1001340.

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