IDHS exercise: Data on maternal health care
(women as the unit of analysis)

Part I. Exploring the IDHS website

On the IDHS website, go to the "Select data" page and chose "Women" as the unit of analysis. Woman-level variables related to antenatal and maternal health are accessible under the "Maternal and infant health" tab. Note that the _01 ending of most variables in this section indicates that the material relates to the woman's most recent birth. Answers are at the end of the exercise (page 3).

1. What variable could you use if you are interested in whether the woman is currently breastfeeding?

2a. The variable BIRTHSZ_01 reports the woman's description of the size of her last-born child at birth. Click on that variable name to bring up the variable description.

> The Universe tab for BIRTHSZ_01 reports which women were asked this question. The most common universe is "Women age 15-49 who gave birth in the five years before the survey." What samples have a different universe, and in what ways are the universes different?

2b. Click on the "case count view" option of the Codes tab for BIRTHSZ_01.

> How many women in the Egypt 1992 sample reported their child was "very large" or "very small"? What categories might you combine if you were concerned about small sample size for these categories?

> Which sample(s) include less detail in their responses than the 5-category responses of Very large, Larger than average, Average, Smaller than average, Very Small?

> How does IDHS handle that difference in response codes? Review the integrated codes and the text in the Comparability tab to find out.

3. BIRTHWT_01 provides an alternative measure of the last-born child's size at birth. Look at the Codes and Description pages of that variable. What are the advantages of this variable, compared to BIRTHSZ_01? What are the disadvantages?

 4. In the United States, poorer birth outcomes, such as children with low birthweight or fetal alcohol syndrome, are often tied to health behaviors such as smoking cigarettes or consuming alcohol during pregnancy. Examine the case counts for the variables TOSMOKE (smokes cigarettes) and ALDRINK (drink alcohol) and indicate whether cigarette smoking and alcohol consumption are major issues for pregnant women in the countries included in IDHS (so far as you can tell for the samples included in those variables). Hint: Use the "Search" option to locate these variables quickly.

5. Open-ended questions:

a. Examine the variables available under the "Socioeconomic status" tab. These cover a variety of measures, including those relating to household wealth (based on household possessions and housing quality) divided into quintiles (WEALTHQ), work and occupation, education, and media exposure. Which variable would you choose to identify the least privileged women, when studying maternal health, and why?

b. Maternal health care and delivery might be affected by or have effects on other areas of women's health and well-being. Explore other topic areas on the IDHS Select Data page for Women and frame a hypothesis about some relationship between an aspect of maternal health and a variable from another topical area.

For example, is the place of delivery (DELPL_01), such as outside a medical facility, associated with the likelihood that a woman has experienced fistula (FSEVHAD)? Do women who have experienced intimate partner violence (DVPMSEVER, DVPLSEVER) have worse maternal healthcare or birth outcomes? Frame a hypothesis linking some aspect of maternal health to another topic and write it down, specifying the variables you would use.

Answers to maternal health website exercises

1. Variable indicating whether the woman is breastfeeding: BFEEDANYNOW

2a. Universe differences for BIRTHSZ_01

Different reference period of three years before the survey (Benin 1996, Cote d'Ivoire 1994, Ghana 1993, India 1998, Kenya 1998, Mali 1995, Mozambique 1997, Niger 1998, Nigeria 1999, Zimbabwe 1994) or four years before the survey (India 1992, Uganda 1995).

Limiting sample to ever-married women: All Egyptian samples and India 1992 and 1998.

Different age range for women of childbearing age: India 1992 includes women age 13-49, and Nigeria 1999 includes women age 10-49.

2b. Combining categories for BIRTHSZ_01

Answer: 27 very large and 39 very small last-born births in Egypt 1992. Combine responses into Large, Average, and Small (first digit codes of 1, 2, and 3) in the composite coding to handle small numbers of cases or incorporate samples with fewer responses, such as India 1992 and 1998.

3. Advantages and disadvantages of using BIRTHWT_01 rather than BIRTHSZ_01

BIRTHWT_01 is a less subjective measure and allows the data to be recoded into standard categories such as "low birth weight" (under 2500 grams), "very low birthweight" (under 1500 grams), and "extremely low birth weight" (under 1000 grams). The disadvantage is that it is only available for infants who were weighed at birth. This variable may also be subject to recall error, and to limit this, the researcher may wish to limit the analysis to cases where the birthweight was written on the child's health card (code 1 in BIRTHWTREF_01).

4. Smoking and alcohol use seem very minor maternal health issues for African and Indian women, given the rarity of smoking by women and the large proportion of women who don't drink alcohol.