# Subject: High ASFR using DHS method compared to DHS reports Posted by mllind89 on Fri, 23 Jan 2015 19:35:06 GMT

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### Hello,

I am having problems recreating the ASFR estimates provided in DHS reports while using the DHS 3-year ASFR method from the "Guide to DHS Statistics." I consistently get a high TFR and the ASFRs for age groups between 15 and 34 are high while the age groups from 34-49 match the DHS report decently well. For this reason I expect that I am including births I should not or I am excluding women-years I should be including. Below are the steps I take to calculate the ASFR (the calculation is run in STATA). I have also attached my estimates from the IDN 2012 survey and MDA 2005 survey. The "raw\_" variables are the ASFR and TFR without survey weights applied and the ASFR and TRF variables have survey weights applied. Does anyone know why this could be happening?

#### **DHS ASFR Method**

Step 1: Calculate the number of children born within the exposure period by 5 year women age groups

- 1. Calculated the age of the child at the time of the survey
- 2. Dropped all children who were not born 1-36 months before the survey
- 3. Generated the mothers age at birth of each remaining child
- 4. Dropped all children whose mother's age were outside of the standard reproduction period (15-49)
- 5. Counted the number of children by 5 year age groups (15-24, 25-29, ..., 45-49) and survey design variables
- Step 2: Calculated the number of women-years by age group during the exposure period
  - 1. Refreshed the data (brought back in all women)
  - 2. Dropped women's duplicated lines (so that each line represented a different woman)
- 3. Calculated the age (and corresponding age group) of each woman at the end of the exposure period (one month before the survey date)
- 4. Calculated the number of months each woman spent in the end of exposure end group (high age group)
  - a. Months in high age group = svdate 1 mothers birth date (all dates in CMC)
  - b. Set the maximum number of months to 36
  - 5. Calculated the number of months spent in the lower age group (if any)
    - a. Months in the lower age group = 36 months in higher
  - 6. Dropped all women outside of the reproductive period (15-49)
  - 7. Calculated the total number of months per age group by survey design variables
- Step 3: Calculated the ASFR and TFR (weighted and un-weighted)
- 1. Using the psu weight and age group, the number of children were matched with the number of women-months
  - 2. Calculated the raw or un-weighted ASFR estimates
    - a. Counted the number of months by age group and divided by 12 to get women-years
    - b. Counted the number of children by age group
    - c. Divided the number of children by the number of women-years
  - 3. Calculated the weighted estimates
- a. Using STATA svy estimates, the ratio of the number of children to the number of women-months was calculated and then multiplied by 12 to bring the estimated up to

## children/women-years

- 4. Calculated the TFR from both the raw and weighted ASFR
  - a. Summed the ASFR and multiplied by 5

Thank you Maggie

- File Attachments
  1) MDA\_2005\_DHS.xlsx, downloaded 912 times
- 2) IDN\_2012\_DHS.xlsx, downloaded 865 times