Subject: Calculating state-specific maternal mortality ratio and rate from the NDHS 2013
Posted by AkiodeN on Wed, 11 May 2016 18:52:56 GMT
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Dear All,
I am currently running some secondary analysis of the Nigeria demographic and health Survey(NDHS) 2013. I am conducting state-specific analysis. I noticed however that the do file (set of code) used to calculate the national Maternal mortality rate/ratio is not yielding those in the NDHS 2013 report. The plan is to use same to find the MMR of one of the states in Nigeria. Below is the set of code;

```
gen strata=v023
gen psu=v021
gen weight=v005/1000000
gen wt=weight*(awfactt/100)
svyset psu [pweight=weight], strata(strata)
*Rename all of the repeating variables to drop the leading 0 to help with reshaping
rename mm*_0* mm*_*

tab mmidx_1
*reshape the file into a sibling history file, though this may take several time to run.
reshape long mmidx_ mm1_ mm2_ mm3_ mm4_ mm5_ mm6_ mm7_ mm8_ mm9_ mm10_
mm11_ mm12_ mm13_  mm14_ mm15_, i(caseid) j(mmindex)
*Rename to drop the trailing underscore on the end of the reshaped variables
rename mm*_ mm*
*Drop empty matrices
drop if mmidx==.
*Check total sisters and brothers - compare total from table 15.1
tab mm1
*Drop siblings without sex or survival status
drop if (mm1==8 | mm1==9 | mm2==8 | mm2==9 | mm1==. | mm2==.)
*check counts of sisters and brothers by survival status - compare with living siblings and dead
siblings from table 15.1
tab mm2 mm1
*Period to use
* 7 years (84 months) before interview
local period 84
*calculate deaths and exposure for each age group. Each woman can contribute to
*...3 different age groups in tbe past 7 years.
*Calculate upper and lower limits in CMC for inclusion for time period. Exclude
*...month of interview.
gen upplim = v008-1
*Replace upper limit with the CMC date of death for siblings that died
replace upplim = mm8 if mm2==0
*Lower limit - 7 years (84 months) before interview
gen lowlim=v008-`period'
*Total exposure in the time period
```

```
gen exposure=upplim-lowlim+1
replace exposure=0 if exposure < 0
* Oldest age group
gen agegrp1=int((upplim-mm4)/84)
*caculate exposure in this age group
gen expo1=min(exposure, upplim-(mm4+agegrp1*84)+1)
*calculate deaths
gen deaths1=(mm2==0 & expo1>0)
*calculate remaining exposure time
replace exposure=exposure-expo1
*middle age group
gen agegrp2=agegrp1-1
*calculate exposure in this age group
gen expo2 = min(84, exposure)
*Set deaths to 0 - all deaths are in the oldest age group
gen deaths2=0
*calculate the remaining exposure time
replace exposure = exposure - expo2
*youngest age group
gen agegrp3 = agegrp2- 1
*calculate exposure in this age group
gen expo3 = min(84, exposure)
*set deaths to 0 - all deaths are in the oldest age group
gen deaths3=0
*reshape so that there are separate records for each age group with exposure and deaths in thos age groups
reshape long agegrp expo deaths, i(caseid mmindex) j(j)
*only keep  the deaths and exposure in the in age groups 3 (15-19) through 9 (45-49)
keep if agegrp>=3 & agegrp <=9
label define agegrp 3 "15-19" 4 "20-24" 5 "25-29" 6 "30-34" 7 "35-39" 8 "40-44" 9 "45-49"
label values agegrp agegrp
*sample weight
*calculating deaths
tab agegrp mm1 [iw=wt]
tab agegrp mm1 [iw=wt]
*exposure from table 15.3  (expo is in months, divisions by 12 to give years)
tab agegrp mm1 [iw=expo*wt/12]
*deaths from table 15.4 - restrict to maternal deaths
tab agegrp [iw=deaths*wt] if mm1==2 & mm9 >=2 & mm9<=6
*exposure from table 15.4 (expo is in months, division by 12 to give years) - restrict to women only
tab agegrp [iw=expo*wt/12] if mm1==2
tab agegrp [iw=expo*wt/12] if mm1==2
tab agegrp [iw=expo*wt/12] if mm1==2
```

Please, is there something I did not include in this code to correctly calculate the national MMR of Nigeria ?