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Subject: Calculating pregnancy related maternal mortality by year using ETHIOPIA DHSs 2000-2016

Posted by [Melese](#) on Thu, 11 Mar 2021 01:33:54 GMT

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Dear DHS expert, greetings. As you know DHS collects data within 5-7 years before the survey. I have calculated the pregnancy related maternal mortality for all the ETHIOPIA DHS surveys (2000-2016) using your guidelines. Dear expert, I want to calculate the estimates for each year preceding the survey. i.e. for each year that is included in the survey preceding the study. For example: for the EDHS 2016, this mortality is calculated for the deaths in 7 years preceding this survey (since 2010). I want to calculate the estimates for each year 2010-2016. Which variable/s should I use, please? I need your help.

Kindest Regards

Melese

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Subject: Re: Calculating pregnancy related maternal mortality by year using ETHIOPIA DHSs 2000-2016

Posted by [Bridgette-DHS](#) on Thu, 11 Mar 2021 20:54:13 GMT

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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

The sibling histories are not limited to the past 7 years. They are intended to include all siblings ever born. The limitation to the past 7 years is imposed during the calculation of the rates. The past 7 years refers to the 84 calendar months before the month of interview and varies for women interviewed in different months. It does not refer to calendar years such as 2010-2016.

It would definitely be possible to calculate rates for different intervals before the survey or for calendar years. We don't normally do this except for data quality checks. Our GitHub site--includes a Stata program to calculate these rates. It can be modified for different intervals of time, but you should be careful with such modifications because the rates depend on exposure (the denominators) as well as the dates of the deaths (the numerators).

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Subject: Re: Calculating pregnancy related maternal mortality by year using ETHIOPIA DHSs 2000-2016

Posted by [Melese](#) on Fri, 12 Mar 2021 02:38:27 GMT

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Dear Bridgette and Tom, thank you very much for the reply.

Dear experts, can you please help me with this STATA syntax (program) to calculate these rates over different time intervals, please? I couldn't get it on the GitHub site.

Regards

Melese

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\*The following is the syntax that I used to calculate the pregnancy-related maternal mortality rate (out of the 15-49 reproductive age women) over the 05 years preceding the survey by using the ETHIOPIA 2011 survey IR dataset.

```

keep caseid v001 v002 v003 v005 v008 v011 v012 v013 v021 v023 v024 v025 v106 v190 awfactt
mm* mmc*
rename mm*_0* mm*_
reshape long mmidx_ mm1_ mm2_ mm3_ mm4_ mm5_ mm6_ mm7_ mm8_ mm9_ mm10_
mm11_ mm12_ mm13_ mm14_ mm15_, i(caseid) j(mmindex)
rename mm*_ mm*
drop if mmidx==.
tab mm1
drop if (mm1 == 8 | mm1 == 9 | mm2 == 8 | mm2 == 9 | mm1 == . | mm2 == .)
tab mm2 mm1
local period 60
gen upplim = v008-1
replace upplim = mm8 if mm2 == 0
gen lowlim = v008-`period'
gen exposure = upplim-lowlim+1
replace exposure = 0 if exposure < 0
gen agegrp1 = int((upplim-mm4)/60)
gen expo1 = min(exposure,upplim - (mm4 + agegrp1*60) + 1)
gen deaths1 = (mm2==0 & expo1 > 0)
replace exposure = exposure - expo1
gen agegrp2 = agegrp1 - 1
gen expo2 = min(60,exposure)
gen deaths2 = 0
replace exposure = exposure - expo2
gen agegrp3 = agegrp2 - 1
gen expo3 = min(60,exposure)
gen deaths3 = 0
reshape long agegrp expo deaths, i(caseid mmindex) j(j)
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
gen wt = v005/1000000
tab agegrp mm1 [iw=deaths*wt]
tab agegrp mm1 [iw=expo*wt/12]
tab agegrp [iw=deaths*wt] if mm1 == 2 & mm9 >= 2 & mm9 <= 6
tab agegrp [iw=expo*wt/12] if mm1 == 2
gen PregMMR = 0 if [(agegrp==3 | agegrp==4 | agegrp==5 | agegrp==6 | agegrp==7 | agegrp==8
| agegrp==9) & (mm1 == 2)]
replace PregMMR = 1 if [(agegrp==3 | agegrp==4 | agegrp==5 | agegrp==6 | agegrp==7 |
agegrp==8 | agegrp==9) & (mm1 == 2) & (mm1 == 2) & (mm9 >= 2) & (mm9 <= 6)]

```

Subject: Re: Calculating pregnancy related maternal mortality by year using ETHIOPIA DHSs 2000-2016

Posted by [Bridgette-DHS](#) on Fri, 12 Mar 2021 12:54:45 GMT

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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

The GitHub Stata program can be accessed here:

[https://github.com/DHSProgram/DHS-Indicators-Stata/tree/master/Chap16\\_AM](https://github.com/DHSProgram/DHS-Indicators-Stata/tree/master/Chap16_AM). To use it, you should first look at this page: <https://github.com/DHSProgram/DHS-Indicators-Stata>.

You may be able to adapt that program to different time intervals--your Stata skills appear to be excellent. The GitHub program is a modification of a more general program I wrote several years ago. I believe it is set up for a specific reference period, the 7 years (84 months) before the survey. However, if you look at the code, you should be able to locate two variables that specify the reference period for the estimates in century month codes (cmc). Look for "lcmc" and "ucmc" (for lower and upper cmc of the reference period). They can be specified with either a "calendar years" or "years ago" definition of the reference period.

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Subject: Re: Calculating pregnancy related maternal mortality by year using ETHIOPIA DHSs 2000-2016

Posted by [Melese](#) on Wed, 17 Mar 2021 14:39:56 GMT

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Dear Tom, thank you very much for the help.

Using the 2000 ETHIOPIA DHS IR data file and applying the previous command to calculate the pregnancy-related maternal mortality rate in the five (05) years preceding the survey, I tried the following command to calculate the mortality rate in the calendar year 1987(a single year).

```
gen pregmmr1987= PregMMR if [(lowlim==1050  
|lowlim==1051|lowlim==1052|lowlim==1053|lowlim==1054) & (upplim==1045 | upplim==1046|  
upplim==1047|upplim==1048|upplim==1049|upplim==1050|upplim== 1056)]
```

However I failed, Tom. I still need your help and I am grateful for the help you guys offered me.

Regards

Melese

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Subject: Re: Calculating pregnancy related maternal mortality by year using ETHIOPIA DHSs 2000-2016

Posted by [Bridgette-DHS](#) on Thu, 18 Mar 2021 14:36:47 GMT

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A reply was sent to your email.

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