Subject: Re: Probability of dying between exact age 15 and 50 (35q15) Posted by Bridgette-DHS on Fri, 09 Aug 2024 13:51:13 GMT

View Forum Message <> Reply to Message

Following is a response from Senior DHS staff member, Tom Pullum:

The DHS estimates of 35q15 in the adult and maternal mortality chapter of the final report, generic chapter 16, come from the sibling histories. Here is the GitHub program that calculates them: https://github.com/DHSProgram/DHS-Indicators-Stata/blob/mast er/Chap16\_AM/AM\_rates.do. You are right, the program (which I wrote) does not include confidence intervals.

35q15 is a compound rate, a complex function of the 7 age-specific rates 5m15, ..., 5m45 (after they have been converted to 5q15, ..., 5q45). There are two possible strategies for getting confidence intervals. The first is a jackknife or bootstrap or something similar. The other, which I prefer, is analytical, and is based on calculating the m's and their standard errors with a model and then using nlcom (in Stata) or some equivalent form of a Taylor Series or delta method to get the standard errors.

About a year ago I wrote a Stata program that includes the calculation of confidence intervals for the adult mortality rate for women or men (35m15 times 1000). It also calculates the pregnancy-related and maternal mortality rates. See a link to the program below.

This is not an "official" DHS program but it has many comments, and I hope it will work for you after you change the paths and put it into the Stata do-file editor. It is currently set up to run on just one survey at a time.

35m15 is not the same as 35q15, which you were asking about, but I expect that it has a narrower confidence interval, in terms of the ratio of the top end to the bottom end, because it is not a compound rate. Hope this helps. I do not have the time to modify this program to include a confidence interval for 35q15.

## File Attachments

1) DHS\_adult\_and\_maternal\_mortality\_micro\_do\_29Aug2023.txt, downloaded 109 times