Subject: Number of under-five deaths
Posted by calupsita on Mon, 23 Nov 2020 13:56:36 GMT
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Dear all,

I am estimating under-five mortality rates based on small age segments (0, 1-2, 3-5, 6-11, 12-23, 24-35, 36-47, 48-59 months), following the DHS guideines, which results in probabilities of death.

I wonder if it is possible (or if it is correct) to estimate the absolute number of under-five deaths/ children at risk based on these age groups and what would be the best approach for this.

Thank you!

Subject: Re: Number of under-five deaths
Posted by Bridgette-DHS on Mon, 23 Nov 2020 15:47:04 GMT
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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

You appear to be trying to duplicate the DHS procedure to calculate the under-five mortality rates. On the web page for the Users Forum you will find a link to our GitHub site, which includes Stata (and SPSS) versions of the programs for DHS indicators. Go to the chapter for child mortality. You are on the right track, but it will be hard to match DHS estimates without using the code that is provided.

Subject: Re: Number of under-five deaths
Posted by calupsita on Wed, 25 Nov 2020 12:44:04 GMT
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Thank you so much for the answer.

I already have mortality rates calculated using DHS procedures. However, I also need the <number of deaths> and the <number of children at risk> for the entire group of under-fives.

What I am not sure of is whether I can combine the numerators and denominators of the eight age groups (later combined into probabilities of death) to obtain absolute death / exposure values for all under-five children. If so, how to do that, since the simple sum of values results in estimates inconsistent with the mortality rates.

Subject: Re: Number of under-five deaths
Posted by Bridgette-DHS on Wed, 25 Nov 2020 15:31:09 GMT

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

This is not so easy. The complication is that the birth histories give age at death, not cmc of death. Say a child was born in month A and died at age B months. That means the child could have died in month A+B-1 or month A+B. The DHS procedure is to assign half of the death to each of these two months, and to assign half a unit of risk to each of these two months. Sometimes it happens that month A+B is in one time interval and month A+B+1 is in the next time interval.

The number of children at risk of dying at age 0-4 in the past five years will be the number of children born 0-9 years ago minus the number who died 5-9 years ago. All remaining children had some exposure to age 0-4 in the past five years.

The number of deaths at age 0-4 in the past five years will be the number of children born in the past ten years who died at age 0-4 (b7<60) in the past five years.

You can go into the under-five mortality program and try to identify and pull out the relevant numbers or you can construct a tabulation of cmc of birth (b3) and months of age at death (b7) and figure it out.