Subject: Cambodia mortality/morbidity rates due to accidents: calculation issues
Posted by milo1984 on Fri, 20 May 2016 07:13:45 GMT
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Hello,

I am working with the Cambodian DHS surveys from 2000, 2005, 2010 and 2014, and trying to calculate the mortality and morbidity rates for children due to accidental injuries. I have two questions relating to issues I am having.

1) I wanted to calculate the mortality rate due to accidents across different surveys, disaggregated by age/gender etc, and I therefore thought I could just use the individual recode file (PR) variables ("sh51_1/2/3 - death due to accident") to work out the number of deaths due to accidents within the sampled population, along with other individual-level data on age/gender etc to disaggregate the rates.

However, the individual recode (PR) variables for accident-caused-deaths ("sh51_1/2/3 - death due to accident") are empty in ALL surveys, i.e. there is no data in them, not even numbers of missing records. This is not the case for the same variables in the household recodes (HR) for all surveys though ("sh51_1/2/3 - death due to accident"), where numbers of deaths due to accidents appear to be recorded.

I assume I'm completely misunderstanding how to go about calculating death rates due to accidents, but can anyone please help me understand how to do this. e.g. will I need to somehow link the numbers in the HR recode to the PR recode, and why are the sh57_1/2/3 variables even included in the PR recodes when they contain no data?

2) When looking at morbidity (injuries) due to accidents the numbers don't match in the HR and PR recode files in all surveys, so again I'm unsure how to go about calculating rates, which I again had initially planned to do just using the relevant variables in the PR recode files.

e.g.

Cambodian DHS 2014

HR recode - sh50 "person in household accidentally killed or injured in last 12 months (rech3)": number of injuries in past 12 months = 0 = 14654, 1 = 1064, 2 = 101, 3 = 5.
Total is therefore = 1064 + (2*101) + (3*5) = 1281.

PR recode - sh50 "person in household accidentally killed or injured in last 12 months (rech3)": number of injuries in past 12 months = 0 = 67970, 1 = 5513, 2 = 603, 3 = 32.
Total is therefore = 5513 + (2*603) + (3*32) = 6815.

So the overall number of injuries in the past 12 months according to the HR recode is 1281, but according to the PR recode is 6815: clearly a huge difference, and I don't understand why this is the case! Again I assume I have completely misunderstood something obvious here rather than there being a genuine discrepancy, but can anyone help me understand the cause, and so how to go about correctly calculating the injury rates?

Thank you

Subject: Re: Cambodia mortality/morbidity rates due to accidents: calculation issues
Posted by milo1984 on Fri, 27 May 2016 16:15:15 GMT
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Is there any chance a DHS statistician can help with my query?

Thank you.

Subject: Re: Cambodia mortality/morbidity rates due to accidents: calculation issues
Posted by Bridgette-DHS on Thu, 02 Jun 2016 15:27:33 GMT
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Following is a response from Senior DHS Stata Specialist, Tom Pullum:

You were right to expect the codes in the HR file to appear in the PR file too. It occasionally happens that they are not transferred. This is a data processing error and usually only happens, as in this case, with country-specific questions.

Note that if the accident resulted in a death, then the person who died will not be included in the household listing, and could not be in the PR file. Other accidents, that do NOT result in a death, COULD be associated with an individual in the PR file.

There appears to have been a coding omission. I am looking just at the 2014 survey, and at the files KHPR71FL.dta and KHHR72FL.data. I see that the HR file includes sh50 and sh53_1/2/3 through sh57_1/2/3, all related to accidents. The PR file includes sh50 and sh53 through sh57, without subscripts. The omission is that the line number of the person referred to was not coded. In the HR file there should have been, say, sh52_1/2/3, which would have been the line numbers of the three people (max) in the household who had accidents (but survived).

The line numbers are not given explicitly in the HR file, but apparently DP had access to them, because the PR file DOES identify the (surviving) individuals. You say that the variables are all missing in the PR file, but I do see them in KHPR71FL.dta. (I don't have time to look at the other Cambodia surveys.)

If you look at the KHPR71 file carefully (for example with "list hv001 hv002 hvidx sh50 sh53 sh54 sh55 sh56 sh57 if sh50==3, table clean") you will see that everyone in the household has the same value of sh50, and the people who had non-missing values of sh53-sh57 will have codes for those variables. For example, if there were 3 people who had accidents, those people will be identified. The value of sh54 (on survival) is superfluous because it is always yes. (People who died are identified in the HR versions of these variables, but you have no other information about them.)

I hope this will point you in the right direction. Let me know if you have other questions about how to use these variables.

Subject: Re: Cambodia mortality/morbidity rates due to accidents: calculation issues
Posted by milo1984 on Tue, 07 Jun 2016 08:48:36 GMT
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Thank you very much for the helpful reply. I think that has answered all my current questions effectively.
