Subject: analysis of data of children

Posted by fldekoning on Wed, 05 Mar 2014 20:18:16 GMT

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I am involved in a national food security survey implemented by SETSAN, the governmental agency for food security in Mozambique. The sample design of the survey is similar to the sample of the Mozambican DHS 2011 (and the Kyrgyz DHS). In order to test my analysis plan for SPSS complex samples I am trying to replicate some figures in the sampling errors chapter in the report of the recent Kyrgyz DHS. This works well for household and women related variables, but I fail to reproduce the figures related to nutritional status of the under-five children, e.g. height-for-age (% <-2SD). I wonder what I do wrong and hope you can give me some advice.

I used file KYKR60FL.SAV. Regarding the CS analysis plan, I used V022 for strata, V001 for clusters and V005 for sample weight; estimation method was WR. I was in doubt about which variable to use to calculate the prevalence of low height-for-age (H/A<-2SD): HW5 or HW70, but decided to use HW70 because it uses WHO 2006 as reference and excludes cases with values out of plausible limits. Then I computed a new dichotomous variable with value 1 for H/A < -200 and value 0 for H/A>= -200, and recoded 9996-9998 to missing. This resulted in 4016 valid cases (plausible values) out of a total of 4363 cases (of which 293 are missing: 120 user missing and 173 system missing). To compute the frequencies of low height-for-age (<2SD) I use Complex Samples with the above defined analysis plan, then use Frequencies, and use variable V024 (Region) for Subpopulations to compute the prevalence and error for the provinces.

The first thing that strikes me is that the Kyrgyz DHS report mentions 4337 cases for the analysis of the height-for-age variable, which is much more than the number of 4016 cases with valid anthropometric indices that I arrived at myself. Secondly, and probably not surprisingly, my estimates and errors do not correspond with the figures in the Kyrgyz report, particularly for the provinces.

I wonder what I did wrong. Did I use the wrong data file, or the wrong variable (HW70), or was the recoding of HW70 not correct? Was the CS plan of analysis correct (for example, was it appropriate to use V022 for sample weight)?

I would be very happy if you could help me out. It is important to us because we have to present figures at province level besides at national level and (national) urban/rural, and would like to compare our data with those of the Mozambique DHS 2011.

Thank you very much in advance.

Subject: Re: analysis of data of children

Posted by Trevor-DHS on Tue, 18 Mar 2014 13:39:45 GMT

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The first thing to look at is the denominator. According to the Kyrgyz Republic report on page 184, the data were collected from children under age 5 in the sample households - that is not just the children of women who were interviewed. The KR file that you are currently using is only for children of women who were interviewed. You will note in table 12.1 that there are rows for

Mother's Interview Status, that shows that some mothers of children included in the table were not interviewed. You will need to use the PR file to find all of the children measured. In the PR file, the variable HC70 is the equivalent variable to HW70 to use.

For the CS Plan, I recommend to use V021 for the PSUs and not V001. In many surveys these are identical, but in a small number of surveys the cluster is not the same as the PSU. For the CS plan, you should be using PSUs.

Hopefully this will help you on the right track. Let us know if you still have problems.