Subject: regression to explore the relationship between neonatal mortality & maternal health seeking behavioo
Posted by gyhujbox5 on Fri, 25 Sep 2020 06:45:21 GMT
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Hi there,

I am using data from Nepal Demographic and Health Surve to explore the relationship between neonatal mortality and maternal health seeking behaviour. Dependent variable as neonatal mortality for last birth in five years preceding the survey (recoded as 1=neonatal death, 0=none). I am thinking to use multiple logistic regression for my analysis. After exploring the data, I found that the number of neonatal death is 71 out of 4079 last birth in five years preceding the survey. Is it (71 neonatal death) is too small in comparison to 4008 non death to use regression analysis? I gone through few papers and found no restriction in data using DHS data for neonatal death. Please suggest me.

Subject: Re: regression to explore the relationship between neonatal mortality & maternal health seeking behavioo
Posted by Bridgette-DHS on Fri, 25 Sep 2020 13:08:10 GMT
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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

My recommendation would be that you go ahead with a preliminary logit regression, including the weights and survey design effects, and look at the standard errors and confidence intervals in the results. You may be able to get a significant coefficient at the national level, but I have my doubts.

In logit regression, the standard error of the coefficient depends as much on the number of "yes" cases as on the number of "no" cases, and not just on the total number of cases. It's good that you are being cautious.

An important issue in this relationship is women who have difficulties during the pregnancy, that is, a higher risk pregnancy, may be more likely to seek care. This can flip the sign of the coefficient, making it appear that health care has had a negative effect.