Subject: why weights cannot be used to test for relationship like regression
Posted by mmakali1 on Wed, 02 Mar 2016 22:41:41 GMT
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I would like to seek guidance concerning the kenya 2008/2009 DHS guide on sampling weights.What is the rationale on why sampling weights should not be used when performing a relationship like logistic regression ?Am using a merged dataset from household and hiv datasets.Am running a bivariate logistic regression and will also test for effect modification between hiv status and improved water sources and improved sanitation.Attached is an excerpt from the DHS guide on sampling weights below..

Notes and Considerations
1. The sum of the sample weights only equals the number of cases for the entire sample and not for subgroups such as urban and rural areas.
2. Where there are no differential probabilities, weights may not be calculated since weights based just on response rates usually make little difference in results.
3. Use of sample weights is appropriate when representative levels of statistics are desired, such as percentages, means, and medians.
4. Use of sample weights is inappropriate for estimating relationships, such as regression and correlation coefficients.
5. Use of sample weights biases estimates of confidence intervals in most statistical packages since the number of weighted cases is taken to produce the confidence interval instead of the true number of observations. For oversampled areas or groups, use of the sample weights will drastically overestimate sampling variances and confidence intervals for those groups.