
Subject: Re: Query on Cluster-Level Modeling with DHS Data and Sampling Weights

Posted by [Bridgette-DHS](#) on Fri, 20 Sep 2024 10:41:46 GMT

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Following is a response from Senior DHS staff member, Tom Pullum:

You are using R. Below I will paste a simple example in Stata, showing what I would do. The example shows how the weights and number of cases come into play with a binary outcome and a glm model. Substantively, this would not be a good analysis of the data, but it is just intended as an example of the setup. Hope you can convert to R and hope this is helpful.

* Example of individual-level and cluster-level analysis with the same variables

* Kenya 2014 DHS survey

use "...KEIR81FL.DTA" , clear

* construct a binary outcome variable for 4+ children

```
gen nch4plus=0
```

```
replace nch4plus=1 if v201>=4
```

* construct dummies for wealth quintiles

```
xi i.v190
```

```
rename _I* *
```

* Individual-level analysis

```
svyset v001 [pweight=v005], strata(v023) singleunit(centered)
```

```
glm nch4plus v190_* , family(binomial) link(logit) eform
```

* Cluster-level analysis; first switch to clusters as units

```
gen cases=1
```

```
collapse (first) v005 v023 (sum) nch4plus cases (mean) v190_* , by(v001)
```

```
svyset [pweight=v005], strata(v023) singleunit(centered)
```

```
glm nch4plus v190_* , family(binomial cases) link(logit) eform
```
