
Subject: How to use cluster and strata variables in ever married surveys?

Posted by [Han](#) on Fri, 18 Dec 2020 15:24:25 GMT

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Hi, I have a problem regarding all women factors in STATA. From the Page 1.43 of Guide to DHS Statistics DHS-7, the example shows that the mean number of children ever born for all women can be calculated by the following code:

```
gen awf = awfactt/100
ratio v201 / awf [iw=wt]
```

However, I am puzzled why the cluster and strata variables were not considered in the above code? If I would like to calculate the weighted prevalence of Y for example for women from an ever married survey, then what should I do to take cluster, strata, and awfactt variables into consideration together?

Thank you!

Subject: Re: How to use cluster and strata variables in ever married surveys?

Posted by [Bridgette-DHS](#) on Thu, 24 Dec 2020 00:28:25 GMT

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Following is a response from Senior DHS Specialist, Kerry MacQuarrie:

There are two questions here: (1) whether to use svy commands to account for the clusters and strata in the complex sampling design and (2) whether to incorporate awf to account for using an ever-married woman sample. I take each in turn.

1. In fact, svy: can be used with ratio commands in your example below. But it's not necessary when you're looking only at the point estimate.

```
ratio v201 / awf [iw=wt]
```

and

```
svy: ratio v201 / awf
```

produce the same thing because svyset uses wt for the weighting the same way iw does. It only makes a difference in calculating the confidence intervals and other statistics based on them (p-value from a chi-square, e.g.) because svyset also takes into account clustering that the iweights do not.

The same thing applies to getting the weighted prevalence using tab commands. Using either

```
tab varY [iw=wt]
```

or

```
svy: tab varY
```

will produce the same point estimate. Use svy: tab (with lb ub or ci options) if you want the 95%CI.

2. Regarding awf, I'm not certain this is something you need to adjust for in the analysis (prevalence estimates) you're looking for. If you're working in the IR file, your denominator will be all ever-married women, so the prevalence of Y is ___% of ever-married women. As long as you present that clearly, there is no issue. On the other hand, if you're working in the PR file, that file has data on its variables for all women, married or not, so awf wouldn't be needed as an adjustment factor. I've only had to use awf for calculating things like mean or median ages of marriage for all women using data from ever-married women samples, and not for calculating the percentage of something among ever-married women. Please clarify what analyses you're conducting and which data file(s) you're working in if you still think awf is something you need to adjust for.

Subject: Re: How to use cluster and strata variables in ever married surveys?

Posted by [Han](#) on Thu, 24 Dec 2020 02:15:35 GMT

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Dear Kerry MacQuarrie,

Thanks a lot for this clear and elaborated reply.

I intended to calculate the prevalence of underweight in a ever-married women survey with a complex sampling design using a IR file. According to your suggestion, I now understand that I have no need to adjust for awf when calculating this prevalence in such surveys.

Best Regards

Han
