Subject: Indicator of sexual violence and child marriage
Posted by DHSuserNY on Fri, 24 Jan 2014 17:17:32 GMT
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I'm using the Women's Individual file to estimate the prevalence of females who have experienced child marriage (first marriage before age 18) and/or sexual violence in various countries by creating a joint indicator of the two variables. Since the age at marriage variable (v511) is asked of all women in the sample and the violence questions (d108, d125, d124, d126) are only asked to one woman per household in the violence module, what weight should I be using for this joint indicator? If I use the domestic violence weight (d005), the estimate will reflect only those in the domestic violence subsample but will this accurately estimate those who were married by age 18? And if I use the regular weight, it seems like it will underestimate those who have experienced violence.

Any advice is appreciated.

Thanks!

Subject: Re: Indicator of sexual violence and child marriage
Posted by Trevor-DHS on Fri, 24 Jan 2014 19:24:47 GMT
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If you plan to calculate an indicator of whether a woman has experienced child marriage or sexual violence, you will need to limit your analysis to women for whom both the marriage and the domestic violence data were collected. When analyzing this data you should use the domestic violence weights (d005).

Subject: Re: Indicator of sexual violence and child marriage
Posted by DHSuserNY on Mon, 27 Jan 2014 16:05:06 GMT
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Great, thanks.. that's helpful!

Another related question, is there a rule of thumb for the number of observations using the DV sub-sample that are considered too small for reliable statistics. For example, with the full sample, DHS usually states under 25 observations is too small to be reliable, and 25-49 should be used with caution when interpreting statistics.

Thanks again!

Subject: Re: Indicator of sexual violence and child marriage
Posted by Liz-DHS on Mon, 27 Jan 2014 16:08:34 GMT
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Dear User,
I believe the same rule of thumb is used for all subsamples. Trevor can chime in if he is not in agreement.
Thanks!

Subject: Re: Indicator of sexual violence and child marriage
Posted by Reduced-For(u)m on Tue, 04 Mar 2014 19:05:14 GMT
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You could always do the power calculations and get some idea for yourself. Stata 13 has a new "power" command, or you could leaf through this paper:
http://www.stat.columbia.edu/~gelman/stuff_for_blog/chap20.p df

Or you could just use one of the online power calculators, like this one:
http://www.statisticalsolutions.net/pss_calc.php (I just picked this one out of all of them because I played with it once - some offer more alternatives)

Basically, if you have some idea of the standard deviation of your outcome, and how big an effect you want to be able to detect, you can figure out the necessary sample size to get 80% (or whatever) power at 95% (or whatever) confidence pretty easily. I would be that the DHS recommendations come from some calculation like that (or just the old N=40 --> Normal Distribution of Ybar rule of thumb)

For instance, to detect an effect of .5 standard deviations of your outcome with "standard" parameters (alpha = .05; beta = .8) you need 63 observations in each of treatment and control groups (assuming iid random treatment). If you aren't thinking in these kinds of comparisons, the simple power calculations may still give you some idea of a needed sample size - just know that that is an absolute minimum size and should probably be internally revised upward for any hope of finding the effect of interest.