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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](http://www.stat.columbia.edu/~gelman/stuff_for_blog/chap20.pdf)

Or you could just use one of the online power calculators, like this one:  
[http://www.statisticalsolutions.net/pss\\_calc.php](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  $\bar{Y}$  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.

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