Subject: Contraception discontinuation
Posted by ASharma on Sun, 20 Mar 2016 16:46:49 GMT
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I am trying to recreate contraception discontinuation rates- table 7.9 and 7.10 in Nepal DHS 2011; I have used calendar data to derive the rates but for some reason even the number of episodes are not matching with the Nepal 2011 report. Please help.

Subject: Re: Contraception discontinuation
Posted by ASharma on Wed, 23 Mar 2016 05:41:59 GMT
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Just to add I found a miss match within RH calendar and current use. For case ID 1703 102 2 the current use is female sterilization while the calendar data shows non-use in last five year. Even though this is one case, it will count as three when weighted. Further for Vcal_2, (reasons for discontinuation) I noticed "?" as a value - not really sure what this means, (it could be missing value) and how this has been adjusted in the table.

Thank you.

Subject: Re: Contraception discontinuation
Posted by ASharma on Sat, 26 Mar 2016 14:50:21 GMT
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Hello

Can anyone else help me with this? Its been a silence thus far...

Thank you.

Subject: Re: Contraception discontinuation
Posted by Liz-DHS on Tue, 29 Mar 2016 20:42:07 GMT
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Dear User,
We have submitted your query to one of our experts. As soon as we have a response, we will post. Thank you!

Subject: Re: Contraception discontinuation
Posted by Trevor-DHS on Tue, 29 Mar 2016 21:12:10 GMT
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This situation happens occasionally when two events occur in the same month. In the case you pointed out the respondent gave birth in the month of interview and was sterilized immediately after birth. In the calendar only one code is recorded and the code for the birth takes priority over the code for sterilization. Thus you will not see the code for sterilization in the calendar for this case.

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Subject: Re: Contraception discontinuation
Posted by Trevor-DHS on Wed, 30 Mar 2016 04:10:49 GMT
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In response to message 9365, if you can share your code we can check for where there are differences in the calculation.

In response to message 9386, and the "?" in vcal_2, this code is for a missing response for the reason for discontinuation in the second column of the calendar. This category is collapsed into the "Other reasons" category in table 7.9

For your question about matching the number of episodes in table 7.9 or 7.10, which numbers are you comparing to? I don't see a total number of episodes in either of these tables. Note also that these two tables use very different approaches for their calculation. Table 7.9 uses a life table for the discontinuation rates and uses episodes in the period 3-62 months preceding the survey, while table 7.10 is a simple percent distribution of episodes that terminated in the period 0-59 months preceding the survey. Table 7.10 provide a total number of discontinuations (episodes that discontinued in the period 0-59 months before the survey).

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Subject: Re: Contraception discontinuation
Posted by ASharma on Wed, 30 Mar 2016 17:05:27 GMT
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Dear Trevor

Thank you for clarification regarding the birth and treatment of missing variable. For the table 7.10 please find my code

******Calendar data****

```
forvalues i = 1/80 {
  gen e_`i' = substr(vcal_1,`i',1)
  gen r_`i' = substr(vcal_2,`i',1)
}
keep caseid v001 v002 v003 v005 v008 v011 v017 v018 v019 v013 v101 v102 v106 v131 v190
v302a v312 v501 v624 e* r*
reshape long e_ r_, i(caseid) j(i)
```

* Set length of calendar to use

```
gen callen = v018 + 59

gen begin = v018
gen end = callen

****** Include only the five year period
keep if i >= begin & i <= end

*******Table 7.10
tab r_ e_ [iw=v005/1000000]
```

Using this I obtain a table which has 4432 total number of discontinuation. In addition this includes methods like Diaphragm and other traditional which I are not there in the final table and not sure how these were treated.

For Table 7.10, I did use survival analysis (life tables). However I have not used survival analysis in Stata and thus used SPSS. Please find below the syntax. I would be thankful if you could suggest code for Stata.

```
SURVIVAL TABLE=i BY status (1)
  /INTERVAL=THRU 62 BY 3
  /STATUS=e(1)
  /PRINT=TABLE
  /PLOTS (SURVIVAL)=i BY status
  /COMPARE=i BY status
  /CALCULATE PAIRWISE.
```

Thank you

Regards
Anu

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Subject: Re: Contraception discontinuation
Posted by ASharma on Thu, 14 Apr 2016 16:28:05 GMT
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Dear Trevor

Any guidance on my last post?

regards.

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Subject: Re: Contraception discontinuation
Posted by Trevor-DHS on Wed, 20 Apr 2016 18:19:16 GMT
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I don't have too much experience with life tables in Stata, but analysis expert Sarah Bradley wrote recently for another user:
"My suggestions for replicating DHS results are:

1. Reshape vcal_1 and vcal_2 into files where the unit of analysis is the episode of contraceptive use (potential multiple episodes j per woman i). It sounds like this isn't a daunting task for you, but if you run into trouble with this step, please let Trevor and I know, as we're working on standard events-based files.

2. Calculate durations of use from the start and end of each episode of use. Note that DHS standard is to use a window of observation that is 3-62 months prior to interview, censoring the most recent 3 months prior to interview, dropping left-truncated episodes, and including episodes of use that began >62 months before interview as late entries into the life table. We describe this in somewhat excruciating detail in the methodological appendix in the recent Guttmacher Report on Contraceptive Failure.

3. For associated-single decrement rates (as in the Guttmacher report), try -sts list-. Note that this doesn't support pweights. I use iweights and calculate the SEs in alternative ways.

4. For multiple-decrement rates (as in DHS final reports, STATcompiler), I like -stcompet-. The documentation on this in Stata Journal is quite good.

A caveat: -ltable- in Stata assumes that nax = n/2, i.e. that discontinuations occur in the middle of the month. The DHS standard is to assume that discontinuations occur at the end of the month, so -ltable- will produce slightly different estimates than -sts list- which assumes that failures occur at the end of the month."

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Subject: Re: Contraception discontinuation
Posted by ASharma on Sun, 24 Apr 2016 13:02:44 GMT
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Dear Trevor and Sarah

Thank you very much. This looks to be super helpful. I will review the materials further before posting any new query. However I do have one questions on the analysis, were the women who were using sterilization (male or female) before the calendar discarded for the analysis. What about those adopting this method during the period, how are they treated? Maybe this is mentioned in the document posted.

Thank you
AS

Subject: Re: Contraception discontinuation
Posted by Sarah B on Fri, 13 May 2016 09:04:50 GMT
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Hi Anu,

Most contraceptive discontinuation rates are calculated for specific methods, so sterilization is not an issue. When all methods are combined, though, episodes of sterilization that began during the window of observation are included in the denominator, and in the numerator in the very rare case of discontinuation.

As explained in the Guttmacher report, episodes of use that began prior to the window of observation are excluded from analysis, regardless of the method used, because we do not have a start date/duration for the episode.

I haven't gone through your code in detail, but noticed one issue below that will make your #s not match the results in the DHS final report. Your window of observation is set for the past 5 years prior to interview, i.e. months 0-59 prior to interview. DHS (and the Guttmacher report referenced below) censors the 3 months prior to interview because women may not recognize they are pregnant in the first 0-2 months of pregnancy. To avoid underestimation of contraceptive failure due to unrecognized pregnancies, we use months 3-62 prior to survey as the window of observation. So I think you want:

gen callen = v018 + 3 + 59
gen begin = v018 + 3

Cheers,
Sarah

Subject: Re: Contraception discontinuation
Posted by Osmara on Thu, 11 May 2017 20:46:41 GMT
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Dear Trevor and Forum members

I'm analyzing data about contraceptive discontinuation and have some doubts about how to organize my dataset: I'm using data from local survey in Brazil and I have used Calendar data. Looking at Polis et al. (2016) in Appendix A: Calculation of failure rates, I check that "episodes of contraceptive used began before your observation period but within the calendar period, you include the episode as a late entry into the life table, using only the months of contraceptive use that ocurred within the 3-62 months period of observation". I have around 68-72 months of observation for each woman, and I'll analyze only 3-62 months too. So I need exclud months 63-72. In what moment I exclud these episodes? It's whem I'm preparing my dataset or doing analyze? Could you please assist me with obtaining the Stata command to do this exclusion.

I would greatly appreciate any assistance you could offer. Thank you.
Osmara