Subject: Merging PR and IR with only ever-married women Posted by albena on Mon, 01 Jul 2024 16:34:03 GMT View Forum Message <> Reply to Message

## Dear all,

I am coming across an issue for some of the IR datasets that are conducted with only ever-married women and would need your assistance for the hv005 and v005 variables which are the hh sampling weight (PR) and the woman sampling weight (IR).

In the case when the women's data includes only ever-married women, I have to merge it with the household member data to still have the women that are never-married. However, then I have a problem with the sampling weights of the never-married women as in the household member data they have the hv005, but this is different than the v005. I did compare the v005 and the hv005 for the ever-married women and they differ.

Could you tell me why there is a difference between the values of the two weights and would it be legitimate to still use the hv005 for never-married women when they are not part of the women's survey? Or what kind of sampling weight otherwise I should be assigning to them. One example of a dataset where I have this issues is Bangladesh 2017/18.

Thanks as always for your help!

Albena

Subject: Re: Merging PR and IR with only ever-married women Posted by Janet-DHS on Wed, 03 Jul 2024 19:27:10 GMT View Forum Message <> Reply to Message

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

If you want to combine the never-married women in the PR file with ever-married women in the IR file, you can use hv005 for the NMW but you have to take into account that the IR weight, v005, has been adjusted for nonresponse (not all of the eligible women in the PR file, see hv117, were actually interviewed), and it has been re-scaled so that the mean of v005 in the IR file is exactly 1 (multiplied by 1000000).

You will be approximately correct if you just use hv005 for BOTH categories of women in the pooled file. You could improve things slightly by adjusting hv005 for the EMW for nonresponse, but this could be tricky.

The usual strategy would be to use the awfact weights in the IR file, as described in the Guide to DHS Statistics. I personally prefer your strategy but (as I said) it's tricky in terms of the adjustment I just mentioned.

Thank you very much for your help!

I wanted to share the code I use for adjusting the sampling weights for non-response of the ever-married women in the case when the IR data is based only on ever-married women. I merge the PR with the IR dataset to retrieve the never-married women and also construct the sampling weights for them.

use "dir.../BDPR7RFL.dta", clear // this is an example with the survey for Bangladesh 2017/18

\* keep women age 15-49 years

keep if hv104 ==2 keep if hv105 >=15 & hv105 <=49

rename hv001 v001 rename hv002 v002 rename hvidx v003

\* merge with IR data merge 1:1 v001 v002 v003 using "dir../BDIR7RFL.dta"

tab hv116 \_m

```
egen hv005_sum=sum(hv005) if hv116~=0, by(hv023)
egen response=sum((_m==3)*hv005/hv005_sum) if hv116~=0, by(hv023)
```

```
* constructed weight for ever-married with adjustment for nonresponse gen wt=hv005*(1/response) if _m==3
```

\*\*\* \* Check re-scaled constructed weight equals v005 egen temp=mean(wt) gen wt\_rescaled=(wt/temp)\*1000000

```
sum wt_rescaled v005
corr wt_rescaled v005
```

\* weights for never-married

replace wt = hv005 if \_m==1 & hv116==0

drop if wt ==.

Does this approach seem somewhat correct to you? I have a doubt about the condition hv116~=0. Is it more correct to have hv117==1 (include only the eligible women for the wm interview)? I also tried with hv116~=0 & hv103 ==1 (woman slept last night in the household). The hv102==1 (usual resident) doesn't play any role I think (?).

I think that my point refers very much to the definition of eligible women for the wm interview in the case of ever-married IR. Are the eligible women just hv116 ~=0 & hv103 ==1 & age >=15 & age <=49? Why can some ever-married women be non-eligible? Maybe this is because they turn out to be never married? Or is it because they are physically/mentally unable to do the IR interview, e.g. because mentally ill, in labor, ...? If women are non-eligible because they are actually never married, then I should indeed use the hv117 variable. If they are non-eligible because of incapacity to do an individual interview I should use the hv116 variable. So, I was wondering which women are included in the set hv116~=0 & hv117==0? Could you help me with this?

Thank you!

Subject: Re: Merging PR and IR with only ever-married women Posted by Janet-DHS on Wed, 31 Jul 2024 18:32:56 GMT View Forum Message <> Reply to Message

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

I believe that what you done is ok. I say "ok" rather than "correct" because I'm sure there's more than one way to do what you want to do.

In most surveys we do see some differences between marital status as it is reported in the household survey, by the household respondent (for all household members), and in the women's survey, where it is reported by the woman herself. I think it's quite possible that a few women are reported as ever-married by the household respondent and get hv117=1, but then they self report as never-married. I have not checked for such cases in this survey, but in the past I have suggested that such discrepancies reflect on survey quality.

I too have worked on this problem. My latest attempt, in April 2023, is attached. You could run it on this survey and compare with what you get. (Let us know if you have difficulty running it.) There are probably differences, but I hope they are small. In any case, I guarantee you that what you did and what I did will produce different estimates than the usual DHS approach, with all-women factors. The all-women factors are very sensitive to sampling variation and should have been abandoned decades ago, in my humble opinion.

## File Attachments 1) convert\_EMW\_IR\_file\_to\_all\_women\_file\_do\_24Apr2023.txt, downloaded 116 times

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