## Subject: Re: Combining PR and KR to get child-specific malaria test results Posted by Trevor-DHS on Mon, 29 Aug 2016 16:53:27 GMT

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Here is a response from Senior DHS Stata Specialist Tom Pullum:

You appear to have encountered two errors in the KR data. I will report them to our DP staff. Here I will go into quite a bit of detail because this kind of detective work may be useful.

There are two children in this Angola KR file who have duplicate values of v001, v002, and b16. I found the duplicates with these lines:

```
use AOKR51FL.dta, clear
gen n=1
collapse (sum) n, by(v001 v002 b16)
drop if n==1
list, table clean
```

You can thus identify v001 and v002 and b16 for these cases and go back to the KR file to get the mother's line number, v003:

```
use AOKR51FL.dta, clear list v001 v002 v003 b16 if v001==58 & v002==53, table clean list v001 v002 v003 b16 if v001==96 & v002==69, table clean
```

## Giving this:

```
v001 v002 v003 b16
870.
       58
            53
                 4
                     7
871.
       58
            53
                 6
                     7
    v001 v002 v003 b16
1327.
       96
            69
                  3
                      5
1328.
       96
            69
```

Apparently, in these two households, the same child is listed twice, each time with a different mother. To figure out how this happened, my next step was to list the two households in the PR file, as follows:

use AOPR51FL.dta, clear

. list hv001 hv002 hvidx hv101 hv104 hv105 if hv001==58 & hv002==53, table clean

	hv001	hv002	hvid	x hv10	)1 hv10	4 hv105
6704	4. 58	53	1	head	male	59
670	5. 58	53	2	wife or	female	52
6706	6. 58	53	3	grandchi	male	22
6707	7. 58	53	4	other re	female	17
6708	3. 58	53	5	other re	female	0
6709	9. 58	53	6	grandchi	female	18
6710	0. 58	53	7	other re	male	0

. list hv001 hv002 hvidx hv101 hv104 hv105 if hv001==96 & hv002==69, table clean

	hv00	1	hv002	hvidx	k hv101	hv104	hv105
1066	2.	96	69	1	head	male	38
1066	3.	96	69	2	son/daug	female	15
1066	4.	96	69	3	son/daug	female	17
1066	5.	96	69	4	brother/	male	18
1066	6.	96	69	5	grandchi	female	1
1066	7.	96	69	6	other re	male	23
1066	8.	96	69	7	other re	female	19
1066	9.	96	69	8	brother/	female	31

I believe that in the first household, the first child with b16=7 should actually have b16=5. In the second household, I think there is simply a duplication of the child on line 5.

To confirm that in the second household there is a duplication of the same child, I do this: use AOKR51FL.dta, clear

keep if v001==96 & v002==69 & b16==5

list, table clean

I won't copy the output, but all the b variables are duplicated, not just b16--so, yes, one of these cases is a duplicat and should be removed. However, which one? Who is the mother? Is the mother the woman on line 3 or the woman on line 7? In many surveys, I could get this from hv112, line number of the mother, but that's omitted from this survey, so I have to go to the IR file.

The mystery child has bidx=1, so I only need to look for the youngest child in the birth histories (child 01) for these two women.

use AOIR51FL.dta, clear

keep if v001==96 & v002==69 & (v003==3 | v003==7)

keep v001 v002 v003 b\*\_01

list, table clean

These two women have identical entries for the youngest child, and both match with the mystery child. Probably the child should be removed from the birth history of one of the women in the IR file. Based on the order of the household listing, and the relation to head code (hv101), I believe that the child's mother is the woman (age 17) on line 3, NOT the woman (age 19) on line 7.

Therefore I propose that while doing the merge of the KR and PR files, in the KR file you change b16 to 5 for the first child in household 58/53 and you drop the second child in household 96/69: set more off

use e:\DHS\DHS\_data\KR\_files\AOKR51FL.dta, clear keep v001 v002 v003 b\*

tab b16,m drop if b16==0 | b16==.

replace b16=5 if v001==58 & v002==53 & v003==4 & b16==7 drop if v001==96 & v002==69 & v003==7 & b16==5

rename v001 hv001

rename v002 hv002 gen hvidx=b16 sort hv001 hv002 hvidx

save e:\DHS\DHS\_data\scratch\AO51temp.dta, replace

use e:\DHS\DHS\_data\PR\_files\AOPR51FL.dta, clear keep hvidx hv001 hv002 hv105 sort hv001 hv002 hvidx merge with the temp file.....

If you do this, you will not get an error message from Stata. Note that you should not permanently alter your AO51 files. If you do, you will regret it later....