Subject: not in the universe
Posted by hemistryhealth on Sun, 19 Aug 2018 23:09:21 GMT
View Forum Message <> Reply to Message

Good evening,

I am using child recode from IPUMS DHS as my unit of analysis looking at anaemia in women and children. I have a not in-universe value of 28,490 out of total 62,913 observation. Please help. This is almost half of the observation. Is there a reason (that number of women did not screen for anemia, or inconsistent result???)Please.

Thanks a million

Eunice

Subject: Re: not in the universe
Posted by hemistryhealth on Mon, 20 Aug 2018 12:05:55 GMT
View Forum Message <> Reply to Message

Hi ALL,

Please, I will really appreciate if anyone has a feedback on my question posted yesterday on not in the universe. I am really trying to understand the huge number of NUI in women.

I really appreciate your help.

Eunice

Subject: Re: not in the universe
Posted by kingx025 on Fri, 24 Aug 2018 21:01:40 GMT
View Forum Message <> Reply to Message

I would need to know which country and sample year you are working with to be sure, but my best guess is that a subset of households were selected for hemoglobin testing, and all children outside of those households were not tested/did not get a blood draw. Check the UNIVERSE tab for your variable of interest, or try running a cross-tab with the variable HEMOSELECT (V042) if children are the unit of analysis (KR files) or with HHEMOSELECT (HV042) if household members are the unit of analysis (PR files). Often only half of households are selected for biometric measures such as blood testing. The same holds if you looking at results for women or adult men.

Subject: Re: not in the universe
Posted by hemistryhealth on Sat, 25 Aug 2018 11:44:35 GMT

Thank you for your time in responding. I am exploring Ghana2014, malawi 2016, rwanda 2015, tanzania 2016, uganda 2016, zimbabwe 2015. I checked the not in the universe tab and nothing to explain this difference. I checked the summary report for each of the countries and tabled out the women and children testing results with number sampled. my extracted data gave me sampled size for all countries N= 62,913. See attached sreeen shot of anemia screenshot.
The missing is just way too much. Oh, yes, I checked the number of hh sampled as well. 2 of the countries used 1/2, 2 used 1/3 and 2 used all hh.

Thanks for your time.

File Attachments

1) Capture.PNG, downloaded 475 times

Subject: Re: not in the universe
Posted by kingx025 on Mon, 27 Aug 2018 17:38:35 GMT

Brian Zetah, one of the grad RAs on the IPUMS-DHS project, checked the numbers and sorted out how various children end up in the NIU category for your samples of interest.

Some of the universes for the biometric variables in the KR file use wording such as: Ghana 2014: Surviving children under age 5 who were measured as household members and whose co-resident mothers were female survey respondents age 15-49.
There are some universe restrictions implicit in the term "who were measured as household members"--and you can see those restrictions if you look at the universe for the child biometric measures using household members as the unit of analysis (from the PR files).

For example, the universe for the child biometric variables in the PR (household member) files is: Ghana 2014: Household member age 6-59 months, in households selected for weight, height, and hemoglobin measurements.
So, children under 6 months were excluded, children who were dead were excluded, children who were not measured for some reason were excluded, and children in households NOT selected for weight, height, and hemoglobin measurements were excluded.

I reproduce, below, Brian's summary of his results, looking at the samples of interest for you, for more detail:
It seems like this user is not taking into account cases of women/children who were not selected for various reasons.

As shown in the picture the user attached, there are 35,495 cases that are NIU. 28,490 cases can be accounted for simply by the fact that their household was not selected for hemoglobin measurements.

We now have 7,005 cases where the household was selected for hemoglobin measurements, but

are still NIU. To figure out these remaining cases, around half of these cases are due to the ages of these children. As noted in the universe, children under 6 months of age are excluded.

So now we have 3,646 cases left to account for. For these cases, I looked at hwwhynotmeas (hw13), which reports whether the child was measured and the reason why not if they weren't measured.

This also makes sense, as we wouldn't expect any data for dead children or children for whom no measurements were found. Thus, this user may find it helpful to drop all cases where hemoselect (v042) == 0, hwwhynotmeas (hw13) == 97 (no measurement found in household), and kidagemo (hw1) < 6 (children under 6 months).

This thread on the user forum may be also helpful in explaining cases of "no measurement found in household." Of particular interest is a comment from Trevor, where he notes:

"There are two parts to the explanation:
1) In DHS, we first interview households, collect a list of persons living in the household and who slept in the household the night before the survey, and for selected groups of these people (children under age 5, women age 15-49, sometimes men age 15-49/54/59) we collect anthropometric measures and biomarker information. When we interview women we also collect a history of all of the children the woman has given birth to. HW13 in the BR and KR files relates to all of the children the woman has given birth to, and some of these may not live in the household. Any living child of the woman interviewed who does not usually live in the household and did not sleep in the household the night before the survey will have no anthropometric information collected for them in the household/biomarker questionnaire and are coded "no measurement found in household".

2) For surveys such as Malawi 2010 and Mali 2012 the anthropometric and biomarker information collected in the survey was only collected in a portion of the sample. For Malawi 2010, see section 1.7 on page 5 of the Malawi DHS 2010 report which explains that the hemoglobin test was conducted in a sub-sample of one third of households only. For Mali DHS 2012, I believe that a subsample of half of the households was used (see Mali 2012-13 DHS report). You should select only the households that were selected for the anthropometry and biomarker data collection (v042 == 1).
Code: [Select all] [Show/ hide]
tab hw13 v042,m
to see the cases selected and not selected.

In general when analyzing the data on nutrition of children, we would recommend using the PR file and the HC series of variables which includes all children living in the household or who slept in the household the previous night and on which we base our analysis, rather than the BR or KR file. However, as it appears that you are linking this to intimate partner violence, there is no advantage to this as you need to be linking women and their children, but this also means that you will have no anthropometry or biomarker information for any child who does not live with the respondent, which would clearly be a limitation of your study (with a possible bias as it is possible that children not living with their mothers may be correlated with intimate partner violence)." (emphasis added)

As a side note, given Trevor's recommendation to use the PR file, it may be helpful to direct this user to use household members as the unit of analysis on the IPUMS-DHS site.

That's the end of Brian's summary. I will work with the IPUMS-DHS team to make sure that the full detail on universes for the child biometric variables is consistently included.

Thanks for drawing our attention to this issue.

Miriam King

Subject: Re: not in the universe
Posted by hemistryhealth on Mon, 27 Aug 2018 18:48:48 GMT
View Forum Message <> Reply to Message

Thank you, Brian and Dr. King, for your time and detailed answer. I had explored the women and household file as the unit of analysis in beginning in IPUM-DHS for my samples and found that, e.g. breastfeeding and BIDX information were missing in the household recoded file in IPUMs.(see e.g. attached) and all my variable of interest were present only in completion in the children recoded file. Also, age for children in months (HML16A) was also missing for Malawi, Uganda, and Zimbabwe amongst other variables. I will continue to work on with your explicit explanation of the NUI and explore the other unit of analysis in details at a more later stage because of my time constraint. I sincerely appreciate your time.

Eunice

File Attachments
1) Capture.PNG, downloaded 468 times

Subject: Re: not in the universe
Posted by kingx025 on Mon, 27 Aug 2018 19:14:48 GMT
View Forum Message <> Reply to Message

Good luck with your research, Eunice. The only variables we have included when household members are the unit of analysis are variables included in the PR/Household file, and while the PR files have biometric data for children whose mothers were not surveyed, the PR files lack many other child health variables of interest that were collected as part of the woman's survey.

Perhaps someday IPUMS-DHS will try to link the women's and children's information back to the household files, but that is a long-run rather than short-term goal. I understand from posts on the User Forum that the very skilled staff at ICF have not been able to link back children from the KR files to the household PR files for some older years, so I doubt that IPUMS-DHS would succeed on that either. If you need a wide range of child health information then working with the KR files are indeed your best option. We've tried to make that easier by linking the mother's and mother's household files and variables to the child/KR files in IPUMS-DHS.

Best wishes,
Miriam

Subject: Re: not in the universe
Posted by sarah.posner@colorado.edu on Mon, 17 Sep 2018 20:22:28 GMT
View Forum Message <> Reply to Message

Hello I have a similar question about not in universe for the childrens file for Kenya in 2014, there were 4,616 missing cases of 41,928 and was wondering why some are not in the universe and the best protocol to handle this.

Subject: Re: not in the universe
Posted by kingx025 on Mon, 17 Sep 2018 21:32:50 GMT
View Forum Message <> Reply to Message

Can you please supply some more information, Sarah? By "the children's file for Kenya in 2014," I assume you mean source data from the KR file for Kenya 2014. I see a total of only 20,964 children in the KR file for Kenya 2014. Can you double-check which files are involved and state which variables you are interested in?

Here's an example of a universe for a child biometric variable for Kenya 2014 (data from the KR file):
Kenya 2014: Surviving children under age 5 who were measured as household members and whose co-resident mother was a female survey respondent age 15-49. (Taken from the universe statement for HW2)

I'm not sure what you mean by "the best protocol to handle this." I think you just need to acknowledge which children are included in your analysis; there is nothing you can do to adjust for children who are dead or not measured, for example.

Miriam
