Subject: Antibiotic use for ARI - Tanzania DHS 2016
Posted by soniwe on Sun, 24 Jun 2018 05:21:09 GMT
View Forum Message <> Reply to Message

Hi there,

We are looking at antibiotic use in the Tanzania DHS 2016 data, and trying to replicate the antibiotic use for ARI shown in Table 10.5. We are able to reproduce the figures shown using the following code in Stata:

```
gen ari=0
replace ari=1 if h31b==1 & (h31c==1 | h31c==3)
replace ari=. if age>=60 | b5==0

gen ari_ab=0
replace ari_ab=1 if h37i==1 | h37j==1 | h37n==1
replace ari_ab=. if b19>=60 | b5==0
```

However, we noticed that if there is no fever (i.e. h22=0) then there is data in the dataset on treatment seeking, but there is no data on which drugs were taken. Following the skip pattern in the questionnaire this doesn't seem to make sense. And it means that in fact the data in Table 10.5 shows antibiotic use for ARI only when fever is also present. In other datasets (e.g. Nepal DHS 2016), there is data on antibiotic use for ARI regardless of whether fever is also present.

Thanks for any clarification you can give on this!

Sonia

Subject: Re: Antibiotic use for ARI - Tanzania DHS 2016
Posted by Bridgette-DHS on Wed, 27 Jun 2018 15:58:25 GMT
View Forum Message <> Reply to Message

Following is a response from DHS Technical Specialist, Shireen Assaf:

To get the correct estimates for the antibiotics use indicator you need to indicate that this is among those with ARI symptoms (i.e. you need to add ari==1 in coding the antibiotic indicator). The code below would give you the correct estimates. I also provided the same code for fever for table 10.6

```
*Table 10.5
gen ari=0
replace ari=1 if h31b==1 & (h31c==1 | h31c==3)
replace ari =. if b5==0

gen antibari=0 if ari==1
replace antibari=1 if ari==1 & h37i==1
replace antibari=1 if ari==1 & h37j==1
```

```
replace antibari=1 if ari==1 & h37n==1


*Table 10.6
gen fever=0
replace fever=1 if h22==1
replace fever=. if b5==0

gen antibf=0 if fever==1
replace antibf=1 if fever==1 & h37i==1
replace antibf=1 if fever==1 & h37j==1
replace antibf=1 if fever==1 & h37n==1
```

Subject: Re: Antibiotic use for ARI - Tanzania DHS 2016
Posted by kingx025 on Mon, 09 Jul 2018 01:33:50 GMT
View Forum Message <> Reply to Message

It is confusing that treatments for acute childhood illnesses may be reported as:
Given for fever
Given for cough
Given for fever or cough
Given for fever and cough
Given for fever or convulsions

Which of these conditions holds varies across samples. Because of this variability, IPUMS-DHS
(at www.idhsdata.org) uses composite coding for variables covering such topics as Was the
child's fever/cough treated by a particular drug. In IPUMS-DHS:
All "No" responses are given a code of "00"
All "Yes" responses share a common first digit of 1. The second digit indicates what constellation
of symptoms was treated by the medicine, i.e.,
11 Given for fever
12 Given for cough
13 Given for fever or cough
14 Given for fever and cough
15 Given for Fever or convulsions

Here's an example from ML131 (also named FEVGIVANTIB), for "Child's fever/cough treated by:
Antibiotics (pill/syrup)
 https://www.idhsdata.org/idhs-action/variables/FEVGIVANTIB#c odes_section
By seeing where the X appears (next to which of the 5 possible "Yes" codes listed above), you
can see which constellation of symptoms was specified in a given sample. I can see that this
variable means "given for fever" for Tanzania 2015, because that's where the X appears on the
codes page. Many more samples refer to "fever or cough" for this variable, and some refer to just
"cough" (e.g., Mali 1987), so it's not surprising that you noted differences between Tanzania 2015
and Nepal 2016.

IPUMS-DHS staff empirically check the universe for every sample and every variable, so you can be confident about which category is specified for a given sample in the IPUMS-DHS version of the DHS data. Along with checking where the X appears in the "Yes" codes, you can find this information by checking the Universe tab in the variable description. For example, here are the universes for various samples for ML131, with children as the unit of analysis; https://www.idhsdata.org/idhs-action/variables/FEVGIVANTIB#u niverse_section

You can use the IPUMS-DHS website documentation to check this information and analyze the original DHS files with that information in mind, or log in to the IPUMS-DHS website using your DHS user name and password, select the samples and variables you need and the file format you prefer, and download your customized data file (for free) for analysis.

Miriam King

Subject: Re: Antibiotic use for ARI - Tanzania DHS 2016
Posted by soniwe on Fri, 13 Jul 2018 09:27:08 GMT
View Forum Message <> Reply to Message

Hi Miriam and Bridgette,

Thanks very much for your responses.

Bridgette: We used the subpop option to specify that we only wanted children with ARI, which gives the same result as your antibari code, though specifying it in the code makes it easier for downstream analyses, so we will use that next time!

Miriam: We had noticed that the variable labels for h37i vary between surveys, but hadn't realised that this was related to differences in the data. The resources you shared are very useful.

Both: My question really relates to the fact that in the Tanzania 2016 dataset there are no data on antibiotic use for ARI (rapid or difficult breathing due to a problem in the chest, as defined by the DHS), unless there is also a fever. If you cross tab problem being chest-related (h31c) with antibiotic use (h37i) when there is no fever, no observations are returned.

tab h31c h37i if h22==0

However, according to the questionnaire (Qs 620 to 630), if there are symptoms of ARI (i.e. yes to rapid/difficult breathing, and yes to problem being chest-related) the skip should take you past the fever check to Q 624, which asks about treatment-seeking. In the Nepal 2016 DHS, where the questions and skips are exactly the same as Tanzania 2016 DHS, there is available data if you cross tab h31c with h37i. I'm trying to understand why this is the case.

Thanks for any clarification you can provide.

Sonia