Subject: Child Health and WASH

Posted by chande on Sat, 20 Mar 2021 07:28:59 GMT

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I am trying to check the impact of water sanitation and hygiene on child health(diarrhea, stunting, wasting). Should i use the PR file and how to select only the de facto children. Should i use PR file only or other files too for merging? As i want to find relationship between child health and other household characteristics (Water, Sanitation, mother age & education, father age & education, number of households, nutritional knowledge of mother, decision making of mother, breastfeeding). I need assistance regarding which file to use for above variables and which variables do i need to generate and which are already available in data files.

Subject: Re: Child Health and WASH

Posted by hamid on Sat, 20 Mar 2021 09:30:06 GMT

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Hi,

you can find the complete list of variables contained in each file in the DHS recode manuals: https://dhsprogram.com/publications/publication-dhsg4-dhs-qu estionnaires-and-manuals.cfm

- -make sure that you refer to the manual corresponding to the correct DHS (i.e. if working with Nigeria 1990 you look at the Recode Manual for DHS-II, and when working with Nigeria 2018 the DHS-VII manual would be the correct one).
- Regarding the file to use, it depends on your specific research question and needs. The PR file lists information at the household member level and it also includes anthropometrics (but I believe that it does not contain diarrhea information).

If I were you, I would start with the children recode which includes most of the information you need. If something is missing from this file you want to merge information from other files using the correct unique identifier.

Here how to merge and analyse the DHS https://dhsprogram.com/data/Guide-to-DHS-Statistics/Analyzin g DHS Data.htm

- De facto household memembers are identified by the HV103 variable (in DHS-VII).

Taking some time to study all the documentation and the data structure is always worth:)

Best, Hamid

Subject: Re: Child Health and WASH

Posted by chande on Sat, 20 Mar 2021 10:27:23 GMT

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Thank you Hamid.

I am reading documents.

As you mentioned i need to compute the measures for wasting, stunting etc. May be by following commands etc.

gen stunted = .

replace stunted = 0 if hW70 < 9990

\* set to 1 (Stunted) if it is less than -2 SD (data are stored with two implied decimal places, and thus appear as -200)

replace stunted = 1 if hW70 < -200

\* tabulate stunting for children under age 60 months who are usual residents households. tab stunted if hW1 < 60 & h135==1 & hw70 < 9990 [iw=hv005/1000000]

can you please clarify do i need to consider de facto households which are not available in KR file.

If i replicate stunting %age like report, i am using above commands and V103 (de facto ) members and i got the same %ages with PR file, but what about children file(KR)? Thank you

Subject: Re: Child Health and WASH

Posted by hamid on Sat, 20 Mar 2021 14:08:05 GMT

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What I wrote in the previous post and then deleted was referring to the actual computation of the WAZ, HAZ etc..

It is nice that DHS provides these measures in their recent dataset, however, for older DHS you need to compute them just using gender, age in months/days, weight and height (which it is a very useful thing to do if you do not have much experience).

From your code I believe that you want a dummy indicator taking on value 1 for children with HAZ below -2SD, and zero otherwise (Moderate Stunting).

You code has mistakes.

First, a value of 9999 (not 9990!) for hw70 means that the measurement is missing, thus you do NOT want to replace this value with zeros (which means that a child is in good health). Be also careful because hw70 can take on values 99998 and 99999.

In short: hw70 = 9999 or 99999: either height, weight or any other variable needed to compute HAZ is missing (age, gender, ..)

hw70 - 99998: no variable is missing but HAZ takes on a biological implausible value.

replace hw70 = hw70 / 100

gen stunted = .

replace stunted =. if hW70 == 9999 | hw70 == 99999 | hw70 == 99998

replace stunted = 1 if hW70 < -2

replace stunted = 0 if hW70 >= -2

The de facto household members are those individuals that slept in the household dwelling the night before the interview. The de facto but not de jure members are somehow outside of the sampling design: they are visitors.

Including visitors below age 5 for your study in my opinion does not make much sense:

- if a child was present in the household dwelling by chance (just visiting) all your variables of interest have no causal effect on the dependent variable (especially HAZ which is a measure of long-term malnourishment);
- there is a high likelihood that a visitor cannot be linked to the characteristics of her/his parents;

Best, Hamid

Subject: Re: Child Health and WASH

Posted by chande on Thu, 27 May 2021 16:28:16 GMT

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I generated stunted wasted underweight and CGF(child growth failure- if stunting, wasting underweight (anyone=1) CHF=1 otherwise=0) as binary variables. Is it possible that i may consider these variables as continuous variables? and how to generate above variables in that case?

Subject: Re: Child Health and WASH

Posted by Bridgette-DHS on Mon, 07 Jun 2021 20:12:49 GMT

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Following is a response from DHS Lead Nutrition Research Associate, Rukundo Benedict:

It is possible to consider stunting, wasting, and underweight as continuous variables since these are defined based on WHO Z-score cut-offs. In a regression these can be considered binary (e.g. stunted or not) or continuous if using the height-for-age (HAZ), weight-for height (WHZ) or weight-for-age (WAZ) z-scores.

Child growth failure (CGF) is another way to describe undernutrition, that excludes micronutrient deficiencies. The indicator that you created for child growth failure is a composite and is based on those identified as stunted (HAZ<-2SD), wasted (WHZ<-2SD), and underweight (WAZ<-2SD) and as such the variable you created is binary. Since each of the variables (stunting, wasting, and underweight) are unique measures of child growth failure, it's not possible to create or use z-score for the CGF. However, you could examine the three indicators HAZ, WHZ, and WAZ separately as continuous variables since they are all measures of child growth failure.