Subject: Anthropometric corrections to DHS data
Posted by 11bc23 on Fri, 29 Jan 2021 14:51:01 GMT
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Hi DHS users and team,

I am hoping to clarify whether publicly available DHS datasets already corrects for mismeasurement of child length and height?

WHO released a technical report in 2019 that recommends applying an adjustment of +/-0.7cm to estimates when children were measured lying (when they should've been measured standing) and children were measured standing (when they should've been measured lying). The report can be found here: https://www.who.int/nutrition/publications/anthropometry-dat a-quality-report/en/

Is the above correction or any other adjustments for other variables related to stunting or child growth applied to DHS datasets prior to public release? Have DHS datasets prior to 2019 been back-corrected at all based on WHO recommendations?

Any insight on whether this is included in standard DHS protocol is greatly appreciated. Thank you.

Subject: Re: Anthropometric corrections to DHS data
Posted by Bridgette-DHS on Mon, 22 Feb 2021 13:44:55 GMT
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The following replaces an earlier response, and is by Senior DHS Nutrition Analysis & Research Manager, Sorrel Namaste.

The adjustments applied in DHS surveys is aligned with the 2019 WHO-UNICEF recommendations on how to handle mismeasurement of child length and height data. The algorithm is as follows:

• For children aged below 24 months (< 731 days) and measured standing, the height is converted to recumbent length by adding 0.7 cm; and for children aged 24 months or above who are measured in recumbent position, the length is converted to standing height by subtracting 0.7 cm.

• For children under 9 months of age, where the information indicates standing height was measured assumes this is an error and child is treated as measured in the recumbent position.

Prior to the 2019 WHO-UNICEF guidelines, there was a small difference in how the WHO igrowup software and The DHS Program handled the adjustment for mismeasurement. Both the WHO igrowup software and DHS followed the current algorithm described above in regards to the first bullet i.e. For children aged below 24 months (< 731 days) and measured standing, the height is converted to recumbent length by adding 0.7 cm; and for children aged 24 months or above who

are measured in recumbent position, the length is converted to standing height by subtracting 0.7 cm. However, prior to 2019 The DHS Program also made an additional adjustment that the WHO irgrowup did not make, as follows:

• For children under 8 months of age, where the information indicates standing height was measured assumes this is an error and child is treated as measured in the recumbent position. For children 35 months or older, where the information indicates that recumbent length was measured assumes this is an error and child is treated as measured in the standing position.

In November 2019, the DHS revised our algorithm to fully align with the 2019 WHO-UNICEF guidelines and surveys that completed fieldwork after that date have the new adjustment applied. Prior DHS datasets are not back-corrected, but the change in the adjustment approach is minimal and will likely have little to no impact on anthropometric Z-scores. DHS data users have the option to make the adjustments themselves using WHO software. More information on the WHO macros available can be found here: WHO Anthro Survey Analyzer and other tools. Please note that some but not all the WHO packages have been updated to align with the new 2019 mismeasurement adjustment guidelines.