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Subject: Oedema & use of all valid z-scores

Posted by [bloessnerM](#) on Wed, 02 Apr 2014 16:04:33 GMT

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We propose to include the assessment of bilateral pitting oedema in children 0-59 months old. The recommended assessment technique is to grasp the foot so that it rests in your hand with your thumb on top of the foot. Press your thumb gently for a few seconds. If a pit (dent) remains in the foot when you lift your thumb, the child has oedema. The oedema must appear in both feet; if the swelling is in only one foot, it may just be a sore or infected foot. [Reference WHO: Training course on child growth assessment, Module B . ([http://www.who.int/childgrowth/training/module\\_b\\_measuring\\_growth.pdf?ua=1](http://www.who.int/childgrowth/training/module_b_measuring_growth.pdf?ua=1)).

Children with oedema should not be weighed given that the excess fluid may result in a weight measurement that masks severe acute malnutrition. Not assessing oedema in children thus may result in underestimation of SAM in for certain populations.

The WHO macro to derive z-scores based on WHO standards to our knowledge was incorporated into the DHS CPro procedure and it already contains the logic to calculate aggregated estimates for surveys including oedema cases.

If oedema assessment is included into the DHS nutrition module, it would be good to add to the results table the total number of oedema cases found in the surveyed population.

It is important to note that oedema assessment is not necessary for all countries, but would be recommended to include for surveys in countries where oedema has been repeatedly observed such as in Sub-Saharan Africa, South-central and South-eastern Asia.

Another suggestion refers to the current DHS calculation approach using list-wise deletion of child records when one indicator z-score is flagged as outside the limits. UNICEF and WHO, for MICS and the WHO Global Database on Child Growth and Malnutrition, respectively, use all valid z-scores per indicator in order to make maximum use of the available data.

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