Subject: Problem in height/age Z-score (HAZ) in DHS data
Posted by nksingh on Wed, 11 Jul 2018 07:52:58 GMT

I am trying to calculate Z-score of height/age (HAZ) based on NFHS-3 (DHS-5) 2005-06 data for India. For this purpose, Z-score calculated by me (by using Stata program, R program, and program provided WHO) is not matching with Z-score provided with DHS data (hw70 in IAKR52FL.dta in Stata format. In this regard my observations are as follows

 All programs Stata (zsore06, zanthrow), R, igrowup (WHO) provide similar results.
 Z-Score calculated by using Stata command zscore06 with age in months (hw1) is not matching with DHS Z-score hw70.
 After calculating age in months from days in month (by dividing days with 30.4375) out of 43,740 cases, 6828 cases are remaining unmatched.
 According to specification of igrowup program provided by WHO, children below 24 months (731 days) should be length-based, and for children above (or equal) 24 months it should be height-based. Out of 43,740 suitably measured children (according to hw13), 5140 were not measured in suitable position (according to hw15). After making suitable adjustment, 2866 cases are remaining unmatched. Out of 2866 cases, mostly cases are flagged cases (2434). Only 432 un-flagged cases are remaining unmatched.
 These 432 un-flagged cases matches with unadjusted (for position in which child was measured) Z-score of Stata command (Strange).
In flagged DHS Z-Score (2434 cases), many (1038) belonging within limit of [-6, 6] (calculate through Stata command).

I want to know what procedure DHS has adopted for calculating of Z-Score of HAZ, especially of cases mentioned under code 9996-9999. Do program for creating Z-score through Stata command and matching it with Z-score posted with DHS data has been attached

File Attachments
1) HAZ_z-score.do, downloaded 849 times