Subject: Exact stunting rate with exact observation number
Posted by anikhpg42@gmail.com on Wed, 30 May 2018 16:58:54 GMT
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Hi,
In order to find the stunting rate among children under age 5 using BDHS 14 data, I have used the following Stata command.
I used this command both in KR & PR dataset. But the total observation number is not exactly matching with the BDHS-14 report.

Prevalence of Stunting in 2014 (Children under age 5)

My estimation,
Using KR file, 36.24 % (N = 6965)
Using PR file, 36.09 % (N = 7256)

From BDHS'14 Report
36.1 % (N = 7318)

Here, my question is, how can I obtain the same prevalence rate and same observation for calculating child stunting rate?
Where is my mistakes, that I've made in my Stata command?
I have to get the exact observations and the exact stunting rate.

Stata command for stunting (just for the KR file)

```
*SVY command
gen strata=v023
gen psu=v021
gen sampwt=v005/1000000
svyset psu [pw=sampwt], strata (strata)

//child stunting calculation
codebook hw70
tab hw70 if hw70>9990,m
tab hw70 if hw70>9990, m nolabel
gen HAZ=hw70
replace HAZ=. if HAZ>=9996
*****
gen stunted=.
replace stunted=0 if HAZ~=.
replace stunted=1 if HAZ<-200

svy: tab stunted
```

Best regards,
Anik

Subject: Re: Exact stunting rate with exact observation number
Posted by Mlue on Thu, 31 May 2018 09:00:28 GMT
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Hi Anik,

Please check the following code which may help you...

I believe that the following code will match the BDHS report figure (number of children = 7 318)

FOR Stata

```
// USE "BDPR72FL" ON Stata

** CHILD NUTRITIONAL STATUS
** Table 11.1 Nutritional status of children

 ** Compiled by Mluleki Tsawe
 ** PhD student: University of the Western Cape, South Africa

***** BANGLADESH DHS 2014

clear all
set mem 1g
set matsize 800
set maxvar 10000
cd "..."
use "BDPR72FL", clear

**********************************

** WEIGHT VARIABLE
gen weight = hv005/1000000

*******************************************************************************

** SURVEY SET
gen psu =    hv021
gen strata = hv022

svyset psu [pw = weight], strata(strata) vce(linearized)
*svydes

*******************************************************************************

// RECODES & RENAMES

rename hc27 sex
```

```
rename hv270 wealth
rename hv025 residence
rename hv024 region
*rename shdist district

** CHILD AGE IN MONTHS
recode hc1 (0/5 = 1 "<6") (6/8 = 2 "6-8") (9/11 = 3 "9-11") (12/17 = 4 "12-17") ///
(18/23 = 5 "18-23") (24/35 = 6 "24-35") (36/47 = 7 "36-47") ///
(48/59 = 8 "48-59"), gen(child_age)
label var child_age "Child age (months)"
label val child_age child_age

** CHILD AGE IN MONTHS 2
recode hc1 (0/4 = 1 "<5") (5/9 = 2 "5-9") (10/15 = 3 "10-15") (16/19 = 4 "16-19") ///
(20/25 = 5 "20-25") (26/35 = 6 "26-35") (36/49 = 7 "36-49") ///
(50/59 = 8 "50-59"), gen(child_age2)
label var child_age2 "Child age in months"
label val child_age2 child_age2

** WEALTH STATUS
recode wealth (1/2=1 "Poor") (3=2 "Middle") (4/5=3 "Rich"), gen(wealth_rec)
label var wealth_rec "Household wealth _ recode"
label val wealth_rec wealth_rec

*******************************************************************************

// CHILD MALNUTRITION INDICATORS (according to WHO)

** STUNTING = Height-for-age
cap drop stunting
gen stunting=0 if hv103==1
replace stunting=. if hc70>=9996
replace stunting=1 if hc70<-200 & hv103==1
label define stunting 0"Not stunting" 1"Stunting"
label var stunting "Stunting children"
label val stunting stunting

** WASTING = Weight-for-height

gen wasting=0 if hv103==1
replace wasting=. if hc72>=9996
replace wasting=1 if hc72<-200 & hv103==1
label define wasting 0"Not wasting" 1"Wasting"
label var wasting "Wasting children"
label val wasting wasting

** UNDERWEIGHT = Weight-for-age
```

```
gen underweight=0 if hv103==1
replace underweight=. if hc71>=9996
replace underweight=1 if hc71<-200 & hv103==1
label define underweight 0"Not underweight" 1"Underweight"
label var underweight "Underweight children"
label val underweight underweight

*******************************************************************************

** DROP IF NOT WITHIN SAMPLE
qui regr stunting underweight wasting if stunting !=. & underweight !=. & wasting !=. [pw=weight]
drop if e(sample)!=1  /* drop observations with missings on any variable to be used in analysis */

*******************************************************************************

** CHECK
svy: tab stunting, count format(%4.0f)
svy: tab wasting, count format(%4.0f)
svy: tab underweight, count format(%4.0f)

******************

svy: tab stunting, percent format(%4.1f)
svy: tab wasting, percent format(%4.1f)
svy: tab underweight, percent format(%4.1f)

*******************************************************************************
*******************************************************************************
*******************************************************************************

svy: tab child_age stunting, percent format(%4.1f) row miss
svy: tab child_age wasting, percent format(%4.1f) row miss
svy: tab child_age underweight, percent format(%4.1f) row miss

exit



*****************************************

FOR SPSS


*// [ OPEN THE DATA - HOUSEHOLD MEMBER RECODE ] **.
** BANGLADESH DHS 2014 **.
** **.
GET
  STATA FILE='...\BDPR72FL.DTA'.
```

```
DATASET NAME DataSet1 WINDOW=FRONT.

*****************************************************************************************************************
**********.

** WEIGHT VARIABLE.
COMPUTE weight = hv005/1000000.

WEIGHT BY weight.

** COMPLEX SURVEY VARIABLES.
COMPUTE psu = hv021.
COMPUTE strata = hv023.

*****************************************************************************************************************
**********.

RENAME VARIABLES (hc27 = sex) (hv270 = wealth) (hv025 = residence) (hv024 = region).

*****************************************************************************************************************
**********.

** CHILD AGE IN MONTHS.
RECODE hc1 (0 THRU 5 = 1) (6 THRU 8 = 2) (9 THRU 11 = 3)
(12 THRU 17 = 4) (18 THRU 23 = 5) (24 THRU 35 = 6) (36 THRU 47 = 7)
(48 THRU 59 = 8) INTO child_age.
VARIABLE LABELS child_age 'Child age (months)'.
EXECUTE.
VALUE LABELS child_age 1 "0-5 months" 2 "6-8 months" 3 "9-11 months" 4 "12-17 months" 5
"18-23 months" 6 "24-35 months" 7 "36-47 months" 8 "48-59 months".

SELECT IF child_age  LE 8.

*****************************************************************************************************************
**********.

** STUNTING = Height-for-age.
COMPUTE stunting=$SYSMIS.
    IF hv103=1 stunting=0.
    IF missing(hc70) stunting=$SYSMIS.
    IF (hc70>=9996) stunting= $SYSMIS.
    IF (hc70 LT -200 AND hv103=1) stunting = 1.
EXECUTE.
VARIABLE LABELS stunting 'Stunting children'.
VALUE LABELS stunting 0 "Not stunting" 1 "Stunting" .

*****************************************************************************************************************
**********.
```

```
** WASTING = Weight-for-height.
COMPUTE wasting=$SYSMIS.
    IF hv103=1 wasting=0.
    IF missing(hc72) wasting=$SYSMIS.
    IF (hc72>=9996) wasting= $SYSMIS.
    IF (hc72 LT -200 AND hv103=1) wasting = 1.
EXECUTE.
VARIABLE LABELS wasting 'Wasting children'.
VALUE LABELS wasting 0 "Not wasting" 1 "Wasting" .

*************************************************************************************************************
**********.

** UNDERWEIGHT = Weight-for-age.
COMPUTE underweight=$SYSMIS.
    IF hv103=1 underweight=0.
    IF missing(hc71) underweight=$SYSMIS.
    IF (hc71>=9996) underweight= $SYSMIS.
    IF (hc71 LT -200 AND hv103=1) underweight = 1.
EXECUTE.
VARIABLE LABELS underweight 'Underweight children'.
VALUE LABELS underweight 0 "Not underweight" 1 "Underweight" .

*************************************************************************************************************
**********.
*************************************************************************************************************
**********.
*************************************************************************************************************
**********..
*************************************************************************************************************
**********.
*************************************************************************************************************
**********.

SELECT IF stunting LE 1 & wasting LE 1 & underweight LE 1.

** CHECK.
FREQUENCIES VARIABLES= stunting wasting underweight
  /ORDER=ANALYSIS.

*************************************************************************************************************
**********.

CROSSTABS
  /TABLES=child_age sex wealth residence region BY stunting
  /FORMAT=AVALUE TABLES
  /CELLS=ROW
```

```
  /COUNT ROUND CELL.

CROSSTABS
  /TABLES=child_age sex wealth residence region BY underweight
  /FORMAT=AVALUE TABLES
  /CELLS=ROW
  /COUNT ROUND CELL.

CROSSTABS
  /TABLES=child_age sex wealth residence region BY wasting
  /FORMAT=AVALUE TABLES
  /CELLS=ROW
  /COUNT ROUND CELL.

******************************************************************************************************************
**********.
```

Subject: Re: Exact stunting rate with exact observation number
Posted by anikhpg42@gmail.com on Thu, 31 May 2018 09:40:59 GMT
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Hi,
Thank you very much for the coding.
But, as a beginner, one thing is bothering me, can't understand fully, that is-
I have applied your code and got the percentage 36.1% for stunting.
But, in the result it shows,

Number of obs = 7,167
Population size = 7,317.7967
Design df = 580

Now, what does these 3 mean??

Here, we can see the number of observation was 7167 though the population size was 7318..again df is 580
The whole thing seems to me quite puzzling.
Would you plz describe these 3 terms, what are they indicating?

Again, Thank you very much for your help.
