
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" .

```

```

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

```

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.
