
Subject: How missing values were handled in BDHS 2011 final report?

Posted by [Niladdri](#) on Wed, 25 Mar 2015 21:49:43 GMT

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Hello,

Can anybody let me know in the table 15.5.1 and 15.5.2 how they calculated the number of thin, normal, overweight and obese men and women under nutritional status? I found 2100 among 7565 observations (unweight) are missing for shbm (body mass index for respondent) variable for them who were successfully tested for blood glucose level. How can I generate the missing values in STATA-13 for shbm variable as they did?

Thanks.

Subject: Re: How missing values were handled in BDHS 2011 final report?

Posted by [Trevor-DHS](#) on Wed, 01 Apr 2015 19:10:53 GMT

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I reviewed the calculation of this indicator and found a problem in the construction of the nutritional status variable, relating to cases where the BMI cannot be calculated as the weight or height (or both) were not measured. these cases are incorrectly distributed into the other categories due to a mistake in the recoding. Rather than 3 women with out of range or missing height and weight there are actually 131 cases. These rows of table 15.5.1 should read:

Nutritional status

Thin (BMI<18.5) 6.1 0.0 2.6 0.3 64.4 0.7 26.9 0.4 4.7 100.0 1.0 1,087

Normal (BMI 18.5-24.9) 10.6 0.1 2.9 0.7 61.9 0.3 24.6 2.5 7.0 100.0 1.1 1,946

Overweight (BMI 25.0 - 29.9) 20.0 0.0 1.3 2.7 57.3 2.1 21.4 5.9 9.4 100.0 4.8 519

Obese (BMI >= 30.0) 28.1 0.0 3.2 0.0 42.4 2.1 26.3 5.4 20.7 100.0 2.1 132

Similarly for men, there are 109 cases that have out of range or missing height and/or weight and should be excluded. The equivalent columns for table 15.5.2 for men should be:

Nutritional status

Thin (BMI<18.5) 7.6 0.0 2.9 0.3 58.7 0.3 30.8 0.5 6.5 100.0 0.6 1,050

Normal (BMI 18.5-24.9) 10.5 0.1 2.1 0.4 64.5 0.7 22.9 2.3 7.0 100.0 1.1 2,234

Overweight (BMI 25.0 - 29.9) 20.0 0.0 1.9 1.0 49.9 0.8 28.2 7.0 11.2 100.0 1.8 303

Obese (BMI >= 30.0) 33.5 0.0 0.0 7.6 30.5 2.2 36.0 12.2 11.4 100.0 9.9 25

These corrections have a small effect on the results, but not one of programmatic meaning.

Below is code to reproduce the nutritional status variable used in these tables:

* create BMI variable from separate variables used.

```
gen bmi = shbm
```

```
replace bmi = ha40 if hv104==2 & bmi==.
```

```
replace bmi = hb40 if hv104==1 & bmi==.
```

* recode BMI into the groups needed.

```
recode bmi (0/1849=0 "Thin") (1850/2499=1 "Normal") (2500/2999=2 "Overweight") (3000/9990=3 "Obese") (9991/9999=9 "Missing"),g(bmi2)
```

* put pregnant women into a separate category to be excluded
replace bmi2 = 4 if sh234c >= 35 & sh234c <= 49 & sh231 == 2 & ha54 == 1
lab def bmi2 4 "Pregnant", add

* tabulate women for table 15.5.1

tab bmi2 [iw=hv005/1000000] if sh231==2 & hv105>=35 & sh284a <= 990

* tabulate men for table 15.5.2

tab bmi2 [iw=hv005/1000000] if sh231==1 & hv105>=35 & sh284a <= 990

The data come from a few different parts of the questionnaire, and not just variable shbm. Also note that sh231 is used here for the sex, rather than hv104, and there is one case coded as male on sh231 that is coded female on hv104. This case should probably be treated as female, but I used sh231 here to be consistent with the original tabulation.

Subject: Re: How missing values were handled in BDHS 2011 final report?

Posted by [Hassen](#) on Wed, 23 May 2018 04:24:14 GMT

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Thank you Trevor!!
