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Subject: Diastolic measure for India DHS 2019-21  
Posted by [rburga](#) on Sat, 30 Jul 2022 22:30:45 GMT  
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Hello,

I just wanted to report an error in the variable sb18d (first diastolic reading). It has a unique value (108) for all individuals. The tabulation looks like this:

first diastolic   reading	Freq.	Percent	Cum.
-----+-----			
108	724,115	100.00	100.00
-----+-----			
Total	724,115	100.00	

Best

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Subject: Re: Diastolic measure for India DHS 2019-21  
Posted by [Bridgette-DHS](#) on Mon, 01 Aug 2022 16:06:16 GMT  
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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

The variable you are referring to is shb18d (you left out the "h"). It is not quite true that ALL the values are 108, but about 55% are. There are also some implausibly small and large values.

Thanks for noting this. We will look into it.

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Subject: Re: Diastolic measure for India DHS 2019-21  
Posted by [Bridgette-DHS](#) on Tue, 02 Aug 2022 20:02:05 GMT  
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Following is an update from DHS Research & Data Analysis Director, Tom Pullum:

We have confirmed that the concentration on 108 is due to an error in the construction of the recode file. The values in the raw data file (to which there is not general access), and the analysis in the final report are ok. The error will be corrected in the next version of the recode file.

Thanks again for reporting this.

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Subject: Re: Diastolic measure for India DHS 2019-21  
Posted by [govind@iips.net](mailto:govind@iips.net) on Sun, 04 Sep 2022 11:14:12 GMT  
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Dear All,

Currently, I am trying to match the sample size and prevalence of hypertension in India using the person file of DHS data 2019-21. I have used the following codes but cannot match the prevalence percentage and sample size with the final report of the National Family Health Survey (NFHS) 2019-21 report (tables 12.3.1 and 12.3.2). Please help me to match the prevalence percentage and sample size. The codes are:

```
gen sys = .
gen dia = .
* if the first measure is given
replace sys = shb18s if inrange(shb18s,20,299) & inrange(shb18d,20,299)
replace dia = shb18d if inrange(shb18s,20,299) & inrange(shb18d,20,299)
* if the second measure is given take it
replace sys = shb25s if inrange(shb25s,20,299) & inrange(shb25d,20,299)
replace dia = shb25d if inrange(shb25s,20,299) & inrange(shb25d,20,299)
* if the third measure is given take the last
replace sys = shb29s if inrange(shb29s,20,299) & inrange(shb29d,20,299)
replace dia = shb29d if inrange(shb29s,20,299) & inrange(shb29d,20,299)
* if all measures are given, then average the last two
replace sys = (shb25s + shb29s)/2 if inrange(shb29s,20,299) & inrange(shb29d,20,299) &
inrange(shb25s,20,299) & inrange(shb25d,20,299)
replace dia = (shb25d + shb29d)/2 if inrange(shb29s,20,299) & inrange(shb29d,20,299) &
inrange(shb25s,20,299) & inrange(shb25d,20,299)
```

\*\*\*\*\*

```
gen ht=.
replace ht=1 if (sys>139|dia>89| shb21==1) & (sys~= . |dia~=.)
replace ht=0 if ht==. & (sys~= . |dia~=.)
```

Thanking you.

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Subject: Re: Diastolic measure for India DHS 2019-21  
Posted by [Shireen-DHS](#) on Wed, 07 Sep 2022 13:46:58 GMT  
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Hello,

Using the IAPR7CFL.dta file the following Stata code will get you a close match to the percentage (less than 1 percentage point difference from table) and a match with the denominator. This code has a different way to get the valid measurements than what you used in your code.

Thank you.

Best,

Shireen Assaf

The DHS Program

\*Stata code:

```
gen bp_w=.
```

```
*each measurement is valid pair if sys and dia >20 and <299
```

```
gen valid3 = 0
```

```
replace valid3 = 1 if (shb29s>20 & shb29s<299 & shb29d>20 & shb29d<299)
```

```
gen valid2 = 0 if valid3==0
```

```
replace valid2 = 1 if (shb25s>20 & shb25s<299 & shb25d>20 & shb25d<299) & valid3==0
```

```
gen valid1 = 0 if valid2==0 & valid3==0
```

```
replace valid1 = 1 if (shb18s>20 & shb18s<299 & shb18d>20 & shb18d<299) & valid2==0 & valid3==0
```

```
* 3 valid measurements
```

```
gen validbp = 0
```

```
replace validbp =1 if (shb18s>20 & shb18s<299 & shb18d>20 & shb18d<299) ///
```

```
    & (shb25s>20 & shb25s<299 & shb25d>20 & shb25d<299) ///
```

```
    & (shb29s>20 & shb29s<299 & shb29d>20 & shb29d<299)
```

```
* if 3 valid measurements, take average of last two
```

```
gen sys = 0
```

```
replace sys = ((shb25s+shb29s)/2) if validbp==1
```

```
* if < 3 valid measurements, take last valid measurement
```

```
if sys== 0 {
```

```
    replace sys = shb29s if valid3==1
```

```
}
```

```
if sys==0{
```

```
    replace sys = shb25s if valid2==1
```

```
}
```

```
if sys==0 {
```

```
    replace sys = shb18s if valid1==1
```

```
}
```

```
gen dia = 0
```

```
replace dia = ((shb25d+shb29d)/2) if validbp==1
```

```
* if < 3 valid measurements, take last valid measurement
```

```
if dia==0 {
```

```
    replace dia = shb29d if valid3==1
```

```
}
```

```
if dia==0{
  replace dia = shb25d if valid2==1
}
if dia==0 {
  replace dia = shb18d if valid1==1
}
```

\*gen variable to exclude women with no valid bp measurements

```
gen validany = 0
replace validany = 1 if valid1>0 | valid2>0 | valid3>0
```

\*bp for women - restricted to age 15-49, women,

```
replace bp_w=0 if validany==1
replace bp_w = 1 if ((sys>=140 | dia>=90) | shb21==1) & validany==1
replace bp_w =. if hv104 !=2
replace bp_w=. if hv105<15 | hv105>95
cap label var bp_w "Women who have hypertension"
```

```
gen wt=hv005/1000000
```

```
tab bp_w [iw=wt]
tab bp_w if hv105<50 [iw=wt]
```

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Subject: Re: Diastolic measure for India DHS 2019-21  
Posted by [govind@iips.net](mailto:govind@iips.net) on Fri, 09 Sep 2022 08:41:19 GMT  
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Thanks, Shireen for your kind gesture.

Yes, denominators are matching with the report. however, I just wanted to know whether these differences in the prevalence rate are due to the sampling weight used in the person file.

Thanks.  
Govind

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Subject: Re: Diastolic measure for India DHS 2019-21  
Posted by [Shireen-DHS](#) on Fri, 09 Sep 2022 12:04:07 GMT  
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Hello,

The code I provided uses weights, see below:

```
gen wt=hv005/1000000
```

```
tab bp_w [iw=wt]
tab bp_w if hv105<50 [iw=wt]
```

The difference in the prevalence was less than 1 percentage point and I could not identify the reason. It's not because of the weight.

Thank you.  
Best,  
Shireen Assaf

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Subject: Re: Diastolic measure for India DHS 2019-21  
Posted by [SKS](#) on Fri, 21 Oct 2022 10:49:15 GMT  
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I am grateful to you for your assistance Shireen-DHS. However I have still a concern, see below:

```
. tab bp_w if hv105<50 [iw=wt]
```

```
Women who |
  have |
hypertensio |
      n |   Freq.   Percent   Cum.
-----+-----
      0 | 621,587.95   88.86   88.86
      1 |  77,906.45   11.14  100.00
-----+-----
Total | 699,494.4   100.00
```

Denominator of women 15-49 is still not matching with report (699,479 women).

```
. tab bp_w [iw=wt]
```

```
Women who |
  have |
hypertensio |
      n |   Freq.   Percent   Cum.
-----+-----
      0 | 778,967.79   79.59   79.59
      1 | 199,793.51   20.41  100.00
-----+-----
Total | 978,761.29  100.00
```

The denominator of women ( age 15 and over) is also not matching with report (978,742 women) and the hypertension for women aged 15 and over is 21.3 in report (pp. 497, Table 12.3.1), which

is also not matching.

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Subject: Re: Diastolic measure for India DHS 2019-21  
Posted by [Bridgette-DHS](#) on Wed, 16 Nov 2022 14:39:08 GMT  
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Following is a response from Senior DHS staff member, Tom Pullum:

These small discrepancies may be due to minor revisions of the data files, including weights, since the report was published. We do not have access to the earlier versions of the files and cannot put more effort into trying to get an exact match.

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