
Subject: Re: Calculating Median Ages
Posted by [Liz-DHS](#) on Tue, 11 Nov 2014 16:33:23 GMT
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Dear User,

Here is a response from Dr. Tom Pullum:

Quote: Say that x is the name of a variable, such as age at marriage, and X is a specific value of that variable, e.g. 19.

If you look at how cumulative percentages are calculated, for any variable, in Stata (or in general), the cumulative percentage for variable x and value X is the percentage of cases with x less than or equal to X . For example, 48.37% is the percentage of cases with $x \leq 19$ and 56.12% is the percentage of cases with $x \leq 20$. I believe you were not including the "=" sign.

Age "19" is a one-year interval interpreted as age at last birthday. The upper boundary for age 19 is the exact day of the 20th birthday, which has an exact value is 20.00 (you can put as many zeroes after the decimal point as you want). That's why I said that 48.37% of women were married by exact age 20 and 56.12% by exact age 21. In terms of "exact" age, the median must be somewhere between 20.00 and 21.00. I gave the steps for finding the median, 20.2.

By the way, here's a trick that will save you some arithmetic. Paste the following lines into Stata:

```
input x P
20 48.37
. 50.00
21 56.12
end
```

```
regress x P
predict xhat
replace x=xhat if x==.
list x P, table clean
```

This will give the value of x for which $P=50$, i.e. the median.