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Subject: Confidence Interval for Median duration of abstinence

Posted by [alam.sayeeef](#) on Fri, 07 Feb 2020 14:14:48 GMT

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I want to calculate the confidence interval of the median duration of postpartum abstinence. The variable is given in months (whole numbers).

Method 1: SUMMARIZE, detail

PROS - Calculation by category/strata is feasible.

CONS - the confidence interval so produced is not in decimal since data is not considered as normal.

SYNTAX

by por, sort: summarize m8, detail

OUTPUT

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-> por = Urban

duration of abstinence

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Percentiles	Smallest		
1%	0	0	
5%	1	0	
10%	1	0	Obs 35,523
25%	2	0	Sum of Wgt. 35,523
50%	3		Mean 20.01053
		Largest	Std. Dev. 35.44062
75%	7	98	
90%	96	98	Variance 1256.038
95%	96	98	Skewness 1.670594
99%	96	98	Kurtosis 3.817338

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-> por = Rural

duration of abstinence

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Percentiles	Smallest		
1%	0	0	
5%	1	0	
10%	1	0	Obs 116,567

25%	2	0	Sum of Wgt.	116,567
50%	3		Mean	20.76323
		Largest	Std. Dev.	36.31985
75%	7	98		
90%	96	98	Variance	1319.131
95%	96	98	Skewness	1.583656
99%	98	98	Kurtosis	3.531344

Method 2: TABSTAT

PROS - Calculation by category/strata is feasible.

CONS - the confidence interval so produced is not in decimal since data is not considered as normal.

SYNTAX

tabstat m8, stat(median) by(por)

OUTPUT

Summary for variables: m8

by categories of: por (Place of Residence)

por	p50
-----+-----	
Urban	3
Rural	3
-----+-----	
Total	3
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Method 2: CENTILE

PROS - The ci produced is in the desired format due to the consideration of variable as normally distributed

CONS - Calculation by category/strata is not feasible.

SYNTAX

centile m8, n

OUTPUT

-- Normal, based on observed centiles --

Variable	Obs	Percentile	Centile	[95% Conf. Interval]	
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m8	152,090	50	3	2.743866	3.256134

Please let me know how to get ci in decimals (i.e. normally distributed) and also by category/strata

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