



www.epilepsy.va.gov/Statistics

Statistics in Evidence Based Medicine

Lecture 3: Data Display Methods

Rizwana Rehman, PhD

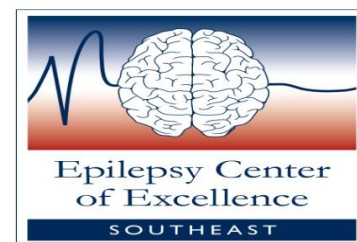
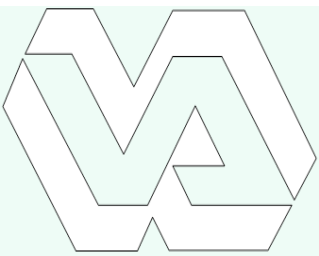
Regional Statistician

Southeast Epilepsy Center of Excellence

Durham VA Medical Center, Durham NC

Rizwana.Rehman@va.gov

(919)286-0411 ext: 5024





Overview

- Tables
- Displaying continuous data
- Displaying categorical data
- Misleading graphs
- Appendix

Audio Information: Dial 1-888-767-1050
Conference ID 59058061

Tables

Psychiatric Diagnosis of Seizure Patients at Durham VA Medical Center 1998-2010

Psychiatric DX	Epileptic Seizures (Frequency)	Epileptic Seizures (Relative Frequency %)	Non Epileptic Seizures (Frequency)	Non Epileptic Seizures (Relative Frequency %)
Depression	16	43.2	6	11.1
PTSD	2	5.4	14	25.9
Both Depression & PTSD	1	2.7	6	11.1
Somatoform	0	0.0	3	5.6
Anxiety	0	0.0	5	9.3
Bipolar	0	0.0	2	3.7
Unspecified	3	8.1	2	3.7
Conversion	0	0.0	3	5.6
Alcohol Dependence	1	2.7	0	0.0
Dysthymia	0	0.0	3	5.6
No Psyche Problem	14	37.8	10	18.5
Total	37	100.0	54	100.0

Tables

Systematic Review *Comparison of the Quality of Medical Care in Veterans Affairs and Non-Veterans Affairs Settings. Medical Care 2010*

Table may be long like the one shown below which consists of many pages.

Medical Care • Volume XX, Number X, XXX 2010

Comparison of the Quality of Medical Care

TABLE 1. Evidence Table of Included Studies										
Author	Conditions	Quality Measure(s)	VA Data			Non-VA Data			Principal Finding	Grade
			Year	Data Collected	Level	Year	Study Size	Data Level		
General studies, multiple conditions										
Jack et al ¹	Multiple	Adherence to 40 percent of care indicators targeting 3 conditions	1997-1999	Multiple	Multiple	1996-2000	Multiple	9%	The VA was better than expected overall quality (6% vs 15%); chronic disease care (7% vs 9%) and preventive care (6% vs 44%) had not been met.	A
Diabetes ²										
Adelman et al ³	Multiple	Adherence to 3 preventive A indicators, 3 B, and 1 C	1994-2000	Multiple	Multiple	1997-2001	Multiple	Effective to assess	The VA outperformed the reference for service program on all 11 indicator indicators from 1997 to 1999 and 12 of 11 indicators in 2000.	A
Board et al ⁴	Diabetes, hypertension, preventive care	Use of 17 recommended health care services including cancer prevention, cardiovascular risk reduction, diabetes management and infection prevention	2000-2004	Multiple	Multiple	2000-2004	Multiple	30,873	VA care was associated with greater use of 6 of 17 recommended services in 2000 and 12 of 17 recommended services in 2004.	B
General studies, preventive care ⁵										
Chen et al ⁶	Preventive care	Influenza and pneumococcal vaccines	2000	Multiple	Multiple	2000	Multiple	32,060	VA care was associated with higher influenza vaccine rates than non-VA care. VA care compared to non-VA care was associated with higher influenza vaccine rates (43% vs 34%) and pneumococcal vaccine rates (24% vs 14%).	A
Diabetes ⁷										
Adelman et al ⁸	Preventive care	Influenza and pneumococcal vaccines	1995-2001	Multiple	Multiple	1995-2001	Multiple	Not reported	Rate of influenza and pneumococcal vaccination in the VA were lower than rates reported in a national sample of community diabetes. From 1995 to 2001, VA enrollees were more likely to have been vaccinated for influenza and pneumococcal than were community diabetes outside VA.	A

(Continued)



Communicating Information via Tables

- A table should stand alone from the text
- Should be easy to read & understand
- Should have a clear title
- Proportions, rates and percentages should be distinguishable from each other
- Use present tense

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Don't use Past Tense with Tables

Table 1

Correlations between predictor variables and seizure outcome were shown

Predictor variable	<i>P</i> value
Age at onset	0.76
Duration of epilepsy	0.67
Age at surgery	0.94
Risk factors	0.59
Comorbidities	1
MRI –MTS	0.6
Interictal spike location	0.24
Lesion on path (MTS/AVM/cancer/tumor)	0.002

Pathological diagnosis was associated with good outcome ($P = 0.002$).



Stem & Leaf Plot

Table 1.2 Urinary concentration of lead in 15 children from housing area X ($\mu\text{mol}/24\text{hr}$)

0.6, 2.6, 0.1, 1.1, 0.4, 2.0, 0.8, 1.3, 1.2, 1.5, 3.2, 1.7, 1.9, 1.9, 2.2

Figure 1.2 Ordered stem and leaf plot

Stem	Leaf							
0	1	4	6	8				
1	1	2	3	5	7	9	9	
2	0	2	6					
3	2							

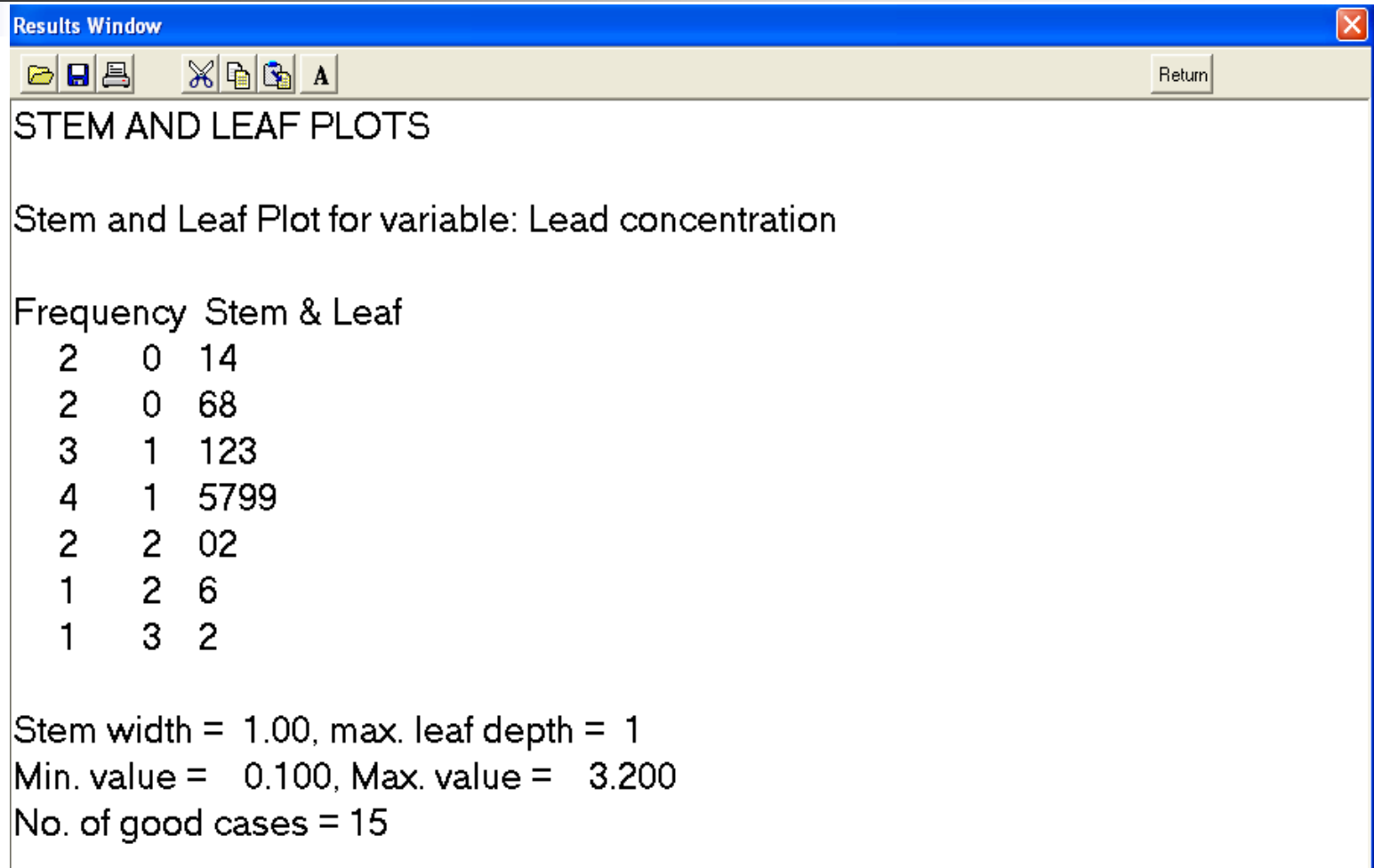


Advantages of Stem and Leaf Plot

- Good for exploring relationship between data
- Mean, Median, Mode & Range are easy to find
- Original data values can be recovered

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Stem and Leaf Plot in Openstat





Dot Plot for Two Tables

Table 1.2 Urinary concentration of lead in 15 children from housing area X ($\mu\text{mol}/24\text{hr}$)

0.6, 2.6, 0.1, 1.1, 0.4, 2.0, 0.8, 1.3, 1.2, 1.5, 3.2, 1.7, 1.9, 1.9, 2.2

Table 1.3 Urinary concentration of lead in 16 rural children ($\mu\text{mol}/24\text{hr}$)

0.2, 0.3, 0.6, 0.7, 0.8, 1.5, 1.7, 1.8, 1.9, 1.9, 2.0, 2.0, 2.1, 2.8, 3.1, 3.4

Dot Plot

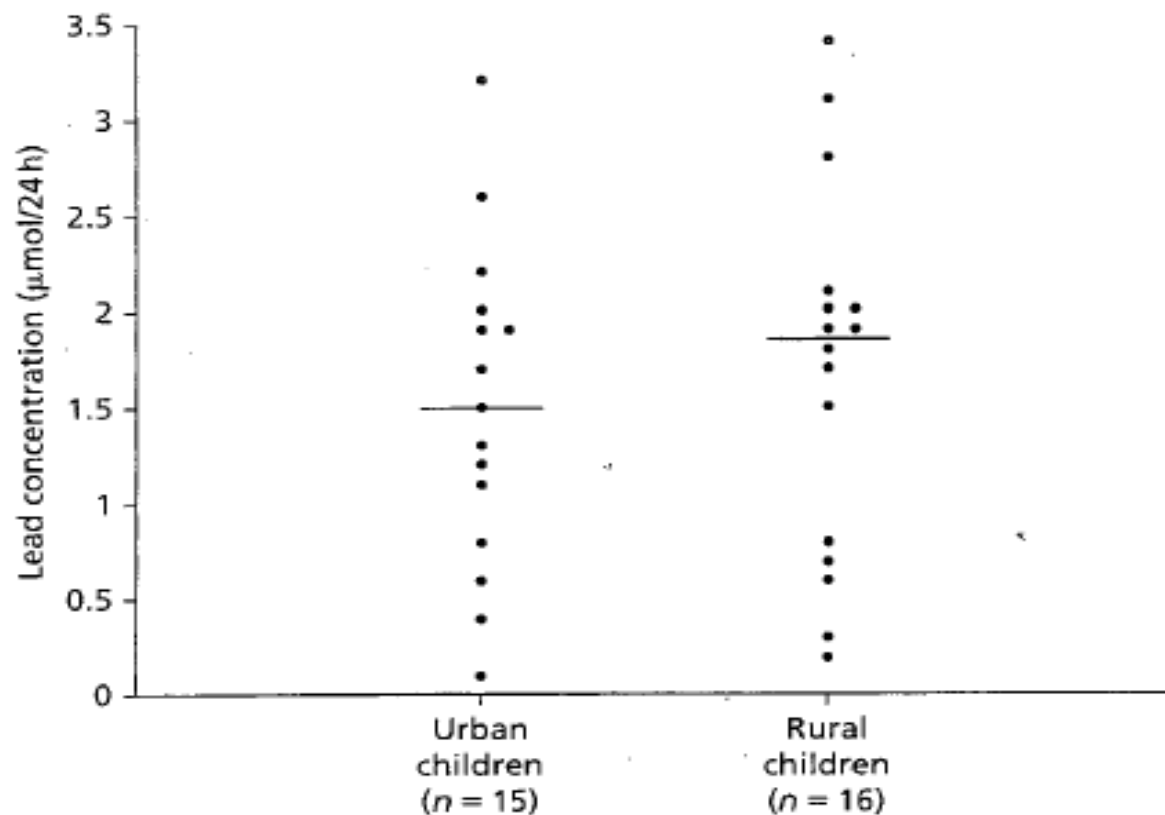
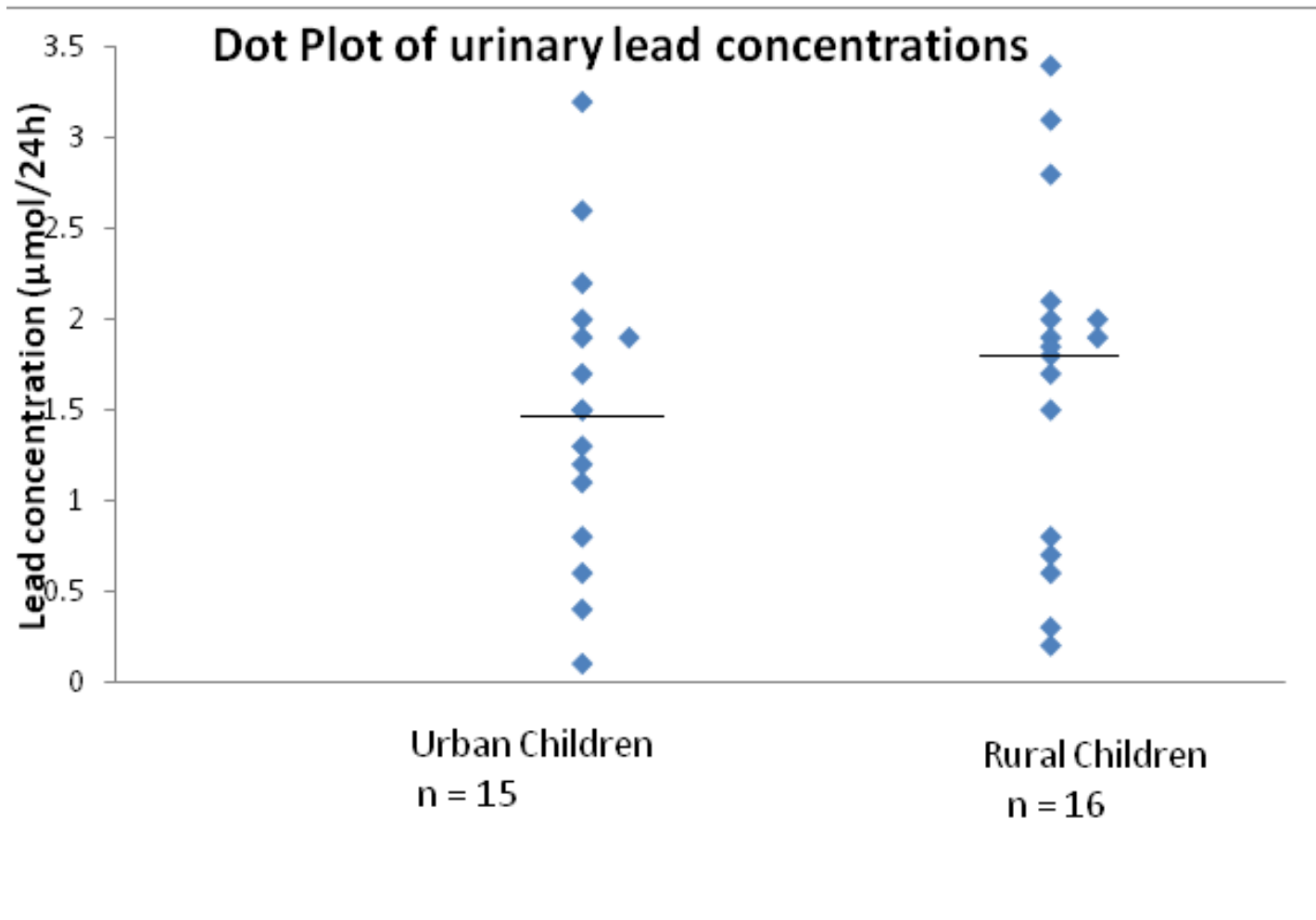


Figure 1.3 Dot plot of urinary lead concentrations for urban and rural children (with medians).

Dot Plot Generated in Excel



Dot Plot for Paired Data

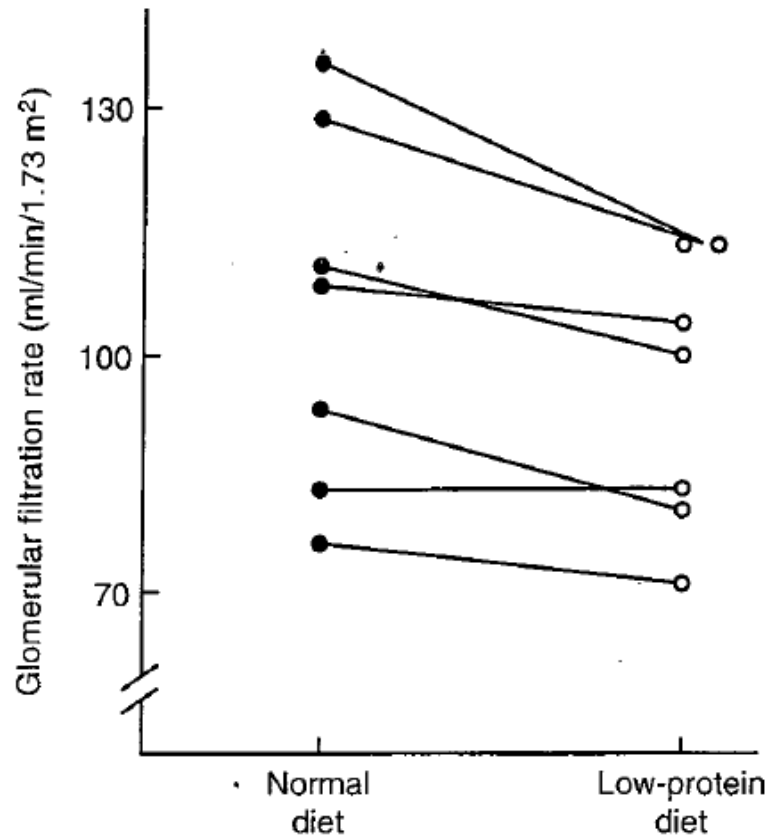


Figure 4.2 Glomerular filtration rate during normal and low-protein diets in insulin-dependent diabetics (after Cohen *et al.*, 1987, with permission)



What is a Dot Plot?

- In a dot plot each observation appears as a dot on the vertical axis.
- The median or mean of data is represented by a small horizontal line.

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Conference ID 59058061



Advantages of a Dot Plot

- Easy to eyeball a small data set
- Simplest way to show small data sets side by side
- Outliers can be detected
- Specially valuable if describing a paired data set

Error Bar Plot or Dynamite Plunger Plot

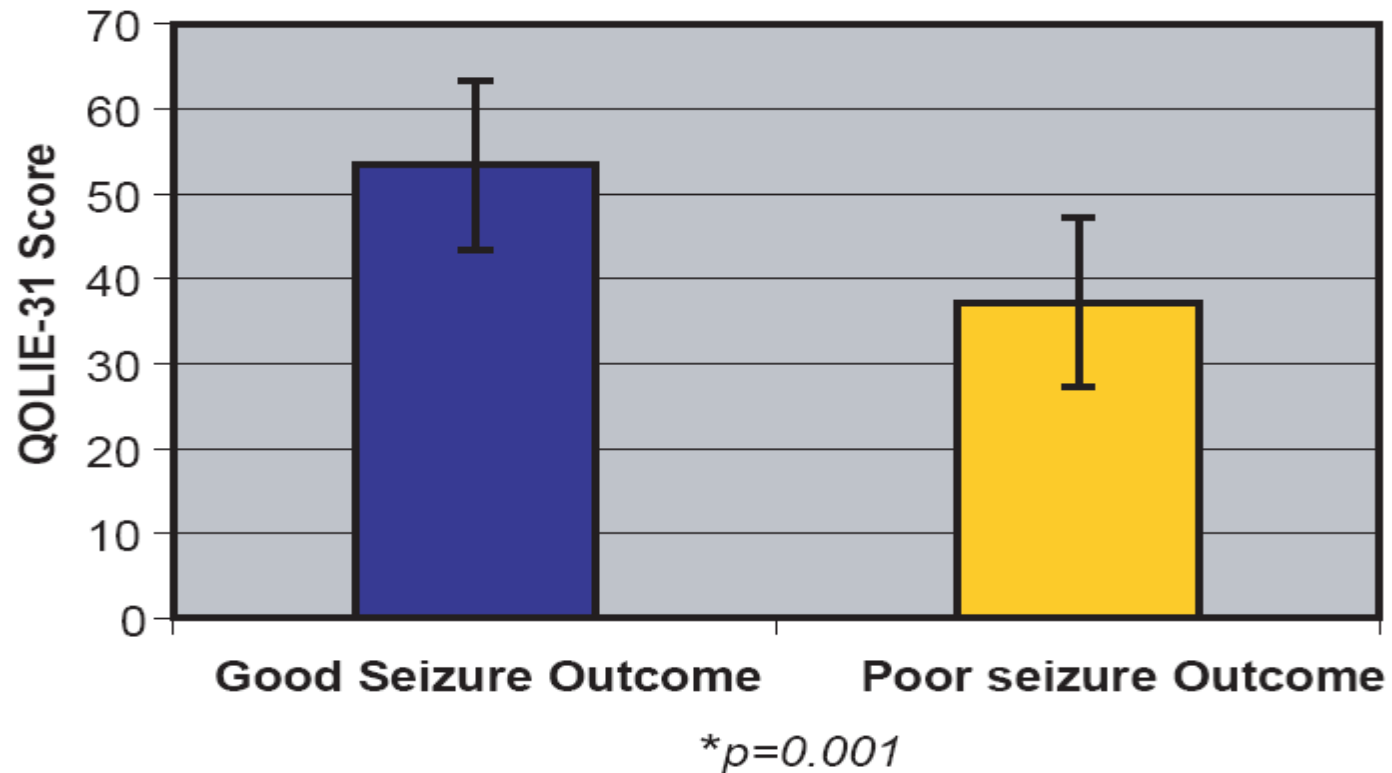


Fig. 1. Difference in quality of life scores between the group with good seizure outcome (Engel Class I) and those with poor seizure outcome (Engel Class II, III and IV).



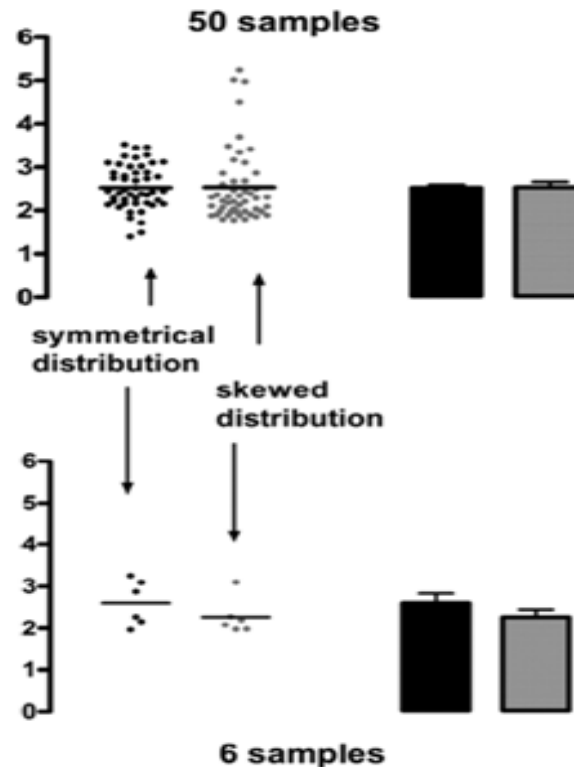
What is an Error Bar Plot?

- An error bar plot illustrates mean with some measure of uncertainty.
 - **Example** Good Seizure outcome QOLIE 31 score 53.66 10.6, Poor seizure outcome QOLIE 31 score 37.13 13.40
- Standard Error of Mean (SEM), Confidence Interval and Standard Deviation (SD) are used to show uncertainty.

Dynamite Plunger Plots (mean with SD) are a waste of space for showing data distribution

Don't use Dynamite Plunger Plots for displaying distributions

Figure 1. Comparison of a dot plot with a plunger plot A, two datasets, with the same mean value, displayed as either dot plots or plunger plots.



Drummond G B, Vowler S L Exp Physiol 2011;96:483-485



Error Bar Plots for Uncertainty in Population Mean

- Help in visualizing likely mean of a population
- Help in evaluating statistically significant difference between means of two groups
- Using standard error and confidence intervals will have different interpretations

Error Bars what they tell you and what they don't

Show the data, don't conceal them

Box-Whisker Plot

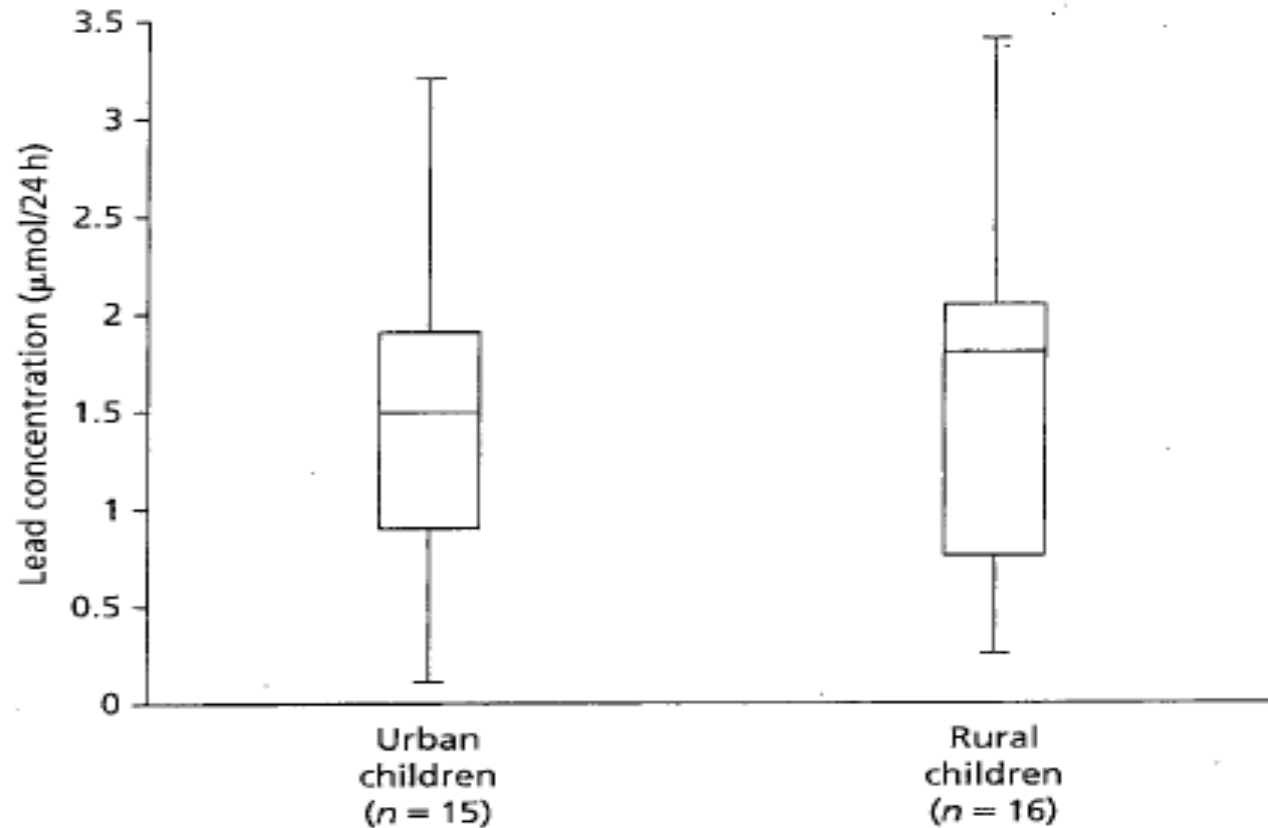


Figure 1.4 Box-whisker plot of data from Figure 1.3.



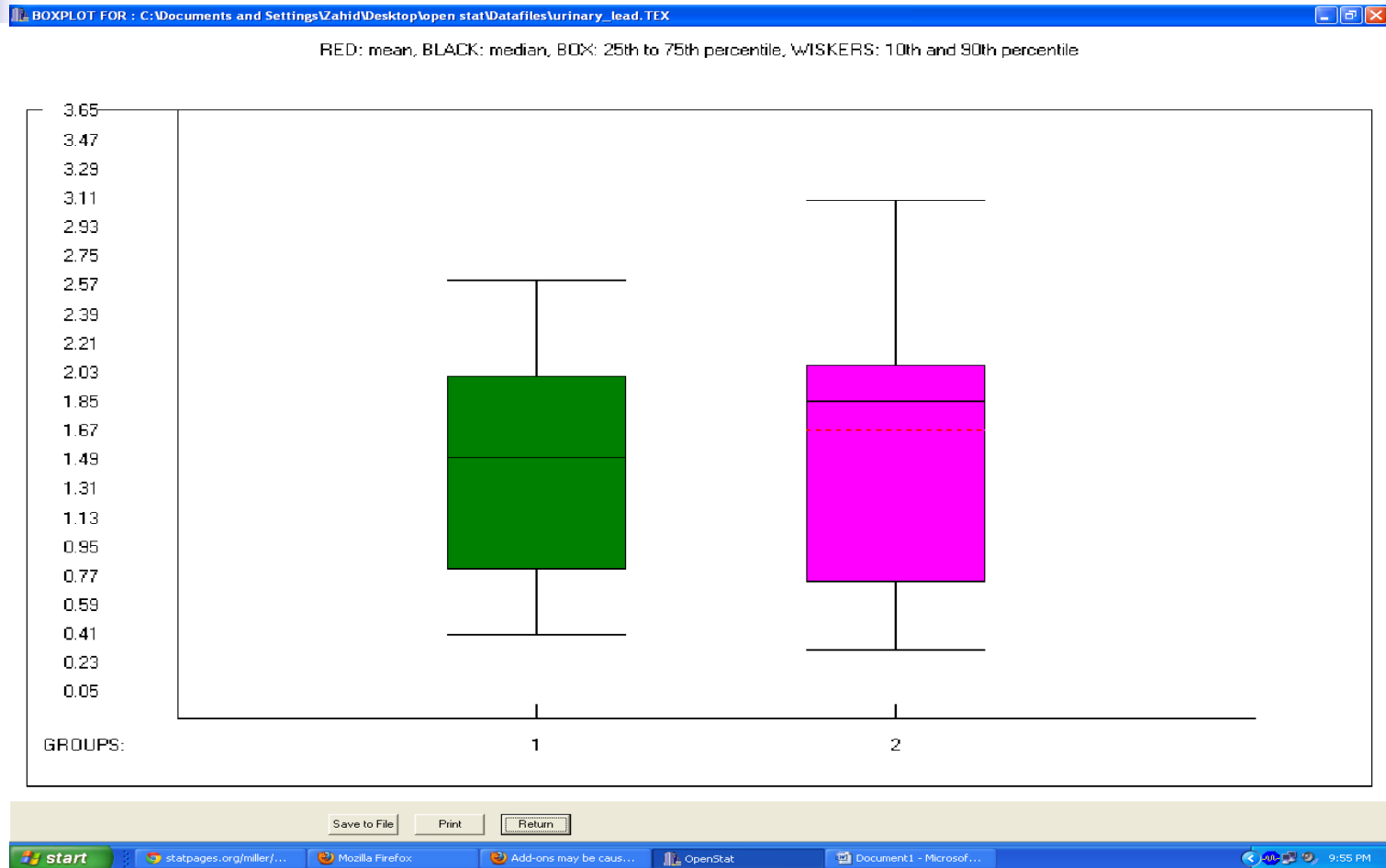
What is a Box Plot?

A box plot usually shows five summary Statistics; **First & third quartile, median, maximum and minimum.**

The box is marked by the first & third quartile with median marked inside the box; whiskers extend to the range.

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Conference ID 59058061**

Box Plot in Openstat



Group 1: Urban Children; Group 2 Rural Children



Box Plot in Openstat

- Box plot in Openstat shows both median and mean
- Box represents 25th and 75th percentiles
- Whiskers are extended from 10th percentile to 90th percentile
 - Does not show outliers



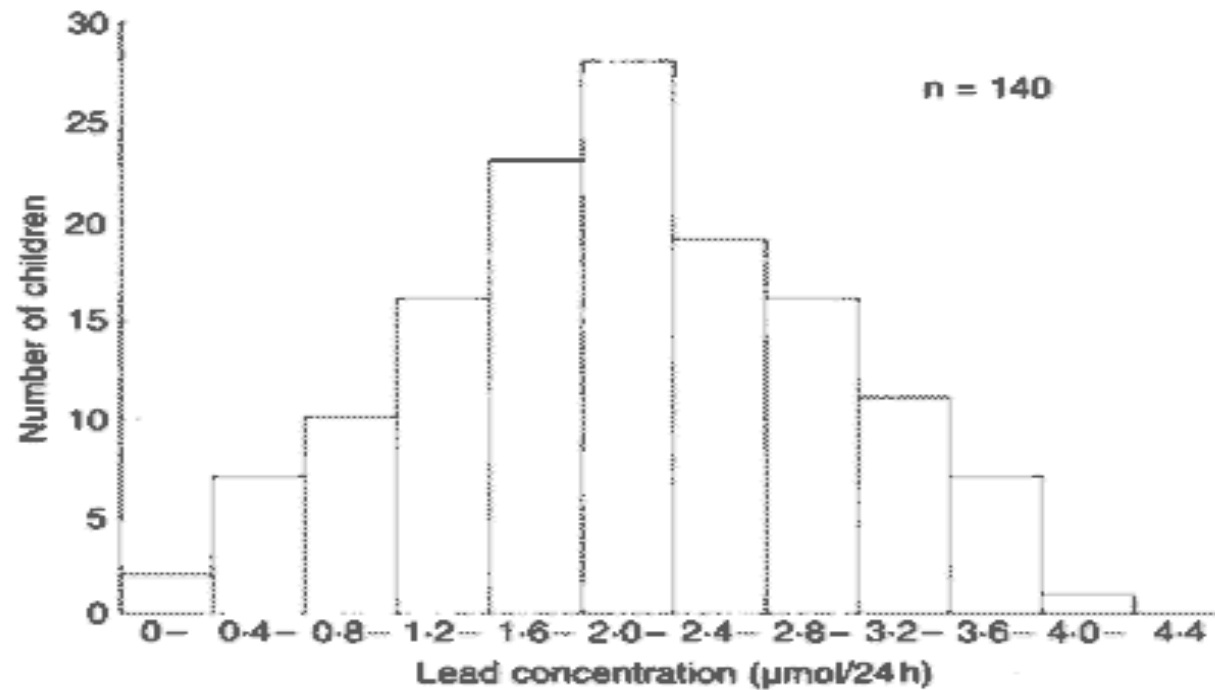
Advantages of a Box Plot

- Alternative to dot plot for large data sets
- Covers more information; good for illustration of certain locations
- Length of the box is a visual representation of interquartile range
- Good to compare the shapes of distributions

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Histogram

Figure 1.5 Histogram of data from Table 1.4





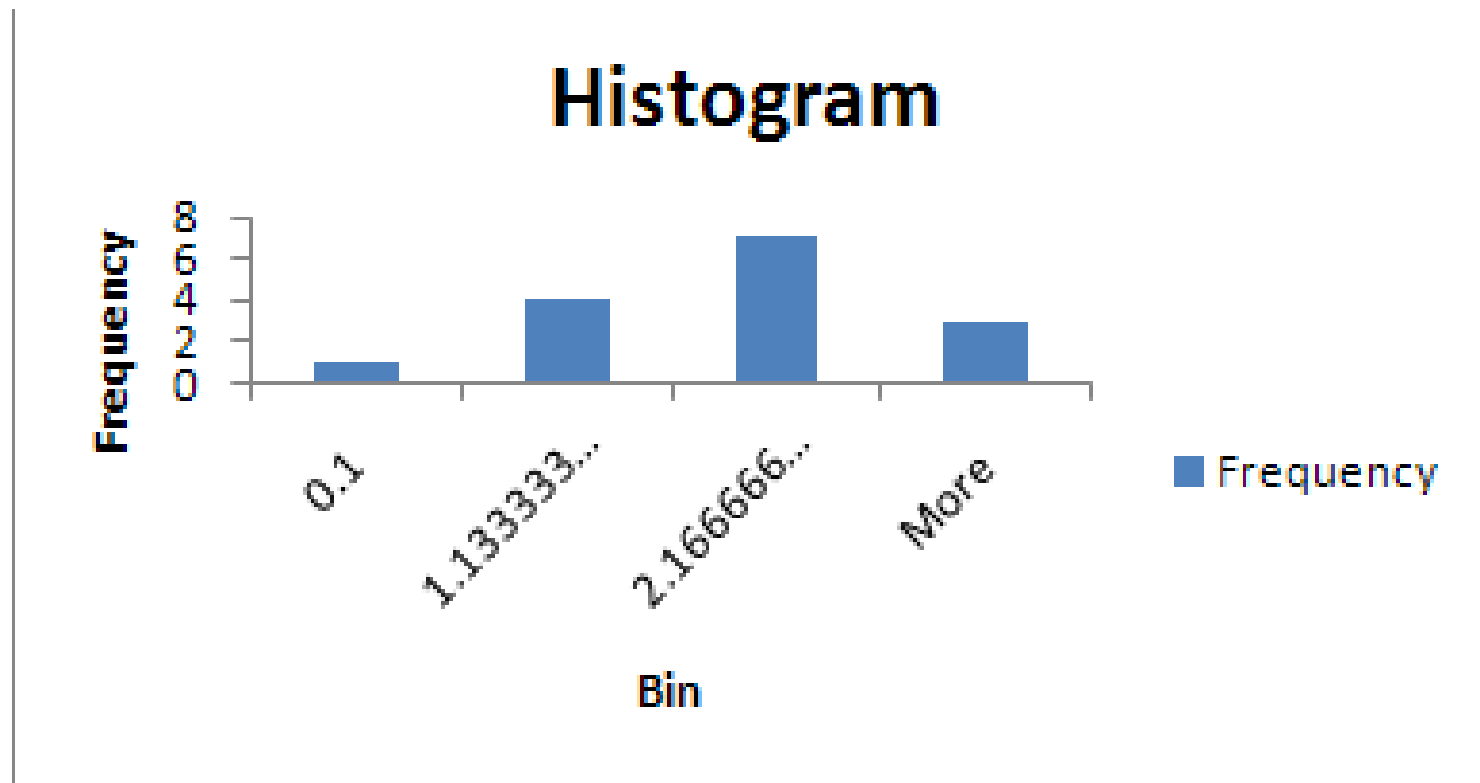
What is a Histogram?

- A Histogram presents measures of interest along the X axis and the # or percentages of observations along the Y axis in form of adjacent vertical rectangles.
- Can be used to describe shape of distribution
- Only used for continuous data
 - Along the X axis we have classes or intervals
 - For equal classes the area & the height of the rectangles are proportional to the number of subjects in a class

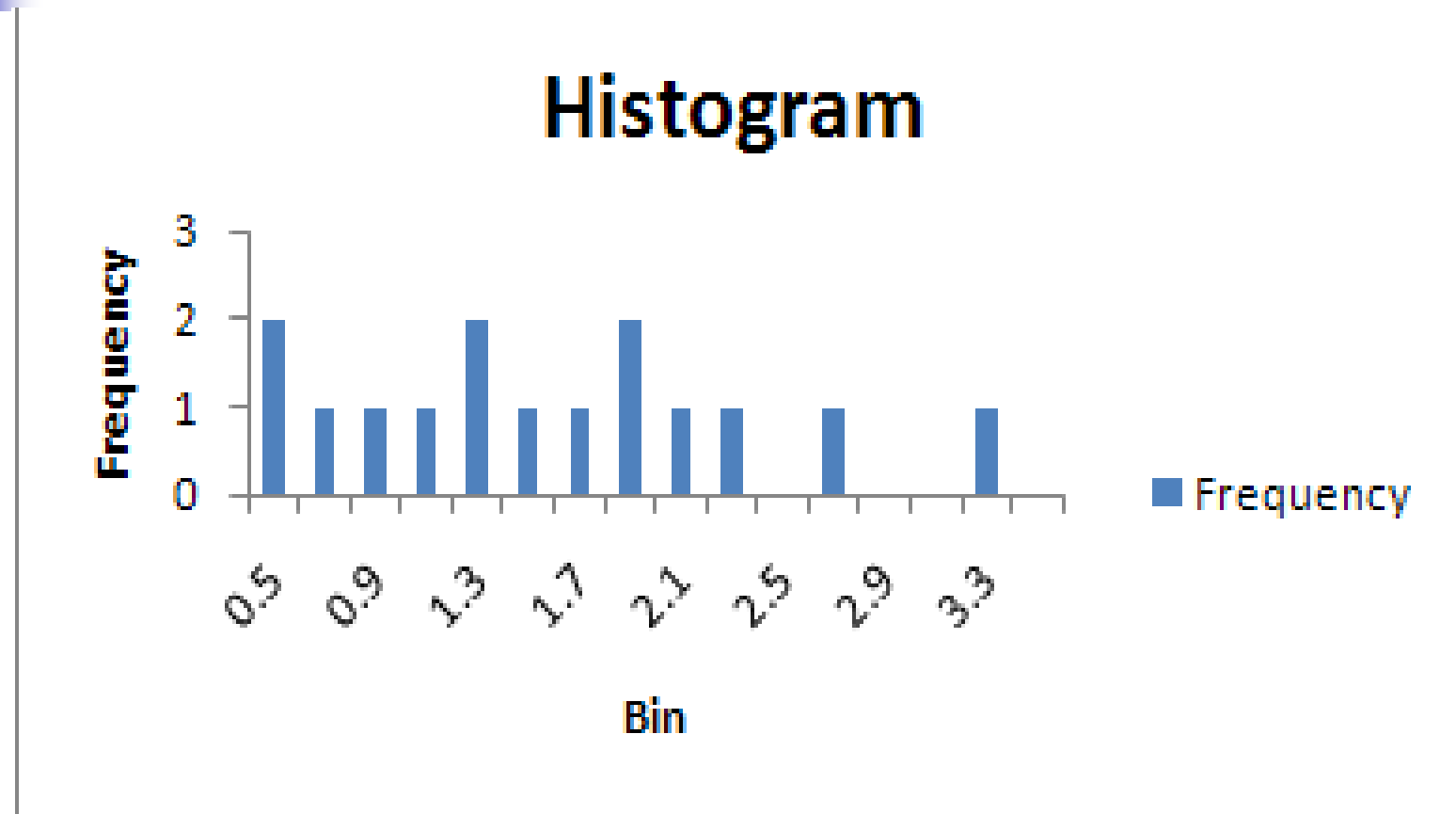
Excel Histogram (default) for the Shape of Distribution

Table 1.2 Urinary concentration of lead in 15 children from housing area X ($\mu\text{mol}/24\text{hr}$)

0.6, 2.6, 0.1, 1.1, 0.4, 2.0, 0.8, 1.3, 1.2, 1.5, 3.2, 1.7, 1.9, 1.9, 2.2

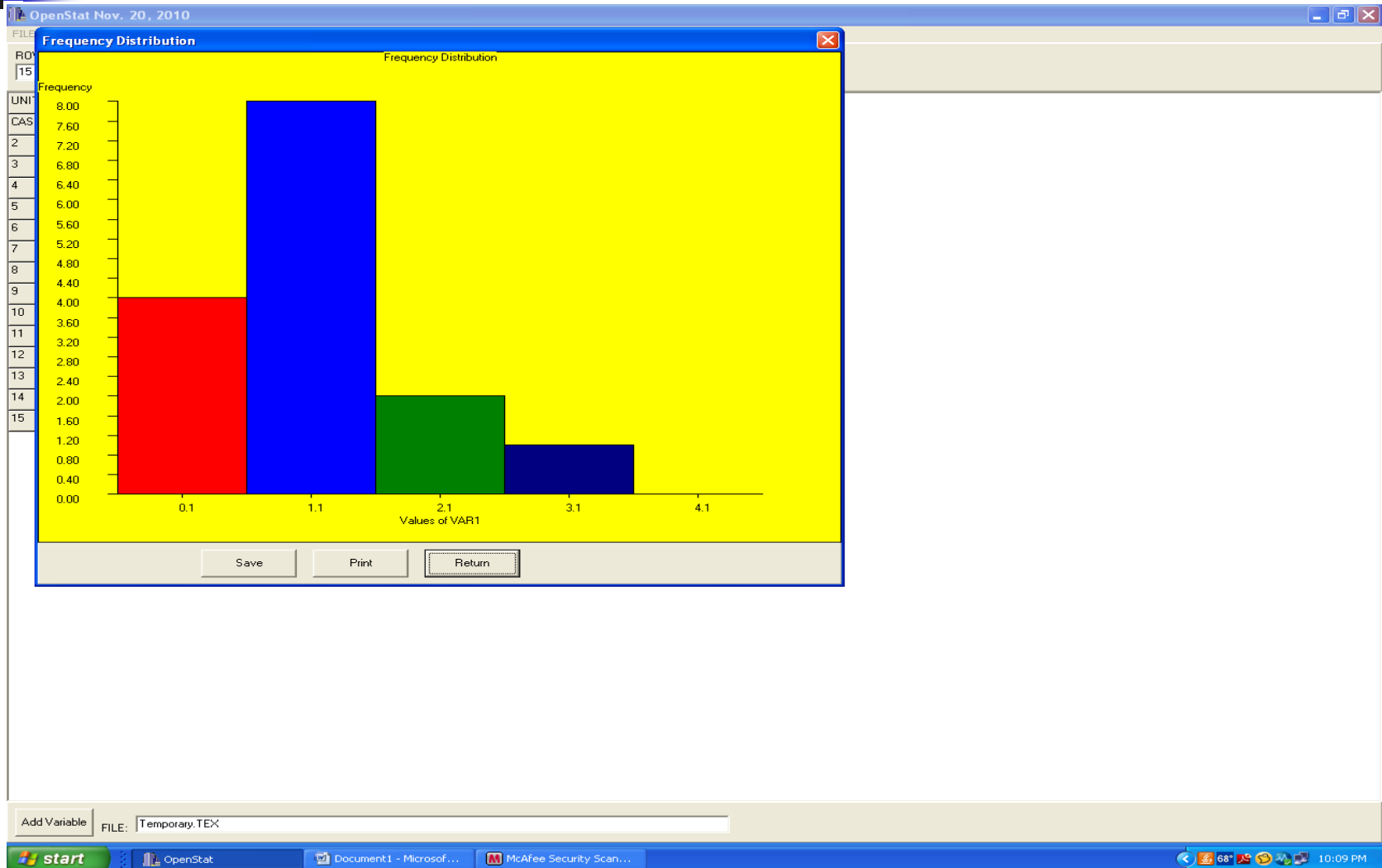


Changing Class Intervals Affects the Shape of a Histogram



<http://support.microsoft.com/kb/214269>

Histogram in Openstat



Scatter Plot

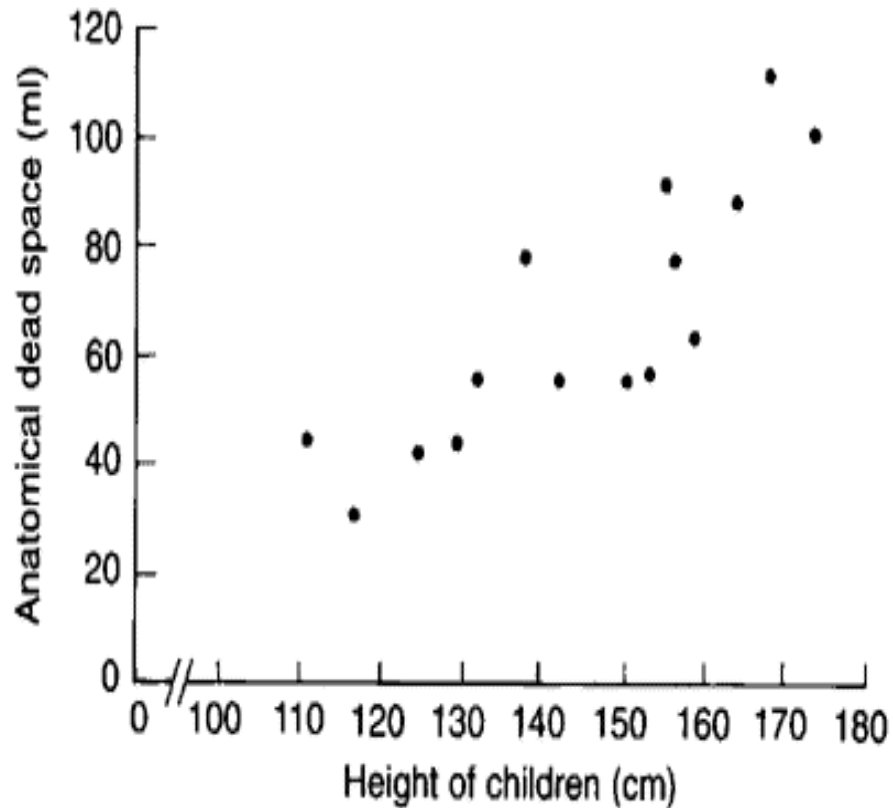


Figure 11.2 Scatter diagram of relation in 15 children between height and pulmonary anatomical dead space.

Statistics at Square One



What is a Scatter Plot?

- A scatter diagram shows the association between two variables.
 - If no causation then choice of axis is immaterial
 - If one variable x causes the other y , then plot x along horizontal axis and y along vertical axis

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Conference ID 59058061

Bar Charts

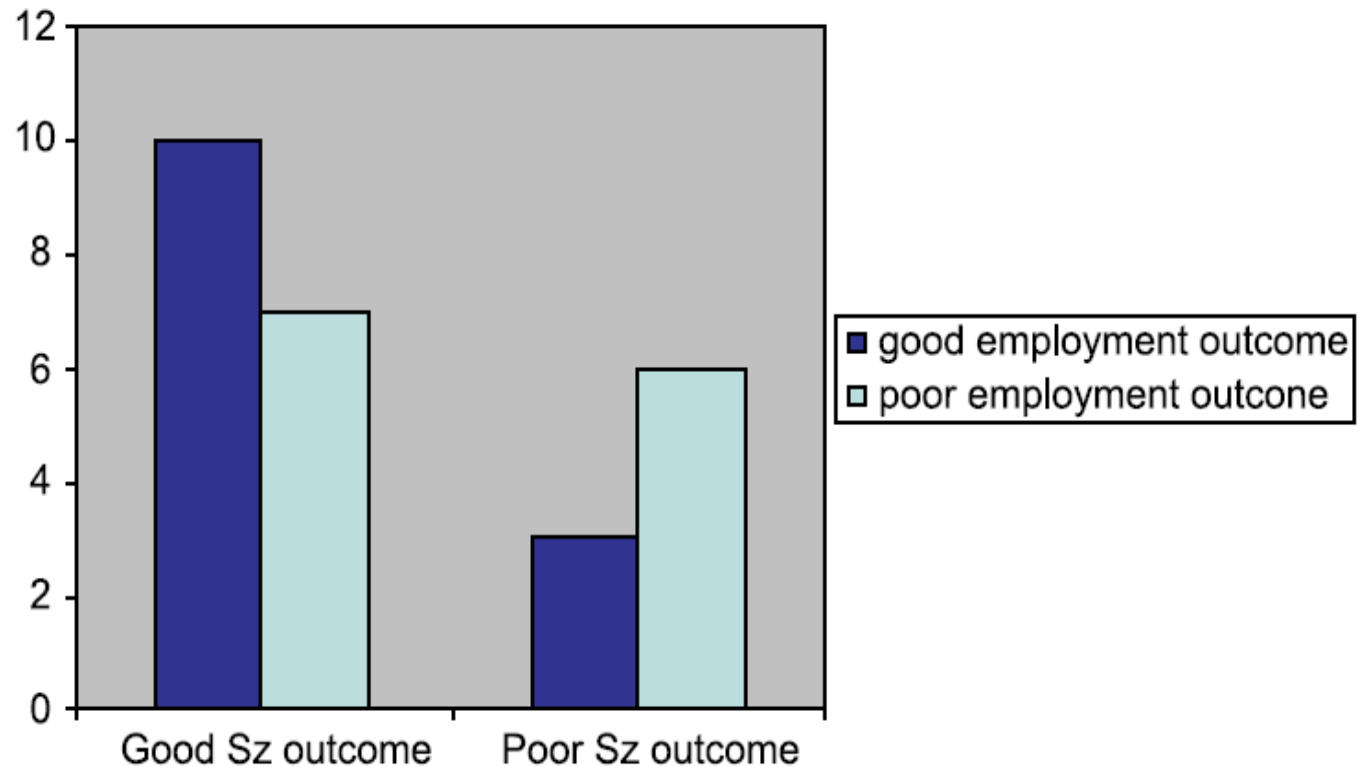


Fig. 2. Employment outcomes in the group with good seizure outcome and poor seizure outcome following ATL.



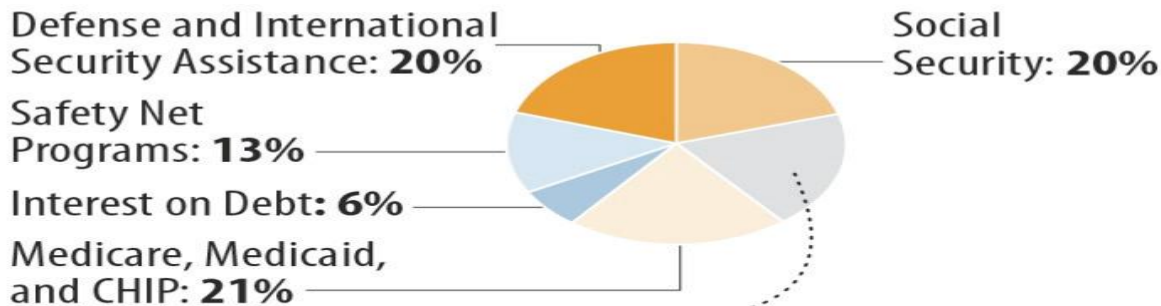
What is a Bar Chart?

- A bar chart shows data in form of horizontal or vertical bars for mutually exclusive categories
- Bar charts show frequencies & relationships
- Used for comparisons among groups
- Can show changes over time

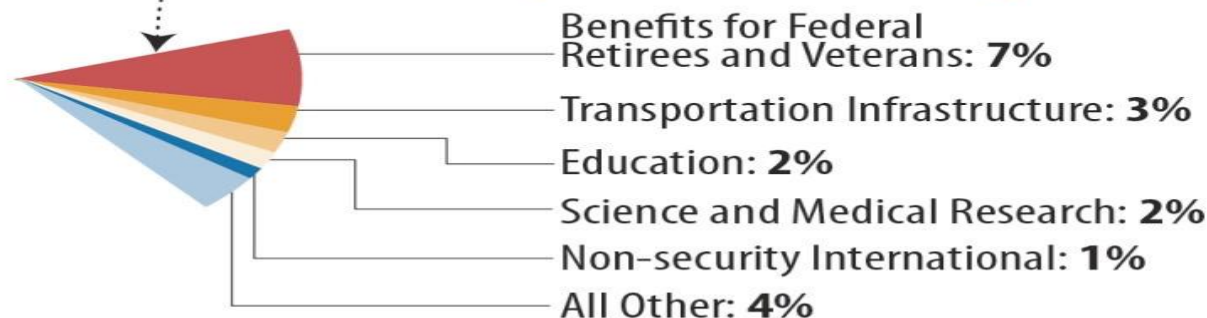
Pie Chart for Relative Frequencies

Where Do Our Federal Tax Dollars Go?

Most of Budget Goes Toward Defense, Social Security, and Major Health Programs



Program Areas in the Remaining Fifth of the Budget

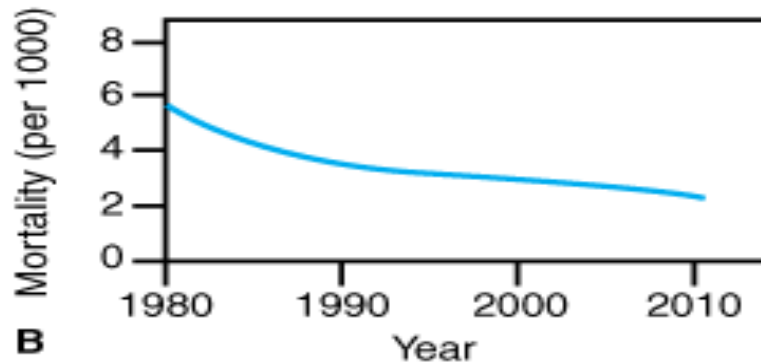
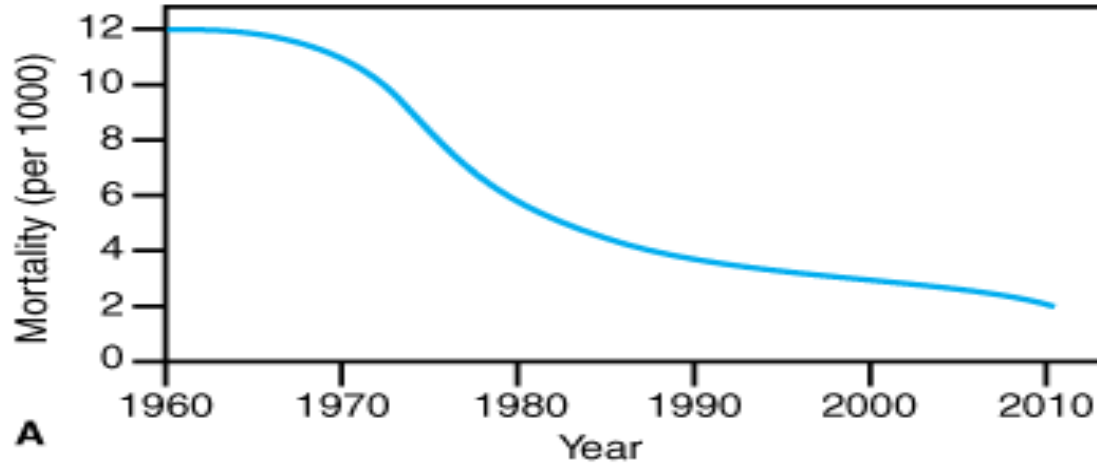


Note: Percentages do not add to 100 due to rounding.

Source: 2011 figures from Office of Management and Budget, FY 2013 Historical Tables.

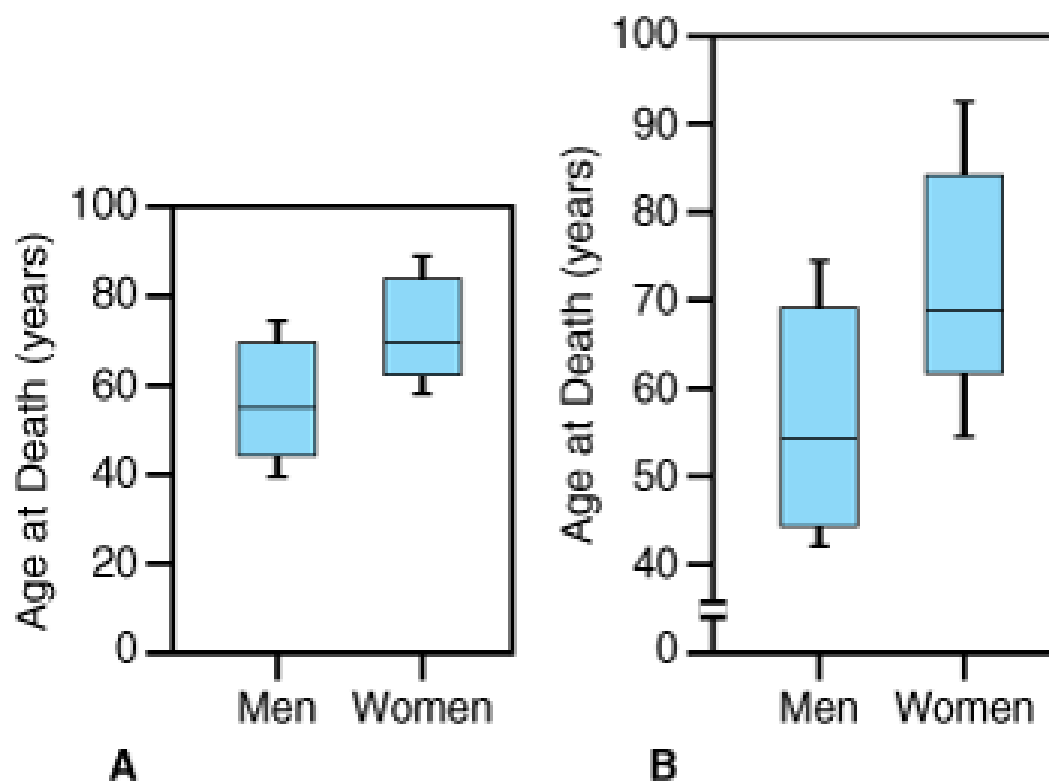
[Center on Budget and Policy Priorities | cbpp.org](http://cbpp.org)

Starting Point of a Graph



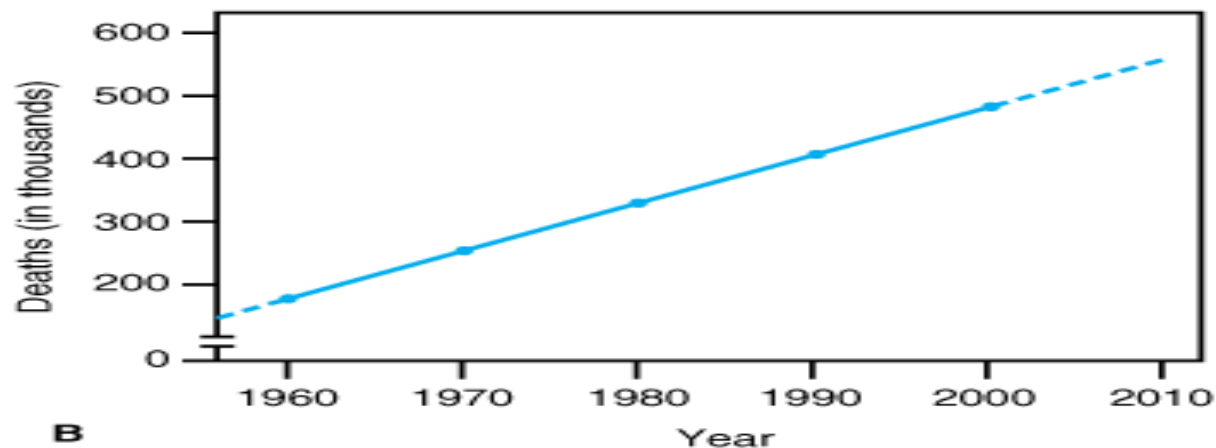
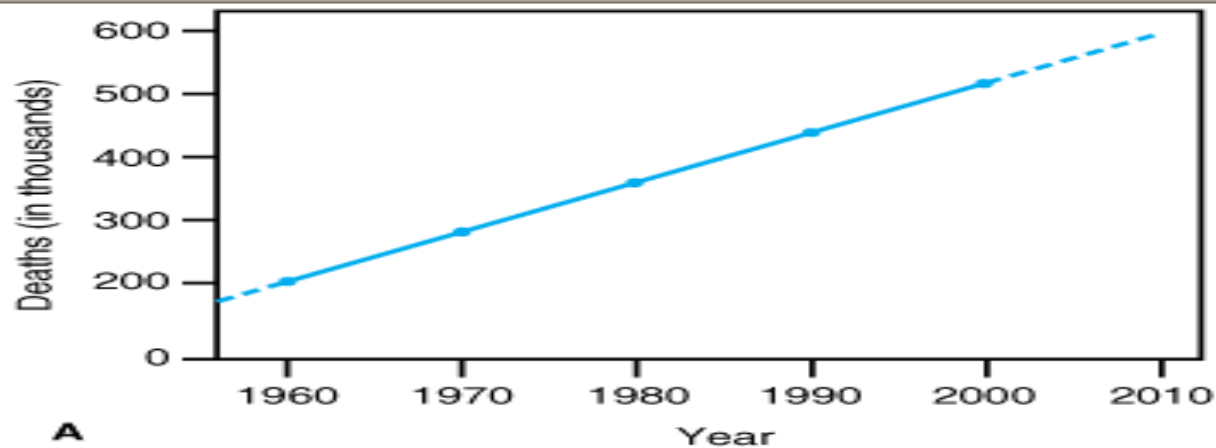
Misleading graphs

Choice of Vertical Axis may Enhance or Minimize the Change



Source: Dawson B, Trapp RG: *Basic & Clinical Biostatistics*, 4th Edition:
<http://www.accessmedicine.com>

Misunderstanding of the Scale





Summary: Display Data, Don't Conceal Them!

- For a small data set a dot plot is better than a box-whisker plot.
- Use a scatter plot for displaying the relationship between two quantitative variables. Don't categorize one or both variables.
- Use box-whisker plots side by side instead of histograms or error bar plots to compare distribution of data sets.
- When using error bar plot for uncertainty in computed mean clearly state if standard error or confidence interval is used.



Thank you!

Questions/Comments

Rizwana.Rehman@va.gov

(919) 286-0411 ext: 5024

For more information, program materials,
and to complete evaluation for CME
credit visit

www.epilepsy.va.gov/Statistics



APPENDIX

Download Openstat

<http://www.statprograms4u.com/>

Draw Stem and Leaf Plot

OpenStat Nov. 20, 2010

FILES VARIABLES EDIT ANALYSES SIMULATION

ROW COL
15 1

UNITS	VAR1
CASE 1	0.6
2	2.6
3	0.1
4	1.1
5	0.4
6	2.0
7	0.8
8	1.3
9	1.2
10	1.5
11	3.2
12	1.7
13	1.9
14	1.9
15	2.2

2. Choose Analyses, Descriptive

- Descriptive
 - Frequencies
 - Cross Tabulation
 - Breakdown
 - Normality Tests
 - X Versus Y Plot
 - Group (integer) Frequency Charts
 - Repeated Measures Bubble Plot
 - QQ or PP Plot
 - Smooth Data by Averaging
 - Compare Two Distributions
 - Compare Observed to Theoretical Distribution
 - Three Dimension Rotation
 - Box Plots
 - X versus Multiple Y Plot
 - Stem and Leaf Plot**
 - Multiple Group X versus Y Plot
- Comparisons
- Analyses of Variance
- Correlation
- Multiple Regression
- Interrupted Time Series Analysis
- Multivariate
- Nonparametric
- Measurement
- Matrix Manipulation
- Statistical Process Control
- Financial
- Neural Network
- Linear Programming (SIMPLEX)

3. Select Stem and Leaf Plot

1. Enter data

Table 1.2 Urinary concentration of lead in 15 children from housing area X ($\mu\text{mol}/24\text{hr}$)

0.6, 2.6, 0.1, 1.1, 0.4, 2.0, 0.8, 1.3, 1.2, 1.5, 3.2, 1.7, 1.9, 1.9, 2.2

Add Variable FILE: Temporary.TEX

start OpenStat

68° 10:00 PM

Draw Stem and Leaf Plot

OpenStat Nov. 20, 2010

FILES VARIABLES EDIT ANALYSES SIMULATION UTILITIES OPTIONS HELP

ROW: 15 COL: 1 Cell Edit (Return to finish) N CASES: 15 No. VAR.S: 1 ASCII: 13 STATUS: Press F1 for help when on any menu item.

UNITS	VAR1
CASE 1	0.6
2	2.6
3	0.1
4	1.1
10	1.5
11	3.2
12	1.7
13	1.9
14	1.9
15	2.2

4. Use arrow to select variable

Stem and Leaf Plot

Directions: Click on the variable(s) to be analyzed in the left list of available variables. Click the right arrow button to enter the selected variable(s). To remove a selected variable, click the name of the variable in the right list and click the left arrow button. Click OK to complete the analysis.
Note: When the leaf depth is greater than 1, some leaves may represent fragments smaller than the leaf depth.

Available Variables: [Empty]

Selected Variables: VAR1

Buttons: Reset, Cancel, Compute, Return

5. Click on Compute

Show all scaled values and strings

Add Variable FILE: Temporary.TEX

start OpenStat Document1 - Microsof... 68° 10:02 PM

Stem and Leaf Plot

OpenStat Nov. 20, 2010

FILES VARIABLES EDIT ANALYSES SIMULATION UTILITIES OPTIONS HELP

ROW COL Cell Edit (Return to finish) N CASES No. VAR.S ASCII STATUS:
15 1 2.2 15 1 13 Press F1 for help when on any menu item.

UNITS	VAR1
CASE 1	0.6
2	2.6
3	0.1
4	1.1
5	0.4
6	2.0
7	0.8
8	1.3
9	1.2
10	1.5
11	3.2
12	1.7
13	1.9
14	1.9
15	2.2

Results Window

Return

STEM AND LEAF PLOTS

Stem and Leaf Plot for variable: VAR1

Frequency	Stem	Leaf
2	0	14
2	0	68
3	1	123
4	1	5799
2	2	02
1	2	6
1	3	2

Stem width = 1.00, max. leaf depth = 1
 Min. value = 0.100, Max. value = 3.200
 No. of good cases = 15

Add Variable FILE: Temporary.TEX

start OpenStat Document1 - Microsof...

68° 10:04 PM

Draw Histogram

2. Choose Analyses
Descriptive

3. Select Frequencies

1. Enter data

2	2.6
3	0.1
4	1.1
5	0.4
6	2.0
7	0.8
8	1.3
9	1.2
10	1.5
11	3.2
12	1.7
13	1.9
14	1.9
15	2.2

Table 1.2 Urinary concentration of lead in 15 children from housing area X ($\mu\text{mol}/24\text{hr}$)

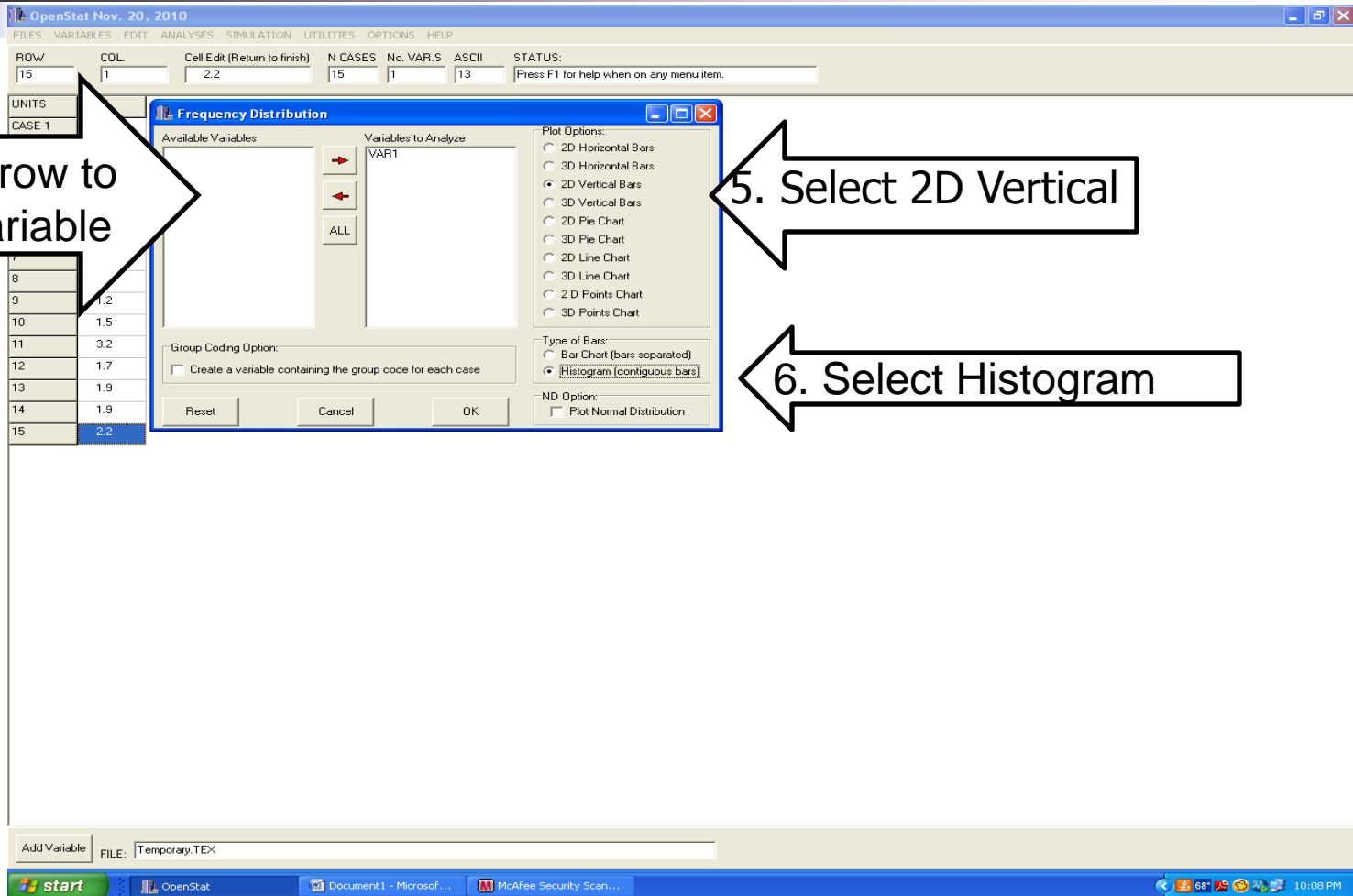
0.6, 2.6, 0.1, 1.1, 0.4, 2.0, 0.8, 1.3, 1.2, 1.5, 3.2, 1.7, 1.9, 1.9, 2.2

Histogram

4. Use arrow to select variable

5. Select 2D Vertical

6. Select Histogram



Histogram

OpenStat Nov. 20, 2010

FILES VARIABLES EDIT ANALYSES SIMULATION UTILITIES OPTIONS HELP

ROW COL Cell Edit (Return to finish) N CASES No. VAR'S ASCII STATUS:

15 1 2.2

UNITS VAR1

CASE	VAR1
1	0.6
2	2.6
3	0.1
4	1.1
5	0.4
6	2.0
7	0.8
8	1.3
9	1.2
10	1.5
11	3.2
12	1.7
13	1.9
14	1.9
15	2.2

Freq. Dist. Specifications

VAR1

Minimum 0.1

Maximum 3.2

Range 4.1

The interval size and number of intervals are shown below. You may change the number of intervals by entering a new interval size. Click on the current interval size and enter a new value. Press return when finished.

Interval Size: 1 Number of Intervals: 5

Cancel OK

Group Coding Option:

☐ Create a variable containing the group code for each case

Reset Cancel OK

7. Change interval size here if you don't like the default

8. Press OK

Add Variable FILE: Temporary.TEX

start OpenStat Document1 - Microsof... McAfee Security Scan... 68° 10:08 PM

Histogram

OpenStat Nov. 20, 2010

FILES VARIABLES EDIT ANALYSES SIMULATION UTILITIES OPTIONS HELP

ROW COL. Cell Edit (Return to finish) N CASES No. VAR.S ASCII STATUS:
15 1 2.2 15 1 13 Press F1 for help when on any menu item.

UNITS VAR1

CASE 1	0.6
2	2.6
3	0.1
4	1.1
5	0.4
6	2.0
7	0.8
8	1.3
9	1.2
10	1.5
11	3.2
12	1.7
13	1.9
14	1.9
15	2.2

Results Window

FREQUENCY ANALYSIS BY BIN

Frequency Analysis for VAR1

FROM	UP TO	FREQ.	PCNT	CUM.FREQ.	CUM.PCNT.	%ILE	RANK
0.10	1.10	4	0.27	4.00	0.00	0.13	
1.10	2.10	8	0.53	12.00	0.80	53.33	
2.10	3.10	2	0.13	14.00	0.93	86.67	
3.10	4.10	1	0.07	15.00	1.00	96.67	
4.10	5.10	0	0.00	15.00	1.00	100.00	

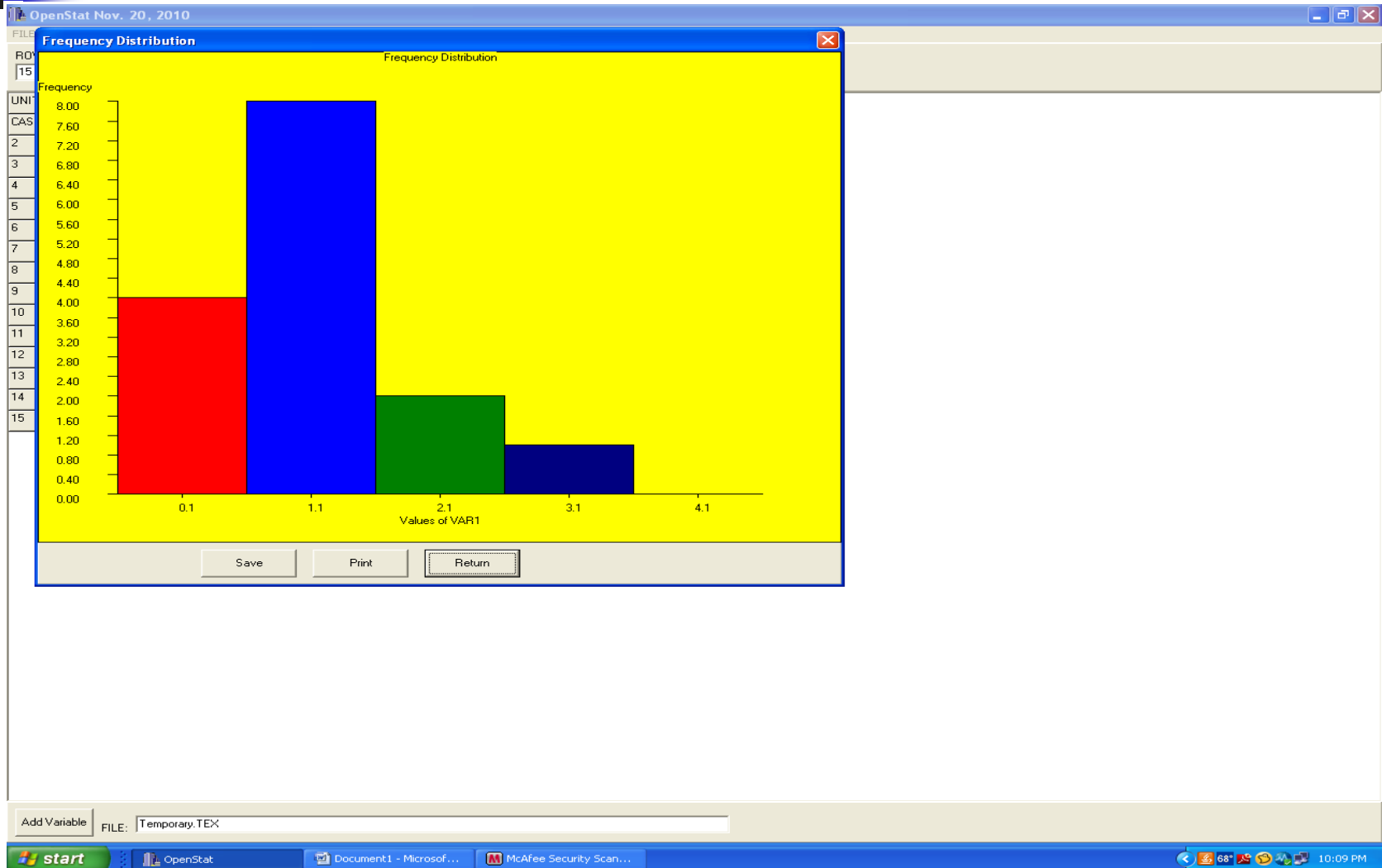
9. Press Return

Return

Add Variable FILE: Temporary.TEX

start OpenStat Document1 - Microsof... McAfee Security Scan... 10:09 PM

Histogram





Data for Box Plot

Table 1.2 Urinary concentration of lead in 15 children from housing area X ($\mu\text{mol}/24\text{hr}$)

0.6, 2.6, 0.1, 1.1, 0.4, 2.0, 0.8, 1.3, 1.2, 1.5, 3.2, 1.7, 1.9, 1.9, 2.2

Table 1.3 Urinary concentration of lead in 16 rural children ($\mu\text{mol}/24\text{hr}$)

0.2, 0.3, 0.6, 0.7, 0.8, 1.5, 1.7, 1.8, 1.9, 1.9, 2.0, 2.0, 2.1, 2.8, 3.1, 3.4

Box Plot

2. Use Variables menu to create a new variable

1. Enter both data sets under VAR1

The screenshot shows the OpenStat software interface. On the left, a data table with columns UNITS, VAR1, and VAR2. The VAR1 column contains numerical data for 31 rows. A callout arrow points to the VAR1 column with the instruction '1. Enter both data sets under VAR1'. On the right, a 'Data Dictionary' window is open, showing a table with columns No., Short Name, Long Name, Type, Integers, Decimals, and Missing. The table contains two rows: VAR1 (Variable1) and VAR2 (Variable2). A callout arrow points to the 'Press to create a variable automatically' button at the bottom of the Data Dictionary window with the instruction '2. Use Variables menu to create a new variable'. The bottom status bar shows the file name 'Temporary.TEX' and the system tray with the time '10:16 PM'.

UNITS	VAR1	VAR2
CASE 1	0.6	
2	2.6	
3	0.1	
4	1.1	
5	0.4	
6	2.0	
7	0.8	
8	1.3	
9	1.2	
10	1.5	
11	2	
12	1.7	
13	1.9	
14	1.9	
15	2.2	
16	0.2	
17	0.3	
18	0.6	
19	0.7	
20	0.8	
21	1.5	
22	1.7	
23	1.8	
24	1.9	
25	1.9	
26	2.0	
27	2.0	
28	2.1	
29	2.8	
30	3.1	
31	3.4	

No.	Short Name	Long Name	Type	Integers	Decimals	Missing
1	VAR1	Variable1	0	8	1	99999
2	VAR2	Variable2	0	8	1	99999

Box Plot

OpenStat Nov. 20, 2010

FILES VARIABLES EDIT ANALYSES SIMULATION UTILITIES OPTIONS HELP

ROW COL Cell Edit (Return to finish) N CASES No. VAR.S ASCII STATUS:
31 2 2.0 31 2 46 Press F1 for help when on any menu item.

UNITS	VAR1	VAR2
CASE 1	0.6	1.0
2	2.6	1.0
3	0.1	1.0
4	1.1	1.0
5	0.4	1.0
6	2.0	1.0
7	0.8	1.0
8	1.3	1.0
9	1.2	1.0
10	1.5	1.0
11	3.2	1.0
12	1.7	1.0
13	1.9	1.0
14	1.9	1.0
15	2.2	1.0
16	0.2	2.0
17	0.3	2.0
18	0.6	2.0
19	0.7	2.0
20	0.8	2.0
21	1.5	2.0
22	1.7	2.0
23	1.8	2.0
24	1.9	2.0
25	1.9	2.0
26	2.0	2.0
27	2.0	2.0
28	2.1	2.0
29	2.8	2.0
30	3.1	2.0
31	3.4	2.0

3. Enter 1 for group one data and 2 for group two data

Add Variable FILE: Temporary.TEX

start OpenStat Document1 - Microsof... McAfee Security Scan... 67° 10:17 PM

Box Plot

OpenStat Nov. 20, 2010

FILES VARIABLES EDIT ANALYSES SIMULATION UTILITIES OPTIONS HELP

ROW COL
15 2

UNITS VAR1 V

CASE 1	0.6	
2	2.6	
3	0.1	
4	1.1	
5	0.4	
6	2.0	
7	0.8	
8	1.3	1.0
9	1.2	1.0
10	1.5	1.0
11	3.2	1.0
12	1.7	1.0
13	1.9	1.0
14	1.9	1.0
15	2.2	1.0
16	0.2	2.0
17	0.3	2.0
18	0.6	2.0
19	0.7	2.0
20	0.8	2.0
21	1.5	2.0
22	1.7	2.0
23	1.8	2.0
24	1.9	2.0
25	1.9	2.0
26	2.0	2.0
27	2.0	2.0
28	2.1	2.0
29	2.8	2.0
30	3.1	2.0
31	3.4	2.0

ANALYSES

- Descriptive
 - Central Tendency, Variability
 - Frequencies
 - Cross Tabulation
 - Breakdown
 - Normality Tests
 - X Versus Y Plot
 - Group (integer) Frequency Charts
 - Repeated Measures Bubble Plot
 - QQ or PP Plot
 - Smooth Data by Averaging
 - Compare Two Distributions
 - Compare Observed to Theoretical Distribution
 - Three Dimension Rotation
 - Box Plots**
 - X versus Multiple Y Plot
 - Stem and Leaf Plot
 - Multiple Group X versus Y Plot

4. Choose Analyses, Descriptive, Box Plots

Add Variable FILE: Temporary.TEX

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Box Plot

The screenshot shows the OpenStat software interface. The main window displays a data table with columns UNITS, VAR1, and VAR2. The data is as follows:

UNITS	VAR1	VAR2
CASE 1	0.6	1.0
2	2.6	1.0
3	0.1	1.0
4	1.1	1.0
5	0.4	1.0
6	2.0	1.0
7	0.8	1.0
8	1.3	1.0
9	1.2	1.0
10	1.5	1.0
11	3.2	1.0
12	1.7	1.0
13	1.9	1.0
14	1.9	1.0
15	2.2	1.0
16	0.2	2.0
17	0.3	2.0
18	0.6	2.0
19	0.7	2.0
20	0.8	2.0
21	1.5	2.0
22	1.7	2.0
23	1.8	2.0
24	1.9	2.0
25	1.9	2.0
26	2.0	2.0
27	2.0	2.0
28	2.1	2.0
29	2.8	2.0
30	3.1	2.0
31	3.4	2.0

A 'Box Plot' dialog box is open, showing the following settings:

- Available Variables: VAR1, VAR2
- Group Variable: VAR2
- Measurement Variable: VAR1
- Option: ☒ Show Frequencies
- Buttons: Reset, Cancel, Compute, Return

A callout box with an arrow pointing to the 'Compute' button contains the text:

5. Make selections as shown above and then select Compute

The bottom of the screen shows the Windows taskbar with the Start button, OpenStat application, and other running programs like Document1 - Microsoft... and McAfee Security Scan... The system clock shows 10:18 PM.

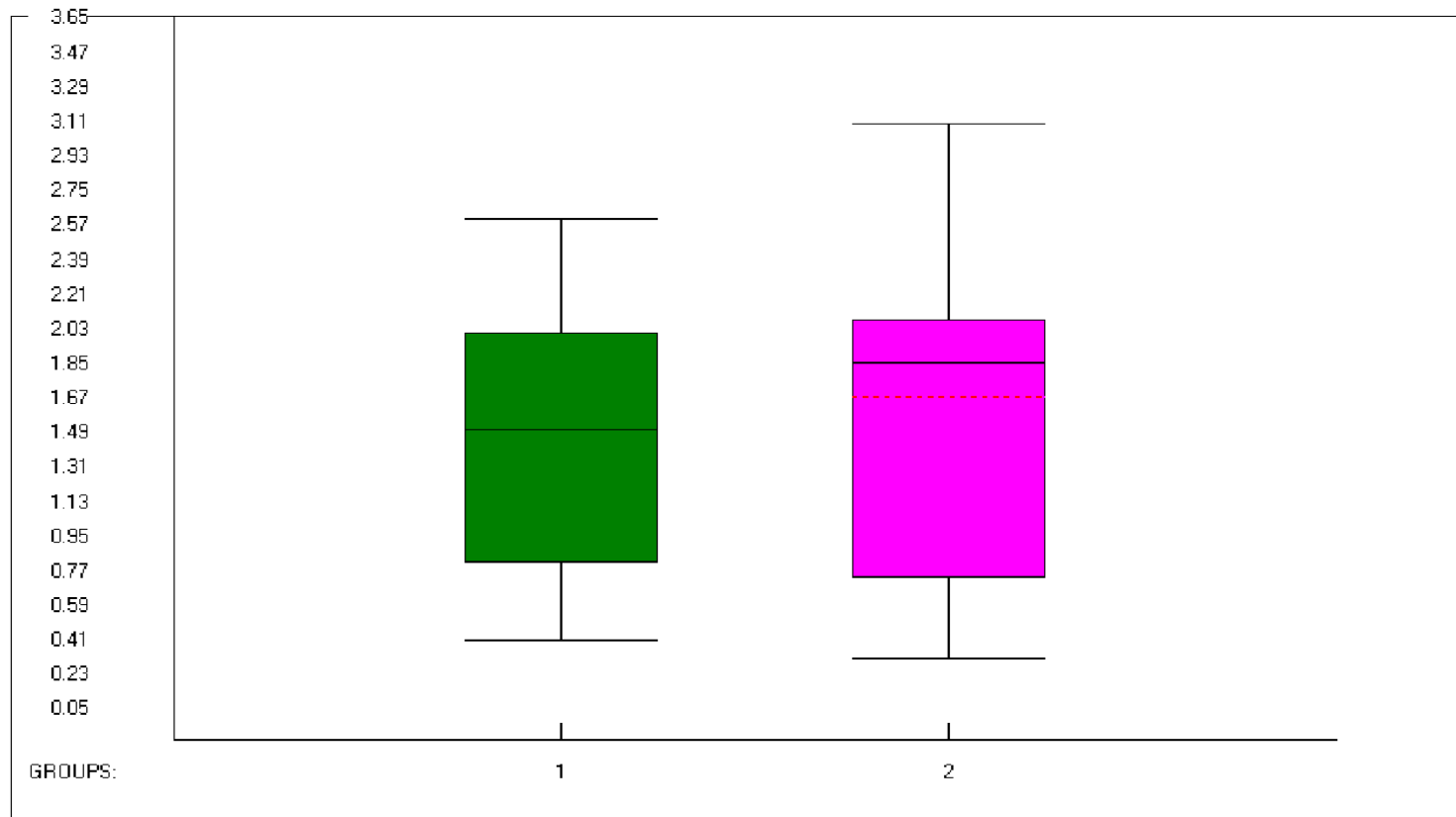
Box Plot



Box Plot

BOXPLOT FOR : Temporary.TEX

RED: mean, BLACK: median, BOX: 25th to 75th percentile, WISKERS: 10th and 90th percentile



GROUPS:

1

2

Save to File

Print

Return

start

OpenStat

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McAfee Security Scan...

67° 10:20 PM