

Introduction to Descriptive Statistics

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Measures of Central Value

- Mean - average total/no. of cases
- Median - 50% of cases above & below
- Mode - most frequently occurring event

Examples

- 10, 12, 15, 15, 18
- Mean = $70/5 = 14$
- Median = 15
- Mode=15

Measures of Dispersion

- Range - difference between highest and lowest values
- Standard Deviation - average difference observed between all values and their mean

Measures of location

- Percentiles - 100ths
 - Quartiles - quarters
 - Quintiles - fifths
 - Deciles - 10ths
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- Centiles=percentiles
 - Quantiles=measure of quantity i.e. all of the above

Data Checking

- The Normal Curve
- Skew
- Outliers

Risk

- Relative Risk
- Odds Ratio

Validity of a test

- Sensitivity
- Specificity

Significance

- P-values
- Statistical significance
- Clinical significance