

Clinical significance

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Confidence Intervals Confidence intervals are used to describe the amount of uncertainty of a sample estimate of a general population. It is useful in helping to determine clinical significance in that it provides an estimated range of values likely to include unknown parameters of the population. Confidence interval also gives more information than just estimate points (McGlinchey, David and Neil 529). There are a number of controversies around the clinical significance and statistical significance issue.

There is a general agreement that statistical significance do not give information concerning clinical significance. While medical studies are conducted on selected samples of people, the goal is to implement the findings on a totally different population. The arising concern, in this case, is that the sample of the study could give misleading results. It could be a very small sample or a biased sample not equivalent to the actual population that is being treated.

Mathematical deductive logic cannot detect sample bias. The way in which the sample was chose is required in order to detect the bias, which raises an issue on clinical significance. Statistical significance is generally about the possibility of a chance finding that will not stay in the replications of the future. However, it does not say how big the difference was. On the other hand, clinical significance, the magnitude of treatment benefits is considered. Determining clinical significance demands a clear operational definition of terms in the definition (McGlinchey, David and Neil 531-532). Therefore, the application of test statistic results in a general population results into issues of biases and ineffective treatments, therapy.

Summarily, the importance of understanding the differences between clinical

significance and statistical significance should be emphasized. The understanding will ensure that the improvements in outcomes including behavior and cognitive when compared to placebo are translated into a clinical setting.

Works cited

McGlinchey, Joseph B., David C. Atkins, and Neil S. Jacobson. "Clinical Significance Methods:

Which One to use and how Useful are they?" Behavior Therapy 33. 4 (2002): 529-50