SAMPLE SIZE DETERMINATION IN HEALTH RESEARCH

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*One of frequently asked question by medical and dental students / researchers is how to determine the sample size. Sample size calculations is necessary for approval of research projects, clearance from ethical committees, approval of grant from funding bodies, publication requirement for journals and most important of all justify the authenticity of study results. Determining the sample size for a study is a crucial component. The goal is to include sufficient numbers of subjects so that statistically significant results can be detected. Using too few subjects’ will result in wasted time, effort, money, animal lives etc and may yield statistically inconclusive results. There are numerous situations in which sample size is determined that varies from study to study. This article will focus on the sample size determination for hypothesis testing that involves means, one sample t test, two independent sample t test, paired sample and one way analysis of variance.*

Key works: Sample size, hypothesis testing, one sample t test, two independent sample test, paired sample t test, one way analysis of variance

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