

ABSTRACT

Understanding statistics can be one of the more difficult and daunting tasks facing the clinician attempting to understand and use the research literature. While the fundamental aim of including statistics in literature is to justify the conclusions and to enhance the information presented, all too often, statistics serve only to intimidate and alienate clinicians. There are two sources for this barrier to understanding: poor comprehension of statistics by clinicians, and inappropriate presentation of statistics by researchers. In the third of our papers on evidence-based practice and the clinician, some basic principles of statistics are introduced. Aspects such as the concepts of clinical and statistical significance are discussed, and an outline of the appropriate use of specific statistics is provided. The hope is that this will enable the clinician to better judge the applicability of statistical techniques as applied in the published literature. Some of the newer, more 'clinician friendly' statistical approaches are also presented. Finally some of the cheats and shortcuts commonly encountered in the presentation of research are discussed, and the methods for dealing with them are outlined.

Keywords

Clinical research, evidence based practice, clinical trials, research design.

Australasian Journal of Podiatric Medicine
2000; Vol 34, No.4 :125-131

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Volume 34 • Number 4 • 2000