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Books Review

Teaching Biostatistics in Medicine and Allied Health Sciences

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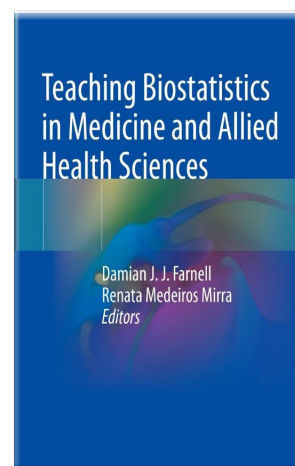Publisher: Springer Nature, Switzerland
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Biostatistics is crucial for the medical professionals, being important for understanding information presented in the scientific literature, and for implementing the concept of evidence-based medicine. *Teaching Biostatistics in Medicine and Allied Health Sciences* is a book which focuses on teaching biostatistics in medicine and allied health sciences, highlighting its trends and challenges, and giving suggestions on how to improve the methods used in order to obtain good learning outcomes e.g., an adequate level of understanding of the basics of statistical concepts; acquiring knowledge needed for the correct understanding of research results; raising interest on the topic and giving confidence to students that they can understand and use biostatistics.

As the authors highlight, teaching biostatistics in medicine and dentistry in higher education shows great variability. Discussion on what and how biostatistics courses should be taught is under way . therefore, book presents the perspective of both teaching staff and students, which is a highly recommended approach as the two parts are frequently different in many regards.

In this book, teaching of some aspects frequently discussed during the courses of biostatistics, needed for understanding research results, is assessed e.g., on the topics of null hypothesis, p-values and confidence intervals. The authors highlight that such topics are frequently perceived by students as being important to be known, but also rather hard to understand. Therefore, these courses should take into account the students' level of understanding. Simplifying the information presented, especially in beginner courses, may be recommended in order to promote conceptual understanding of biostatistics and provide a foundation on which students can develop by individual learning.

As the authors highlight, one important challenge that comes with teaching statistics is related to delivering it to people who frequently do not have advanced training in mathematics, by teaching staff that rather often do have training in this regard. A misconception that is frequently encountered among students is that understanding biostatistics cannot be done without advanced medical training, and it should be resolved after the statistical course taught. Important suggestions on how teaching staff can overcome this obstacle are given in this book. Opinion on the level of mathematical training that should be used is also given, and the importance of focusing on statistical thinking more than on formula and calculation is highlighted.

In conclusion, *Teaching Biostatistics in Medicine and Allied Health Sciences* provides a comprehensive perspective on teaching biostatistics to medical and dental students, and provides knowledge useful for the teaching staff in order to obtain adequate learning outcomes.

The Books Review is drafted in the reviewer's sole wording and illustrates his opinions