METADATA

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Abstract

Epidemiology is the basis of research in Health Sciences. In this book, the basic principles and the methodology of epidemiological research are presented. Epidemiological studies rely on statistics, employing often complex tests. The complexity of statistics used in Epidemiology works deterrently for many health scientists, who usually avoid the burden of statistical analysis. The aim of this book is to help understand and perform statistical analysis, without the use of mathematical calculations on paper. Instead, practical applications in SPSS and Stata are presented, because the volume of data in medical sciences makes any paper calculations impractical. This book begins with basic epidemiological applications such as data presentation, basic epidemiological rates, comparing continuous and categorical variables, simple linear regression, and strata analysis. In the second part, the statistics of cross-sectional, cohort, and case-control studies are presented, also focusing on survival analysis and logistic regression. Finally, a chapter on strategies of analysis and presentation of results for publication concludes the book. Each chapter begins with a brief introduction of the topics covered. Then a step-by-step approach in SPPS and Stata is presented and after the examples, there are review exercises for the reader, who can use any statistical package he wishes.

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