Preface

Those doing research should agree that both knowledge and understanding on research methodology and statistical analysis are essential and critical. So this book combines both disciplines at one place. The aim is to provide guidelines on how to plan and conduct research in medicine and health care. It is suitable for students and medical or healthcare practitioners with relevant examples and data used. There are already many books on research methodology available in the circulation. There are also many biostatistics books with step-by-step instruction using SPSS. This book is not meant to repeat all information from those books but rather to complement them. Only critical points are mentioned in the book making it a good option for a quick reference on research methodology. Important and critical points are gathered from various sources and from my own experience.

This book is divided into two main parts. Chapter 1 is about research methodology and Chap. 2 is on how to analyse the data. Chapter 1 begins with an overview of how to conduct a research. Emphasis is made for a good understanding of the problem being investigated and how to visualise them graphically. Then the book covers important information about study designs, sampling strategies and sample size calculation. Good data collection starts with a good planning and this is elaborated before the chapter ends with the summary of critical points in research methodology.

Those coming from non-mathematical side often find difficult when it comes to data analysis. So the statistical analysis chapter is written by showing step-by-step format using IBM SPSS Statistics for Windows with some important notes provided when required. Relevant explanation on the results is given with some examples of how to present them for some analyses. Data for the exercise are available at www.jamalrahman.net/book/dataset.

I hope this book will be useful for undergraduates, postgraduates or even professionals in medical research.

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