

# An introduction to Clinical Research for Health and Social Care Professionals (2022), by Ario Santini and Kenneth Eaton.

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## Keywords

Health | Research | Social Care

## Abbreviations

None.

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**What this paper adds:** Ario Santini and Kenneth A. Eaton (2022) have created a valuable introduction to clinical research, which introduces readers to the topic as well as guiding them through the steps required to produce and publish clinical research. This book provides a broad and thorough understanding but acts more so as a gateway to the world of clinical research. This is a review of the book.

**Introduction:** Clinical research is a fundamental and yet underexplored aspect of health and social care professionals' careers (William Moraes *et al.*, 2015). Its benefits reach from professional to patient, with breakthroughs leading to earlier diagnosis, more effective treatment and in turn lower mortality rates in UK hospitals, that are more involved in research (NIHR, 2023). Health and Social care professionals are both expected to practice and treat according to evidence base, and this is well established and appreciated.

However, the number of professionals involved in research falls short of those that appreciate its importance (Eaton, 2022).

An Introduction to Clinical Research for Health and Social Care Professionals (2022) acts as a useful tool for those involved in clinical research, and guides readers through the 10 stages of a research project.

**Context:** This book is structured as an introduction to research and so the authors have helpfully included references to other resources at the end of each chapter, which the readers may find useful if wanting to delve deeper. Furthermore, some chapters of the book include diagrams, e.g. Chapter 2, to aid understanding whereas others are more heavily narrated, e.g., Chapter 3.

The structure of this book includes 18 chapters, over which the 10 stages of a research project are chronologically spread. Chapter 1 sets out the purpose for carrying out practice-based research: Chapter 2 covers the essentials of critical appraisal of literature, which is a step required before carrying out research.

The first 3 stages of a research project are covered in chapter 3; the initial idea, searching the literature and refining the questions and aims based on the literature search. As these concepts are brief and linked together the authors have usefully grouped them within the same chapter. In

contrast, stage 4: Designing studies, is comprised of many aspects and has been covered by the following 8 chapters, Chapters 4 through 11.

Chapter 4, titled part 1, covers aspects of quantitative study design as well as guiding the reader to choosing appropriate studies based on their type of research. Examples are helpfully spaced throughout the chapter in the form of tables, with additional tables listing the advantages and disadvantages of each type of study. This provides the user with the tools to make decisions on which type of study is best for their research and examples of how to conduct this research. The topics covered include basic research design, pre-clinical research, case reports, case series, cross sectional studies, case control studies and lastly cohort studies.

Chapter 5, which is part 2, covers solely randomised control trials (RCTs). To a lay person it may appear confusing as to why RCTs have been placed apart from the other quantitative studies, but to the experienced researcher, it is because RCTs are considered the “gold standard for effectiveness research” (Hariton and Locascio, 2018).

The authors, in a similar fashion, explain qualitative study design in chapter 6 and like all other chapters, this includes a bullet pointed overview of what will be covered. Although this chapter briefly introduces qualitative research it provides limited insight into how to choose a data collection

method or subtype of qualitative research.

For readers unsure about systematic reviews the authors have dedicated chapter 7 to this, including what constitutes excellent reviews, strengths and weaknesses and sources of data. The end of the chapter concludes with a checklist for a meta-analysis study. In continuation, Chapter 8 teaches readers about sampling techniques of which random sampling is mentioned as the preferred type. Sample size calculation and types of bias are also covered in a what to do/what not to do manner. Similarly, chapter 9 covers questionnaires.

Stage 4 of the book covers screening, diagnostic testing, prognosis, diagnosis, risk and prognostic study methods. Chapter 10 is the first to include statistics relevant to research. These can be challenging concepts to grasp and so are covered in a fair amount of detail from positive predictor values to examples of receiver operating characteristic curves. Chapter 11 focuses on scientific terminology that is often confused: Prognosis and diagnosis. These terms are then applied to research and further, more complex, statistics.

Before ethics approval for a research study can be obtained, a protocol must be written, and different organisations have different requirements as stated in chapter 12. A concise and step by step layout is provided for readers to follow when writing their own proposal,

leading up to obtaining ethics approval which is covered in the following chapter.

Ethics forms a vital aspect to any research for the protection of research participants as well as the success of the research in being published, hence chapter 13 alludes to existing codes of practice, implications of misconduct and suitable consent procedures.

Upholding its aim to increase engagement of healthcare professionals in clinical research, the following chapter (14) covers advice on obtaining funding. It is studded with useful resources and organisations. Chapter 15 turns its attention to the logistics surrounding carrying out research, with focus on management, time, quality, recruitment and support.

Chapter 16 revisits data collection, this time in more detail. Data collation is also included in this section however data presentation is included in the following chapter (17). With the aid of visual examples, the authors talk through many options for data presentation whilst also signposting to outside resources for additional information. Guidance on how to choose the best suited summary method and data presentation type are also provided. Analysis of data is covered in the latter part of this section with a helpful paragraph containing “useful free tools” provided in the form of web links.

Finally, the last chapter of this book covers writing the first draft of a paper,

submitting for the editorial process, presenting results at meetings and conferences and peer reviews. The book concludes with appendices, a glossary of terms as well as details regarding an apprenticeship scheme. It is apparent to the reader that this book aims to support them in achieving 'gold standard' level of research.

**Evaluation:** On the whole, this book serves well as a valuable tool for both health and social care professionals as well as students new to research and development. However, like any other first edition of a book, there are always areas to improve. The first being the length of the book itself, as the introduction alone may pose daunting to the budding clinical researcher. Spanning 315 pages of A4 text with no colour, to a novice it could appear overwhelming. However, it must be appreciated that clinical research is a vast topic, with many areas to cover, and the authors are clearly intent on providing readers with all the tools and enough information they need for carrying out a research project and probably did not want to compromise on detail.

In addition to this upon reading this book there are aspects to the order in which the chapters appear, I wished had been different. For example, if following the book step by step a reader would have designed their study (covered in chapters 4-11) before considering ethics (alluded to in chapters 1&11) or funding (found in chapter 14). Since applying for ethics

and funding may require more time it may be more efficient to have considered this first.

**Summary:** This is a user friendly guide to clinical research, useful for students and professionals alike. The book's modernity sets it apart from others on the shelf. The logical and concise structure enable the reader to easily refer to the text alongside their research.

Overall, this book equips its reader with the information and resources to start on their research journey.

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