

Introduction

The Research Process and the Structure of the Book I have written this book with a wide audience in mind. Health professionals those new to research, teachers, research users, managers, students, experienced researchers will all benefit from the detailed guidance. It is illustrated throughout with carefully chosen case examples that will be familiar to health professionals but accessible to everyone.

This book is for you if you are a health professional keen to undertake research that is of direct relevance to health care practice. You have probably got an idea of what you want to investigate, such as something that troubles you in your clinical practice. You may have some other motivation for doing this, perhaps a research degree or dissertation, or perhaps frustration with your clinical work or the health service.

This book is for you if you are unsure how to get started on research. It takes you through each step in great detail, making sure that what you actually research is what you really want to research, it guides you through research that reveals how and why things happen the way they do, and give you results that you can use in health care practice.

You may have some knowledge of research but are confused by the different types of research or cannot see how you could use the various research methods. Maybe you were told that small research studies are a waste of time.

This book gives in-depth illustrations and examples of the different approaches to research and the arguments about their usefulness. It explains how different research methods relate to each other and how small research studies can contribute new knowledge about our world.

You may have talked to people doing research who are confident about what they are doing and are clear about the difference between theory and hypothesis, between qualitative and quantitative research, between an interview study and a survey and between a research user and a research participant. If these differences are not so clear to you, then this book is for you as it clarifies these distinctions. It avoids using jargon and provides you with a glossary of words used in research.

2 RESEARCH METHODS FOR HEALTH CARE PRACTICE

Table 0.1 The research process

<i>Phase</i>	<i>Steps to be taken</i>	
I	Becoming motivated and examining our motivations Critical observation of difference and change Establishing the overall aim of our research Clarifying the frame and focus of our research Developing the research aim, questions and objectives	Involving users ethical considerations
II	Examining our preferences for how to approach the research Defining the focus of our research Reviewing literature in preparation for designing research Matching the research approach to the research aim Modelling the research focus	
III	Using existing data or collecting new data Analysing data	

This book is also for you if you:

- teach research methods at undergraduate or postgraduate level to health professionals in training or practice. The book provides a structure for working through the issues of developing research, including critical thinking and critical use of research methods.
- are a 'research user' such as an advisor to a research team, a member of a research user group or on a research ethics committee. This book will introduce you to the way researchers think and to research methods that are useful for health care practice. The Glossary also provides non-technical explanations.
- manage a health care services and want to encourage a critical approach to developing an innovative and evidence-based service where research becomes part of everyday clinical practice.
- are an experienced researcher interested in exploring what is distinctive about research for health care practice.

The research process and the structure of the book

The first chapter of this book, 'Research health care practice', introduce you to research and the various types of research related to health care practice. It explores the basics of research including how we think about the world and what our research can tell us about how it works. The research process as mapped out in the table below guides you through the different phases of research.

In phase I of the research process is discussed in Chapter 2, Getting started on your research. The steps taken are very similar for all types of health-related research. Each step is important and needs careful thought. Often we have to go through the different steps in this phase several times before we are ready to move

on to the next phase. It may seem that these steps are really preparation for research rather than the research itself, which we often think of as collecting and analysing data. These early steps underpin the whole of our research. Taking time and care on this phase ensures that the rest of the research process goes well.

In phase I and throughout the research process we need to consider the ethical implications of the research. This is discussed in Chapter 3 'Considering the Ethics of Your Research'.

The perspective of future users of the results of our research can be of great value and is discussed in Chapter 4. 'Involving users in your research'. Users can contribute throughout the research process.

Once we know what we want to research there is a further stage (phase II) of preparation needed, before designing the details of our research. This is discussed in Chapter 5, 'Preparing to design research for health care practice'. This phase ensures that we understand as much as possible about what we want to research and are clear about the focus of our research and the best way of approaching it. It is at this point that our decisions will determine the way we collect our data.

Phase III considers the collection and analysis of research data. There are now many sources of data about health and health care that are collected for other purposes. These resources can be used as data for our research (phase III) and are introduced in Chapter 6. 'Using existing data in research' for health care practice. Published research can also be used as a source of data for research. Chapter 6 also describes how to collect and analyse published research for our own research.

How to collect new data is described in both Chapters 7. 'Collecting and exploring new data using qualitative methods' and Chapter 8. 'Collecting and exploring new data using quantitative methods'. These chapters complement each other, each covering issues relevant to the other. The chapters describe how to ensure that the data collected is directly relevant to the research and collected in a way that can reveal what is happening in the world.

The term **qualitative** is used in health-related research to distinguish data collection methods such as interviews from **quantitative** data collection methods, which involve counting and measurement. The distinction can be useful in designing data collection; however, both qualitative and quantitative data can be collected within one study and using both approaches can enhance the value of a study. There has been a great deal of debate about the value of qualitative and quantitative research methods. These debates relate, at least in part, to the ways of reasoning with which the methods are associated (discussed in Chapter 1). This book clarifies the value of both types of data in research for health care practice.

Methods of data analysis can be used for data drawn from an existing source and for new data. When using the approach to research described in this book, analysis usually starts very soon after data collection, and early results of analysis are used to improve the collection, of subsequent data and decisions about further data analysis. This early exploration of data is included in Chapters 7 and 8.

There are many approaches to the analysis of data relevant for health and health care. This book does not attempt to cover them all but rather explores an approach of particular relevance for health care practice. However, the further reading sections at the end of Chapters 7, 8 and 9 direct the reader to books that describe other methods of analysis.

Chapter 9 'Analysing data in research for health care practice' discusses an approach to data analysis where the results can directly feed into health care practice, it uses a well-established principle for data analysis of constant comparison. The chapter emphasises the importance of understanding the whole nature of what the research is about, rather than the details. This approach is accessible by all health care professionals without special expertise, and through this approach insights can be gained of direct relevance for clinical practice. The chapter then explores the potential of further analysis that requires additional expertise but based on constant comparison. This analysis has potential for understanding the tailoring of interventions, in terms of their nature and timing, to individual people in clinical practice.

The position of research for health care practice, and its particular contribution to the wider world of research is summarized in the Conclusion to this book.

This book is written as an introduction to the issues you need to consider for undertaking research within your own practice setting, using examples drawn from the everyday work of health professionals. It will enable you to develop and plan your own research. You may need to read further details of particular aspects of your research, so a brief list of further reading is provided after each chapter. Additionally, the concepts discussed are listed at the end of each chapter so that you can check your understanding of them in the Glossary (at the end of the book) and read more about them elsewhere. The Glossary terms are highlighted in bold at their first appearance in each chapter.