

LISA MCKENNA | BEVERLEY COPNELL



# FUNDAMENTALS OF NURSING AND MIDWIFERY RESEARCH

A practical guide for evidence-based practice

FUNDAMENTALS OF  
**NURSING**  
AND MIDWIFERY  
RESEARCH

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First published 2019 by Allen & Unwin

Published 2020 by Routledge  
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN  
605 Third Avenue, New York, NY 10017

*Routledge is an imprint of the Taylor & Francis Group, an informa business*

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A catalogue record for this  
book is available from the  
National Library of Australia

Type design by Squirt Creative  
Set in 11/15 pt Legacy Serif ITC by Midland Typesetters, Australia

ISBN-13: 9781760631093 (pbk)

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# OUTLINE OF THE BOOK

## **SECTION 1 HOW DO I FIND AND USE EVIDENCE?**

Chapter 1 provides an introduction to evidence in nursing and midwifery. The chapter discusses the importance of using evidence in practice and outcomes when health professionals do not use evidence to support their practice. It positions research in the context of evidence and outlines the need for nurses and midwives to be users of evidence. It uses Nursing and Midwifery Board of Australia standards to reinforce its importance.

Chapter 2 provides a focus on locating evidence to support nursing and midwifery practice. The chapter examines sources of research evidence along with strategies for effectively finding it and determining its credibility. It presents common databases where nursing and midwifery research can be found, and strategies for conducting effective searches within them.

## **SECTION 2 HOW CAN I MAKE SENSE OF RESEARCH EVIDENCE?**

Chapter 3 provides an overview of various steps involved in the research process. It introduces considerations in developing a research question, deciding the best approach for a research study, designing a study, and identifying and accessing necessary approvals.

Chapter 4 provides an overview of quantitative research approaches commonly used in nursing and midwifery, with a focus on person-centred care. The chapter examines experimental and non-experimental research designs, and processes for developing a quantitative research question. It explores different types of data, sampling procedures, data collection, basic statistical tests and the importance of validity and reliability. Finally, it discusses reporting of quantitative findings and related reporting standards.

Chapter 5 provides an overview of qualitative research approaches commonly used in nursing and midwifery, with a focus on person-centred care. The chapter explores reasons why qualitative research is

popular in nursing and midwifery and introduces common approaches—namely, phenomenology, descriptive qualitative approaches and grounded theory. Using a case study, it explores steps in undertaking qualitative research, common data collection methods, sampling approaches and analysing qualitative data using thematic and content analysis. Finally, it examines considerations for ensuring the quality of qualitative research, and reporting findings.

### **SECTION 3 HOW DO I CRITICALLY EVALUATE RESEARCH STUDIES?**

Chapter 6 provides an overview of processes for critiquing research. It introduces a step-by-step approach to evaluating research quality through questioning and critiquing tools. Using the case example of vital signs monitoring, the chapter examines the value of nursing and midwifery research. It introduces the collation of research critiques of bodies of knowledge to explore approaches to structured critical literature reviews—namely, systematic and scoping reviews—including protocol development.

Chapter 7 provides an overview of ethical considerations in nursing and midwifery research. The chapter introduces the importance of ethical approaches to research and the roles of Human Research Ethics Committees. It presents a range of fundamental principles that should underpin all research involving human participants, including research merit and integrity, beneficence and non-maleficence, respect for persons and justice. Finally, the chapter explores ethical issues arising in the emerging use of the internet and social media as data sources in research.

### **SECTION 4 HOW DO I USE RESEARCH EVIDENCE TO INFORM MY PRACTICE?**

Chapter 8 provides an overview of approaches to applying research evidence to nursing and midwifery practice. The chapter introduces the concept of knowledge translation and the questioning of clinical practice. It presents clinical practice guidelines and clinical audits as sources of practice evidence. The chapter examines some common evidence-based practice models used in health care. Finally, it explores evaluation of evidence implementation using action research and realist evaluation as sample approaches.

Chapter 9 is dedicated to the writing of effective reviews of the literature. The chapter begins by defining what a literature review seeks to achieve, types of literature reviews and the process of writing a review. It introduces a range of academic concepts important to students needing to undertake reviews of literature for academic assessments as well as for clinical work.

## **SECTION 5 HOW DO I PURSUE A NURSING OR MIDWIFERY RESEARCH FUTURE?**

Chapter 10 provides insights into research career pathways available to nurses and midwives. It introduces different types of research roles common to these professions and education pathways to research careers. The second half of the chapter focuses on seeking funding for research activities and developing effective proposals for grant funding or academic work.

# PREFACE

In today's contemporary healthcare system, research plays a major role in directing the best approaches to clinical care and practice. This is no different for the disciplines of nursing and midwifery, where increasingly there is an onus to provide the most effective care, informed by quality and current research findings. Consumers of health care, too, are much better informed than they have been in the past. With access to endless online information resources, they expect the highest levels of treatments and care. Thus, the concept of evidence-based care has to become central to the practice of nurses and midwives.

Over past decades, nurses and midwives have cared for patients based upon traditional knowledge and practices. Many have continued to practise in the ways they were originally taught in their pre-registration courses. However, this is no longer appropriate. Nurses and midwives have a professional responsibility to keep up-to-date with current research impacting on their clinical practice. This occurs in a context where there is increasing emphasis on research and rapid growth in the production of research by nurses, midwives and other health professionals. Nurses and midwives require the skills and knowledge to read and understand research reports, evaluate the quality of the research, synthesise different research studies, apply the most appropriate findings to their clinical practice and evaluate their effectiveness. Furthermore, many nurses and midwives desire to contribute directly to the production of relevant research, requiring skills in performing quality research studies relevant to their practice.

We have written this text to be a useful introduction to research and evidence-based practice for nursing and midwifery students and clinicians. It aims to be practical in its approach, so that it can be used across various stages of the professional's career. We hope to demystify the connection between research and practice for students and clinicians. Each chapter in