THIRD EDITION

Guide to Evidence-Based Physical Therapist Practice Dianne V. Jewell PT, DPT, PhD, FAACVPR

The Rehab Intel Network Ruther Glen, Virginia



9781284028553_FMxx_i_xvi.indd 1 30/01/14 10:44 AM

World Headquarters Jones & Bartlett Learning 5 Wall Street Burlington, MA 01803 978-443-5000 info@jblearning.com www.jblearning.com

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Composition: Cenveo® Publisher Services
Cover Design: Michael O'Donnell
Director of Photo Research and Permissions: Amy Wrynn
Photo Research and Permissions Coordinator: Joseph Veiga
Rights Clearance Editor: Maria Leon Maimone
Cover Image: © Eky Studio/ShutterStock, Inc.
Printing and Binding: Edwards Brothers Malloy
Cover Printing: Edwards Brothers Malloy

To order this product, use ISBN: 978-1-284-03416-5 Library of Congress Cataloging-in-Publication Data

Jewell, Dianne V., author.

Guide to evidence-based physical therapist practice / Dianne V. Jewell.—Third edition.

p.; cm.

Includes bibliographical references and index.

ISBN 978-1-284-02855-3 (pbk.)

I. Title.

[DNLM: 1. Physical Therapy Modalities. 2. Evidence-Based Practice—methods. WB 460]

RM700

615.8'2-dc23

2013047418

6048

Printed in the United States of America 18 17 16 15 14 10 9 8 7 6 5 4 3 2 1

To the faculty of the Department of Physical Therapy in the Sargent College of Allied Health Professions at Boston University from 1986 to 1988. None of this was possible without your investment in me and the lessons you taught about excellence, thoughtfulness, and service to the profession.

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PREFACE

Guide to Evidence-Based Physical Therapist Practice, Third Edition is the only textbook on the market that provides the foundational groundwork of research methods and teaches physical therapist students and clinicians alike how to integrate evidence in a clinical practice. Its goal is to make the evidence-based physical therapist practice (EBPT) process accessible and relevant to nonresearchers who need to *apply* research as well as conduct it.

Consistent with prior versions, this edition blends research methods fundamentals with essential information about the evidence appraisal process. The patient/client management model described in the American Physical Therapy Association's *Guide to Physical Therapist Practice, Second Edition* remains the framework for discussion. The definitions and labels used to describe the evidence-based practice approach to patient care are consistent with the World Health Organization's *International Classification of Functioning, Disability and Health*.

The organization and goals of the sections are described here. Every effort has been made to have a structure that promotes ease-of-use for the physical therapist student and practicing clinician.

Part I: Principles of Evidence-Based Physical Therapist Practice

Part I comprises three chapters that set the stage for the use of evidence in patient/client management. Tools and resources from organizations and individual authors recognized as leaders in the evidence-based practice movement are adapted or referenced in the context of physical therapist practice.

Part II: Elements of Evidence

The first five chapters of Part II describe the different components of a research article with an emphasis on the features that enhance or diminish a study's quality. The goal of these chapters is unchanged. They are intended to increase readers' understanding of and confidence with the evidence they review, not to train new researchers.

Part III: Appraising the Evidence

The underlying principle remains; evidence-based physical therapy requires students and clinicians to work with the best available evidence that, often times, is weakly designed. Readers must determine for themselves whether the evidence they locate is useful *despite* its limitations.

Part IV: Evidence in Practice

Part IV continues its focus on the application of evidence in the context of patient/client management. A fundamental tenet of this book is evidence must be considered with respect

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to the individual patient/client. The updates to this edition are included here. My hope is these updates serve readers in their quest to engage effectively in evidence-based physical therapist practice.

New and Revised in this Edition

- Chapter 1 Evidence-Based Physical Therapist Practice. To further emphasize the reasons why it is crucial for evidence to be used in clinical decision making, examples of circumstances where biases and limitations have resulted in errors in reasoning have been included.
- Chapter 5 Research Design. Content related to qualitative research designs has been expanded to improve reader understanding about the contribution of these methodologies.
- Chapter 9 Unraveling Statistical Mysteries: Description and Chapter 10 Unraveling Statistical Mysteries: Inference. In order to facilitate learning of this challenging material, I have unpacked this content, taking the time to explain step-by-step how statistical tests in research studies should be used. Chapter 10 is entirely new and devoted to the difficult topic of inferential tests. The format of both chapters honors the original work with tables designed for easy reference and emphasis on balancing statistical significance with clinical relevance.
- Part III Appraising the Evidence. The most significant update is the application of revised evidence appraisal worksheets that have been informed by an evolving perspective about research design elements and their contribution to bias.
- Chapter 18 Patient/Client Preferences and Values. Examples of qualitative research are provided to illustrate more explicitly the contribution of these designs to a physical therapist's ability to discern and understand individual patient/client preferences and values.

For the Instructor

In addition to the updates described, *Guide to Evidence-Based Physical Therapist Practice, Third Edition* now includes a comprehensive suite of instructor resources. These resources are provided so instructors can effectively map and implement the book into their course.

- NEW Test Bank with 150 questions
- · Sample Syllabus
- PowerPoint Presentations for each chapter
- · Helpful Resource List with additional references

For the Student

Similarly, in the hopes of supplying students with all the tools they need to practice and apply the material in the book, each new copy of the *Third Edition* now comes with access to Navigate Student Companion Website, with helpful tools such as flash cards and practice quizzes.

Navigate Companion Website, including:

- Flashcards
- Interactive Glossary
- Practice Quizzes
- · Web Links
- · Screenshots of electronic databases

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ACKNOWLEDGMENTS

Guide to Evidence-Based Physical Therapist Practice, Third Edition arrives on the 25th anniversary of my entrance into the profession of physical therapy. If anyone told me back then that I would be a textbook author, much less one who managed to deliver three editions of the manuscript, I would have laughed them out of the room! Yet here I am, propelled by the continued support I have received for the effort. Special thanks for this Third Edition go to Kayla Dos Santos at Jones & Bartlett Learning for her steadfastness, patience, and attention to detail. I hope they know what they have in you! I also want to acknowledge the thoughtful work of colleagues who have added their own textbooks on this topic since the publication of my last edition. Your contributions helped me take stock of my methods and biases in writing and taught me how to refine the material in new ways. I look forward to our continued conversations and collaboration as we work to build the momentum behind this important evolution in physical therapist practice.

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