

EVIDENCE-BASED PRACTICE FOR HEALTH PROFESSIONALS

An Interprofessional Approach

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Preface

The concept for this book was born of the need for a text to accompany a course in evidence-based medicine and biostatistics. These topics are taught early in many health professional training programs across the country and around the world. Although useful and informative resources are available on these topics, many of them are geared toward experienced clinicians or designed to prepare students to perform biomedical research. The content and organization of this book emerged and solidified over years of teaching physician assistant, public health, nursing, and dental hygiene students.

This entry-level textbook for health professional students explores the basic concepts of evidence-based practice with a clinical emphasis. The text utilizes cases and examples derived from primary care. A pragmatic strategy is employed in this book, teaching the skills needed to access, interpret, evaluate, and apply evidence to interprofessional, patient-centered healthcare decisions. Practice exercises are included to provide applied learning experiences. These activities engage students in communication about evidence-based practice with other health professionals, patients, families, and professionals in related fields, including pharmaceutical representatives.

One of the most frequent encounters healthcare providers experience with healthcare-related evidence is through the pharmaceutical sales pitch. This textbook gives readers the knowledge and tools to make self-informed, evidence-based decisions and to communicate effectively with professionals in the pharmaceutical and other healthcare-related industries. The book also reviews common biomedical research and statistics terminology. A glossary of terms is also included.

OBJECTIVES AND THE NEED FOR THIS TEXT

Evidence-based practice (EBP) is a powerful tool for healthcare providers. This book is designed to help readers achieve two objectives related to EBP: (1) to locate, interpret, evaluate, and apply research to the care of individual patients and (2) to communicate effectively about research to patients, colleagues, and other professionals. Many books and resources are available to help practitioners understand the array of sophisticated concepts involved with EBP. Too often, however, these resources focus on statistics and research, emphasizing how to design and conduct clinical

studies. Although these skills are important for researchers, they are less relevant for healthcare students and educational programs whose interests focus on quality clinical practice.

Other EBP resources with a more clinical emphasis have been written outside of the United States. The concepts, language, and examples in these texts do not fit with the healthcare system in the United States. Lastly, other books on EBP remain highly abstract, offering no applied learning experiences. This textbook provides meaningful learning activities through communications such as writing a letter to an insurance company, explaining the evidence regarding treatment to a patient, selecting a diagnostic tool, and designing community-based educational materials. These brief applied-learning experiences, along with clinical case studies, help students bridge the gap from the abstract concepts of research, statistics, and technical jargon to the concrete skills of healthcare decision making and communications.

INTENDED AUDIENCE

This book was developed for teaching EBP to college students who have a basic science and statistics background. We have written with medical, dental, physician assistant, nursing, dental hygiene, pharmacy, rehabilitative professions, and public health programs in mind. This textbook is intended to be incorporated into the larger curriculum of entry-level training programs. It is designed to accompany a semester-long course in EBP. We presume the readers of this book also have a set of primary textbooks and other references appropriate for their training programs.

ACCREDITATION AND PROFESSIONAL STANDARDS

Satisfaction of accreditation standards is just one reason for programs to teach EBP. It was also one of the reasons this book was written. For example, accrediting bodies for schools of allopathic medicine,

osteopathic medicine, physician assistant studies, dental hygiene, and nursing require the teaching of EBP. Here are a few examples of accreditation standards related to EBP and evidence-based nursing.

The Liaison Committee on Medical Education (LCME) is the national accrediting authority for medical education programs leading to the MD degree in the United States and Canada. Its education standard number 6 states:

The curriculum of a medical education program must incorporate the fundamental principles of medicine and its underlying scientific concepts; allow medical students to acquire skills of critical judgment based on evidence and experience; and develop medical students' ability to use principles and skills wisely in solving problems of health and disease. (www.lcme.org/functions2010jun.pdf)

Predoctoral osteopathic schools of medicine are accredited by The American Osteopathic Association's Commission on Osteopathic College Accreditation (COCA). The core competencies of the COCA state:

At minimum, a graduate must be able to: (1) Demonstrate basic knowledge of osteopathic philosophy and practice and osteopathic manipulative treatment; and, (2) Demonstrate medical knowledge through one or more of the following: passing of course tests, standardized tests of the NBOME, post-core rotation tests, research activities, presentations, and participation in directed reading programs and/or journal clubs; and/or other evidence-based medical activities. (www.do-online.org/pdf/SB03-Standards_of_Accreditation_July%201,%202010.pdf)

The Commission on Collegiate Nursing Education (CCNE) accredits nursing programs. The CCNE's standards call for nursing programs to incorporate guidelines from the AACN (American Association of Critical-Care Nurses). The AACN includes a host of expectations related to evidence-based nursing, which are too lengthy for purposes of this discussion. However, we include one of the AACN

statements here regarding baccalaureate nursing education:

Professional nursing practice is grounded in the translation of current evidence into practice. Scholarship for the baccalaureate graduate involves identification of practice issues; appraisal and integration of evidence; and evaluation of outcomes. As practitioners at the point of care, baccalaureate nurses are uniquely positioned to monitor patient outcomes and identify practice issues. Evidence-based practice models provide a systematic process for the evaluation and application of scientific evidence surrounding practice issues Dissemination is a critical element of scholarly practice; baccalaureate graduates are prepared to share evidence of best practices with the interprofessional team. (www.aacn.nche.edu)

Physician assistant (PA) programs are accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). Regarding the PA curriculum, the most recent ARC-PA standards state:

The curriculum establishes a strong foundation in health information technology and evidence-based medicine and emphasizes the importance of remaining current with the changing nature of clinical practice.

The ARC-PA holds PA programs to the following standard:

The program curriculum must include instruction to prepare students to search, interpret and evaluate the medical literature, including its application to individualized patient care. (www.arc-pa.org)





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Bernadette Howlett, PhD

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Ellen J. Rogo, RDH, PhD

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For the past 10 years, her career focus has been in the pharmaceutical and medical fields. She has combined her knowledge of medical Spanish and Hispanic culture as well as pharmacology and medical practice training for the provision of services in a family practice setting. In her current position at a rural community health center, Teresa provides health care to a population of medically underserved people in northern Utah and southeastern Idaho.



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