
For a respiratory care practitioner trying to expand his or her professional skills into clinical or laboratory research, the experience is akin to living in a foreign country. The language and customs of scientific inquiry are often starkly different from those typically encountered in clinical practice. Like a culturally incompetent tourist, just about every neophyte makes seemingly innocuous comments concerning research, only to be greeted with unanticipated responses such as uncomfortable silence, apparent excessive nitpicking, or even outright hostility. The experience can be bewildering.

Those of us fortunate enough to have ventured to a foreign country with a friend well acquainted with that culture, have had a much smoother and richer experience than if we had traveled alone. They are crucial in helping to explain unusual customs and assist us with our communication skills. In much the same way, respiratory care practitioners wishing to explore the world of scientific research also need a travel guide or “cultural informant.” When I started out on my journey in research I was blessed to have several gifted and kind mentors. Yet many clinicians interested in research do not have the good fortune of having an enthusiastic, caring mentor to guide them into this new world of intellectual inquiry. Moreover, introductory textbooks on clinical research mostly are geared toward physicians, or those training in the behavioral sciences. Often the subject matter is approached in a fashion that either is too advanced for allied health professionals, or too remote from their daily experiences.

Therefore, reading Robert Chatburn’s Handbook for Health Care Research was a rewarding and welcome departure from the usual textbooks I have perused over the years. This 368-page textbook contains 17 chapters and 6 appendices, including a glossary. The book is well made with good-quality paper and formatting that makes it easy on the eyes. One of its many appealing features is that its structure lends itself for use as a primary text for an introductory course on research methodology. Each chapter has test questions with answers provided in one of the appendices, and, when appropriate, a brief summary is provided.

Handbook for Health Care Research is divided into 4 sections beginning with an introduction consisting of 3 brief chapters that provide a what-and-why sketch of research. These include descriptions of the various types of research a respiratory care practitioner may encounter, as well as the socioeconomic context in which research takes place. In addition, it also provides an excellent overview of the ethical conduct of clinical research.

The core material follows in the subsequent sections. Section II, “Planning the Study,” consists of 4 chapters that succinctly discuss scientific methodology, how to develop a study question, how to read a scientific paper/ conduct a competent literature review, as well as basic designs used for different kinds of studies. As fitting, the bulk of the text resides in Section III, “Conducting the Study,” consisting of 6 chapters discussing how to actually implement a clinical trial and make measurements. The majority of chapters in this section focus on biostatistics and systematically deal with every possible type of data and test the respiratory care practitioner is likely to encounter. This includes statistical methodology for nominal, ordinal, and continuous measures.

Unlike other textbooks on research design that I’ve encountered, Chatburn has very thoughtfully provided an entire section devoted to publishing one’s scientific findings. Section IV provides chapters detailing how to write an abstract, a research paper, and even discusses the steps involved in making a poster presentation for a scientific meeting. Moreover, Chatburn not only provides concrete examples of scientific writing for the novice researcher to model their own projects, he devotes over 30 pages to the actual mechanics of scientific writing.

What struck me about Handbook for Health Care Research was the care, precision, and detail of the material covered. For instance, the discussion of informed consent and the process of getting a study protocol approved by an institutional review board will greatly assist the reader in preparing for this crucial hurdle in the research process. Also, there is a concerted effort throughout to provide concrete examples of concepts that should assist the novice in understanding abstract scientific concepts. When first discussing the scientific method, the relationship between a study problem, a test hypothesis, and an experiment is conveyed by a simple example, whereby a test is designed to determine whether a coin is a penny. This is presented elegantly as an algorithm in figure form. Likewise, the numerous figures and tables are handsomely constructed and convey information in a straightforward manner.

In essence, Chatburn has created a very thoughtful and eminently accessible textbook not only for the respiratory care practitioner who is starting out on a research path, but also as a useful reference for the seasoned researcher. As someone with several decades of clinical research experience, I only wish that I had had Handbook for Health Care Research available to me when I was beginning my career. I highly recommend it to any health care practitioner, and particularly to those who are beginning their journey.

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The author has disclosed no conflicts of interest.


Examination review systems are a serious matter for educators and students. Program accreditation and reputation depend upon the examination outcomes of graduates. Graduates are able to secure employment only if they are successful on the national boards. A responsible program prepares its students for practice and to pass the credentialing examinations. Respiratory care faculty, students, and graduates are
Health care workers are usually involved with the application of research results in the clinical setting. Within the research continuum, however, an infinite number of opportunities exist to become involved in seeking the answers to questions relating to the practice of health care. In each case, health care workers must review those guidelines applicable in their own institution.