In Tribute: David L. Sackett
Paul Stratford


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The health care community has lost a remarkable human being who had a profound impact on research methodology and the way clinical practice has evolved over the past 5 decades.

Dr. David Sackett (Figure), recognized as the father of evidence-based medicine (practice) (EBM), died on May 13, 2015. Evidence-based medicine (practice) is defined as “the integration of best research evidence with clinical expertise and patient values”1,2 and was ranked by BMJ as one of the top 10 medical breakthroughs since 1840.3

Sackett was born in Chicago and received a medical degree from the University of Illinois and a master’s degree in epidemiology from Harvard University. His original medical training was in internal medicine and nephrology; however, at the time of the Cuban Missile Crisis, he was drafted and assigned to the US Public Health Service (USPHS). It was during his experience with the USPHS that he began to conceive how epidemiological principles could be applied to clinical practice. “Big-E” epidemiology examines the distribution and determinants of disease and injury in populations, whereas clinical epidemiology is concerned with the determinants and effects of clinical decisions.

The following is a brief account of Sackett’s career in his own words and edited by Dr. Brian Haynes. It appeared in an interview-style document that he wrote in response to questions about his career:

After training in internal medicine, nephrology and epidemiology, David Sackett re-coined the term “clinical epidemiology” and began his 1st career (age 32) as the founding Chair of Clinical Epidemiology & Biostatistics at McMaster University’s new medical school. In his 2nd career he began to design, execute, interpret, nominate, write and teach about randomized clinical trials, an activity that continues to the present, some 200 trials later. His 3rd career was dedicated to developing and disseminating “critical appraisal” strategies for busy clinicians and ended when he decided he was out of date clinically and returned (at age 49), in his 4th career, to a 2-year “retreading” residency in Hospitalist Internal Medicine. His 5th and 6th careers were largely clinical, as Physician-in-Chief at Chedoke-McMaster Hospitals, and as Head of the Division of General Internal Medicine for the Hamilton region. In 1994 a chair was created for him at the University of Oxford, where he took up his 7th career as Foundation Director of the National Health Service at the John Radcliffe Hospital, Foundation Chair of the Cochrane Collaboration Steering Group, and Foundation Co-Editor of Evidence-Based Medicine. Retired from clinical practice in 1999, he began his 8th career by returning to Canada and setting up the Trout Research & Education Centre, where he reads, researches, writes and teaches about randomized clinical trials. Along the way, he has published 12 books, chapters for about 60 others, and over 300 papers in medical and scientific journals.4(p7)

Sackett’s lifelong commitment was to improve patient outcomes through the application of the best available evidence. Quite simply, his raison d’ être was to “train the masses” to transform research findings into clinical actions that best served individual patients. Although many of his efforts focused on the design, conduct, reporting, and interpretation of randomized clinical trials, he made equally important contributions to many other areas of clinical practice and education. For example, in a series of 27 monographs published in the journal Clinical Trials, he and his coauthors addressed a spectrum of topics including time management, mentoring, sabbaticals, fabrication of data, and modernization of graduate education courses.

Regardless of his topic, the hallmark of his teaching was to use the clinical vignette as a way to grab the attention of his readers. One example concerning prognosis: “Suppose, for example, you detect 10 to 15 degrees of scoliosis in an otherwise healthy 12-year-old...
student who has come for her preschool examination. Do you tell her and her parents (and, if so, what do you say?); refer her to an ‘orthopod’ or what?" These seemingly simple vignettes not only served as a “hook” to catch the interest of learners but provided the starting point for a process of inquiry and learning. The “Sackett process” typically involved the following steps: (1) structure a researchable question, (2) select the most likely resource, (3) design an effective search strategy, (4) summarize and critique the evidence, (5) apply the evidence to the patient of interest, and (6) evaluate the process and outcome.

Although Sackett’s name will forever be synonymous with EBM and clinical practice, he last wrote and spoke about it more than 15 years ago. His reasoning provides further insight into his character and values:

I had long held the view that ‘experts’ inevitably became detrimental to the fields of their expertise, for 2 reasons. First, their opinions and pronouncements about their field carried a far greater persuasive power than they deserved on the basis of evidence alone. Second, subconsciously (if not consciously), experts’ acceptance or rejection of new ideas about their field (presented in the grants and manuscripts they were asked to referee) were influenced by the extent to which these new ideas challenged their prior expert pronouncements. For these reasons, I had ‘resigned’ from the field of compliance research back in the early 80’s. Matters were even worse for me as the EBM expert: I was considered a nice guy, and colleagues who disagreed with my views were worried about hurting my feelings. Shortly after our return to Canada [circa late 1990’s] I published my resignation from EBM in the BMJ, and with the exception of these interviews, I haven’t refereed, written, or lectured about EBM since.4(p57)

Over the decades, David Sackett received numerous awards, including induction into the Canadian Medical Hall of Fame, the Gairdner Wightman Award, and Officer of the Order of Canada. Although these recognitions and scholarly achievements are exceptional, the man himself was even more remarkable. He genuinely cared about his patients, colleagues, and students, and he never sought to upstage those around him. Although his name will forever be synonymous with evidence-based practice, his legacy is the countless number of clinicians and researchers he influenced and their “ripple effect” on others. He will be missed.

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Comment From Editor in Chief Rebecca Craik and Deputy Editor Daniel Riddle
I (R.C.) was chair of the Strategic Planning Committee for the APTA Section on Research from 1992 to 1996. Consistent with planning that occurred in many sections at that time, the mission and vision statements addressed diverse and sometimes divergent member needs. For the Section on Research, long-term objectives and action items had to meet the needs of members interested in becoming informed consumers of research, whereas other objectives had to address the needs of members interested in improving
research design, methodology, and analysis. We struggled. I still remember Lynn Snyder-Mackler, PT, PhD, FAPTA (APTA’s most recent Mary McMillan Lecturer), bursting into the room at one of our meetings, carrying a tome. She was so excited to share the Users’ Guides to the Medical Literature I-IX that had been published in JAMA in the early 1990s (the first aptly called “How to Get Started”). The Evidence-Based Medicine Working Group, which had developed those guides, included David Sackett. Lynn advocated for these articles to serve as a framework for continuing education courses in physical therapy and for section research efforts.

It is amazing how quickly the term “evidence-based practice” (EBP)—though not necessarily evidence-based actions—became part of our lexicon. Sackett and his colleagues have inspired so many activities and provided a foundation for essentially all EBP curricula in physical therapy. Sackett’s impact on physical therapy is profound; here we list only a few contributions:

- The evaluative criteria used by the Commission on Accreditation in Physical Therapy Education (CAPTE) require that the curriculum prepare students for EBP.
- The Centre for Evidence-Based Physiotherapy, established in 1999, strives to maximize the effectiveness of services by facilitating the application of the best available evidence.
- PEDro, the physiotherapy evidence database, contains about 30,000 randomized controlled trials, systematic reviews, and clinical practice guidelines and can be accessed online for free.
- Stroke Engine is a free site designed by the Canadian Partnership for Stroke Recovery to bridge the gap in knowledge translation between research findings and current clinical practice.
- PTNow, APTA’s clinician website, is designed to help physical therapist and physical therapist assistant members use evidence in patient care.

To this Sackett-inspired list, we add that PTJ developed the feature “Linking Evidence And Practice (LEAP)” to demonstrate how to apply evidence to practice.

We thank Paul Stafford, one of PTJ’s statistical consultants and one of Sackett’s fellow Canadians, for speaking to Sackett’s accomplishments and honoring his memory.

References

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