

Research and Podiatry: Developing Evidence-Based Treatment

A student argues for more research in the profession.

Jon Goldsmith

Jon Goldsmith is a 4th year student at the Scholl College of Podiatric Medicine at Finch University of Health Sciences/The Chicago Medical School. This paper was the winner of the 16th Annual Student Writing competition of the American Podiatric Medical Writers Association.

In today's constantly changing world of medicine, the difficulties of reimbursement remain constant. From the beginning of managed care, cost reduction and appropriate reimbursement have played a prominent role. Insurance companies are only willing to reimburse for procedures and treatments that have been proven to obtain desirable results. Evidence-based treatment is essential for any practicing physician who plans to stay in business. Where do these treatments and protocols originate? The research society of medicine produces these advancements and affirmations of treatment. Today we are witnessing tremendous advancements in the medical field that are the results of increased research funding and scientific developments. Research programs and efforts have yielded the human genome project, which stands to revolutionize the practice of medicine. Advancements and studies produce quality patient care and affirm the standard treatments.

Podiatry lags behind in this area of academic commitment. Although there are podiatric medical journals in print, the research being performed primarily revolves around case studies. Retrospective case studies conclude by stating a hypothesis. A more compelling goal would be strong prospective studies that prove or disprove a hypothesis. Clearly prospective studies are more aggressive and productive.

According to Drs. Michael Turlik and Donald Kushner in their paper entitled "Levels of Evidence of Articles in Podiatric Medical Journals," level one research provides "guidance in therapeutic decision-making." Retrospective case studies do not qualify as level one quality. Over a span of five years, only 1% of articles found in podiatric journals were based on meta-analyses or randomized controlled trials. These two types of articles offer the most accurate and strongest conclusions. Sixty-eight per cent of printed articles in podiatric journals were found to be case studies.

There would seem to be an easy solution to this issue: Everyone must conduct prospective research until this imbalance has subsided. This is not a realistic goal. Prospective studies require a considerable investment of funds and energy. Today's practicing podiatric physician, more than ever before, is spending his or her efforts on the confusing battle of medical economics.

Traditional Medical Research

Traditionally, medical research has rarely come from the practicing physician. Other medical fields have placed the responsibility of research on the faculty of their colleges. Podiatric colleges lack the necessary numbers of faculty to produce a large quantity of research. With the added worry of student numbers, less money is being appropriated to faculty and facilities for research. Within the past year, research-producing professors at William M. Scholl College of Podiatric Medicine have left because of more promising situations at non-podiatric medical institutions.

Another source of research could be the student bodies of the colleges. Unfortunately, at Scholl, research is given very little publicity. Although there is an "Introduction to Research" lecture during the students' first year, this is the only time given to the importance and value of research.

This is inadequate considering all of the opportunities available at the school. A member of the Journal of the American Podiatric Medical Association's editorial advisory board runs the research program at Scholl and a combined DPM/PhD program is offered. There is a modern gait lab available for studies. Recent Stickel Award winners are on staff at Scholl.

Students and Research

Should students be required to complete research upon graduation? Logic says that those students not interested in research would produce work of little effort or quality, while students with a passion for this area of interest will search it out whether it is mandatory or not. Evidence of this is the annual journal produced by Scholl students consisting of student research.

Surgical residency programs are mandated to require a publishable study upon the completion of their program. However, few are upholding this requirement. Two of the common reasons behind the relaxing of this requirement are the lack of time and resources to complete an original independent study.

Potential Solutions

What are the solutions to this complicated and important issue? If podiatric physicians are interested in continuing to provide the best quality of foot care and get paid for it, the production of meta-analysis and randomized controlled trials must be increased. These studies will provide standards and credibility for treatments such as foot orthoses while establishing our place in the scientific community.

Practicing physicians should continue to offer the research they can. It has been noted that the "practicing" physician produces the least amount of research. Because of the demands of practice and the availability of past records, this most likely will lead to the continued production of retrospective case-based studies.

As podiatric residencies are in the process of standardizing their curriculum, research should be a requirement that is not bypassed. Certain institutions, particularly residencies associated with major health science centers, will be better equipped to provide the resources for such a requirement. Time during residency should be allotted for conducting original research.

Finally, podiatric medical colleges need to make research a valuable component of the student's education. Scholl College offers an independent scholar program that culminates in the production of independent research that is of publishable quality. The failure of the school to make this program appealing has nearly led to its extinction. Students should be given the privileges of modifying their schedules, receiving a stipend, and receiving merited recognition. Colleges should appropriate proper funds to facilities and hire faculty that are interested in the research.

The issue of research and podiatric medicine will not disappear. Practicing physicians will continue to ignore the problem until it affects their personal economics. With managed care's continuing movement towards evidence-based medicine, that time is rapidly approaching.