Vision field assessment

The recent theme issue on visual field assessment was articulate, informative and timely. I commend the authors, editors and referees for their contributions to that issue and for so thoroughly addressing the topic. The introductory editorial, discussions of instrumentation, common field deficit-related eye disorders and medicolegal aspects of eye care related to visual field testing collectively form a cohesive volume.

A key point introduced in the editorial and stressed by several of the authors warrants reiteration: the role of the issue was "Visual Field Assessment," not "Visual Field Testing.") In the area of visual field studies, the optometrist by virtue of his or her background knowledge, training and clinical experience determines the type of instrumentation and visual field test, then must analyze the results and determine their significance. At that point, periodic monitoring, comanagement or referral may be warranted. In each case, the optometrist assumes full responsibility for determining the proper care for the patient, informing the patient of the findings, their significance and the management alternatives as well as coordinating any subsequent care. Automated, computerized instrumentation, while making some aspects of the work easier, faster and more accurate, supports but does not replace the optometrist's unique diagnostic and management skills.

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References

Comments on "more research"

I'd like to add some personal observations on the business of clinical research to Dr. Meyers' opinion. Mine is the perspective of the clinician-researcher with little formal research background; just an interest and a stubborn streak. That stubborn streak has managed to produce one article in press, one "in the computer" and one "on the drawing board."

But let me explain some of the frustration in home-grown clinical research . . . and what "in the computer" and "on the drawing board" mean. The biggest problems I've found are limited statistical expertise and help and (read here 'gentle') constructive critical review. Those aids are taken for granted in a university setting. They were finally accomplished on the in-press article using a local school district statistician (trade for one pair of RGP lenses) and the help of the late Charlie Margach, just before his passing. I was not able to establish substantive research ties at my college of optometry.

Through some coincidence I have (hopefully) established my research resource: Washington State University. WSU has a branch campus in Spokane and is establishing what they call their Health Research Center. Their goal is to foster local clinical research in medical practice by teaming practitioners who wish to do clinical research with interested faculty members (who need to do research for tenure). Prior to this my only attachment to WSU was as a rabid football fan. But given this resource, the computer of a graduate student holds one data set on its way to becoming a Master's thesis. A second project of mine has just started the search process for a faculty member to put in on his drawing board. With luck, both studies will end up in print sometime, somewhere.

The first step was a night class on applying research in medical practice: seventeen physicians (one ophthalmologist), a few graduate students and me. Does that sound like the usual M.D./O.D. proportions in research? As more M.D.s take advantage of the WSU program, I hope O.D.s will also.

Four or so years ago when I started this odyssey, I made a suggestion for a similar clinical research structure to my optometry Alma Mater. Enough said. Perhaps time will show WSU and I are tilting at windmills.

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References

More research

We read with great interest Dr. Kenneth J. Myers' article in the November 1989 issue. Dr. Myers' findings that optometry, the largest eye care provider

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profession in the country, is involved in only less than 3 percent of the ophthalmic research are very alarming. We greatly appreciate the excellent research Dr. Myers carried out to reveal all this information; however, we strongly disagree with his conclusions.

Dr. Myers feels that rather than attempting to increase the profession’s performance in research, we should abandon research altogether in favor of a new system of research—monitors (scientists called “ferrets”). Ferrets will scan the research literature performed by others to alert the profession of various developments in ophthalmic research that may be relevant to the profession.

Dr. Myers’ work actually contradicts his point of view. A ferret system could have never come up with the original data that he has collected and presented in this paper. No other discipline would have looked at this data and presented it, although, ophthalmology may wish it had, as it might be tempted to use this information in hoping to restrict the future growth and scope of practice in optometry.

Dr. Myers justified these conclusions by saying that ours is a clinical profession rather than a research profession. A profession is a profession. We have been clinicians for hundreds of years. Over the last few decades we fought hard to become a recognizable academic discipline. If we want to remain as an academic discipline, we have to play by the rules of the academic world. All academically based professions have to maintain active research in order to advance. If we abandon research, we will eventually, probably quickly, go back to becoming a non-profession, i.e., apprentice training for technical activities. As an engineer, Dr. Myers should know that most engineering graduates do not perform research at any time during their career; they practice engineering. However, no one the world over imagines the engineering profession continuing to develop by monitoring developments in physics, chemistry or any other allied field.

The question of research in our academic institutions is simply a question of excellence, which we have to maintain at any cost if we are to survive. Dr. Myers’ suggestion is similar to a recent argument within the Boston school system, whether one third of the high school seniors who cannot read at the 8th grade level should or should not graduate. The answer to this question in our minds is simple—only those seniors who can read, write, do their mathematics, know their geography, history and English at the 12th grade level should graduate. The question should never have been posed the way it was. Similarly, optometry does not have any option with regard to research.

Dr. Myers suggests that with the expanding clinical scope of the profession, more optometrists will take part in “clinical research,” which he sees differently from the basic research currently performed in optometry. The notion that clinical treatment trials will supplement the research need of the profession is erroneous. Institutions and clinicians whose institutions did not participate in development of treatment and evaluation techniques will not be included in clinical trials. The scope of the clinical responsibilities of the profession will be shrinking rather than expanding.

The suggestion that AOA or the American Academy of Optometry monitor research for the profession is even more alarming. We have noted with concern that such groups do little but organize conferences for “optometric researchers.” The little money the profession spends on encouraging research could be spent much better.

Dr. Myers and everybody in optometric education should read the 1973 AOA Commissioned Havighurst Report again, particularly the portions dealing with research and the role of research in a profession.

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References

Author’s response
I did not advocate “we should abandon research altogether in favor of a new system of research-monitors (scientists call “ferrets”),” only that since optometry produces but 3 percent of “ophthalmic” research, we need to understand the other 97 percent.

Drs. Peli and Sivak confuse graduate school research conducted by M.Sc. and Ph.D. faculty and candidates who operate under one set of “academic rules” with professional school research directed by clinical faculty who play by different “academic rules,” hire Ph.D.s using soft (grant) money and direct their research. This is the distinction between directed research by clinical professions (medicine, dentistry) and research conducted by graduate school disciplines (psychology, physiology, anatomy). The latter dominates NEI research while clinical NEI research (30 percent) is dominated by ophthalmology.

I am concerned that we don’t operate under the wrong “academic rules.” Peli and Sivak’s letter states, “we fought hard to become a recognizable academic
discipline. If we want to remain as an academic discipline, we have to play by the rules of the academic world. All academic-based professions have to maintain active research in order to advance.” That is my point. Some of us have the mind set of graduate school academicians and not clinical academicians. Our research is often Ph.D. academic research, not clinical research. Because of “academic rules,” clinical faculty have sometimes been delegated to secondary status with promotion and tenure dependent upon Ph.D. research. There are dangers in these “rules of the academic world.” We are a clinical profession with professional schools; we are not an academic specialty with graduate programs and should not compete with Ph.D. departments. As a small profession with finite resources, we must husband them to support research that applies to what we are about: patient care. Ophthalmology understands this. They do not support undirected graduate school research. Their Ph.D.s work in channels with clinical implications. We should do likewise.

We ought not do research done by nonclinical disciplines nor compete with them under their “academic rules.” We should play by professional school “academic rules.” Our profession needs to stand on the feet of its clinicians and not the feet of other disciplines living under other “academic rules.”

Contemplate the patient care changes of the past 20 years: implant lenses, improved contact lenses, new medications and surgical procedures, new lenses (PALS), dilated exams by optometry, Excimer lasers, diffraction IOLs, improved instrumentation. How many came from graduate school research laboratories?

Businessmen know they must understand their market and how to position in their market. Our market is patient care, and with our small capital, we ought not reinvent wheels or compete with wheel makers. We should emulate medicine and support directed research. Few, if any, Ph.D.s direct schools of medicine or dentistry, or set the direction of research at those institutions. The letterhead from Drs. Peli and Sivak contains seven individuals who comprise the physiological optics unit of the Eye Research Institute at Boston. Of these, only Dr. Peli holds the O.D. The others hold the Ph.D. But their unit, like counterparts at other medical centers, depends on grant monies and patient billings, and its direction is set by M.D.s who operate the patient care facility under whose umbrella their research is done. Medical schools do not compete with or conduct graduate school Ph.D. research and do not follow their “academic rules.” They hire Ph.D.s who pursue the goals of their school. As a result, their academic “tail” does not wag their clinical “dog.”

I agree with Drs. Peli and Sivak that a profession must, to flower, have roots in research. But our flower is patient care. The roots Peli and Sivak support produce a different flower; an academic flower. We ought keep this difference in mind.

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