

Educating AuD Students for the Practice of Evidence-Based Audiology

By James W. Hall III

This article is the second of a two-part series on evidence-based audiology and the education of audiologists. In the first article (Hall, 2018), the concept of evidence-based audiology was reviewed. Also, challenges in the incorporation of evidence-based audiology into doctor of audiology (AuD) programs were identified. This article offers general and specific steps and strategies for more effectively instilling in doctor of audiology students the principles of evidence-based audiology, and their application in clinical practice.

One simple and logical way to define evidence-based audiology is to adapt the definition of

evidence-based medicine to our profession. With full credit and acknowledgment to Dr. David Sackett (Sackett et al, 1996), we might paraphrase him in defining evidence-based audiology as the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients with hearing loss and related disorders. The practice of evidence-based audiology means integrating individual clinical expertise with the best available external clinical evidence from systematic research. Part one of this series identified multiple serious challenges inherent in the instruction of evidence-based audiology.

There is no widely-accepted or endorsed strategy for instilling in doctor of audiology students the principles of evidence-based audiology, but university AuD programs might consider including the following components into the process.

Evidence-Based Clinical Culture

All academic and clinical faculty members in AuD programs must be fully committed to preaching and practicing evidence-based audiology. Clear and strong statements in support of evidence-based audiology should be prominent in the descriptions of the mission and



curriculum of AuD programs. Systems should be in place to verify consistent, evidence-based practice in clinical settings, ranging from routine clinic chart audits to regular review of clinical policies and protocols to ensure compliance with current clinical practice guidelines.

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A Required Course Devoted to Evidence-Based Audiology

Scheduled within the first year of the program, the course is perhaps best co-taught by one AuD-level faculty member with extensive clinical experience and duties, along with another PhD-level faculty member with research expertise.

Logical subject matter in the course would include the following:

1. An introduction to research methodology and experimental design
2. Lectures on best practices, standard of care, and professional liability
3. Preparation of a research proposal suitable for an Institutional Review Board (IRB)
4. A systematic review of clinical practice guidelines in audiology

Weekly Audiology Grand Rounds Conferences

This traditional clinical learning forum in health professions, often scheduled early in the morning before everyone heads off to their busy clinics, provides students with a weekly reminder of the importance of evidence-based audiology. Attendance is mandatory for students and faculty alike.

Typically, the one-hour grand rounds format begins with a student giving a case study presentation, including a relevant literature review, followed by faculty-led questions and comments, plus a group discussion with student participation. Occasionally, visiting professors or local audiologists are invited as grand rounds speakers. AuD programs lacking large and diverse clinical patient populations might consider participating via teleconferencing in audiology grand rounds conferences available at other universities or teaching medical centers.

Regular Journal Article Reviews

This is another time-honored fixture in the education of health professionals. Perhaps once or twice every month, a student is assigned the responsibility of selecting one or more peer-reviewed articles for review. Although all students (and faculty) are expected to read the article (s), the designated student presents a critical review of the article before opening up the session to questions, comments, and discussion. Academic and clinical faculty members actively participate in these journal article review sessions.

Some readers may wonder why a research or “capstone” project is not listed among the forgoing components of the educational effort to promulgate evidence-based practice in education. AuD-student-supervised research projects often do not achieve their intended goal, that is: “... students must

be critical consumers of research and be able to apply this knowledge in evidence-based practice (ACAE, 2016).” A host of practical problems conspire to minimize the value of the required student research project.

Most undergraduates entering an AuD program lack requisite research skills such as a rudimentary knowledge of statistics or experimental design. Not surprisingly, the majority of AuD students are interested in developing clinical competence rather than research skills. Faculty schedule and interest is another serious limitation. The research committee directing each AuD student project consists of multiple busy faculty members who lack the time and motivation for this additional workload, particularly since the effort rarely leads to an academic payoff like a peer-reviewed publication.

Due to time-consuming requirements, such as securing IRB approval and subject recruitment, plus competing clinical practicum demands, student research projects may linger on for months or even years with inconsistent and inadequate progress. Speaking from my experience as a faculty member, sadly, not all students complete their project before graduation. To be sure, some research projects meet the intended goals for select doctor of audiology students, some of whom decide to pursue a PhD degree and a career as a clinical scholar.

Conclusion

The time has come for a more intensive, comprehensive, and coordinated approach for evidence-based audiology education of doctor of audiology students

with close collaboration among varied stakeholders, including AuD academic programs, major preceptorship sponsors of fourth-year externships, and the Academy’s affiliated organizations (AAA Foundation, Student Academy of Audiology, American Board of Audiology, and Accreditation Commission for Audiology Education). ⁴¹

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