The seeds of this clinical forum were sown at the 2003 American Speech-Language-Hearing Association (ASHA) Annual Convention when I went to Marc Fey and Laura Justice’s session on evidence-based practice (EBP) in the schools (Fey & Justice, 2003). After Fey discussed the different levels of research evidence, Justice talked about the science and craft of making clinical decisions. She defined craft as a theoretically and goal-oriented body of knowledge that is achieved through trial and error. Vaughn and Dammann (2001) noted that when craft is inoculated from superstition and folklore, it leads to acceptable results, and the methods developed are often useful techniques and skills. Justice went on to point out that clinicians often rely on craft when evidence is not available. At this same ASHA Convention, I presented a miniseminar entitled, “How to Decide Which Speech Treatment Approach to Use” (Kamhi, 2003). If ASHA allowed titles to exceed 10 words, the rest of the title would have been “When There Is Limited Evidence To Help You Decide.” When I got back to my office after the conference, I looked at the ASHA Web site for other presentations that dealt with EBP and found one by Nan Bernstein Ratner in which she discussed some of the same issues as they applied to fluency treatment.

The common theme across these three 2003 ASHA presentations was that the principles of EBP are not necessarily easy to apply to the various disciplines in speech-language pathology because of the limited evidence available to support clinical decisions. There are also controversial features of EBP that affect its implementation. These include questions about acceptable forms of evidence and the importance of nonresearch factors on treatment efficacy. Interest in addressing these questions led to a miniseminar presented by me, Nan, and Laura at the 2004 ASHA Convention entitled, “Combining Research and Reason To Make Treatment Decisions.” After reviewing the evidence for treating a particular disorder type (e.g., fluency, phonology, early literacy), we each talked about how this research could be combined with reason to decide which treatment approach to use with clients who have fluency, phonological, and literacy problems.

The clinical forum that follows evolved from this 2004 ASHA miniseminar. In addition to articles by the three of us, the forum contains an article by Ron and Sandi Gillam on child language intervention. The four articles are followed by commentaries from Ray Kent, Ann Tyler, Teresa Ukrainetz, and Marc Fey. Each of the articles and commentaries is summarized briefly below.

Bernstein Ratner had already committed to writing an article based on her ASHA presentation for the Journal of Fluency Disorders (Bernstein Ratner, 2005), so I was very happy that she accepted the challenge of taking a broader disciplinary approach to the implementation of EBP in an article here. In her article, Bernstein Ratner considers the valuable and controversial aspects of EBP as well as the obstacles that may impede the application of evidence to clinical practice. Among other things, she points out that frequently used treatments may have little firm validation data and little relevance to the actual profile of the client one is seeing. Bernstein Ratner challenges all of us to consider whether it is therapies, therapists, or some combination of both that results in the best treatment outcomes.

In his commentary, Kent notes that our professions are not alone in struggling with EBP. As reflected in the title of the commentary, the goal of EBP is progress, not perfection. Kent welcomes articles like Bernstein Ratner’s because they are a necessary part of the struggle to define a philosophy and an implementation of EBP that is...
suited to our profession. The commentary is organized according to
the key questions posed by Bernstein Ratner: How does one define
evidence relevant to clinical practice? What is the role of theory
in evaluating evidence? How does one distinguish between the
contributions of “practices” and “practitioners?” How does a field
ensure that clinically relevant evidence reaches its constituency and is
embraced by professionals? Kent provides thoughtful answers and
reflections to these questions, drawing on his experience as ASHA
vice president for research and technology and his knowledge of
the ongoing struggles that other professions have experienced while
implementing EBP. In his role as ASHA Vice President, Kent has
overseen our organization’s efforts to make EBP ubiquitous
together throughout the profession. The ultimate goal of these efforts is to
adapt EBP to the unique character of our profession.

My article on speech–sound disorders is an expanded version of
my 2003 and 2004 ASHA presentations and the concluding chapter I
wrote for my recent co-edited book on phonological disorders
(Kamhi, 2005). In the article, I consider how research, clinical
expertise, client values, a clinician’s theoretical perspective, and
service delivery issues affect the decisions that clinicians make to treat
children with speech–sound disorders. I believe, like Ylvisaker
(2004), that treatment decisions are influenced most by the
changes that occur in client behaviors. These changes must, however,
be experimentally validated, which is not always easy to do.

Tyler is in general agreement with me that how we validate clinical
decisions is the key question. She emphasizes the need for
administering probes for untrained as well as trained stimuli at regular
intervals (e.g., 6, 8, and 12 weeks). She believes that it is crucial to
targeted and that no changes occurred in untargeted aspects. Tyler
also suggests that service delivery factors such as the intensity of
treatment are critically important to the rate of change and long-term
outcomes, but adequate research is lacking in this area.

Justice focuses her contribution on how response to intervention
(RTI), an evidence-based perspective, can be used to decrease the
prevalence of reading problems and the role that speech-language
pathologists (SLPs) might play in preventive and remedial efforts.
A significant portion of her article is devoted to describing the RTI
model. RTI is an educational policy that is driven by EBP to provide
multi-tiered interventions to reduce children’s risk for reading failure.
Justice makes the compelling argument that SLPs can serve their
clients best by working collaboratively with other school profes-
sionals to design and implement preventive reading interventions
beginning in preschool and continuing through the early school years.

Ukrainetz’ commentary focuses on how RTI will impact the role
that SLPs play in serving children with reading and language
disabilities. She notes that “effective intervention is characterized by
the provision of repeated opportunities in an intensive format with
systematic support for explicit learning objectives” (p. 301) and cites
research showing that current school-based language intervention
does not have these qualities. To address these shortcomings,
Ukrainetz argues that it is crucial for SLPs to increase the intensity of
their interventions. She suggests three ways to do this: (a) revise
eligibility criteria to reduce the number of qualifying children, (b)
limit the range of speech-language treatment targets, and (c) reduce
the time that children remain on caseloads. RTI provides
the framework for facilitating these changes in language intervention.

In the final article, Gillam and Gillam describe the seven-step EBP
decision-making process and show how this process can be used to
evaluate intervention approaches in order to improve grammatical
morphology in children with language impairments. One of the most
intimidating aspects of the EBP process is determining the level of
evidence for studies that have been selected for review and critically
evaluating a study’s merit. Gillam and Gillam provide a succinct
summary of these levels and discuss how they assigned levels for
particular studies that targeted grammatical morphology.

Fey, like many others in this clinical forum, acknowledges the
many obstacles involved in implementing EBP, especially over the
short term. He believes that all of these obstacles are tractable, but that
they must be addressed head on. The ones he addresses in his
commentary are the costs to clinicians of doing EBP and the potential
problems with the systems for rating levels of external evidence. For
example, an important consideration in rating external evidence is
distinguishing between research designs and study quality. Studies
that provide lower levels of evidence are not necessarily lower in
quality than studies that provide higher levels of evidence. Like many
others in this clinical forum, Fey makes the important point that
clinicians who attend to research-based evidence only and fail to
consider client and clinician factors are not doing EBP.

Well, there you have it—four articles and four commentaries.
I hope your appetite has been sufficiently whetted. Enjoy!

REFERENCES

Some questions to consider. Journal of Fluency Disorders, 30,163–188.

Fey, M., & Justice, L. (2003, November). Evidence-based practice in the
schools. Miniseminar presented at the Annual Conference of the

Kamhi, A. (2003, November). How to decide which treatment approach to
use. Miniseminar presented at the Annual Conference of the American
Speech-Language-Hearing Association, Chicago.

& K. Pollock (Eds.), Phonological disorders in children: Clinical decision
making in assessment and intervention (pp. 211–228). Baltimore:
Brookes.

Combining research and reason to make treatment decisions.
Miniseminar presented at the Annual Conference of the American

Vaughn, S., & Dammann J. (2001). Science and sanity in special
education: Behavioral Disorders, 27, 21–29.

clinical decision making. Paper presented at the Evidence-Based Practice
in Child Language Disorders Working Group, Austin, TX.

Received June 6, 2006
Accepted June 8, 2006
DOI: 10.1044/0161-1461(2006/028)

Contact author: Alan Kamhi, Department of Communication Sciences
and Disorders, 300 Ferguson, UNCG, Greensboro, NC 27402.
E-mail: agkamhi@uncg.edu

KEY WORDS: evidence-based practice
Prologue: Combining Research and Reason To Make Treatment Decisions

Alan G. Kamhi
Lang Speech Hear Serv Sch 2006;37;255-256
DOI: 10.1044/0161-1461(2006/028)

This article has been cited by 1 HighWire-hosted article(s) which you can access for free at:
http://lshss.asha.org/cgi/content/full/37/4/255#otherarticles

This information is current as of July 29, 2010

This article, along with updated information and services, is located on the World Wide Web at:
http://lshss.asha.org/cgi/content/full/37/4/255

Downloaded from lshss.asha.org on July 29, 2010