# Cellular Physiology: The Real Evidence-Based Practice

Contributed by Allan Besselink, PT, Dip.MDT
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Evidence-based practice. EBP. It's become one of the catch phrases of our era. In a land of randomized clinical trials, case reports, and clinical observation, clinicians are constantly seeking out the evidence to support their diagnostic and treatment interventions.

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It's a phrase that is in vogue in the health care world. The concept certainly makes sense. Good research ... good data ... good conclusions ... an overall improvement in our practice patterns ... and overall good for the patient. How can you beat the logic of that?

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If it was only that simple. Well, hold on a minute - maybe it is.

The primary reality we are faced with in the land of EBP is that there are a lot of research studies to be read. This would then assume that you understand the statistical analysis involved, or can wade through the discussion and conclusions. If you have a critical eye, then you'll decipher what good can be had from any given study.

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But now the reality. Most studies are poorly designed, poorly written, or make incomprehensible and unreasonable judgements based on their own data. Of course, if you only read the abstract (like many clinicians - doctorate or otherwise), then you're never going to see these errors of omission or perception.

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Let's imagine a world in which the study is well-written, methodical, and solid. What the clinician does with this information remains to be seen. In the light of good evidence, many simply refuse to challenge their belief systems. Many will refuse to accept the ramifications of the data - and will continue to practice without acknowledging the "evidence-based" information that they just read.

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If we can assume (generally not a safe thing) that the clinician is open-minded and has a high upper end to their comfort zone (see my earlier article for more details on "The Comfort Zone"), then we're still faced with a lot of poorly designed and presented research data.

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Lo and behold, the best evidence-based practice support has been right underneath our noses. And it's been there for a long time.

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Cellular physiology. The gold standard in evidence-based practice.

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Hypotheses are derived for research studies and clinical interventions that simply have no solid basis in cellular physiology. This is a field that has been well-researched. We know how the cell functions. We know how it adapts to imposed demands. We know what causes it to thrive ... and we know what causes it to die.

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Clinical observations are critical in EBP. What we see in a clinical setting leads us to ask the right questions in our research. But if we cannot differentiate "causation" and "correlation", and if we can't reconcile our hypotheses with cellular physiology, then we also cannot maintain the contradiction in our thinking. It's time to revise the thinking instead of holding on to it dearly in our belief system.

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The answers to EBP lie in front of us. More than 50 years of research in cellular physiology should give us plenty with which to work. Now if we could only move forward on some of those belief systems that pervade our system ...

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