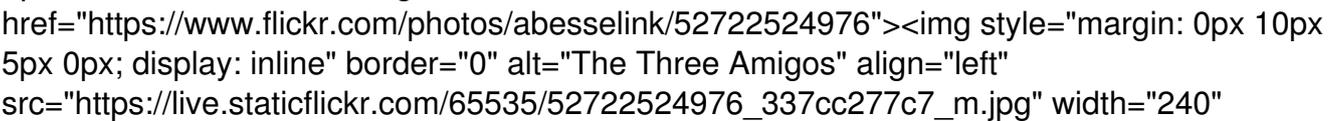


[!\[\]\(666e09182d4cd268646ea700ea60dcdf_img.jpg\)The Three Amigos](https://www.flickr.com/photos/abesselink/52722524976/ "The Three Amigos")

The Three Amigos

The Three Amigos

In health care, we talk a lot about evidence-based practice or its younger brother, evidence-informed practice. Aligned with this, we have developed what is now known as the three-legged stool of evidence-based practice. The now-legendary three legs of the proverbial stool include research evidence, clinical expertise, and patients' values, needs, and preferences. However, what has been forgotten in this whole construct is that any good stool is useless unless it stands upon a sound foundation, or as Newton would have it, *standing on the shoulders of giants*. Let's call them the Three Amigos.

When I say *The Three Amigos*, I am not talking about Chevy Chase, Steve Martin, and Martin Short. I am, however, talking about anatomical plausibility, scientific validity, and cognition. This is the foundation upon which clinical reasoning and evidence-based practice should be built.

The First Amigo, anatomical plausibility, may in fact be the most important. This amigo sets the tone for us living and thriving here on planet earth as we fight gravity every day. Human anatomy is the context for everything we do in the world of health care. In short, the question becomes this: is the problem or issue or mechanism or intervention anatomically plausible?

Much of what I call *orthopedic mythology* is borne of a resistance to this amigo. Many of these issues can be reconciled by the anatomical research literature on asymptomatic subjects and the presence of abnormal MRI findings. Normal isn't symmetry. Normal isn't the absence of MRI findings. Abnormal, as I have always said, is the new normal.

The Second Amigo, scientific validity, now takes the first and builds upon it. If you made it past the first amigo, then you have to be able to decide if two people would agree on what stands before you. As an example, reliability is a foundational concept for validity. If two raters can't agree, does it really exist? From there, we are left with causality and correlation and the false attribution that often confuses the two.

The Third Amigo, cognition, is the clean-up batter for the first two amigos. Cognition is defined as *the mental act or process by which knowledge is acquired, including perception, intuition, and reasoning*. Errors in thinking are often due to errors in perception. This is often driven by a subconscious unwillingness to challenge our current beliefs in the face of sound evidence. The question is this: can you maintain consistent, sound critical thinking given the information at hand, or are you buried in cognitive biases and logical fallacies that serve only to make your argument (and perceived expertise) stick?

The Three Amigos of Evidence-Based Practice might not be as funny as Chevy Chase, Steve Martin, and Martin Short, but they are the giants upon whose shoulders we can stand - to provide the most effective, patient-centered care that we can provide. A stool that stands tall upon these shoulders is a sound stool, indeed.

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