Message from the Editor

## "The journey of a thousand miles...."



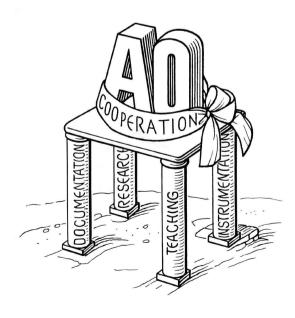
One common translation of the remainder of this famous ancient quote by Chinese philosopher Lao-Tzu, is that the journey "starts with a single step."

It is with this insight that I would like to introduce you to the Evidence-Based Spine-Care Journal (EBSJ), a new scientific journal organized through AOSpine International, the largest multispecialty, truly global spine society. Of course, a reasonable first question to ask is "Why another spine journal?" A brief review of where we came from and where we are intending to head may provide insight as well as reveal its purpose.

AO (Arbeitsgemeinschaft für Osteosynthesefragen)—the venerable and unique surgical organization—recently celebrated its 50th year. The simple yet profound concept of this organization was based on four principles, which later became known as the AO's "four pillars of cooperation":

- Documentation of all patients
- Development of instrumentation and implants (which has been cutting edge!)
- Research
- Teaching (which is still unsurpassed)

Since its inception, the AO has espoused many of the primary principles of evidence-based medicine (EBM) before it was formally described. AO values and activities have encouraged evaluation of results, critical appraisal to provide context for drawing inferences and using these as a basis for directing future basic and clinical research. This integrated and ever-evolving process sets the stage for the AO community to be an active player in EBM.



Within the spine-care community we have remained faithful to the core values, yet have found it frequently difficult to offer highest quality source materials for our hundreds of annual spine courses around the world. This has made it challenging to teach using an evidence-based approach versus relying mainly on opinion-based resources.

With this inaugural issue, EBSJ is the first step toward assisting the global community of spine-care professionals with finding, describing and developing the highest quality evidence in its very own, unique format. In doing so, EBSJ expands on the first step that was EBSS (Evidence-Based Spine Surgery).

Behind the substitution of one consonant within the title change from EBSS to the new EBSJ are a number of rather substantial changes:

- *Its community-centric approach:* EBSJ's format and publication model will make it much easier for members of the international community to contribute. With this approach, EBSJ will be a better vehicle for uniting AOSpine surgeons and other providers from around the world.
- *A more efficient production model:* Combined with eventual MEDLINE® indexing, this model will allow for broader dissemination and stronger impact across disciplines.
- A directive to enhance the quality of evidence in spine care: With our evidence-based focus, presentation and distribution, we can expand upon the overall quality of evidence in the field.

This inaugural issue of EBSJ includes research submissions from the first Global Spine Conference held last June in San Francisco. This is an excellent start to establishing EBSJ's commitment to the international community, while featuring some interesting topics and novel approaches to treatment of spine-related problems.

These lofty goals set forth a literal "journey of (more than) a thousand miles," with meetings and gatherings around the world from a group of dedicated individuals who have committed themselves to the concept of a truly novel and hopefully very worthwhile spine journal that surpasses the scope of existing journals.

Another possible translation of the Chinese proverb is that the journey "...begins beneath one's feet." This is perhaps a reference to beginning where one is and knowing where one wants to go from there. Applied to our current situation, we would like to explore in unprecedented depth the current status of the evidence on any given spine topic, thus allowing us to consider how to improve its quality. We may not like the quality of the current evidence, but we can significantly enhance it by setting on a clear path of many steps and many feet, geared towards providing meaningful and clinically relevant evidence for spine care.

To set us in motion for this journey, regular features of EBSJ will include:

• Systematic reviews on timely and sometimes controversial topics. This allows us to see "where we are at" with regard to the evidence on those topics. We hope this stimulates discussion and encourages researchers to enhance the quality of evidence. It hopefully will also stimulate new interest in exploring certain topics under a new light.

- *Original research reports.* As a reporting requirement for EBSJ, studies must follow specific guidelines accounting for patients and follow-up based on reporting standards from CONSORT and others, detailing patient characteristics and reporting of methods based on the PICO or PPO concept. No other journal makes these specifications. To require these is a step toward enhanced credibility.
- Appraisal of original studies. We feature methodological reviews and Class of Evidence (CoE) appraisals of original studies by PhD-level researchers with expertise in clinical research and epidemiology. This provides authors and the spine community with insight into how to enhance the quality of future studies. It enhances understanding of how to perform and use research from an evidence-based perspective by including critique of important methodological components that can bias results. Future researchers can gain significant insight by considering these areas and planning studies which seek to decrease bias.
- *Methodological assistance*. We will offer an opportunity for assistance to authors with topics of importance to the global community who otherwise would not have access to methodological expertise or statistical analysis. This will broaden the chance for research-minded spine surgeons around the world to contribute in a meaningful fashion to the knowledge base of spine care.
- Brief educational pieces on how to effectively use and conduct research. These will facilitate an understanding of how to find, understand, create and report the highest quality research.
- *An evidence-based case discussion*. This will address the recurring issue of outliers in actual daily care in the face of ever-changing guidelines and evidence-based practice recommendations.

You will note that each of the studies in this inaugural issue has limitations; in fact, all studies have limitations. It is a well-honed academic practice to find fault and limitations in any research, especially clinical research. This applies even to recent multimillion dollar studies conceived by some of the brightest minds in medicine, public health, and epidemiology. Only by taking a step back and making constructive suggestions that improve the quality of studies and how they are reported, will we be able to enhance the credibility and quality of the evidence in spine care overall. Hence I am proud of the authors who were willing to stick their necks out and contribute to a brand new spine journal. By sharing their research in EBSJ, they are starting the process of systematically and profoundly changing the way we deliver spine care, by incorporating evidence into our practices in a clinically meaningful fashion. I very much respect and appreciate the authors who submitted to our first issue for taking the first actual steps in our journey.

As spine care professionals, our first priority is to provide our patients with the highest quality of care possible; this includes consideration of the very basic evidence that what we do is beneficial and acknowledging what the limitations may be. As teachers—whether through AOSpine courses, in our hospitals, or at our medical schools—we should increasingly rely on scientifically founded, evidence-based materials to replace the more subjective impression-based teaching contents of the past. Our literature must provide a higher quality of evidence so that we can practice and teach from an evidence-based perspective, including understanding where the evidence falls short.

Whether we like it or not, as healthcare systems around the world increasingly feel economic constraints, mounting pressure will be placed on our spine community to

provide high quality evidence of efficacy, effectiveness, safety, and cost-effectiveness to support funding and reimbursement decisions. This process can be a most painful one, especially if changes in customary health care delivery models are brought forth. Unfortunately, there are plenty of examples where the good name of "evidence" is employed for political decisions rather than using scientific publications as a starting point for discussion. The discussion should include objective review of the studies, always with an eye towards leaving room for human exceptions and with an understanding of the limitations of research to provide conclusive evidence for all situations. Our own literature must provide a consistently higher quality of evidence that effectively documents the efficacy, effectiveness and safety of what we do so that policy and decision makers have a clear picture of the strengths and limitations of what we do.

With EBSJ, we have an opportunity to move forward on the journey, a grand march, toward higher quality research and evidence in our field. I invite you as a reader, author or reviewer to join in our mission of setting the stage for evidence-based practice and influencing the future of spine surgery. Simply go to the EBSJ tab on the AOSpine website to learn more about this exciting resource. We hope you will become engaged in and join our "journey of a thousand miles."

Welcome to the inaugural issue of EBSJ!