

Real Acupuncture or Real World Acupuncture?

DECIPHERING ACUPUNCTURE STUDIES IN THE NEWS

Matthew Bauer, LAc

Recent studies have concluded that acupuncture is no more effective than various forms of sham or placebo acupuncture, and these conclusions have been reported in the media and used by skeptics to discredit acupuncture. The Oriental medical (OM) community's response to these reports has been ineffective, perhaps counterproductive. These studies, and the resulting media coverage, can serve as a wake-up call to the OM community, alerting us that we need to be more proactive in our public education efforts and rethink some long-held beliefs regarding the efficacy of traditional theories.

In the News

In the last few years, several studies sought to measure the effectiveness of acupuncture in treating common conditions.^{1,2,3} The findings of these studies were widely reported within the media.^{4,5,6} The good news for the Oriental medicine (OM) profession is that these studies found that acupuncture was not only effective, but often more effective than conventional therapies. The bad news is that these studies also found that traditional acupuncture techniques - based on the point/channel theories taught in OM schools - were no more effective than what is termed "sham" or "placebo" acupuncture.

The most recent of these studies, published in the May 11, 2009 issue of the *Archives of Internal Medicine* and sometimes referred to as the "Seattle" study, built on other recent studies and is a good example of current acupuncture research. One of the conclusions this study's authors reached is particularly striking:



"Collectively, these recent trials provide strong and consistent evidence that real acupuncture needling using the Chinese Meridian system is not more effective for chronic low back pain than various purported forms of sham acupuncture."

As someone who has treated thousands of people with chronic low back pain using the Chinese meridian system, my first reaction to this statement was to feel the researchers were mistaken. But, I also respect scientific research and feel it would be a great mistake for those of us in the OM profession to criticize these studies just because they tell us something we don't want to hear,

without looking critically at both the studies and our own beliefs.

Real Vs. Real World

The only evidence these studies actually provide is that so-called "real" acupuncture is not more effective than sham acupuncture in a controlled, clinical trial environment. I believe this detail is of critical importance. But, before I explain why this detail is of such importance, I want to critique the response to these studies from within the OM profession.

Up to this point, the sparse response from the OM field to these studies has been limited to pointing out that there are many acupuncture points including hundreds of extra points, so "sham" acupuncture is still hitting acupuncture points. Regarding studies that use "placebo" techniques in which acupuncture is simulated with the skin unbroken, some acupuncturists have pointed to tapping techniques, common in Japanese acupuncture, that never pierce the skin. While there is some merit to these arguments, they ignore the greater problem with these studies and make the OM profession sound to the public like we are grasping at straws and making excuses. If researchers can't help but hit useful points no matter how hard they try to avoid them, why should anyone bother seeking treatment from people trained in the complex traditional theories that stress diagnosing *qi* imbalances to identify the best point prescriptions?

The primary problem with these studies is not that researchers inadvertently performed real acupuncture when they attempted to do sham or placebo acupuncture, but that the real acupuncture seriously underperformed. Most of these studies show the real acupuncture groups to be somewhere in the 45-60% effective range. Only 45-60%? If I was only getting 45-60% positive effect for my patients, I would never have been able to build my practice and support my family for the last 23 years. Ask any clinically successful acupuncturist, and they will tell you for common pain problems like low back pain, the average range of effectiveness is somewhere between 75-85%.

Obviously, something about the design of these studies does not capture what happens in the real world when using acupuncture to treat these conditions. Unfortunately, we don't have enough studies that reflect what happens in the real world because most of the money for research has gone to the "controlled" studies using sham and placebo controls, and the type of patient contact that happens in real world treatment is not allowed. None of these recent studies allowed the acupuncturist who did the needling to consult with the patient and choose points and techniques.

In most of these studies, a set of points were prescribed and used repeatedly regardless of the patient's progress, or lack thereof. The Seattle study was the only study that attempted to mimic actual practice by having a diagnostic acupuncturist see one group of patients before each treatment. This diagnostician chose the points to be used based on traditional diagnostic rationale, but then these points were passed along to the treating acupuncturist who did the actual needling.

Qi Interaction

Will it affect the outcome if the acupuncturist who inserts the needles is not allowed to interact with the patient and choose what points and techniques to use? It shouldn't matter, if acupuncture only stimulates specific nerve endings, causing mechanical neuro-chemical responses within the body. But, if acupuncture actually works by manipulating *qi*, as its founders and supporters have claimed for more than 2,000 years, then there is very good reason to believe that the *qi* dynamic between the acupuncturist and the patient is an important factor that must be considered.

The first day I interned in the private practice of my school's clinic director, he asked me to take

charge of treating a very difficult case. When I balked and said I thought I was too inexperienced to manage such a difficult case, my teacher told me that my sincere enthusiasm created a positive *qi* that helped to offset my lack of experience. Over the years, I have come to believe the acupuncturist's *qi* can be as important as the points themselves. Points do matter, but the effect these points elicit is influenced by the *qi* of the one stimulating them. Like yin and yang, there is a combination of both factors at play: different points have different tendencies regarding how they influence a patient's *qi* dynamics, but that tendency is influenced by the *qi* of the person manipulating the points. Because this fact is rarely discussed in acupuncture circles, researchers have not taken this into account in their studies.

Skeptics have long contended that acupuncture only works if the patient believes in it (ignoring the effects of veterinary acupuncture or animal studies), but it may be more important that acupuncturists believe in what they are doing. The best practitioners with the highest success rates put everything they have into every treatment - into every needle or patient contact. We choose points and techniques because we believe they are very best for our patients, and that belief influences the effects of the points. Any acupuncturist who puts needles in a patient not believing it to be the very best they can do is inserting those needles with less than optimal *qi*.

Unlike administering drugs or performing surgery, which manipulates the body in a more mechanical fashion, influencing *qi* dynamics is more dependant on subtle factors, including the *qi* of the one doing the manipulating. This may sound like what skeptics call "woo-woo" - irrational, new age mysticism — but it is a key part of acupuncture's traditional foundation and deserves consideration. Before jumping to conclusions about traditional concepts, we should encourage studies using acupuncture in a way that reflects what takes place in the real world. Let's study what happens to patients when treated in actual clinic conditions with no blinding or controls, in which the acupuncturist does whatever their years of training and experience leads them to believe is the best they can do for each patient. Don't limit them in their techniques and communication with the patient, because such limits are not imposed in real world practice. And don't refer to acupuncture being done under research constrained controls as "real" acupuncture, because it does not resemble the manner in which acupuncture is done in actual practice.

These studies point to sobering realities the OM profession needs to face. We cannot ignore the fact that in study after study in which researchers stimulated points in a manner that seemed incompatible with traditional Chinese medicine protocols, a respectable percentage of test subjects experienced significant improvement. So while it may be fact that the best trained and most experienced acupuncturists will obtain 75-85% effectiveness rates for their patients, it may also be a fact that poking some needles virtually anywhere will get 40%-50%, sometimes even 60% effectiveness. (See sidebar.) If that is the case, then the value of comprehensive traditional training and years of experience may be in getting that extra 20-30% of successful outcomes.

I am not surprised that poking needles anywhere can help a decent percentage of pain-related cases because I believe any acupuncture stimulates the body to produce anti-trauma chemistry such as pain modifiers and anti-inflammatory compounds. That is why I was never strongly opposed to other health care professionals being able to legally do some acupuncture. I have long felt that rather than fighting to prevent other health care professionals from having the right to perform acupuncture, the OM profession should be trying to educate these other professions that the more comprehensive training allows for that additional 20-30% effectiveness. In a spirit of mutual respect, we could encourage other health care professionals to refer their more difficult cases to us. This suggestion may not be welcomed by some, but the OM profession must be open to evolve with the times.

Regardless of how we approach the issue of other health care professionals using acupuncture in

their practices, the recent studies and media reporting of their findings should make one thing very clear: The OM profession needs to be much more proactive both in encouraging research that better reflects real-world acupuncture and in educating the public and media about OM and the OM profession. The OM profession has never mounted a comprehensive, multi-year, public education campaign. We have never seen fit to make such a campaign a priority. This must change. We cannot continue to leave the manner in which OM is perceived by the public and portrayed within the media to outside forces. For too many years, our profession has acted as if all we have to do is raise education standards and do the good work of helping people and the rest would take care of itself. The conclusions of these studies and the media reports that followed should be making it clear that this is not the case.

Conclusion

If it were true that getting successful results does not depend on where one puts the needles, then every first-year acupuncture intern would get the same results as their most experienced teachers, which is not the case. While it seems to be true that having positive *qi* can make up for lack of experience, almost any acupuncturist will tell you that they get better results with experience. After training and licensure, acupuncturists typically spend the next several years of their careers learning more techniques and theories to add to their arsenal. Why do we do this? Because we learn that sometimes your Plan A or Plan B does not get results, so you better have a Plan C, D, and E as back-up if you want to get the highest degree of success. If it did not matter where you put the needles, no one would bother to keep learning additional techniques and the robust continuing education offerings out there would cease to exist.

We OM professionals, who work our tails off helping our patients, know how valuable our services are and we know that points do matter. We are buoyed by the gratitude of our patients, even as they tell us how they wished they had known about OM sooner and wonder why more people don't take advantage of this safe healing resource. We don't have to manipulate the facts to educate the public, media, and policymakers about what we have to offer, but we do have to guard against allowing the facts to be manipulated against us. There are acupuncture researchers who have a greater grasp of the subtle dynamics of clinical acupuncture, including the Society for Acupuncture Research, and the OM profession should do more to familiarize ourselves with their work and to encourage that the real-world effects of OM is given its just due.

References

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About the Studies

The two main trials referenced in this article are the German Acupuncture Trails (GERAC) for chronic low back pain and that carried out in both the Center for Health Studies, Seattle, Wash. and the Division of Research, Northern California Kaiser Permanente, Oakland, Calif. that is sometimes called the "Seattle Study."

In the German trails, 1,162 patients were randomized into groups receiving "real" acupuncture, "sham" acupuncture, or conventional therapy. Participants underwent 10 30-minute sessions usually at 2 treatments a week for 5 weeks. An additional five treatments were offered to those who had partial response to treatment. The "real" acupuncture groups were needled at points traditionally believed to be beneficial for lower back pain while the sham acupuncture involved superficial needling at non-traditional points. At 6 months, positive response rate was 47.6% in the real acupuncture group, 44.2% in the sham acupuncture group, and 27.4% in the conventional therapy group.

In the Seattle study, 638 adults with uncomplicated low back pain of 3-12 months duration were randomized into four groups: individualized acupuncture, standardized acupuncture, simulated acupuncture, and conventional care. In the individualized acupuncture groups, a "diagnostic acupuncturist" considered the patient's progress and prescribed points according to traditional theory. The prescribed points were then needled by the treating acupuncturist. The standardized group employed a set of points traditionally considered helpful in treating low back pain that were used throughout the treatment series. The simulated group had the same points as used in the standardized group but toothpicks were used to simulate the feeling of acupuncture. The treatments were done using back points so subjects could not see the needles. Treatments in the first three groups were done by experienced acupuncturists and consisted of two treatments a week for three weeks then once a week for four weeks.

At eight weeks, mean dysfunction scores for the first three groups were 4.5, 4.5, and 4.4 points compared to 2.1 points for conventional care. Symptoms improved by 1.6 to 1.9 points in the first three groups and 0.7 in the conventional care group.

While I emphasize the need to distinguish what both of these studies refer to as "real" acupuncture from that which is practiced in the real world of clinical acupuncture settings, the Seattle Study did make note that its design had limitations, including restricting treatment to a single component of TCM (needling), pre-specification of the number and duration of treatment, and limited communication between the patient and acupuncturist. While I applaud this study's authors for mentioning these limitations, the conclusions they reached regarding the "strong and consistent evidence" that real acupuncture is not more effective than sham acupuncture indicate they did not consider these limitations too significant.

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