

The Use of Acupuncture in the U.S. Military: Challenges and Opportunities

Moderator: Wayne B. Jonas, MD¹

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MEDICAL ACUPUNCTURE WAS PRIVILEGED to host a roundtable discussion among military leaders and acupuncture specialists late last summer. Moderated by Dr. Wayne B. Jonas, the discussion focuses on exciting new military uses of acupuncture, including wounded troop evacuation and traumatic brain injury (TBI) treatment for wounded warriors. The discussion highlights how different specialists come together, using acupuncture, and touches on the possible mechanism of action of this technique.

Wayne B. Jonas: *Welcome, to this roundtable on military acupuncture. We have an illustrious panel of experts in the areas of acupuncture training, acupuncture delivery, and acupuncture in the military, and I am looking forward to a robust discussion about how acupuncture can better alleviate suffering and improve the care of our service members and their families.*

I would like to begin with a question about implementation and adoption of acupuncture in the military. Implementation issues have been a major challenge. Fifteen years ago, the National Institutes of Health [NIH] held a consensus conference on acupuncture, and one of the things that came out of that conference was that acupuncture had been proven to be safe and effective for certain types of

conditions, such as the treatment of perioperative acute pain, which was one condition for which acupuncture was found to be effective.

Since then, there has been considerably more research, including large randomized placebo-controlled trials demonstrating that acupuncture is very effective for the treatment of acute and chronic pain, and there has been subsequent research done by people on this panel looking at the use of acupuncture techniques in the military, demonstrating both feasibility and delivery.

Yet, at the current time, in most hospitals—both conventional and military—it is still not common for patients to have access to acupuncture. So integration of even proven practices is one of the challenges that we have.

How can acupuncture be adopted into the military setting given the rapid pace, workforce issues, the cost, extreme environments, and team issues that are unique to the military? Dr. Niemtzow, you have been involved in this field for many years, immersed in military delivery of acupuncture. Would you mind leading us off with this question?

Richard C. Niemtzow: Thank you, for the opportunity. First, I think it is very important in the armed forces that there should be a permanent cadre of medical

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Report Documentation Page

Form Approved
OMB No. 0704-0188

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1. REPORT DATE 2011		2. REPORT TYPE		3. DATES COVERED 00-00-2011 to 00-00-2011	
4. TITLE AND SUBTITLE The Use of Acupuncture in the U.S. Military: Challenges and Opportunities				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) United States Air Force Acupuncture Center, Joint Base Andrews, MD, 20762				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

acupuncturists, and physicians should be selected to learn medical acupuncture. We must have trained medical acupuncturists in order to deliver care.

Once a cadre of physicians has been established, it is very important to address their delivery of care to suit the tempo of the military clinical setting. Our outpatient clinics are usually designed for not much more than 20-minute sessions during a regular clinic day, so the acupuncture treatments must be brief and effective. There is not that much time allotted for the care of the patient. When we listen to and address the patient's complaint and then put the patient's information in the computer system, that does not allow for much extra time.

In the combat arena, it is extremely difficult to do long treatments during a battlefield situation. So I see two types of treatments: short treatments and effective treatments that are used in the immediate situation where there is not time to do the complete physical and history, especially during a combat period; and then, of course, when the patient is in a more safe area that these treatments can be then performed in a longer period of time.

Joan A.G. Walter: I just want to speak to your last point Dr. Niemtow, in which you discussed combat environments, and add that, for the military, there are a number of opportunities for integrating acupuncture into care. In addition to treating a variety of conditions, such as acute and chronic pain or stress, acupuncture can be made available in multiple environments such as the combat or field environment, as well as in medical transport, acute care clinics, and daily sick call. These would greatly expand the availability of acupuncture beyond what is usually available, which is in boutique, specialty clinics, often only after all else has failed. I think the military has a unique opportunity to increase the early intervention through acupuncture and would like to facilitate that happening.

WBJ: *Dr. Koffman, you have recently come back from deployments to Afghanistan where you used acupuncture on a regular basis. You are now looking at how to do this within a major medical center. Could you address some of the issues you have discovered in adapting acupuncture to the military?*

Robert L. Koffman: I would be happy to. I have had the pleasure of delivering medical acupuncture in a variety of operational settings, and I agree with Mrs. Walter's assessment that there are many platforms and opportunities. The problem really is one of distribution, and, typically, what I found was that the areas, combat outposts, Forward Operational Bases [FOBs]—the bases where individuals were the most beaten up and had the most pain and could have utilized the services of a medical acupuncturist—were the least likely to have access to a medical acupuncturist.

In addition to the absolute number of trained providers—and when I was in Afghanistan wandering throughout the

country, I ran into no more than half a dozen medical acupuncturists who were capable of providing services or had the equipment to deliver care but were not tasked to do so—there is a significant maldistribution.

This calls into question the need to develop from the military perspective, if you will, an AQD, or an additional qualification designation code, or number, which is one way to ensure adequate distribution and assignment of individuals with this additional qualification so that there can be more consistent deployment and more even distribution of providers.

Stephen M. Burns: If I might speak to that, I am in touch right now with an Air Force physician who took the 2009 Air Force Acupuncture Course for Deploying Physicians that was taught in conjunction with Dr. Helms. He is currently deployed, and working as an anesthesiologist. While he sees many very badly wounded soldiers, he is not able to offer acupuncture. Most of them cannot consent to acupuncture, and those that probably would benefit from his expertise in acupuncture are at the flight medicine clinic, and at the troop clinics. He is simply not able to see them, because he is busy with his anesthesia work.

So the problem, as Dr. Koffman so well put it, is not only a question of distribution, it is sometimes the availability. Even if they are in theater, they are not in places where they can make an immediate impact.

Richard P. Petri, Jr.: I want to take a step backward. I agree with everything that has been said, but I think, in order to fully engage acupuncture into the military, there needs to be a standardization of acceptance, which will speak to credentialing. I recall that, with the Air Force being trained through the Helms Medical Institute [HMI, Berkeley, CA], a number of the people who went through the course were not even allowed to do acupuncture because their facilities did not allow them to do the credentialing. So, even though, in some places, we have acupuncturists, they are not allowed to practice.

To increase the acceptance of acupuncture, some type of statement has to be made in terms of how we deal with acupuncturists who have been trained and get their leadership to accept this modality as a useful tool so that the leadership allows them to use it on soldiers or service members that need their care. In my experience, we do not have enough acupuncturists. Or, they are not in the right places, and, sometimes, when they are in the right places, they are not allowed to practice.

Joseph M. Helms: The HMI teaching team took on the challenge of providing acupuncture in rapid-treatment environments in preparation for the first Air Force-sponsored program in 2009. We decided to streamline how we teach pain management and created a hierarchy of the approaches based on how the pain is manifesting.

In addition to that, we created the *HMI SMART Book*¹ (SMART standing for Systemic Medical Acupuncture for Rapid Treatment), because, when you are in the field and under pressure, sometimes you cannot pull the needle patterns from your memory, even though you have been well-trained. The SMART Book provides the busy practitioner a jump start on safe needle patterns for problems commonly encountered in the theater or in stateside clinics.

That was our effort to adapt acupuncture to a military environment. The feedback we have gotten over the last 3 years has been quite favorable. HMI course graduates can provide thoughtful, responsible treatments, even under pressure.

WBJ: *These comments lead nicely into one of the questions we wanted to have addressed by the panel, which is what kinds of qualifications for acupuncture are needed for military use, and are they different from civilian use? I would like to ask Dr. Helms if he would lead this one off. As you have just shared, you have been one of the main teachers and developers of training programs for civilian physicians, and now in the military. Could you address the issue of qualifications for acupuncture and training for acupuncturists that are needed for delivery in an integrative setting?*

JMH: For 30 years, we have limited our training to MD and DO physicians, plus the occasional DDS and DPM. We teach a comprehensive hybrid approach to medical acupuncture, which includes classical tenets from Asian tradition as well as contemporary neuroanatomically based acupuncture approaches.

From my perspective, I think that acupuncture should be established, developed, and maintained within the medical model that is extant in the military provision of medical services. Acupuncture should be provided and supervised by well-trained and licensed MDs and DOs, whether they are working solo or are assisted by providers in other conventional categories of military medical service.

The first step is an active medical license. The second step is competent comprehensive training. The third step might involve working with appropriate colleagues to take some of the load from the unavoidably busy schedules of military physicians.

WBJ: *Thank you very much. Dr. Koffman, you mentioned AQDs. Could you explain to our readers what they are and how you would envision that happening at different provider levels?*

RLK: Each service has a way of identifying critical skills of a provider beyond just the person's specialty. I have additional qualification as a flight surgeon, so that, should the Department of Defense (DoD) need to identify somebody for a particular mission, the DoD can look at personnel files and pull individuals who are aeromedically trained or capable of providing aeromedical service as flight surgeons.

Similarly, there needs to be, in my mind, a way to identify folks who have operationally relevant skills such as medical acupuncture, so that, when they are deployed or assigned, there can be insurance that providers who have this ability are well-represented where the greatest need is—at the point of the spear. At this current time, it is hit-or-miss in terms of assignment. Individuals are not selected for a mission or a billet or a job based on the ability to manage pain rapidly. Obviously, the combat-deployed environment is perhaps the most acute representation of where having adequately trained, well-distributed providers would be useful.

Each service has its own method of identifying additional qualifications. I am sure Dr. Nientzow and Dr. Burns can talk about the Air Force and Dr. Petri about the Army qualification or additional qualification system.

RCN: Yes. The Air Force actually has started perhaps a year ago with a special designator for medical acupuncturists. Whether it is being used appropriately I cannot say, but that actually has been initiated.

WBJ: *Great. Dr. Petri, is anyone addressing these standards on the Army side?*

RPP: Until recently, there has not been. With the task force on pain management and the Surgeon General's office recommendations, there has been an attempt to start the credentialing for different providers, not just acupuncturists. I served on the Veterans Administration [VA] committee several years ago for the implementation of the White House guidelines, when this was mandated to be implemented within the VA. We spent over 2 years looking at the credentialing of acupuncturists in the VA.

Within the Army we have licensed acupuncturists providing services, especially in the treatment of posttraumatic stress. At my own post, I have a licensed acupuncturist who is not under my supervision and has been in place for several years.

So the issue of acupuncturist versus licensed acupuncturist or medical acupuncturist is one that is going to come up in this discussion as we go ahead and lay down criteria for credentialing, because it is such a political area not only in the military but in the civilian area as well. As I remember, the state of Montana, in fact, does not allow medical acupuncturists, but licensed acupuncturists only. So that issue is going to have to come up at some point.

WBJ: *Sticking with the topic of qualifications, would panel members address the issue around training qualifications for those who are not delivering the acupuncture, but are part of the team that is delivering overall care? For example, needles may be stuck in by one particular individual. Then patients may be put on a transport, and then they are handed off to multiple others. There are people taking care of them who are doing other things such as*

wound care and IVs [intravenous injections], who are not acupuncturists. To appropriately deliver acupuncture, they too need some type of training, and understanding of this therapy. What types of issues need to be addressed in that delivery process? Perhaps Mrs. Walters can start us off.

JAGW: It is a great question, and one that is near and dear to Dr. Burns and Dr. Niemtow and me, after having done a study on the use of acupuncture for pain treatment during aeromedical evacuation. It is a great point, and again distinguishes some of the unique features of military medicine and integrating acupuncture into a military environment that just do not come up in most civilian situations.

For instance, in doing acupuncture in the aeromedical system, we had to secure approval from aeromedical command, which needed to see these needles, needed to understand the possible complications if they came out or if they had to be pulled out or if they fell into the airplane for instance. Could they bollix up some of the mechanics? So there is an education process that needs to become part of the standardization of any treatment program that includes education and information to all of the possible members in the military system who would have hands on the patient throughout that process—from the field down to the tertiary medical care environment.

WBJ: Great—any further comments from the other panel members?

SMB: Sure, if I might. Four years ago, we visited the Air Force Surgeon General's Clinical Quality Management director. We explained that Dr. Niemtow's Battlefield Acupuncture [BFA], would be safe to teach as a single procedure, just as a family practice resident might be taught how to do a vasectomy. After doing five or ten vasectomies successfully, and being signed off, she/he has the ability to do that single procedure. But this skill, this privilege does not give him or her the right to be an urologist, and she/he does not accept urologic referrals. But this resident can receive hospital privileges for that skill.

We have been successful at training other non-acupuncture trained physicians in the BFA procedure. I think a multi-tiered approach to implementing acupuncture can be very effective. Many patients can be treated successfully by flight surgeons, for example, who are deployed or in garrison. Their patients often have problems that are easily accessible to, or treated with, a simple technique such as BFA that is quite powerful.

JMH: I know that you and Dr. Niemtow have been conscientious about making this point clear, but I would like to add just one comment. As someone whose organization has been dedicated to quality in acupuncture education and practice, I think it is critical that people who are trained in only one technique such as BFA understand that it is only

one technique. BFA can frequently be of assistance in acute and chronic pain problems, but knowing only BFA does not identify a doctor as being comprehensively trained in medical acupuncture. This detail is often lost to the decision makers. For example, BFA training has already spread virally throughout the ranks of physician and other medical providers within the military. Viral spread does not create competent acupuncturists.

WBJ: Thank you. This is a wonderful discussion about what kind of training and education needs to be in place in order to bring acupuncture into a complex care system like the military provides. We have heard clearly that there needs to be some leadership training for those involved so they understand what it is about, and for those administering care, whether they are delivering the acupuncture or not. Again, multilevel types of educational approaches are needed.

There are other individuals who are involved in pain management, and physicians certainly are major players in that. Anesthesiologists or nurse-anesthetists are also important players, and they have a toolbox of other technologies, such as medications and other types of interventions. There are behavioral medicine specialists who also deal with pain. The question that I would like to have our panel address is: Can acupuncture be used along with these other methods, such as with medications and other interventional techniques? I will ask Dr. Petri to lead this off—as a Physical Medicine and Rehabilitation physician, you use a variety of interventional and noninterventional techniques to treat pain, and have now brought acupuncture into your own practice. How do these techniques work together to alleviate pain?

RPP: I would say that not only can we use acupuncture with other modalities, I think it is imperative we use acupuncture with other modalities. The push now, within the Army at least, is that our care be given as patient-centered home care in which the patient is actively participating in care through a holistic, multidisciplinary team approach. We must coordinate and work with other modalities. Otherwise, we are really not doing anything different than anyone else other than the fact that we are offering a different treatment modality.

In our clinic, we are starting to pass patients across the spectrum of treatment. In other words, a patient will come in with pain, see the chiropractor, and the chiropractor will say: "Well, yes, you have some needs that I think can be met with acupuncture." Typically, in the past, you would send the consult in and I would see the person 6 weeks later. That just does not work, so our doors are starting to be open to the possibility that as a soldier comes in it is a one-stop shop. The soldier comes in, sees the chiropractor, the chiropractor identifies that acupuncture could help in this situation, and then I see that soldier immediately and

do some treatments based on the physical exam that I can obtain in whatever period of time I have available. It is a different concept and way of treating patients. It makes everyone stop and think of how do we best implement this new paradigm for treatment? I will tell you, it has not been easy.

As we expand that to other modalities in the holistic approach, it is going to become more challenging, because you have multiple layers of getting people involved. Your surgeon needs to sit at the table, psych needs to sit at the table, your pharmacist needs to sit at the table. It takes a different mindset to bring everybody holistically together and sit down and talk about these things.

But it is an initiative that we are trying to do at Fort Bliss, El Paso, TX, and I think the Surgeon General is doing it as well with the recommendations of the task force.

JMH: The beauty of acupuncture is that it can be used as a solo therapy in cases when it is indicated as an exclusive treatment. But it can also be combined with pretty much any other form of medical treatment or intervention, ranging from medications to mechanical interventions to osteopathic manipulation to helping with surgical repair. That is truly its beauty, and opens the door to the remarkable creativity that the provider brings to the interaction with the patient.

The phenomenon of being so versatile and with potential creative application emphasizes the importance that acupuncture providers be part of the conventional biomedical system of training, orientation, teamwork, and skill set. This is particularly critical in a coordinated military environment.

WBJ: *Dr. Koffman, you have some experience with that at the National Intrepid Center of Excellence [NICoE; Bethesda, MD], do you have anything that would add to this?*

RLK: I do, and we use acupuncture—medical acupuncture—here in just about every patient. That said, we offer many other modalities, concurrently or sequentially, for many of those same symptoms that acupuncture is being utilized to treat, largely pain syndromes, but also anxiety and sleep, autonomic balancing, and regulation.

I think the other side of the usefulness of an integrative and holistic approach is to empower the patient with choices—allowing the patient to experience different modalities, either in combination with medications or, it is hoped, to replace perhaps some medications. To give the patient a sense of empowerment and actually put him or her in the decision-making process is extraordinarily engaging.

I will add further that most, if not all of the patients who come here, are very willing to try medical acupuncture, oftentimes, for no other reason than that they have heard so much about it, and they have heard success stories. What is important is that they themselves are given the opportunity

to experience it and decide if it is something that they want to include in what we call their recovery trajectory.

WBJ: *Thank you, Dr. Koffman. I would ask you to expand on that a little bit. As a leader in one of the premiere new optimal healing environments in the military focused on psychological health and traumatic brain injury [TBI], I am interested to hear more about how selection for acupuncture is done. It sounds like what you are saying is that the patients are given the choice when they come to your center from a menu of options, including acupuncture. I am wondering if you have found out in the field that this is the optimal way to provide the integration, or does there need to be more professional guidance in terms of who gets acupuncture?*

RLK: Let me just qualify my comments somewhat. It sounds like we are giving the patient a menu and asking that patient to select blindly from column A, column B and column C. But, in actuality, these are informed choices. After the interdisciplinary team evaluates the patient, we come up with this recovery trajectory, set goals, and then we acknowledge the various problems, such as psychological pain, physical pain, and moral pain, and we sit down with the patient and tell the patient what we have found to be helpful among these various modalities and work with the patient to help come up with a plan. So it is a collaborative informed choice that is made with the interdisciplinary team and the patient.

WBJ: *O.K., so you have a team that helps guide the treatment plan, and the patient is part of that team, and then those with knowledge about acupuncture are included.*

RLK: Absolutely. It would not work if we were merely telling the patient: “You need this or that.”

WBJ: *Right. Do you have, for example, interventional anesthesiologists on that team, and do they work closely in helping to decide when and how their techniques can be integrated with acupuncture?*

RLK: We do not have interventional anesthesiologists or pain specialists. We have physical medicine, and we have primary care, and what we really have is a patient who is interested in having multiple concerns addressed in a very short period of time. Many patients with pain have had only pharmacologic interventions.

RPP: I think the NICoE is a fantastic model for a multidisciplinary approach to a multitude of different issues such as TBI, post-traumatic stress and pain. The question is how do you get that acceptance in other locations where the leadership itself will not allow for acupuncture to be put on the table as an option to aid our patients? That has been a challenge for me.

I think there was a good initiative at Brooke Army Medical Center [BAMC], where they actually developed an advisory team of personnel within their own facility, where, through that process, they were able to gain more acceptance from their own personnel and providers in the sense of referring patients to their service. When you have patients who voluntarily come and say, “I am going to do acupuncture because I think it is going to help,” the outcomes tend to be better when the patients have expectations that it will work.

So the question I would ask is how do we replicate the program like NICOE has for its acceptance in terms of a multidisciplinary approach in medical acupuncture, and translate it into places where it is really not allowed because of the leadership. I know there has to be education, promotion, marketing and things like that. That can be truly a difficult thing to obtain.

RLK: I think the real question is how can the NICOE model inform best practice. We endeavor to evaluate the science behind many CAM [complementary and alternative medicine] modalities rigorously in this patient population, which I hope and truly believe will contribute to the informed decision-making process. Beyond the science, the question at hand pertains to the state of advocacy for medical acupuncturists in the various services. Who is the proponent for this modality at the highest level? I think the Air Force is probably the most developed service, with Dr. Niemtzwow having direct advocacy and proponentcy to the Surgeon General. Is that correct?

RCN: Yes, that is correct. I serve as his consultant, and I am able to request meetings with him to discuss various aspects of acupuncture.

WBJ: *Raising the advocacy among the leadership sounds like a key issue that needs to be done in those areas. I would like to move on to a topic that has been mentioned several times during our discussion and relates to raising the level of interest among the leadership members, and that is the question of acupuncture’s use beyond pain.*

As this panel knows, the service members who are coming back from multiple deployments often share a set of comorbidities that are more than simply pain. Sometimes, this has been called the trauma spectrum or trauma spectrum response [TSR]. Dr. Niemtzwow can you talk about the use of acupuncture for conditions other than pain?

RCN: People usually associate acupuncture with pain, but this modality is useful in other areas of internal medicine.

We use acupuncture for various symptoms including hot flashes in pre-, post- and perimenopausal patients. We have seen it work very well for depression. We use it for dermatological challenges. We have experimented with low vision, and that certainly is a promising area. We have used

it intensively for chronic migraines, allergies, and viral laryngitis. We have found it to be useful for peripheral neuropathies, certainly complex regional pain syndromes, diabetic neuropathies, and many other conditions.

WBJ: *Could you talk a little bit about your use of other technologies, such as laser and electrical stimulation?*

RCN: We are using laser at our clinic, and laser is nothing new in acupuncture nor is electroacupuncture. We have had the opportunity to look at very low-level laser applications to wounded warriors at Walter Reed Army Medical Center [WRAMC], and as you know, we—Dr. Burns and I—work with the amputee patients, and find acceptability of lasers among the patients to be quite high, and it works well. We substitute a harmless laser exposure instead of using needles. Of course, there is no pain associated with that.

We also do things such as piezoelectric stimulation, which is using a high-voltage, very-low-current stimulation around the areas of pain. There are other classical acupuncture techniques that we have investigated. We have also looked at using intense light stimulation, particularly on the ear.

WBJ: *Any other comments from the panel members on technologies that they are using?*

SMB: We often treat patients at the Air Force Acupuncture Center at Joint Base Andrews [in MD], who may come in with either post-traumatic stress disorder [PTSD] or TBI with related headaches. We are frequently asked to see these patients primarily for their pain control. But as many of you said, they often have many other problems—anxiety, sleep disorders, hyperarousability and many unexplained disorders. We will frequently ask them: “What is it that is troubling you the most at present?,” and we will focus our treatment on that.

With treatment, we will often begin to peel back the onion, as it were, and get into some of the other areas. For example, if a person has chronic pain, it may be disrupting that patient’s sleep, which makes him or her irritable, and that patient also has to take pain meds, creating a situation in which he or she does not participate in physical therapy or mental health therapy, and withdraws at home.

As you begin applying treatments—whether they are energetic circuits or specific pain-targeted therapies—you do begin to get more of a holistic response even if you focus on just the area that the patient is identifying as the most troubling at present. I think there is a need to get in and show patients that they can be helped and that they can see fairly prompt results at least in one or two areas. Then, as you develop trust and a patient begins seeing some improvement, you can begin to bring these other modalities to bear.

We often begin with either an energetic circuit or a very gentle electric circuit, or laser, because if they have had

many surgical procedures, they just may not want one more needle. A very gentle laser treatment may show them that it does not have to hurt to get better.

WBJ: *It sounds like acupuncture is useful for a variety of the comorbidities of trauma response. Is acupuncture something that should be offered to anyone that has been exposed to trauma of any type, or is this something that should be a primary modality for those who have been injured or multiply deployed?*

RLK: Actually, there are two aspects to this important question. We know that there is excellent science about the use of acupuncture in acute pain and, perhaps less so, but still important science in chronic pain. But the aspects of managing the symptoms of the trauma spectrum to include arousal and anxiety and irritability, and particularly panic, and all of these things which also affect sleep, with the use of acupuncture, really needs to be studied.

Anecdotally, medical acupuncture has been extraordinarily helpful in managing these symptoms. Indeed, I do not think there are too many individuals in whom I have not been able to successfully mitigate anxiety, facilitate sleep, and restore the balance in what otherwise has been an autonomic instability and excessive catecholamine arousal.

But the second issue is—and I think just as important—patient engagement. There really needs to be a patient-centered, holistic, and integrative approach that empowers the patient with options, and with a sense of control over that patient's care, and then, benefitting from pain relief, improvement in sleep, and decrease in anxiety, to take the therapy to the next level, and work on subsequent and related issues bothering the patient. In the trauma spectrum, the challenge resides in the psychosocial domain.

There is opportunity not just to facilitate sleep or alleviate pain and decrease anxiety, but then to develop a therapeutic rapport with the patient and work with him or her at various levels even deeper from that first patient engagement. I have frequently invoked the phrase, “come for the needles, and stay for the therapy.”

SMB: Both on the inpatient side and outpatient side, Dr. Niemtzw and I have had the opportunity to treat PTSD, whether it came from domestic abuse, childhood abuse, or from combat trauma. We get feedback from the provider and occasionally the patient later that, “wow that was our best session. We really got into some things that they have not been able to disclose.” So I would strongly agree with Dr. Koffman's statement.

RPP: The thing that I truly enjoy about acupuncture and the ability to do it is that acupuncture opens the door to other modalities that, on their own, may not be accepted, such as mind-body techniques. I think one of the more valuable areas of integrative medicine that we often overlook is nu-

trition and how nutrition fits into treatment, especially with this type of spectrum disorder. Just think of the soldier who has anxiety and difficulties sleeping, and through the course of the treatments, nobody has asked how many Red Bulls this soldier is drinking. We later find out that soldier is having trouble with sleep. He or she may be suffering nutritionally and we often forget to ask simple questions that may have significant impacts on that soldier's condition.

Within my clinic, I primarily see pain patients, and it has been very frustrating over the years when I treat a patient for the pain, and I am not getting any significant outcomes. I recognized that until I deal with the stress and other issues, the pain really does not move.

So I have begun to teach my patients stress-management treatments through mind-body techniques such as imagery and meditation. I also teach them self-help skills such as acupressure and a self-directed stretching program. Within acupuncture treatments, I utilize the Dragons points quite often for the emotional pain, and then I move into physical pain treatments, either at the same time, or as the body accepts the acupuncture. I start with the simpler, less energy-moving treatments and then move into more-aggressive pain-management techniques.

JMH: Most military patients are drawn or referred to acupuncture for pain-related problems. But physicians who are open to observing comorbid problems that occur in the trauma spectrum rapidly see acupuncture's value for acute and chronic stress-related issues. This is why we created the Auricular Trauma Protocol [ATP; discussed in other articles in this issue] as a starting psychological treatment that can be combined with a treatment for pain or other problems.

Acupuncture in the field has been reported to be rapidly effective for general medical problems that commonly occur, in addition to the aches, pains, bumps, and bruises of being in the field. These include headaches, respiratory problems—sinusitis and bronchitis—that occur in dusty and sandy environments, gastrointestinal disturbances, genitourinary disturbances, and the obvious sleep and anxiety-related problems.

WBJ: *It sounds to me like your experiences have been that acupuncture is broadly applicable to a variety of conditions in the trauma spectrum and beyond. As a scientist, that makes me want to put on my skeptic's hat and ask the next question, which is how much of acupuncture is placebo, and do we need to do research to clarify what components are due to the actual needle or are due to other components of the therapeutic encounter?*

RPP: I would say—and I do not say this flippantly—does it matter? Do we need to know the exact contribution that acupuncture contributed toward the resolution of the condition, or should we look at whole systems and outcomes? An individual is an interplay of many systems, both internally and externally. To research the individual aspect of a

given modality tends to overlook this aspect of whole systems. We must avoid “stove piping” treatments. We need to begin to research outcomes of the whole system. This could be both in qualitative as well as quantitative analysis. I know the scientific community wants to know what percent of acupuncture contributed to the success in treating a patient. But, when we are looking at a holistic individual and we are getting good outcomes, how necessary is it to know exact percentages of each thing? In my clinic, if a patient comes in with a mindset that this is going to work, I usually get much better results, and that patient usually has a better outcome.

What I can also tell you is, if a patient is brought into my clinic, and the spouse is the one who is making the patient come, and he or she does not agree that acupuncture is going to work, then when it does work, I have an advocate for the rest of my life, and that advocate goes out and recruits for me. So I am not really sure what the answer is to your question in terms of a placebo and if it is really what is contributing to this. But I do know that every individual comes in with a different set of expectations, and, a lot of times, I am surprised by the degree of satisfaction achieved by the treatments.

SMB: I agree. I might add that we know that the provider–patient relationship is a major component of healing. If patients experience initial positive results, whether as skeptics or believers, I think the doctor–patient relationship, the patients’ beliefs, and their wish to get well—all play a synergistic role. Whatever is going to be most effective in terms of returning patients to full function quickly with the least risk is what is important. I am very happy to work with other mind–body techniques and often encourage patients to explore other modalities while they are attending our acupuncture clinic.

WBJ: *It is true that often patients and practitioners are not so concerned about the mechanisms. But, if I am one of these leaders that we talked about earlier that has to decide, “should I invest money now in training, standards, leadership, and practitioners specifically for acupuncture?,” how am I going to make a decision about whether resources should be put into acupuncture, or were better spent on relationships and rapport development, or some other approach that enhances healing?*

From a policy perspective, it might perhaps be important that we do some direct comparisons against these programs in order to make those resource-allocation decisions.

What is the role of comparative effectiveness research, and what studies need to be done to better clarify the role of acupuncture compared to other kinds of approaches in pain, especially since the military has to decide between such approaches as it allocates its limited resources?

RPP: That is a very good point that you make in terms of obtaining the funding and having the proof for leadership—

and how do we best go about obtaining that? Recently at Fort Bliss—we are doing a new initiative with a Wellness Fusion Campus. The project is a holistic approach: medical working with operational leadership. They are not necessarily concerned about the components just as long as the end product is what they are looking for and assists them in operational readiness.

I would say the answer to your question is not necessarily how we get leadership to agree to fund acupuncture over mind–body techniques. I think our goal and our difficulty in obtaining approval is to have the leadership buy into a holistic program regardless of the components. I think we have a good start with that at Fort Bliss. We are partnered with the Samueli Institute [Alexandria, VA] to develop the program and then to do evaluations throughout.

The key is obtaining the research to prove that a holistic program, regardless of the components—although the components in themselves do need adequate research to make sure that the components are safe and effective on their own—is just as important as the research on the overall outcome.

JAGW: I would just like to mention that the Samueli Institute has a study that is going on in collaboration with a number of you at WRAMC that is looking at a comparison of usual care alone compared to usual care with either a very standardized formulaic acupuncture approach or a more Chinese medicine, ritualistic kind of approach that has a large component of relationship building between the provider of the acupuncture and the patient. I think studies that are designed in that way get away from trying to disentangle actual needle versus sham needle, provide some meaningful treatment to the patients, but also try to get at the question of to what extent the relationship-building portion of acupuncture is part of the therapeutic effect.

WBJ: *This has been an informative and excellent discussion. Are there any final wrap-up comments from the panel?*

RLK: I was just briefed on a protocol that we are going to undertake here using acupuncture and functional magnetic resonance imaging; and the NICoE is uniquely situated to be able to provide some of these comparative effectiveness studies with the capabilities that we have. Our patient population is eager to help advance the science; moreover, the patients are benefitting from these modalities. These patients are willing to help us understand how and why this works. We have the unique scanning capabilities to further the science, and that is very exciting. I really think that, once we have the ability to demonstrate in a scientific method what works, the medical community will follow, as they have done with other evidence-based techniques.

It is important that we remind the readership that acupuncture has already been recommended as a modality for the treatment of trauma spectrum symptoms now articulated

in the new DoD VA clinical practice guideline for PTSD. Visit: www.healthquality.va.gov/Post_Traumatic_Stress_Disorder_PTSD

RPP: There is also the Surgeon General of the Army's Task Force on Recommendations for Acupuncture within the inclusion of pain management. Access: http://armymedicine.mil/reports/Pain_Management_Task_Force.pdf I would note there is also the attempt to make acupuncture a Tricare benefit.

JAGW: My wrap-up point would be that, based on all of the clinicians who have spoken to the power and value that they see in acupuncture, it is that this technique, which we keep calling a modality, is in truth a holistic approach to care of the whole person, and that in a military patient population, it appears to have great value and to pave the way for a more-holistic approach to the care of military patients.

WBJ: *We have heard about some of the challenges in bringing acupuncture into a large organization like the DoD. We have also heard about some of the opportunities and the readiness of the DoD to really make that happen, and a un-*

ique role that acupuncture could serve in being a first out in providing healing to service members. I think we see the DoD again being a leader in this area, and if we can do it successfully there it will have an impact on the culture at large.

Thank you all for your tremendous commitment to our service members and your participation in this panel.

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